Report of the City of Tacoma Minimum Wage Task Force
June 2015

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THE CITY OF TACOMA'S
MINIMUM WAGE TASK FORCE

APPROVED WORK PLAN

28 MAY 2015

As charged by the Mayor and City Council, the Minimum Wage Task Force's purpose is to review minimum wage alternatives for the City of Tacoma. The Task Force's report and recommendations must be submitted to the Mayor and Council by 30 June 2015.

PHASE	TIMELINE	OUTCOMES	ACTIVITIES
A. **Structure Process; Assess the Situation**	28 May–1 June	1. Consensus agreements on the work plan and ground rules. 2. Mutual interests of the Task Force members. 3. Understanding of how other jurisdictions are addressing the minimum wage. 4. Understanding of demographic, social, and economic conditions and trends in Tacoma.	▪ Task Force approves work plan and ground rules. ▪ Task Force briefed on the ordinances of other cities that have addressed raising the minimum wage. ▪ Task Force member and economist brief MWTF about current and future demographic conditions and trends.
B. **Agree on Key Findings**	1-9 June	1. Consensus agreement on "The Key Findings of the Minimum Wage Task Force."	▪ MWTF agrees on a set of key findings to provide the factual basis for its recommendations. ▪ MWTF releases key findings to public through its website and media.
C. **Agree on Alternatives**	9-21 June	1. Consensus agreement on criteria for evaluating alternatives. 2. Consensus agreement on a set of alternatives.	▪ MWTF briefs Mayor and Council on key findings. ▪ MWTF identifies, discusses, and agrees on the criteria by which it will assess the options for achieving mutual interests. ▪ MWTF identifies, discusses, and agrees on a set of alternatives. ▪ Economist and staff conduct additional research on and

			analysis of the alternatives, and report to MWTF on findings.
D. **Reach Agreement on Recommendations**	22-26 June	1. Consensus agreement on recommendations that achieve MWTF's mutual interests and meet criteria.	▪ MWTF discusses options and chooses recommendations. ▪ MWTF asks the questions "How will these recommendations serve the community in 2, 5, or 10 years? What could go wrong if they were implemented? How would the City deal with that?" ▪ MWTF reaches agreement on recommendations addressing the minimum wage in Tacoma.
E. **Reach Agreement on Report**	27-30 June	1. Consensus agreement on MWTF's report to Mayor Strickland and City Council.	▪ With assistance of facilitator and staff, MWTF writes and agrees on final report recommending how Tacoma should address the minimum wage in the future.
F. **Present Report to Mayor, Council, Public**	30 June	1. Report presented to Tacoma's elected officials. 2. Report made public.	▪ MWTF presents it report with findings and recommendations to Mayor and City Council. ▪ MWTF briefs media on its report or supports Mayor in announcing report to media and citizenry.

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

APPROVED GROUND RULES

to Guide the Task Force's Discussions and Decision-Making

Adopted by the Task Force Members on 28 May 2015

Task Force Members' Roles and Responsibilities:

1. Each member of the Task Force is an equal participant in the process and has equal opportunity to voice opinions and contribute ideas.

2. Task Force members represent others not at the table, but it is understood that each member speaks for her/himself. Task Force members may want to periodically update their constituents about the group's progress. At appropriate times, the members should check with their constituents to seek their reactions to and support for our recommendations.

3. Task Force members accept the responsibility to come to the meetings prepared for the discussions.

4. We also commit to fully explore the issues and search for creative solutions that best serve our mutual interests.

5. We recognize the legitimacy of the interests, concerns, and goals of others, whether or not we agree with them. We commit to treating each other, and those who attend our meetings, with respect, civility, and courtesy.

6. We will listen carefully, ask pertinent questions, and educate ourselves and those we represent about the interests and needs that must be addressed in a constructive problem-solving atmosphere.

7. In view of the specific scope of the project and limited amount of time available, we will make a concerted effort to focus on the topics under discussion.

8. Task Force members, including the alternates, commit to attending as many meetings as possible. If a member must miss a meeting, she/he is responsible for asking a fellow member to represent her/his interests and positions at that meeting. The member may also submit written comments that will be distributed to the others. Task Force members should consult the meeting summaries, which will be sent to them and posted on the Task Force's website, or talk to a fellow member or the facilitator to understand the proceedings and decisions made at the meetings they missed.

9. As the process unfolds, Task Force members should provide feedback to the facilitator on the process and his performance. We may do so at meetings and/or by calling or emailing him between meetings.

The Facilitator's Role and Responsibilities:

10. The facilitator's role is to manage the process by keeping discussions focused, ensuring that all points of view are heard, and conducting the meetings according to the spirit of these ground rules. With no stake in the substantive outcome, he is obligated to remain neutral on the issues.

11. The facilitator will also write drafts of the Task Force's report. Once the final version has been reviewed, edited, and approved by the members, he will work with them to prepare to present it to the Mayor and City Council.

The Staff's Roles and Responsibilities:

12. Like the facilitator, City staff and the economists that the City has hired are resources to support Task Force members. They, too, will remain neutral on the issues. They will support the facilitator in ensuring the process is orderly and well managed and the Task Force by obtaining information that Task Force members agree they need to be able to reach consensus.

Roles and Responsibilities of Guests:

13. Interested and affected parties or individuals who are not on the Task Force are welcome to attend the meetings. The public may submit their input in writing to the Task Force.

Agreements and Recommendations:

14. The Task Force is expected to identify and define a wide range of interests, perspectives, and opinions. Decisions will be made by consensus. Consensus is defined as the unanimous agreement of the Task Force members.

15. If a Task Force member finds she/he cannot live with an emerging agreement of the entire group, that person is obligated to make her/his concerns known, and the rest of the group is obligated to listen with an interest in resolving them. Everyone is expected to try work to address the concerns, including asking the concerned party (parties) to clarify the underlying interests or about other dynamics that could be interfering with an agreement. All parties are obligated to try to find an alternative that meets the interests of the concerned party (parties) as well as their own.

16. If it is not possible to reach consensus on particular recommendations, the interests of each party and the potential options for resolving the issue will be documented and included in the Task Force's report.

Meeting Agendas and Summaries:

17. Task Force meetings will be task-oriented. Draft agendas will be prepared by the facilitator and distributed to all members for review and comment 2-3 days before a meeting. Agendas will describe the matter for discussion and the purpose of discussing it, and be accompanied by information necessary to support informed discussion.

18. If the agenda or facilitation techniques are not working, Task Force members agree to inform the facilitator so that changes can be made and the group can proceed.

19. Following the conclusion of each meeting, a summary of key decisions and agreements will be developed by the facilitator and distributed to each member within 48 hours of a meeting's adjournment.

20. Task Force members are obligated to review the summaries for accuracy and to alert the facilitator if they find mistakes.

Communicating with the Media and Other Interested Parties:

21. Task Force members agree that it is in their best interests to not speak to the media or negotiate in public during this process. If contacted by representatives of the media, Task Force members will speak only for themselves, and should focus the comments on the process, not on emerging substantive positions or proposals. Task Force members will avoid characterizing the Task Force's or other members' positions. After speaking with the media representatives, or to other organizations or groups, members should inform the facilitator to minimize the possibility that other parties in this process could misinterpret their comments.

22. When appropriate, a joint statement suitable for discussion with the media and with other organizations will be developed by the Task Force. At that time Task Force members will agree on who shall present it on behalf of them, and how it will be communicated.

Final Report:

23. A draft report summarizing the Task Force's findings and consensus recommendations will be prepared by the facilitator and distributed to all members for their review and approval. After approving it, the Task Force members will submit their final report to the Mayor and City Council.

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

THE TASK FORCE'S FIRST MEETING

Thursday, 28 May 2015
5:30 – 8:30 p.m.
The Center for Urban Waters
326 East D Street, Tacoma

REVISED DRAFT AGENDA

THE MEETING'S GOALS:

1. Adopt the structure by which the Task Force will conduct business and make decisions.

2. Identify, discuss, and understand the mutual interests of the Task Force members.

3. Learn from the experiences of other jurisdictions while beginning to frame the issue in terms of Tacoma's demographics.

***NOTE**: Light snacks will be served starting at 5:15 p.m. Please come early to enjoy them so we can convene the meeting promptly at 5:30. Thank you!*

I.	5:30	Meeting Convenes: Introductions	Everyone

- *Task Force members and staff briefly introduce themselves.*
- *What organization or constituency do you represent?*

II.	5:45	Welcome and Thank You! Review Task Force's Mandate	Mayor Strickland

III.	6:00	Review Open Meetings Act and Public Records Obligations ▪ *Deputy City Attorney Martha Lantz will review for us the requirements of the Open Meetings Act and public records.* ▪ *Are there any questions or concerns?*	Martha Lantz, City Attorney's Office
IV.	6:20	Approve Work Plan and Ground Rules ▪ *Is there consensus for the work plan and ground rules?* ▪ *Does the Task Force acknowledge that meeting summaries will be high-level summaries of the key discussions, decisions, and agreements, not verbatim transcripts or legal documents?*	Jim Reid/Task Force
V.	6:45	Task Force Members' Interests ▪ *What are the Task Force members' mutual interests?*	Task Force
VI.	7:25	Minimum Wage Ordinances of Other US Cities ▪ *What is the content of the ordinances that other US cities have adopted to raise the minimum wage, and how do they compare to each other?* ▪ *Questions and answers.*	Chris Bacha, City Attorney's Office
VII.	7:55	A First Peak at the Demographics of Tacoma and the Region Dr. Modarres, Director of the UW Tacoma's Center for Urban Studies and a Task Force members, will present demographic information about Tacoma and the surrounding region to provide context for the Task Force's discussions. ▪ *Are there any questions?* ▪ *How does this information help inform our discussions?* ▪ *Is there other information we could use from Ali?*	Dr. Ali Modarres
	8:30	Adjourn	

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

THE TASK FORCE'S FIRST MEETING

Thursday, 28 May 2015 5:30 – 8:30 p.m.
The Center for Urban Waters

SUMMARY

OF THE MEETING'S KEY DISCUSSIONS, DECISIONS, AND AGREEMENTS

Approved by the Task Force on 1 June 2015

In attendance: Mayor of Tacoma: The Honorable Marilyn Strickland; **Task Force Members and Alternates**: Sarah Cherin, Pastor Gregory Christopher, Odette D'Aniello, Michelle Douglas, Liz Dunbar, Dennis Farrow, Reggie Frederick (by telephone), Eric Hahn, Russ Heaton, Elizabeth Lewis, Dr. Ali Modarres, Abranna Romero Rocha, David Strong, Robert Taylor, and Brenda Wiest; **City Staff** serving the Task Force: Chris Bacha, Jared Eyer, Martha Lantz, Christina Watts, and Tadd Willie; **Economic Consultant:** Katie Baird; **Facilitator**: Jim Reid

Task Force members who were absent: Kelly Chambers and Jason Kinlow

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Facilitator Jim Reid called this first meeting of the Tacoma Minimum Wage Task Force to order at 5:34 p.m. PDT.

THE TASK FORCE'S DECISIONS AND AGREEMENTS

The Task Force members:

1. Approved a work plan outlining the stages of their work through the deadline of 30 June 2015.
2. Approved ground rules to guide how they will work together and make decisions.
3. Approved nine mutual interests or principles that may serve as the foundation for a consensus agreement and as criteria by which to evaluate alternatives.

MAYOR STRICKLAND OPENS MEETING BY THANKING TASK FORCE MEMBERS FOR SERVING

Tacoma Mayor Marilyn Strickland and her fellow City Council members established the Minimum Wage Task Force and worked together to appoint its members. Mayor Strickland opened the meeting by

thanking the members for serving on the Task Force. She characterized the group as "balanced" because the members represent labor, small and big businesses, non-profit organizations, and youth. She explained why the Task Force's meetings must be public, and acknowledged that this could inhibit candid conversation. But she urged the Task Force members to speak openly and honestly, to listen intently, and to work cooperatively to try to reach a solution that is in the best interests of the community. The Mayor also urged everyone to respect differing opinions, and asked the community and constituent groups to respect that the Task Force members are not elected officials or politicians but have stepped up to address a difficult issue in the public eye. No Task Force member, no business, and no organization should suffer because of the opinions expressed at the Task Force meetings.

Finally, she acknowledged that the 15 Now Initiative prompted the City's leadership to create the Task Force. She urged Task Force members to reach agreement on a proposal that the Council can put before voters on the November ballot. If the Task Force doesn't reach agreement on a set of recommendations, the City Council could act unilaterally. Task Force member Sarah Cherin commented that if the Task Force reaches agreement, she would prefer the Council enact the proposal rather than place it on the ballot.

TASK FORCE AGREES ON AN ORGANIZATIONAL STRUCTURE, INCLUDING WORK PLAN AND GROUND RULES

Following the Mayor's welcome and opening remarks, Task Force members addressed three organizational issues.

1. Martha Lantz of the City Attorney's Office briefed the members on the requirements of the State's Open Public Meetings Act (OPMA) and the Public Records Act. She provided all Task Force members with a summary of the acts' major provisions.

   As a result of the Task Force's discussion with Martha and Mayor Strickland about the OPMA and public records requirements, a suggestion was made that *Task Force members should not communicate with each other by email*.

   In addition, **the Task Force agreed that any questions about the OPMA or public records requirements should be directed to facilitator Jim Reid.** He will help get the answer from the appropriate City staff person.

2. The Task Force reviewed the draft work plan that outlines the stages of this process. Task Force member Sarah Cherin asked that the phrase "income and wages" be replaced by "minimum wage" under Phase D. "Reach Agreement on Recommendations," in the third bullet of the fourth column (Activities) in the matrix, and under Phase E. "Reach Agreement on Report," in the lone bullet of the same column (Activities).

   One milestone of the work plan that Jim Reid highlighted was the Task Force reaching agreement on a set of findings on June 8th. This could help achieve the members' interest in developing and agreeing on solutions that are based on data and facts.

   The Task Force members then unanimously approved the work plan.

3. Jim reviewed the proposed ground rules that are intended to guide Task Force discussions and decision-making. The major items of interest to the Task Force members during the subsequent discussion were: 1) engaging the public in the Task Force's deliberations (#13); and 2) defining "consensus" (#14).

   Tadd Wille, the City's Budget Director and a member of the staff team serving the Task Force, pledged to find an efficient way for citizens to provide written comments to the Task Force members during this process. *Tad will report back to the Task Force at the meeting on Monday, 1 June.*

   Task Force members also said they must be diligent in reaching out to constituents, colleagues, neighbors, friends, and family to solicit thoughts, ideas, and suggestions.

   Task Force members discussed that defining consensus as "the unanimous agreement of the Task Force members" is a high standard. After a brief discussion, the Mayor urged the members to work to attain that standard, and they agreed to leave the language of #14 as it was proposed.

   The Task Force members then unanimously approved the ground rules.

TASK FORCE MEMBERS AGREE ON THEIR MUTUAL INTERESTS

Jim presented to the Task Force members nine interests (or principles or goals) that he believes he heard many of them mention when he was interviewing each of them between the 19th and 27th of May. After a brief discussion, a couple members and the Mayor suggested that the second interest be changed to read "Improve the quality of life for Tacoma residents."

The Task Force members then unanimously approved their mutual interests.

Note: The approved editions of the work plan, ground rules, and interests are being submitted to the Task Force members with this draft summary and will be posted on the Task Force's website.

TASK FORCE REVIEWS MINIMUM WAGE ORDINANCES OF OTHER CITIES ACROSS THE US

Deputy City Attorney Chris Bacha provided a matrix to the Task Force summarizing "from 30,000 feet" the key terms and provisions of minimum wage ordinances in eight cities in the western United States and Montgomery County, Maryland. While there was not time for the members to read the information and discuss it in depth, they asked Chris if he would add some data to it, and he said he would be glad to do so. The data Chris will add to the matrix are:

- The third and fourth columns of the matrix (beginning on page 2) identify the date of increase in the jurisdiction's minimum wage and the amount of the new minimum wage, respectively. At the Task Force's request, Chris will include the minimum wage at the time of the passage of the ordinances raising the minimum wage and the percent of the increase above the original.

- The City Council of Oakland, California declined to raise the minimum wage. The information about Oakland's proposed ordinance will be added to this matrix.
- Include in the matrix whether the voters approved any of these ordinances (or initiatives that became law) or if they became law only by action of the legislative body.

- Identify if future increases to the minimum wage in any of these jurisdictions linked to the Consumer Price Index (CP!).

The discussion ended with a focus on enforcement provisions, which are outlined in Chris' paper on pages 7-9. One conclusion from the discussion was that the City of Tacoma's authority to enforce would need to comply with the authority given to cities under Washington State law.

As the review of the ordinances of other jurisdictions drew to a close, Task Force member Odette D'Aniello asked "Can the Task Force's discussions can go beyond the minimum wage?" Mayor Strickland said the City of Tacoma is committed to reducing poverty, and the minimum wage issue is "only one piece of the pie." She suggested the Task Force members think about the broader mission as they focus on the minimum wage.

The meeting adjourned at 8:12 p.m. PDT.

The Task Force's next meeting is Monday, 1 June 2015, from 5:30-8:30 p.m. PDT at the Center for Urban Waters.

PUBLIC MEETINGS and PUBLIC RECORDS

Tacoma Minimum Wage Task Force

PUBLIC MEETINGS ACT

- State law, RCW 42.30, “Open Public Meetings Act” “OPMA”
- Applies to Task Force as a group formed by a “governing body”
  - Council is the “governing body” of the City
  - Task force formed by Council to act on behalf of Council to gather information and make recommendations

PUBLIC MEETING REQUIREMENTS

- All meetings of task force open to public
- All actions of the task force taken openly

PUBLIC MEETINGS

- It is a meeting when a quorum present and “action” occurs
- Action is any official business of the task force such as
  - Discussion, deliberation, receipt of public testimony, consideration, reviews, evaluations
  - Not limited to “final” action or voting

CLOSED SESSIONS

- Authorized in certain specific and limited circumstances but unlikely to apply to task force
- If you think you need one, check with staff

MEETING REQUIREMENTS

- Notice to public (for regular and special meetings)
- Published agenda (especially if special meeting)
- Public permitted to attend without conditions – not required to allow participation
- Minutes generally taken
- Topics generally limited to published agenda

E-MAIL “MEETINGS”

- E-mail exchanges can be meetings when the Task Force or a quorum is on the same e-mail or in same chain.
- How to avoid:
  - Don’t “Reply All”
  - Don’t participate in “serial” e-mails, forwarded from member to member
  - Rely on staff to manage outgoing and communications

“SOCIAL MEDIA” MEETINGS

- Task Force Member conversations in shared environment can be meetings
  - Avoid group blogs, group forums, groups in social media
  - Rely on staff to manage social media for the task force
  - If using social media as an individual, avoid suggesting you speak for the group

VIOLATION OF OPEN MEETINGS LAWS

- Individual member liability
  - –$100 penalty for *knowing* violation
- Task force action null and void
- Bad Press
- Public Distrust

PUBLIC RECORDS ACT

- State law, RCW 42.56,“Public Records Act” “PRA”
- Applies to “records” made and used by task force members
  - “Records” are information or communication of any type – paper, electronic, audio etc.
- Only applies to public records
  - Public records relate to the performance of task force related business
  - Does not apply to personal records, statements, opinions of task force members

RETAIN PUBLIC RECORDS

Duty to retain public records for the periods set by state and City

- "Owner" of record generally keeps
  - Task force members not likely to "own" most records
- Some records have no retention period
- Transitory records discarded when no longer useful
  - Personal notes, informational copies, duplicates, meeting notices etc.

REQUEST FOR RECORDS

- Members of public entitled to inspect and copy public records upon request
  - If record exists must be produced even if retention period past
- Narrow exemptions to production
- Requester not required to give reason for request

RESPONSE TO REQUEST

- Timely search all potential locations
  - Personal computers, personal cell phones, smart phones, lap tops, tablets, paper files
- Produce all responsive records to staff
- May be exemptions, staff to determine, so produce all

- Let staff know promptly if receive communication that could be records request

MANAGING YOUR PUBLIC RECORDS

- Keep all task force related records in one location
  - Separate e-mail account/separate folders for task force business
    - Streamlines search and production
    - Reduces intermingling with personal records
- Diligently manage public records
  - Dispose of transitory records when no longer needed
  - Rely on staff to initiate, direct, and facilitate communications
  - Be mindful of creating public records by blogging, social media posting, writing as a task force member

PUBLIC RECORDS VIOLATIONS

- City held responsible
  - Penalties for not searching, not producing, late producing etc.
- Failure to conduct adequate search could cause a court to order search
  - Including of any location where records may be, to include personal or home or business locations and devices
- Good faith effort to comply is defense to penalties

AN INITIATIVE ORDINANCE OF THE CITY OF TACOMA TO REQUIRE THE PAYMENT OF A CITY-WIDE MINIMUM WAGE

I Declaration of Necessity.

WHEREAS the costs of housing, food, medical care and other basic necessities in the city of Tacoma are now beyond the means of many low-wage workers to pay them and;
WHEREAS the stated mission of the City of Tacoma is to "enhance the lives of its citizens"; and the stated vision of the City of Tacoma is to "be recognized as a livable and progressive international city'; and the key to livability is a livable wage; and the mark of a progressive city is to strive to improve the welfare of its citizens and;
WHEREAS the City of Tacoma has an opportunity to demonstrate that it honors and defends the dignity and economic well-being of its citizens, the people declare that in their considered judgment the health, safety and the general welfare of the citizens of this city require the enactment of this measure. **NOW THEREFORE**, BE IT ORDAINED, BY THE PEOPLE OF THE CITY OF TACOMA:
A New Ordinance is added to the Tacoma Municipal Code as follows:

II **TITLE:** This ordinance shall be known as the "TACOMA MINIMUM WAGE ORDINANCE."

III Definitions as used in this initiative.

(1) "Director" means the Director of the Finance Department of the City or any officer, agent or employee of the City designated to act on the Director's behalf.
(2) "Employer" includes any individual, partnership, association, corporation, business trust or any person or group of persons acting directly or indirectly in the interest of an employer to control the activities and compensation of an employee, but does not include:
  (a) Any business receiving an exemption under the City of Tacoma Tax Code, 6A.30.090, Exemptions, paragraph V or a credit under 6A.30.066, Small business phased tax credit.
  (b) Any business located outside the City of Tacoma if gross income as defined in 6A.30.066 remains below the highest dollar amount allowed under 6A.30.066.
(3) "Employ means to direct the activities of and compensate an employee for work performed for an employer.
(4) "Employee" includes any individual, employed by an employer who, in a given week, performs at least two hours of work within the city limits of Tacoma or maintains or reports to an office within the city limits of Tacoma or performs work supervised from an office within the city limits of Tacoma but shall not include:
  (a) Any individual employed in casual labor in or about a private home, unless performed in the course of the employer's trade, business or profession;
  (b) Any individual engaged in the activities of an educational, charitable, religious, state or local governmental body or agency or nonprofit organization where the employer-employee relationship does not in fact exist or where the services are offered freely by an employee without coercion by the employer and are not a condition of employment. If the individual receives reimbursement in lieu of compensation for normally incurred out-of-pocket expenses or receives a nominal amount of compensation per unit of voluntary service rendered, an employer-employee relationship is deemed not to exist for the purpose of this ordinance.
(5) "Ordinance" means the "Tacoma Minimum Wage Ordinance."
(6) "Wage" means compensation due to an employee by reason of employment, payable in legal tender of the United States or checks on banks convertible into cash on demand at full face value, subject to such deductions, charges or allowances as may be permitted by law. Gratuities received by employees shall not be considered part of the minimum wage.
(7) "Department" refers to the Finance Department of the City of Tacoma.

IV Minimum Hourly Wage – Adjusted minimum wage based on inflation.

(1) Beginning on the earliest date allowed by law following the certification of this ordinance, every employer shall pay to each of his or her employee's wages at a rate of not less than fifteen dollars ($15.00) per hour.
(2) On September 30, 2016 and on each following September 30th, the Director shall calculate an adjusted minimum wage rate to maintain employee purchasing power by increasing the current year's minimum wage rate by the rate of inflation. The consumer price index for urban wage earners and clerical workers, CPI-W, for the twelve months prior to each September 1st is calculated by the United States Department of Labor. The adjusted minimum wage rate for Tacoma shall be calculated to the nearest cent using the unchained CPI-W for urban wage earners and clerical workers for the Seattle-Tacoma-Bremerton CMSA. If a successor index must be chosen, the most relevant local index will be selected. Each adjusted minimum wage rate calculated under this ordinance takes effect on the following January 1st. If the inflation index is a negative number there will be no change in the minimum wage rate.

V Police Powers granted. – Authority and responsibility to administer, monitor, enforce. – Duty to provide periodic reports.

(1) This ordinance establishes a minimum wage for workers in Tacoma and enables the City of Tacoma and the Director of the Finance Department of the City to exercise police powers to enforce that minimum wage.
(2) The Director shall have the authority and responsibility to administer, monitor and enforce compliance with minimum wage requirements under this ordinance.
(3) Beginning March 31, 2016 and on March 31 of each subsequent year, the Director shall publish an annual report addressed to the Council, the Citizens of Tacoma, and the Minimum Wage Review Commission providing a statistically valid assessment of compliance with this ordinance and detailing related enforcement activity.

VI Rulemaking Authority – Finance Director.

The Director shall have the power to make rules pursuant to 6A.10.160, Director to make rules, provided that such rules or regulations do not allow any employer to pay a wage less than the Tacoma minimum wage to any employee unless exempted by the definition of an employee or employer in this ordinance.

VII Minimum Wage Review Commission

(1) Beginning in April of 2016 and each subsequent April an independent citizen commission shall be formed and named the Tacoma Minimum Wage Review Commission. The commission will consist of seven members, five of whom are to be selected by lot by the County Auditor from eligible City of Tacoma voters in each of the City's Council districts. One member from City of Tacoma residents with labor issues management experience is to be appointed by the Mayor and confirmed by the City Council and one member with labor issues resolution experience is to be selected by the Pierce County Central Labor Council after being nominated from City of Tacoma residents by member unions. All members must show proof of residency in the City of Tacoma upon appointment and maintain such residency for the duration of their service on the Commission.
(2) Every year, the Commission will review the Director's Report and certify that adequate resources are being allocated to administration and enforcement of the ordinance. If the Commission finds that funding and/or staffing is inadequate, the Commission is authorized to direct the City Council to rectify the situation.
(3) Every five years, the Commission will review the minimum wage and assess whether the base minimum wage needs to be increased beyond scheduled cost-of-living increases. The Commission will present its findings and

recommendations to the City Council for action.

VIII **Notification of employers**.

(1) By November 1 of each year, the Department shall publish and make available to Employers a bulletin announcing the adjusted minimum wage rate for the upcoming year, which shall take effect on January 1. In conjunction with this bulletin, the Department shall by November 1 of each year publish and make available to employers, in all languages spoken by more than five percent of the work force in the City, a notice suitable for posting by employers in the workplace informing employees of the current minimum wage rate and of their rights under this ordinance.

(2) Every employer shall post in a conspicuous place at any workplace or job site where any employee works the notice published each year by the Department informing employees of the current minimum wage rate and of their rights under this ordinance. Every employer shall post such notices in any language spoken by at least five percent of the employees at the work-place or job site. Every employer shall also provide each employee at the time of hire with the employer's name, address and telephone number in writing.

IX **Investigation—Services of federal and state agencies -- Employer's records -- Industrial homework**.

(1) The Director or his or her designated representatives may investigate and gather data regarding the wages, hours and other conditions and practices of employment of any employer subject to this ordinance and may enter and inspect such places and such records and make such transcriptions thereof, question such employees and investigate such facts, conditions, practices or matters as he or she may deem necessary or appropriate to determine whether any person has violated any provision of this ordinance or which may aid in the enforcement of the provisions of this ordinance.

(2) With the consent and cooperation of federal and/or state agencies charged with the administration of federal and state labor laws, the Director may, for the purpose of carrying out his or her functions and duties under this ordinance, utilize the services of federal and state agencies and their employees and, notwithstanding any other provision of law, may reimburse such federal and state agencies and their employees for services rendered for such purposes.

(3) Every employer subject to any provision of this ordinance or of any order issued under this ordinance shall make, keep and preserve such records of the persons employed by him or her and shall preserve such records for a period of at least ten years.

(a) These records shall contain at a minimum, each employee's name, address, rate of pay, the amount paid each pay period, hours worked each day, each work week and such other information as the Director shall prescribe by regulation.

(b) Such records shall be open for inspection or transcription by the Director or his or her authorized representative at any reasonable time and such reasonable time shall be within 15 days of the Director's request for disclosure.

(c) The employer shall make reports therefrom to the Director as he or she shall prescribe by regulation.

(d) The employer shall furnish to the Director or to his or her authorized representative on demand a sworn statement attesting to the accuracy and completeness of such records and information upon forms prescribed or approved by the Director.

(4) The Director is authorized to make such regulations regulating, restricting or prohibiting industrial homework as are necessary or appropriate to prevent the circumvention or evasion of and to safeguard the minimum wage rate prescribed in this ordinance.

X **Claims against employer—Assignment of wage claim-reporting violations**.

(1) An employee of an employer as defined in this ordinance or anyone advocating in the employee's interest may file a complaint. This involves providing information showing work hours and rates of pay. The Director and any designee of the Director employed by the Department may initiate an investigation even when no complaint has been filed. All claims must be investigated by the City Finance Department or if appropriate, forwarded to the Washington State Department of Labor & Industries for investigation. In order to protect claimants from retaliation the Department shall maintain the claimant's anonymity unless and until disclosure is required by law. Claimants shall be notified of the status of their claim within 30 calendar days and further updates provided upon request until the claim is resolved by the Director. In addition to filing a complaint with the department, a worker may have other remedies under the law.

(2) Any employer who pays any employee less than wages to which such employee is entitled under or by virtue of this ordinance, shall be liable to such employee affected for the full amount of such wage rate, less any amount actually paid to such employee by the employer and for costs and such reasonable attorney's fees as may be allowed by the court. Any agreement between such employee and the employer to work for less than such wage rate shall be no defense to such action.

(3) Upon obtaining information indicating an employer may be committing a violation under this ordinance and when, in the judgment of the Director, the claims are valid and enforceable in the courts, the Director shall:

(a) Order the payment of all wages owed the workers and institute actions necessary for the collection of the sums determined owed; and

(b) Report, with evidentiary documentation, to the City Attorney to support criminal prosecution.

(c) For persons who are financially unable to employ counsel the Director may take assignments of wage claims and prosecute actions for the collection of wages.

XI **Prohibited acts of employer—Penalty**.

(1) Any employer who pays or agrees to pay wages at a rate less than the rate applicable under this ordinance shall, upon conviction therefore, be guilty of:

(a) Theft under RCW 9A.56.050—Theft in the third degree if the unpaid wages of all affected employees does not exceed seven hundred and fifty dollars; or

(b) Theft under RCW 9A.56.040—Theft in the second degree if the unpaid wages of all affected employees exceeds seven hundred fifty dollars but does not exceed five thousand dollars; or

(c) Theft under RCW 9A.56.030—Theft in the first degree if the unpaid wages of all affected employees exceeds five thousand dollars.

(2) If any of the penalties in subsection (1), immediately above, are disallowed by the courts, the employer shall pay a civil penalty of $100.00 per day per employee for the first violation or $500.00 per day per employee for the second violation or $1,000.00 per day per employee for subsequent violations. All penalty monies collected are to be evenly divided between the affected employees and the Department to defray the cost of enforcement. Further, the violator shall be subject to such further penalties as set forth herein. The civil penalty may be assessed and collected by use of all appropriate legal remedies.

(3) If the penalties cited in subsections (1) and (2) immediately above are disallowed by the courts the employer shall be subject to the maximum penalty allowed by law.

(4) Any employer who obstructs, hinders or delays the director or his or her authorized representatives in the performance of his or her duties in the

enforcement of this ordinance or refuses to admit the director or his or her authorized representatives to any place of employment or fails to make, keep and preserve any records as required under the provisions of this ordinance or falsifies any such record or refuses to make any record accessible to the director or his or her authorized representatives upon demand or refuses to furnish a sworn statement of such record or any other information required for the proper enforcement of this ordinance to the director or his or her authorized representatives upon demand or otherwise violates any provision of this ordinance or of any regulation issued under this ordinance shall be deemed in violation of this ordinance and shall, upon conviction therefore, except as defined otherwise above, be guilty of a gross misdemeanor.

(5) It shall be unlawful for an employer or any other party to discriminate in any manner or take adverse action against any person in retaliation for exercising rights protected under this ordinance. Rights protected under this ordinance include, but are not limited to: the right to file a complaint or inform any person about any party's alleged noncompliance with this ordinance, the right to inform any person of his or her potential rights under this ordinance and to assist him or her in asserting such rights. Protections of this ordinance shall apply to any person who mistakenly, but in good faith, alleges noncompliance with this ordinance. Any employer who discharges or in any other manner discriminates or retaliates against any employee because such employee has made any complaint to his or her employer or because such employee has caused to be instituted or is about to cause to be instituted any proceeding under or related to this ordinance or because such employee has testified or is about to testify in any such proceeding shall be deemed in violation of this ordinance and shall, upon conviction therefore, be guilty of a gross misdemeanor. Taking adverse action against a person within ninety (90) days of the person's exercise of rights protected under this ordinance shall raise a rebuttable presumption of having done so in retaliation for the exercise of such rights.

XII **City Authorized to Consider Compliance.**

City officials are hereby authorized to consider, to the maximum extent permitted by law, an employer's record of noncompliance with this ordinance in making decisions on City contracts, land use approvals and other entitlements to expand or operate within the City. The City is authorized to either deny approval or include conditions for approval ensuring future compliance by investigating complaints of noncompliance with this ordinance and rendering City decisions on the merits of such complaints. The City is authorized to award the same relief in its proceedings as a court may award. Pursuit of such administrative remedy shall not be a prerequisite for pursuing a private action under this Ordinance.

XIII **Ordinance establishes minimum standards and is supplementary to other laws—More favorable standards unaffected**.

This ordinance establishes a minimum standard for wages and working conditions of all employees in this city unless exempted herein and is in addition to and supplementary to any other federal or state law or ordinance or any rule or regulation issued under such law or ordinance, provided such law, ordinance, rule or regulation does not allow any employer to pay a wage less than the Tacoma minimum wage to any employee not explicitly exempted by the definition of an employee or employer in this ordinance. Any standards relating to wages, hours or other working conditions established by any applicable federal or state law or ordinance or any rule or regulation issued thereunder which are more favorable to employees than the minimum standards applicable under this ordinance or any rule or regulation issued hereunder, shall not be affected by this ordinance and such other laws, rules or regulations shall be in full force and effect and may be enforced as provided by law.

XIV **Severability**.

If any provision of this ordinance or the application thereof to any person or circumstances, is held invalid, the remainder of the ordinance and the application thereof to other persons or circumstances shall not be affected thereby.

COMPARISON OF KEY TERMS AND PROVISIONS

MINIMUM WAGE ORDINANCES; COMPARISON

(Revised June 2, 2015)

1. RICHMOND, CALIFORNIA – June 2014
2. BERKELEY, CALIFORNIA – June 2014
3. SAN FRANCISCO, CALIFORNIA – November 2003; November 2014
4. SEATTLE, WASHINGTON – June 2014
5. SAN JOSE, CALIFORNIA – November 2012
6. MONTGOMERY COUNTY, MARYLAND – November 2013
7. ALBUQUERQUE, NEW MEXICO – December 2006; November 2012
8. BERNALILLO COUNTY , NEW MEXICO – May 2013
9. LOS ANGELES, CALIFORNIA – Draft May 2015 (Vote Anticipated on June 3)
10. OAKLAND, CALIFORNIA – Nov 2014

(Note: Las Cruces, New Mexico was not included because the code was not available in a searchable format and SeaTac was excluded because it is applicable to a limited number of employers. Other cities that have adopted minimum wage legislation applicable to non-governmental employers include San Diego, Chicago, and Washington D.C.)

1. COMMON PROVISIONS: The Following list represents the provisions that are found in the above sample of minimum wage ordinances:

A. FINDINGS
B. AUTHORITY
C. PURPOSE
D. DEFINITIONS
E. MINIMUM WAGE REQUIRED
F. TIPS/SERVICE CHARGES
G. REPORTING REQUIREMENTS
H. WAIVERS; EXEMPTONS; EXCEPTIONS
I. NOTICE/POSTING
J. RETALIATION
K. IMPLEMENTATION; ENFORCEMENT; VIOLATIONS
L. RELATIONSHIP TO OTHER REQUIREMENTS
M. WELFARE TO WORK PROGRAMS
N. FEES
O. OUTREACH
P. SEVERABILITY

2. MATERIAL PROVISIONS; COMPARISON

A. Definitions. The definition of employee and employer will affect the persons and entities to which the minimum wage requirements will apply. Accordingly, it may be useful to understand how other jurisdictions have defined these terms.

i. Employee: All jurisdictions more or less defined employee as those persons who were entitled under state law to payment of minimum wage. However, in some instances, the definition included additional exclusions rather than setting forth the exclusions in a separate section of the ordinance. Those exclusions will be discussed later in this memorandum.

ii. Employer: All but Seattle generally defined employer in the same manner, (a person who directly or indirectly through any other person, including through the services of a temporary employment agency, staffing agency, subcontractor or similar entity, employs or exercises control over the wages, hours or working conditions of any Employee) or were required to have a local business license. However, in some instances, the definition included additional exclusions rather than setting forth the exclusions in a separate section of the ordinance. Those exclusions will be discussed below.

B. Minimum Wage Required. The following is a summary of the effective dates of the minimum wage increase(s) for the sample ordinances:

CITY	DEDUCTIONS; DELAY; EXCEPTIONS; OTHER	DATE OF INCREASE	MINIMUM WAGE $
Richmond, CA – June 2014		Minimum Wage Prior to increase – (State min wage increased from $8 to $9 in July 2014)	**9.00**
		Oct 2014	**10.00** (11.1% increase)
		Oct 2015	**11.00** (10% increase)
		Oct 2016	**12.50** (13.6% increase)
	Medical – Allows a deduction of up to $1.50 for employers providing medical benefits		

	Intermediate Minimum Wage – Applies an intermediate minimum wage for employers shipping goods outside the city		
	Exemption: Persons employed through YouthWORKS (City of Richmond) program. (see definition of employer)		
	Exemption: Persons receiving income from government grants, reimbursement programs or vouchers that specify the amount of funding for the employee's compensation. (see definition of employee)		
	Small Business: Exemption for small business below threshold number of labor hours (800/2 week period) (see definition of employer)		
	Collective Bargaining: Exemption to the extent required by law and waived in a collective bargaining agreement.		
Berkeley, CA – June 2014		Minimum Wage Prior to increase – (State min wage increased from $8 to $9 in July 2014)	**9.00**
		90 days after Ordinance was certified	**10.00** (11.1% increase)
	Delay – Increase was delayed for non-profits	Oct 2015	**10.00** (11.1% increase)
	Collective Bargaining: Exemption to the extent required by law and waived in a collective bargaining agreement.		
	On-Call: Exempts Employees who are on-call or stand-by under FLSA (but only while on-call or stand-by).		

	Job Training: Participates up to 25 years of age in youth job training programs operated by non-profit or government.		
San Jose, CA – Nov 2012 (Voter approved initiative)		Minimum Wage Prior to increase -	**8.00**
		90 days after ordinance became effective	**10.00** (25% increase)
	CPI: Prior year's increase, in any, as of August of the immediately preceding year over the level as of August of the previous year of the Consumer Price Index (Urban Wage Earners and Clerical Workers, U.S. City Average for all Items) or its successor . . . rounded to the nearest multiple of five cents.	Jan 2014	Annual CPI increase
	Collective Bargaining: Exemption to the extent required by law and waived in a collective bargaining agreement.		
Los Angeles – Ordinance not yet adopted (Vote anticipated June 3, 2015)		Minimum Wage Prior to probable increase-	**9.00**
	26 or more Employees	July 2016	**10.50** (16.7% increase)
		July 2017	**12.00** (14.3% increase)
		July 2018	**13.25** (10.4% increase)
		July 2019	**14.25** (7.5% increase)

		July 2020	**15.00** (5.3% increase)
	CPI: The minimum wage will increase based on the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) for the Los Angeles metropolitan area (Los Angeles-Riverside-Orange County, CA), which is published by the Bureau of Labor Statistics.	July 2022	Annual CPI increase
	25 or fewer employees	July 2017	**10.50** (16.7% increase assuming minimum wage remains at 9.00)
		July 2018	**12.00** (14.3% increase)
		July 2019	**13.25** (10.4% increase)
		July 2020	**14.25** (7.5% increase)
		July 2021	**15.00** (5.3% increase)
	CPI: The minimum wage will increase based on the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) for the Los Angeles metropolitan area (Los Angeles-Riverside-Orange County, CA), which is published by the Bureau of Labor Statistics.	July 2022	Annual CPI increase
	Non-Profits: Deferral program for qualifying non-profits.		
San Francisco – Nov 2003		Minimum Wage Prior to Increase	**6.75**

		90 days after ordinance became effective	**8.50** (25.9% increase)
	Prior year's increase, if any, in the Consumer Price Index for urban wage earners and clerical workers for the San Francisco-Oakland-San Jose, CA metropolitan statistical area.	January 2005	Annual CPI increase
	Delay – Increased delayed for small business and non-profits	January 2005	**7.75** (14.9% increase)
		January 2006	Same as all others
	Collective Bargaining: Exemption to the extent required by law and waived in a collective bargaining agreement.		
San Francisco – Nov 2014 (Voter approved initiative)		Minimum Wage Prior to Increase	**11.05**
		May 2015	**12.25** (10.9% increase)
		July 2016	**13.00** (6.1% increase)
		July 2017	**14.00** (7.7% increase)
		July 2018	**15.00** (7.1% increase)
	CPI: Prior year's increase, if any, in the Consumer Price Index for urban wage earners and clerical workers for the San Francisco-Oakland-San Jose, CA metropolitan statistical area.	July 2019	Annual CPI increase
Bernalillo County, New Mexico – May 2013		Minimum Wage Prior to Increase	**7.50**
		July 2013	**8.00** (6.7% increase)

		January 14	**8.50** (6.25% increase)
	CPI: The increase in the cost of living shall be calculated based on the percentage increase, if any, of the Consumer Price Index or its successor index as published by the U.S. Department of Labor or its successor agency.	January 2015	Annual CPI increase
	Exceptions: Persons employed by a parent, spouse or a sibling; person performing babysitting services; employees under 16 years of age		
	Tips: Minimum wage remains same as federal minimum wage if employee customarily receives tips but is supplemented by employer if it does not raise wage to minimum wage under the City Code.		
	Medical/Childcare: Reduces minimum wage by $1/hr. for benefits exceeding annualized $2,500/year	April 2013	Minimum wage less $1.00/hr.
Albuquerque – Dec 2006		Minimum Wage Prior to Increase	**5.15**
		Jan 2007	**6.75** (31% increase)
		Jan 2008	**7.15** (5.9% increase)
		Jan 2009	**7.50** (5.2% increase)
	Medical/Childcare: Reduced minimum wage by $1/hr. for benefits exceeding annualized $2,500/year	Jan 2007	**5.75** (11.7% increase)
		Jan 2008	**6.15** (7% increase)
		Jan 2009	**6.50** (5.7% increase)

	Tips; Commissions: Counted as wages and credited to satisfaction of minimum wage		
	Interns: Excludes interns working for academic credit or in work-study (see definition of employee)		
Albuquerque – (Initiative approved by voters) Nov 2012		Minimum Wage Prior to Increase	**7.50**
		Jan 2013	**8.50** (13.3% increase)
	Tipped Employees: 60% of applicable minimum wage.	Change effective Jan 2015 (Added a minimum wage for tipped employees)	**5.25**
	Medical/Childcare: Reduced minimum wage by $1/hr. for benefits exceeding annualized $2,500/year	Jan 2013	**7.50** (0% increase)
	CPI: Prior year's increase, if any, as of August of the immediately preceding year over the level as of August of the previous year of the Consumer Price Index (Urban Wage Earners and Clerical Workers)	Jan 2014	Annual CPI Increase.
Montgomery County – Nov 2013		Minimum Wage Prior to Increase	**7.25**
		July 2014 (the effective date of the ordinance)	**11.50** (58.6% Increase)
	Exceptions: Person exempt from minimum wage requirements under state or federal law; persons under 19 years of age working no more than 20 hours/wk.; persons subject to opportunity wage under state or federal act.		

	Tips: Allows a credit for tips with a cap on the credit (credit cannot exceed County minimum wage less 50% of state minimum wage)		
	Government: Includes the County but excludes employees working for the United States, the State of Maryland, and other local governments.		
	Interns: Excludes interns working for academic credit or in work-study (see definition of employee)		
Seattle, WA – June 2014		Minimum Wage Prior to Increase	**9.32**
	Schedule 1 – 501 or more employees in the united states and all franchises associated with a franchisor with more than 500 employees in the united states.	Schedule 1 Employers	
		April 2015	**11.00** (18% increase)
		Jan 2016	**13.00** (18.2% increase)
		Jan 2017	**15.00** (15.4% increase)
	CPI: The Consumer Price Index annual percent change for urban wage earners and clerical workers, termed CPI-W, or a successor index, for the twelve months prior to each September 1st as calculated by the United States Department of Labor	Jan 2018	Annual CPI increase
		Schedule 1 employers that pay toward medical benefit plans:	
		2015 State Minimum Wage	**9.47**

		Jan 2016	**12.50** (32% increase over 2015 min wage)
		Jan 2017	**13.50** (8% increase)
		Jan 2018	**15.00** (11.1%)
		Jan 2019	Equal to Schedule 1 employees
	Commission; Bonus: Credit toward payment of minimum wage for the period in which commission/bonus is earned.		
	Schedule 2 – 500 or fewer employees in the united states and excluding franchises associated with a franchisor with more than 500 employees in the united states.	Schedule 2 employers – Pay the lower of the applicable Schedule 1 minimum wage or the rate below:	
		Minimum Wage Prior to Increase	**9.47**
		April 2015	10.00 (5.6% increase)
		Jan 2016	10.50 (5.0% increase)
		Jan 2017	11.00 (4.8% increase)
		Jan 2018	11.50 (4.5% increase)
		Jan 2019	12.00 (4.3% increase)
		Jan 2020	13.50 (12.5% increase)
		Schedule 2 Employers – Minimum Compensation	
	Tips and medical benefits: Schedule 2 employers must pay a minimum hourly compensation in accordance with this schedule unless the	April 2015	**11.00** (Mandatory)

	minimum hourly wage for schedule 1 employees is lower (with the exception of April 2015 – January 2016). Tips, bonus and commissions can be included in the wages for this purpose; provided that, the applicable minimum wage is met.		
		Minimum Wage Prior to Increase	**9.47**
		Jan 2016	**12.00** (26.7% increase)
		Jan 2017	**13.00** (8.3% increase)
		Jan 2018	**14.00** (7.7% increase)
		Jan 2019	**15.00** (7.1% increase)
		Jan 2020	**15.75** (5% increase)
		Jan 2021	Equal to Schedule 1 employees
Oakland, CA – June 2014 (Voter approved Initiative)		Minimum Wage Prior to increase	**9.00**
		March 2015	**12.25** (36.1% increase)
	CPI: The Minimum Wage shall increase by an amount corresponding to the prior calendar year's increase, if any, in the Consumer Price Index for urban wage earners and clerical workers for the San Francisco-Oakland-San Jose, CA metropolitan statistical area (or if such index is discontinued, then in the most similar successor index)	January 2016	Annual CPI Increase

3. Implementation and Enforcement: All cities either adopted provisions for enforcement or enacted provisions that authorized promulgation of rules and guidelines for implementation and enforcement. The following is an overview of the types of implementation and enforcement provisions adopted:

i. Authority to Promulgate Rules/Regulations: The Cities of Richmond, Berkeley, San Jose, Albuquerque, Los Angeles, San Francisco, and Seattle, and Bernalillo County granted administrative authority to promulgate rules and regulations to implement and enforce their respective minimum wage ordinances.

ii. Adoption of Enforcement Provisions: The Cities of Richmond, Berkeley, Seattle, San Jose, and San Francisco and Montgomery County adopted more specific implementation and enforcement provisions which are summarized below:

Common Provisions	Description	Cities
Reporting Violations	Allows an employee or other person to report violations to a designated administrative agency or department	Richmond, Berkeley. San Jose, Seattle, Montgomery County
Investigations	Authorizes a designated administrative agency or department to investigate violations. In instances, the power to inspect, interview witnesses, and issue subpoenas is granted (**Note**: legal review is required to determine if such authority can be granted under Washington law)	Richmond, Berkeley, San Jose, Seattle, Montgomery County, San Francisco
Confidentiality	Authorizes some level of confidentiality for the person reporting a violation	Richmond, Berkeley, San Jose, San Francisco
Retaliation	Makes it unlawful to retaliate or discriminate against a person for exercising rights protected under the minimum wage code. In some instances, the code authorizes a civil action in the event that the employer engages in unlawful retaliation. (**Note**: legal review is required to determine if such authority can be granted under Washington law)	Richmond, Berkeley, San Jose, Los Angeles, San Francisco, Montgomery County, Albuquerque (Civil action authorized), Seattle
Civil Action	Authorizes the City Attorney	**Bernalillo County** (also

	or aggrieved employee to bring a civil action in a court of competent jurisdiction to recover wages owed (**Note**: legal review is required to determine if such authority can be granted under Washington law)	allows recover of twice the wages owed plus interest); **Albuquerque** (civil action authorized for claims of retaliation); **Richmond** (allows attorney's fees and legal and equitable relief for violations); **Berkeley** (authorizes recovery of wages and penalties and legal and equitable relief); **San Jose** (authorizes recovery of wages and penalties and legal and equitable relief); **San Francisco** (authorizes recovery of wages and penalties and legal and equitable relief):
Criminal Violations	None of the jurisdictions have adopted criminal penalties for violation of the minimum wage laws	
Civil Violations	Authorizes notice and demand to cure a violation. Failure to cure constitutes a nuisance and may be enforced under the nuisance provisions of the City Code. Additionally, authorizes issuance of an administrative citation with penalties.	Richmond
	Authorizes issuance of administrative citations and fines for violation Authorizes issuance of a civil compliance order that may be enforced in a civil action Authorizes revocation of business licenses until a violation is remedied	Berkeley
	Authorizes issuance of administrative citations and fines for violation	San Jose

	Authorizes issuance of a civil compliance order that may be enforced in a civil action Authorizes revocation of business licenses until a violation is remedied	
	Director may order civil penalties and full payment of unpaid wages subject to appeal before hearing examiner	Seattle
	Authorizes conciliation (informal and confidential resolution of sustained complaints) Authorizes a hearing for those cases that cannot be conciliated	Montgomery County
	Authorizes issuance of notice of civil violation, imposition of penalties and an administrative appeal	San Francisco

MINIMUM WAGE ORDINANCES; COMPARISON

REVISED MAY 29, 2015 – CDB, OFFICE OF CITY ATTORNEY

(*Working Files*)

1. RICHMOND, CALIFORNIA – June 2014
2. BERKELEY, CALIFORNIA – June 2014
3. SAN FRANCISCO, CALIFORNIA – November 2003
4. SEATTLE, WASHINGTON – June 2014
5. SAN JOSE, CALIFORNIA – November 2012
6. SEATAC, WASHINGTON – January 2014
7. MONTGOMERY COUNTY, MARYLAND – November 2013
8. ALBUQUERQUE, NEW MEXICO – December 2006
9. BERNALILLO COUNTY , NEW MEXICO – May 2013
10. LOS ANGELES, CALIFORNIA – Draft May 2015
11. OAKLAND, CALIFORNIA – Nov 2014

(Note: Las Cruces, New Mexico was not included because the code was not available in a searchable format**)**

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A. FINDINGS

SeaTac:

The following measures are necessary in order to ensure that, to the extent reasonably practicable, all people employed in the hospitality and transportation industries in SeaTac have good wages, job security and paid sick and safe time.

Montgomery County:

Findings and definitions.

(a) Findings.

(1) Many persons employed in the County are paid wages which are insufficient to sustain minimum standards of living in the County.

(2) Minimum standards of living in the County are higher than the minimum standards of living in many other areas of the State.

(3) Minimum wage standards in the County are necessary to:

(A) promote the health and welfare of County residents;

(B) safeguard employers and employees against unfair competition;

(C) increase the stability of industry in the County;

(D) increase the buying power of employees in the County; and

(E) decrease the need for the County to spend public money for the relief of employees who also live in the County.

B. AUTHORITY

Richmond:

This chapter is adopted pursuant to the powers vested in the City of Richmond under the laws and Constitution of the State of California and the City Charter, including, but not limited to, the police powers vested in the City pursuant to Article XI, Section 7 of the California Constitution and Section 1205(b) of the California Labor Law.

Berkeley:

This Chapter is adopted pursuant to the powers vested in the City of Berkeley under the laws and Constitution of the State of California but not limited to, the police powers vested in the City pursuant to Article XI, Section 7 of the California Constitution and Section 1205(b) of the California Labor Law.

San Jose:

This Chapter is adopted pursuant to the powers vested in the City of San Jose under the laws and Constitution of the State of California, but not limited to, the police powers vested in the City pursuant to Article XI, Section 7 of the California Constitution and Section 1205(b) of the California Labor Law.

San Francisco:

AUTHORITY.

This Chapter is adopted pursuant to the powers vested in the City and County of San Francisco ("the City") under the laws and Constitution of the State of California and the City Charter including, but not limited to, the police powers vested in the City pursuant to Article XI, Section 7 of the California Constitution and Section 1205(b) of the California Labor Law.

C. PURPOSE

Berkeley:

This ordinance shall be known as the "Minimum Wage Ordinance."
The purpose of this ordinance is to protect the public health, safety and welfare. It does this by requiring that employees are compensated by their employers or respective subcontractors in such a manner as to enable and facilitate their individual self-reliance within the City of Berkeley.

Los Angeles:

PURPOSE.
According to consultants retained by the City and studies submitted to the City for its consideration, Los Angeles is a low-wage city with a high cost of living. Without action to raise the wage floor, the problems caused by incomes that are inadequate to sustain working families will become more acute. The cost of living is continuing to rise in Los Angeles and labor market projections by the California Employment Development Department show that the number of low-wage jobs will grow faster than the number of mid- and high-wage jobs. Inaction will mean that the share of the labor force that does not receive sustaining pay will grow and the gap between stagnating low wages and the cost of a basic standard of living in Los Angeles will continue to widen.

Contrary to popular perception, the large majority of affected workers are adults, with a median age of 33 (only three percent are teens). The proposed minimum wage increase will greatly benefit workers of color, who represent over 80% of affected workers. Workers of all education levels will benefit from the proposed law, with less educated workers benefitting the most.

Los Angeles also ranks highest in California in child poverty rates. In short, although the City is experiencing strong economic growth which has spurred employment, poverty and inequality remain high and wages continue to stagnate. Affected workers disproportionately live in low-income families; on average, affected workers bring home more than half of their family's income. Affected workers live disproportionately in the lower-income areas of the City. These areas will experience greater earnings gains than the City as a whole due to a higher minimum wage. The research literature suggests that downstream benefits will result from the proposed wage increase, such as improved health outcomes for both workers and their children, and increases in children's academic achievements and cognitive and behavioral outcomes.

Studies show that minimum wage increases reduce worker turnover. Turnover creates financial costs for employers. Reduced worker turnover means that workers will have more tenure with the same employer, which creates incentives for both employers and workers to increase training and worker productivity.

The City has recognized that income inequality is one of the most pressing economic and social issues facing Los Angeles. Workers, who must live paycheck to paycheck, are frequently forced to work two or three jobs to provide food and shelter for their families. These workers often rely

on the public sector as a provider of social support services and, therefore, the City has an interest in promoting an employment environment that protects government resources. Therefore, by paying a higher than state-mandated minimum wage, the City seeks to promote the health, safety and welfare of thousands of workers by ensuring they receive a decent wage for the work they perform.

D. **DEFINITIONS**:

Richmond:

7.108.030 - Definitions.

The following terms shall have the following meanings:

(a) "City" means City of Richmond, California.

(b) "Department" means the Employment and Training Department of the City of Richmond or such other City department as the City Manager shall designate.

(c) "Employee" means any person who:

(1) In a calendar week performs at least two (2) hours of work for an employer as defined below within the geographic boundaries of the City; and

(2) Qualifies as an employee entitled to payment of a minimum wage from any employer as defined below under the California minimum wage law, as provided under Section 1197 of the California Labor Code and wage orders published by the California Industrial Welfare Commission, or is a participant in a Welfare-to-Work Program. An employee who is exempt from payment of a minimum wage under California minimum wage law is not an employee for purposes of this chapter. Employees in California who are exempt from California minimum wage law are not employees subject to this chapter. This includes, but is not limited to, learners as defined by the Division of Labor Standards Enforcement. Employees in California who are exempt from payment of a minimum wage or are entitled to a reduced minimum wage under California minimum wage law are not employees subject to this chapter. This includes, but is not limited to, learners as defined by the Division of Labor Standards Enforcement and the California Code of Regulations.

(3) "Employee" shall not include any person who is employed through the YouthWORKS Youth Summer Employment Program, which is the City of Richmond program that offers Richmond youth, ages 15 to 21, the chance to work in a variety of local jobs to gain professional working experience during the summer months. Employee shall also not include any employee that receives fifty percent (50%) or more of his or her income from government grants, reimbursement programs, or vouchers, where the funding agency providing the grants, reimbursement programs, or vouchers specifies the amount of funding being provided for the employee's compensation.

(d) "Employer" means any person, as defined in Section 18 of the California Labor Code, who directly or indirectly through any other person, including through the services of a temporary employment agency or similar entity, employs or exercises control over the wages, hours or working conditions of any employee. "Employer," however, shall not include any small business employer who pays for less than 800 hours of employee labor during a given two-week period, including all persons performing work for compensation on a full-time, part-time, or temporary basis. An employer that pays for 800 or more hours of employee labor during any two-week period at all business locations, whether inside or outside the City of Richmond, shall be deemed to be a covered employer for the entirety of that two-week period and the remainder of that calendar year quarter. In determining how many hours of employee labor an employer pays for, all labor performed by businesses with substantial overlapping ownership or control shall be aggregated.

(e) Minimum wage:

(1) "Minimum wage" shall have the meaning set forth in Section 7.108.040 of this chapter.
(2) "Intermediate minimum wage" shall mean an amount equal to the midpoint between the minimum wage as set forth in Section 7.108.040 of this chapter, and the minimum wage required by State law, rounded up to the nearest penny.

(f) "Welfare-to-Work Program" means the CalWORKS Program, County Adult Assistance Program (CAAP) which includes the Personal Assisted Employment Services (PAES) Program, and General Assistance Program, and any successor programs that are substantially similar to them.

Berkeley:

The following terms shall have the following meanings:
A. "City" shall mean the City of Berkeley.
B. "Department" shall mean the Department of Finance or other City department or agency as the City shall by resolution designate.
C. "Employee" shall mean any person who:

1. In a calendar week performs at least two (2) hours of work for an Employer within the geographic boundaries of the City; and
2. Qualifies as an employee entitled to payment of a minimum wage from any employer under the California minimum wage law, as provided under Section 1197 of the California Labor Code and wage orders published by the California Industrial Welfare Commission, or is a participant in a Welfare-to-Work Program.

D. "Employer" shall mean any person, including corporate officers or executives, as defined in Section 18 of the California Labor Code, who directly or indirectly through any other person, including through the services of a temporary employment agency, staffing agency, subcontractor or similar entity, employs or exercises control over the wages, hours or working conditions of any Employee, or any person receiving or holding a business license through Title 9 of the Berkeley Municipal Code.
E. "Minimum Wage" shall have the meaning set forth in Section 13.99.040 of this Chapter.
F. "Nonprofit Corporation" shall mean a nonprofit corporation, duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation and (if a foreign corporation) in good standing under the laws of the State of California, which corporation has established and maintains valid nonprofit status under Section 501(c)(3) of the United States Internal Revenue Code of 1986, as amended, and all rules and regulations promulgated under such Section, or any non-profit educational organization qualified under Section 23701 (d) of the Revenue and Taxation code.
G. "Welfare-to-Work Program" shall mean the CalWORKS Program, County Adult Assistance Program (CAAP) which includes the Personal Assisted Employment Services (PAES) Program, and General Assistance Program, and any successor programs that are substantially similar to them.

Seattle:

Definitions
For the purposes of this Chapter:
"Actuarial value" means the percentage of total average costs for covered benefits that a health

benefits package will cover;
"Agency" means the Office for Civil Rights and any division therein;
"Bonuses" means non-discretionary payments in addition to hourly, salary, commission, or piece-rate payments paid under an agreement between the employer and employee;
"Commissions" means a sum of money paid to an employee upon completion of a task, usually selling a certain amount of goods or services;
"Director" means the Division Director of the Office of Labor Standards within the Office for Civil Rights or the Division Director's designee;
"Employ" means to permit to work;
"Employee" means "employee," as defined under Section 12A.28.200. Employee does not include individuals performing services under a work study agreement;
"Employer" means any individual, partnership, association, corporation, business trust, or any person or group of persons acting directly or indirectly in the interest of an employer in relation to an employee;
"Franchise" means a written agreement by which:
1. A person is granted the right to engage in the business of offering, selling, or distributing goods or services under a marketing plan prescribed or suggested in substantial part by the grantor or its affiliate;
2. The operation of the business is substantially associated with a trademark, service mark, trade name, advertising, or other commercial symbol; designating, owned by, or licensed by the grantor or its affiliate; and
3. The person pays, agrees to pay, or is required to pay, directly or indirectly, a franchise fee;
"Franchisee" means a person to whom a franchise is offered or granted;
"Franchisor" means a person who grants a franchise to another person;
"Hearing Examiner" means the official appointed by the Council and designated as the Hearing Examiner, or that person's designee (Deputy Hearing Examiner, Hearing Examiner Pro Tem, etc.);
"Hourly minimum compensation" means the minimum compensation due to an employee for each hour worked during a pay period;
"Hourly minimum wage" means the minimum wage due to an employee for each hour worked during a pay period;
"Medical benefits plan" means a silver or higher level essential health benefits package, as defined in 42 U.S.C. section 18022, or an equivalent plan that is designed to provide benefits that are actuarially equivalent to 70 percent of the full actuarial value of the benefits provided under the plan, whichever is greater;
"Minimum compensation" means the minimum wage in addition to tips actually received by the employee and reported to the Internal Revenue Service, and money paid by the employer towards an individual employee's medical benefits plan;
"Minimum wage" means all wages, commissions, piece-rate, and bonuses actually received by the employee and reported to the Internal Revenue Service;
"Piece-rate" means a price paid per unit of work;
"Rate of inflation" means the Consumer Price Index annual percent change for urban wage earners and clerical workers, termed CPI-W, or a successor index, for the twelve months prior to each September 1st as calculated by the United States Department of Labor;
"Schedule 1 Employer" means all employers that employ more than 500 employees in the United

States, regardless of where those employees are employed in the United States, and all franchisees associated with a franchisor or a network of franchises with franchisees that employ more than 500 employees in aggregate in the United States;
"Schedule 2 Employer" means all employers that employ 500 or fewer employees regardless of where those employees are employed in the United States. Schedule 2 employers do not include franchisees associated with a franchisor or a network of franchises with franchisees that employ more than 500 employees in aggregate in the United States;
"Tips" means a verifiable sum to be presented by a customer as a gift or gratuity in recognition of some service performed for the customer by the employee receiving the tip;
"Wage" means compensation due to an employee by reason of employment, payable in legal tender of the United States or checks on banks convertible into cash on demand at full face value, subject to such deductions, charges, or allowances as may be permitted by rules of the Director. Commissions, piece-rate, and bonuses are included in wages. Tips and employer payments toward a medical benefits plan do not constitute wages for purposes of this Chapter.

SeaTac:

Definitions
As used in this Chapter, the following terms shall have the following meaning:

A. “City” means the City of SeaTac.

B. “Compensation” includes any wages, tips, bonuses, and other payments reported as taxable income from the employment by or for a Covered Worker.

C. “Covered Worker” means any individual who is either a Hospitality Worker or a Transportation Worker.

D. “Hospitality Employer” means a person who operates within the City any Hotel that has one hundred (100) or more guest rooms and thirty (30) or more workers or who operates any institutional foodservice or retail operation employing ten (10) or more nonmanagerial, nonsupervisory employees. This shall include any person who employs others providing services for customers on the aforementioned premises, such as a temporary agency or subcontractor.

E. “Hospitality Worker” means any nonmanagerial, nonsupervisory individual employed by a Hospitality Employer.

F. “Hotel” means a building that is used for temporary lodging and other related services for the public, and also includes any contracted, leased, or sublet premises connected to or operated in conjunction with such building's purpose (such as a restaurant, bar or spa) or providing services at such building.

G. “Institutional foodservice or retail” is defined as foodservice or retail provided in public facilities, corporate cafeterias, conference centers and meeting facilities, but does not include preparation of food or beverage to be served in-flight by an airline. Restaurants or retail operations that are not located within a hotel, public facility, corporate cafeteria, conference

facility or meeting facility are not considered a hospitality employer for the purpose of this Chapter.

H. "Person" means an individual, corporation, partnership, limited partnership, limited liability partnership, limited liability company, business trust, estate, trust, association, joint venture, or any other legal or commercial entity, whether domestic or foreign, other than a government agency.

I. "Predecessor Employer" means the Hospitality or Transportation Employer that provided substantially similar services within the City prior to the Successor Employer.

J. "Retention Employee" means any Covered Worker who:

1) was employed by a Predecessor Employer for at least 30 workdays; and
2) was either:

a) laid off or discharged for lack of work due to the closure or reduction of a Hospitality or Transportation Employer's operation during the preceding two years; or

b) is reasonably identifiable as a worker who is going to lose his/her job due to the closure or reduction of the Hospitality or Transportation Employer's operation within the next 6 months.

K. "Service charge" is defined as set forth in RCW 49.46.160(2)(c).

L. "Successor Employer" means the new Hospitality or Transportation Employer that succeeds the Predecessor Employer in the provision of substantially similar services within the City.

M. "Transportation Employer" means:

1) A person, excluding a certificated air carrier performing services for itself, who:
a) operates or provides within the City any of the following: any curbside passenger check-in services; baggage check services; wheelchair escort services; baggage handling; cargo handling; rental luggage cart services; aircraft interior cleaning; aircraft carpet cleaning; aircraft washing and cleaning; aviation ground support equipment washing and cleaning; aircraft water or lavatory services; aircraft fueling; ground transportation management; or any janitorial and custodial services, facility maintenance services, security services, or customer service
performed in any facility where any of the services listed in this paragraph are also performed; and b) employs twenty-five (25) or more nonmanagerial, nonsupervisory employees in the performance of that service.
2) A transportation employer also includes any person who:

a) operates or provides rental car services utilizing or operating a fleet of more than one hundred (100) cars; shuttle transportation utilizing or operating a fleet of more than ten (10) vans or buses; or parking lot management controlling more than one hundred (100)

parking spaces; and
b) employs twenty-five (25) or more nonmanagerial, nonsupervisory employees in the performance of that operation.

N. “Transportation Worker” means any nonmanagerial, nonsupervisory individual employed by a Transportation Employer.

O. “Tips” mean any tip, gratuity, money, or part of any tip, gratuity, or money that has been paid or given to or left for a Covered Worker by customers over and above the actual amount due for services rendered or for goods, food, drink, or articles sold or served to the customer.

San Jose:

The following terms shall have the following meanings:
A. "City" shall mean City of San Jose.
B. "Employee" shall mean any person who:
1. In a calendar week performs at least two (2) hours of work for an Employer as defined below.
2. Qualifies as an employee entitled to payment of a minimum wage from any employer under the California minimum wage law, as provided under Section 1197 of the California Labor Code and wage orders published by the California Industrial Welfare Commission, or is a participant in a Welfare-to-Work Program.
C. "Employer" shall mean any person, including corporate officers or executives, as defined in Section 18 of the California Labor Code, who directly or indirectly through any other person, including through the services of a temporary employment agency, staffing agency or similar entity, employs or exercises control over the wages, hours or working conditions of any Employee and who is either subject to the Business License Tax Chapter 4.76 of the Municipal Code or maintains a facility in the City.
D. "Minimum Wage" shall have the meaning set forth in Section 4.100.040 of this Chapter.
E. "Office" shall mean the Office of Equality Assurance or such other City department or office as the Council shall by resolution designate.
F. "Welfare-to-Work Program" shall mean the CalWORKS Program, County Adult Assistance Program (CAAP) which includes the Personal Assisted Employment Services (PAES) Program, and General Assistance Program, and any successor programs that are substantially similar to them.

Albuquerque:

DEFINITIONS.
For the purpose of this article, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

CITY. The City of Albuquerque.
EMPLOYEE. Any person who performs work for an employer for monetary compensation for at least two hours in a given week within the municipal limits of the city. EMPLOYEE shall include persons who perform work for an employer on a full-time, part-time, seasonal, or temporary basis.

EMPLOYEE shall not include any person who is excluded from the definition of employee under NMSA §§ 50-4-21(c)(3)-(5), (7) of the New Mexico Minimum Wage Act, except that persons employed by the City of Albuquerque are employees. EMPLOYEE shall not include interns working for an employer for academic credit in connection with a course of study at an accredited school, college or university or employees working for an accredited school, college or university pursuant to a work-study program while attending that school, college or university. EMPLOYEE shall not include any person who has received a certificate from the state labor commissioner pursuant to § 50-4-23 NMSA 1978 or § 50-4-21(c)(12) NMSA 1978.
EMPLOYER. Any person, partnership, association, corporation, business trust, legal representative, or any other entity, or group of persons or entities, including corporate officers or executives, who is required to have a business license or business registration from the City of Albuquerque and who directly or indirectly or through an agent or any other person including, but not limited to, through a subsidiary or through the services of a temporary services agency, a staffing agency, a building services contractor, or any similar entity, employs or exercises control over the wages, hours or working conditions of any employee. EMPLOYER shall include the City of Albuquerque.
MINIMUM WAGE, MINIMUM WAGE RATE. The minimum hourly rates of monetary compensation for work as specified in this article.
TIP. A sum presented by a customer as a gift or gratuity in recognition of some service performed for the customer. TIP shall include only tips actually received by an employee as money belonging to him or her. Where employees practice tip pooling or splitting, as where wait staff give a portion of their tips to bus persons, both the actual amounts retained by the waiters or waitresses and those given the bus persons shall be considered TIPS of the individual employee who retains them. A compulsory charge for service imposed on a customer by an employer's establishment shall not be considered a TIP unless it is distributed by the employer to its employees.
TIPPED EMPLOYEE. Any employee engaged in an occupation in which he or she customarily and regularly receives tips from customers.

<u>Montgomery County</u>:

Definitions. As used in this Article:

Director means the Executive Director of the Office of Human Rights and includes the Executive Director's designee.

Employ means to engage a person to work for compensation.

Employee means any person permitted or instructed to work or be present by an employer in the County and who is an employee subject to the minimum wage requirements of the Federal Act or the State Act.

Employer means any person, individual, proprietorship, partnership, joint venture, corporation, limited liability company, trust, association, or other entity operating and doing business in the County that employs 2 or more persons in the County. Employer includes the County government, but does not include the United States, any State, or any other local government.

Federal Act means the federal Fair Labor Standards Act of 1938, as amended.

State Act means the Maryland Wage and Hour Law, as amended.

Wage means all compensation that is due to an employee for employment.

Los Angeles:

The following definitions shall apply to this article:
A. "City" means the City of Los Angeles.
B. "Designated Administrative Agency (DAA)" means the Department of Public Works, Bureau of Contract Administration, which shall bear administrative responsibilities under this article.
C. "Employee" means any individual who:
1. In a particular week performs at least two hours of work within the geographic boundaries of the City for an Employer; and
2. Qualifies as an Employee entitled to payment of a minimum wage from any Employer under the California minimum wage law, as provided under Section 1197 of the California Labor Code and wage orders published by the California Industrial Welfare Commission.
D. "Employer" means any person, as defined in Section 18 of the California Labor Code, including a corporate officer or executive, wha directly or indirectly or through an agent or any other person, including through the services of a temporary service or staffing agency or similar entity, employs or exercises control over the wages, hours or working conditions of any employee.
E. "Non-Profit Corporation" means anon-profit corporation, duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation and, if a foreign corporation, in good standing under the laws of the State of California, which corporation has established and maintains valid non-profit status under Section 5Q1(c)(3) of the United States Internal Revenue Code of 1986, as amended, and all rules and regulations promulgated thereunder.
F. "Person" means any person, association, organization, partnership, business trust, limited liability company or corporation.

Bernalillo County:

Definitions.
County means the County of Bernalillo
Employer means any person, who is required to have a business registration from the county and who directly or indirectly or through an agent or any other person including, but not limited to, through a subsidiary or through the services of a temporary services agency, a staffing agency, a building services contractor, or any similar entity, employs or exercises control over the wages, hours or working conditions of any employee. "Employer" shall include the county.
Employee means any person who performs work for an employer for monetary compensation for at least two hours in a given week within the unincorporated limits of the county. "Employee" shall include persons who perform work for an employer on a full-time, part-time, seasonal, or temporary basis. Employee shall not include any person who is excluded from the definition of employee under NMSA 1978, §§ 50-4-21(C)(3)—(5), (7) of the New Mexico Minimum Wage Act, except that persons employed by the County of Bernalillo are employees.
"Employee" shall not include interns working for an employer for academic credit in connection with a course of study at an accredited school, college or university or employees working for an accredited school, college or university pursuant to a work-study program while attending that school, college or university. "Employee" shall not include any person who has received a

certificate from the state labor commissioner pursuant to NMSA 1978, § 50-4-23 or § 50-4-21(C)(12).
Minimum wage, minimum wage rate means the minimum hourly rates of monetary compensation for work as specified in this ordinance.
Tip means a sum presented by a customer as a gift or gratuity in recognition of some service performed for the customer. "Tip" shall include only tips actually received by an employee as money belonging to him or her. Where employees practice tip pooling or splitting, as where wait staff give a portion of their tips to bus persons, both the actual amounts retained by the waiters or waitresses and those given the bus persons shall be considered "tips" of the individual employee who retains them. A compulsory charge for service imposed on a customer by an employer's establishment shall not be considered a "tip" unless it is distributed by the employer to its employees.
Tipped employee means any employee engaged in an occupation in which he or she customarily and regularly receives tips from customers.
Tipped minimum wage means the minimum cash wage that a tipped employee must receive from his or her employer, as provided under section 2-220(a).

San Francisco:

DEFINITIONS.

As used in this Chapter, the following capitalized terms shall have the following meanings:

"Agency" shall mean the Living Wage/Living Health Division of the Office of Contract Administration or such other City department or agency as the City shall by resolution designate.

"City" shall mean the City and County of San Francisco.

"Employee" shall mean any person who:

(a) In a particular week performs at least two (2) hours of work for an Employer within the geographic boundaries of the City; and

(b) Qualifies as an employee entitled to payment of a minimum wage from any employer under the California minimum wage law, as provided under Section 1197 of the California Labor Code and wage orders published by the California Industrial Welfare Commission, or is a participant in a Welfare-to-Work Program.

"Employer" shall mean any person, as defined in Section 18 of the California Labor Code, including corporate officers or executives, who directly or indirectly or through an agent any other person, including through the services of a temporary services or staffing agency or similar entity, employs or exercises control over the wages, hours or working conditions of any Employee.

"Minimum Wage" shall have the meaning set forth in Section [12R.]4 of this Chapter.

"Small Business" shall mean an Employer for which fewer than ten (10) persons perform work for compensation during a given week. In determining the number of persons performing work for an Employer during a given week, all persons performing work for compensation on a full-time, part-time, or temporary basis shall be counted, including persons made available to work through the services of a temporary services or staffing agency or similar entity.

"Nonprofit Corporation" shall mean a nonprofit corporation, duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation and (if a foreign corporation) in good standing under the laws of the State of California, which corporation has established and maintains valid nonprofit status under Section 501(c)(3) of the United States

Internal Revenue Code of 1986, as amended, and all rules and regulations promulgated under such Section.

"Welfare-to-Work Program" shall mean the City's CalWORKS Program, County Adult Assistance Program (CAAP) which includes the Personal Assisted Employment Services (PAES) Program, and General Assistance Program, and any successor programs that are substantially similar to them.

Oakland:

Definitions

As used in this Chapter, the following capitalized terms shall have the following meanings:

"City" shall mean the City of Oakland.

"Employee" shall mean any person who:

a. In a particular week performs at least two (2) hours of work within the geographic boundaries of the City for an Employer; and

b. Qualifies as an employee entitled to payment of a minimum wage from any employer under the California minimum wage law, as provided under Section 1197 of the California Labor Code and wage orders published by the California Industrial Welfare Commission.

"Employer" shall mean any Person who directly or indirectly (including through the services of a temporary services or staffing agency or similar entity) employs or exercises control over the wages, hours or working conditions of any Employee.

"Paid Sick Leave" shall mean paid "sick leave" as defined in California Labor Code § 233(b)(4), except that the definition here extends beyond the Employee's own illness, injury, medical condition, need for medical diagnosis or treatment, or medical reason, to also encompass time taken off work by an Employee for the purpose of providing care or assistance to other persons specified below with an illness, injury, medical condition, or need for medical diagnosis or treatment.

"Minimum Wage" shall have the meaning set forth in Section 5.92.020 of this Chapter.

"Person" means an individual corporation, partnership, limited partnership, limited liability partnership, limited liability company, business trust, estate, trust, association, joint venture, agency, instrumentality, or any other legal or commercial entity, whether domestic or foreign.

"Small Business" shall mean an Employer for which normally fewer than ten persons work for compensation during a given week, including persons employed outside the City. The City Council is authorized to adopt regulations further defining "small business" for businesses with fluctuating numbers of employees. In determining the number of persons performing work for an employer during a given week, all persons performing work for the same business enterprise for compensation on a full-time, part-time, or temporary basis shall be counted, including persons made available to work through the services of a temporary services or staffing agency or similar entity.

E. MINIMUM WAGE REQUIRED

Richmond:

Minimum wage.

(a) Employers shall pay employees no less than the minimum wage set forth in this section for each hour worked within the geographic boundaries of the City. The minimum wage shall be as follows:
   (1) For a transition period beginning on January 1, 2015, and ending on December 31, 2015, the minimum wage shall be an hourly rate of nine dollars and sixty cents ($9.60). For a transition period beginning on January 1, 2016 and ending on December 31, 2016, the minimum wage shall be an hourly rate of eleven dollars and fifty-two cents ($11.52). For a transition period beginning on January 1, 2017 and ending on December 31, 2017, the minimum wage shall be an hourly rate of twelve dollars and thirty cents ($12.30).
   (2) Beginning on January 1, 2018, the minimum wage shall be an hourly rate of thirteen dollars ($13.00).
   (3) To prevent inflation from eroding its value, beginning on January 1, 2019, and each year thereafter, the minimum wage shall increase by an amount corresponding to the prior year's increase, if any, in the Consumer Price Index for Urban Wage Earners and Clerical Workers for the San Francisco-Oakland-San Jose, CA metropolitan statistical area, or any successor index as published by the U.S. Department of Labor or its successor agency.
   (4) The adjusted minimum wage shall be announced by October 1 of each year, and shall become effective as the new minimum wage on January 1.
   (5) If the employer pays at least $1.50 per hour per employee towards an employee medical benefits plan, which allows the employee to receive employer-compensated care from a licensed physician, the employer shall pay employees the minimum wage as defined in this section, less $1.50, so long as such deduction is consistent with Section 7.108.100. The department guidelines established pursuant to this chapter shall include rules for calculating this medical benefits plan credit, as well as address any procedures required for obtaining this credit.
   (6) Employer shall pay its employees no less than the intermediate minimum wage for each hour worked if employer derives more than fifty percent (50%) of its income from transactions where the employer's goods and services produced by the employer in Richmond are delivered or shipped outside the City of Richmond. In determining whether this fifty percent (50%) threshold is met, the employer shall only consider operations within the City of Richmond, and the income shall be based on the combined value of goods and services.

(b) A violation for unlawfully failing to pay the minimum wage shall be deemed to continue from the date immediately following the date that the wages were due and payable as provided in Part 1 (commencing with Section 200) of Division 2 of the California Labor Code, to the date immediately preceding the date the wages are paid in full.

Berkeley:

Minimum Wage.

A. Employers shall pay Employees no less than the Minimum Wage set forth below for each hour worked within the geographic boundaries of the City.

Date	Minimum Hourly Wage
October 1, 2014	$10.00
October 1, 2015	$11.00
October 1, 2016	$12.53

B. For Employers that are Nonprofit Corporations, the requirements of this Chapter shall not take effect until October 1, 2015, at which time the minimum wage will be $11.00 per hour.
C. A violation for unlawfully failing to pay the Minimum Wage shall be deemed to continue from the date immediately following the date that the wages were due and payable as provided in Part 1 (commencing with Section 200) of Division 2 of the California Labor Code, to the date immediately preceding the date the wages are paid in full.

Seattle:

14.19.020 - Employment in Seattle and Employer Schedule Determination

A. Employees are covered by this Chapter for each hour worked within the geographic boundaries of Seattle, provided that an employee who performs work in Seattle on an occasional basis is covered by this Chapter in a two-week period only if the employee performs more than two hours of work for an employer within Seattle during that two-week period. Time spent in Seattle solely for the purpose of travelling through Seattle from a point of origin outside Seattle to a destination outside Seattle, with no employment-related or commercial stops in Seattle except for refueling or the employee's personal meals or errands, is not covered by this Chapter. An employee who is not covered by this Chapter is still included in any determination of the size of the employer.

B. For the purposes of determining whether a non-franchisee employer is a Schedule 1 employer or a Schedule 2 employer, separate entities that form an integrated enterprise shall be considered a single employer under this Chapter. Separate entities will be considered an integrated enterprise and a single employer under this Chapter where a separate entity controls the operation of another entity. The factors to consider in making this assessment include, but are not limited to:

    1. Degree of interrelation between the operations of multiple entities;
    2. Degree to which the entities share common management;
    3. Centralized control of labor relations; and
    4. Degree of common ownership or financial control over the entities.

There shall be a presumption that separate legal entities, which may share some degree of interrelated operations and common management with one another, shall be considered separate employers for purposes of this section as long as (1) the separate legal entities operate substantially in separate physical locations from one another, and (2) each separate legal entity has partially different ultimate ownership. The determination of employer schedule for the current calendar year will be calculated based upon the average number of employees employed per calendar week during the preceding calendar year for any and all weeks during which at least one employee worked for compensation. For employers that did not have any employees during the previous calendar year, the employer schedule will be calculated based upon the average number of employees employed per calendar week during the first 90 calendar days of the current year in which the employer engaged in business.

C. The Director shall have the authority to issue a special certificate authorizing an employer to pay a wage less than the City of Seattle minimum wage, as defined in this Chapter, but above the Washington State minimum wage, as defined in RCW 49.46.020. Such special certificates shall only be available for the categories of workers defined in RCW 49.46.060 and shall be subject to such limitations as to time, number, proportion, and length of service as the Director shall prescribe. Prior to issuance, an applicant for a special certificate must secure a letter of recommendation from the Washington State Department of Labor and Industries stating that the applicant has a demonstrated necessity pursuant to WAC 296-128.

D. The Director shall by rule establish the minimum wage for employees under the age of eighteen years, provided that any percentage of the hourly rate established by rule shall not be lower than the percentage applicable under state statutes and regulations.

14.19.030 - Hourly Minimum Wage - Schedule 1 Employers

A. Effective April 1, 2015, Schedule 1 employers shall pay each employee an hourly minimum wage of at least $11.00. Pursuant to the following schedule, effective January 1 of each year thereafter, Schedule 1 employers shall pay any employee an hourly minimum wage as follows:

Year	Hourly Minimum Wage
2016	$13.00
2017	$15.00

Effective January 1, 2018, the hourly minimum wage paid by a Schedule 1 employer to any employee shall be increased annually on a percentage basis to reflect the rate of inflation and calculated to the nearest cent on January 1 of each year thereafter.

B. Schedule 1 employers can meet the applicable hourly minimum wage requirement through a payment of the minimum wage, provided that the Schedule 1 employer is in compliance with all applicable law. Where an employee is paid on a commission or piece-rate basis, wholly or partially, the amount earned on such basis in each work-week period may be

credited as a part of the total wage for that period, and the total wages paid for such period shall be computed on the hours worked in that period resulting in no less than the applicable minimum wage rate. Where an employee is paid a bonus, the amount of the bonus in each work-week period may be credited as a part of the total wage for that period, and the total wages paid for such period shall be computed on the hours worked in that period resulting in no less than the applicable minimum wage rate. Pursuant to the following schedule, effective January 1, 2016, Schedule 1 employers that pay toward an individual employee's medical benefits plan shall pay the employee an hourly minimum wage as follows:

Year	Hourly Minimum Wage
2016	$12.50
2017	$13.50
2018	$15.00

Effective January 1, 2019, payment by the employer of health benefits for employees shall no longer affect the hourly minimum wage paid by a Schedule 1 employer.

14.19.040 - Hourly Minimum Wage - Schedule 2 Employers

A. Effective April 1, 2015, Schedule 2 employers shall pay each employee an hourly minimum wage of at least $10.00. Schedule 2 employers can meet the applicable hourly minimum wage requirement through a payment of the minimum wage, provided that the Schedule 2 employer is in compliance with all applicable law. Effective January 1 of 2016 and each year thereafter, Schedule 2 employers shall pay each employee an hourly minimum wage that is the lower of (a) the applicable hourly minimum wage for Schedule 1 Employers or (b) the hourly minimum wage shown in the following schedule:

Year	Hourly Minimum Wage
2016	$10.50
2017	$11.00
2018	$11.50
2019	$12.00
2020	$13.50

2021	$15.00
2022	$15.75
2023	$16.50
2024	$17.25

Effective on January 1 of 2025, and January 1 of every year thereafter, the hourly minimum wage paid by a Schedule 2 employer to any employee shall equal the hourly minimum wage applicable to Schedule 1 employers.

B. Schedule 2 employers can meet the applicable hourly minimum wage requirements through a payment of the minimum wage, provided that the Schedule 2 employer is in compliance with all applicable law.

14.19.050 - Hourly Minimum Compensation - Schedule 2 Employers

A. Effective April 1, 2015, Schedule 2 employers shall pay each employee an hourly minimum compensation of at least $11.00. Effective January 1 of each year thereafter, Schedule 2 employers shall pay each employee an hourly minimum compensation that is the lower of (a) the applicable hourly minimum wage for Schedule 1 Employers or (b) the hourly minimum compensation shown in the following schedule:

Year	Hourly Minimum Compensation
2016	$12.00
2017	$13.00
2018	$14.00
2019	$15.00
2020	$15.75

Effective January 1, 2021, the hourly minimum compensation paid by a Schedule 2 employer to any employee shall equal the hourly minimum wage applicable to Schedule 1 employers.

B. Schedule 2 employers can meet the applicable hourly minimum compensation requirement through wages (including applicable commissions, piece-rate, and bonuses), tips and money

paid by an employer towards an individual employee's medical benefits plan, provided that the Schedule 2 employer also meets the applicable hourly minimum wage requirements.

C. Effective January 1, 2025, minimum compensation will no longer be applicable as defined in this Chapter.

SeaTac:

Establishing A Living Wage For Hospitality Workers and Transportation Workers

A. Each Hospitality Employer and Transportation Employer shall pay Covered Workers a living wage of not less than the hourly rates set forth in this section. The rate upon enactment shall be fifteen dollars ($15.00) per hour worked.

B. On January 1, 2015, and on each following January 1, this living wage shall be adjusted to maintain employee purchasing power by increasing the current year's wage rate by the rate of inflation. The increase in the living wage rate shall be calculated to the nearest cent using the consumer price index for urban wage earners and clerical workers, CPI-W, or a successor index, for the twelve months prior to each September 1st as calculated by the United States department of labor. The declaration of the Washington State Department of Labor and Industries each September 30 regarding the rate by which Washington State's minimum wage rate is to be increased effective the following January 1, pursuant to RCW 49.46.020(4)(b), shall be the authoritative determination of the rate of increase to be applied for purposes of this provision.

C. The City Manager shall publish a bulletin by October 15 of each year announcing the adjusted rates. Such bulletin will be made available to all Hospitality Employers and Transportation Employers and to any other person who has filed with the City Manager a request to receive such notice but lack of notice shall not excuse noncompliance with this section.

D. Each Hospitality Employer and Transportation Employer shall provide written notification of the rate adjustments to each of its workers and make the necessary payroll adjustments by January 1 following the publication of the bulletin. Tips, gratuities, service charges and commissions shall not be credited as being any part of or be offset against the wage rates required by this Chapter.

San Jose:

A. Employers shall pay Employees no less than the Minimum Wage set forth in this Section for each hour worked within the geographic boundaries of the City.

B. The Minimum Wage shall be an hourly rate often dollars ($10). To prevent inflation from eroding its value, beginning on January 1, 2014, and each year thereafter, the Minimum Wage shall increase by an amount corresponding to the prior year's increase, if any, in the cost of living. The prior year's increase in the cost of living shall be measured by the percentage increase, if any, as of August of the immediately preceding year over the level as of August of the previous year of the Consumer Price Index (Urban Wage Earners and Clerical Workers, U.S. City Average for All Items) or its successor index as published by the U.S. Department of Labor or its successor agency, with the amount of the minimum wage increase rounded to the nearest

multiple of five cents. The adjusted minimum wage shall be announced by October 1 of each year, and shall become effective as the new minimum wage on January 1.

C. A violation for unlawfully failing to pay the Minimum Wage shall be deemed to continue from the date immediately following the date that the wages were due and payable as provided in Part 1 (commencing with Section 200) of Division 2 of the California Labor Code, to the date immediately preceding the date the wages are paid in full.

Albuquerque:

MINIMUM WAGE

(A) Minimum wage payment required. Except as provided herein, employers shall pay all employees no less than the minimum wage for each hour worked within the municipal limits of the city. Tips or commissions received and retained by an employee shall be counted as wages and credited towards satisfaction of the minimum wage.

(B) Minimum wage rate. Beginning January 1, 2007, the minimum wage for employees shall be an hourly rate of $6.75. Beginning January 1, 2008, the minimum wage for employees shall be an hourly rate of $7.15. Beginning January 1, 2009, the minimum wage for employees shall be an hourly rate of $7.50. For employers who provide healthcare and/or childcare benefits to an employee during any pay period for which the employer pays an amount for those healthcare benefits equal to or in excess of an annualized cost of $2,500.00, beginning January 1, 2007, the minimum wage for that employee shall be an hourly rate of $5.75, in addition to the healthcare benefits and/or childcare benefits, beginning January 1, 2008, the minimum wage for that employee shall be an hourly rate of $6.15, in addition to the healthcare and/or childcare benefits, and beginning January 1, 2009, the minimum wage for that employee shall be an hourly rate of $6.50, in addition to the healthcare and/or childcare benefits.

Montgomery County:

Minimum wage required.

(a) County minimum wage. Except as provided in Subsection (b), an employer must pay wages to each employee for work performed in the County at least the greater of:
(1) the minimum wage required for that employee under the Federal Act;
(2) the minimum wage required for that employee under the State Act; or
(3) $11.50 per hour.
(b) Exclusions. The County minimum wage does not apply to an employee who:
(1) is exempt from the minimum wage requirements of the State or Federal Act;
(2) is under the age of 19 years and is employed no more than 20 hours per week; or
(3) is subject to an opportunity wage under the State or Federal Act.
(d) Retaliation prohibited. A person must not:
(1) retaliate against any person for:
(A) lawfully opposing any violation of this Article; or
(B) filing a complaint, testifying, assisting, or participating in any manner in an

investigation, proceeding, or hearing under this Article; or
(2) obstruct or prevent enforcement or compliance with this Article.

Los Angeles:

PAYMENT OF MINIMUM WAGE TO EMPLOYEES.

A. An Employer shall pay an Employee a wage of no less than the hourly rates set under the authority of this article.

B. Employers with 26 or more Employees shall pay a wage of no less than the hourly rates set forth:
1. On July 1, 2016, the hourly wage shall be $10.50.
2. On July 1, 2017, the hourly wage shall be $12.00.
3. On July 1, 2018, the hourly wage shall be $13.25.
4. On July 1, 2019, the hourly wage shall be $14.25.
5. On July 1, 2020, the hourly wage shall be $15.00.

C. Employers with 25 or fewer Employees shall pay a wage of no less than the hourly rates set forth:
1. On July 1, 2017, the hourly wage shall be $10.50.
2. On July 1, 2018, the hourly wage shall be $12.00.
3. On July 1, 2019, the hourly wage shall be $13.25.
4. On July 1, 2020, the hourly wage shall be $14.25.
5. On July 1, 2021, the hourly wage shall be $15.00.

D. On July 1, 2022, and annually thereafter, the minimum wage will increase based on the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) for the Los Angeles metropolitan area (Los Angeles-Riverside-Orange County, CA), which is published by the Bureau of Labor Statistics. The DAA shall announce the adjusted rates an January 1St and publish a bulletin announcing the adjusted rates, which shall take effect on July 1 of each year.

E. Employees, who are "Learners" as defined in Labor Code Section 1192 and consistent with wage orders published by the California Industrial Welfare Commission and are 14-17 years of age, shall be paid not less than 85% of the minimum wage rounded to the nearest nickel during their first 160 hours of employment. After more than 160 hours of employment, Learners shall be paid the applicable minimum wage pursuant to this section.

F. For purposes of this article, the size of an Employer's business or Non-Profit Corporation shall be determined by the average number of Employees employed during the previous calendar year.

San Francisco:

MINIMUM WAGE.

(a) Employers shall pay Employees no less than the Minimum Wage for each hour worked within the geographic boundaries of the City.

(b) Beginning on the effective date of this Chapter, the Minimum Wage shall be an hourly rate of $8.50. To prevent inflation from eroding its value, beginning on January 1, 2005, and each year thereafter, the Minimum Wage shall increase by an amount corresponding to the prior year's increase, if any, in the Consumer Price Index for urban wage earners and clerical workers for the San Francisco-Oakland-San Jose, CA metropolitan statistical area.

(c) The Minimum Wage for Employers that are Small Businesses or Nonprofit Corporations shall phase in over a two year period in order to afford such Employers time to adjust. For such Employers, the effective date of this Chapter shall be January 1, 2005. For a transition period beginning January 1, 2005 and ending December 31, 2005, the Minimum Wage for Employees of such Employers shall be an hourly rate of $7.75. Beginning January 1, 2006, the Minimum Wage for Employees of such Employers shall be the regular Minimum Wage established pursuant to Section 4(b)1 of this Chapter.

Oakland:

Minimum Wage.

A. Employers shall pay Employees no less than the Minimum Wage for each hour worked within the geographic boundaries of the City.

B. Beginning on the 2nd of March, 2015, the Minimum Wage shall be an hourly rate of $12.25. To prevent inflation from eroding its value, beginning on the 1st of January 2016, and then each year thereafter on the 1st of January, the Minimum Wage shall increase by an amount corresponding to the prior calendar year's increase, if any, in the Consumer Price Index for urban wage earners and clerical workers for the San Francisco-Oakland-San Jose, CA metropolitan statistical area (or if such index is discontinued, then in the most similar successor index).

Bernalillo County:

Minimum wage.
(a) Minimum wage payment required. Except as provided herein, employers shall pay all employees no less than the minimum wage for each hour worked within the unincorporated limits of the county. The current State of New Mexico minimum wage of $7.50, except as provided in subsection (b), must become the greater by $1.00 per hour, in $2.50 increments as provided below:
(1) The minimum wage shall be enacted via two incremental increases of $0.50 as provided in subsection (b).
(2) The minimum wage shall be increased by $0.50 effective July 1, 2013; and a second increment of $0.50 increase effective January 1st, 2014.
(3) Effective January 1, 2014 the minimum wage for Bernalillo County shall be $8.50, except as provided in subsection (b).
(4) Annual cost of living adjustment. The minimum wage shall be increased on January 1, 2015, and on January 1 of successive years by the Bernalillo County Commission based on the increase, if any, in the cost of living, and rounded to the nearest multiple $0.05. The increase in the cost of living shall be calculated based on the percentage increase, if any, of the Consumer Price Index or its successor index as published by the U.S. Department of Labor or its successor

agency. The county shall publish the adjusted minimum wage for the forthcoming year on its Internet home page by October 15 of each preceding year, and they shall become effective on January 1 of the forthcoming year.

(5) The board of county commissioners will review the minimum wage every five years, in order to assess its continuing adequacy.

(b) Exceptions to the minimum wage increase shall include:

(1) Any person employed by a parent, spouse or a sibling;

(2) Any person performing babysitting services in the employer's home on a casual basis;

(3) Any employee under the age of 16.

(c) For any employee who customarily and regularly receives tips or gratuities, the minimum wage shall remain at the federal minimum wage of $2.13 per hour. If an employee's tips combined with the employer's cash wage of at least $2.13 per hour do not equal the minimum hourly wage established in section A, the employer shall make up the difference. This subsection shall not be construed to prohibit the pooling of tips among employees who customarily and regularly receive tips.

(d) Minimum wage rate. For employers who provide healthcare and/or childcare benefits to an employee during any pay period for which the employer pays an amount for those healthcare benefits equal to or in excess of an annualized cost of $2,500.00, beginning April 1, 2013 and each year thereafter, the minimum wage for that employee shall be an hourly rate of $1.00 less than the current minimum wage otherwise applicable to employees who do not receive such benefits.

F. TIPS/ SERVICES CHARGES

SeaTac:

Require That Service Charges and Tips Go To Those Performing The Service

A. Any service charge imposed on customers of, or tips received by employees of, a Hospitality Employer shall be retained by or paid to the nonmanagerial, nonsupervisory Hospitality or Transportation Workers who perform services for the customers from whom the tips are received or the service charges are collected.

B. The amounts received from tips or service charges shall be allocated among the workers who performed these services equitably; and specifically:

1) Amounts collected for banquets or catered meetings shall be paid to the worker(s) who actually work with the guests at the banquet or catered meeting; and
2) Amounts collected for room service shall be paid to the worker(s) who actually deliver food and beverage associated with the charge; and
3) Amounts collected for porterage service shall be paid to the worker(s) who actually carry the baggage associated with the charge.

Montgomery County:

Tipped employees.
(a) Definition. As used in this Section, tipped employee means:
(1) an employee who:
(A) is engaged in an occupation in which the employee customarily and regularly receives more than $30 each month in tips;
(B) has been informed by the employer about the provisions of this Section; and
(C) has kept all of the tips that the employee received.
(2) Notwithstanding paragraph (1)(C), this Section does not prohibit the pooling of tips.
(b) Computation of wage. Except as provided in subsection (c), an employer may include, as part of the wage of a tipped employee:
(1) an amount that the employer sets to represent the tips of the employee; or
(2) if the employee or representative of the employee satisfies the Director that the employee received a lesser amount in tips, the lesser amount.
(c) Limit. The tip credit amount that the employer may include under subsection (b) must not exceed the County minimum wage less 50% of the minimum wage required for that employee under the State Act.

G. REPORTING REQUIREMENTS

SeaTac:

Employee Work Environment Reporting Requirement

A. Hospitality Employers and Transportation Employers shall retain records documenting hours worked, paid sick and safe time taken by Covered Workers, and wages and benefits provided to each such employee, for a period of two years, and shall allow the City Manager or designee access to such records, with appropriate notice and at a mutually agreeable time, to investigate potential violations and to monitor compliance with the requirements of this Chapter.

B. Hospitality Employers and Transportation Employers shall not be required to modify their recordkeeping policies to comply with this Chapter, as long as records reasonably indicate the hours worked by Covered Workers, accrued paid sick and safe time, paid sick and safe time taken, and the wages and benefits provided to each such Covered Worker. When an issue arises as to the amount of accrued paid sick time and/or paid safe time available to a Covered Worker under this chapter, if the Hospitality Employers and Transportation Employers does not maintain or retain adequate records documenting hours worked by the Covered Worker and paid sick and safe time taken by the Covered Worker, it shall be presumed that the Hospitality Employers and Transportation Employers has violated this chapter.

C. Records and documents relating to medical certifications, re-certifications or medical histories of Covered Worker or Covered Workers' family members, created for purposes of this chapter, are required to be maintained as confidential medical records in separate files/records from the usual personnel files. If the Americans with Disabilities Act (ADA) and/or the Washington Law Against Discrimination (WLAD) apply, then these records must comply with the ADA and WLAD confidentiality requirements.

Los Angeles:

Every three years after July 1, 2016, the Chief Legislative Analyst (CLA) with the assistance of the City Administrative Officer (CAO) shall commission a study to review the state of the City's economy; minimum wage impacts; textile and apparel manufacturing impacts; temporary workers, guards and janitors impacts; home health care services impacts; residential care and nursing facilities impacts; child day care services impacts; restaurants and bars impacts; personal and repair services impacts; transitional jobs programs impacts; service charges, commissions and guaranteed gratuities impacts; and wage theft enforcement. On an annual basis, the CLA and CAO shall collect economic data, including jabs, earnings and sales tax.

San Francisco:

The Office of Labor Standards Enforcement shall provide annual reports to the Board of Supervisors on the implementation of the Minimum Wage Ordinance.

H. **WAIVERS; EXEMPTIONS; EXCEPTIONS**:

Richmond:

To the extent required by law, all or any portion of the applicable requirements of this chapter may be waived in a bona fide collective bargaining agreement, provided that such waiver is explicitly set forth in such agreement in clear and unambiguous terms.

Berkeley:

Waiver Through Collective Bargaining

To the extent required by federal law, all or any portion of the applicable requirements of this Chapter may be waived in a bona fide collective bargaining agreement, provided that such waiver is explicitly set forth in such agreement in clear and unambiguous terms.

SeaTac:

Waivers

The provisions of this Chapter may not be waived by agreement between an individual Covered Worker and a Hospitality or Transportation Employer. All of the provisions of this Chapter, or any part hereof, including the employee work environment reporting requirement set forth herein, may be waived in a bona fide collective bargaining agreement, but only if the waiver is explicitly set forth in such agreement in clear and unambiguous terms. Unilateral implementation of terms and conditions of employment by either party to a collective bargaining relationship shall not constitute, or be permitted, as a waiver of all or any part of the provisions of this chapter.

San Jose:

WAIVER THROUGH COLLECTIVE BARGAINING

To the extent required by federal law, all or any portion of the applicable requirements of this Chapter may be waived in a bona fide collective bargaining agreement, provided that such waiver is explicitly set forth in such agreement in clear and unambiguous terms.

Los Angeles:

DEFERRAL APPLICATION FOR CERTAIN NON-PROFIT EMPLOYERS.

The DAA shall establish a procedure to allow an Employer that is a Non-Profit Corporation with 26 or more Employees to qualify for the deferral rate schedule specified in Section 187.02.C. A Non-Profit Employer seeking the deferral must establish by compelling evidence that:

A. The chief executive officer earns a salary which, when calculated on an hourly basis, is less than five times the lowest wage paid by the corporation; or
B. It is a Transitional Employer as defined in Section 10.31.1(h) of the Los Angeles Administrative Code; or
C. It serves as a child care provider; or
D. It is funded primarily by City, County, State or Federal grants or reimbursements.

Los Angeles:

NO WAIVER OF RIGHTS.

Any waiver by an Employee of any or all of the provisions of this article shall be deemed contrary to public policy and shall be void and unenforceable.

Berkeley:

Exemptions

The requirements of this chapter shall not apply to the following Employees:

1. Employees who are standing by or on-call according to the criteria established by the Fair Labor Standards Act, 29 U.S.C. Section 201. This exemption shall apply only during the time when the employee is actually standing by or on-call.
2. Job training program participants up to 25 years of age in youth job training programs operated by Nonprofit Corporations or governmental agencies.

SeaTac:

Exceptions

The requirements of this Chapter shall not apply where and to the extent that state or federal law or regulations preclude their applicability. To the extent that state or federal law or regulations require the consent of another legal entity, such as a municipality, port district, or county, prior to becoming effective, the City Manager is directed to formally and publicly request that such consent be given.

San Francisco:

WAIVER THROUGH COLLECTIVE BARGAINING.

All or any portion of the applicable requirements of this Chapter shall not apply to Employees covered by a bona fide collective bargaining agreement to the extent that such requirements are expressly waived in the collective bargaining agreement in clear and unambiguous terms.

Oakland:

Any waiver by an individual Employee of any of the provisions of this Chapter shall be

deemed contrary to public policy and shall be void and unenforceable, except that Employees shall not be barred from entering into a written valid collective bargaining agreement waiving a provision of this Chapter if such waiver is set forth in clear and unambiguous terms. Any request to an individual Employee by an Employer to waive his or her rights under this Chapter shall constitute a violation of this Chapter.

I. NOTICE; POSTING; RECORDS

Richmond:

Notice, posting and payroll records.

(a) By December 1 of each year, the department shall publish and make available to employers a bulletin announcing the adjusted minimum wage rate for the upcoming year. In conjunction with this bulletin, the department shall by December 1 of each year publish and make available to employers, in all languages spoken by more than five percent (5%) of the work force in the City, a notice suitable for posting by employers in the workplace informing employees of the current minimum wage rate and of their rights under this chapter.

(b) Every employer shall post in a conspicuous place at any workplace or job site where any employee works the notice published each year by the department informing employees of the current minimum wage rate and of their rights under this chapter. Every employer shall post such notices in any language spoken by at least five percent (5%) of the employees at the work-place or job site.

(c) Employers shall retain payroll records pertaining to employees for a period of four years, and shall allow the City access to such records, with appropriate notice and at a mutually agreeable time, to monitor compliance with the requirements of this chapter. Where an employer does not maintain or retain adequate records documenting wages paid or does not allow the City reasonable access to such records, the employee's account of how much he or she was paid shall be presumed to be accurate, absent clear and convincing evidence otherwise.

Berkeley:

Notice, Posting and Payroll Records.

A. By August 1 of each year, the Department shall publish and make available to Employers a bulletin announcing the adjusted Minimum Wage rate, which shall take effect on October 1 of that year. In conjunction with this bulletin, the Department shall by August 1 of each year publish and make available to Employers, in all languages spoken by more than five percent of the work force in the City, a notice suitable for posting by Employers in the workplace informing Employees of the current Minimum Wage rate and of their rights under this Chapter.

B. Every Employer shall post in a conspicuous place at any workplace or job site in the City where any Employee works the notice published each year by the Department informing Employees of the current Minimum Wage rate and of their rights under this Chapter. Every Employer shall post such notices in any language spoken by at least five percent of the Employees at the work-place or job site. Every Employer shall also provide each Employee at the time of hire with the Employer's name, address, and telephone number in writing. Failure to post such notice shall render the Employer subject to administrative citation, pursuant to Section 90, Subsection A, of this Chapter.

C. Employers shall retain payroll records pertaining to Employees for a period of four years, and shall allow the City access to such records, with appropriate notice and at a mutually agreeable time, to monitor compliance with the requirements of this Chapter. Where an Employer does not maintain or retain adequate records documenting wages paid or does not allow the City reasonable access to such records, the Employee's account of how much he or she was paid shall be presumed to be accurate, absent clear and convincing evidence otherwise. Furthermore, failure to maintain such records or to allow the City reasonable access shall render the Employer subject to administrative citation, pursuant to Section 90, Subsection A, of this Chapter.

D. If a violation of this Chapter has been finally determined, the City shall require the Employer to post public notice of the Employer's failure to comply in a form determined by the City. Failure to post such notice shall render the Employer subject to administrative citation, pursuant to Section 90, Subsection A, of this Chapter.

Seattle: (Note: Subsection "C" below is from the enforcement provisions of the Seattle Min Wage Code).

C. Notice, Posting, and Records

1. Employers shall give notice to employees in English, Spanish and any other language commonly spoken by employees at the particular workplace that they are entitled to the minimum wage and minimum compensation; that retaliation against employees who exercise their rights under this Chapter is prohibited; and that each employee has the right to file a charge if the minimum wage or minimum compensation as defined in this Chapter is not paid or the employee is retaliated against for engaging in an activity protected under this Chapter.
2. Employers may comply with this section by posting in a conspicuous place at any workplace or job site where any covered employee works a notice published each year by the Agency informing employees of the current minimum wage and minimum compensation rates applicable in that particular workplace or jobsite and of their rights under this Chapter in English, Spanish and any other languages commonly spoken by employees at the particular workplace or job site.
3. Employers shall retain payroll records pertaining to covered employees for a period of three years documenting minimum wages and minimum compensation paid to each employee.

San Jose:

NOTICE, POSTING AND PAYROLL RECORDS

A. By December 1 of each year, the Office shall publish and make available to Employers a bulletin announcing the adjusted Minimum Wage rate for the upcoming year, which shall take effect on January 1. In conjunction with this bulletin, the Office shall by December 1 of each year publish and make available to Employers, in all languages spoken by more than five percent of the work force in the City, a notice suitable for posting by Employers in the workplace

informing Employees of the current Minimum Wage rate and of their rights under this Chapter.

B. Every Employer shall post in a conspicuous place at any workplace or job site where any Employee works the notice published each year by the Office informing Employees of the current Minimum Wage rate and of their rights under this Chapter. Every Employer shall post such notices in any language spoken by at least five percent of the Employees at the work-place or job site. Every Employer shall also provide each Employee at the time of hire with the Employer's name, address, and telephone number in writing.

C. Employers shall retain payroll records pertaining to Employees for a period of four years, and shall allow the City access to such records, with appropriate notice and at a mutually agreeable time, to monitor compliance with the requirements of this Chapter. Where an Employer does not maintain or retain adequate records documenting wages paid or does not allow the City reasonable access to such records, the Employee's account of how much he or she was paid shall be presumed to be accurate, absent clear and convincing evidence otherwise.

Albuquerque:

NOTICE, POSTING AND RECORDS.

(A) Notice to employees. Every employer shall post in a conspicuous place at any workplace or job site where any employee works a notice published each year by the City Attorney informing employees of the current minimum wage rates and of their rights under this article. Every employer shall post such notices in English and Spanish.

(B) Records. Employers shall maintain payroll records showing the hours worked daily by and the wages paid to all employees. Employers shall retain payroll records pertaining to employees for a period of three years. When the employer uses tips to meet the minimum wage for an employee, the employer must have a tip declaration signed by the tipped employee for each pay period.

Los Angeles:

NOTIFYING EMPLOYEES OF THEIR POTENTIAL RIGHT TO THE FEDERAL EARNED INCOME CREDIT.

Employers shall inform Employees of their possible right to the federal Earned Income Credit (EIC) under Section 32 of the Internal Revenue Code of 1954, 26 U.S.C. Section 32.

Bernalillo County:

Notice, posting and records.
(a) Notice to employees. Every employer shall post in a conspicuous place at any workplace or job site where any employee works a notice published each year by the county zoning, building and planning office informing employees of the current minimum wage rates and of their rights under this division. Every employer shall post such notices in English and Spanish.

(b) Records. Employers shall maintain payroll records showing the hours worked daily by and the wages paid to all employees. Employers shall retain payroll records pertaining to employees for a period of three years. When the employer uses tips to meet the minimum wage for an employee, the employer must have a tip declaration signed by the tipped employee for each pay period.

San Francisco:

NOTICE, POSTING AND PAYROLL RECORDS.

(a) By December 1 of each year, the Agency shall publish and make available to Employers a bulletin announcing the adjusted Minimum Wage rate for the upcoming year, which shall take effect on January 1. In conjunction with this bulletin, the Agency shall by December 1 of each year publish and make available to Employers, in all languages spoken by more than five percent of the San Francisco work force, a notice suitable for posting by Employers in the workplace informing Employees of the current Minimum Wage rate and of their rights under this Chapter.

(b) Every Employer shall post in a conspicuous place at any workplace or job site where any Employee works the notice published each year by the Agency informing Employees of t he current Minimum Wage rate and of their rights under this Chapter. Every Employer shall post such notices in English, Spanish, Chinese and any other language spoken by at least five percent of the Employees at the workplace or job site. Every Employer shall also provide each Employee at the time of hire the Employer's name, address and telephone number in writing.

(c) Employers shall retain payroll records pertaining to Employees for a period of four years, and shall allow the Agency access to such records, with appropriate notice and during business hours, to monitor compliance with the requirements of this Chapter. Where an Employer does not maintain or retain adequate records documenting wages paid or does not allow the Agency reasonable access to such records, it shall be presumed that the Employer paid no more than the applicable federal or state minimum wage, absent clear and convincing evidence otherwise.

(d) The Director of the Agency or his or her designee shall have access to all places of labor subject to this ordinance during business hours to inspect books and records, interview employees and investigate such matters necessary or appropriate to determine whether an Employer has violated any provisions of this ordinance.

(e) The Agency shall be authorized under Section 12R.7 to develop guidelines or rules to govern Agency investigative activities, including but not limited to legal action to be taken in the event of employer noncompliance or interference with Agency investigative actions.

Oakland:

NOTICE TO EMPLOYEES

Each Employer shall give written notification to each current Employee and to each new Employee at time of hire, of his or her rights under this Chapter. The notification shall be in all languages spoken by a more than 10% of the Employees, and shall also be posted prominently in areas at the work site where it will be seen by all Employees. The City Administrator is authorized to prepare sample notices and Employer use of such notices shall constitute compliance with this subsection.

Oakland:

RETENTION OF RECORDS

Each Employer shall maintain for at least three years for each Employee a record of his or her name, hours worked, pay rate, Paid Sick Leave accrual and usage, and Service Charge collection and distribution. Each Employer shall provide each Employee a copy of the records relating to such Employee upon the Employee's reasonable request.

J. RETALIATION

Richmond:

Retaliation prohibited.

(a) It shall be unlawful for an employer or any other party to discriminate in any manner or take adverse action against any person in retaliation for exercising rights protected under this chapter. Rights protected under this chapter include, but are not limited to: the right to file a complaint, or the right to inform any person about any party's alleged noncompliance with this chapter or any person's potential rights under this chapter. Protections of this chapter shall apply to any person who in good faith alleges noncompliance with this chapter.

(b) Taking adverse action against a person within ninety (90) days of the person's exercise of rights protected under this chapter shall raise a rebuttable presumption of having done so in retaliation for the exercise of such rights.

Berkeley:

Retaliation Prohibited.

It shall be unlawful for an Employer or any other party to discriminate in any manner or take any adverse action (including action relating to any term, condition or privilege of employment) against any person in retaliation for exercising rights protected under this Chapter. Rights protected under this Chapter include, but are not limited to: the right to file a complaint or inform any person about any party's alleged noncompliance with this Chapter; and the right to inform any person of his or her potential rights under this Chapter or otherwise educate any person about this Chapter or to assist him or her in asserting such rights. Protections of this Chapter shall apply to any person who mistakenly, but in good faith, alleges noncompliance with this Chapter. Taking adverse action against a person within ninety (90) days of the person's exercise of rights protected under this Chapter shall raise a rebuttable presumption of having done so in retaliation for the exercise of such rights. Failure to comply with this provision shall render the Employer subject to administrative citation, pursuant to Section 90, Subsection A, of this Chapter.

SeaTac:

Prohibiting Retaliation Against Covered Workers For Exercising Their Lawful Rights

A. It shall be a violation for a Hospitality Employer or Transportation Employer or any other person to interfere with, restrain, or deny the exercise of, or the attempt to exercise, any right protected under this Chapter.

B. It shall be a violation for a Hospitality Employer or Transportation Employer to take adverse action or to discriminate against a Covered Worker because the Covered Worker has exercised in good faith the rights protected under this Chapter. Such rights include but are not limited to the right to file a complaint with any entity or agency about any Hospitality Employer's or Transportation Employer's alleged violation of this chapter; the right to inform his or her employer, union or other organization and/or legal counsel about a Hospitality Employer's or

Transportation Employer's alleged violation of this section; the right to cooperate in any investigation of alleged violations of this chapter; the right to oppose any policy, practice, or act that is unlawful under this section; and the right to inform other Covered Workers of their rights under this section. No Covered Worker's compensation or benefits may be reduced in response to this Chapter or the pendency thereof.

C. The protections afforded under subsection B shall apply to any person who mistakenly but in good faith alleges violations of this Chapter.

San Jose:

RETALIATION PROHIBITED

It shall be unlawful for an Employer or any other party to discriminate in any manner or take adverse action against any person in retaliation for exercising rights protected under this Chapter. Rights protected under this Chapter include, but are not limited to: the right to file a complaint or inform any person about any party's alleged noncompliance with this Chapter; and the right to inform any person of his or her potential rights under this Chapter and to assist him or her in asserting such rights. Protections of this Chapter shall apply to any person who mistakenly, but in good faith, alleges noncompliance with this Chapter.

Taking adverse action against a person within ninety (90) days of the person's exercise of rights protected under this Chapter shall raise a rebuttable presumption of having done so in retaliation for the exercise of such rights.

Los Angeles:

RETALIATORY ACTION PROHIBITED.

No Employer shall discharge, reduce in compensation or otherwise discriminate against any Employee for opposing any practice proscribed by this article, for participating in proceedings related to this article, for seeking to enforce his or her rights under this article by any lawful means, or for otherwise asserting rights under this article.

San Francisco:

RETALIATION PROHIBITED.

It shall be unlawful for an Employer or any other party to discriminate in any manner or take adverse action against any person in retaliation for exercising rights protected under this Chapter. Rights protected under this Chapter include, but are not limited to: the right to file a complaint or inform any person about any party's alleged noncompliance with this Chapter; and the right to inform any person of his or her potential rights under this Chapter and to assist him or her in asserting such rights. Protections of this Chapter shall apply to any person who mistakenly, but in good faith, alleges noncompliance with this Chapter. Taking adverse action against a person

within ninety (90) days of the person's exercise of rights protected under this Chapter shall raise a rebuttable presumption of having done so in retaliation for the exercise of such rights.

Oakland:

A. RETALIATION BARRED
1. A Person shall not discharge, reduce the compensation of nor otherwise discriminate against any Person for making a complaint to the City, participating in any of its proceedings, using any civil remedies to enforce his or her rights, or otherwise asserting his or her rights under this Chapter. Within 120 days of an Employer being notified of such activity, it shall be unlawful for the Employer to discharge any Employee who engaged in such activity unless the Employer has clear and convincing evidence of just cause for such discharge.

K. IMPLEMENTATION; ENFORCEMENT; VIOLATIONS

Richmond:

Implementation.

(a) Guidelines. The department shall be authorized to coordinate implementation and enforcement of this chapter and shall promulgate appropriate guidelines or rules for such purposes. Any guidelines or rules promulgated by the department may be relied on by employers, employees and other parties to determine their rights and responsibilities under this chapter. Any guidelines or rules may establish procedures for ensuring fair, efficient and cost-effective implementation of this chapter. Any guidelines or rules shall require that employers claiming a reduction of the minimum wage based on payment of employee benefits, a right to pay the intermediate minimum wage, small business employer status, or any other exemption or reduction in this chapter bear the burden of demonstrating that such exemption or reduction applies to the satisfaction of the department when a violation of this chapter is reported; and shall set forth procedures for claiming such a reduction.

(b) Reporting Violations. An employee or any other person may report to the department in writing any suspected violation of this chapter. The department shall encourage reporting pursuant to this subsection by keeping confidential, to the maximum extent permitted by applicable laws, the name and other identifying information of the employee or person reporting the violation. Provided, however, that the department may disclose his or her name and identifying information as necessary to enforce this chapter or other employee protection laws. In order to further encourage reporting by employees, if the department notifies an employer that the department is investigating a complaint, the department may require the employer to notify its employees that the department is conducting an investigation, using a form provided by the department.

(c) Investigation. The department shall be responsible for investigating any possible violations of this chapter by an employer or other person. The department shall have the authority to inspect workplaces, interview persons and request the City Attorney to subpoena books, papers, records, or other items relevant to the enforcement of this chapter.

(d) Report. The City Manager or his designee shall present a report to the City Council regarding the effectiveness and implementation of this chapter on or about January 1, 2016, and on an annual basis thereafter.

Richmond:

Enforcement.

(a) When a violation is reported under this chapter, the department shall investigate the report of violation and provide the employer with an opportunity to abate the violation through a notice of violation and demand to abate. The notice and demand shall set forth a description of the alleged violation, date(s) of violation, the specific action(s) needed to correct the violation, and the date by which to correct the violation. The notice and demand shall provide no more than thirty (30) days to abate and correct the violation.

(b) Failure to comply with a notice of violation and demand to abate issued pursuant to this chapter shall constitute a nuisance and violation of the Richmond Municipal Code, subject to all penalties and legal actions as set forth in Sections 1.04.100 through 1.04.160 of this

Code, the department shall take any appropriate enforcement action to secure compliance.

(c) In addition to legal actions, the department may issue an administrative citation as set forth in Chapter 2.62 of this Code, with the following exceptions:
   (1) The administrative citation fine shall not exceed $50 per each day or portion of a day that the violation occurs, and for each employee as to whom the violation occurred or continued; and
   (2) Section 2.62.105 of this Code shall not apply; and
   (3) The Hearing Officer's decision issued pursuant to Chapter 2.62 shall be final, and a person aggrieved by the Hearing Officer's decision may seek judicial review in the superior court pursuant to Government Code Section 53069.4.

(d) Any person aggrieved by a violation of this chapter, any entity with a member which is aggrieved by a violation of this chapter, or any other person or entity acting on behalf of the public as provided for under applicable State law, may bring a civil action in a court of competent jurisdiction against the employer or other person violating this chapter and, upon prevailing, shall be awarded reasonable attorneys' fees and costs and shall be entitled to such legal or equitable relief as may be appropriate, including, without limitation, the relief set forth in this section below. Provided, however, that any person or entity enforcing this chapter on behalf of the public as provided for under applicable State law shall, upon prevailing, be entitled only to equitable, injunctive or restitutionary relief to employees, and reasonable attorneys' fees and costs.

(e) This chapter shall not be construed to limit an employee's right to bring legal action for a violation of any other laws concerning wages, hours, or other standards or rights. Nothing in this chapter shall be construed to authorize a right of action against the City.

(f) Except where prohibited by State or Federal law, City agencies or departments may revoke or suspend any registration certificates, permits or licenses held or requested by the employer until such time as the violation is remedied, including but not limited to business licenses as defined by Chapter 7.04 of this Code.

(g) Relief in Civil Action Brought Under this chapter. The remedies for violation of this chapter include but are not limited to:
   (1) Reinstatement in employment and/or injunctive relief, the payment of back wages unlawfully withheld, and the payment of an additional sum as a civil penalty in the amount of $50 to each employee or person whose rights under this chapter were violated for each day or portion thereof that the violation occurred or continued, and fines imposed pursuant to other provisions of this Code or State law.
   (2) Interest on all due and unpaid wages at the rate of interest specified in subdivision (b) of Section 3289 of the California Civil Code, which shall accrue from the date that the wages were due and payable as provided in Part 1 (commencing with Section 200) of Division 2 of the California Labor Code, to the date the wages are paid in full.
   (3) Reimbursement of the City's costs of enforcement and reasonable attorneys' fees.

Berkeley:

Implementation.

A. Guidelines. The Department shall be authorized to coordinate implementation and enforcement of this Chapter and may promulgate appropriate guidelines or rules for such purposes. The Department shall seek out partnerships with community-based organizations and

collaborate with the Labor Commission to facilitate effective implementation and enforcement of this Chapter. Any guidelines or rules promulgated by the Department shall have the force and effect of law and may be relied on by Employers, Employees and other parties to determine their rights and responsibilities under this Chapter. Any guidelines or rules may establish procedures for ensuring fair, efficient and cost-effective implementation of this Chapter, including supplementary procedures for helping to inform Employees of their rights under this Chapter, for monitoring Employer compliance with this Chapter, and for providing administrative hearings to determine whether an Employer or other person has violated the requirements of this Chapter.

B. Reporting Violations. An Employee or any other person may report to the Department in writing any suspected violation of this Chapter. The Department shall encourage reporting pursuant to this subsection by keeping confidential, to the maximum extent permitted by applicable laws, the name and other identifying information of the Employee or person reporting the violation. Provided, however, that with the authorization of such person, the Department may disclose his or her name and identifying information as necessary to enforce this Chapter or other employee protection laws. In order to further encourage reporting by Employees, if the Department notifies an Employer that the Department is investigating a complaint, the Department shall require the Employer to post or otherwise notify its Employees that the Department is conducting an investigation, using a form provided by the Department. Failure to post such notice shall render the Employer subject to administrative citation, pursuant to Section 90, Subsection A, of this Chapter.

C. Investigation. The Department shall be responsible for investigating any possible violations of this Chapter by an Employer or other person. The Department shall have the authority to inspect workplaces, interview persons and request the City Attorney to subpoena books, papers, records, or other items relevant to the enforcement of this Chapter.

D. Informal Resolution. The Department shall make every effort to resolve complaints informally, in a timely manner, and shall have a policy that the Department shall take no more than six months to resolve any matter, before initiating an enforcement action. The failure of the Department to meet these timelines within six months shall not be grounds for closure or dismissal of the complaint.

Berkeley:

Where prompt compliance is not forthcoming, the City and the Department shall take any appropriate enforcement action to secure compliance, including but not limited to the following:

1. The City may issue an Administrative Citation pursuant to Chapter 1.28 of the Berkeley Municipal Code. The amount of this fine shall vary based on the provision of this Chapter being violated, as specified below:
    a. A fine of one thousand dollars ($1,000.00) may be assessed for retaliation by an Employer against an Employee for exercising rights protected under this Chapter for each Employee retaliated against.
    b. A fine of five hundred dollars ($500.00) may be assessed for any of the following violations of this Chapter:
        i. Failure to post notice of the Minimum Wage rate
        ii. Failure to provide notice of investigation to Employees
        iii. Failure to post notice of violation to public
        iv. Failure to maintain payroll records for four years

v. Failure to allow the City access to payroll records

c. A fine equal to the total amount of appropriate remedies, pursuant to subsection E of this section. Any and all money collected in this way that is the rightful property of an Employee, such as back wages, interest, and civil penalty payments, shall be disbursed by the City in a prompt manner.

2. Alternatively, the City may pursue administrative remedies in accordance with the following procedures:

a. Whenever the City determines that a violation of any provision of this Chapter is occurring or has occurred, the City may issue a written compliance order to the Employer responsible for the violation.

b. A compliance order issued pursuant to this chapter shall contain the following information:

i. The date and location of the violation;

ii. A description of the violation;

iii. The actions required to correct the violation;

iv. The time period after which administrative penalties will begin to accrue if compliance with the order has not been achieved;

v. Either a copy of this Chapter or an explanation of the consequences of noncompliance with this Chapter and a description of the hearing procedure and appeal process;

vi. A warning that the compliance order shall become final unless a written request for hearing before the City is received within fourteen days of receipt of the compliance order.

c. Following receipt of a timely request for a hearing, the City shall provide the Employer responsible for the violation with a hearing and, if necessary, a subsequent appeal to the City Council that affords the Employer due process. During the pendency of the hearing and any subsequent appellate process, the City will not enforce any aspect of the compliance order.

3. The City may initiate a civil action for injunctive relief and damages and civil penalties in a court of competent jurisdiction.

B. Any person aggrieved by a violation of this Chapter, any entity a member of which is aggrieved by a violation of this Chapter, or any other person or entity acting on behalf of the public as provided for under applicable state law, may bring a civil action in a court of competent jurisdiction against the Employer or other person violating this Chapter and, upon prevailing, shall be awarded reasonable attorneys' fees and costs and shall be entitled to such legal or equitable relief as may be appropriate to remedy the violation including, without limitation, the payment of any back wages unlawfully withheld, the payment of an additional sum as a civil penalty in the amount of $50 to each Employee or person whose rights under this Chapter were violated for each day that the violation occurred or continued, reinstatement in employment and/or injunctive relief. Provided, however, that any person or entity enforcing this Chapter on behalf of the public as provided for under applicable state law shall, upon prevailing, be entitled only to equitable, injunctive or restitutionary relief to employees, and reasonable attorneys' fees and costs.

C. This Section shall not be construed to limit an Employee's right to bring legal action for a violation of any other laws concerning wages, hours, or other standards or rights nor shall exhaustion of remedies under this Chapter be a prerequisite to the assertion of any right.

D. Except where prohibited by state or federal law, City agencies or departments may revoke or suspend any registration certificates, permits or licenses held or requested by the Employer until such time as the violation is remedied. The City shall not renew any such license of an Employer with outstanding violations, as finally determined under this Chapter, until such time as the violation is remedied.

E. The remedies for violation of this Chapter include but are not limited to:

1. Reinstatement, the payment of back wages unlawfully withheld, and the payment of an additional sum as a civil penalty in the amount of $50 to each Employee or person whose rights under this Chapter were violated for each day or portion thereof that the violation occurred or continued, and fines imposed pursuant to other provisions of this Code or state law.
2. Interest on all due and unpaid wages at the rate of interest specified in subdivision (b) of Section 3289 of the California Civil Code, which shall accrue from the date that the wages were due and payable as provided in Part 1 (commencing with Section 200) of Division 2 of the California Labor Code, to the date the wages are paid in full.
3. Reimbursement of the City's administrative costs of enforcement and reasonable attorney's fees.
4. If a repeated violation of this Chapter has been finally determined, the City may require the Employer to pay an additional sum as a civil penalty in the amount of $50 to the City for each Employee or person whose rights under this Chapter were violated for each day or portion thereof that the violation occurred or continued, and fines imposed pursuant to other provisions of this Code or state law.

F. The remedies, penalties and procedures provided under this Chapter are cumulative and are not intended to be exclusive of any other available remedies, penalties and procedures established by law which may be pursued to address violations of this Chapter. Actions taken pursuant to this Chapter shall not prejudice or adversely affect any other action, civil or criminal, that may be brought to abate a violation or to seek compensation for damages suffered.

San Jose:

IMPLEMENTATION

A. Guidelines. The Office shall be authorized to coordinate implementation and enforcement of this Chapter and may promulgate appropriate guidelines or rules for such purposes. Any guidelines or rules promulgated by the Office shall have the force and effect of law and may be relied on by Employers, Employees and other parties to determine their rights and responsibilities under this Chapter. Any guidelines or rules may establish procedures for ensuring fair, efficient and cost-effective implementation of this Chapter, including supplementary procedures for helping to inform Employees of their rights under this Chapter, for monitoring Employer compliance with this Chapter, and for providing administrative hearings to determine whether an Employer or other person has violated the requirements of this Chapter.

B. Reporting Violations. An Employee or any other person may report to the Office in writing any suspected violation of this Chapter. The Office shall encourage reporting pursuant to this subsection by keeping confidential, to the maximum extent permitted by applicable laws, the name and other identifying information of the Employee or person reporting the violation.

Provided, however, that with the authorization of such person, the Office may disclose his or her name and identifying information as necessary to enforce this Chapter or other employee protection laws. In order to further encourage reporting by Employees, if the Office notifies an Employer that the Office is investigating a complaint, the Office shall require the Employer to post or otherwise notify its Employees that the Office is conducting an investigation, using a form provided by the City.

C. Investigation. The Office shall be responsible for investigating any possible violations of this Chapter by an Employer or other person. The Office shall have the authority to inspect workplaces, interview persons and request the City Attorney to subpoena books, papers, records, or other items relevant to the enforcement of this Chapter.
D. Informal Resolution. The Office shall make every effort to resolve complaints informally, in a timely manner, and shall have a policy that the Office shall take no more than one year to resolve any matter, before initiating an enforcement action. The failure of the Office to meet these timelines within one year shall not be grounds for closure or dismissal of the complaint.

Albuquerque:

IMPLEMENTATION AND ENFORCEMENT.

(A) Rulemaking. The city shall have the authority to coordinate implementation and enforcement of this article and may promulgate appropriate guidelines or rules for such purposes. Any guidelines or rules promulgated by the city shall have the force and effect of law and may be relied on by employers, employees, and other parties to determine their rights and responsibilities under this article. Any such guidelines or rules may establish procedures for ensuring fair, efficient and cost-effective implementation of this article, including supplementary procedures for helping to inform employees of their rights under this article and for monitoring employer compliance with this article.

(B) Civil enforcement. Any employee receiving less than the wage to which the employee is entitled under this article may bring a civil action in a court of competent jurisdiction and, upon prevailing, shall recover the balance of the wages owed, including interest thereon, and an additional amount equal to twice the wages owed, and any other appropriate legal or equitable relief. Any employee who has suffered discrimination in any manner or had adverse action taken against that employee in retaliation for exercising rights protected under this article may bring a civil action in a court of competent jurisdiction and, upon prevailing, shall recover actual damages plus reinstatement in the case of discharge. In any case where an employee has been discharged in retaliation for exercising rights under this article, the period of violation extends from the day of discharge until the day the employee is reinstated, the day the employee agrees to waive reinstatement or, in the case of an employee who may not be rehired, from the day of discharge until the day legal judgment is final. The requirements of this article may also be enforced by the City Attorney. In such case, unpaid wages and actual damages recovered shall be payable to the individual employee as to whom the violation occurred. A plaintiff prevailing in an action to enforce this article shall be entitled to recover his or her costs and expenses of suit and reasonable attorney's fees.

Los Angeles:

IMPLEMENTATION.

The DAA may promulgate guidelines and rules consistent with this article for the implementation of the provisions of this article. Any guidelines or rules shall have the force and effect of law, and may be relied upon by Employers, Employees and other parties to determine their rights and responsibilities under this article.

Bernalillo County:

- Implementation and enforcement.
(a) Rulemaking. The county shall have the authority to coordinate implementation and enforcement of this division and may promulgate appropriate guidelines or rules for such purposes. Any guidelines or rules promulgated by the county shall have the force and effect of law and may be relied on by employers, employees, and other parties to determine their rights and responsibilities under this division. Any such guidelines or rules may establish procedures for ensuring fair, efficient and cost-effective implementation of this division, including supplementary procedures for helping to inform employees of their rights under this division and for monitoring employer compliance with this division.
(b) Civil enforcement. Any employee receiving less than the wage to which the employee is entitled under this division may bring a civil action in a court of competent jurisdiction and, upon prevailing, shall recover the balance of the wages owed, including interest thereon, and an additional amount equal to twice the wages owed, and any other appropriate legal or equitable relief.

Seattle:

Enforcement

A. Powers and Duties
    1. The Agency shall investigate alleged violations of this Chapter as defined herein, and shall have such powers and duties in the performance of these functions as are defined in this Chapter and otherwise necessary and proper in the performance of the same and provided for by law.
    2. The Director is authorized and directed to promulgate rules consistent with this Chapter.
B. Exercise of Rights Protected; Retaliation Prohibited
    1. It shall be a violation for an employer or any other person to interfere with, restrain, or deny the exercise of, or the attempt to exercise, any right protected under this Chapter.
    2. It shall be a violation for an employer to discharge, threaten, harass, demote, penalize, or in any other manner discriminate or retaliate against any employee because the employee has exercised in good faith the rights protected under this Chapter. Such rights include but are not limited to the right to file an oral or written complaint with the Agency about any employer's alleged violation of this Chapter; the right to inform his or

her employer, union or similar organization, and/or legal counsel about an employer's alleged violation of this Chapter; the right to cooperate with the Agency in its investigations of alleged violations of this Chapter; the right to oppose any policy, practice, or act that is unlawful under this Chapter; and the right to inform other employees of his or her potential rights under this Chapter.

3. It shall be a violation for an employer to communicate to a person filing a wage claim, directly or indirectly, explicitly or implicitly, the willingness to inform a government employee that the person is not lawfully in the United States, report or threaten to report suspected citizenship or immigration status of an employee or a family member of the employee to a federal, state, or local agency because the employee has exercised a right under this Chapter.

C. Notice, Posting, and Records

1. Employers shall give notice to employees in English, Spanish and any other language commonly spoken by employees at the particular workplace that they are entitled to the minimum wage and minimum compensation; that retaliation against employees who exercise their rights under this Chapter is prohibited; and that each employee has the right to file a charge if the minimum wage or minimum compensation as defined in this Chapter is not paid or the employee is retaliated against for engaging in an activity protected under this Chapter.

2. Employers may comply with this section by posting in a conspicuous place at any workplace or job site where any covered employee works a notice published each year by the Agency informing employees of the current minimum wage and minimum compensation rates applicable in that particular workplace or jobsite and of their rights under this Chapter in English, Spanish and any other languages commonly spoken by employees at the particular workplace or job site.

3. Employers shall retain payroll records pertaining to covered employees for a period of three years documenting minimum wages and minimum compensation paid to each employee.

D. Charges and Investigation

1. The Agency may investigate any violations of this Chapter. A charge alleging a violation of this Chapter should include a statement of the dates, places, and persons or entities responsible for such violation. A charge alleging a violation of this Chapter may also be filed by the Director on behalf of an aggrieved individual when the Director has reason to believe that a violation has occurred.

2. Charges filed under this Chapter must be filed within three years after the occurrence of the alleged violation. To the extent permitted by law, the applicable statute of limitations for civil actions is tolled during the Department's investigation and any administrative enforcement proceeding under this Chapter based upon the same facts.

3. The Director shall cause to be served or mailed by certified mail, return receipt requested, a copy of the charge on the respondent within 20 days after the filing of the charge and shall promptly make an investigation thereof.

4. The investigation shall be directed to ascertain the facts concerning the alleged violation of this Chapter, and shall be conducted in an objective and impartial manner.

5. During the investigation the Director shall consider any statement of position or evidence with respect to the allegations of the charge which the charging party or the respondent wishes to submit. The Director shall have authority to sign and issue subpoenas requiring the attendance and testimony of witnesses, and the production of evidence including but not limited to books, records, correspondence or documents in the possession or under the control of the employer subpoenaed.

E. Findings of Fact and Notice of Violation. Except when there is an agreed upon settlement, the results of the investigation shall be reduced to written findings of fact, and a written determination shall be made by the Director that a violation of this Chapter has or has not occurred based on a preponderance of the evidence before the Director. The findings of fact shall be furnished promptly to the respondent and charging or aggrieved party in the form of a notice of violation or a written determination of no violation shown.

F. Remedies

1. An employer who willfully violates the notice and posting requirements of this section shall be subject to a civil penalty in an amount not to exceed $125 for the first violation and $250 for subsequent violations.

2. It is unlawful for any employer to willfully resist, prevent, impede or interfere with the Director in the performance of his or her duties under this Chapter. Conduct made unlawful by this subsection 14.19.060.F.2 constitutes a violation, and any employer who commits such a violation may be punished by a civil penalty of not less than $1,000 and not more than $5,000.

3. For a first time violation of this Chapter, the Director, in addition to the remedies provided in subsections 14.19.060.F.1, 14.19.060.F.2, and 14.19.060.F.4 of this Section, shall issue a warning and may assess a civil penalty of up to $500 for improper payment of minimum wage and minimum compensation as defined in this Chapter. For subsequent violations, the Director, in addition to the remedies provided in subsections 14.19.060.F.1, 14.19.060.F.2, and 14.19.060.F.4 of this Section, shall assess a civil penalty for improper payment of minimum wage and minimum compensation as defined in this Chapter. A civil penalty for a second time violation of this Chapter shall be not greater than $1,000 per employee or an amount equal to ten percent of the total amount of unpaid wages, whichever is greater. A civil penalty for a third violation of this Chapter shall not be greater than $5,000 per employee or an amount equal to ten percent of the total amount of unpaid wages, whichever is greater. The maximum civil penalty for a violation of this chapter shall be $20,000 per employee.

4. Within sixty days of a notice of violation of this Chapter, the Director shall confer with the parties and determine an appropriate remedy, which shall include full payment of unpaid wages and accrued interest due to the charging or aggrieved party under the terms of this Chapter and any civil penalties provided in the Section. Such remedy shall be reduced to writing in an order of the Director.

G. Appeal Period and Failure to Respond

An employer may appeal the Director's order, including all remedies issued pursuant to subsection 14.19.060.F of this Section, by requesting a contested hearing before the Hearing Examiner in writing within 15 days of service. If an employer fails to appeal the Director's order within 15 days of service, the Director's order shall be final and enforceable. When the last day of the appeal period so computed is a Saturday, Sunday, or federal or City holiday, the period shall run until 5:00 p.m. on the next business day.

H. Appeal Procedure and Failure to Appear

1. Contested hearings shall be conducted pursuant to the procedures for hearing contested cases contained in Section 3.02.090 and the rules adopted by the Hearing Examiner for hearing contested cases. The Director shall have the burden of proof by a preponderance of the evidence before the Hearing Examiner. Failure to appear for a requested hearing will result in an order being entered finding that the employer cited committed the violation stated in the Director's order. For good cause shown and upon terms the Hearing Examiner deems just, the Hearing Examiner may set aside an order entered upon a failure to appear.
2. In all contested cases, the Hearing Examiner shall enter an order affirming, modifying or reversing the Director's order.
3. In the event an employer fails to comply with any final order issued by the Director or the Hearing Examiner, the Director shall refer the matter to the City Attorney for the filing of a civil action in superior court, the Seattle Municipal Court or any other court of competent jurisdiction to enforce such order.

SeaTac:

Enforcement of Chapter

A. Any person claiming violation of this chapter may bring an action against the employer in King County Superior Court to enforce the provisions of this Chapter and shall be entitled to all remedies available at law or in equity appropriate to remedy any violation of this chapter, including but not limited to lost compensation for all Covered Workers impacted by the violation(s), damages, reinstatement and injunctive relief. A plaintiff who prevails in any action to enforce this Chapter shall be awarded his or her reasonable attorney's fees and expenses.

B. The City shall adopt auditing procedures sufficient to monitor and ensure compliance by Hospitality Employers and Transportation Employers with the requirements of this Chapter. Complaints that any provision of this Chapter has been violated may also be presented to the City Attorney, who is hereby authorized to investigate and, if it deems appropriate, initiate legal or other action to remedy any violation of this chapter; however, the City Attorney is not obligated to expend any funds or resources in the pursuit of such a remedy.

C. Nothing herein shall be construed to preclude existing remedies for enforcement of Municipal Code Chapters.

San Jose:

ENFORCEMENT

A. Where prompt compliance is not forthcoming, the Office shall take any appropriate enforcement action to secure compliance.

1. The Office may issues an Administrative Citation pursuant to Chapter 1.15 of the Code with a fine of not more than $50 for each day or portion thereof and for each Employee or person as to whom the violation occurred or continued.

2. Alternatively, the Office may initiate a proceeding under Chapter 1.14 of the Code by issuing a Compliance Order.

3. The City may initiate a civil action for injunctive relief and damages and civil penalties in a court of competent jurisdiction.

B. Any person aggrieved by a violation of this Chapter, any entity a member of which is aggrieved by a violation of this Chapter, or any other person or entity acting on behalf of the public as provided for under applicable state law, may bring a civil action in a court of competent jurisdiction against the Employer or other person violating this Chapter and, upon prevailing, shall be awarded reasonable attorneys' fees and costs and shall be entitled to such legal or equitable relief as may be appropriate to remedy the violation including, without limitation, the payment of any back wages unlawfully withheld, the payment of an additional sum as a civil penalty in the amount of $50 to each Employee or person whose rights under this Chapter were violated for each day that the violation occurred or continued, reinstatement in employment and/or injunctive relief. Provided, however, that any person or entity enforcing this Chapter on behalf of the public as provided for under applicable state law shall, upon prevailing, be entitled only to equitable, injunctive or restitutionary relief to employees, and reasonable attorneys' fees and costs.

C. This Section shall not be construed to limit an Employee's right to bring legal action for a violation of any other laws concerning wages, hours, or other standards or rights nor shall exhaustion of remedies under this Chapter be a prerequisite to the assertion of any right.

D. Except where prohibited by state or federal law, City agencies or departments may revoke or suspend any registration certificates, permits or licenses held or requested by the Employer until such time as the violation is remedied.

E. Relief

The remedies for violation of this Chapter include but are not limited to:

1. Reinstatement, the payment of back wages unlawfully withheld, and the payment of an additional sum as a civil penalty in the amount of $50 to each Employee or person whose rights under this Chapter were violated for each day or portion thereof that the violation occurred or continued, and fines imposed pursuant to other provisions of this Code or state law.

2. Interest on all due and unpaid wages at the rate of interest specified in subdivision (b) of Section 3289 of the California Civil Code, which shall accrue from the date that the wages were due and payable as provided in Part 1 (commencing with Section 200) of Division 2 of the California Labor Code, to the date the wages are paid in full.
3. Reimbursement of the City's administrative costs of enforcement and reasonable attorneys fees.

F. Posted Notice

If a repeated violation of this Chapter has been finally determined, the Office may require the Employer to post public notice of the Employer's failure to comply in a form determined by the City.

Montgomery County:

Enforcement.

(a) A covered employee who was paid a wage rate less than the County minimum wage in violation of this Article may file a complaint with the Director under Section 27-7.
(b) The County Executive must delegate the authority to enforce this Article to a State agency that:
(1) enforces the State Act; and
(2) is legally authorized to enforce the County minimum wage.

Sec. 27-70. Enforcement.
(a) A covered employee who was paid a wage rate less than the County minimum wage in violation of this Article may file a complaint with the Director under Section 27-7 .
(b) The County Executive must delegate the authority to enforce this Article to a State agency that:
(1) enforces the State Act; and
(2) is legally authorized to enforce the County minimum wage.

Administration and enforcement.

(a) Filing complaints. Any person subjected to a discriminatory act or practice in violation of this Article, or any group or person seeking to enforce this Article or Articles X, XI, or XII, may file with the Director a written complaint, sworn to or affirmed under the penalties of perjury, that must state:

(1) the particulars of the alleged violation;

(2) the name and address of the person alleged to have committed the violation; and

(3) any other information required by law or regulation.

(b) Commissioner initiated complaints. Any commissioner or the Commission may initiate a

complaint in the commissioner's or Commission's name in the manner provided in subsection (a).

(c) Testing and corroboration. After a complaint is filed, the director promptly must provide a copy or synopsis of the complaint to the respondent. If the director decides to corroborate the complaint by testing, the director must provide the copy or synopsis to the respondent promptly after completion of the testing. The Commission may also initiate or corroborate complaints on the basis of testing carried out by its staff, contractors, or volunteers authorized by the Commission or the director, or their designees.

(d) Limitations; filing with other agencies. Any complaint must be filed with the director or the Commission within one year after the alleged discriminatory act or practice. If those acts or practices are continuing in nature, the complaint must be filed within one year after the most recent act or practice. Filing with any federal or state agency charged with civil rights enforcement constitutes a filing under this article.

(e) Investigation.

(1) After receiving a complaint, the director must investigate as necessary to ascertain appropriate facts and issues. The director may:

(A) issue subpoenas to compel the attendance of witnesses, the production of documents, and other evidence relevant and necessary to investigate the complaint;

(B) conduct discovery, including interrogatories and depositions; and

(C) require both the complainant and respondent to attend a fact-finding conference and, if either party fails to attend, dismiss the complaint, impose a default judgment, or order other appropriate sanctions against the absent party.

(2) The Commission, director, and staff must not disclose any information gathered during the investigation, including the parties' identities, except that:

(A) Any information may be released at any time if the release has been agreed to in writing by both the complainant and the respondent.

(B) The identity of the complainant may be disclosed to the respondent at any time.

(C) If the director certifies a complaint to the Commission, any information may be released unless the case review board grants a private hearing before the board or a hearing examiner.

(D) After the director certifies a case to the Commission, documents or materials gathered during the investigation must be available to the parties, except that any investigatory materials that the Commission, case review board, hearing examiner, or director determines are privileged or confidential and would not be used at a hearing must not be released to any party.

(f) Initial determination, dismissal before hearing.

(1) The Director must determine, based on the investigation, whether reasonable grounds exist to believe that a violation of this Article or Articles X, XI, or XII, occurred and promptly send the determination to the complainant and the respondent.

(2) If the Director determines that there are no reasonable grounds to believe a violation occurred, and the complainant appeals the determination to the Commission within 30 days after the Director sends the determination to the complainant, the Director promptly must certify the complaint to the Commission. The Commission must appoint a case review board to consider the appeal. The board may hear oral argument and must:

(A) dismiss the complaint without a hearing;

(B) order the Director to investigate further; or

(C) set the matter for a hearing by a hearing examiner or the board itself, and consider and decide the complaint in the same manner as if the Director had found reasonable grounds to believe that a violation of this Article or Articles X, XI, or XII, occurred.

(3) If the Director determines that there are reasonable grounds to believe a violation occurred, the Director must attempt to conciliate the matter under subsection (g).

(g) Conciliation.

(1) A conciliation conference is informal and nothing said or done during a conciliation conference is admissible in any subsequent hearing under this article. The Commission or the director may disclose something said or done during a conciliation conference only if the parties agree in writing.

(2) The terms of a conciliation agreement must be reduced to writing and approved by the Commission. An approved conciliation agreement is an "informal disposition" under Section 2A-10(g), is binding on the parties, has the force and effect of a contract, and is enforceable as a contract. The Commission may enforce the agreement as an order of the Commission.

(3) A conciliation agreement that requires confidentiality and is otherwise acceptable to the Commission:

(A) may be approved by the Commission, at its discretion, to resolve a complaint regarding discrimination in a place of public accommodation;

(B) must not be approved unless the Commission finds that disclosure would not further the purposes of this article or State or federal laws prohibiting discrimination in real estate;

(C) should be approved by the Commission to resolve a complaint regarding employment

discrimination.

(4) If conciliation has not occurred within 90 days after the director found reasonable grounds to believe a violation occurred, or the director decides at any time that conciliation would be fruitless, the director promptly must certify the complaint to the Commission, which must appoint a case review board to consider and decide the complaint. The director may extend the conciliation deadline by mutual consent of the complainant and respondent.

(h) Hearings. The hearing must be conducted by the Commission case review board or a hearing examiner according to Sections 2A-1 to 2A-11, this Chapter, and Commission rules. If a hearing is granted, the Commission or the director may ask the County Attorney to intervene on behalf of the County to enforce this Chapter. The County may recover its costs, including reasonable attorney's fees, if it substantially prevails.

(i) Decision and order.

(1) The case review board must issue a final decision on a complaint according to Section 2A-10, this Chapter, and Commission rules.

(2) If any party, after proper notice, does not appear at a scheduled hearing, a hearing examiner may recommend and the board may order any relief to another party that the facts on record warrant.

(3) The board may award costs, including reasonable attorney's fees, to any party if another party filed or maintained a frivolous complaint, or filed or maintained a complaint not in good faith.

(4) The board must apply relevant federal, State, County, and case law to the facts. The board may order payment of damages and any other relief that the law and facts allow and warrant. The board's decision is binding on the parties, subject to appeal to the courts under subsection (k).

(5) If a hearing examiner conducts the hearing, the hearing examiner must forward a recommended decision and order to the board. The board may hear additional oral argument and must adopt, reverse, modify, or remand the recommended decision before issuing the board's final decision and order.

(j) Notification to other agencies. If a case review board determines that a person has violated this article, the director may refer the decision to any State or County agency or authority that:

(1) issued a license or franchise to the person; or

(2) does business under contract with the person.

(k) Appeal. Any party aggrieved by a case review board’s final decision may seek full appellate review under Section 2A-11. A decision by a case review board under subsection

(f)(2)(A) to uphold the Director's finding that there are no reasonable grounds to believe a violation occurred is not subject to appellate review.

(l) Enforcement of orders and subpoenas. The Commission, a case review board, or a hearing examiner may direct, and the director may ask, the County Attorney to enforce by any appropriate legal action a subpoena or other order issued by the director, hearing examiner, board, or Commission. The County or any party seeking to enforce an order or subpoena may recover costs and reasonable attorney's fees if the County or party substantially prevails.

(m) Interim relief. At any time after a complaint has been filed, the Commission, a case review board, or a hearing examiner may direct, and the director may ask, the County Attorney to seek any appropriate legal relief, such as a temporary restraining order or a preliminary injunction, to preserve the status quo or prevent irreparable harm.

San Francisco:

IMPLEMENTATION AND ENFORCEMENT.

(a) Implementation. The Agency shall be authorized to coordinate implementation and enforcement of this Chapter and may promulgate appropriate guidelines or rules for such purposes consistent with this Chapter. Any guidelines or rules promulgated by the Agency shall have the force and effect of law and may be relied on by Employers, Employees and other parties to determine their rights and responsibilities under this Chapter. Any guidelines or rules may establish procedures for ensuring fair, efficient and cost-effective implementation of this Chapter, including supplementary procedures for helping to inform Employees of their rights under this Chapter, for monitoring Employer compliance with this Chapter, and for providing administrative hearings to determine whether an Employer or other person has violated the requirements of this Chapter. The Agency shall make every effort to resolve complaints in a timely manner and shall have a policy that the Agency shall take no more than one year to settle, request an administrative hearing under Section 12R.7(b), or initiate a civil action under Section 12R.7(c). The failure of the Agency to meet these timelines within one year shall not be grounds for closure or dismissal of the complaint.

(b) Administrative Enforcement. The Agency is authorized to take appropriate steps to enforce this Chapter. The Agency may investigate any possible violations of this Chapter by an Employer or other person. Where the Agency has reason to believe that a violation has occurred, it may order any appropriate temporary or interim relief to mitigate the violation or maintain the status quo pending completion of a full investigation or hearing. Where the Agency, after a hearing that affords a suspected violator due process, determines that a violation has occurred, it may order any appropriate relief including, but not limited to, reinstatement, the payment of any back wages unlawfully withheld, and the payment of an additional sum as an administrative penalty in the amount of $50 to each Employee or person whose rights under this Chapter were violated for each day that the violation occurred or continued. A violation for unlawfully withholding wages shall be deemed to continue from the date immediately following the date that the wages were due and payable as provided in Part 1 (commencing with Section 200) of Division 2 of the California Labor Code, to the date immediately preceding the date the wages are paid in full. Where prompt compliance is not forthcoming, the Agency may take any appropriate enforcement action to secure compliance, including initiating a civil action pursuant

to Section 7(c)1 of this Chapter and/or, except where prohibited by state or federal law, requesting that City agencies or departments revoke or suspend any registration certificates, permits or licenses held or requested by the Employer or person until such time as the violation is remedied. In order to compensate the City for the costs of investigating and remedying the violation, the Agency may also order the violating Employer or person to pay to the City a sum of not more than $50 for each day and for each Employee or person as to whom the violation occurred or continued. Such funds shall be allocated to the Agency and shall be used to offset the costs of implementing and enforcing this Chapter. The amounts of all sums and payments authorized or required under this Chapter shall be updated annually for inflation, beginning January 1, 2005, using the inflation rate and procedures set forth in Section 4(b)2 of this Chapter. An Employee or other person may report to the Agency in writing any suspected violation of this Chapter. The Agency shall encourage reporting pursuant to this subsection by keeping confidential, to the maximum extent permitted by applicable laws, the name and other identifying information of the Employee or person reporting the violation. Provided, however, that with the authorization of such person, the Agency may disclose his or her name and identifying information as necessary to enforce this Chapter or for other appropriate purposes. In order to further encourage reporting by Employees, if the Agency notifies an Employer that the Agency is investigating a complaint, the Agency shall require the Employer to post or otherwise notify its Employees that the Agency is conducting an investigation, using a form provided by the Agency.

(c) Civil Enforcement. The Agency, the City Attorney, any person aggrieved by a violation of this Chapter, any entity a member of which is aggrieved by a violation of this Chapter, or any other person or entity acting on behalf of the public as provided for under applicable state law, may bring a civil action in a court of competent jurisdiction against the Employer or other person violating this Chapter and, upon prevailing, shall be entitled to such legal or equitable relief as may be appropriate to remedy the violation including, without limitation, the payment of any back wages unlawfully withheld, the payment of an additional sum as liquidated damages in the amount of $50 to each Employee or person whose rights under this Chapter were violated for each day that the violation occurred or continued, reinstatement in employment and/or injunctive relief, and shall be awarded reasonable attorneys' fees and costs. Provided, however, that any person or entity enforcing this Chapter on behalf of the public as provided for under applicable state law shall, upon prevailing, be entitled only to equitable, injunctive or restitutionary relief, and reasonable attorneys' fees and costs. Nothing in this Chapter shall be interpreted as restricting, precluding, or otherwise limiting a separate or concurrent criminal prosecution under the Municipal Code or state law. Jeopardy shall not attach as a result of any administrative or civil enforcement action taken pursuant to this Chapter.

(d) Interest. In any administrative or civil action brought for the nonpayment of wages under this Section, the Agency or court, as the case may be, shall award interest on all due and unpaid wages at the rate of interest specified in subdivision (b) of Section 3289 of the California Civil Code, which shall accrue from the date that the wages were due and payable as provided in Part 1 (commencing with Section 200) of Division 2 of the California Labor Code, to the date the wages are paid in full.

(e) Posting Notice of Violation. If an Employer fails to comply with a settlement agreement with the Agency, a final determination by the Agency after an administrative hearing officer issues a decision after a hearing under Section 12R.7(b), an administrative citation issues under Section 12R.19, a decision made in an administrative appeal brought under Section 12R.21, or

judgment issued by the Superior Court, and the Employer has not filed an appeal from the administrative hearing decision, administrative citation, administrative appeal decision, or judgment, or the appeal is final, the Agency may require the Employer to post public notice of the Employer's failure to comply in a form determined by the Agency.

San Francisco:

CIVIL ACTIONS.
In addition to the actions provided for in Section 12R.7(c), the City Attorney may bring a civil action to enjoin any violation of this Chapter. The City shall be entitled to its attorney's fees and costs in any action brought pursuant to this Section where the City is the prevailing party.

SEC. 12R.15. REMEDIES CUMULATIVE.
The remedies, penalties and procedures provided under this Chapter are cumulative and are not intended to be exclusive of any other available remedies, penalties and procedures.

SEC. 12R.16. ADMINISTRATIVE PENALTIES AND CITATIONS.
(a) Administrative Penalties; Citations. An administrative penalty may be assessed for a violation of the provisions of this Chapter as specified below. The penalty may be assessed by means of an administrative citation issued by the Director of the Office of Labor Standards Enforcement.
(b) Administrative Penalty Amounts. In addition to all other civil penalties provided for by law, the following violations shall be subject to administrative penalties in the amounts set forth below:

VIOLATION PENALTY AMOUNT
Failure to maintain payroll records or to retain payroll records for four years – Administrative Code Section 12R.5(c) $500.00
Failure to allow the Office of Labor Standards Enforcement to inspect payroll records – Administrative Code Section 12R.5(c) $500.00
Retaliation for exercising rights under Minimum Wage Ordinance – Administrative Code Section 12R.6
The Penalty for retaliation is $1,000.00 per employee. $1,000.00
Failure to Post notice of Minimum Wage rate – Administrative Code Section 12R.5(b)
Failure to provide notice of investigation to employees – Administrative Code Section 12R.7(b)
Failure to post notice of violation to public – Administrative Code Section 12R.7(e)
Failure to provide employer's name, address, and telephone number in writing – Administrative Code Section 12R.5(b) $500.00

The penalty amounts shall be increased cumulatively by fifty percent (50%) for each subsequent violation of the same provision by the same employer or person within a three (3) year period. The maximum penalty amount that may be imposed by administrative citation in a calendar year for each type of violation listed above shall be $5,000 or $10,000 if a citation for retaliation is issued. In addition to the penalty amounts listed above, the Office of Labor Standards Enforcement may assess enforcement costs to cover the reasonable costs incurred in enforcing the administrative penalty, including reasonable attorneys' fees. Enforcement costs

shall not count toward the $5,000 annual maximum.

SEC. 12R.17. VIOLATIONS.

(a) Separate and Continuing Violations; Penalties Paid Do Not Cure Violations. Each and every day that a violation exists constitutes a separate and distinct offense. Each section violated constitutes a separate violation for any day at issue. If the person or persons responsible for a violation fail to correct the violation within the time period specified on the citation and required under Section 12R.18, the Director of the Office of Labor Standards Enforcement may issue subsequent administrative citations for the uncorrected violation(s) without issuing a new notice as provided in Section 12R.18(b). Payment of the penalty shall not excuse the failure to correct the violation nor shall it bar any further enforcement action by the City. If penalties and costs are the subject of administrative appeal or judicial review, then the accrual of such penalties and costs shall be stayed until the determination of such appeal or review is final.

(b) Payments to City; Due Date; Late Payment Penalty. All penalties assessed under Section 12R.16 shall be payable to the City and County of San Francisco. Administrative penalties and costs assessed by means of an administrative citation shall be due within thirty (30) days from the date of the citation. The failure of any person to pay an administrative penalty and costs within that time shall result in the assessment of an additional late fee. The amount of the late fee shall be ten (10) percent of the total amount of the administrative penalty assessed for each month the penalty and any already accrued late payment penalty remains unpaid.

(c) Collection of Penalties; Special Assessments. The failure of any person to pay a penalty assessed by administrative citation under Section 12R.16 within the time specified on the citation constitutes a debt to the City. The City may file a civil action, create and impose liens as set forth below, or pursue any other legal remedy to collect such money.

(d) Liens. The City may create and impose liens against any property owned or operated by a person who fails to pay a penalty assessed by administrative citation. The procedures provided for in Chapter 10, Article XX of the Administrative Code shall govern the imposition and collection of such liens.

(e) Payment to City. The Labor Standards Enforcement Officer has the authority to require that payment of back wages found to be due and owing to employees be paid directly to the City and County of San Francisco for disbursement to the employees. The Controller shall hold the back wages in escrow for workers whom the Labor Standards Enforcement Officer, despite his/her best efforts, including any required public notice, cannot locate; funds so held for three years or more shall be dedicated to the enforcement of the Minimum Wage Ordinance or other laws enforced by the Office of Labor Standards Enforcement.

SEC. 12R.18. ADMINISTRATIVE CITATION; NOTICE OF VIOLATION.

(a) Issuance of Citation. The Director has the authority to issue an administrative citation for any violation of this Chapter that is identified in Section 12R.16(b). The administrative citation shall be issued on a form prescribed by the Office of Labor Standards Enforcement.

(b) Notice and Opportunity to Cure. In order to facilitate compliance, the Director of the Office of Labor Standards Enforcement ("Director") or his or her designee may notify any person in violation of the Code provisions identified in Section 12R.16(b) of such violation prior to the issuance of an administrative citation. Regardless of the manner of service of the notice under Section 12R.19, the Director or his or her designee may post the notice of violation by affixing the notice to a surface in a conspicuous place on property that is (1) the person's

principal place of business in the City, or (2) if the person's principal place of business is outside the City, the fixed location within the City from or at which the person conducts business in the City, or (3) if the person does not regularly conduct business from a fixed location in the City, one of the following: (i) the location where the person maintains payroll records if the notice of violation is for violation of Section 12R.5(c), or (ii) the jobsite or other primary location where the person's employees perform services in the City at the time the notice is posted. The notice of violation shall specify the action required to correct or otherwise remedy the violation(s). At the discretion of the Director or his or her designee, the person or persons responsible for the violation may be allowed ten (10) days from the date of the notice of violation to establish that no violation occurred or such person or persons are not responsible for the violation, or correct or otherwise remedy the violation; provided, however, that the Director may, in his or her discretion, assign a longer period, not to exceed twenty-one (21) days, within which to correct or otherwise remedy each violation, or establish that no violation occurred or such person or persons are not responsible for the violation. The Director may consider the cost of correction and the time needed to obtain information, documents, data and records for correction in assigning a specific period of time within which to correct or otherwise remedy each violation, or obtain and submit evidence that no violation occurred or such person or persons are not responsible for the violation.

SEC. 12R.19. ADMINISTRATIVE CITATION AND NOTICE OF VIOLATION; SERVICE.

Service of a notice of violation and an administrative citation under Section 12R.16 may be accomplished as follows:

(a) The Director or his or her designee may obtain the signature of the person responsible for the violation to establish personal service of the citation; or

(b) (1) Director or his or her designee shall post the citation by affixing the citation to a surface in a conspicuous place on the property described in Section 12R.18. Conspicuous posting of the citation is not required when personal service is accomplished or when conspicuous posting poses a hardship, risk to personal health or safety or is excessively expensive; and

(2) The Director or his or her designee shall serve the citation by first class mail as follows:

(i) The administrative citation shall be mailed to the person responsible for the violation by first class mail, postage prepaid, with a declaration of service under penalty of perjury; and

(ii) A declaration of service shall be made by the person mailing the administrative citation showing the date and manner of service by mail and reciting the name and address of the person to whom the citation is issued; and

(iii) Service of the administrative citation by mail in the manner described above shall be effective on the date of mailing.

SEC. 12R.20. ADMINISTRATIVE CITATION; CONTENTS.

The administrative citation under Section 12R.16 shall include all the following:

(1) A description of the violation;

(2) The date and location of the violation(s) observed;

(3) A citation to the provisions of law violated;

(4) A description of corrective action required;

(5) A statement explaining that each day of a continuing violation may constitute a new and separate violation;

(6) The amount of administrative penalty imposed for the violation(s);

(7) A statement informing the violator that the fine shall be paid to the City and County of San Francisco within thirty (30) days from the date on the administrative citation, the procedure for payment, and the consequences of failure to pay;

(8) A description of the process for appealing the citation, including the deadline for filing such an appeal; and

(9) The name and signature of the Director.

SEC. 12R.21. ADMINISTRATIVE APPEAL.

(a) Period of Limitation for Appeal. Persons receiving an administrative citation may appeal it within fifteen (15) days from the date the citation is served. The appeal must be in writing and must indicate a return address. It must be accompanied by the penalty amount, specifying the basis for the appeal in detail, and must be filed with both the Office of Labor Standards Enforcement and the Controller's Office as indicated in the administrative citation.

(b) Hearing Date. As soon as practicable after receiving the written notice of appeal and the penalty amount, the Controller or his or her designee shall promptly select a hearing officer (who shall not be an employed in the Office of Labor Standards Enforcement) to hear and decide the administrative appeal. The hearing officer shall fix a date, time and place for the hearing on the appeal. Written notice of the time and place for the hearing may be served by first class mail, at the return address indicated on the written appeal. Service of the notice must be made at least ten (10) days prior to the date of the hearing to the person appealing the citation. The hearing shall be held no later than thirty (30) days after service of the notice of hearing, unless that time is extended by mutual agreement of the parties.

(c) Notice. Except as otherwise provided by law, the failure of any person with an interest in property affected by the administrative citation, or other person responsible for a violation, to receive a properly addressed notice of the hearing shall not affect the validity of any proceedings under this Chapter. Service by first class mail, postage prepaid, shall be effective on the date of mailing.

(d) Failure to Appeal. Failure of any person to file an appeal in accordance with the provisions of this Section or to appear at the hearing shall constitute a failure to exhaust administrative remedies and a forfeiture of the penalty amount previously remitted.

(e) Submittals for the Hearing. No later than five (5) days prior to the hearing, the person to whom the citation was issued and the Office of Labor Standards Enforcement shall submit to the hearing officer, with simultaneous service on the opposing party, written information including, but not limited to, the following: the statement of issues to be determined by the hearing officer and a statement of the evidence to be offered and the witnesses to be presented at the hearing.

(f) Conduct of Hearing. The hearing officer appointed by the Controller or the Controller's designee shall conduct all appeal hearings under this Chapter. The Office of Labor Standards Enforcement shall have the burden of proof in such hearings. The hearing officer may accept evidence on which persons would commonly rely in the conduct of their serious business affairs, including but not limited to the following:

(1) A valid citation shall be prima facie evidence of the violation;

(2) The hearing officer may accept testimony by declaration under penalty of perjury relating to the violation and the appropriate means of correcting the violation;

(3) The person responsible for the violation, or any other interested person, may present testimony or evidence concerning the violation and the means and time frame for correction.

The hearing shall be open to the public and shall be tape-recorded. Any party to the hearing

may, at his or her own expense, cause the hearing to be recorded and transcribed by a certified court reporter. The hearing officer may continue the hearing and request additional information from the Office of Labor Standards Enforcement or the appellant prior to issuing a written decision.

(g) Hearing Officer's Decision; Findings. The hearing officer shall make findings based an the record of the hearing and issue a decision based on such findings within fifteen (15) days of conclusion of the hearing. The hearing officer's decision may uphold the issuance of a citation and penalties stated therein, may dismiss a citation, or may uphold the issuance of the citation but reduce, waive or conditionally reduce or waive the penalties stated in a citation or any late fees assessed if mitigating circumstances are shown and the hearing of officer finds specific grounds for reduction or waiver in the evidence presented at the hearing. The hearing officer may impose conditions and deadlines for the correction of violations or the payment of outstanding civil penalties. Copies of the findings and decision shall be served upon the appellant and the Office of Labor Standards Enforcement by certified mail.

(h) Hearing Officer's Decision. The decision of the hearing officer is final. If the hearing officer concludes that the violation charged in the citation did not occur or that the person charged in the citation was not the responsible party, the Office of Labor Standards Enforcement shall refund or cause to be refunded the penalty amount to the person who deposited such amount. The hearing officer's decision shall be served on the appellant by certified mail.

SEC. 12R.22. REGULATIONS.

The Office of Labor Standards Enforcement may promulgate and enforce rules and regulations, and issue determinations and interpretations relating to the administrative penalty and citation system pursuant to Sections 12R.16 through 12R.20, inclusive. The Controller may promulgate and enforce rules and regulations, and issue determinations and interpretations relating to the conduct of administrative appeals under Section 12R.21. Any rules and regulations promulgated by the Office of Labor Standards Enforcement or Controller shall be approved as to legal form by the City Attorney, and shall be subject to not less than one noticed public hearing. The rules and regulations shall become effective 30 days after receipt by the Clerk of the Board of Supervisors, unless the Board of Supervisors by resolution disapproves or modifies the regulations. The Board of Supervisors' determination to modify or disapprove a rule or regulation submitted by the Office of Labor Standards Enforcement or Controller shall not impair the ability of the Office of Labor Standards Enforcement or Controller to resubmit the same or similar rule or regulation directly to the Board of Supervisors if the Office of Labor Standards Enforcement or Controller determines it is necessary to effectuate the purposes of this Chapter.

SEC. 12R.23. JUDICIAL REVIEW.

(a) Procedures. After receipt of the decision of the hearing officer under Section 12R.21, the appellant may file an appeal with the superior court pursuant to California Government Code Section 53069.4. The appeal shall be submitted within twenty (20) days of the date of mailing of the hearing officer's decision, with the applicable filing fee. The appeal shall state the reasons the appellant objects to the findings or decision.

(b) Review. The superior court shall conduct a de novo hearing, except that the contents of the Office of Labor Standards Enforcement's file (excluding attorney client communications and other privileged or confidential documents and materials that are not discoverable or may be

excluded from evidence in judicial proceedings under the Evidence Code, Civil Code, Code of Civil Procedure or other applicable law) shall be received into evidence. A copy of the notice of violation and imposition of penalty shall be entered as prima facie evidence of the facts stated therein.

(c) Filing Fee. The superior court filing fee shall be twenty-five ($25.00). If the court finds in favor of the appellant, the amount of the fee shall be reimbursed to the appellant by the City and County of San Francisco. Any deposit of penalty shall be refunded by the City and County of San Francisco in accordance with the judgment of the court.

SEC. 12R.24. OTHER REMEDIES NOT AFFECTED.

The administrative citation procedures established in this Chapter shall be in addition to any other criminal, civil, or other remedy established by law which may be pursued to address violations of this Chapter. An administrative citation issued pursuant to this Chapter shall not prejudice or adversely affect any other action, civil or criminal, that may be brought to abate a violation or to seek compensation for damages suffered.

Oakland:

CITY AUTHORIZED TO CONSIDER COMPLIANCE

City officials are hereby authorized to consider, to the maximum extent permitted by law, an Employer's record of noncompliance with this Chapter in making City decisions on City contracts and land use approvals and other entitlements to expand or operate within the City. The City is authorized to either deny approval or include conditions for approval ensuring future compliance by investigating complaints of noncompliance with this Chapter and rendering City decisions on the merits of such complaints. The City is authorized to award the same relief in its proceedings as a court may award. Pursuit of such administrative remedy shall not be a prerequisite for pursuing a private action under this Chapter.

PRIVATE RIGHTS OF ACTION

Any Person claiming harm from a violation of this Chapter may bring an action against the Employer in court to enforce the provisions of this Chapter and shall be entitled to all remedies available to remedy any violation of this Chapter, including but not limited to back pay, reinstatement and/or injunctive relief. Violations of this Chapter are declared to irreparably harm the public and covered employees generally. The Court shall award reasonable attorney's fees, witness fees and expenses to any plaintiff who prevails in an action to enforce this Chapter. Any Person who negligently or intentionally violates this Chapter shall be liable for civil penalties for each violation with a maximum of $1000 per violation, the amount to be determined by the court. No criminal penalties shall attach for any violation of this Chapter, nor shall this Chapter give rise to any cause of action for damages against the City.

L. RELATIONSHIP TO OTHER REQUIREMENTS

Richmond:

This chapter provides for payment of a local minimum wage and shall not be construed to preempt or otherwise limit or affect the applicability of any other law, regulation, requirement, policy or standard that provides for payment of higher or supplemental wages or benefits, or that extends other protections.

Berkeley:

This Chapter provides for payment of a local Minimum Wage and shall not be construed to preempt or otherwise limit or affect the applicability of any other law, regulation, requirement, policy or standard that provides for payment of higher or supplemental wages or benefits, or that extends other protections.

Seattle:

This Chapter provides minimum wage and minimum compensation requirements and shall not be construed to preempt, limit, or otherwise affect the applicability of any other law, regulation, requirement, policy, or standard that provides for greater wages or compensation; and nothing in this Chapter shall be interpreted or applied so as to create any power or duty in conflict with federal or state law. Nor shall this Chapter be construed to preclude any person aggrieved from seeking judicial review of any final administrative decision or order made under this Chapter affecting such person.

San Jose:

This Chapter provides for payment of a local Minimum Wage and shall not be construed to preempt or otherwise limit or affect the applicability of any other law, regulation, requirement, policy or standard that provides for payment of higher or supplemental wages or benefits, or that extends other protections.

Los Angeles:

The provisions of this article shall not be construed as limiting any Employee's right to obtain relief to which he or she may be entitled at law or in equity.

Los Angeles:

Nothing in this article shall be interpreted or applied so as to create any power or duty in conflict with any federal or State law.

Albuquerque:

This article provides for payment of minimum wage rates and shall not be construed to preempt or otherwise limit or affect the applicability of any other law, regulation, requirement, policy or standard that provides for payment of higher or supplemental wages, benefits, or protections. Nothing contained in this article prohibits an employer from paying more than the minimum wage rates established under this article.

Bernalillo County:

Relationship to other requirements.

This division provides for payment of minimum wage rates and shall not be construed to preempt or otherwise limit or affect the applicability of any other law, regulation, requirement, policy or standard that provides for payment of higher or supplemental wages, benefits, or protections. Nothing contained in this division prohibits an employer from paying more than the minimum wage rates established under this division.

San Francisco:

This Chapter provides for payment of a minimum wage and shall not be construed to preempt or otherwise limit or affect the applicability of any other law, regulation, requirement, policy or standard that provides for payment of higher or supplemental wages or benefits, or that extends other protections including, but not limited to, the San Francisco Minimum Compensation Ordinance.

Oakland:

The purpose of this Chapter is to ensure minimum labor standards. This Chapter does not preempt or prevent the establishment of superior employment standards (including higher wages) or the expansion of coverage by ordinance, resolution, contract, or any other action of the City or Port of Oakland. This Chapter shall not be construed to limit a discharged Employee's right to bring a common law cause of action for wrongful termination.

M. WELFARE TO WORK PROGRAMS

Richmond:

Application of minimum wage to welfare-to-work programs.

The minimum wage established pursuant to this chapter shall apply to the Welfare-to-Work programs under which persons must perform work in exchange for receipt of benefits. Participants in Welfare-to-Work Programs shall not, during a given benefits period, be required to work more than a number of hours equal to the value of all cash benefits received during that period, divided by the minimum wage.

Berkeley:

110 Application Of Minimum Wage To Welfare-To-Work Programs.
The Minimum Wage established under this Chapter shall apply to the Welfare-to-Work programs under which persons must perform work in exchange for receipt of benefits. Participants in Welfare-to-Work Programs within the City of Berkeley shall not, during a given benefits period, be required to work more than a number of hours equal to the value of all cash benefits received during that period, divided by the Minimum Wage.

San Jose:

APPLICATION OF MINIMUM WAGE TO WELFARE-TO-WORK PROGRAMS.

The Minimum Wage established pursuant to Section 4(b) of this Chapter shall apply to the Welfare-to-Work programs under which persons must perform work in exchange for receipt of benefits. Participants in Welfare-to-Work Programs shall not, during a given benefits period, be required to work more than a number of hours equal to the value of all cash benefits received during that period, divided by the Minimum Wage.

San Francisco:

APPLICATION OF MINIMUM WAGE TO WELFARE-TO-WORK PROGRAMS.

The Minimum Wage established pursuant to Section 4(b)1 of this Chapter shall apply to the City's Welfare-to-Work Programs under which persons must perform work in exchange for receipt of benefits. Participants in Welfare-to-Work Programs shall not, during a given benefits period, be required to work more than a number of hours equal to the value of all cash benefits received during that period, divided by the Minimum Wage. Where state or federal law would preclude the City from reducing the number of work hours required under a given Welfare-to-Work Program, the City may comply with this Section by increasing the cash benefits awarded

so that their value is no less than the product of the Minimum Wage multiplied by the number of work hours required.

N. FEES

Richmond:

Fees.

Nothing in this chapter shall preclude the City Council from imposing a cost recovery fee on all employers to pay the cost of administering this chapter.

Berkeley:

Nothing herein shall preclude the City Council from imposing a cost recovery fee on all Employers to pay the cost of administering this Chapter

San Jose:

Nothing herein shall preclude the City Council from imposing a cost recovery fee on all Employers to pay the cost of administering this Chapter.

O. **OUTREACH**

San Francisco:

The Office of Labor Standards Enforcement shall establish a community-based outreach program to conduct education and outreach to employees. In partnership with organizations involved in the community-based outreach program, the Office of Labor Standards shall create outreach materials that are designed for workers in particular industries.

P. SEVERABILITY

Seattle:

The provisions of this Chapter are declared to be separate and severable. If any clause, sentence, paragraph, subdivision, section, subsection or portion of this Chapter, or the application thereof to any employer, employee, or circumstance, is held to be invalid, it shall not affect the validity of the remainder of this Chapter, or the validity of its application to other persons or circumstances.

SeaTac:

If any provision of this Ordinance is declared illegal, invalid or inoperative, in whole or in part, or as applied to any particular Hospitality or Transportation Employer and/or in any particular circumstance, by the final decision of any court of competent jurisdiction, then all portions and applications of this Ordinance not declared illegal, invalid or inoperative, shall remain in full force or effect to the maximum extent permissible under law.

San Jose:

If any part or provision of this ordinance, or the application of this ordinance to any person or circumstance, is held invalid, the remainder of this ordinance, including the application of such part or provisions to other persons or circumstances, shall not be affected by such a holding and shall continue in full force and effect. To this end, the provisions of this ordinance are severable.

Los Angeles:

If any subsection, sentence, clause or phrase of this article is for any reason held to be invalid or unconstitutional by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it would have adopted this section, and each and every subsection, sentence, clause and phrase thereof not declared invalid or unconstitutional, without regard to whether any portion of the ordinance would be subsequently declared invalid or unconstitutional.

San Francisco:

SEVERABILITY.

If any part or provision of this Chapter, or the application of this Chapter to any person or circumstance, is held invalid, the remainder of this Chapter, including the application of such part or provisions to other persons or circumstances, shall not be affected by such a holding and shall continue in full force and effect. To this end, the provisions of this Chapter are severable.

Oakland:

SEVERABILITY

If any provision or application of this Chapter is declared illegal, invalid or inoperative, in whole or in part, by any court of competent jurisdiction, the remaining provisions and portions thereof and applications not declared illegal, invalid or inoperative shall remain in full force or effect. The courts are hereby authorized to reform the provisions of this Chapter in order to preserve the maximum permissible effect of each subsection herein. Nothing herein may be construed to impair any contractual obligations of the Port or City of Oakland. This Chapter shall not be applied to the extent it will cause the loss of any federal or state funding of City or Port activities."

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

THE TASK FORCE'S SECOND MEETING

Monday, 1 June 2015
5:30 – 8:30 p.m.
The Center for Urban Waters
326 East D Street, Tacoma

DRAFT AGENDA

THE MEETING'S GOALS:

1. Hear the Task Force members' current thinking on raising the minimum wage in Tacoma.

2. Begin the process of gathering facts and data through a discussion of demographic information about Tacoma and the region, and through a series of questions and considerations about the potential economic impacts of raising the minimum wage.

***NOTE**: Light snacks will be served starting at 5:15 p.m. Please come early to enjoy them so we can convene the meeting promptly at 5:30. Thank you!*

I.	5:30	Meeting Convenes: Review Goals and Agenda	Jim Reid, facilitator
II.	5:35	Housekeeping Items • *Approve summary of 28 May meeting* • *Hear how citizens may submit written input to the Task Force.*	Task Force/Tadd Wille
III.	5:40	Present Members' Positions on Raising Minimum Wage Each Task Force member has 3 minutes to share her/his position on the issue of raising the minimum wage. There won't be time for questions and answers or discussion and debate. The purpose of this exercise is to hear what each member thinks today. • *How do you feel about raising Tacoma's minimum wage?* • *What interests and consideration are most important in your current thinking?*	Task Force Members

IV.	6:30	Past, Current, and Future: The Demographics of Tacoma and the Region Dr. Modarres, Director of the UW Tacoma's Center for Urban Studies and a Task Force members, will present demographic information about Tacoma and the surrounding region to provide context for the Task Force's consideration and discussions. ▪ *Are there any questions? Any reactions?* ▪ *How does this information help inform your thinking? What was most important to you?* ▪ *Is there other information we could use from Ali?*	Ali Modarres/Task Force Members
	7:20	break	
V.	7:25	Framing the Discussion About the Economic Impacts of Raising the Minimum Wage Katie Baird, Associate Professor of Economics, Politics, Philosophy, and Public Affairs at the UW Tacoma, and Doug Wills, an Associate Professor of Economics at the Milgard School of Business at UW Tacoma are serving as economic consultants to the Task Force. In this session they'll help the Task Force frame the discussion about potential economic impacts of raising the minimum wage. They'll walk us through the a series of questions (**SEE HANDOUT**) and present a conceptual overview of the economics of wage support policies.	Katie Baird, Doug Wills, and Task Force Members
VI.	8:10	Beginning to Identify and Define the Key Findings ▪ *In light of what we have learned from Ali, Katie, and Doug this evening, what topics might your key findings address (employment, poverty, effect on businesses?)?* ▪ *What data and information will you need to reach these findings?*	Everyone
	8:30	Adjourn	

THE TASK FORCE'S NEXT MEETING IS:

Thursday, 4 June 2015
5:30 – 8:30 p.m.
The Center for Urban Waters

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

THE TASK FORCE'S SECOND MEETING

Monday, 1 June 2015 5:38 – 8:34 p.m.

The Center for Urban Waters

Revised SUMMARY

OF THE MEETING'S KEY DISCUSSIONS, DECISIONS, AND AGREEMENTS

In attendance: Task Force Members and Alternates: Sarah Cherin, Pastor Gregory Christopher, Odette D'Aniello, Michelle Douglas, Liz Dunbar, Dennis Farrow, Reggie Frederick (by telephone), Eric Hahn, Russ Heaton, Dr. Ali Modarres, Abranna Romero Rocha, David Strong, Robert Taylor, and Brenda Wiest; **City Staff** serving the Task Force: Tadd Wille, Jared Eyer, and Martha Lantz; **Economic Consultants**: Katie Baird and Doug Wills; **Facilitator**: Jim Reid

Task Force members who were absent: Kelly Chambers, Jason Kinlow, and Elizabeth Lewis

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Facilitator Jim Reid called tonight's meeting of the Tacoma Minimum Wage Task Force to order at 5:38 p.m. PDT.

THE TASK FORCE'S DECISIONS AND AGREEMENTS

The Task Force members:

1. Approved the draft summary of the key discussions, decisions, and agreements of their first meeting on 28 May 2015. The final summary will be posted on the Task Force's website to help keep the public informed about the Task Force's work.

2. Approved a proposal from Tadd Wille, the City's Budget Director, to continually engage citizens in the Task Force's work. The City will establish a Task Force email by which citizens can send comments, ideas, and suggestions to the Task Force. Each Monday the staff will bundle the comments and distribute them to all Task Force members for their review and consideration.

   Task Force member Michelle Douglas asked that the City consider offering citizens the ability to send comments in languages other than English, and Tadd said he would look into that.

A Housekeeping Measure: Follow-up on the Open Public Meetings Act (OPMA)

Deputy City Attorney Martha Lantz, who at the 28 May meeting briefed the Task Force on the obligations and requirements of the Open Public Meetings Act (OPMA) and the Public Records Act, returned to ask if the Task Force members have any additional questions or concerns about complying with two Acts. No one expressed any concerns or asked additional questions.

Facilitator Jim Reid reminded the members that when they reply to something he has sent them, they should only write to him, not include all the other members on the email. This will avoid the perception that the Task Force is conducting business privately. If the Task Force member is asking a question that everyone should be given the answer to, Jim will construct an email for everyone stating the issue or question and providing the answer.

Task Force Members Articulate Their Current Thinking on Raising the Minimum Wage

The Task Force members took a few minutes to share their current thinking about raising the minimum wage. Here is a synopsis of the major themes from their comments:

- Task Force members from a variety of perspectives expressed compassion for low-income people who are struggling to make ends meet. They also respect that people need a living wage.
- With a number of Task Force members saying to "do it reasonably," It appears there may be sentiment for raising the minimum wage over time.
- A number of Task Force members also mentioned "meeting in the middle" or finding a "middle ground."
- There seems to be recognition that the minimum wage is not the only means of lifting people out of poverty. Education and training, affordable housing, and transportation were mentioned as other issues that must be addressed to help reduce poverty.
- Task Force members appeared to distinguish large businesses, including nation-wide enterprises, from small, local businesses.
- Task Force members reiterated one of their mutual interests: Potential unintended consequences must be considered when assessing potential solutions. Task Force members don't want businesses to leave Tacoma, people to lose their jobs or businesses to close, or unskilled employees to lose job opportunities because those jobs became more appealing to others in the workforce. One potential positive unintended consequence that was mentioned is that other cities in the region raise their minimum wage as a result of Tacoma's action.
- Another sentiment appeared to be that Tacoma is unique and the solutions need to reflect the community's uniqueness. Some members raised the question of how to balance the city's uniqueness with the fact Tacoma is part of a regional economy and society.
- Another question put on the table was this: "What will be the cost of doing nothing?"

Presentations Provide Context for Thinking About the Minimum Wage Issue

The rest of the meeting was devoted to presentations that were intended to help set the framework for the discussions about raising the minimum wage. Ali Modarres' presentation helped establish a profile

of Pierce County, illustrating how its demographics fit within and compare to the wider region. Katie Baird and Doug Wills helped frame economic considerations. They suggested that relying on data alone about Tacoma isn't sufficient to figure out how a particular minimum wage would affect the City's residents. Also needed are judgments about how the labor market will respond to a minimum wage.

Dr. Ali Modarres, the Director of the UW Tacoma's Center for Urban Studies and a Task Force member, provided demographic information to help create a profile of Pierce County and begin to give context to the debate around raising the minimum wage. He reviewed PowerPoint slides and a hand out showing the jobs in the county (provided by the Bureau of Labor Statistics) that currently make less than $15 per hour, and the estimate of how many jobs there are in each category. The primary lessons from his remarks included:

- In crafting policies to lift people out of poverty and, more specifically, to address increasing the minimum wage, we must consider the labor market in the long-term future.

- Seattle's population and economic growth are on a trajectory that far outpaces that of any other city in our region or state, making it extremely difficult to compare Seattle to Tacoma, Everett, or Spokane. Solutions that work for Seattle may not work elsewhere.

- Growth and development in Pierce County have outpaced Tacoma's in the last couple decades.

- The unemployment rate in Pierce County was 2.6% higher than Seattle's in December 2014.

- Between 2000 and 2013, the number of Pierce County residents in the range of 35-44 years old declined, as did the number of people below 19 years of age. This is likely to reflect that 35 to 44 year-olds moved from the County and took with them their young children.

- Based on estimates from the Bureau of Labor Statistics, there are about 269,800 jobs in Pierce County. Of these, about 71,450 provide a salary of less than $15 per hour. That is 26.5% of the jobs in this county. However, we must also consider the percentage relative to standard error for the employment data in some occupational categories.

- Based on analysis by the Puget Sound Regional Council (U.S. Census—Pierce County inflow/outflow data from 2011) about 155,000 people live and work in Pierce County. About 134,00 people who live in Pierce County work outside the county, and close to 83,000 people who live outside Pierce County work in the county.

- One of the biggest public policy issues today is housing, which is increasingly unaffordable. The rise in income is not matching the rise in medium housing prices.

- Based on May 2013 Bureau of Labor Statistics data for all occupations, the mean hourly wage in Tacoma is one percent higher than that of the United States ($22.46 vs. $22.33). Seattle's mean hourly wage is 27% higher than that of the U.S. ($28.36 vs. 22.33).

After a brief dialogue with Ali, some Committee members said it would help them understand the issues around the minimum wage even better if the Task Force could get an understanding of who are the people in Tacoma/Pierce County currently making less than $15 per hour. Ali said he may have

additional information to draw this profile. The Washington State Employment Security Division (ESD) may also have data that could help provide this understanding.
Katie Baird, an Associate Professor of Economics, Politics, Philosophy, and Public Affairs at the UW Tacoma, and Doug Wills, an Associate Professor of Economics at the Milgard School of Business, also at the UW Tacoma, presented a paper that offered questions for the Task Force's consideration about the potential economic impacts of raising the minimum wage. They emphasized that different values and value judgments will guide the discussion more than data.

Katie mentioned that raising the minimum wage is an economic redistribution strategy, as is the income tax, for example. She presented these four concepts by which to consider raising the minimum wage:

1. **Demand for Labor**: How employers respond to a minimum wage. Redistribute profits to employees, relocate, reduce use of labor, use a labor substitute, such as technology, and/or raise the price to consumers to balance the loss of profits.
2. **Supply of Labor**: Employment will look more attractive for labor. Increase the supply; change the composition of minimum wage workers.
3. **Leakages or unintended consequences**: Less employment as some businesses leave or choose to not locate in Tacoma. In addition, the characteristics of minimum wage workforce could change and consumers, rather than employers, pay for a higher minimum wage by buying at higher prices.
4. **Good unintended good consequences**: People work harder, Tacoma becomes a more desirable place to live, and the cost of social services to City government and other social service providers declines. In addition, other cities in the region follow Tacoma's example by raising their minimum wages.

Katie concluded by stating that within this context there will be tradeoffs and they should be recognized in the discussion and debate.

The major points of Doug's remarks included:

- It's difficult to project outcomes of raising the minimum wage because, among other factors, the market is volatile, the Tacoma-area market is small, wages may not be not all the benefits that workers receive, and both businesses' and peoples' responses to change differ widely.
- Local conditions matter.
- Previous research on the economic impacts of raising the wage is mixed; some data appears to be inconsistent or contradictory and some of the findings are inconclusive.
- Businesses will be affected differently and respond differently. For example, a large firm with lots of capital may not have as high a percentage of labor costs and thus would respond in one fashion. A small business with a high percentage of labor costs would likely respond differently.
- Take into account what might happen to other benefits offered, including paid sick leave and paid vacations.
- Both businesses and people adjust to change. But the degree of their flexibility and the time needed to adapt will vary.
- We won't get easy answers from the data, but we might be able to get a sense of what will happen to business and labor.

The meeting adjourned at 8:33 p.m. PDT. The Task Force's next meeting is June 4th from 5:30-8:30 at the Center for Urban Waters.

Economics of a Minimum Wage

City of Tacoma Minimum Wage Task Force

KATIE BAIRD, ASSOCIATE PROFESSOR OF ECONOMICS, UWT

DOUG WILLS, ASSOCIATE PROFESSOR OF ECONOMICS, UWT

Overview:

- Provide framework based on economic principles of a minimum wage proposal, to guide your deliberations.
- *Conceptual* understanding of economic consequences. *Not* providing empirical analysis.
- Economics and data will not lead you all to the same conclusions.
  - Well-informed people who care about minimum wage workers can reach different conclusions.
  - Even with respect to the economics, economists disagree. Doug and I will likely disagree. You will disagree with others in the room.
- Yet: four key concepts that will be at the heart of your discussions.

Income Redistribution

Concept One: The Demand for Labor (Employers)

One response: redistribute profits to employees

But other options:

- Relocate
- Reduce use of labor
- Use a labor substitute (eg, a computer to answer phone call)
- Raise Price so that Consumers Pay the Higher Wage

Concept Two: The Supply of Labor

Concept Three: Leakages (Unintended Consequence)

Some Possibilities:

- Less employment: some leave, and others choose not to come to Tacoma
- Characteristics of minimum wage workforce changes
- Consumers rather than employers “pay” for higher minimum wages (prices Increase)

Concept Four: Unintended Good Consequences

- People Work Harder
- Tacoma Becomes a More Desirable Place to Live
- The City of Tacoma's Costs Go Down
- Do Neighboring Communities Copy Tacoma?

To Summarize:

- **The Economics of a Minimum Wage:**
  - How do employers respond?
  - How do employees respond?
  - What sort of unintended bad consequences might there be?
  - What sort of unintended good consequences might there be?
- **There Will Be Tradeoffs: Some will win and others will lose:**
  - Who are the potential winners and losers?
  - How do you weigh these different interests?

What Does Previous Research Find?

- Overview of Case Studies of Minimum Wage

- Findings Are Mixed (More on Why Soon), But Some General Tendencies:
  - Differential Impact on Workers Depending on Their Skill
  - Total income to minimum wage workers goes up, but income gains are not evenly distributed.
  - Creation of new jobs at minimum wage levels is slowed.

- However:
  - Effects tend to be small.
  - Research results are not consistent, and sometimes contradictory.

Local Conditions Matter

- Response of Firms Depends On:
  - How important is minimum wage labor in overall costs?
  - How easily can they avoid higher costs?
  - Can a business pass higher labor costs on by raising prices?
    - To what degree are they competing with low-cost producers elsewhere versus a “location specific” business?
- Response of Workers Depends On:
  - How mobile workers are into and out of a location?
  - What happens to other (non-wage) benefits. Eg, sick leave, vacation, health benefits, parking, transportation, etc.

City of Tacoma Minimum Wage Task Force **June 2015**

Questions to Consider Regarding the Economic Impact of a Potential Increase in Tacoma's Minimum Wage

Scope: Should a higher minimum wage in Tacoma apply to all minimum wage workers?

- Teenagers? Students? Interns? Apprentices? Those with good benefits?
- All hourly employees, including those who make tips?
- All hourly employees, including those who work for small businesses?
- Those working for businesses with small profits or no profits (non-profits)?

Effect on Workers: How would a higher minimum affect workers?

- Would there be more seeking work in Tacoma because:
  - More in Tacoma enter the labor market?
  - Those already working seek more hours?
  - More people from surrounding areas seek work in Tacoma?
- Would workers in Tacoma be likely to respond to minimum wage by working harder or otherwise being more productive?

Effect on Employers: How would employers respond?

- What jobs in Tacoma pay minimum wage, and how many are there?
- How would different employers respond to higher minimum wages? Would they:
  - Relocate (or shut down)?
  - Reduce the number of employees hired?
  - Accept lower income for themselves?
  - Raise the price of what they sell?
- Which type of firms in Tacoma would be more likely to respond in which way?

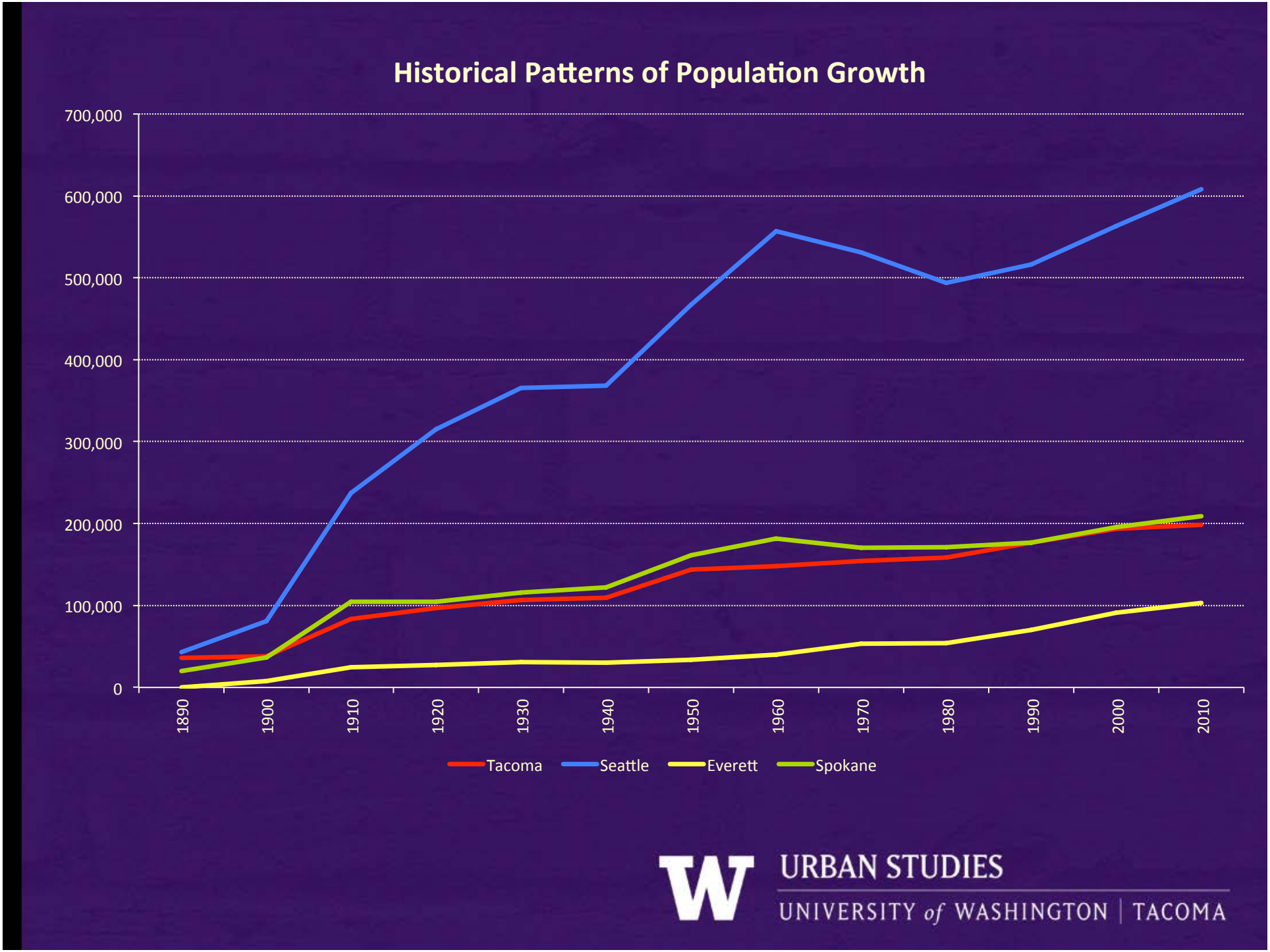
Overall Impact

- What effect would raising the minimum wage have on poverty and low-income residents' income? What would be the mpact on different subpopulations?
- Where would the money to pay higher minimum wages come from?
- Would surrounding areas be more or less likely to raise their minimum wages in response?
- What impact would a higher minimum wage have on the City of Tacoma's costs?
- Would a higher minimum wage likely increase the wages (and hours) of workers earning above the minimum wage?
- Would a higher minimum wage increase unemployment? What jobs might move elsewhere?
- Would a higher minimum wage encourage more residents to work?
- Would a higher minimum wage be difficult to enforce?

A bit of context

Ali Modarres

URBAN STUDIES
UNIVERSITY of WASHINGTON | TACOMA


Historical Patterns of Population Growth
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
1890
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
Tacoma
Seattle
Everett
Spokane
URBAN STUDIES
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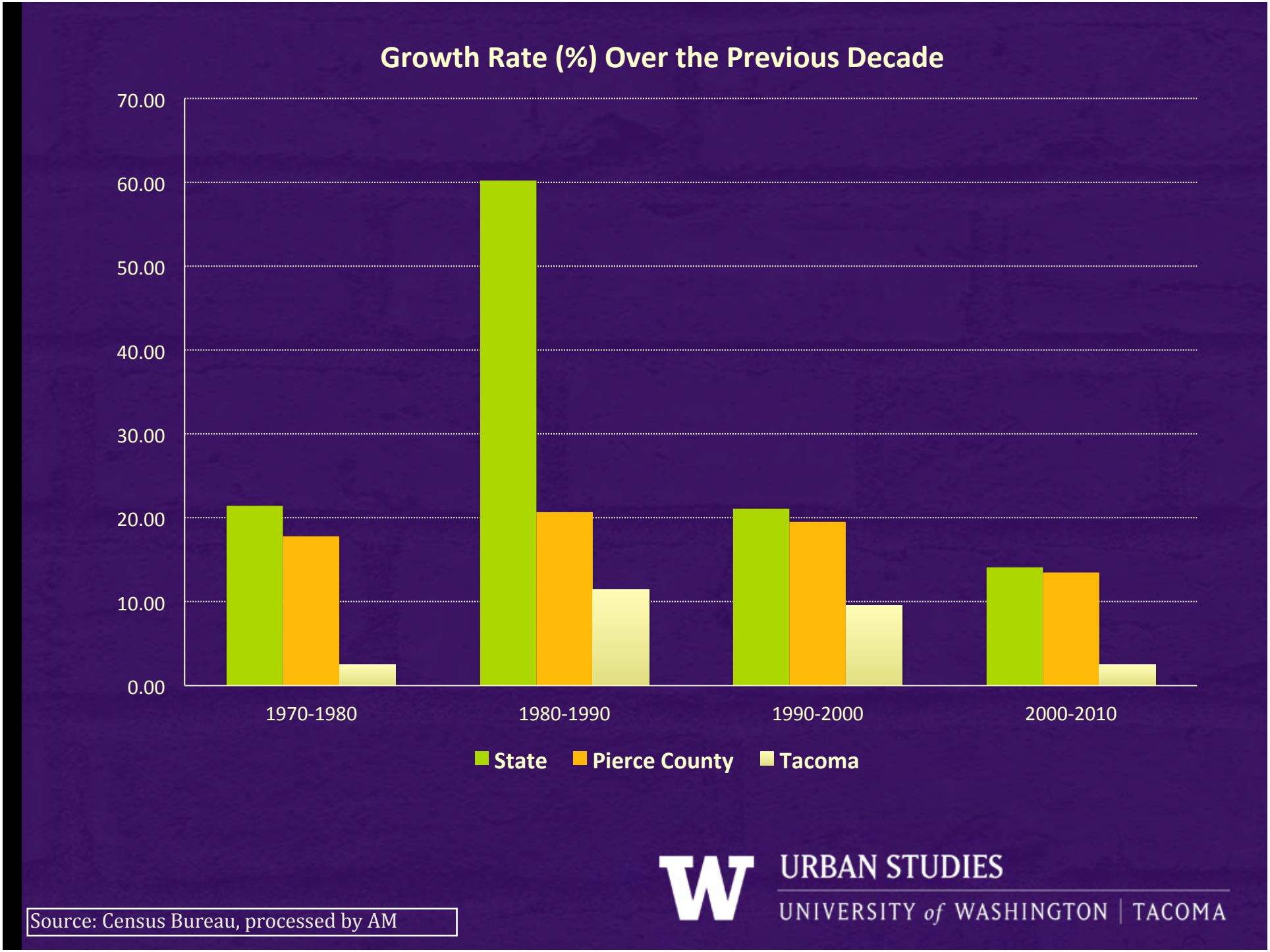
Growth Rate (%) Over the Previous Decade
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
1970-1980
1980-1990
1990-2000
2000-2010
State
Pierce County
Tacoma
URBAN STUDIES
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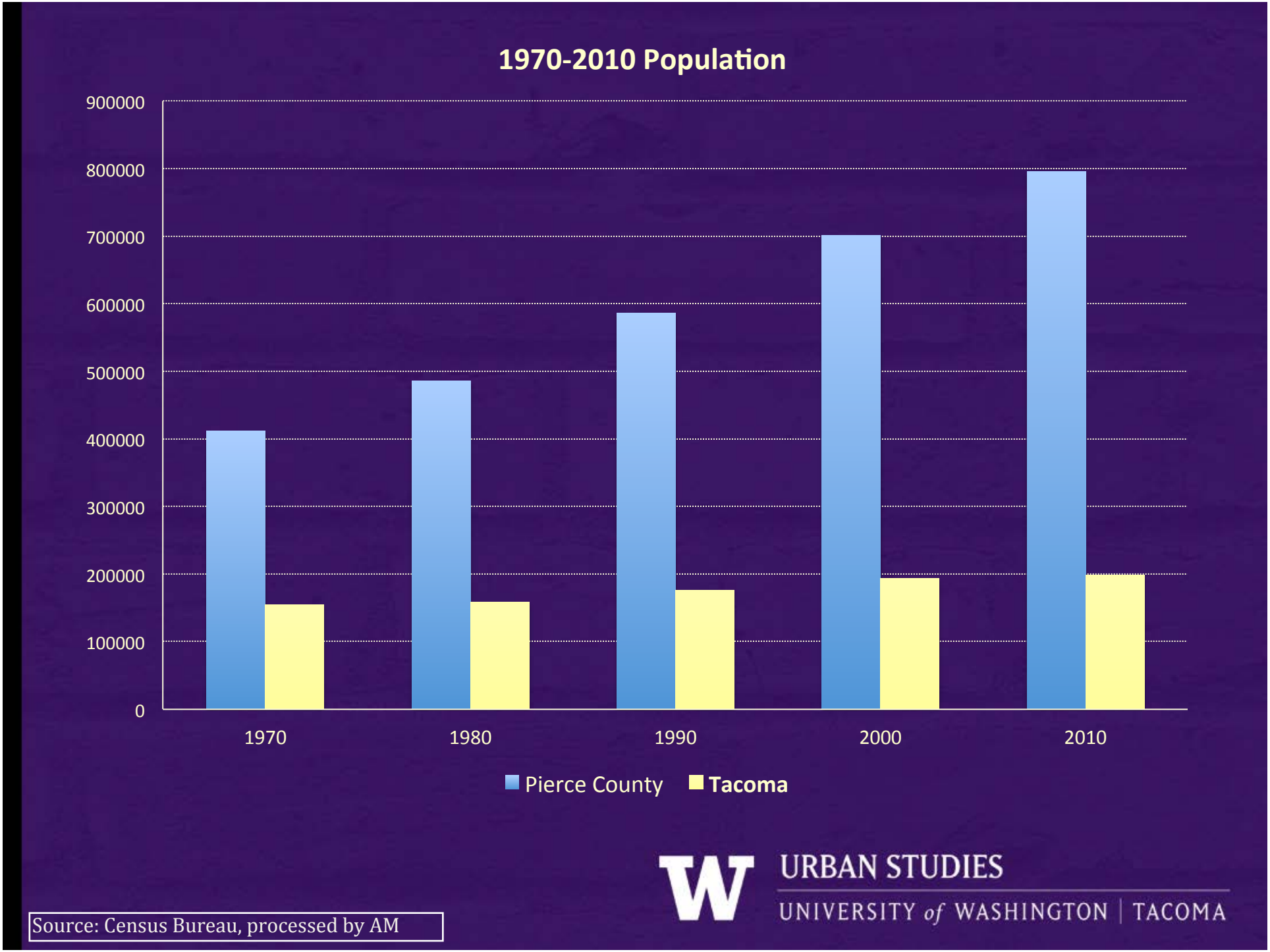
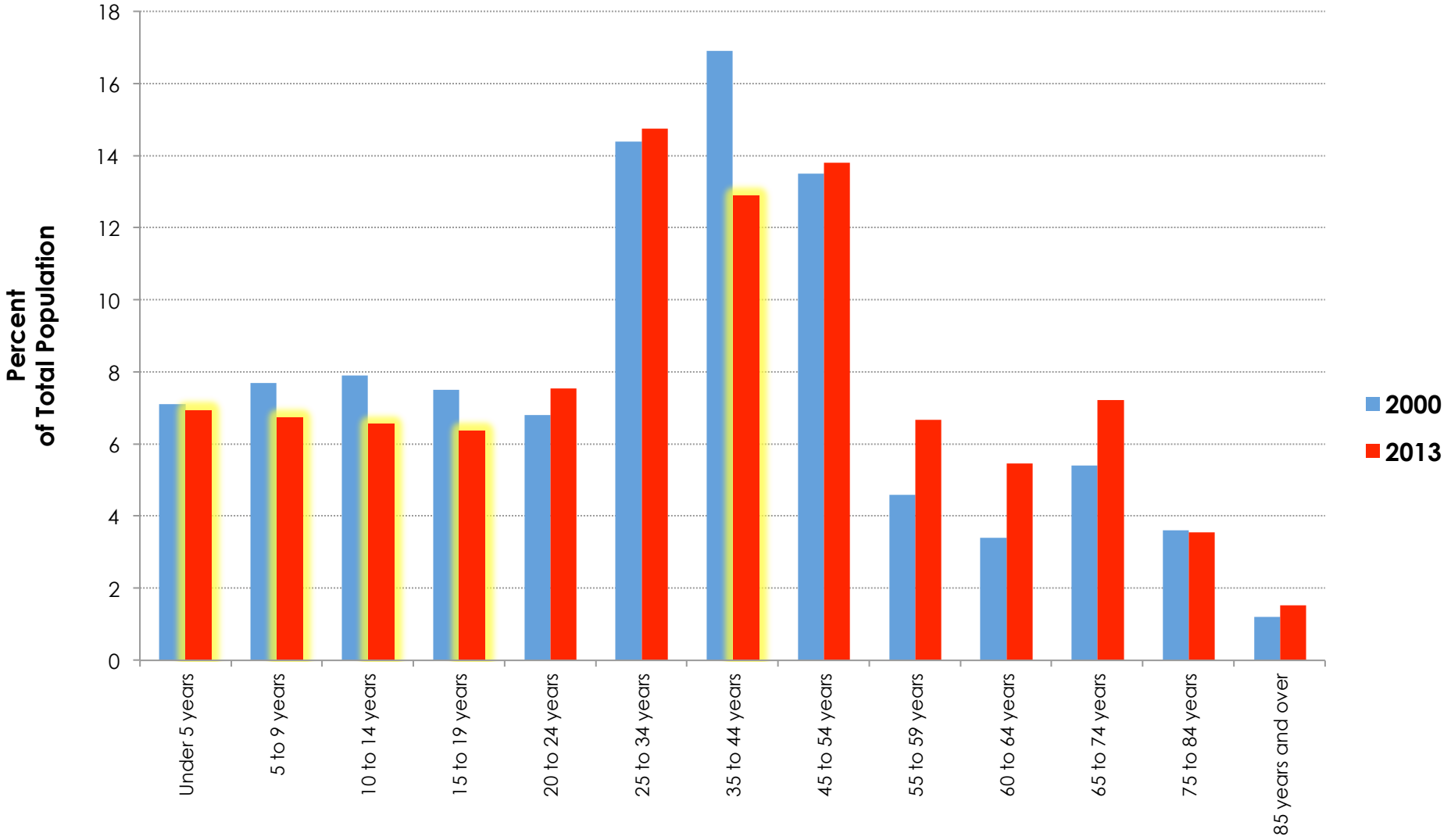
Source: Census Bureau, processed by AM

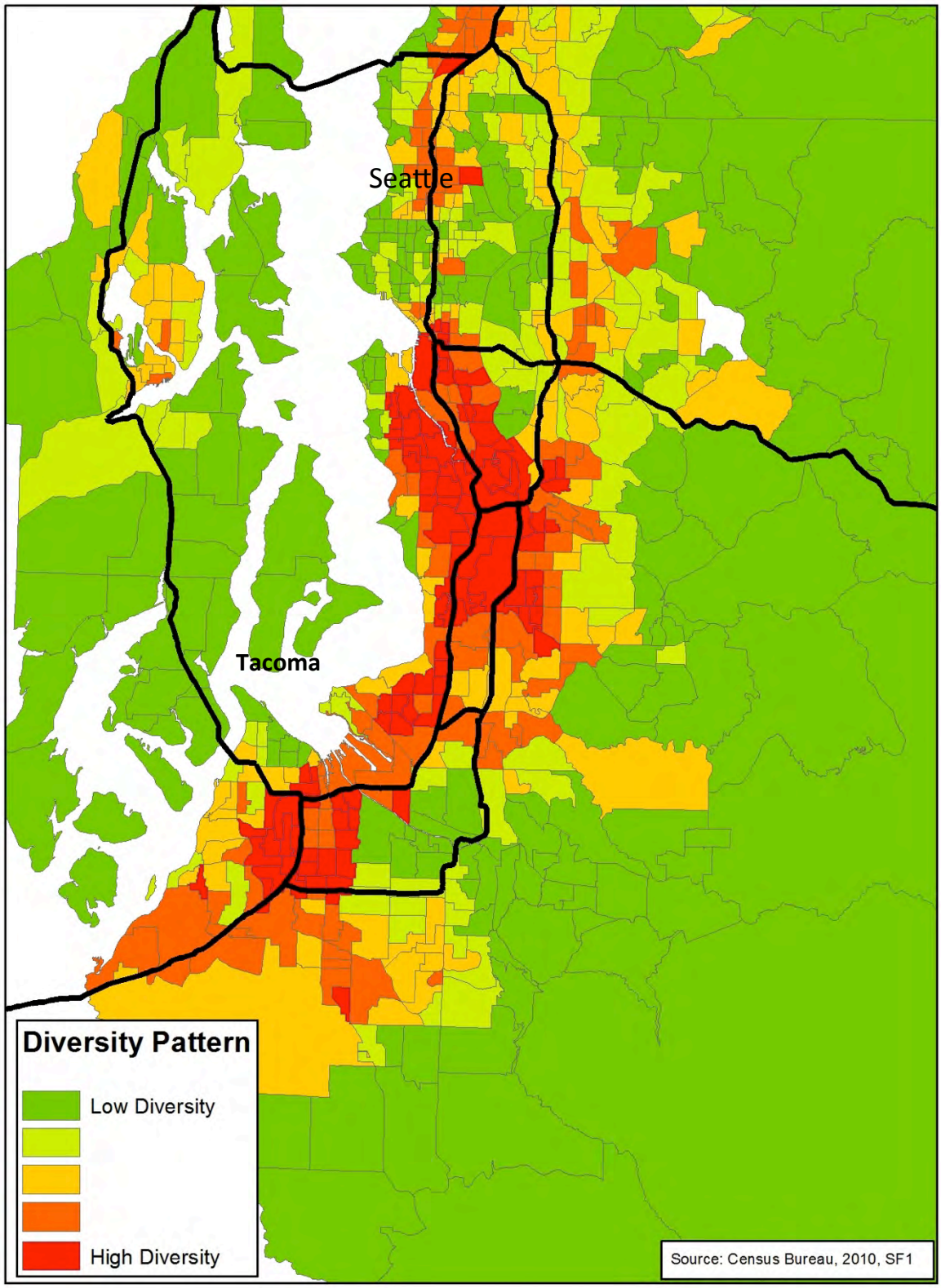

1970-2010 Population
900000
800000
700000
600000
500000
400000
300000
200000
100000
0
1970
1980
1990
2000
2010
Pierce County
Tacoma
URBAN STUDIES
UNIVERSITY of WASHINGTON | TACOMA
Source: Census Bureau, processed by AM

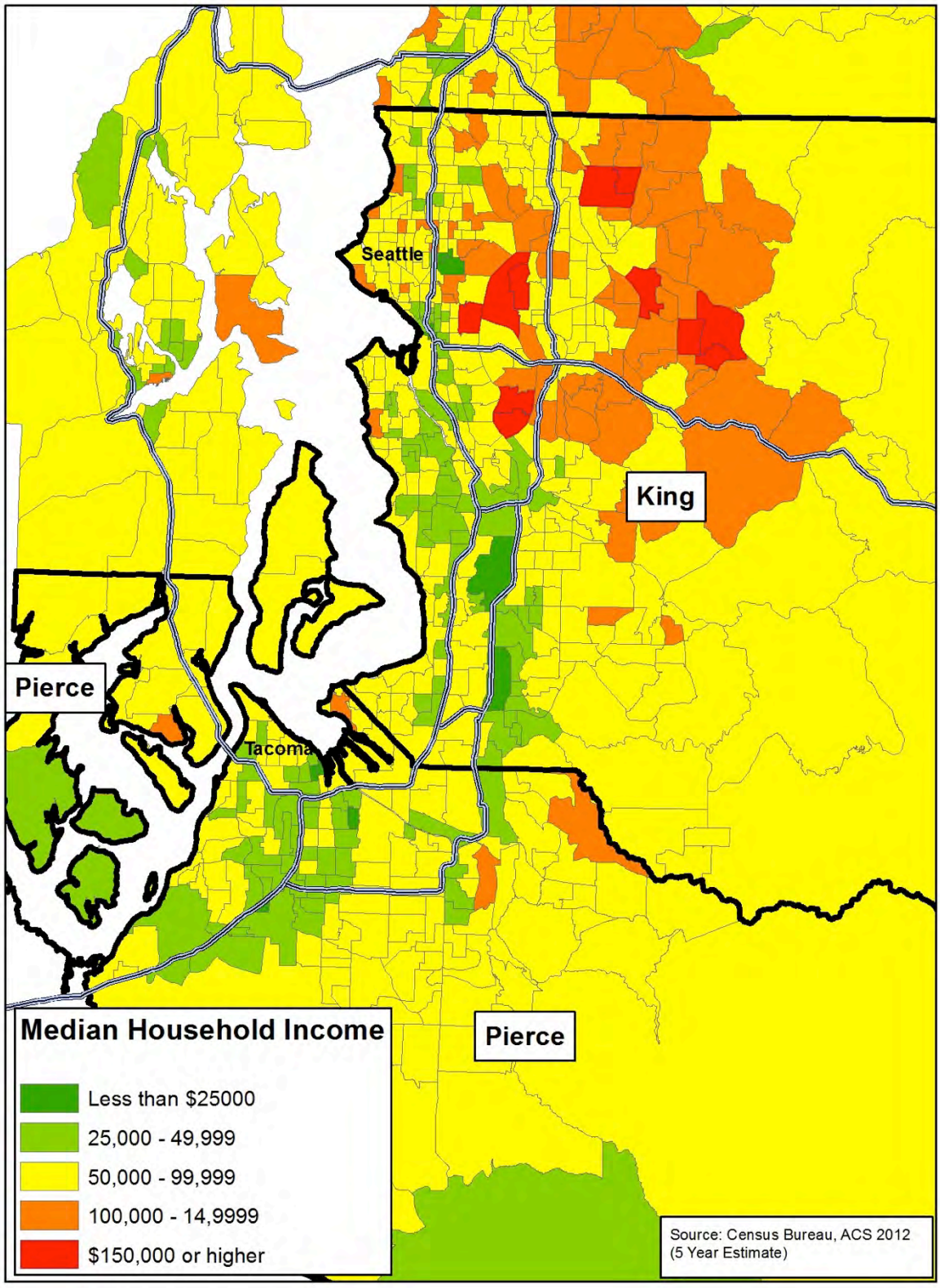
Pierce County Age Structure
2000-2013

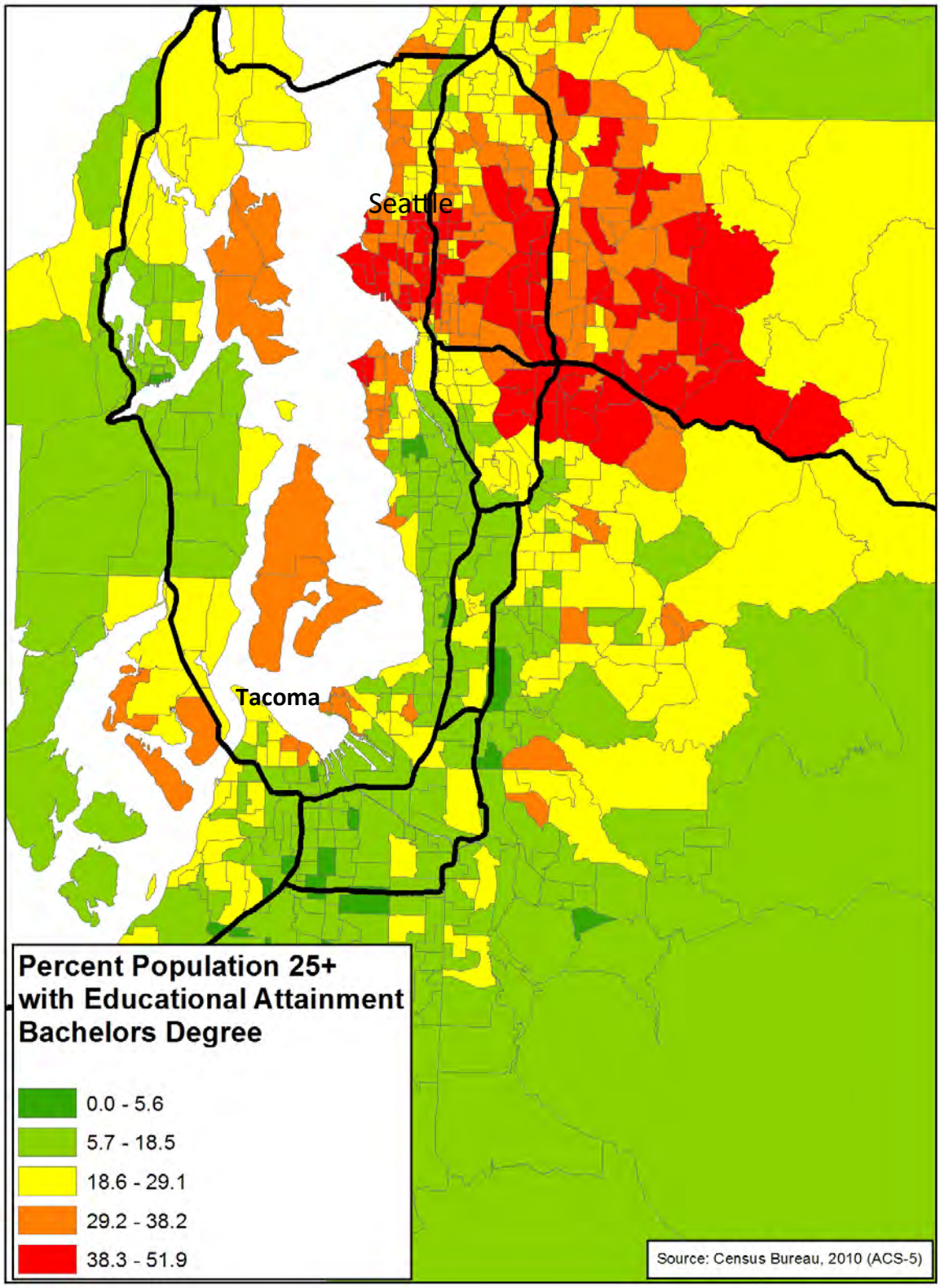


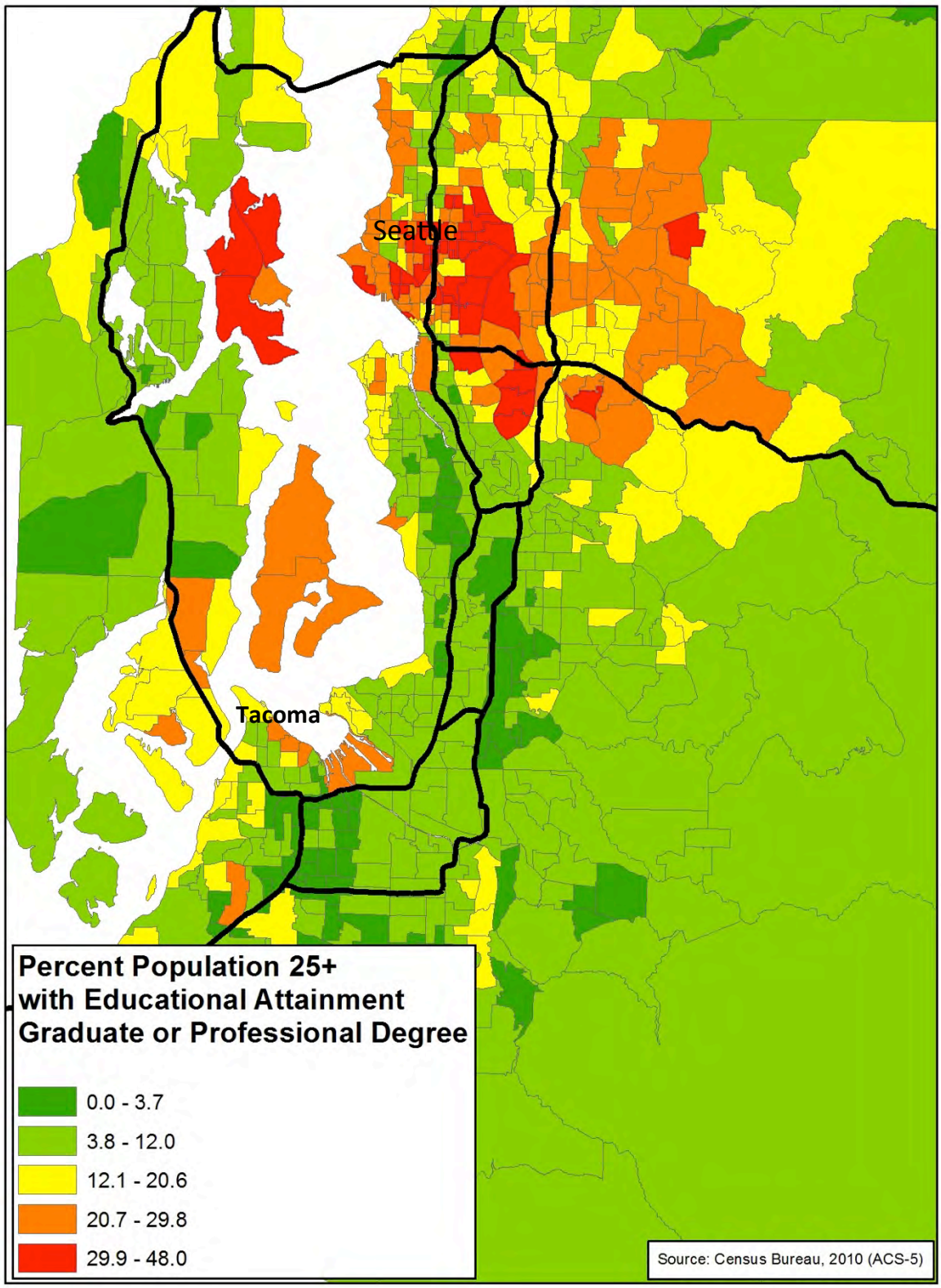
From 2000 to 2013, median age in the county increased from 34 to 35.9.

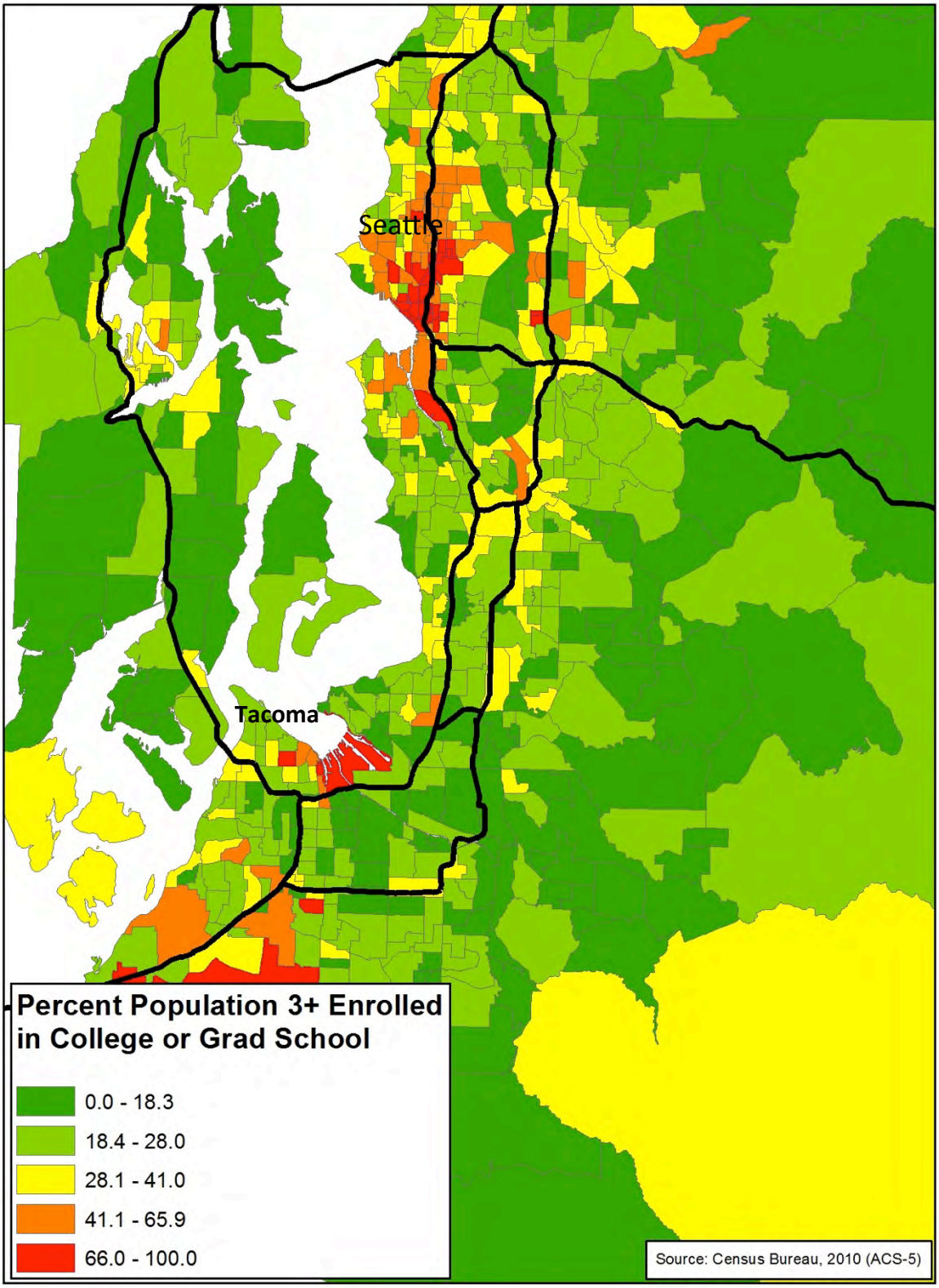
Source: Census Bureau, Processed by AM

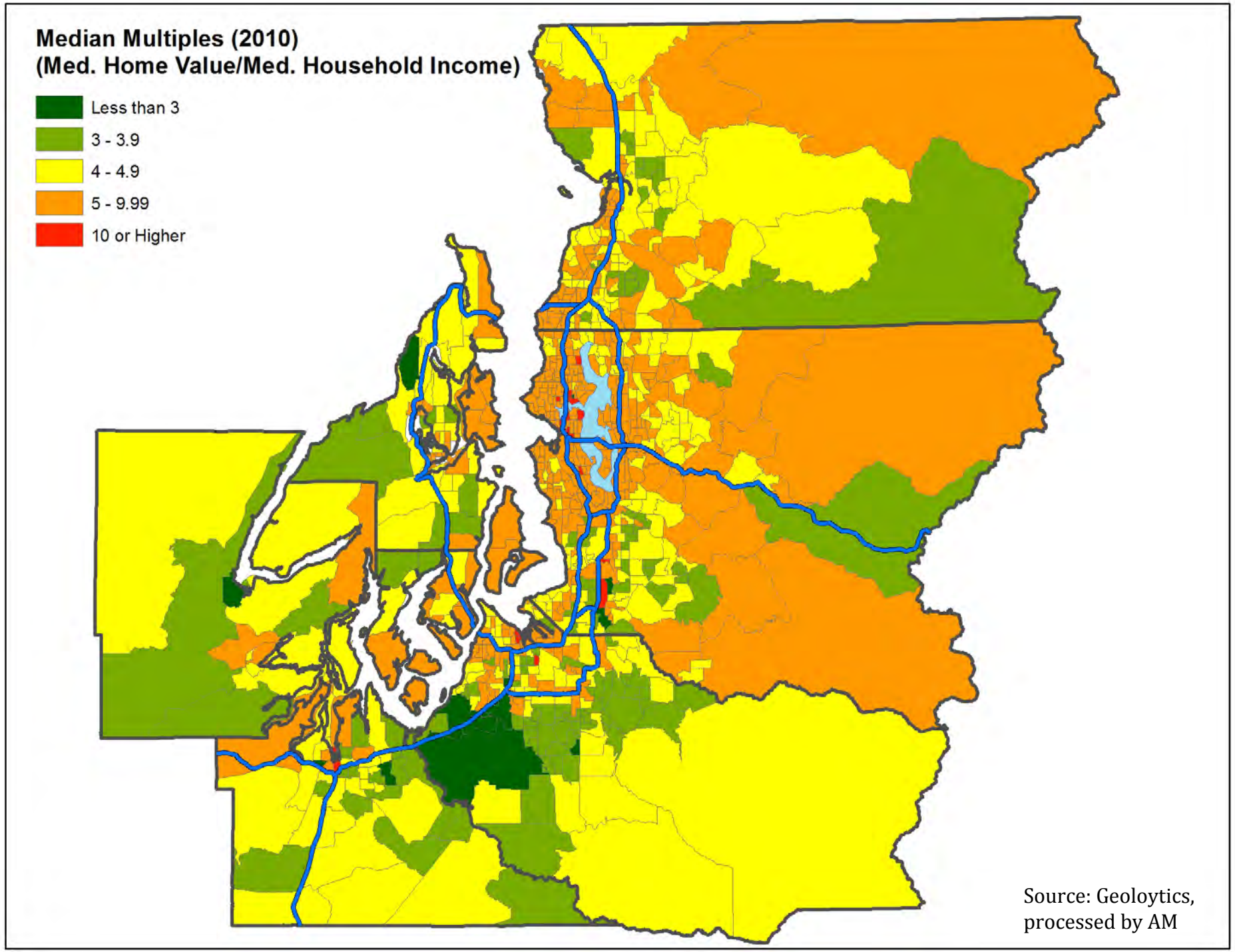

Seattle
Tacoma
Diversity Pattern
Low Diversity
High Diversity
Source: Census Bureau, 2010, SF1

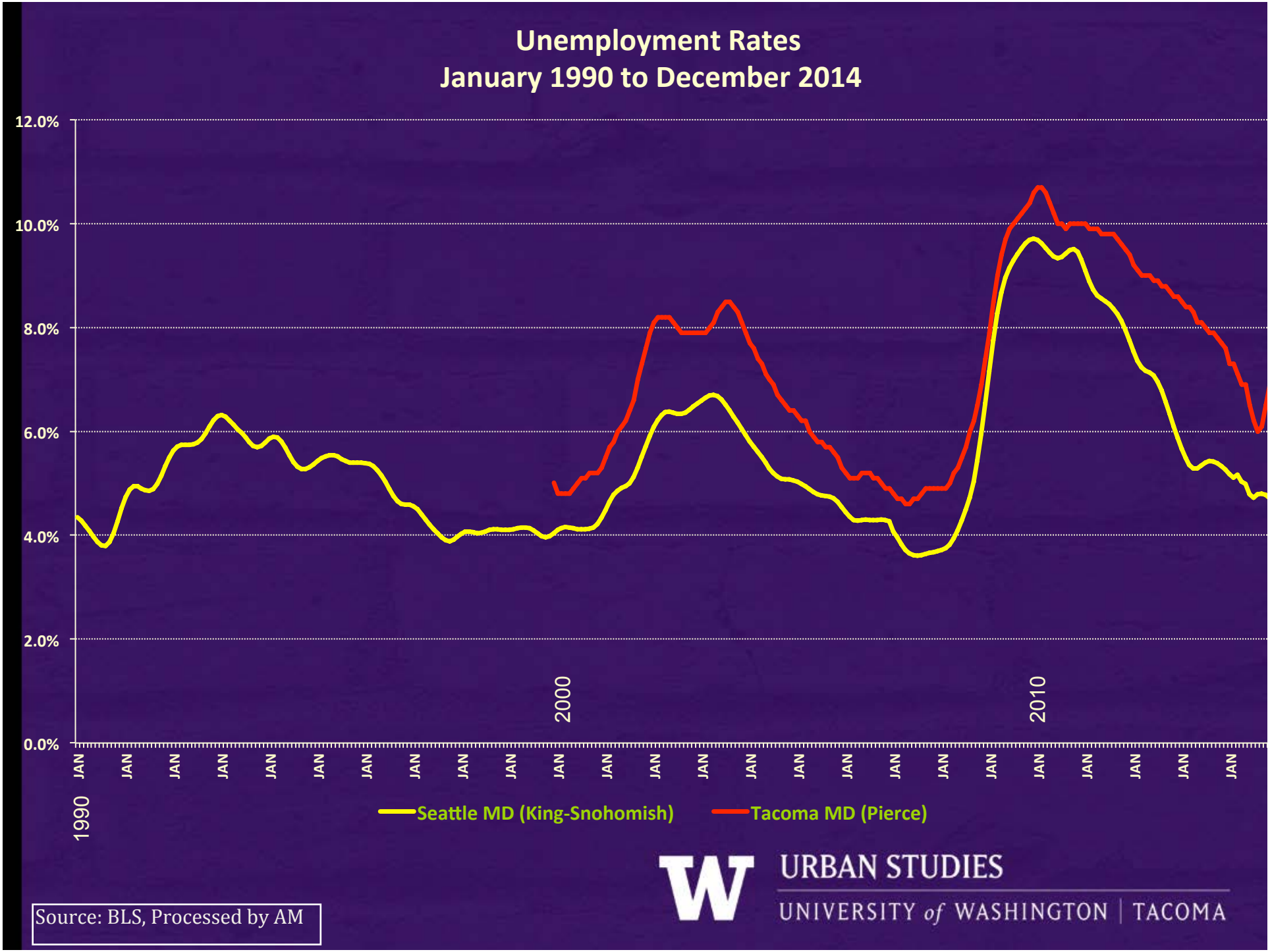

Seattle
King
Pierce
Tacoma
Pierce
Median Household Income
Less than $25000
25,000 - 49,999
50,000 - 99,999
100,000 - 14,9999
$150,000 or higher
Source: Census Bureau, ACS 2012
(5 Year Estimate)


Seattle
Tacoma
Percent Population 25+ with Educational Attainment Bachelors Degree
0.0 - 5.6
5.7 - 18.5
18.6 - 29.1
29.2 - 38.2
38.3 - 51.9
Source: Census Bureau, 2010 (ACS-5)


Seattle
Tacoma
Percent Population 25+
with Educational Attainment
Graduate or Professional Degree
0.0 - 3.7
3.8 - 12.0
12.1 - 20.6
20.7 - 29.8
29.9 - 48.0
Source: Census Bureau, 2010 (ACS-5)


Seattle
Tacoma
Percent Population 3+ Enrolled in College or Grad School
0.0 - 18.3
18.4 - 28.0
28.1 - 41.0
41.1 - 65.9
66.0 - 100.0
Source: Census Bureau, 2010 (ACS-5)


Median Multiples (2010)
(Med. Home Value/Med. Household Income)
Less than 3
3 - 3.9
4 - 4.9
5 - 9.99
10 or Higher
Source: Geoloytics, processed by AM


Unemployment Rates
January 1990 to December 2014
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
1990
2000
2010
JAN
Seattle MD (King-Snohomish)
Tacoma MD (Pierce)
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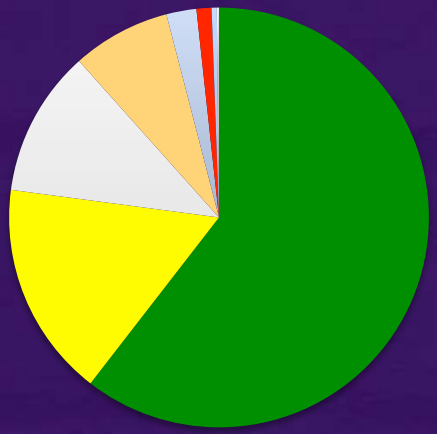
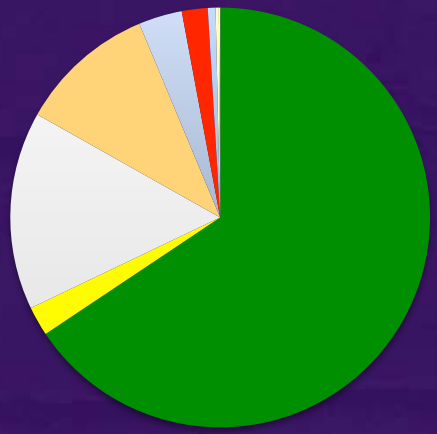
Source: BLS, Processed by AM

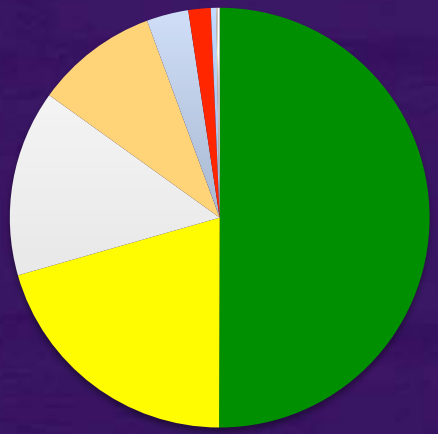
Kirkland



Seattle



Tacoma



- 1 to 4 employees
- 5 to 9 employees
- 10 to 19 employees
- 20 to 49 employees
- 50 to 99 employees
- 100 to 249 employees
- 250 to 499 employees
- 500 to 999 employees
- 1,000 employees or more

A higher proportion of firms in Tacoma are in the 5-9, 10-19, and 20 to 49 employee size.

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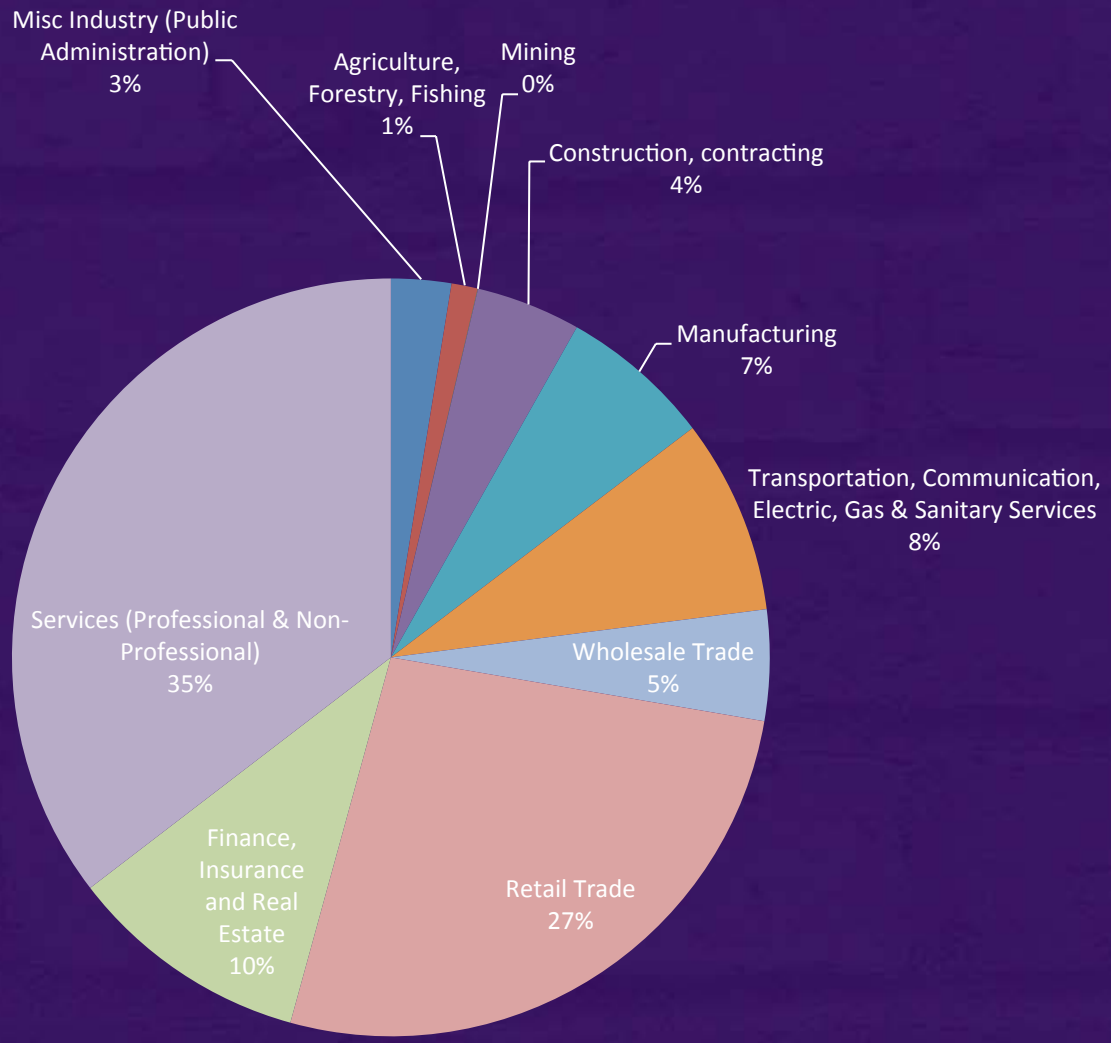
King County Economic Sector By Share of Employment



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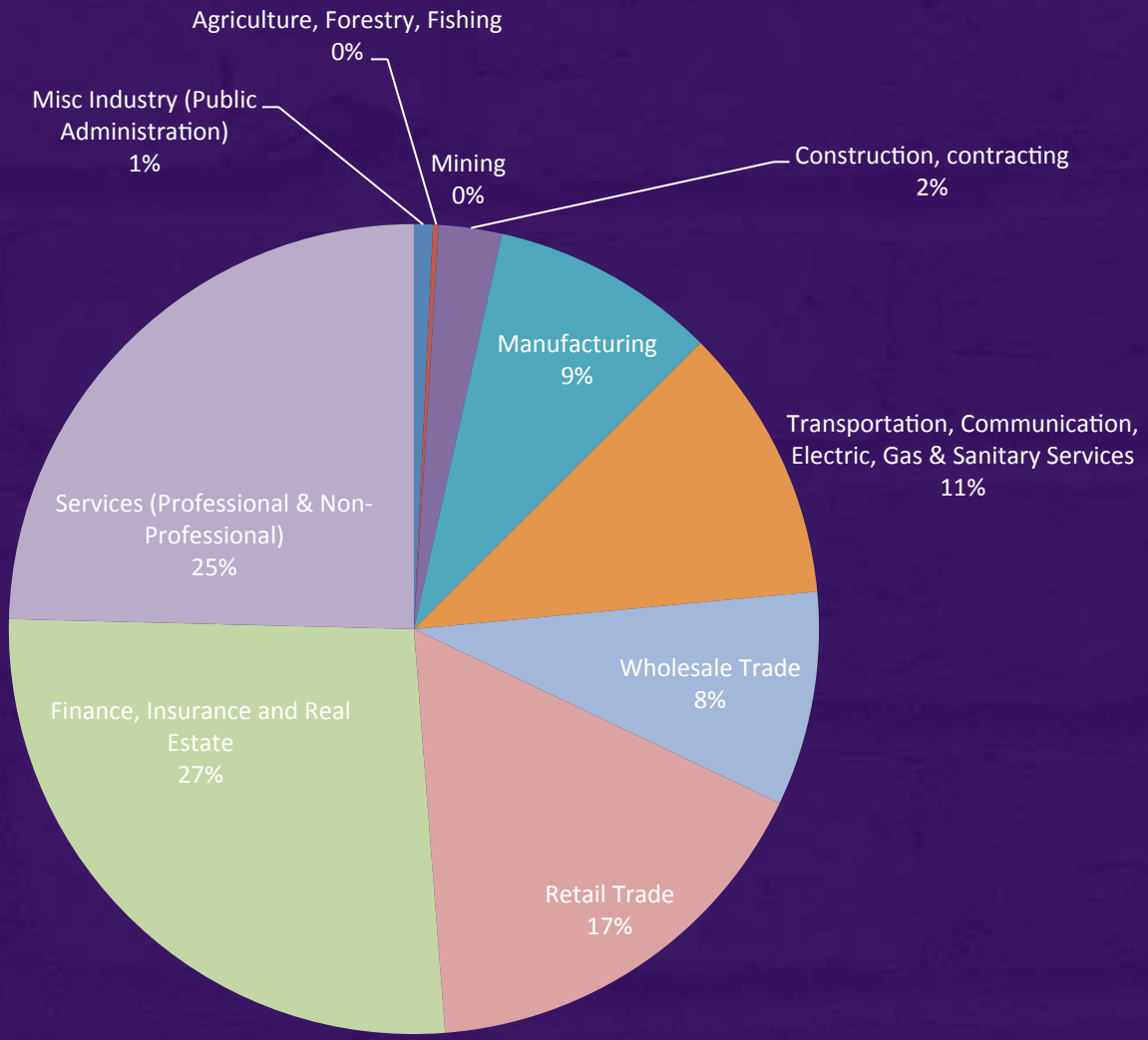
Source: ESRI Business, Processed by AM

King County Revenue by Economic Sector



URBAN STUDIES
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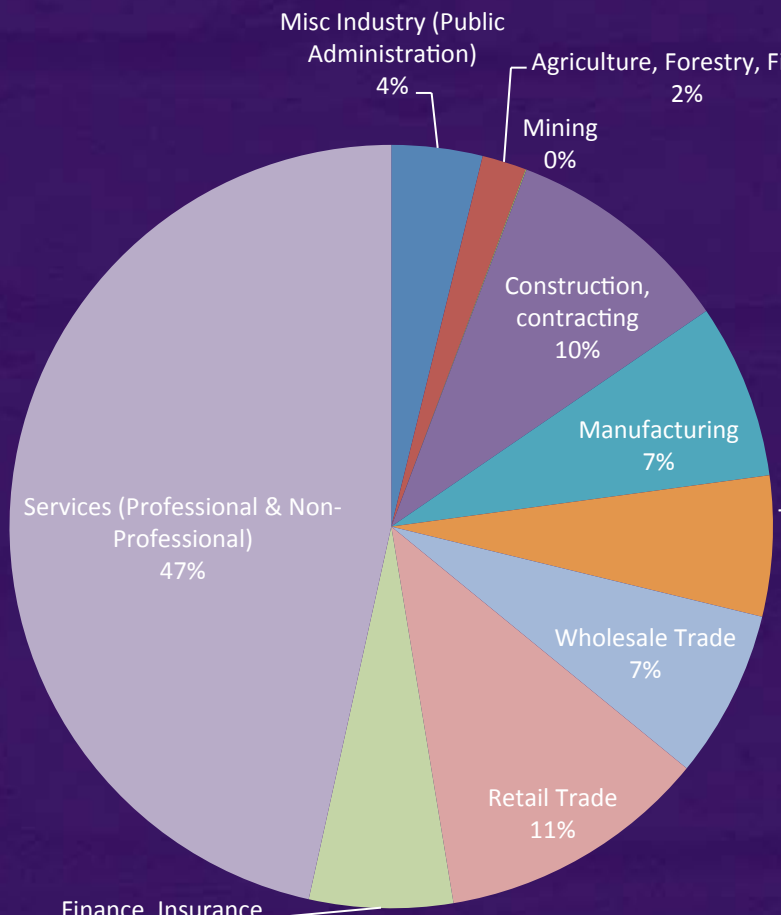
Source: ESRI Business, Processed by AM

Pierce County Economic Sector By Share of Employment



Source: ESRI Business, Processed by AM

URBAN STUDIES
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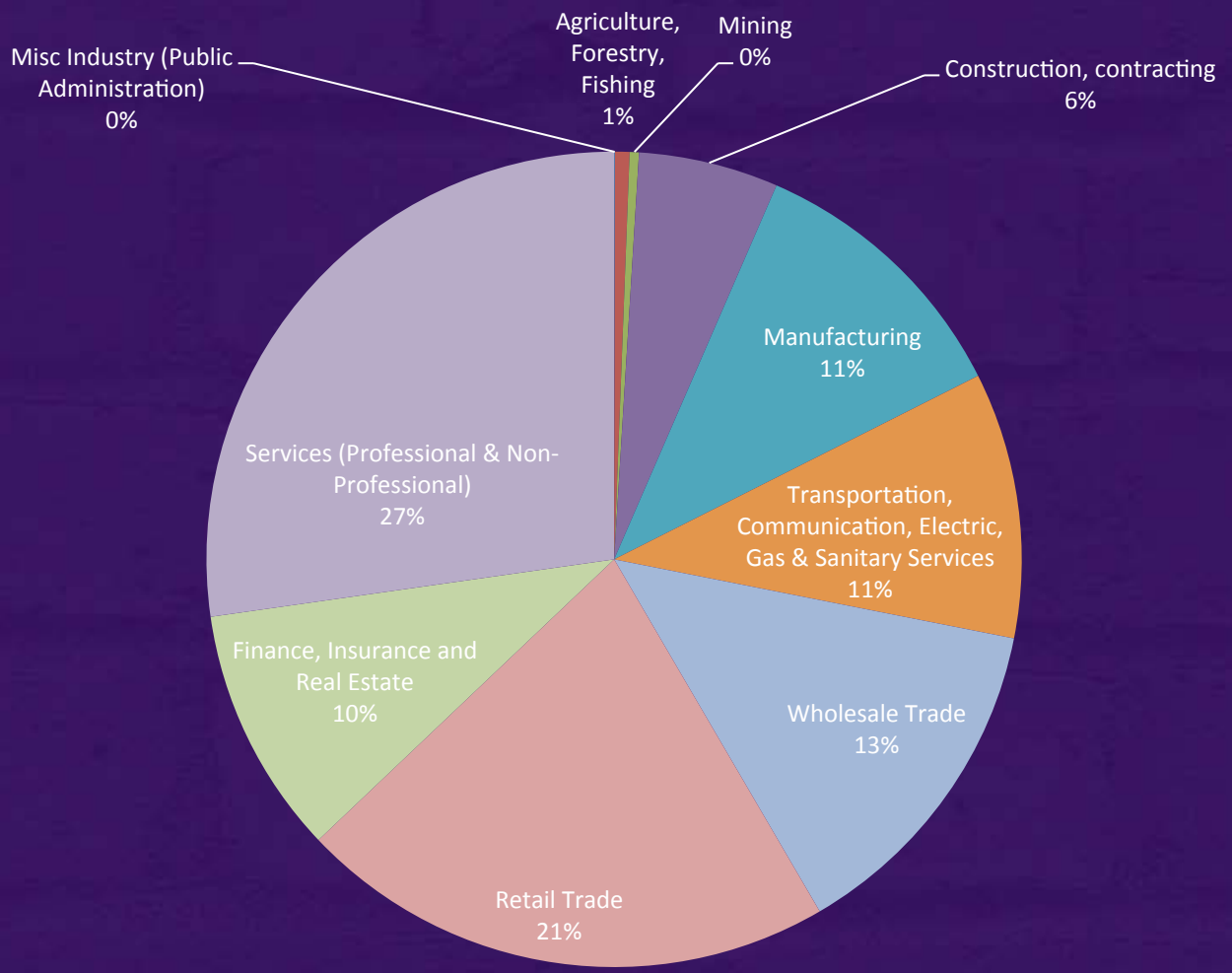
Pierce County Revenue by Economic Sector



Source: ESRI Business, Processed by AM

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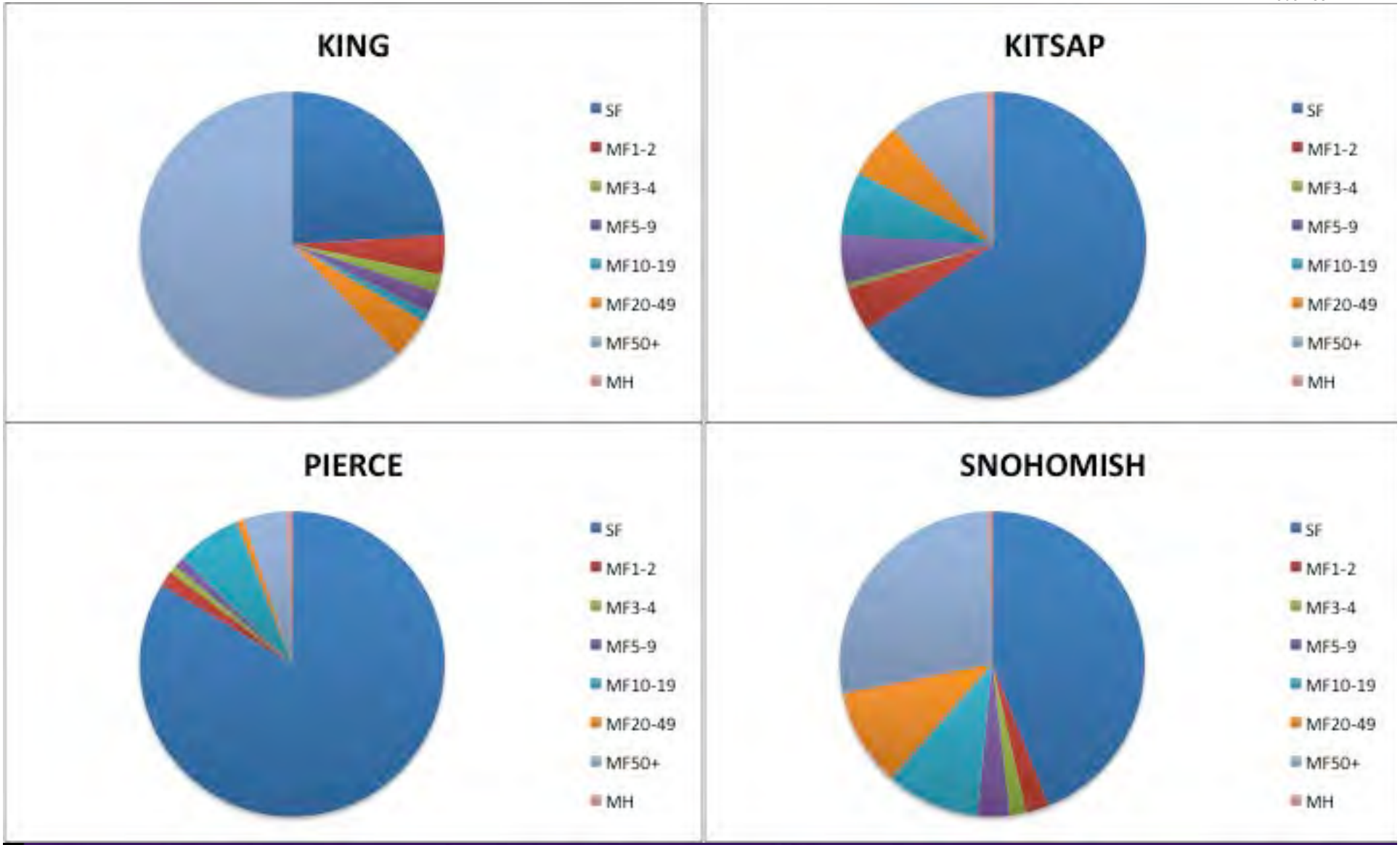


2013 Housing Permits, Source: PSRC

URBAN STUDIES
UNIVERSITY of WASHINGTON | TACOMA

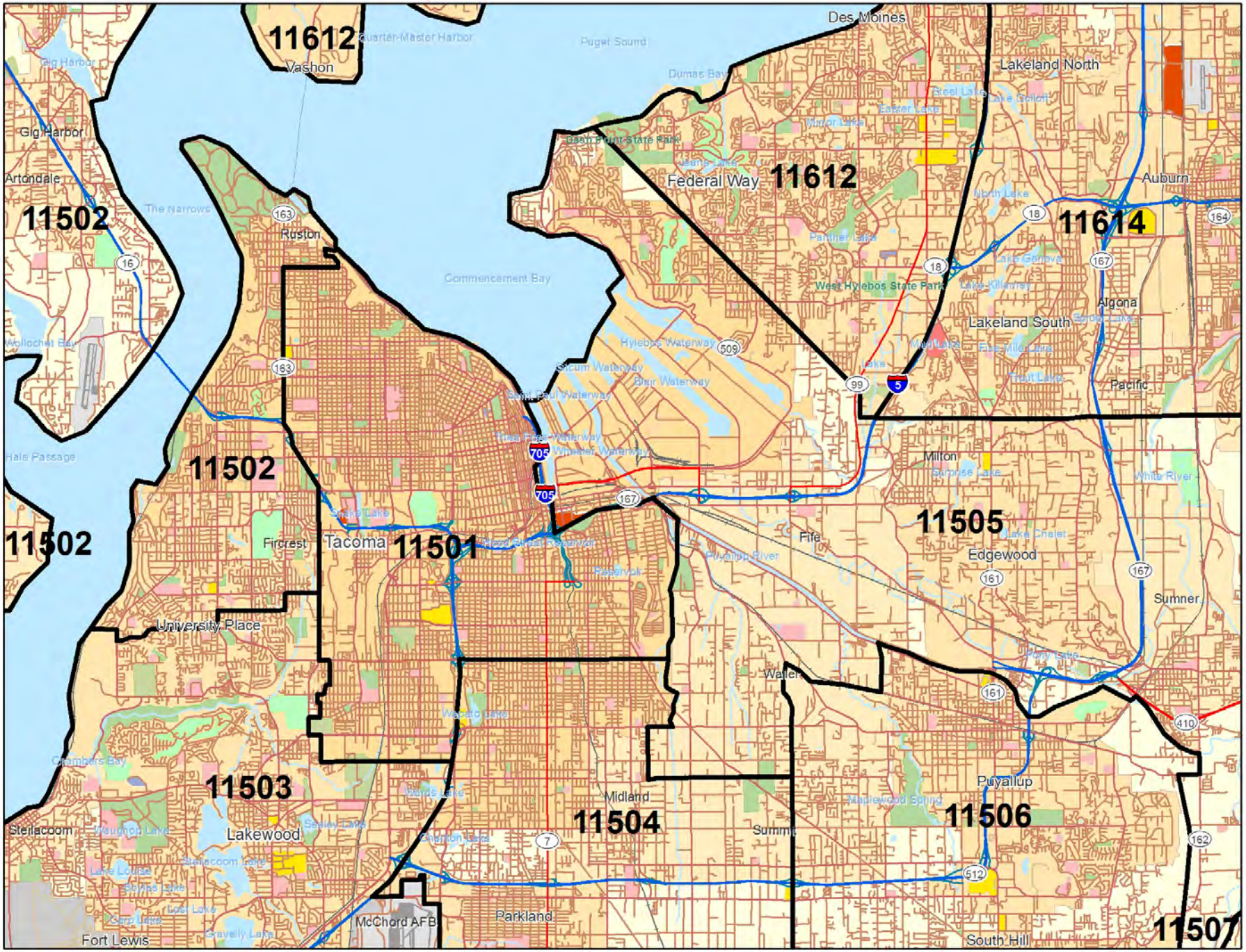
Table 1 A - Occupational employment and wages by major occupational group, United States and the Tacoma Metropolitan Division, and measures of statistical significance, May 2013

Major occupational group	Percent of total employment		Mean hourly wage		
	United States	Tacoma	United States	Tacoma	Percent difference (1)
Total, all occupations	100.00%	100.00%	$22.33	$22.46	1
Management	4.9	3.8*	53.15	49.93*	-6
Business and financial operations	5.0	4.1*	34.14	31.52*	-8
Computer and mathematical	2.8	1.4*	39.43	36.09*	-8
Architecture and engineering	1.8	1.2*	38.51	38.26	-1
Life, physical, and social science	0.9	0.6*	33.37	33.30	0
Community and social services	1.4	2.3*	21.5	20.33*	-5
Legal	0.8	0.7*	47.89	37.13*	-22
Education, training, and library	6.3	7.0*	24.76	23.90*	-3
Arts, design, entertainment, sports, and media	1.3	0.8*	26.72	22.91*	-14
Healthcare practitioner and technical	5.8	6.8*	35.93	38.66*	8
Healthcare support	3.0	3.0	13.61	16.02*	18
Protective service	2.5	2.6	20.92	25.89*	24
Food preparation and serving related	9.0	9.4*	10.38	11.92*	15
Building and grounds cleaning and maintenance	3.2	3.2	12.51	14.04*	12
Personal care and service	3.0	3.3	11.88	13.08*	10
Sales and related	10.6	11.0	18.37	16.88*	-8
Office and administrative support	16.2	15.7	16.78	18.00*	7
Farming, fishing, and forestry	0.3	0.1*	11.7	17.54*	50
Construction and extraction	3.8	5.0*	21.94	25.56*	16
Installation, maintenance, and repair	3.9	5.0*	21.35	24.68*	16
Production	6.6	4.9*	16.79	19.49*	16
Transportation and material moving	6.8	8.0*	16.28	19.14*	18

Table 1B - Occupational employment and wages by major occupational group, United States and the Seattle-Bellevue-Everett Metropolitan Division, and measures of statistical significance, May 2013

Major occupational group	Percent of total employment		Mean hourly wage		
	United States	Seattle	United States	Seattle	Percent difference (1)
Total, all occupations	100.00%	100.00%	$22.33	$28.36*	27
Management	4.9	5.4*	53.15	59.30*	12
Business and financial operations	5	7.4*	34.14	38.00*	11
Computer and mathematical	2.8	8.0*	39.43	49.35*	25
Architecture and engineering	1.8	3.5*	38.51	42.51*	10
Life, physical, and social science	0.9	1.2*	33.37	34.54	4
Community and social services	1.4	1.3	21.5	21.56	0
Legal	0.8	0.9*	47.89	49.49	3
Education, training, and library	6.3	5.1*	24.76	26.67	8
Arts, design, entertainment, sports, and media	1.3	1.9*	26.72	27.87*	4
Healthcare practitioner and technical	5.8	4.7*	35.93	40.93*	14
Healthcare support	3	2.2*	13.61	17.43*	28
Protective service	2.5	1.8*	20.92	25.27*	21
Food preparation and serving related	9	7.9*	10.38	12.74*	23
Building and grounds cleaning and maintenance	3.2	2.4*	12.51	14.84*	19
Personal care and service	3	3	11.88	14.53*	22
Sales and related	10.6	10.3	18.37	22.15*	21
Office and administrative support	16.2	13.5*	16.78	19.38*	15
Farming, fishing, and forestry	0.3	0.1*	11.7	16.12*	38
Construction and extraction	3.8	3.7	21.94	27.38*	25
Installation, maintenance, and repair	3.9	3.3*	21.35	25.58*	20
Production	6.6	6.1*	16.79	21.04*	25
Transportation and material moving	6.8	6.3*	16.28	19.92*	22

Footnotes:
(1) A positive percent difference measures how much the mean wage in Tacoma is above the national mean wage, while a negative difference reflects a lower wage.
* The percent share of employment or mean hourly wage for this area is significantly different from the national average of all areas at the 90-percent confidence level.
Source: Bureau of Labor Statistics
http://www.bls.gov/regions/west/news-release/occupationalemploymentandwages_tacoma.htm
http://www.bls.gov/regions/west/news-release/occupationalemploymentandwages_seattle.htm


11612
Vashon
Des Moines
Lakeland North
Gig Harbor
Artondale
11502
Federal Way
11612
Auburn
11614
Ruston
Algona
Lakeland South
Pacific
Milton
11502
11505
Fircrest
Tacoma
11501
Fife
Edgewood
Sumner
University Place
Waller
11503
Midland
11504
Puyallup
11506
Steilacoom
Lakewood
Summit
McChord AFB
Parkland
Fort Lewis
South Hill
11507

May 2014 Occupational Employment Statistics (OES) Estimates

Sorted by Mean Hourly Wage for Occupations Whose Mean Hourly Wage Was Below 15

Tacoma Metropolitan Division*

Sources:
Occupational Employment Statistics (OES) Survey
Bureau of Labor Statistics, Department of Labor
website: http:/stat.bls.gov/oes/home.htm

Occupation Title	Occupation Level **	Employment	% relative standard error for the employment	Employment per 1000 jobs	Location Quotient	Mean Hourly Wage	Mean annual wage	% relative standard error for the mean wage
Locker Room, Coatroom, and Dressing Room Attendants	detailed	40	46.6	0.163	1.24	9.94	20,670	4.9
Dishwashers	detailed	1,250	15.7	4.657	1.25	10.28	21,380	1.6
Ushers, Lobby Attendants, and Ticket Takers	detailed	60	16.6	0.237	0.28	10.62	22,090	2.7
Combined Food Preparation and Serving Workers, Including Fast Food	detailed	7,190	7.3	26.713	1.15	10.69	22,230	1.6
Religious Workers, All Other	detailed	40	17.0	0.130	2.17	10.74	22,340	5.2
Dining Room and Cafeteria Attendants and Bartender Helpers	detailed	770	20.2	2.877	0.95	10.76	22,390	3.2
Food Servers, Nonrestaurant	detailed	480	28.8	1.768	0.95	10.77	22,410	2.4
Amusement and Recreation Attendants	detailed	270	19.7	1.018	0.50	10.78	22,430	2.5
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	detailed	1,170	27.1	4.329	1.23	10.90	22,670	3.3
Cooks, Fast Food	detailed	**	**	**	**	10.95	22,780	7.2
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	detailed	680	13.0	2.525	0.92	11.00	22,880	3.1
Maids and Housekeeping Cleaners	detailed	1,490	28.7	5.535	0.80	11.09	23,060	2.4
Cooks, Short Order	detailed	560	15.6	2.061	1.54	11.28	23,470	1.9

May 2014 Occupational Employment Statistics (OES) Estimates

Sorted by Mean Hourly Wage for Occupations Whose Mean Hourly Wage Was Below 15

Tacoma Metropolitan Division*

Sources:
Occupational Employment Statistics (OES) Survey
Bureau of Labor Statistics, Department of Labor
website: http:/stat.bls.gov/oes/home.htm

Childcare Workers	detailed	1,190	24.6	4.421	1.02	11.39	23,690	2.7
Parking Lot Attendants	detailed	150	27.5	0.571	0.57	11.41	23,730	2.2
Demonstrators and Product Promoters	detailed	150	24.7	0.565	0.91	11.42	23,750	3.7
Gaming Dealers	detailed	560	22.4	2.084	2.93	11.61	24,140	11.0
Food Preparation Workers	detailed	2,190	25.0	8.136	1.29	11.61	24,150	3.3
Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	detailed	210	19.7	0.797	0.80	11.77	24,480	5.0
Cooks, Restaurant	detailed	2,300	8.2	8.548	1.05	11.81	24,560	2.5
Laundry and Dry-Cleaning Workers	detailed	500	19.2	1.839	1.25	11.82	24,590	3.2
Food Preparation and Serving Related Workers, All Other	detailed	200	49.2	0.755	2.24	11.93	24,810	4.7
Food Preparation and Serving Related Occupations	**major**	**26,760**	**2.3**	**99.383**	**1.09**	**12.02**	**25,000**	**1.7**
Manicurists and Pedicurists	detailed	350	33.7	1.308	2.23	12.08	25,130	6.5
Pharmacy Aides	detailed	40	36.3	0.139	0.46	12.23	25,440	3.6
Personal Care Aides	detailed	2,500	26.4	9.268	1.00	12.24	25,450	5.4
Hotel, Motel, and Resort Desk Clerks	detailed	310	20.5	1.137	0.64	12.25	25,470	3.1
Veterinary Assistants and Laboratory Animal Caretakers	detailed	210	24.1	0.782	1.49	12.28	25,550	3.6
Packers and Packagers, Hand	detailed	1,650	16.3	6.144	1.20	12.44	25,870	1.9
Food Processing Workers, All Other	detailed	30	18.4	0.118	0.37	12.45	25,900	3.4
Nonfarm Animal Caretakers	detailed	510	10.6	1.878	1.57	12.52	26,040	3.4
Telemarketers	detailed	160	29.0	0.606	0.35	12.64	26,300	6.8

May 2014 Occupational Employment Statistics (OES) Estimates

Sorted by Mean Hourly Wage for Occupations Whose Mean Hourly Wage Was Below 15

Tacoma Metropolitan Division*

Sources:
Occupational Employment Statistics (OES) Survey
Bureau of Labor Statistics, Department of Labor
website: http:/stat.bls.gov/oes/home.htm

Cashiers	detailed	7,230	8.0	26.841	1.07	12.84	26,700	2.7
Travel Agents	detailed	70	38.7	0.257	0.54	12.90	26,830	8.5
File Clerks	detailed	270	35.4	1.010	0.92	12.91	26,850	5.0
Cleaners of Vehicles and Equipment	detailed	620	22.0	2.300	0.97	12.92	26,880	6.1
Preschool Teachers, Except Special Education	detailed	550	35.2	2.051	0.79	12.94	26,920	2.8
Photographers	detailed	70	14.8	0.258	0.67	12.99	27,010	12.9
Sewing Machine Operators	detailed	400	30.9	1.485	1.41	12.99	27,020	2.9
Waiters and Waitresses	detailed	4,500	7.8	16.720	0.92	13.05	27,140	6.1
Home Health Aides	detailed	**	**	**	**	13.10	27,260	2.8
Umpires, Referees, and Other Sports Officials	detailed	170	38.9	0.648	5.00	*	27,290	13.1
Recreation Workers	detailed	650	17.9	2.407	1.01	13.15	27,350	2.1
Tailors, Dressmakers, and Custom Sewers	detailed	**	**	**	**	13.25	27,570	3.3
Library Assistants, Clerical	detailed	**	**	**	**	13.32	27,700	2.2
Driver/Sales Workers	detailed	930	41.1	3.470	1.16	13.41	27,900	7.2
Automotive and Watercraft Service Attendants	detailed	260	43.5	0.974	1.26	13.52	28,130	6.8
Museum Technicians and Conservators	detailed	90	12.0	0.333	4.52	13.57	28,230	8.5
Personal Care and Service Occupations	**major**	**8,370**	**10.3**	**31.095**	**1.01**	**13.58**	**28,240**	**2.7**
Retail Salespersons	detailed	10,110	5.4	37.561	1.11	13.60	28,290	2.8
Bartenders	detailed	1,620	13.4	6.018	1.40	13.73	28,550	4.6

May 2014 Occupational Employment Statistics (OES) Estimates

Sorted by Mean Hourly Wage for Occupations Whose Mean Hourly Wage Was Below 15

Tacoma Metropolitan Division*

Sources:
Occupational Employment Statistics (OES) Survey
Bureau of Labor Statistics, Department of Labor
website: http:/stat.bls.gov/oes/home.htm

Tellers	detailed	1,160	4.9	4.297	1.13	13.73	28,570	1.8
Tire Repairers and Changers	detailed	320	37.7	1.175	1.58	13.82	28,750	5.7
Psychiatric Aides	detailed	40	16.6	0.146	0.27	13.92	28,960	8.5
Nursing Assistants	detailed	2,260	16.2	8.378	0.79	14.06	29,240	3.1
Counter and Rental Clerks	detailed	1,400	13.9	5.211	1.61	14.08	29,280	3.2
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	detailed	4,080	10.7	15.165	0.96	14.15	29,430	2.5
Helpers--Production Workers	detailed	530	10.6	1.972	0.63	14.15	29,430	4.2
Food Batchmakers	detailed	160	10.1	0.582	0.65	14.19	29,520	3.0
Floral Designers	detailed	90	17.3	0.342	1.03	14.32	29,790	5.0
Building and Grounds Cleaning and Maintenance Occupations	**major**	**7,950**	**5.0**	**29.533**	**0.91**	**14.40**	**29,950**	**2.0**
Taxi Drivers and Chauffeurs	detailed	180	32.1	0.686	0.52	14.41	29,980	7.1
Receptionists and Information Clerks	detailed	2,340	9.0	8.675	1.19	14.44	30,030	2.4
Assemblers and Fabricators, All Other	detailed	350	33.9	1.302	0.74	14.51	30,180	10.1
Bakers	detailed	340	20.6	1.278	0.99	14.71	30,590	4.4
Cooks, Institution and Cafeteria	detailed	1,150	9.1	4.254	1.43	14.72	30,620	2.4
Security Guards	detailed	2,300	25.2	8.557	1.07	14.91	31,010	2.4
Metal Workers and Plastic Workers, All Other	detailed	**	**	**	**	14.94	31,080	3.7

* BLS definition for Tacoma Metropolitan Division is equivalent to Pierce County.
** "Major" refers to a larger job category.

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

THE TASK FORCE'S THIRD MEETING

Thursday, 4 June 2015
5:30 – 8:00 p.m.
The Center for Urban Waters
326 East D Street, Tacoma

DRAFT AGENDA

THE MEETING'S GOALS:

1. Brainstorm (not debate) 3-5 alternatives for raising the minimum wage in Tacoma.

2. Reexamine the alternatives to decide what information could be helpful to complete, discuss, and debate them in order to select one that achieves the Task Force members' mutual interests.

***NOTE**: Light snacks will be served starting at 5:15 p.m. Please come early to enjoy them so we can convene the meeting promptly at 5:30. Thank you!*

I.	5:30	Meeting Convenes: Review Goals, Agenda, Ground Rules	Jim Reid, Facilitator
II.	5:35	Housekeeping Items	Task Force
		• *Approve <u>revised</u> draft summary of 1 June 2015 meeting*	
III.	5:40	Brainstorm Potential Alternatives	Task Force
		The goal of this session is to brainstorm potential alternatives for raising the minimum wage. From facilitator Jim Reid's experience, it will be most manageable for the Task Force members if we develop 3-5 alternatives.	

We will craft the alternatives based on a format that follows the matrix Chris Bacha presented on May 28th and updated earlier this week. *Chris' paper accompanies this agenda.*

Jim will call upon each Task Force member to help brainstorm the nine elements of each alternative. Once we've developed the draft alternatives, we'll look at whether or not any should be eliminated or if some should be merged before we agree that we have a set with which we can work.

7:00 Break

IV.	7:10	What Information Do We Need to Complete Alternatives?	Task Force/Consultants

- *What specific information will help us complete these alternatives?*
- *Did Chris, Ali, Katie, and Doug already provide us with data and information that will be vital to finishing, discussing, and debating them? If so, highlight or reemphasize that information.*
- *What else might we need to complete this task?*

V.	7:45	Next steps to Complete the Alternatives	Jim/Task Force

8:00 Adjourn

THE TASK FORCE'S NEXT MEETING IS:

Monday, 8 June 2015

5:30 – 8:30 p.m.

The Center for Urban Waters

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

THE TASK FORCE'S THIRD MEETING

Thursday, 4 June 2015 5:35 – 8:00 p.m.

The Center for Urban Waters

SUMMARY

OF THE MEETING'S KEY DISCUSSIONS, DECISIONS, AND AGREEMENTS

Approved by the Task Force on 11 June 2015

In attendance: Task Force Members and Alternates: Sarah Cherin, Pastor Gregory Christopher, Odette D'Aniello, Michelle Douglas (by phone), Liz Dunbar, Dennis Farrow, Reggie Frederick (by phone), Eric Hahn (by phone), Russ Heaton, Dr. Ali Modarres, Abranna Romero Rocha, David Strong, Robert Taylor, and Brenda Wiest; **City Staff** serving the Task Force: Andy Cherullo and Christina Watts; **Economic Consultants**: Katie Baird; **Facilitator**: Jim Reid

Task Force members who were absent: Kelly Chambers, Elizabeth Lewis, and Jason Kinlow

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Facilitator Jim Reid called the Tacoma Minimum Wage Task Force's meeting to order at 5:35 p.m. PDT.

THE TASK FORCE'S DECISIONS AND AGREEMENTS

The Task Force members:

1. Approved the draft summary of the key discussions, decisions, and agreements of their second meeting on 1 June 2015. The final summary will be posted on the Task Force's website to help keep the public informed about the Task Force's work.

2. Developed four preliminary alternatives for raising the minimum wage in Tacoma.

TASK FORCE BRAINSTORMS FOUR PRELIMINARY ALTERNATIVES FOR RAISING MINIMUM WAGE IN TACOMA

The Task Force members devoted most of the meeting to brainstorming four alternatives for raising the minimum wage in Tacoma. The preliminary options are described in the matrix on the following page.

Under the definition of "brainstorming," the Task Force members suggested ideas they may not support. Rather, they "floated trial balloons" to get the conversation going and get some initial ideas "on the table." Furthermore, there was no discussion or debate of the merits of the alternatives. The intent of this exercise was to craft some potential alternatives and identify information needed to refine them before beginning to discuss and debate them.

ELEMENTS	ALTERNATIVE A	Alternative B	Alternative C	Alternative D
Amount in Dollars Total dollar increase in the minimum wage.	$12 per hour	$15 per hour	$10 per hour	$13 per hour
Date Implementation Starts **(Length of Time to Implementation)** Date the program to increase the minimum wage starts.	1 July 2016 [1]	1 July 2016	1 July 2016	1 July 2016
Phased-in or Immediate Approach What approach should be used to increase minimum wage?	Support for both approaches	Phased-in (up to 5 years)	Support for both approaches	Phased-in (up to 4 years)
Length of Time to Final Increase Length of time to achieve a total increase in the minimum wage.	Immediately for big businesses to 1 year for everyone	1 year for big businesses to 5 years for everyone	Immediately	1 year for big businesses to 4 years for everyone
Number of Steps to Amount How many steps needed to reach total increase in minimum wage?	0 - 3 [2]	0 - 5	0	0 - 4
Credits or Exemptions What credits or exemptions should be considered?	See list on next page.	See list on next page.	See list on next page.	See list on next page.
Maintaining an Amount Should the minimum wage continue to increase based on some cost of living measure?	Yes [3]	Yes	Yes	Yes
Compliance/Enforcement How is compliance with the program ensured or enforced?	[4]			
Intended Consequences What are some intended outcomes?				
Unintended Consequences What might be unintended consequences, both positive and negative?				

[1] For all four alternatives, the minimum wage would rise on 1 January 2016 under existing state and city law. There would be a second increase on 1 July 2016 under the terms of this program.

[2] The ranges in steps for Alternatives A, B, and D represent 0 years (or immediately achieve the goal) for big businesses to the number of annual increases (beginning on 1 July 2016) needed to raise the minimum wage to achieve the goal.

[3] The amount of the automatic annual raise in the hourly minimum wage could be determined by: a) maintaining Tacoma's minimum annual wage at a certain amount or percentage about the State's minimum wage; b) linking it to the appropriate Consumer Price Index (CPI); or c) linking it to the median income in the city.

[4] Ideas ranged from using administrative support followed by civil penalties for non-compliance to basing enforcement on state law. Depending on how complicated the enforcement mechanism becomes, a Task Force member suggested that Tacoma may need to establish an Office of Labor Standards.

Brainstormed List of Credits and Exemptions:

A couple Task Force members said there should be no exemptions, and speculated that the simpler the program, the less need there could be for them. A couple other Task Force members suggested there should be exemptions for small businesses and small non-profit organizations but they should "sunset" (expire) after a certain amount of time. One interest expressed was that Tacoma's policies should be consistent with state law.

Here is the brainstormed list of potential exemptions or credits:

- provide a "tip credit" for restaurant employees
- calculate medical/health benefits as well as paid sick days, vacation days, and retirement programs into the equation
- provide credits for first-time hires, trainees and interns, youth, and/or chronically unemployed people
- remove collective bargaining units from the minimum wage ordinance, as some cities have done
- exempt businesses that do not sell their products in Tacoma but export them out of the city
- provide credit for companies that incentivize full-time employment, such as making part-time positions into full-time jobs for employees who want to work more hours
- protect tips by ensuring they go the employees

Follow-up items:

Based on the brainstorming of alternatives and credits and exemptions, here are some follow-up steps:

1. Define "small" and "big" businesses in Tacoma. If small and big businesses are distinguished from one another in a proposal from the Task Force to the Mayor and Council, would there be two categories or would businesses be grouped into more than two?
2. Learn how the city currently enforces its minimum wage law.
3. Understand the state's structure for addressing minimum wage.
4. Learn if the state provides exemptions under its minimum wage law.
5. Review the state's enforcement policies, standards, and methods, including its penalties.

6. Identify which CPI would be used to determine the amount of an automatic annual increase in the minimum wage (once the target amount is achieved) if that index was chosen as the standard for calculating the increase.
7. Find out if there are any other indicators to maintain the minimum wage.

Dr. Modarres Presents a Portrait of Some Tacoma Residents Who Earn Less Than $15 Per Hour

At the request of his fellow Task Force members, Ali Modarres provided a profile of the workers in a part of Tacoma who earn less than $15 per hour. The area that he focused on is the Public Use Microdata Area (PUMA) 11501. The population is 124,900 (this number, and the others below) are rounded off. Among the people of this PUMA, 47,900 reported having worked in the past twelve months for 50-52 weeks and reported annual wages.

In 2013, the state minimum wage was $9.19. Someone working full-time at minimum wage should have reported annual wages (or salary incomes) equal to or larger than $19,115.20 (2080 hours x $9.19 per hour). Annual wages reported below that level might suggest that either the person reported incorrectly or received other non-wage benefits. People who worked below $15 per hour should have reported annual wages (or salary incomes) below $31,200 (2080 hours x $15 per hour). About 10,100 people reported working full time, earning annual wages equal to or larger than $19,115.20 and less than $31,200. This represents 21% of the 47,900 full-time employees who reside in PUMA 11501.

Information on this universe of 10,100 workers:

- *Annual Wage distribution:*
  - 18.6% made $20,000 or less (i.e., worked at or about the state minimum wage circa 2013)
  - 38.7% made $20-$25,000
  - 43.7% made more than $25,000 but less than $31,200

- *Gender:*
  - 44.5% were male
  - 55.5% were female

- *Age Distribution:*
  - They were all 20 years of age or older
  - 49.7% were 20 to 30
  - 15.9% were between 30 and 40
  - 34.4% were older than 40

- *School enrollment:*
  - 81.5% had not attended a school in the past three months
  - 18.5% were attending school/college

- *Educational attainment:*
  - 3.7%: No schooling completed
  - 37.4%: High school degree or less (including GED or alternative credentials)
  - The remainder had some years in college, including Associate, BA/BS, and MA/MS degrees

- *Race and Ethnicity:*
  - 53.3% Non-Hispanic White
  - 13.1% Non-Hispanic African American
  - 3.7% Non-Hispanic Native American
  - 8% Non-Hispanic Asian
  - 2.4% Non-Hispanic Native Hawaiian and other Pacific Islanders
  - 11% Two or more races
  - 8.5% Latino

- *Citizenship Status:*
  - 81.9% Born in the U.S.
  - 2.4% Born in Puerto Rico, Guam, the U.S. Virgin Islands, or the Northern Marianas
  - Less than 1% were born abroad of American parent(s)
  - 9.1% U.S. Citizens by naturalization
  - 6% Not a citizen of the U.S.

Something to think about:

Reported **personal incomes** (which are different than wages) from the same 10,100 people ranged from $19,200 to $53,300. At the lower end that matches the $9.19 state minimum wage for 2013. The higher end, however, exceeds the upper limit of $31,200 (for $15 per hour wages). Looking into the data, only 5.2% of these workers reported personal incomes above $31,200. Overall, this means that only a small portion of the targeted population—those who earned between $9.19 and $15 per hour—earned supplemental incomes.

Task Force Members Suggest Information Needs to Refine Alternatives

The meeting ended with Task Force members suggesting additional information they might be able to use to refine the alternatives.

Top Priorities -- Information already produced that we assume will be efficiently obtained:

- The structure of the State's law on minimum wage, including credits and exemptions, if any.
- Data, information, or studies from state legislative staff that were helpful to the State Senate and House when they considered legislation to raise the statewide minimum wage. Rep. Laurie Jenkins and her staff could be the initial resources.
- Two studies that Brenda Wiest suggested. 1) A study that focuses on the relationship between

Spokane and neighboring cities in Idaho, particularly Coeur d'Alene. Has the higher minimum wage in Washington State led to businesses relocating in Idaho? What have been other impacts of a higher minimum wage in Washington? 2) An examination of a "training" wage. Brenda sent these to me and I will forward them.

- Information/studies from last year's Seattle Income Inequality Task Force that would be relevant or could be extrapolated for Tacoma.

The next tier of information that may be interesting and useful, although we are not sure it exists:

- A study or report on the experience of a comparable city to Tacoma that raised its minimum wage. What have been the consequences, both intended and unintended? And Ali stated that if we found such a study, it would be most useful to consider regional impacts since Tacoma is part of the regional economy.
- An understanding of differences between San Francisco and Oakland to suggest differences between Seattle and Tacoma. Ali suggested it would help us to learn more about why Oakland made a choice to have a lower minimum wage than SF.
- Katie's suggestion of what the minimum wage jobs are in Tacoma. This might be a companion piece--more drilled down--to the matrix Ali has presented that documents the jobs in Pierce County.

This information was requested but may be challenging to acquire in the limited time we have or may be inconclusive for a variety of reasons:

- A study that indicates whether or not the poverty level has been affected by cities raising the minimum wage above that of their state.
- Information/data indicating the impact on businesses in a city or cities with minimum wages above that of their states.
- When minimum wages increase, do rents rise, too? Do people have more money for groceries, living expenses, and entertainment? What do they do with their higher wages? (Is there a multiplier affect?)
- What is the average salary of tip workers in Tacoma? Would that information confirm or refute the assumption that "tipped workers" are doing well?
- If wages are raised, do people still qualify for subsidizations such as health care or childcare?

Finally, this is not a request for information as much as it could be an exercise to help solidify alternatives or a preferred alternative: Review Chris' matrix about the ordinances cities have adopted raising the minimum wage to compare their elements with the elements of the alternatives the Task Force discussed last night. In other words, learn from the experience of others to see if anything any of them has done could be borrowed for a proposal from the Task Force to the Mayor and Council.

The meeting adjourned at 8:00 p.m. PDT. The Task Force's next meeting is **Thursday, 11 June** from 5:30-8:30 at the Center for Urban Waters.

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

Thursday, June 4, 2015

The Center for Urban Waters

Elements of the Alternatives

The following elements can be considered as part of the alternatives for increasing the minimum wage in Tacoma. Reviewing the matrix of other city initiatives provided by the City Attorney's Office will help to give concrete examples of these elements.

Element	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Amount in Dollars				
The total dollar increase in the minimum wage.				
Length of Time to a Final Increase				
The length of time to reach a total increase in the minimum wage.				
Length of Time to Implementation				
The length of time to initiate an increase in the minimum wage.				
Phased-In or Immediate Approach				
What approach should be used to increasing the minimum wage?				
Number of Steps to an Amount				
steps will be needed to reach a total increase in the minimum wage?				
Exemptions				
What exemptions should be considered to a proposal or list of recommendations?				
Maintaining an Amount				
Should an amount be tied to some costs of living measure?				
Intended Consequences				
Unintended Consequences				

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

FOUR ALTERNATIVES THE TASK FORCE BRAINSTORMED ON 4 JUNE 2015

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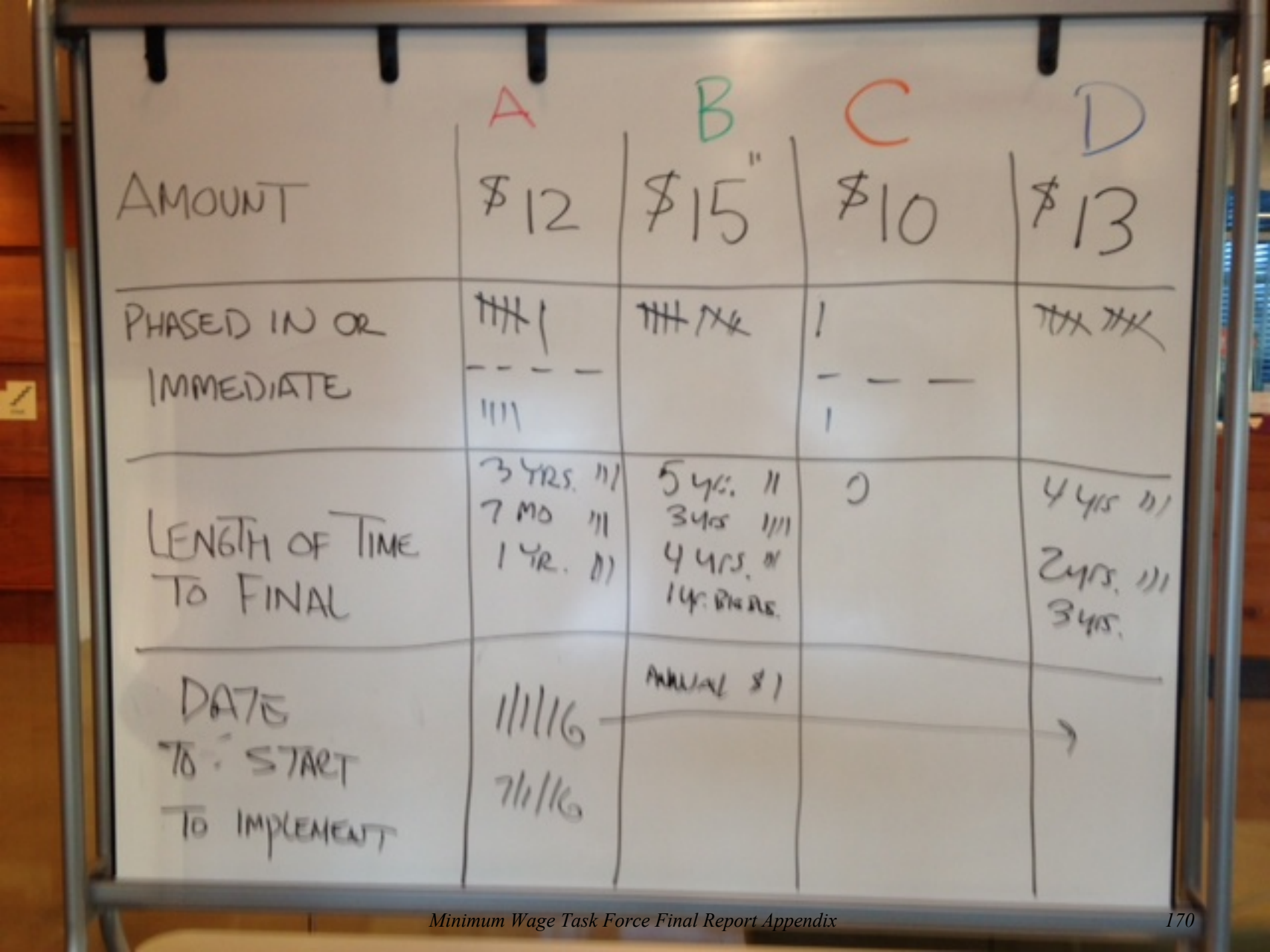
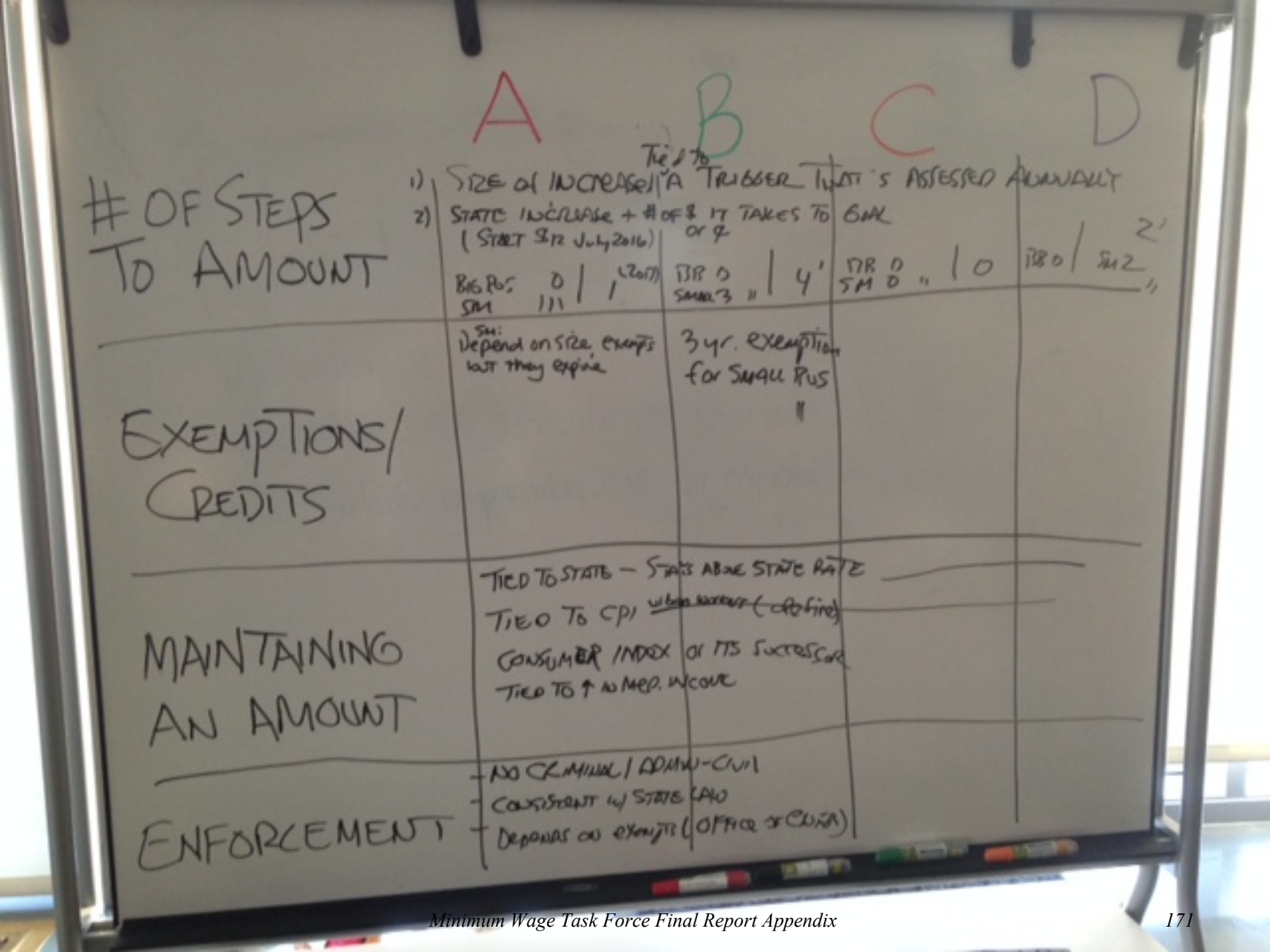
- provide credit for companies that incentivize full-time employment, such as making part-time positions into full-time jobs for employees who want to work more hours
- protect tips by ensuring they go the employees


A
B
C
D
AMOUNT
$12
$15
$10
$13
PHASED IN OR IMMEDIATE
LENGTH OF TIME TO FINAL
3 YRS.
7 MO
1 YR.
5 YR.
3 YRS
4 YRS.
4 YRS
2 YRS.
3 YRS.
DATE TO START TO IMPLEMENT
1/1/16
7/1/16


A
B
C
D
OF STEPS TO AMOUNT
1) SIZE of INCREASE(S) A TRIGGER THAT'S ASSESSED ANNUALLY
2) STATE INCREASE + # OF $ IT TAKES TO GET
(START $12 July 2016)
BIG BUS: 0 | 1 (2017)
SM 111
IBR 0 | 4' | IBR 0 | 0 | IBR 0 | $12
SM 3 " | SM 0 " | SM 2 "
2'
EXEMPTIONS/ CREDITS
SM: Depend on size exempts last they expire
3 yr. exemption for SMALL BUS
MAINTAINING AN AMOUNT
TIED TO STATE – STATE ABOVE STATE RATE
TIED TO CPI
CONSUMER INDEX OR ITS SUCCESSOR
TIED TO ↑ IN MED. INCOME
ENFORCEMENT
- NO CRIMINAL / ADMIN-CIVIL
- CONSISTENT W/ STATE LAW
- DEPENDS ON EXEMPT (OFFICE OF CIVIL)

EXEMPTS CONSISTENT W/ STATE LAW

TIP CREDIT FOR RESTAURANT

To Do:
Define SMALL, LARGE BUSINESSES

CREDIT FOR people GIVEN HEALTH, SICK, VAC, RETIRE

FOR SMALL NON-PROFITS, SMALL IS OVER TIME

1ST TIME HIRES, TRAINEES, INTERNS, CHRONIC UNEMPL, YOUTH (INCLUD YOUTH PROGRAM)

NO EXEMPTIONS (LIKE STATE)

FOR COLLECTIVE BARGAINING

EXPORT SERVICES out of CITY

TO INVENTORY FULL-TIME EMPLOYEES
(CAN'T HIRE OTHERS IF P-T WANT F-T JOBS)

TIP PROTECTION - TIPS, SERVICE CHARGES GO TO EMPLOYEES

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

THE TASK FORCE'S FOURTH MEETING

Thursday, 11 June 2015
5:30 – 8:25 p.m.
The Center for Urban Waters
326 East D Street, Tacoma

DRAFT AGENDA

THE MEETING'S GOALS:

1. Discuss potential points of consensus to see if we can reduce the number of alternatives that the Task Force considers.

2. Discuss other elements to begin to develop one or two alternatives to submit to the Mayor and Council.

***NOTE**: Light snacks will be served starting at 5:15 p.m. Please come early to enjoy them so we can convene the meeting promptly at 5:30. Thank you!*

I.	5:30	Meeting Convenes: Review Goals, Agenda	Jim Reid, Facilitator
II.	5:35	Housekeeping Items	Task Force
		• *Approve revised draft summary of 4 June 2015 meeting*	
III.	5:40	Review and Discuss Points of Potential Consensus	Task Force
		At the June 4th meeting, the Task Force brainstormed four alternatives, each with a different minimum wage as the ultimate goal.	
		▪ *Can we reduce the choices to two?*	

At last week's meeting there appeared to be consensus among Task Force members for phasing in over time the increase in the minimum wage so that all entities, no matter what size or sector, offer the same minimum wage by a date certain.

- *Is this accurate?*
- *Can we narrow the timeframe for achieving the minimum wage goal to one or two choices?*

At last week's meeting, it appeared there was consensus to allow the minimum wage to rise next January 1st as it would under existing state law, and then institute the first increase under the Task Force's recommendations on 1 July 2016.

- *Is this accurate?*

Depending on the timeframe(s) for achieving the minimum wage goal:

- *What are the choices for increasing the minimum wage each year until we achieve the ultimate goal?*
- *Is there a consensus on a proposal?*

Last week there seemed to be consensus among the Task Force members for automatically increasing the minimum wage annually after the minimum wage goal is achieved. It appeared the Task Force supported linking those increases to an index, such as the Consumer Price Index, and ensuring that Tacoma's minimum wage remains higher than the state's.

- *Are these points accurate?*
- *What indexes might be appropriate for determining the automatic annual increase?*

Last week there appeared to be an interest in periodically assessing the impacts of raising the minimum wage once the Task Force's minimum wage goal is achieved.

- *Is this accurate?*
- *How often should the assessment be conducted?*
- *Does the Task Force need to recommend how this assessment would be conducted and by whom, and what would happen depending on its findings?*

6:45 Break

IV. 6:55 Discuss Additional Elements of the Alternatives — Task Force

- *Should there be a different timeframe for "large" and*

"small" entities to reach the minimum wage goal? If so, why? If not, why not?

- *Are there other choices that should be considered?*
- *Is there consensus on one or two pathways to achieve the minimum wage within the timeframe(s) the Task Force favors?*
- *Last week the Task Force brainstormed credits and exemptions. With the Task Force's points of consensus and interests in mind, what is the thinking about them? Are they needed? Which ones might make the most sense? Why?*

- *Some Task Force members have mentioned offering Incentives to get businesses to achieve the minimum wage even sooner than the timeline. Is there interest on the part of the Task Force in exploring this further?*
- *If so, what might be the incentives?*

- *Last week the Task Force briefly discussed enforcement. Most everyone seemed interested in keeping down the costs of compliance. Is that accurate? In light of our discussions tonight, what are the Task Force members' impression about the kind of compliance program that would be needed?*

- *Are there other elements of a program we should discuss tonight?*

V. 8:20 Next Steps

8:25 Adjourn

THE TASK FORCE'S NEXT MEETING IS:

Monday, 15 June 2015

5:30 – 8:25 p.m.

The Center for Urban Waters

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

THE TASK FORCE'S FOURTH MEETING

Thursday,11 June 2015 5:30 – 7:50 p.m.
The Center for Urban Waters

SUMMARY

OF THE MEETING'S KEY DISCUSSIONS, DECISIONS, AND AGREEMENTS

Approved by the Task Force on 18 June 2015

In attendance: Task Force Members and Alternates: Sarah Cherin (phone), Pastor Gregory Christopher, Michelle Douglas (phone), Liz Dunbar, Dennis Farrow, Reggie Frederick, Eric Hahn, Russ Heaton, Dr. Ali Modarres, Abranna Romero Rocha, David Strong, Robert Taylor, and Brenda Wiest; **City Staff** serving the Task Force: Tadd Wille, Andy Cherullo, Jared Eyer, and Christina Watts; **Economic Consultants**: Katie Baird; **Facilitator**: Jim Reid

Task Force members who were absent: Kelly Chambers, Odette D'Aniello, and Elizabeth Lewis

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Facilitator Jim Reid called the Tacoma Minimum Wage Task Force's meeting to order at 5:30 p.m. PDT.

THE TASK FORCE'S DECISIONS AND AGREEMENTS

The Task Force members:

1. Approved the summary of the key discussions, decisions, and agreements of their third meeting on 4 June 2015. The final summary will be posted on the Task Force's website to help keep the public informed about the Task Force's work.

TASK FORCE REFINES FOUR PROPOSALS FOR RAISING THE MINIMUM WAGE IN TACOMA

On June 4th the Task Force members brainstormed four alternatives for raising the minimum wage in Tacoma. Building on those alternatives, they put four proposals "on the table" during tonight's meeting.

As the discussion unfolded, Task Force members identified *points of consensus* among them and their proposals. They are:

1. Increases in the minimum wage should be incremental and phased in over time until the goal is reached.

2. Once the goal has been reached, the minimum wage should increase annually based on the Consumer Price Index (CPI) or another appropriate index.
3. Tacoma should allow the same credits and exemptions in its minimum wage policy that the State of Washington allows.
4. The program recommended by the Task Force to Mayor Strickland and the City Council should be as clear and simple as possible to make it understandable and appealing to voters if it is placed on the November 2015 ballot.
5. Another reason why it should be as simple and efficient as possible is to minimize the costs of administration and enforcement.

Here are the four proposals the Task Force is considering. During the coming week leading up to their meeting on June 18th, Task Force members will reach out to their associates, colleagues, and constituents to hear their reactions to the proposals and continue to look for common ground and one solution that will meet the interests of all parties.

PROPOSAL #1:

Goal:	Raise the minimum wage to $15 per hour.
When:	Phased in over time.
Begin:	1 January 2016.
Key elements:	Define small businesses as those with 50 or fewer employees, and large businesses as those with more than 50 employees. Small businesses can take longer to reach $15 per hour than large businesses.
Exemptions:	Same as what the state uses now.

PROPOSAL #2:

Goal:	Raise the minimum wage to $10.88, then allow it to rise annually (and remain higher than the state's minimum wage) by using the CPI.
When:	On 1 January 2016 Tacoma's minimum wage becomes $10.88.
Key element:	Businesses of all sizes are on the same pathway to raising the minimum wage.
Exemptions:	Same as what the state uses now.

PROPOSAL #3:

Goal:	Raise the minimum wage to $13 per hour.
When:	Phased in over time to reach the goal on 1 January 2019.
Begin:	1 July 2016. Allow minimum wage to rise according to state law on 1 January 2016 to approximately $9.77 per hour. On 1 July 2016 raise it to $10.88. Then raise it incrementally each year until the goal is met on 1 January 2019.
Key elements:	a) Businesses of all sizes are on the same pathway to raising the minimum wage. b) Propose this solution to the Mayor and Council and urge them to adopt an ordinance enacting it into law before Election Day.
Exemptions:	Same as what the state uses now.

PROPOSAL #4:

Goal:	Raise the minimum wage in Tacoma by $2.53 (the same number as Tacoma's area code, and, therefore, dubbed "The Tacoma Solution") to $12 per hour by a date certain.
When:	By either 2018, 2019, or 2020. Scenario 4A: By 1 January 2018: Minimum wage rises to $10.31 in 2016, $11.15 in 2017, and $12 in 2018. Scenario 4B: By 1 January 2019: Minimum wage rises to $10.10 in 2016, $10.74 in 2017, $11.37 in 2018, and $12 in 2019. Scenario 4C: By 1 January 2020: Minimum wage rises to $9.98 in 2016, $10.48 in 2017, $10.99 in 2018, $11.49 in 2019, and $12 in 2020.
Key element:	Businesses of all sizes are on the same pathway to raising the minimum wage.
Exemptions:	Same as what the state uses now.

During the brief conversation after all four proposals were put on a whiteboard, Ali Modarres commented that he sees Proposal #3 as a compromise Liz Dunbar raised the issue of providing credit to businesses that provide health care so to not risk employees' health benefits by raising the minimum wage. David Strong suggested the Task Force should consider which proposal is most winnable at the ballot box as well as responsible public policy.

Task Force members pledged to talk to their associates, colleagues, and constituents in preparation for the next discussion of the proposals on Thursday, 18 June.

The meeting adjourned at 7:50 p.m. PDT.

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

THE TASK FORCE'S FIFTH MEETING

Thursday, 18 June 2015

4:30 – 8:30 p.m. *

The Center for Urban Waters

326 East D Street, Tacoma

**** Please note earlier starting time of tonight's meeting.***

DRAFT AGENDA

THE MEETING'S GOALS:

1. Using the four alternatives that were refined on 11 June, make proposals that would achieve or help advance the mutual interests of the parties.

2. Try to reach agreement on one or two proposals to submit to the Mayor and Council.

***NOTE**: Light snacks will be served starting at 4:15 p.m. Please come early to enjoy them so we can convene the meeting promptly at 4:30. Thank you!*

I.	4:30	Meeting Convenes: Review Goals, Agenda	Jim Reid, Facilitator
II.	4:35	Housekeeping Items	Task Force
		• *Approve <u>revised</u> draft summary of 11 June 2015 meeting.*	
III.	4:40	Discuss the Parties' Proposals	Task Force
		At the meeting on June 11th Task Force members refined alternatives and committed to discussing them with their constituents.	
		▪ *As a result of discussing the alternatives with your constituents,*	

are there a few proposals to "put on the table?"

- *Which mutual interests do your proposals help achieve? What other interests might they help advance?*
- *Has any of the information provided during the past week by staff and the economists helped shaped your proposals?*
- *What other considerations are reflected in them?*

6:15 Break

IV. 6:30 Try to Reach Agreement on One or Two Proposals — Task Force

- *Is there consensus among the Task Force for one or two proposals?*
- *How should they be presented to the Mayor and Council?*
- *What are the key messages that the Task Force should communicate to the City's elected officials?*

V. 8:20 Next Steps

8:30 Adjourn

THE TASK FORCE'S NEXT MEETING IS:

Monday, 22 June 2015

5:30 – 8:25 p.m.

The Center for Urban Waters

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

THE TASK FORCE'S FIFTH MEETING

Thursday,18 June 2015 4:37 – 7:27 p.m.
The Center for Urban Waters

SUMMARY

OF THE MEETING'S KEY DISCUSSIONS, DECISIONS, AND AGREEMENTS

Approved by the Task Force on 22 June 2015.

In attendance: Task Force Members and Alternates: Kelly Chambers, Sarah Cherin, Pastor Gregory Christopher, Odette D'Aniello, Michelle Douglas, Liz Dunbar, Reggie Frederick, Russ Heaton, Abranna Romero Rocha, David Strong, Robert Taylor, and Brenda Wiest; **City Staff** serving the Task Force: Tadd Wille, Andy Cherullo, Jared Eyer, and Christina Watts; **Economic Consultants**: Katie Baird; **Facilitator**: Jim Reid

Task Force members who were absent:, Dennis Farrow, Eric Hahn, and Ali Modarres

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Facilitator Jim Reid called the Tacoma Minimum Wage Task Force's meeting to order at 4:37 p.m. PDT.

THE TASK FORCE'S DECISIONS AND AGREEMENTS

The Task Force members:

1. Approved the summary of the key discussions, decisions, and agreements of their fourth meeting on 11 June 2015. The final summary will be posted on the Task Force's website to help keep the public informed about the Task Force's work.

THE TASK FORCE'S NARROWS PROPOSALS TO THREE

As a result of the evening's discussion, the Task Force narrowed the number of proposals to three. They are illustrated in a separate document that accompanies this summary. The Task Force asked that the proposals be placed in a matrix for an easier side-by-side comparison. The members also requested that two other columns be included in the matrix, one to show projected future increases in the State's minimum wage under existing law, and the other to show the effects of the 15Now initiative. **Please see accompanying document "Proposal Matrix."**

In an initial straw poll to see where sentiment lies, three Task Force members indicated support for Proposal A (as labeled on the accompanying document), five leaned toward Proposal B, and three indicated a preference for C. Michelle spoke in favor of elements of Proposals A and C.

Facilitator Jim Reid asked the Task Force if they were wanted to submit these three proposals to Mayor Strickland and the City Council. Most Task Force members spoke in favor of continuing to work to try to reach consensus on one recommendation or to finalize two options to submit to the elected officials.

Task Force members will continue to talk to their colleagues, associates, and constituents about the proposals and on Monday, 22 June, at their next meeting, will resume their conversation to see if they can finalize what they will recommend.

The meeting adjourned at 7:27 p.m. PDT.

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

THE TASK FORCE'S FIFTH MEETING

Thursday, 22 June 2015
5:30 – 8:30 p.m.
The Center for Urban Waters
326 East D Street, Tacoma

DRAFT AGENDA

THE MEETING'S GOAL:

Using the three proposals that emerged from the June 18th meeting, work to reach agreement on one or two that the Task Force can recommend to the Mayor and Council.

***NOTE**: Light snacks will be served starting at 5:15 p.m. Please come early to enjoy them so we can convene the meeting promptly at 5:30. Thank you!*

I.	5:30	Meeting Convenes: Review Goals, Agenda	Jim Reid, Facilitator
II.	5:35	Housekeeping Items	Task Force
		• *Approve draft summary of 18 June 2015 meeting.*	
III.	5:40	Work to Reach Agreement on Recommendations	Task Force
		▪ *Is there consensus among the Task Force for one or two proposals?* ▪ *How should they be presented to the Mayor and Council?* ▪ *What are the key messages that the Task Force should communicate to the City's elected officials?*	
V.	8:20	Next Steps	
	8:30	Adjourn	

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

THE TASK FORCE'S SIXTH MEETING

Thursday, 22 June 2015 5:37 – 7:11 p.m.

The Center for Urban Waters

FINAL SUMMARY

OF THE MEETING'S KEY DISCUSSIONS, DECISIONS, AND AGREEMENTS

Approved by the Task Force on 25 June 2015.

In attendance: Task Force Members: Sarah Cherin, , Michelle Douglas, Dennis Farrow, Dr. Ali Modarres, Abranna Romero Rocha, David Strong, Robert Taylor, and Brenda Wiest; **City Staff** serving the Task Force: Andy Cherullo and Christina Watts; **Economic Consultants**: Doug Wills; **Facilitator**: Jim Reid

Task Force members who were absent: Kelly Chambers, Pastor Gregory Christopher, Odette D'Aniello, Liz Dunbar, Reggie Frederick, Eric Hahn, and Russ Heaton.

Facilitator Jim Reid called the Tacoma Minimum Wage Task Force's meeting to order at 5:37 p.m. PDT.

THE TASK FORCE'S DECISIONS AND AGREEMENTS

The two decisions of this meeting were:

1. The Task Force approved the summary of the key discussions, decisions, and agreements of its fifth meeting on 18 June 2015. The final summary will be posted on the Task Force's website to help keep the public informed about the Task Force's work.

2. A majority of the Task Force members who were present endorsed a minimum wage proposal offered by Michelle Douglas as a compromise and amended by the others.

SEVEN TASK FORCE MEMBERS ENDORSE MICHELLE DOUGLAS' "COMBO PROPOSAL"

Seven of the eight Task Force members in attendance tonight endorsed a minimum wage proposal offered by Michelle Douglas and amended by the others. Dennis Farrow indicated his support for the proposal offered by Russ Heaton last week that has as its goal $12 per hour.

The "combo proposal" is as follows:

A. The "Combo Proposal"

GOALS:

1. Achieve a minimum hourly wage of at least $15 for everyone working in Tacoma by 2024.
2. Raise the minimum hourly wage for employees working for local, national, or global companies in Tacoma with 150 or more employees to $15 by 2020.

PROCESS AND TIMELINE:

Date	**Hourly Minimum Wage:** Organizations with 150 employees or more.	**Hourly Minimum Wage:** Organizations with 149 employees or fewer.
January 1, 2016	$ 9.77 (estimated)	$ 9.77 (estimated)
July 1, 2016	$11.00	$11.00
January 1, 2017	$12.00	$11.50
January 1, 2018	$13.00	$12.00
January 1, 2019	$14.00	$12.50
January 1, 2020	$15.00	$13.00
2020	**ASSESSMENT**: City of Tacoma conducts an assessment of the impacts of the recent rise in the minimum wage on: a) small businesses and non-profits; b) minimum wage/low wage workers; and c) the city's economy in the context of Pierce County and the greater Puget Sound region.	
January 1, 2021	Previous Year + CPI increase *	$13.50 (including CPI increase. If MHW is $13.33 because of CPI, this program would raise it an additional $0.17 to reach $13.50)
2021	**IMPLEMENT KEY FINDINGS**: City of Tacoma and business, labor, and community partners review the assessment's findings to determine strategies and goals to address them. Tacoma City Council adopts some as policies to strengthen small, local businesses and others as policies that are part of the City's comprehensive campaign to reduce poverty.	
January 1, 2022	Previous Year + CPI Increase	$14.00

January 1, 2023	Previous Year+ CPI increase	$14.50
January 1, 2024	Previous Year+ CPI increase	$15.00
January 1, 2025	Previous Year+ CPI increase	$15.00 + CPI increase
2026-2030	Sometime during these five years the City would adjust the minimum wage of employees of small businesses to achieve parity between the minimum hourly wages paid by small and large businesses.	

** The State of Washington estimates the CPI will rise 2.4% annually.*

During the discussion of this proposed compromise, another idea emerged. Its goal would be to raise the minimum wage in Tacoma to $13 by 2020. It would not distinguish between large and small businesses. To some Task Force members it sounded like that portion of Proposal A above that would apply to small businesses, except that once $13 per hour is reached in 2020, the CPI would be used in subsequent years to determine the amount of the annual raise in the minimum wage.

The meeting adjourned at 7:11 p.m. PDT.

Proposal Matrix

Proposal	Year	State Minimum Wage	Proposal A		Proposal B	Proposal C	15Now
			Large Businesses	*Small Businesses*			
Phasing Approach	***2015***	$9.54					
	2016	$9.77	$11.00	$10.50	*$10.88	$10.10	$15.00
	2017	$10.01	$12.50	$11.50	$11.50	$10.74	$15.36
	2018	$10.25	$13.50	$12.50	$12.50	$11.37	$15.73
	2019	$10.49	$15.00	$13.50	$13.50	$12.00	$16.11
	2020	$10.75	$15.36	$14.50	$14.50	$12.29	$16.49
	2021	$11.00	$15.73	$15.50	$15.00	$12.58	$16.89
	Year hits $15	2035				2029	
					*Begins 7/1/2016		
Notes							
	• Assumes a 1/1 start unless otherwise noted	• Current Minimum wage projection with an estimated 2.4% CPI	• Small business defined as 50 employees or less • Tied to CPI after reaching $15.00 or $15.50		• Price benchmarks include changes in the State Minimum Wage • Tied to CPI after reaching $15.00	• Mirrors HB 1355 • Tied to CPI after 2019	• Assumes an estimated 2.4% CPI • Tied to CPI after 2016

Proposal Matrix

Observations		Year	Proposal B	Proposal C	
		2015			
1	Proposals A (small businesses) & B are essentially the same. There is only a fifty cent variation.	***2016***	*$10.88	$10.10	
		2017	$11.50	$10.74	
		2018	$12.50	$11.37	
2	Proposals B & C are very close as they hit $12.00 within a year of each other. They real difference is their timing to $15.00.	***2019***	$13.50	$12.00	
		2020	$14.50	$12.29	
		2021	$15.00	$12.58	
	This poses the question of when members want to see the proposal hit $12.00 and then $15.00.	***Year hits $15***		2029	

3 The issue of wanting to provide considerations for small businesses still needs to be answered. If the answer is yes, how do we define the difference?

TACOMA MINIMUM WAGE TASK FORCE

Combo Proposal

June 21, 2015

GOALS:

1. Achieve a minimum hourly wage of at least $15 for everyone working in Tacoma by 2024.

2. Raise the minimum hourly wage for employees working for local, national, or global companies in Tacoma with over 200 employees to $15 by 2023.

PROCESS AND TIMELINE:

Date	**Hourly Minimum Wage:** Organizations with 200 or more employees	**Hourly Minimum Wage:** Organizations with fewer than 200 employees
January 1, 2016	$ 9.77 (estimated)	$ 9.77 (estimated)
July 1, 2016	$ 11.00 *	$ 10.50 *
January 1, 2017	$ 12.00	$ 11.00
January 1, 2018	$ 13.00	$ 11.50
January 1, 2019	$ 13.00 + CPI (13.33 est.)	$ 12.00
January 1, 2020	$13.33 +CPI) (13.67 est.)	$12.50 + CPI (12.83 est.)
2020	**ASSESSMENT**: City of Tacoma conducts an assessment of the impacts of the recent rise in the minimum wage on: a) small businesses and non-profits; b) minimum wage/low wage workers; and c) the city's economy in the context of Pierce County and the greater Puget Sound region.	
1 January 2021	$ 13.67 + CPI increase ** (14.03 est.)	$ 13.00 + CPI increase ** ($13.33 est.)

2021	**IMPLEMENT KEY FINDINGS**: City of Tacoma and business, labor, and community partners review the assessment's findings to determine strategies and goals to address them. Tacoma City Council adopts some as policies to strengthen small, local businesses and others as policies that are part of the City's comprehensive campaign to reduce poverty.	
January 1. 2021	14.03+ CPI increase ($14.39 est.)	$13.50 + CPI increase (13.85 est.)
January 1,2022	14.39 + CPI increase ($14.75 est.)	$14.00 + CPI increase (14.36 est.)
January 1, 2023	14.75 + CPI increase ($15.13 est.)	$14.36 + CPI increase (14.73 est.)
January 1, 2024 (Parity Year???)	15.13 MHW + CPI increase ($15.52 est.)	15.13 + CPI increase ($15.52 est.)
2025-2030	Or sometime during these five years the City would adjust the minimum wage of employees of small businesses to achieve parity between the minimum hourly wages paid by small and large businesses.	

* Should there be, for a finite period of time, an exemption provided to local high school and college students who are in "work study" or training positions or who receive education credits for their jobs? Or should the educational institutions and businesses receive a "tax credit" as an incentive for hiring and training local high school and college students?

** CPI is estimated to rise 2.4% annually (State projection).

Questions to still be answered:

- Franchises
- Criteria to be considered a small or a large business
- Total compensation
- Anything else to be considered???

Areas where I think there is some flexibility:

- When businesses over 200 get to $15
- How Parity is achieved?

Seattle's Minimum Wage Ordinance

	Employers > 500 Employees		Employers < 500 Employees	
	Schedule A	Schedule B	Schedule C	Schedule D
2015	11.00	11.00	11.00	10.00
2016	13.00	12.50	12.00	10.50
2017	15.00	13.50	13.00	11.00
2018	15.36	15.00	14.00	11.50
2019	15.73	15.73	15.00	12.00
2020	16.11	16.11	15.75	13.50
2021	16.49	16.49	16.49	15.00
2022	16.89	16.89	16.89	15.75
2023	17.29	17.29	17.29	16.50
2024	17.70	17.70	17.70	17.25
2024	18.13	18.13	18.13	18.13
	Pay hourly minimum wage. *Minimum wage means all wages, commissions, piece-rate, and bonuses actually received by the employee and reported to the Internal Revenue Service.*	Pay reduced hourly minimum wage if the employer makes payments toward an employee's silver level medical benefits plan.	Pay hourly minimum compensation rate. *Minimum compensation means the minimum wage in addition to tips actually received by the employee and reported to the Internal Revenue Service, and money paid by the employer towards an individual employee's medical benefits plan.*	Pay an hourly minimum wage and reach the minimum compensation rate through employee tips reported to the IRS and/or payments toward an employee's medical benefits plan. If the tips and/ or payments toward medical benefits do not add-up to the minimum compensation rate, the small employer makes up the difference.

Prepared by the Office of Management and Budget

Source - http://www.seattle.gov/civilrights/labor-standards/minimum-wage

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

THE TASK FORCE'S SEVENTH MEETING

Thursday, 25 June 2015
5:30 – 8:30 p.m.
Tacoma Municipal Building, Room 708
747 Market Street

DRAFT AGENDA

THE MEETING'S GOAL:

Finalize the proposals that the Task Force will recommend to the Mayor and Council on 30 June. _____

***NOTE**: Light snacks will be served starting at 5:15 p.m. Please come early to enjoy them so we can convene the meeting promptly at 5:30. Thank you!*

I.	5:30	Meeting Convenes: Review Goals, Agenda	Jim Reid, Facilitator
II.	5:35	Housekeeping Items • *Approve draft summary of 22 June 2015 meeting.*	Task Force
III.	5:40	Finalize Agreement on Recommendations ▪ *What shall the Task Force submit to the Mayor and City Council on June 30th?*	Task Force
V.	6:10	Finalizing the Recommendations	Task Force

- *Under Proposal A, how should parity be achieved?*
- *Is there a need to address internships and training and work-study opportunities?*
- *Is there anything to be added regarding franchises?*
- *What do we need to know about the use of the CPI?*

7:00 break

VI.	7:10	Review First Draft of Report to Elected Officials	Jim/Task Force
VII.	7:40	Prepare for 30 June Presentation to the Council	Jim/Task Force
	8:00	Adjourn	

THE TASK FORCE'S FINAL MEETING IS:

Monday, 29 June 2015, 5:30 – 7:30 p.m.
The Center for Urban Waters
326 East D Street, Tacoma

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

THE TASK FORCE'S SEVENTH MEETING

Thursday, 25 June 2015 5:40 – 7:02 p.m.
Tacoma Municipal Building

FINAL SUMMARY

OF THE MEETING'S KEY DISCUSSIONS, DECISIONS, AND AGREEMENTS

Approved by the Task Force on 29 June 2015.

In attendance: Task Force Members: Sarah Cherin, Pastor Gregory Christopher, Odette D'Aniello, Michelle Douglas, Liz Dunbar, Dennis Farrow, Eric Hahn, Russ Heaton, Dr. Ali Modarres, Abranna Romero Rocha, David Strong, and Robert Taylor. **City Staff** serving the Task Force: Andy Cherullo and Jared Eyer. **Economic Consultant**: Doug Wills. **Facilitator**: Jim Reid

Task Force members who were absent: Kelly Chambers, Reggie Frederick, and Brenda Wiest.

Facilitator Jim Reid called the Tacoma Minimum Wage Task Force's meeting to order at 5:40 p.m. PDT.

THE TASK FORCE'S DECISIONS AND AGREEMENTS

The three decisions of this meeting were:

1. The Task Force approved the summary of the key discussions, decisions, and agreements of its meeting on 22 June 2015. The final summary will be posted on the Task Force's website to help keep the public informed about the Task Force's work.

2. Eight Task Force members who were present officially endorsed minimum wage Proposal A. Those in favor: Sarah Cherin, Pastor Gregory Christopher, Michelle Douglas, Liz Dunbar, Ali Modarres, Abranna Romero Rocha, David Strong, and Robert Taylor.

3. Four Task Force members who were present officially endorsed minimum wage Proposal B. Those in favor: Odette D'Aniello, Dennis Farrow, Eric Hahn, and Russ Heaton.

ON BEHALF OF THE "BUSINESS CAUCUS," RUSS HEATON PROPOSES A PATH TO $12 PER HOUR BY 2019

Speaking on behalf of five of his Task Force colleagues, Russ Heaton proposed a plan to raise the hourly minimum wage to $12 by 2019. Russ urged the City Council to place this proposal on the November 2015 ballot to counter the Now15 initiative that will be on the ballot:

- $10.25 per hour on January 1, 2016
- $10.75 per hour on January 1, 2017
- $11.25 per hour on January 1, 2018
- $12.00 per hour on January 1, 2019

Starting January 1, 2020, the minimum wage will be adjusted annually per Washington State law (which uses the CPI-W index).

Four Task Force members who were present officially endorsed the above proposal: Odette D'Aniello, Dennis Farrow, Eric Hahn, and Russ. Two other Task Force members who were not present have signed a letter endorsing this proposal; they are Kelly Chambers and Reggie Frederick.

Task Force Members Agree to Submit Two Proposals to the Mayor and Council

Following a brief discussion of Russ' proposal, facilitator Jim Reid polled the Task Force members regarding their support of Proposal A (which was labeled the "Combo Proposal" when Michelle Douglas proposed it on Monday, the 22nd) or Proposal B (the one Russ had just offered).

Eight Task Force members endorsed Proposal A, a two-pronged approach to reaching a $15 per hour minimum wage by 2024, and will recommend to the Mayor and Council that this option should be put on the November ballot as the alternative to 15Now. They were: Sarah Cherin, Pastor Gregory Christopher, Liz Dunbar, Michelle Douglas, Ali Modarres, Abranna Romero Rocha, David Strong, and Robert Taylor. In addition, Brenda Wiest endorsed the proposal on 22 June.

And, as was stated above, the four Task Force members of the "business caucus" who were present endorsed Proposal B. And Reggie and Kelly, while not present, signed a letter endorsing it.

Those in favor of Proposal A quickly dispensed with some remaining issues, including: a) franchises; b) parity between large and small businesses (i.e., by what year the minimum wage will be the same for employees of businesses with 149 employees or less [small businesses] and the employees of businesses with 150 or more employees [large businesses); and c) whether or not to credit businesses that provide training, internships, work study credits to employees .

After the Task Force spoke with Dr. Doug Wills about the Consumer Price Index (CPI), Dr. Modarres volunteered to draft language that would apply to either proposal and for Task Force members to recommend to the City regarding what index the City should use to automatically raise the minimum wage each year.

Task Force Briefly Reviews First Draft of Report and Recommendations to the City Council

The Task Force members briefly reviewed the first draft of the report and recommendations Jim Reid had written for them to provide to the Mayor and City Council. Following a quick conversation, the Task

Force and Jim outlined the steps to finalizing the report and submitting it to the Council. These are the next steps:

- Task Force members will send to Jim their suggested edits by 6 p.m. Friday, the 26th. This will include language from Ali regarding the use of the CPI or another appropriate index.
- The endorsement letters that Task Force members are writing in support of each proposal will be sent to Jim by 5 p.m. on Saturday, the 27th. Those endorsing Proposal A will address franchises, parity, and state requirements pertaining to hiring youth, trainees, work study students, etc.
- Jared Eyer and Christina Watts will produce the side-by-side matrix and send it to Jim by COB Friday so that it can be inserted into the Task Force's report.
- Jim will revise the draft report with the items above and send Edition 3 to everyone on Sunday at approximately noon.
- At the Monday, 29 June Task Force meeting, the members will review it once more for any grammatical mistakes and typos.
- It will then be finalized and presented to the Mayor and City Council during their study session on Tuesday, 30 June. Thus, the Task Force will have met the deadline originally given them by the elected officials.

The meeting adjourned at 7:02 p.m. PDT.

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

THE TASK FORCE'S FINAL MEETING

Monday, 29 June 2015
5:30 – 6:15 p.m.
The Center for Urban Waters
326 East D Street, Tacoma

DRAFT AGENDA

THE MEETING'S GOAL:

Approve the Final Report and Recommendations to the Mayor and City Council. _____

***NOTE**: Light snacks will be served starting at 5:15 p.m. Please come early to enjoy them so we can convene the meeting promptly at 5:30. Thank you!*

I.	5:30	Meeting Convenes	Jim Reid, Facilitator
II.	5:35	Housekeeping Items • *Approve draft summary of 25 June 2015 meeting.*	Task Force
III.	5:40	Approve Final Report and Recommendations	Task Force
V.	6:05	Thank You and Congratulatory Remarks	All
	6:15	Adjourn	

CITY OF TACOMA'S MINIMUM WAGE TASK FORCE

THE TASK FORCE'S EIGHTH AND FINAL MEETING

Monday, 29 June 2015 5:35 – 6:18 p.m.

Center for Urban Waters

SUMMARY

OF THE MEETING'S KEY DISCUSSIONS, DECISIONS, AND AGREEMENTS

In attendance: Task Force Members: Pastor Gregory Christopher, Odette D'Aniello, Michelle Douglas, Liz Dunbar, Reggie Frederick, Russ Heaton, Kelly Chambers, Dr. Ali Modarres, Abranna Romero Rocha, David Strong, and Robert Taylor. **City Staff** serving the Task Force: City Manager T.C.Broadnax, Tadd Wille, Christina Watts, Jared Eyer, and Andy Cherullo. **Facilitator**: Jim Reid

Task Force members who were absent: Sarah Cherin, Dennis Farrow, Eric Hahn, and Brenda Wiest.

Facilitator Jim Reid called the Tacoma Minimum Wage Task Force's meeting to order at 5:35 p.m. PDT.

THE TASK FORCE'S DECISIONS AND AGREEMENTS

The decisions of this meeting were:

1. The Task Force approved the summary of the key discussions, decisions, and agreements of its meeting on 25 June 2015. The final summary will be posted on the Task Force's website to help keep the public informed about the Task Force's work.

2. **The Task Force members in attendance unanimously approved The Final Report and Recommendations of the Task Force to the Mayor and City Council.**

HIGHLIGHTS OF THE MEETING:

- Task Force members carefully reviewed the draft report and made a number of suggestions for improving it. All were unanimously adopted.
- The facilitator and City staff took notes and summarized the changes, and will revise the draft report so that it can be submitted to the Mayor, City Council, and Tacoma's citizens as a final report tomorrow, June 30th.
- City Manager T.C. Broadnax read a letter from Mayor Strickland thanking the Task Force for its service and hard work. T.C. also personally thanked them and facilitator Jim Reid.

- The Task Force members spoke of their respect for one another, and the fact that they were proud of their ability to treat each other respectfully and civilly even when they did not agree with each other's positions.
- They also noted that they are united in their love of Tacoma and wanting to do what is best for the city and its residents.
- Jim Reid, on behalf of the Task Force, will present the report to the Mayor and City Council tomorrow around noon in a Council study session. All Task Force members were encouraged to attend the session, which will be held in Tacoma Municipal Building North, Room 16.

The final meeting of the Tacoma Minimum Wage Task Force adjourned at 6:18 p.m. PDT.

History of Washington Minimum Wage

These are the changes by year that have been made to the Washington State minimum wage since 1961.

Initiative 688, approved by Washington voters in 1998, requires L&I to make a cost-of-living adjustment to the minimum wage each year based on the federal Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

History of Minimum Wage in Washington State	
Effective date	**Minimum wage per hour**
January 1, 2015	$9.47
January 1, 2014	$9.32
January 1, 2013	$9.19
January 1, 2012	$9.04
January 1, 2011	$8.67
January 1, 2010	$8.55
January 1, 2009	$8.55
January 1, 2008	$8.07
January 1, 2007	$7.93
January 1, 2006	$7.63
January 1, 2005	$7.35
January 1, 2004	$7.16
January 1, 2003	$7.01
January 1, 2002	$6.90
January 1, 2001	$6.72
January 1, 2000	$6.50
January 1, 1999	$5.70
(September 1, 1997)	$5.15 (Federal minimum wage change)
January 1, 1994	$4.90

January 1, 1990	$4.25
January 1, 1989	$3.85
January 1, 1976	$2.30
September 1, 1975	$2.00
January 1, 1974	$1.80
January 1, 1968	$1.60
January 1, 1962	$1.25
June 30, 1961	$1.15

Reproduced from the Washington State Department of Labor and Industries Website:

http://www.lni.wa.gov/WorkplaceRights/Wages/Minimum/History/default.asp

ADMINISTRATIVE POLICY

STATE OF WASHINGTON
DEPARTMENT OF LABOR AND INDUSTRIES
EMPLOYMENT STANDARDS

TITLE: **MINIMUM WAGE ACT APPLICABILITY** **NUMBER:** **ES.A.1**

CHAPTER: **RCW 49.46**
WAC 296-128

REPLACES: **ES-005**

ISSUED: 1/2/2002
REVISED: 6/24/2005
REVISED: 3/24/2006
REVISED: 7/15/2014

ADMINISTRATIVE POLICY DISCLAIMER

This policy is designed to provide general information in regard to the current opinions of the Department of Labor & Industries on the subject matter covered. This policy is intended as a guide in the interpretation and application of the relevant statutes, regulations, and policies, and may not be applicable to all situations. This policy does not replace applicable RCW or WAC standards. If additional clarification is required, the Program Manager for Employment Standards should be consulted.

This document is effective as of the date of print and supersedes all previous interpretations and guidelines. Changes may occur after the date of print due to subsequent legislation, administrative rule, or judicial proceedings. The user is encouraged to notify the Program Manager to provide or receive updated information. This document will remain in effect until rescinded, modified, or withdrawn by the Director or his or her designee.

1. When does Chapter 49.46, the Washington Minimum Wage Act, apply?

The Washington Minimum Wage Act (MWA), RCW 49.46, establishes a minimum wage for employees in Washington State in RCW 49.46.005 and RCW 49.46.020. The MWA also requires employers to pay overtime wages of at least one and one-half an employee's regular rate of pay for hours worked in excess of 40 in a week, per RCW 49.46.130.

The MWA is an additional protection to workers employed in Washington State who are already protected by the Industrial Welfare Act (IWA), RCW 49.12. While the IWA makes it illegal for an employer to employ workers at wages that are not adequate for their maintenance or under conditions of labor detrimental to their health, the MWA specifically sets forth an "adequate" wage (the current statutory minimum) and provides the additional protection of overtime compensation.

The MWA is in addition and supplementary to not only the IWA, but to all other standards (state, federal or local law, ordinance, rule or regulation) relating to wages, hours and working conditions. See RCW 49.46.120. If, however, the alternative standard provides either more protection or is more favorable to an employee, the more protective authority will apply. Individuals with questions as to the more protective standards found in federal law should contact the U.S. Department of Labor, Wage and Hour Division.

WAC 296-128 generally contains rules promulgated subject to RCW 49.46. All of these rules have the same force of law as the provisions of RCW 49.46 itself.

2. Which employers are subject to RCW 49.46?

Generally, an "employer" under RCW 49.46.010(4) is "any individual, partnership, association, corporation, business trust, or any person or group of persons acting directly or indirectly in the interest of an employer in relation to an employee."

Public agencies subject to the MWA may nonetheless, in certain situations, be exempt from the requirement to pay overtime wages. **See** *ES.A.8.1* Overtime.

Employers who do business in other states, in addition to Washington, may be engaged in interstate commerce and are subject to the Fair Labor Standards Act (FLSA), in addition to the MWA. FLSA is administered by the U.S. Department of Labor, and clarification must be obtained from that agency.

Employers must follow the laws that are more protective to the worker when there is a difference between the applicability of state and federal laws.

3. Which employees are subject to the protections of RCW 49.46?

The protections of the MWA apply to all "employees." An "employee" is defined as "any individual employed by an employer" *except* those employees specifically excluded by the legislature in RCW 49.46.010(3)(a) through (n). Minimum wage is not required for employees who are excluded from the MWA. Note that there are additional exceptions to overtime, and as a result an employee can be entitled to minimum wage even if overtime pay is not required. See RCW 49.46.130 and administrative policy **ES.A.8.1**, related to overtime.

4. Definition of employ. "Employ" means to engage, suffer or permit to work. See RCW 49.46.010 (3) and WAC 296-126-002 (3).

See ES.C.2 for a detailed discussion of the hours worked for which the employee must be paid at least the applicable minimum wage. The same concepts apply to employers and employees subject to the MWA.

5. Independent contractors are not employees. A bona fide independent contractor is exempt from the MWA because that person is not "employed" by an employer. However, an employer cannot avoid conforming to the MWA by merely referring to someone as an "independent contractor." Whether a worker is an independent contractor must be carefully evaluated on a case-by-case basis.

6. Which employees are excluded from the protections of the MWA?

The following exemptions are found in RCW 49.46.010(3). Application of these exemptions depends on the facts, which must be carefully evaluated on a case-by-case basis:

(a) **Certain agricultural employees:** An individual who is employed as a hand harvest pieceworker in the region of employment, *and* who commutes daily from his or her permanent residence to the farm upon which he or she is employed *and* who has been employed in agriculture less than thirteen weeks during the preceding calendar year. Each of the elements listed above must be met in order for the exemption to apply.

Note: All other agricultural workers *are* covered under MWA. The employer has the burden of proving that agricultural workers fall within the above exemption.

(b) **Casual Laborers:** Any individual "employed in casual labor in or about a private home" *unless* the labor is performed in the course of the employer's trade, business, or profession.

Casual refers to employment that is irregular, uncertain or incidental in nature and duration. This must be determined on a case-by-case basis by looking at the scope, duration and continuity of employment. Employment that is intended to be permanent in nature is not casual, and is not exempt, regardless of the type of work performed. Employment of housekeepers, caregivers, or gardeners on a regular basis is not considered" employed in casual labor" and such workers may be subject to the protections of the MWA.

(c) **Executive, Administrative, Professional, Computer Professional or Outside Sales. See ES.A.9.2 through ES.A.9.8** for further discussion of the "white collar" exemptions.

Note: The rules promulgated by the Washington State Department of Personnel affecting civil service employees have no bearing on department rules for wage and hour purposes. Public employees in executive, administrative, or professional positions are included in the "salary basis" regulation, WAC 296-128-532 and 533. *See administrative policy ES.A.9.1.*

(d) **Volunteer work for an educational, charitable, religious, state or local governmental body or agency or non-profit organization**: Any person engaged in the activities of the above type of organizations as long as there is no employer-employee relationship between the organization and the individual *or* the individual gives his or her services gratuitously to the organization

The department uses the following interpretation in determining whether workers are volunteers exempt from the MWA: Individuals will be considered volunteers only where their services are offered freely and without pressure or coercion, direct or implied, from an employer. Individuals who volunteer or donate their services, usually on a part-time basis, for public service or for humanitarian objectives, not as employees and without contemplation of pay, are not considered employees of the entities that received their services. However, if these people are paid for their services beyond reimbursement for expenses, reasonable benefits or a nominal fee, they are employees and not volunteers.

Individuals do not lose their volunteer status if they receive a nominal fee or stipend. A nominal fee is not a substitute for wage compensation and must not be tied to productivity. An individual who volunteers to provide periodic services on a year-round basis may receive a nominal monthly or annual fee without losing volunteer status.

An individual will not be considered a volunteer if he or she is otherwise employed by the same agency or organization to perform similar or identical services as those for which the individual proposes to volunteer. Any individual providing services as a volunteer who then receives wages for services, is no longer exempt and must be paid at least

minimum wage and overtime pay for hours worked in excess of 40 hours per workweek. Unpaid employment is unlawful. An employee-employer relationship is deemed to exist where there is a contemplation or expectation of payment for goods or services provided.

Note that this interpretation is identical to that used to determine whether a worker is a volunteer and thus exempt from the protections of RCW 49.12, the Industrial Welfare Act.

Volunteers are not allowed in a "for-profit" business. Any individual, partnership, association, corporation, business trust, or any person or group of persons acting directly or indirectly in the interest of an employer, who permits any individual to work, is subject to the provisions of the MWA.

(e) **Individuals who are employed full time by a state or local governmental agency or nonprofit educational, charitable, or religious organization and who also do volunteer work for the agency**. Such individuals are exempt from the MWA only with respect to the voluntary services.

(f) **Newspaper vendors or carriers.** The department construes “newspaper vendors or carriers” very narrowly and does not include magazine carriers or vendors, those who distribute advertising circulars, or persons who sell or distribute literature at sporting events etc.

(g) **Employees of carriers subject to Part I of the Interstate Commerce Act (Railroads and Pipelines):** Part I of the Interstate Commerce Act is limited to railroads and pipelines only. Interstate motor carriers are covered under Part II of the Interstate Commerce Act and are not exempted from the MWA by this definition.

Non-railroad employees may also be subject to this exemption from the MWA if their activity is integral to the interstate commerce of the railroads. Whether non-railroad employees are exempt should be considered on a case-by-case basis.

(h) **Forest protection and fire prevention.** Any persons engaged in forest protection and fire prevention activities.

(i) **Employees of charitable institutions charged with child care responsibilities.** Employees of charitable institutions charged with child care responsibilities as long as the charitable institution is “engaged primarily in the development of character or citizenship or promoting health or physical fitness or providing or sponsoring recreational opportunities or facilities for young people or members of the armed forces of the United States.”

"Charitable institution" traditionally includes churches and other organizations commonly set up under the not-for-profit corporations act if they are recognized by the United States Internal Revenue Service under the tax exemption provision, section 501(c)(3). Typical examples may include the YMCA or YWCA, Girl Scout or Boy Scout organizations, etc. "Charged with child care responsibilities" would include reference to this activity in the organization's by-laws and incorporation documents.

(j) **Individuals whose duties require they reside or sleep at their place of employment or who otherwise spend a substantial portion of their work time subject to call.** This exemption encompasses two categories of workers: (1) Those individuals whose duties require that they reside or sleep at their place of employment, and (2) Those individuals who otherwise spend a substantial portion of work time subject to call and not engaged in the performance of active duties.

(1) Reside or sleep: Employees whose job duties require them to reside at the place of employment exempt from both the minimum wage and overtime requirements. Merely residing or sleeping at the place of employment does not exempt individuals from the Minimum Wage Act. In order for individuals to be exempt, their duties must require that they sleep or reside at the place of their employment. An agreement between the employee and employer for the employee to reside or sleep at the place of employment for convenience or merely because housing is available at the place of their employment would not meet the exemption.

Typical examples of this exemption if their duties require them to reside or sleep at the place of their employment may include apartment managers, maintenance personnel, hotel/motel managers, managers of self-storage facilities, and agricultural workers such as sheepherders.

(k) **Inmates and others in custody.** Residents, inmates or patients of state, county or municipal correctional, detention, treatment or rehabilitative institution would not be required to be paid minimum wage if they perform work directly for, and at, the institution's premises where they are incarcerated, and remain under the direct supervision and control of the institution. State inmates assigned by prison officials to work on prison premises for a private corporation at rates established and paid for by the state are not employees of the private corporation and would not be subject to the MWA.

(l) **Elected or appointed public officials and employees of the state legislature.** The MWA does not apply to any individual who holds a public elective or appointive office of the state, any county, city, town, municipal corporation, political subdivision, or any instrumentality thereof, or any employee of the state legislature.

(m) **Washington State ferry crews.** Vessel operating crews of the Washington State ferries, as long as the Department of Transportation operates the ferries.

(n) **Crews of non-American vessels.** The MWA applies to persons employed as seamen on an American vessel but does not apply to seamen employed on non-American vessels.

7. What is the scope of the department's authority under the Minimum Wage Act?

Assuming that the type of employees and employers involved in a particular case are covered under the MWA, the department has the authority to investigate and gather data and may enter workplaces, examine and copy records, question employees and investigate such facts conditions practices or matters deemed necessary or appropriate to determine whether there has been a violation of the MWA. RCW 49.46.040.

See ES.D.1 for a complete discussion of the record keeping types of records employers subject to the MWA must maintain and produce to the department and to employees.

8. What is the department's enforcement authority regarding violations of the Minimum Wage Act?

If, after investigation, the Department determines that there has been a violation of the MWA in that an employer has paid an employee less than minimum wage or has not paid overtime to an entitled employee, the department may, on the employees' behalf, bring a civil action against an employer to recover unpaid wages. An employee also has the express right to bring a private action for unpaid wages or overtime and to seek costs and attorney fees. See RCW 49.46.090(1). Also **see ES.A.5** for additional discussion of payment of wages less than minimum wage and the employer's liability.

An employer who fails or refuses to comply with the record keeping requirements found in the MWA and in the department's corresponding rules or an employer who refuses to cooperate with the department's reasonable investigation could be subject to criminal prosecution. See RCW 49.46.100.

An employer who pays less than minimum wage or violates other provisions of the MWA (including overtime) could also be subject to criminal prosecution under RCW 49.46.100. Also **see ES.A.3** for definition of wage and methods of calculation to determine whether employee has been paid the applicable minimum wage.

Finally, an employer who fires or discriminates against an employee because the employee has complained to the department about unpaid wages or any other provision of the MWA (including record keeping responsibilities) may be subject to criminal prosecution under RCW 49.46.100. The department does not have the authority to assert criminal charges and criminal fines against such employers. A county or city prosecutor must take such action.

Notwithstanding the department's authority to investigate and bring legal action against an employer for violations of RCW 49.46 on behalf of workers, aggrieved workers retain the right to seek private counsel in order to file a civil action against the employer.

H-0539.2

HOUSE BILL 1355

State of Washington 64th Legislature 2015 Regular Session

By Representatives Farrell, Jinkins, Ryu, S. Hunt, Riccelli, McBride, Stanford, Carlyle, Cody, Tharinger, Goodman, Ortiz-Self, Bergquist, Dunshee, Fitzgibbon, Peterson, Moscoso, Appleton, Sells, Pollet, Robinson, Reykdal, Walkinshaw, Wylie, Ormsby, Santos, Hudgins, Tarleton, Sawyer, Moeller, Fey, Lytton, Gregerson, Gregory, Van De Wege, Kirby, Hurst, Kilduff, Sullivan, Kagi, and Springer

Read first time 01/19/15. Referred to Committee on Labor.

AN ACT Relating to increasing the minimum hourly wage to twelve dollars over four years, without creating new exemptions; amending RCW 49.46.020; and providing an effective date.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

Sec. 1. RCW 49.46.020 and 1999 c 1 s 1 are each amended to read as follows:

(1) ((~~Until January 1, 1999, every employer shall pay to each of his or her employees who has reached the age of eighteen years wages at a rate of not less than four dollars and ninety cents per hour.~~

~~(2) Beginning January 1, 1999, and until January 1, 2000, every employer shall pay to each of his or her employees who has reached the age of eighteen years wages at a rate of not less than five dollars and seventy cents per hour.~~

~~(3) Beginning January 1, 2000, and until January 1, 2001, every employer shall pay to each of his or her employees who has reached the age of eighteen years wages at a rate of not less than six dollars and fifty cents per hour.~~

~~(4)~~)) (a) Beginning January 1, 2016, and until January 1, 2017, every employer shall pay to each of his or her employees who has reached the age of eighteen years wages at a rate of not less than ten dollars per hour.

(b) Beginning January 1, 2017, and until January 1, 2018, every employer shall pay to each of his or her employees who has reached the age of eighteen years wages at a rate of not less than ten dollars and fifty cents per hour.

(c) Beginning January 1, 2018, and until January 1, 2019, every employer shall pay to each of his or her employees who has reached the age of eighteen years wages at a rate of not less than eleven dollars per hour.

(d) Beginning January 1, 2019, and until January 1, 2020, every employer shall pay to each of his or her employees who has reached the age of eighteen years wages at a rate of not less than twelve dollars per hour.

(2)(a) Beginning ((~~on~~)) January 1, ((~~2001~~)) 2020, and each following January 1st as set forth under (b) of this subsection, every employer shall pay to each of his or her employees who has reached the age of eighteen years wages at a rate of not less than the amount established under (b) of this subsection.

(b) On September 30, ((~~2000~~)) 2019, and on each following September 30th, the department of labor and industries shall calculate an adjusted minimum wage rate to maintain employee purchasing power by increasing the current year's minimum wage rate by the rate of inflation. The adjusted minimum wage rate shall be calculated to the nearest cent using the consumer price index for urban wage earners and clerical workers, CPI-W, or a successor index, for the twelve months prior to each September 1st as calculated by the United States department of labor. Each adjusted minimum wage rate calculated under this subsection ((~~(4)~~)) (2)(b) takes effect on the following January 1st.

((~~(5)~~)) (3) The director shall by ((~~regulation~~)) rule establish the minimum wage for employees under the age of eighteen years.

NEW SECTION. **Sec. 2.** This act takes effect January 1, 2016.

--- END ---

HB 1355 - H AMD **86**
By Representative Caldier

SCOPE AND OBJECT 03/03/2015

On page 2, after line 30, insert the following:

"NEW SECTION. **Sec. 2.** A new section is added to chapter 49.46 RCW to read as follows:

(1) Employers may pay employees under the age of eighteen either the federal minimum hourly wage rate established in section 206, subsection (a)(1) of the federal fair labor standards act, or no less than the state minimum hourly wage rate established in section 1 of this act.

(2) A public employer that is subject to a collective bargaining agreement may not allow any dues, fees, assessments, or charges to be deducted under a union security provision from the pay of any employee who is receiving a wage rate equal to the federal minimum wage. The employee must receive the same representation and benefits under the collective bargaining agreement as other employees who are members of the employee organization.

NEW SECTION. **Sec. 3.** A new section is added to chapter 41.56 RCW to read as follows:

An employee organization may not deduct any dues, fees, assessments, or charges under a union security provision from the pay of an employee who is being paid a wage rate equal to the federal minimum wage. The employee must receive the same representation and benefits under the collective bargaining agreement as other employees who are members of the employee organization.

NEW SECTION. **Sec. 4.** A new section is added to chapter 41.80 RCW to read as follows:

An employee organization may not deduct any dues, fees, assessments, or charges under a union security provision from the pay of an employee who is being paid a wage rate equal to the federal minimum wage. The employee must receive the same representation and benefits under the collective bargaining agreement as other employees who are members of the employee organization."

Renumber the remaining section and correct the title.

EFFECT: Provides that: (1) employers may pay employees under the age of 18 either the federal minimum hourly wage or no less than the state minimum hourly wage; and (2) a public employer may not allow the deduction of any dues or fees under a union security provision from the pay of a minor employee receiving the federal minimum wage, and the employee must receive the same representation and benefits under the collective bargaining agreement as other employee members.

--- END ---

HB 1355 - H AMD **85**
By Representative Dent

SCOPE AND OBJECT 03/03/2015

On page 2, line 29, after "(3)" insert "(a) The minimum hourly wage rate applicable to individuals employed in agricultural labor shall be the minimum hourly wage rate that is in effect as of December 31, 2015, and must be adjusted as required by (b) of this subsection.

(b) On September 30, 2017, and on each following September 30th, the department of labor and industries shall calculate an adjusted minimum wage rate for individuals employed in agricultural labor, as required in (a) of this subsection. The adjusted minimum wage rate shall be calculated to the nearest cent using the consumer price index for urban wage earners and clerical workers, CPI-W, or a successor index, for the twelve months prior to each September 1st as calculated by the United States department of labor. Each adjusted minimum wage rate calculated under this subsection takes effect on the following January 1st.

(c) For the purposes of this subsection, "agricultural labor" means services performed:

(i) On a farm, in the employ of any person, in connection with the cultivation of the soil, or in connection with raising or harvesting any agricultural or horticultural commodity, including raising, shearing, feeding, caring for, training, and management of livestock, bees, poultry, and furbearing animals and wild life, or in the employ of the owner or tenant or other operator of a farm in connection with the operation, management, conservation, improvement, or maintenance of such farm and its tools and equipment; or

(ii) In packing, packaging, grading, storing, or delivering to storage, or to market or to a carrier for transportation to market,

any agricultural or horticultural commodity if such service is performed as an incident to ordinary farming operations.

(4)"

EFFECT: Provides that the minimum hourly wage increase does not apply to individuals employed in agricultural labor (the rate applicable to those individuals would be the same as current law). Provides a definition of "agricultural labor."

--- END ---

HB 1355 - H AMD **82**
By Representative Haler

SCOPE AND OBJECT 03/03/2015

On page 2, line 29, after "(3)" insert "An employer may meet the applicable hourly minimum wage requirement of this section through wages, tips, and money paid by the employer towards an individual employee's medical benefits plan. For the purposes of this section "tips" means a verifiable sum presented by a customer as a gift or gratuity in recognition of some service performed for the customer by the employee receiving the tip.

(4)"

EFFECT: Allows an employer to meet the minimum hourly wage requirement through wages, tips, and money paid by the employer towards an employee's medical benefits plan. Provides a definition of "tips."

--- END ---

HB 1355 - H AMD **88**
By Representative Klippert

FAILED 03/03/2015

On page 2, line 22, after "by the" strike "rate of inflation" and insert "((~~rate of inflation~~)) average rate of inflation for the previous seven consecutive years"

On page 2, line 25, after "for the" strike "twelve months" and insert "((~~twelve months~~)) seven consecutive years"

EFFECT: Provides that the adjustment of the minimum wage rate for inflation must be based on the average rate of inflation for the previous seven consecutive years (rather than based on the previous year's rate of inflation).

--- END ---

HB 1355 - H AMD **87**
By Representative Magendanz

SCOPE AND OBJECT 03/03/2015

On page 1, line 21, after "hour" insert ", except as provided in section 2 of this act"

On page 2, line 4, after "hour" insert ", except as provided in section 2 of this act"

On page 2, line 8, after "hour" insert ", except as provided in section 2 of this act"

On page 2, line 12, after "hour" insert ", except as provided in section 2 of this act"

On page 2, line 17, after "subsection" insert ", except as provided in section 2 of this act"

On page 2, after line 30, insert the following:

"NEW SECTION. **Sec. 2.** A new section is added to chapter 49.46 RCW to read as follows:

(1) Employers may pay employees who are at least eighteen years old but under the age of twenty-five a training wage as follows:

(a) A wage rate of eighty-five percent of the rate established in section 1 of this act if the trainee employee is working under a training curriculum developed by the employer that meets the minimum criteria established by the department; or

(b) If the employer does not have a curriculum meeting the criteria established by the department, a wage rate of ninety percent of the rate established in section 1 of this act if the employer,

before hiring the trainee employee, provides the department with a job description listing the skills the trainee employee will be learning through his or her employment.

(2) An employer may not pay a trainee employee the training wage established in this section for more than a total of twelve months.

(3) An employer must employ the trainee employee for a minimum period of eighteen consecutive months. If the employer terminates the trainee employee prior to the expiration of the minimum eighteen month period, the employer must pay a civil penalty to the department in the amount of one-half the difference between the wages paid to the trainee employee and the wages that would have been paid to the trainee employee at the rate of the state minimum wage. The civil penalty under this subsection does not apply if the employer terminated the trainee employee for cause, including but not limited to theft or delinquency, or if the trainee employee voluntarily leaves employment before the expiration of the eighteen month period.

(4) A public employer that is subject to a collective bargaining agreement may not allow any dues, fees, assessments, or charges to be deducted under a union security provision from the pay of any trainee employee who is receiving the wage rate established under this section. The employee must receive the same representation and benefits under the collective bargaining agreement as other employees who are members of the employee organization.

(5) The director must establish minimum criteria for curricula for different industries. The director may consult with businesses, industry associations, community and technical colleges, and other entities in establishing minimum criteria for curricula.

NEW SECTION. **Sec. 3.** (1) The joint legislative audit and review committee must conduct a study to determine the effects, over a five year period, of the provisions created under section 2 of this act on the unemployment rate of youth between the ages of eighteen and twenty-five. The joint legislative audit and review committee must

report back to the appropriate committees of the legislature by December 1, 2021.

(2) This section expires January 1, 2021."

Renumber the remaining section accordingly and correct the title.

EFFECT: Allows employers to pay training wages to employees ages 18 to 24 years old at the following rates: (1) 85% of the minimum wage when the trainee is working under a training curriculum established by the employer that meets the criteria of the Department of Labor and Industries; or (2) 90% of the minimum wage if the employer does not have a curriculum but has submitted to the Department a job description listing the skills the trainee will be learning. Requires the Department to establish minimum criteria for training curricula for industries.

Limits the training wage period to 12 months and requires the employer to employ the trainee for a minimum of 18 months. Provides that if the employer terminates the trainee before the 18 month period expires, the employer must pay civil penalties to the Department unless the termination was for cause or the trainee employee voluntarily quit (the civil penalty is an amount equal to half the difference between the wages paid and the wages that would have been paid if the employer paid the state minimum wage rate).

Prohibits public employers who pay training wages from allowing any dues or fees to be deducted from the trainee's pay under a union security provision.

Requires the Joint Legislative Audit and Review Committee to conduct a study of the effects, over five years, of the training wage rate on youth unemployment.

--- END ---

HB 1355 - H AMD **84**
By Representative Manweller

FAILED 03/03/2015

On page 2, line 22, after "inflation." insert "However, if the rate of inflation has decreased, the minimum wage rate may not be adjusted until the inflation rate has increased to more than the rate it was before the decrease."

EFFECT: Provides that, if there has been a decrease in the rate of inflation, the minimum wage rate may not be adjusted until the inflation rate increases to more than the rate was before the decrease.

--- END ---

HB 1355 - H AMD **92**
By Representative Manweller

WITHDRAWN 03/03/2015

On page 2, after line 30, insert the following:

"NEW SECTION. **Sec. 2.** (1) Any charter, ordinance, regulation, rule, or resolution enacted by any city, town, county, or port district regulating the minimum hourly wage rate must apply equally to both unionized and nonunionized employers.

(2) No charter, ordinance, regulation, rule, or resolution enacted by any city, town, county, or port district regulating the minimum hourly wage rate may permit its requirements to be waived, in whole or in part, in collective bargaining.

(3) Any provision of any charter, ordinance, regulation, rule, or resolution enacted before or after the effective date of this section that conflicts with subsections (1) and (2) of this section shall not be adopted or agreed to and is preempted and unenforceable.

NEW SECTION. **Sec. 3.** A new section is added to chapter 35.21 RCW to read as follows:

Section 2 of this act governs the authority of a city or town to regulate private employers and to contract regarding the minimum hourly wage rate.

NEW SECTION. **Sec. 4.** A new section is added to chapter 35A.21 RCW to read as follows:

Section 2 of this act governs the authority of a code city to regulate private employers and to contract regarding the minimum hourly wage rate.

NEW SECTION. **Sec. 5.** A new section is added to chapter 36.01 RCW to read as follows:

Section 2 of this act governs the authority of a county to regulate private employers and to contract regarding the minimum hourly wage rate.

NEW SECTION. **Sec. 6.** A new section is added to chapter 53.08 RCW to read as follows:

Section 2 of this act governs the authority of a port district to regulate private employers and to contract regarding the minimum hourly wage rate."

Renumber the remaining section consecutively and correct the title.

EFFECT: Adds provisions stating that any local government regulation regarding the minimum hourly wage rate must apply equally to both unionized and nonunionized employers, and no such regulation may permit its requirements to be waived by collective bargaining.

--- END ---

HB 1355 - H AMD **99**
By Representative Manweller

SCOPE AND OBJECT 03/03/2015

On page 2, beginning on line 18, after "(b)" strike all material through "30th" on line 19 and insert "((~~On September 30, 2000, and on each following September 30th~~)) Subject to section 2 of this act"

On page 2, beginning on line 25, after "for the" strike all material through "labor" on line 26 and insert "((~~twelve months prior to each September 1st as calculated by the United States department of labor~~)) average rate of inflation for the previous number of years since the last adjustment, as provided under section 2 of this act"

On page 2, after line 30, insert the following:

"NEW SECTION. **Sec. 2.** This section is the minimum wage performance statement for the minimum wage increase created in section 1 of this act. This performance statement is only intended to be used for subsequent evaluation of the minimum wage increase. It is not intended to create a private right of action by any party or be used to determine eligibility for any wage and hour benefits.

(1) It is the legislature's specific public policy objective to increase minimum wages for the purposes of reducing income inequality in the state, as measured by the United States census bureau.

(2) Beginning September 2020, the joint legislative audit and review committee shall conduct a review on whether there has been a rise in income inequality in the state since the effective date of this section. If the review finds that there has been a rise in income inequality, then the department may not adjust the minimum wage rate for inflation, as provided for under section 1 of this act, unless the rise is due to some factor other than the increase in the

minimum wage rate. The minimum wage rate shall not be adjusted until a review conducted by the joint legislative audit and review committee finds that income inequality in the state has not risen, or if it has risen, the rise is due to some factor other than the minimum wage rate.

(b) Beginning September 2025, and every five years thereafter, the joint legislative audit and review committee shall conduct a review on whether income inequality in this state has risen compared to the previous review conducted by the joint legislative audit and review committee. The minimum wage rate may be adjusted for inflation as provided for under section 1 of this act only if the joint legislative audit and review committee finds in its review that income inequality has not risen compared to the last review, or if it has risen, the rise is due to some factor other than the minimum wage increase in section 1 of this act. If the minimum wage rate is adjusted, it must be adjusted by the average rate of inflation for the previous number of years since the last time the minimum wage rate was adjusted for inflation.

(3) In order to obtain the data necessary to perform the review in subsection 2 of this section, the joint legislative audit and review committee shall refer to the most current information available from the United States census bureau's calculated gini coefficient."

Renumber the remaining section consecutively and correct the title.

EFFECT: Adds a performance statement that:

- sets forth the Legislature's public policy objective of reducing income inequality in the state;
- requires the Joint Legislative Audit and Review Committee (JLARC), in 2020, and every five years after, to review whether there has been a rise in income inequality; and
- provides that the minimum wage rate may only be adjusted for inflation when a JLARC review finds that there has not been a rise in income inequality, or if there has been a rise, it is due to some other factor than the minimum wage.

HB 1355 - H AMD **98**
By Representative Manweller

SCOPE AND OBJECT 03/03/2015

On page 2, beginning on line 18, after "(b)" strike all material through "30th" on line 19 and insert "((~~On September 30, 2000, and on each following September 30th~~)) Subject to section 2 of this act"

On page 2, beginning on line 25, after "for the" strike all material through "labor" on line 26 and insert "((~~twelve months prior to each September 1st as calculated by the United States department of labor~~)) average rate of inflation for the previous number of years since the last adjustment, as provided under section 2 of this act"

On page 2, after line 30, insert the following:

"NEW SECTION. **Sec. 2.** This section is the minimum wage performance statement for the minimum wage increase created in section 1 of this act. This performance statement is only intended to be used for subsequent evaluation of the minimum wage increase. It is not intended to create a private right of action by any party or be used to determine eligibility for any wage and hour benefits.

(1) It is the legislature's specific public policy objective to increase minimum wages but not negatively impact the youth in the state by increasing youth unemployment rates. Young people in the state, specifically those between the ages of sixteen and nineteen, rely upon minimum wage jobs to provide them the opportunity to enter into the workforce and gain necessary skills and work ethic.

(2)(a) Beginning September 2020, the joint legislative audit and review committee shall conduct a review on whether the percentage of youth unemployment has increased from the effective date of this section. If the review finds that the youth unemployment has

increased by more than two percent, then the department may not adjust the minimum wage rate for inflation, as provided for under section 1 of this act, unless the increase is due to some factor other than the minimum wage increase in section 1 of this act. The minimum wage rate shall not be adjusted until a review conducted by the joint legislative audit and review committee finds that the percentage of youth unemployment has not increased by more than two percent.

(b) Beginning September 2025, and every five years thereafter, the joint legislative audit and review committee shall conduct a review on whether the percentage of youth unemployment has increased or decreased from the previous review conducted by the joint legislative audit and review committee. The minimum wage rate may be adjusted for inflation as provided for under section 1 of this act only if the joint legislative audit and review committee finds in its review that youth unemployment has not increased from the last review by more than two percent, or if the percentage has increased by more than two percent, the increase is due to some factor other than the minimum wage increase in section 1 of this act. If the minimum wage rate is adjusted, it must be adjusted by the average rate of inflation for the previous number of years since the last time the minimum wage rate was adjusted for inflation.

(3) In order to obtain the data necessary to perform the review in subsection 2 of this section, the joint legislative audit and review committee shall refer to the most current information available from the United States census bureau."

Renumber the remaining section consecutively and correct the title.

EFFECT: Adds a performance statement that:

- sets forth the Legislature's policy objective of increasing the minimum wage without increasing youth unemployment rates;
- requires the Joint Legislative Audit and Review Committee (JLARC), in 2020, and every five years after, to review whether youth unemployment has increased or decreased from the effective date of the bill; and

- provides that the minimum wage rate may only be adjusted for inflation when a JLARC review finds that the youth unemployment rate has not increased by more than 2% from the last review, or if there has been an increase, the increase is due to some other factor than the minimum wage.

--- END ---

HB 1355 - H AMD **97**
By Representative Manweller

SCOPE AND OBJECT 03/03/2015

On page 2, beginning on line 18, after "(b)" strike all material through "30th" on line 19 and insert "((~~On September 30, 2000, and on each following September 30th~~)) Subject to section 2 of this act"

On page 2, beginning on line 25, after "for the" strike all material through "labor" on line 26 and insert "((~~twelve months prior to each September 1st as calculated by the United States department of labor~~)) average rate of inflation for the previous number of years since the last adjustment, as provided under section 2 of this act"

On page 2, after line 30, insert the following:

"NEW SECTION. **Sec. 2.** This section is the minimum wage performance statement for the minimum wage increase created in section 1 of this act. This performance statement is only intended to be used for subsequent evaluation of the minimum wage increase. It is not intended to create a private right of action by any party or be used to determine eligibility for any wage and hour benefits.

(1) It is the legislature's specific public policy objective to increase minimum wages for the purposes of reducing or maintaining the number of Washingtonians at or below the federal poverty level as measured by the United States census bureau.

(2) As of 2012, according to data from the United States census bureau, thirteen and a half percent of Washingtonians were at or below poverty, ranking Washington as nineteenth in the nation with the lowest poverty level.

(3)(a) Beginning September 2020, the joint legislative audit and review committee shall conduct a review on whether the percentage of

Washingtonians at or below the federal poverty level has increased or decreased from the effective date of this section. If the review finds that the percentage of Washingtonians at or below the federal poverty level has increased, then the department may not adjust the minimum wage rate for inflation, as provided for under section 1 of this act, unless the increase is due to some factor other than the minimum wage increase in section 1 of this act. The minimum wage rate shall not be adjusted until a review conducted by the joint legislative audit and review committee finds that the percentage of Washingtonians at or below the federal poverty level has not increased.

(b) Beginning September 2025, and every five years thereafter, the joint legislative audit and review committee shall conduct a review on whether the percentage of Washingtonians at or below the federal poverty level has increased or decreased from the previous review conducted by the joint legislative audit and review committee. The minimum wage rate may be adjusted for inflation as provided for under section 1 of this act only if the joint legislative audit and review committee finds in its review that the percentage of Washingtonians at or below the federal poverty level has not increased from the last review, or if the percentage has increased, the increase is due to some factor other than the minimum wage increase in section 1 of this act. If the minimum wage rate is adjusted, it must be adjusted by the average rate of inflation for the previous number of years since the last time the minimum wage rate was adjusted for inflation.

(4) In order to obtain the data necessary to perform the review in subsection 3 of this section, the joint legislative audit and review committee shall refer to the most current information available from the United States census bureau."

Renumber the remaining section consecutively and correct the title.

EFFECT: Adds a performance statement that:

- sets forth the Legislature's public policy objective of reducing

or maintaining the number of Washingtonians at or below the federal poverty level;

- requires the Joint Legislative Audit and Review Committee (JLARC), in 2020, and every five years after, to review whether the percentage of Washingtonians at or below the poverty level has increased or decreased; and
- provides that the minimum wage rate may only be adjusted for inflation when a JLARC review finds that the percentage of Washingtonians at or below the federal poverty level has not increased from the last review, or if there has been an increase, the increase is due to some other factor than the minimum wage.

--- END ---

HB 1355 - H AMD **96**
By Representative Manweller

SCOPE AND OBJECT 03/03/2015

On page 2, beginning on line 18, after "(b)" strike all material through "30th" on line 19 and insert "((~~On September 30, 2000, and on each following September 30th~~)) Subject to section 2 of this act"

On page 2, beginning on line 25, after "for the" strike all material through "labor" on line 26 and insert "((~~twelve months prior to each September 1st as calculated by the United States department of labor~~)) average rate of inflation for the previous number of years since the last adjustment, as provided under section 2 of this act"

On page 2, after line 30, insert the following:

"NEW SECTION. **Sec. 2.** This section is the minimum wage performance statement for the minimum wage increase created in section 1 of this act. This performance statement is only intended to be used for subsequent evaluation of the minimum wage increase. It is not intended to create a private right of action by any party or be used to determine eligibility for any wage and hour benefits.

(1) It is the legislature's specific public policy objective to increase minimum wages, but not to the detriment of the minority population of the state.

(2) Beginning September 2020, the joint legislative audit and review committee shall conduct a review on whether the minority unemployment rate has increased from the effective date of this section. If the review finds that the minority unemployment rate has increased by more than two percent, then the department may not adjust the minimum wage rate for inflation, as provided for under section 1

of this act, unless the increase is due to some factor other than the minimum wage increase in section 1 of this act. The minimum wage rate shall not be adjusted until a review conducted by the joint legislative audit and review committee finds that the rate of minority unemployment has not increased by more than two percent.

(b) Beginning September 2025, and every five years thereafter, the joint legislative audit and review committee shall conduct a review on whether the rate of minority unemployment has increased or decreased from the previous review conducted by the joint legislative audit and review committee. The minimum wage rate may be adjusted for inflation as provided for under section 1 of this act only if the joint legislative audit and review committee finds in its review that minority unemployment has not increased from the last review by more than two percent, or if the percentage has increased by more than two percent, the increase is due to some factor other than the minimum wage increase in section 1 of this act. If the minimum wage rate is adjusted, it must be adjusted by the average rate of inflation for the previous number of years since the last time the minimum wage rate was adjusted for inflation.

(3) In order to obtain the data necessary to perform the review in subsection 2 of this section, the joint legislative audit and review committee shall refer to the most current information available from the United States census bureau."

Renumber the remaining section consecutively and correct the title.

EFFECT: Adds a performance statement that:

- sets forth the Legislature's public policy objective of increasing the minimum wage but not to the detriment of the minorities in the state;
- requires the Joint Legislative Audit and Review Committee (JLARC), in 2020, and every five years after, to review whether the rate of minority unemployment has increased or decreased; and
- provides that the minimum wage rate may only be adjusted for inflation when a JLARC review finds that the rate of minority

unemployment has not increased by more than two percent from the last review, or if there has been an increase, the increase is due to some other factor than the minimum wage.

--- END ---

HB 1355 - H AMD **81**
By Representative Orcutt

SCOPE AND OBJECT 03/03/2015

On page 2, line 22, after "inflation" insert ", subject to subsection (c) of this section"

On page 2, after line 28, insert the following:

"(c) The minimum wage rate may not be adjusted if the statewide seasonally adjusted average unemployment rate for the previous twelve months is higher than the national seasonally adjusted average unemployment rate. In determining the unemployment rate, the department must use data from the twelve months prior to each September 1st as calculated by the United States department of labor. The department may resume adjusting the minimum wage rate under this section only when the statewide seasonally adjusted average unemployment rate is lower than the national seasonally adjusted average unemployment rate."

EFFECT: Provides that once the minimum hourly wage rate reaches $12, the wage rate may not be adjusted for inflation if the statewide seasonally adjusted average unemployment rate for the previous 12 months is higher than the national seasonally adjusted average unemployment rate, and the Department of Labor and Industries may resume adjusting the wage rate only when the state's unemployment rate is lower than the national rate.

--- END ---

HB 1355 - H AMD **89**
By Representative Vick

NOT ADOPTED 03/03/2015

On page 2, after line 30, insert the following:

"NEW SECTION. **Sec. 2.** A new section is added to chapter 49.46 RCW to read as follows:

(1) The state of Washington hereby occupies and preempts the entire field regarding the minimum hourly wage rate within the boundaries of the state. A city, town, county, or port district may not require, enforce, or otherwise regulate by means of charter, ordinance, regulation, rule, resolution, or contract, including purchase agreement, the minimum hourly wage rate for private employers. Any such provisions or terms shall not be adopted or agreed to and are preempted and unenforceable. The state preemption created in this section does not apply to any charter, ordinance, regulation, rule, or resolution regulating, or any contract, including purchase agreement, regarding the minimum hourly wage rate for private employers that was adopted by a city, town, county, or port district before the effective date of this section.

(2) This section does not impair any provision of a collective bargaining agreement in effect on the effective date of this section.

(3) The preemption created in this section shall be broadly construed.

Sec. 3. RCW 49.46.120 and 1961 ex.s. c 18 s 4 are each amended to read as follows:

This chapter establishes a minimum standard for wages and working conditions of all employees in this state, unless exempted herefrom, and is in addition to and supplementary to any other

federal((~~,~~)) or state((~~, or local~~)) law ((~~or ordinance,~~)) or any rule or regulation issued thereunder. Any standards relating to wages, hours, or other working conditions established by any applicable federal((~~,~~)) or state ((~~, or local~~)) law ((~~or ordinance,~~)) or any rule or regulation issued thereunder, which are more favorable to employees than the minimum standards applicable under this chapter, or any rule or regulation issued hereunder, shall not be affected by this chapter and such other laws, or rules or regulations, shall be in full force and effect and may be enforced as provided by law.

NEW SECTION. **Sec. 4.** A new section is added to chapter 35.21 RCW to read as follows:

Section 2 of this act governs the authority of a city or town to regulate and contract with private employers regarding the minimum hourly wage rate.

NEW SECTION. **Sec. 5.** A new section is added to chapter 35A.21 RCW to read as follows:

Section 2 of this act governs the authority of a code city to regulate and contract with private employers regarding the minimum hourly wage rate.

NEW SECTION. **Sec. 6.** A new section is added to chapter 36.01 RCW to read as follows:

Section 2 of this act governs the authority of a county to regulate and contract with private employers regarding the minimum hourly wage rate.

NEW SECTION. **Sec. 7.** A new section is added to chapter 53.08 RCW to read as follows:

Section 2 of this act governs the authority of a port district to regulate and contract with private employers regarding the minimum hourly wage rate."

Renumber the remaining section consecutively and correct the title.

EFFECT: Preempts local government regulations of and contracts with private employers regarding minimum wage rates, except for regulations enacted and contracts entered into before the effective date of the act.

--- END ---

Multiple Agency Fiscal Note Summary

Bill Number: 1355 HB	**Title:** Minimum hourly wage increase

Estimated Cash Receipts

Agency Name	2015-17		2017-19		2019-21	
	GF- State	Total	GF- State	Total	GF- State	Total
Washington State Health Care Authority	Non-zero but indeterminate cost and/or savings. Please see discussion.					
Department of Social and Health Services	Non-zero but indeterminate cost and/or savings. Please see discussion.					
Employment Security Department	0	(41,700,000)	0	(59,850,000)	0	(19,280,000)
Total $	**0**	**(41,700,000)**	**0**	**(59,850,000)**	**0**	**(19,280,000)**

Estimated Expenditures

Agency Name	2015-17			2017-19			2019-21		
	FTEs	GF-State	Total	FTEs	GF-State	Total	FTEs	GF-State	Total
Washington State Health Care Authority	Non-zero but indeterminate cost and/or savings. Please see discussion.								
Department of Labor and Industries	.0	0	0	.0	0	0	.0	0	0
Department of Social and Health Services	Non-zero but indeterminate cost and/or savings. Please see discussion.								
Employment Security Department	.0	0	0	.0	0	0	.0	0	0
SWF Statewide Fiscal Note - OFM	Non-zero but indeterminate cost and/or savings. Please see discussion.								
Total	**0.0**	**$0**	**$0**	**0.0**	**$0**	**$0**	**0.0**	**$0**	**$0**

Local Gov. Courts *									
Loc School dist-SPI									
Local Gov. Other **	Non-zero but indeterminate cost and/or savings. Please see discussion.								
Local Gov. Total									

Estimated Capital Budget Impact

NONE

Prepared by: Devon Nichols, OFM	**Phone:** (360) 902-0582	**Date Published:** Final 2/10/2015

* See Office of the Administrator for the Courts judicial fiscal note

** See local government fiscal note

FNPID: 39385

FNS029 Multi Agency rollup

Individual State Agency Fiscal Note

Bill Number: 1355 HB	Title: Minimum hourly wage increase	Agency: 107-Wash State Health Care Authority

Part I: Estimates

☐ **No Fiscal Impact**

Estimated Cash Receipts to:

Non-zero but indeterminate cost. Please see discussion.

Estimated Expenditures from:

Non-zero but indeterminate cost. Please see discussion.

Estimated Capital Budget Impact:

NONE

The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.

Check applicable boxes and follow corresponding instructions:

☒ If fiscal impact is greater than $50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.

☐ If fiscal impact is less than $50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).

☐ Capital budget impact, complete Part IV.

☐ Requires new rule making, complete Part V.

Legislative Contact:	Trudes Tango	Phone: 360-786-7384	Date: 01/20/2015
Agency Preparation:	Kate LaBelle	Phone: 360-725-1846	Date: 02/05/2015
Agency Approval:	Carl Yanagida	Phone: 360-725-1033	Date: 02/05/2015
OFM Review:	Danielle Cruver	Phone: (360) 902-0575	Date: 02/06/2015

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Briefly describe by section number, the significant provisions of the bill, and any related workload or policy assumptions, that have revenue or expenditure impact on the responding agency.

See attached narrative

II. B - Cash receipts Impact

Briefly describe and quantify the cash receipts impact of the legislation on the responding agency, identifying the cash receipts provisions by section number and when appropriate the detail of the revenue sources. Briefly describe the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explain how workload assumptions translate into estimates. Distinguish between one time and ongoing functions.

See attached narrative

II. C - Expenditures

Briefly describe the agency expenditures necessary to implement this legislation (or savings resulting from this legislation), identifying by section number the provisions of the legislation that result in the expenditures (or savings). Briefly describe the factual basis of the assumptions and the method by which the expenditure impact is derived. Explain how workload assumptions translate into cost estimates. Distinguish between one time and ongoing functions.

See attached narrative

Part III: Expenditure Detail

Part IV: Capital Budget Impact

NONE

None

Part V: New Rule Making Required

Identify provisions of the measure that require the agency to adopt new administrative rules or repeal/revise existing rules.

None

Bill Number: 1355 HB HCA Request #: 15-19

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

This bill increases the state minimum wage to twelve dollars an hour over a four year time period.

The bill revises the state minimum wage to the following:

- Effective January 1, 2016: $10.00 per hour
- Effective January 1, 2017: $10.50 per hour
- Effective January 1, 2018: $11.00 per hour
- Effective January 1, 2019: $12.00 per hour

Family Medical Adults:

This program has a modified adjusted gross income (MAGI) eligibility threshold of 54 percent FPL. Increasing the state minimum wage may cause some clients currently covered by Family-related MAGI Medicaid to lose eligibility and to become eligible for the New Adult Group. Similarly, this may cause clients presently on MAGI-based Apple Health to exceed the income eligibility limits and become eligible for non-Apple Health coverage through the Health Benefit Exchange. This would likely result in savings for the HCA, however the full impacts will not be realized until 2019 when the minimum wage reaches twelve dollars per hour. Any changes in the federal poverty level (FPL) and eligibility requirements could change the impact to HCA and the Medicaid program. The anticipated caseload population based on no changes to the minimum wage for fiscal year 16 is 166,425.

Newly Eligible Adults:

This program has a MAGI FPL eligibility threshold of 138 percent. This benefit is 100 percent federally funded through 2016; there would be no impact on GF-S if the population receiving this aid changed. The federal match is anticipated to change incrementally starting in 2017 until it reaches ninety percent in 2020; any changes in population size will have a limited effect on state funds due to the small change in federal match rate. Any changes in the federal poverty level (FPL) and eligibility requirements could change the impact to HCA and the Medicaid program. The anticipated caseload population based on no changes to the minimum wage for fiscal year 16 is 480,565.

Pregnant Women:

This eligibility category has a relatively high MAGI FPL threshold of 193 percent. Given this and the dynamic nature of both family composition and labor force participation decisions for these women, it is unlikely that any change in minimum wage likely would produce impacts on eligibility for this population. The anticipated caseload population based on no changes to the minimum wage for fiscal year 16 is 24,784.

Children's Programs:

Children become ineligible for Medicaid above 312 percent FPL under MAGI. Families at that income range are highly unlikely to be impacted by a change in the minimum wage. The anticipated caseload population based on no changes to the minimum wage for fiscal year 16 is 752,727.

Blind/ Disabled:

Persons in this population have extremely low labor force participation rates and are unlikely to be impacted by any changes in the minimum wage. The anticipated caseload population based on no changes to the minimum wage for fiscal year 16 is 151,444.

II. B - Cash Receipts Impact

Indeterminate

II. C - Expenditures

Indeterminate

Part IV: Capital Budget Impact

None

Part V: New Rule Making Required

None

Individual State Agency Fiscal Note

Bill Number: 1355 HB	Title: Minimum hourly wage increase	Agency: 235-Department of Labor and Industries

Part I: Estimates

☒ **No Fiscal Impact**

The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.

Check applicable boxes and follow corresponding instructions:

☐ If fiscal impact is greater than $50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.

☐ If fiscal impact is less than $50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).

☐ Capital budget impact, complete Part IV.

☐ Requires new rule making, complete Part V.

Legislative Contact:	Trudes Tango	Phone: 360-786-7384	Date: 01/20/2015
Agency Preparation:	Gwendolyn M Reed	Phone: 360-902-6992	Date: 01/23/2015
Agency Approval:	Randi Warick	Phone: 360-902-4214	Date: 01/23/2015
OFM Review:	Devon Nichols	Phone: (360) 902-0582	Date: 01/23/2015

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Briefly describe by section number, the significant provisions of the bill, and any related workload or policy assumptions, that have revenue or expenditure impact on the responding agency.

This proposed legislation would incrementally change the minimum wage to $12.00 per hour for employees who have reached the age of eighteen years. The incremental change would take place as follows:

- Jan. 1, 2016 - $10.00 per hour
- Jan. 1, 2017 - $10.50 per hour
- Jan. 1, 2018 - $11.00 per hour
- Jan. 1, 2019 - $12.00 per hour

Beginning September 30, 2020 the adjusted minimum wage rate will be calculated using the consumer price index.

This proposed legislation has no fiscal impact to the department. The increase will have little or no effect on the number of minimum wage complaints the department receives each year and the department currently uses the consumer price index to adjust the minimum wage rate.

II. B - Cash receipts Impact

Briefly describe and quantify the cash receipts impact of the legislation on the responding agency, identifying the cash receipts provisions by section number and when appropriate the detail of the revenue sources. Briefly describe the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explain how workload assumptions translate into estimates. Distinguish between one time and ongoing functions.

None.

II. C - Expenditures

Briefly describe the agency expenditures necessary to implement this legislation (or savings resulting from this legislation), identifying by section number the provisions of the legislation that result in the expenditures (or savings). Briefly describe the factual basis of the assumptions and the method by which the expenditure impact is derived. Explain how workload assumptions translate into cost estimates. Distinguish between one time and ongoing functions.

None.

Part III: Expenditure Detail

Part IV: Capital Budget Impact

NONE

Part V: New Rule Making Required

Identify provisions of the measure that require the agency to adopt new administrative rules or repeal/revise existing rules.

None.

Individual State Agency Fiscal Note

Bill Number: 1355 HB	Title: Minimum hourly wage increase	Agency: 300-Dept of Social and Health Services

Part I: Estimates

☐ **No Fiscal Impact**

Estimated Cash Receipts to:

Non-zero but indeterminate cost. Please see discussion.

Estimated Expenditures from:

Non-zero but indeterminate cost. Please see discussion.

Estimated Capital Budget Impact:

NONE

The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.

Check applicable boxes and follow corresponding instructions:

☒ If fiscal impact is greater than $50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.

☐ If fiscal impact is less than $50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).

☐ Capital budget impact, complete Part IV.

☐ Requires new rule making, complete Part V.

Legislative Contact:	Trudes Tango	Phone: 360-786-7384	Date: 01/20/2015
Agency Preparation:	Bill Jordan	Phone: 360-902-8183	Date: 02/05/2015
Agency Approval:	Dan Winkley	Phone: 360-902-8179	Date: 02/05/2015
OFM Review:	Devon Nichols	Phone: (360) 902-0582	Date: 02/09/2015

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Briefly describe by section number, the significant provisions of the bill, and any related workload or policy assumptions, that have revenue or expenditure impact on the responding agency.

RCW 49.46.020 State law requires that employers covered under the state Minimum Wage Act pay employees' age 18 years or older no less than the state minimum wage rate. The current state minimum wage rate is $9.47 per hour.

House Bill 1355 increases the minimum wage rate from $9.47 per hour to $12 per hour over a four-year period. Rate increases are as follows:

- Effective January 1, 2016: $10.00 per hour
- Effective January 1, 2017: $10.50 per hour
- Effective January 1, 2018: $11.00 per hour
- Effective January 1, 2019: $12.00 per hour

Effective January 1, 2020, and each January 1st hereafter, every employer shall pay each employee age 18 and older wages at a rate of not less than the amount established by the Department of Labor and Industries.

II. B - Cash receipts Impact

Briefly describe and quantify the cash receipts impact of the legislation on the responding agency, identifying the cash receipts provisions by section number and when appropriate the detail of the revenue sources. Briefly describe the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explain how workload assumptions translate into estimates. Distinguish between one time and ongoing functions.

For lidded grants where DSHS cannot earn federal reimbursement for additional costs, it is assumed that GF-State will be needed. For federal funds that can be earned such as Food Stamps, Title 19, Child Support, are based on the DSHS Compensation Impact Model (CIM) funding percentages.

II. C - Expenditures

Briefly describe the agency expenditures necessary to implement this legislation (or savings resulting from this legislation), identifying by section number the provisions of the legislation that result in the expenditures (or savings). Briefly describe the factual basis of the assumptions and the method by which the expenditure impact is derived. Explain how workload assumptions translate into cost estimates. Distinguish between one time and ongoing functions.

The effect of House Bill 1355 on state employees' wages is addressed in the Office of Financial Management statewide fiscal note.

Discussion of the potential fiscal impacts in this indeterminate statewide note is not intended to be exhaustive. The Department of Social and Health Services (DSHS) has attempted to describe the range of impacts in the areas most likely to have potential costs or savings. Although the fiscal impact is indeterminate, the following scenarios provide a reasonable illustration of the potential fiscal impact.

Minimum wage increases are likely to have the following indeterminate impacts on DSHS:

• Temporary Assistance for Needy Families (TANF) caseload impacts at higher incomes will result in some clients losing eligibility due to incomes above maximum income limits;
• Increased expenditures for collectively bargained home-care worker wages; and
• Higher vendor rates as vendors will want to negotiate contracted reimbursement levels.

Temporary Assistance for Needy Families (TANF):

While the fiscal impact of a minimum wage increase on TANF eligibility is indeterminate, the OFM Forecast Division has data that correlate decreases in TANF caseloads to past increases in minimum wage. Absent other changes, including economic conditions and client choices, it
could be assumed that minimum wage increases would result in fewer clients entering the TANF caseload. Based on past changes to client entry in the time following wage increases, updating the Workfirst caseload forecast model suggests the following caseload reductions and
corresponding savings:

TANF Caseload Impact

Minimum Wage	$10/hour	$10.50/hour	$11/hour	$12/hour
Monthly Average Caseload Change	(266)	(1,671)	(3,344)	(5,369)

TANF Fiscal Impact (in thousands)

Minimum Wage	$10/hour	$10.50/hour	$11/hour	$12/hour
Potential GF-State Savings	($1,226)	($7,682)	($15,351)	($24,598)

Key TANF Assumptions:

• Based on OFM TANF Caseload Forecast models and per-caps as of November 2014.
• The OFM TANF Caseload Forecast model measures and uses the relationship between WorkFirst entry rates and minimum wages between 2003 and 2014 to predict future entries. If the relationship between minimum wage and future entries changes after the minimum wage reaches the level that precludes most adults from entering TANF while working, this relationship could change.
• Qualifications for TANF are based on income and family size.
• TANF household income must be less than 58 percent of the federal poverty level (FPL) in 2014. This percentage will drop over time as FPL Levels are increased for inflation.
• Many clients are unemployed, so a minimum wage increase would not impact income.

Aging and Long-Term Support and Developmental Disability:

DSHS' Home and Community Services (HCS) Division promotes, plans, develops and pays for long-term care services responsive to the needs of persons with disabilities and the elderly with priority attention to low income individuals and families. SEIU Healthcare 775NW is recognized as the sole and exclusive representative for all individual providers of in-home care services as defined in RCW 74.39A.240 and under the provisions of 74.39A.270.

Currently, under the 2013-2015 collective bargaining agreement for SEIU Healthcare 775NW, wages range from $10.53 to $14.34 for services from a contracted individual provider providing services to children and adults assessed by DSHS and found eligible for Medicaid Personal Care (MPC). The SEIU Healthcare 775NW's proposed agreement for 2015-2017, includes phased-in changes to wage scale resulting in a starting wage of $12.00 per hour and a top wage of $15.60 per hour. Due to parity requirements these wage increases also impact Medicaid contracted Home Care Agencies.

With regard to the wage differences provided in HB 1355, both the current and proposed CBA for SEIU Healthcare 775NW already meet or exceed the amount envisioned by the bill through 2018, as well as for the Medicaid contracted Home Care Agencies. There is a small possibility that beginning at September 30, 2019, if the wages in the CBA (and due to parity) do not increase, the wage rate provided for in the bill will be implemented for this population of workers.

Vendor Rates:

It is possible additional funding to support increased vendor rates will be necessary. The indeterminate impact on vendors is due to the fact that many DSHS vendor contracts are paid on a performance-based deliverable basis or are paid at an agreed-upon rate for a unit of service. Under these payment arrangements, DSHS collects total expenditure information for the number of units of service provided. DSHS does not collect information about the number of employees hired by vendors, the number of hours worked by vendor employees or the hourly wage paid by vendors.

Given that DSHS does not collect data on employees hired by vendors, it is unknown how many vendors may be impacted by this bill. It is expected that some vendors will be impacted by increasing the state minimum wage more than others. Vendors whose subsidies are impacted by a minimum wage increase will see an increase in operation costs; and in turn, will likely want to negotiate higher reimbursement levels.

To illustrate the potential vendor rate fiscal impact, the DSHS Vendor Rate Model was updated to reflect the DSHS 2015-17 Biennial budget – Agency Request – Carry Forward Level.

The attached worksheet entitled, FN HB 1355 Vendor Rate, illustrates the potential state and federal costs of raising vendor rates due to increasing the state minimum wage over four years, beginning on July 1, 2016. The table shows the potential impact by fiscal year assuming a percentage (1%, 3%, 5%, and 10%) increase in the first year and then a one percent increase each fiscal year thereafter, of all vendors will be impacted by the increasing minimum wage. For example, the estimated cost shown in fiscal year 2016 is $167,441,000, assuming all vendors increase their rates by five percent increase to meet the required $10 per hour minimum wage.

Part III: Expenditure Detail

Part IV: Capital Budget Impact

NONE

Part V: New Rule Making Required

Identify provisions of the measure that require the agency to adopt new administrative rules or repeal/revise existing rules.

Department of Social and Health Services
2015 Legislative Session
Fiscal Note - HB-1355

VENDOR RATE INCREASE FY 16 TO FY 19

2015 - 17 Biennial Impact	101,209,000	236,240,000	371,277,000	708,854,000
	Base Amount			
Fiscal Year 2016	3,348,778,460			
Fiscal Year 2017	3,369,154,780			
Fiscal Year 2018	3,382,266,460			
Fiscal Year 2019	3,436,875,780			
	1%	**3%**	**5%**	**10%**
Fiscal Year 2016	33,488,000	100,463,000	167,441,000	334,878,000
Fiscal Year 2017	67,721,000	135,777,000	203,836,000	373,976,000
Fiscal Year 2018	102,090,000	170,828,000	239,566,000	411,406,000
Fiscal Year 2019	136,803,000	206,227,000	275,653,000	449,212,000
FY 16				
GF-State	23,562,000	70,685,000	117,809,000	235,615,000
Federal	9,926,000	29,778,000	49,632,000	99,263,000
Total	33,488,000	100,463,000	167,441,000	334,878,000
FY 17				
GF-State	47,595,000	95,426,000	143,258,000	262,834,000
Federal	20,126,000	40,351,000	60,578,000	111,142,000
Total	67,721,000	135,777,000	203,836,000	373,976,000
FY 18				
GF-State	71,749,000	120,059,000	168,368,000	289,141,000
Federal	30,341,000	50,769,000	71,198,000	122,265,000
Total	102,090,000	170,828,000	239,566,000	411,406,000
FY 19				
GF-State	96,145,000	144,939,000	193,732,000	315,711,000
Federal	40,658,000	61,288,000	81,921,000	133,501,000
Total	136,803,000	206,227,000	275,653,000	449,212,000

The State and Federal funding splits are based on the DSHS Compensation Impact Model for the 2015-17 Biennium.

The Fiscal Year 2016 amounts reflect a 1, 3, 5 and 10% increase. Fiscal Year 17 to 19 reflect an additional 1% increase

Individual State Agency Fiscal Note

Bill Number: 1355 HB	Title: Minimum hourly wage increase	Agency: 540-Employment Security Department

Part I: Estimates

☐ **No Fiscal Impact**

Estimated Cash Receipts to:

ACCOUNT	FY 2016	FY 2017	2015-17	2017-19	2019-21
Unemployment Compensation Federal Employees' Benefit Payment Account-Non-Appropriated 622-6	(17,850,000)	(23,850,000)	(41,700,000)	(59,850,000)	(19,280,000)
Total $	(17,850,000)	(23,850,000)	(41,700,000)	(59,850,000)	(19,280,000)

Estimated Expenditures from:

NONE

Estimated Capital Budget Impact:

NONE

The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.

Check applicable boxes and follow corresponding instructions:

☒ If fiscal impact is greater than $50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.

☐ If fiscal impact is less than $50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).

☐ Capital budget impact, complete Part IV.

☐ Requires new rule making, complete Part V.

Legislative Contact:	Trudes Tango	Phone: 360-786-7384	Date: 01/20/2015
Agency Preparation:	Joyce Miller	Phone: 360 902 9251	Date: 01/30/2015
Agency Approval:	Trent Howard	Phone: 360 902 9425	Date: 01/30/2015
OFM Review:	Devon Nichols	Phone: (360) 902-0582	Date: 02/05/2015

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Briefly describe by section number, the significant provisions of the bill, and any related workload or policy assumptions, that have revenue or expenditure impact on the responding agency.

Section 1 amends RCW 49.46.020 stating beginning January 1, 2106, and until January 1, 2017 every employer shall pay to each of his or her employees who have reached the age of eighteen years wages at a rate of not less than ten dollars per hour. Beginning January 1, 2017 until January 1, 2018 a rate of not less than ten dollar and fifty cents per hour, beginning January 1, 2018 until January 2019 a rate of not less than eleven dollars per hour and beginning January 1, 2019 until January 1, 2020 a rate of not less than twelve dollars per hour.

Section 2 adds a new section stating the effective date of the act is January 1, 2016.

II. B - Cash receipts Impact

Briefly describe and quantify the cash receipts impact of the legislation on the responding agency, identifying the cash receipts provisions by section number and when appropriate the detail of the revenue sources. Briefly describe the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explain how workload assumptions translate into estimates. Distinguish between one time and ongoing functions.

The information below is calculated on a calendar year basis.

The impact to the number of jobs and additional wage is as follows:

	Wage Data from 2013			
Hourly Wage Range	$9.01-$10.00	$10.00-$10.49	$10.50-$10.99	$11.00-$11.99
Number of Jobs	109,510	68,604	52,061	97,023
Additional Wages	$ 2,185,198,711	$ 1,460,406,882	$ 1,167,618,828	$ 2,322,177,892

The impact to the Unemployment Trust fund is as follows:

	Unemployment Trust Fund Impact-in Millions	
	UI Benefit Payments	UI Tax Collections
2016	$13.8	$-
2017	$23.2	$1.3
2018	$31.1	$5.3
2019	$45.9	$11.8
2020	$47.1	$21.4

Unemployment benefit would increase by $13.8 million in 2016 and would continue to increase up to $47.1 million by 2020. Tax collections would increase by $1.3 million in 2017 and would continue to increase up to $21.4 million in 2020.

II. C - Expenditures

Briefly describe the agency expenditures necessary to implement this legislation (or savings resulting from this legislation), identifying by section number the provisions of the legislation that result in the expenditures (or savings). Briefly describe the factual basis of the assumptions and the method by which the expenditure impact is derived. Explain how workload assumptions translate into cost estimates. Distinguish between one time and ongoing functions.

Part III: Expenditure Detail

III. A - Expenditures by Object Or Purpose

NONE

Part IV: Capital Budget Impact

NONE

Part V: New Rule Making Required

Identify provisions of the measure that require the agency to adopt new administrative rules or repeal/revise existing rules.

LOCAL GOVERNMENT FISCAL NOTE

Department of Commerce

Bill Number: 1355 HB	**Title:** Minimum hourly wage increase

Part I: Jurisdiction-Location, type or status of political subdivision defines range of fiscal impacts.

Legislation Impacts:

[X] Cities: Increased labor costs for less than 1 percent of positions

[X] Counties: Same as above

[X] Special Districts: Same as above

[ ] Specific jurisdictions only:

[ ] Variance occurs due to:

Part II: Estimates

[ ] No fiscal impacts.

[ ] Expenditures represent one-time costs:

[ ] Legislation provides local option:

[X] Key variables cannot be estimated with certainty at this time: Specific number of positions below the increased thresholds

Estimated revenue impacts to:

None

Estimated expenditure impacts to:

Indeterminate Impact

Part III: Preparation and Approval

Fiscal Note Analyst: Darleen Muhly	Phone: (360) 725-5030	Date: 02/02/2015
Leg. Committee Contact: Trudes Tango	Phone: 360-786-7384	Date: 01/20/2015
Agency Approval: Steve Salmi	Phone: (360) 725 5034	Date: 02/02/2015
OFM Review: Devon Nichols	Phone: (360) 902-0582	Date: 02/03/2015

Part IV: Analysis

A. SUMMARY OF BILL

Provide a clear, succinct description of the bill with an emphasis on how it impacts local government.

This bill would increase the minimum wage for all employees of at least 18 years old as follows:
-- $10 per hour in calendar year 2016
-- $10.50 per hour in calendar year 2017
-- $11 per hour in calendar year 2018
-- $12 per hour in calendar year 2019
-- Thereafter the existing provisions for adjusting the rate annually based on CPI would apply.

B. SUMMARY OF EXPENDITURE IMPACTS

Briefly describe and quantify the expenditure impacts of the legislation on local governments, identifying the expenditure provisions by section number, and when appropriate, the detail of expenditures. Delineate between city, county and special district impacts.

The impact to local government salaries is indeterminate because the number of local government positions under the increased pay threshold is unknown. However, it is assumed that this legislation would only impact less than 1 percent of local government payroll.

According to the Association of Washington Cities, this legislation would likely only impact the salaries of a small number of city employees, with most of those being in seasonal or part-time positions, such as seasonal concession workers. For illustrative purposes, we examined employee salaries reported by the Tacoma News Tribune for City of Tacoma employees in 2013. Out of 3,798 entries, only 70 (less than 2 percent) were identified as earning less than $12 per hour (five Pages paid $11.09 per hour, 20 Occupational Interns Skilled paid $11.47, and 45 Laborers paid $11.92 per hour). All of these, based on 2013 gross pay, appeared to work part-time with most working less than half time. Therefore, they represent less than 1 percent of total City of Tacoma FTEs.

The Washington Association of County Officials also assumed that the number of impacted positions would be small and most of those affected positions would be short-term in nature such as temporary election help in auditors' offices.

It is assumed that overall special districts would have similar impacts as cities and counties. However some districts, such as rural library districts, may have higher impacts than others.

C. SUMMARY OF REVENUE IMPACTS

Briefly describe and quantify the revenue impacts of the legislation on local governments, identifying the revenue provisions by section number, and when appropriate, the detail of revenue sources. Delineate between city, county and special district impacts.

None

SOURCES:
Association of Washington Cities
Washington Association of County Officials
Tacoma News Tribute, City of Tacoma Employees Salary Database,
http://www.thenewstribune.com/tacoma-employee-salaries/?appSession=926351749183615&RecordID=&PageID=2&PrevPageID=2&CPIpage=4&CPIsortType=desc&CPIorderBy=Hourly&cbJumpTo=159

Individual State Agency Fiscal Note

Bill Number: 1355 HB	Title: Minimum hourly wage increase	Agency: SWF-SWF Statewide Fiscal Note - OFM

Part I: Estimates

☐ **No Fiscal Impact**

Estimated Cash Receipts to:

NONE

Estimated Expenditures from:

Non-zero but indeterminate cost. Please see discussion.

Estimated Capital Budget Impact:

NONE

The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.

Check applicable boxes and follow corresponding instructions:

☒ If fiscal impact is greater than $50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.

☐ If fiscal impact is less than $50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).

☐ Capital budget impact, complete Part IV.

☐ Requires new rule making, complete Part V.

Legislative Contact:	Trudes Tango	Phone: 360-786-7384	Date: 01/20/2015
Agency Preparation:	Stephanie Lidren	Phone: (360) 902-3056	Date: 02/06/2015
Agency Approval:	Aaron Butcher	Phone: (360) 902-5555	Date: 02/06/2015
OFM Review:	Devon Nichols	Phone: (360) 902-0582	Date: 02/06/2015

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Briefly describe by section number, the significant provisions of the bill, and any related workload or policy assumptions, that have revenue or expenditure impact on the responding agency.

State law requires that employers covered under the state Minimum Wage Act pay employees age 18 years or older no less than the state minimum wage rate. The current state minimum wage rate is $9.47 per hour.

House Bill 1355 increases the minimum wage rate from $9.47 per hour to $12 per hour. Rate increases are as follows:

- Effective January 1, 2016: $10 per hour
- Effective January 1, 2017: $10.50 per hour
- Effective January 1, 2018: $11 per hour
- Effective January 1, 2019: $12 per hour

Effective January 1, 2020, and each January thereafter, the state minimum wage rate must be adjusted for inflation. The Department of Labor and Industries calculates the adjusted rate using the Consumer Price Index (CPI) for Urban Wage Earners and Clerical Workers (CPI-W), for the 12 months prior to each September 1.

II. B - Cash receipts Impact

Briefly describe and quantify the cash receipts impact of the legislation on the responding agency, identifying the cash receipts provisions by section number and when appropriate the detail of the revenue sources. Briefly describe the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explain how workload assumptions translate into estimates. Distinguish between one time and ongoing functions.

House Bill 1355 has no cash receipts impact for the populations covered in this fiscal note.

II. C - Expenditures

Briefly describe the agency expenditures necessary to implement this legislation (or savings resulting from this legislation), identifying by section number the provisions of the legislation that result in the expenditures (or savings). Briefly describe the factual basis of the assumptions and the method by which the expenditure impact is derived. Explain how workload assumptions translate into cost estimates. Distinguish between one time and ongoing functions.

To illustrate the potential fiscal impact of a minimum wage increase to $12 per hour over the given time period, a rough magnitude of fiscal impact is provided for the:

1) State Employment Workforce
2) K-12 Education Workforce

The following fiscal estimates do not include the potential impact of compression, a general rise in wages when the minimum wage increases.

1) State Employee Workforce

Classified Employees:

Some state jobs in the classified service have salary ranges with beginning steps below the proposed future minimum wages, but all current salary ranges include steps with hourly pay of more than $12. Since pay for these employees changes as they progress through the steps of their salary range, the number of employees who might be affected by a change in the state minimum wage is not fixed but changes as employees reach different steps in their salary ranges and as employees enter and leave job classes.

Other Workers:

There are others, with pay not determined by a salary grid, who may earn less than $12 an hour. Some could be affected by this proposal, but others hold positions that are exempt from the state minimum wage law, such as volunteers (members of boards and commissions, service corps workers) and elected officials. We found relatively few employees outside of higher education who would be affected by the proposed change.

Students:
Student workers at institutions of higher education appear most likely to be affected by changes in the state's minimum wage, but they also are the group for which the least data is available. Additionally, some but not all remuneration received by students is exempt from the state's minimum wage, and we were unable to distinguish between exempt and non-exempt payments in many cases.

Data and Limitations:
For this fiscal note, we used data in the Compensation Impact Model as well as information gathered from state institutions. Both are static 'snapshots' of a continually changing population of workers.

Further, estimating the cost of an increase in minimum wage requires data on hourly wages; state budget data are based on monthly pay amounts. To use monthly data, it was necessary to estimate an hourly pay rate, based on monthly pay and on the "percent time worked" reported.

The percent time worked information was missing or apparently erroneous in many instances, particularly in data for non-classified employees. Institutions were asked to provide additional data or cost estimates, but not all were able to do so in the time available. Cost estimates (attached charts reflect dollars in thousands).

2) K-12 Education – Potential Local District Impact

School Districts:
State allocations for school district staffing reflect higher hourly rates than the new minimum wages identified in this bill, based on calculations for the numbers of state-funded positions provided. It is unknown if the Legislature would choose to increase state allocations in the event of higher minimum wages. School districts employ staff at wages that differ from state funding formula allocations. Districts paying wages at less than the minimum wages identified in this legislation will experience higher costs associated with the increase in minimum wages. The estimated costs attached include both wages and applicable taxes and benefits. As with higher education data, these estimates are based on a snapshot (preliminary S-275 reporting for school year 2014-15) of currently reported employee data from school districts.

Discussion of the potential fiscal impacts in this indeterminate statewide note is not intended to be exhaustive. OFM has attempted to describe the range of impacts in the areas of state and local government most likely to have potential costs or savings. Please see the individual state agency fiscal notes for the potential fiscal impacts for the following:
1) Department of Social and Health Services
2) Health Care Authority
3) Department of Labor and Industries
4) Employment Security Department

Part III: Expenditure Detail

Part IV: Capital Budget Impact

NONE

Part V: New Rule Making Required

Identify provisions of the measure that require the agency to adopt new administrative rules or repeal/revise existing rules.

PRELIMINARY Cost Estimate (State Workers) - Increase in State Minimum Wage
12 Month Cost - including Pension, Social Security, and Medicare Contributions

	FY1			FY2			FY3			FY4		
Dollars in Thousands	*GF-S*	*Other*	*Total*	*GF-S*	*Other*	*Total*	*GF-S*	*Other*	*Total*	*GF-S*	*Other*	*Total*
Non-Student Employees												
State Agencies - Non-Higher Education	$ 2	$ -	$ 2	$ 5	$ -	$ 5	$ 6	$ -	$ 6	$ 10	$ 25	$ 35
Higher Education** - 4 Year*	$ 3	$ 40	$ 43	$ 26	$ 296	$ 322	$ 45	$ 503	$ 548	$ 88	$ 957	$ 1,044
Higher Education - 2 Year*	$ 103	$ 196	$ 299	$ 280	$ 565	$ 844	$ 442	$ 946	$1,388	$ 769	$1,727	$ 2,496
Preliminary Totals	**$ 108**	**$ 236**	**$ 344**	**$ 311**	**$ 861**	**$ 1,171**	**$ 493**	**$ 1,449**	**$1,942**	**$ 867**	**$2,708**	**$ 3,575**
Student Employees	**$ 169**	**$ 652**	**$1,035**	**$ 561**	**$2,559**	**$ 3,120**	**$ 1,062**	**$ 4,231**	**$5,293**	**$ 2,237**	**$7,247**	**$ 9,484**
Student and Non-Student Employees	**$ 277**	**$ 889**	**$1,380**	**$ 872**	**$3,419**	**$ 4,291**	**$ 1,555**	**$ 5,679**	**$7,235**	**$ 3,104**	**$9,956**	**$ 13,060**

**Tuition (149-6) is included in the higher education Other Fund numbers at the level in the Governor's Maintenance Level Budget*
*** data for TESC is not yet available, and data for CWU has not yet been reviewed by the institution*

School District Cost of HB 1355*

Calendar Year	2016	2017	2018	2019	2020	2021
Salary Increase by Calendar Year	$195,509	$60,984	$99,637	$478,926	$209,131	$217,174
Classified Fringe Benefits at 22.72%	$44,420	$13,856	$22,638	$108,812	$47,515	$49,342
Estimated CPI (Applied to Salary Only)	n/a	n/a	n/a	n/a	2.20%	2.20%
Total Calendar Year Cost	**$239,929**	**$74,840**	**$122,275**	**$587,739**	**$256,645**	**$266,516**
State Fiscal Year Cost	**$119,965**	**$157,384**	**$98,557**	**$355,007**	**$422,192**	**$261,581**

**Preliminary S-275 data shows 1,214 indiviuals (439.4 FTE) are paid a wage less than $12 per hour.*

Washington State
House of Representatives
Office of Program Research

BILL ANALYSIS

Labor Committee

HB 1355

Brief Description: Increasing the minimum hourly wage to twelve dollars over four years.

Sponsors: Representatives Farrell, Jinkins, Ryu, S. Hunt, Riccelli, McBride, Stanford, Carlyle, Cody, Tharinger, Goodman, Ortiz-Self, Bergquist, Dunshee, Fitzgibbon, Peterson, Moscoso, Appleton, Sells, Pollet, Robinson, Reykdal, Walkinshaw, Wylie, Ormsby, Santos, Hudgins, Tarleton, Sawyer, Moeller, Fey, Lytton, Gregerson, Gregory, Van De Wege, Kirby, Hurst, Kilduff, Sullivan, Kagi and Springer.

Brief Summary of Bill

- Increases the state minimum hourly wage to $12 over the course of four years.

Hearing Date: 1/26/15

Staff: Trudes Tango (786-7384).

Background:

Employers covered under the state Minimum Wage Act are required to pay employees age 18 or older at least the minimum hourly wage. Each year, the minimum hourly wage rate is adjusted for inflation using the consumer price index for urban wage earners and clerical workers (CPI-W) index.

The Department of Labor and Industries (Department) has authority to set the minimum wage rate for employees under the age of 18. The rules require that employees who are 16 and 17 years old must be paid at least the same minimum wage as adults. Employees under the age of 16 must be paid at least 85 percent of the minimum wage rate.

The current state minimum hourly wage is $9.47. The federal minimum wage is $7.25.

Summary of Bill:

This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.

The state minimum hourly wage is increased to $12 over the course of four years, as follows:

- Beginning January 1, 2016: $10.00
- Beginning January 1, 2017: $10.50
- Beginning January 1, 2018: $11.00
- Beginning January 1, 2019: $12.00
- Beginning January 1, 2020, and thereafter: rate adjusted for inflation.

Appropriation: None.

Fiscal Note: Requested on January 20, 2015.

Effective Date: The bill takes effect on January 1, 2016.

HOUSE BILL REPORT
HB 1355

As Passed House:
March 3, 2015

Title: An act relating to increasing the minimum hourly wage to twelve dollars over four years, without creating new exemptions.

Brief Description: Increasing the minimum hourly wage to twelve dollars over four years.

Sponsors: Representatives Farrell, Jinkins, Ryu, S. Hunt, Riccelli, McBride, Stanford, Carlyle, Cody, Tharinger, Goodman, Ortiz-Self, Bergquist, Dunshee, Fitzgibbon, Peterson, Moscoso, Appleton, Sells, Pollet, Robinson, Reykdal, Walkinshaw, Wylie, Ormsby, Santos, Hudgins, Tarleton, Sawyer, Moeller, Fey, Lytton, Gregerson, Gregory, Van De Wege, Kirby, Hurst, Kilduff, Sullivan, Kagi and Springer.

Brief History:
Committee Activity:
Labor: 1/26/15, 1/29/15 [DP];
Appropriations: 2/16/15, 2/19/15 [DP].
Floor Activity:
Passed House: 3/3/15, 51-46.

Brief Summary of Bill

- Increases the state minimum hourly wage to $12 over the course of four years.

HOUSE COMMITTEE ON LABOR

Majority Report: Do pass. Signed by 4 members: Representatives Sells, Chair; Gregerson, Vice Chair; Moeller and Ormsby.

Minority Report: Do not pass. Signed by 3 members: Representatives Manweller, Ranking Minority Member; G. Hunt, Assistant Ranking Minority Member; McCabe.

Staff: Trudes Tango (786-7384).

HOUSE COMMITTEE ON APPROPRIATIONS

This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.

Majority Report: Do pass. Signed by 18 members: Representatives Hunter, Chair; Ormsby, Vice Chair; Carlyle, Cody, Dunshee, Hansen, Hudgins, S. Hunt, Jinkins, Kagi, Lytton, Pettigrew, Sawyer, Senn, Springer, Sullivan, Tharinger and Walkinshaw.

Minority Report: Do not pass. Signed by 12 members: Representatives Chandler, Ranking Minority Member; Wilcox, Assistant Ranking Minority Member; Buys, Condotta, Dent, Haler, G. Hunt, MacEwen, Magendanz, Schmick, Taylor and Van Werven.

Minority Report: Without recommendation. Signed by 3 members: Representatives Parker, Assistant Ranking Minority Member; Fagan and Stokesbary.

Staff: David Pringle (786-7310).

Background:

Employers covered under the state Minimum Wage Act are required to pay employees age 18 or older at least the minimum hourly wage. Each year, the minimum hourly wage rate is adjusted for inflation using the consumer price index for urban wage earners and clerical workers (CPI-W) index.

The Department of Labor and Industries (Department) has authority to set the minimum wage rate for employees under the age of 18. The rules require that employees who are 16 and 17 years old must be paid at least the same minimum wage as adults. Employees under the age of 16 must be paid at least 85 percent of the minimum wage rate.

The current state minimum hourly wage is $9.47. The federal minimum wage is $7.25.

Summary of Bill:

The state minimum hourly wage is increased to $12 over the course of four years, as follows:

- beginning January 1, 2016 - $10.00;
- beginning January 1, 2017 - $10.50;
- beginning January 1, 2018 - $11.00;
- beginning January 1, 2019 - $12.00;
- beginning January 1, 2020; and
- thereafter: rate adjusted for inflation.

Appropriation: None.

Fiscal Note: Available.

Effective Date: The bill takes effect on January 1, 2016.

Staff Summary of Public Testimony (Labor):

(In support) If a person works full time, he or she should be able to pay basic necessities like rent and food, but today people making minimum wage still have to rely on government assistance to get by. When money is tight, people become marginalized in the community.

Increasing the minimum wage makes the local community healthier and benefits local businesses. There are costs to businesses, but the benefits outweigh the costs. Giving people dignity and more money will not hurt businesses; it will create healthy communities where everyone can succeed. Retaining employees is critical for a business. The phase-in of the increase is a responsible approach and makes it easier for small businesses. Minimum wage workers cannot afford to support themselves and pay debts. Raising the wage to $12 is a good step. In the 1980s, minimum wage had enough buying power, but that is not so in today's dollars. Raising the minimum wage would mean about $350 more in earnings per month for workers. That could make a difference for people living on the edge and relying on government services. Service workers, who are usually the minimum wage workers, are an invisible class and are not valued.

(Opposed) Businesses depend on having a consistent and level playing field when operating in the state. Washington has the highest minimum wage in the country and raising it will have real costs to small businesses. Those costs will end up being passed on to vendors and suppliers. There is only so much a business can pass on to consumers. When small businesses close in communities, those businesses don't return. Seattle may have raised its minimum wage, but outside of Seattle the economic recovery is very slow. Employers offer great benefits, like health insurance, and those benefits should be considered in the minimum wage. Raising the minimum wage could increase youth unemployment, making it harder for youth to get their first job or any job. Wage increases should be tied to increases in education and skills. Benefits and tips should be counted or else employers may not be able to offer those benefits and the increase in wages may end up not improving the employees' standard of living. Restaurants operate on less than a 5 percent profit margin. The restaurant industry would be impacted negatively. Small grocery stores would not be able to compete with national chain grocers that are able to more easily absorb the costs because of the volume of their business. Increasing the minimum wage for employees also means increasing the amount of taxes the employer must pay. Raising the minimum wage would increase the cost and complexity of the agricultural industry.

Staff Summary of Public Testimony (Appropriations):

(In support) If a person works hard, and works full-time, the current minimum wage will only provide about $1,600, and that is not enough for basic needs. This bill helps those at the very bottom of the economic ladder. Eighty-five percent of those earning the minimum wage are over age 18, so it is wrong to characterize minimum wage as a training wage. This minimum wage increase is good for the economy. Evidence supports that a wage boost like this is spent in the economy immediately, and will have no impact on employment levels. This change will also reduce inequalities, and move families just over the poverty line. Some Walmart employees are not paid right for the work they perform. Sick leave and wages have been stolen. Overtime has not been paid. Walmart has fired employees. Some Macy's holiday temporary employees, for over a 3-month period, only make $800 gross per month. Some people would like to see the minimum wage raised so workers can support themselves and their families. Mental health workers are also low-wage workers. The minimum must go up so staff can be retained to protect vulnerable populations. In 1961 the $1.61 minimum wage bought 20 chocolate bars. Today the same hour of minimum wage work wouldn't buy nearly so many–it has not kept up. So many people who support this bill cannot afford to take time off to come here and testify. After years of being considered "entry level," some

decide to open their own businesses, but businesses won't survive if neighbors can't use the services. This bill is about dignity and doing the right thing. Please support people having the bare necessities after working hard all day. This bill is like "trickle-up" economics: give more to those at the bottom, and they can spend more at local businesses. Being at this hearing is costing some people their daily wages. At $10 per hour, and it is hard to buy enough food to keep families with kids healthy. Some parents skip meals, and have to limit what their kids eat. The changes in this bill could give people almost $100 more per month and help workers provide more for their kids and maybe save a little. This is a challenge– Washington already has shown that you can raise poverty wages without destroying businesses. Some workers barely make ends meet, and can't begin to pay student loans. This probably doesn't this represent the values of our state. Some working students, support increasing the minimum wage to $12, but eventually increasing it to $15. We should be working to live, not living to work. Poverty is still on the rise in Washington. Living on the minimum wage is stressful, and makes it difficult to earn enough to feed one's own self. Maintaining grades is impossible because of the long hours that must be support one's own self. A women owned a deli and had 3 employees. She provided them sick leave, and because she treated them well, when she fell ill they helped her out. This is a sensible proposal that gets people closer to a living wage. The restaurant industry is expected to grow at 10 percent per year, but many workers live below the poverty line. Restaurant workers use food stamps at twice the rate of the rest of the population, which is ironic for food servers. More income during working years means more money available during retirement as an alternative to state support.

(Opposed) The independent grocers have small profit margins, and this minimum wage increase will hurt them; a lot of businesses will just cease to exist. What will the cost be to the state? A possible $235 million vendor rate increase just in the first year? Also, concerns about the impact on the Unemployment Insurance Trust Fund are raised by the fiscal note. The private sector impact of this bill is not reflected in the fiscal note at all. Statements about no impact to the private sector seem inconsistent with the impacts to the state illustrated in the fiscal note. Casino employees work for hourly wages plus tips. When the wages are raised for the lowest paid workers, those above them must go up too. At about 100 employees per casino location, there is little flexibility and the price of a $1 chip cannot go up.

Persons Testifying (Labor): (In support) Representative Farrell, prime sponsor; Luke Bridges, Working Washington; Dan Olmstead, Poverty Bay Coffee; Tiffany Turner, Adrift Hotel; Sarajane Siegfried, King County Democrats; Laura Waite and Don Orange, Main Street Alliance; Spencer Baldwin; Nathan Ward; Jessica Field; and Isel Solis.

(Opposed) Robert Battles, Association of Washington Business; Jasmine Donovan, Dicks Drive-In; JoReen Brinkman, Subway Restaurant; Robert Blue, Shining Ocean Incorporated; Bruce Beckett and Bob Mandell, Washington Restaurant Association; Scott Dilley, Washington Farm Bureau; Kelly Chambers, Visiting Angels Home Care; Patrick Conner, National Federation of Independent Business; and Carolyn Logue, Washington Food Industry Association.

Persons Testifying (Appropriations): (In support) Representative Farrell, prime sponsor; Lori Pfingst, Budget Policy Center; Marilyn Watkins, Economic Opportunity Institute;

Andrea Schmitt, Columbia Legal Services; Gerry Paladan; Wendy Brown; Jesse Inman, Downtown Emergency Services Center; Kyong Berry; Don Orange, Hoesly Eco Auto; Laura Waite, Jay's Professional Auto; Dan Olmstead, Poverty Bay Coffee Company; Lilia Montes; Samuel Stubbins; Liz Atkinson-Pattinson; Klayson Braga; Kristen Rowe Finkbiener, MomsRising; Joan Lankford; Anne Guerrein; Bianca Bailey; Autumn Brown; Michelle Thomas, Housing Action Fund; Juanita Maestas; Alex Hur, Statewide Poverty Action; Rachel Dehn, Restaurant Opportunity Center; and Michael Warren, Puget Sound Advocates for Retirement Action.

(Opposed) Mark Johnson, Washington Retail Association; Carolyn Logue, Washington Food Industry; Bob Battles, Association of Washington Business; and Dolores Chiechi, Recreational Gaming Association.

Persons Signed In To Testify But Not Testifying (Labor): Monique Trudnowsia, Adriatic Grill; and Jolinda Stephens, Unitarian Universalist Voices for Justice.

Persons Signed In To Testify But Not Testifying (Appropriations): None.

SENATE BILL REPORT
HB 1355

As of March 31, 2015

Title: An act relating to increasing the minimum hourly wage to twelve dollars over four years, without creating new exemptions.

Brief Description: Increasing the minimum hourly wage to twelve dollars over four years.

Sponsors: Representatives Farrell, Jinkins, Ryu, S. Hunt, Riccelli, McBride, Stanford, Carlyle, Cody, Tharinger, Goodman, Ortiz-Self, Bergquist, Dunshee, Fitzgibbon, Peterson, Moscoso, Appleton, Sells, Pollet, Robinson, Reykdal, Walkinshaw, Wylie, Ormsby, Santos, Hudgins, Tarleton, Sawyer, Moeller, Fey, Lytton, Gregerson, Gregory, Van De Wege, Kirby, Hurst, Kilduff, Sullivan, Kagi and Springer.

Brief History: Passed House: 3/03/15, 51-46.
Committee Activity: Commerce & Labor: 3/30/15.

SENATE COMMITTEE ON COMMERCE & LABOR

Staff: Richard Rodger (786-7461)

Background: Employers covered under the state Minimum Wage Act are required to pay employees age 18 or older at least the minimum hourly wage. Each year the minimum hourly wage rate is adjusted for inflation using the consumer price index for urban wage earners and clerical workers (CPI-W) index.

The Department of Labor and Industries has authority to set the minimum wage rate for employees under the age of 18. The rules require that employees who are 16 and 17 years of age be paid at least the same minimum wage as adults. Employees under the age of 16 must be paid at least 85 percent of the minimum wage rate.

The current state minimum hourly wage is $9.47. The federal minimum wage is $7.25.

Summary of Bill: The state minimum hourly wage is increased to $12 over the course of four years, as follows:

- beginning January 1, 2016 – $10.00;
- beginning January 1, 2017 – $10.50;
- beginning January 1, 2018 – $11.00;
- beginning January 1, 2019 – $12.00; and

This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.

- beginning January 1, 2020, and thereafter, the rate is adjusted for inflation.

Appropriation: None.

Fiscal Note: Available.

Committee/Commission/Task Force Created: No.

Effective Date: The bill takes effect on January 1, 2016.

Staff Summary of Public Testimony: PRO: The success of small businesses depends on how much consumers have in their pocket. In the state, 500,000 workers will benefit from this bill by the time it is fully implemented. It will provide $350 per month in added wages for a minimum wage worker; which is a life-changing wage. Increasing the minimum wage is supported by 2600 small businesses. It is not possible to support a family on the current wage and this bill is a start, but it is not enough. Real world evidence shows that increased minimum wages benefit the economy and have no impact on employment. Fourteen states raised their minimum wage in 2014. The $12 wage is the minimum necessary to provide self-sufficiency and reward human activity. Low-wage workers are the basis of our economy. A great deal of these workers are over age 30, single mothers, and support families. We need a livable wage of $15 per hour. Our customers pay for our services with wages, salaries, or social security, not profits and dividends. Minimum wages have gone up six times over the same period costs of everything else have gone up 20 times. The Economic Policy Institute report found that between 1979–2012, income for the bottom 99 percent in Washington went down 3.4 percent, while the top 1 percent's income went up 188.5 percent.

CON: We provide our workers with many benefits such as health care, scholarships, and others that when combined would exceed the $15 per hour straight wage. We can raise the minimum wage that saves local jobs and upgrades their education and skills. A $12 wage will make it difficult for at-risk youth to get jobs. An economic impact study shows that increased costs reduces flexibility for small businesses and that 16,000 jobs will be lost in Washington with passage of this bill. A $12 wage would take all of our profits and we can't raise prices because our customer would just go across to Idaho where their costs are lower with a $7.25 wage, plus a tip credit. Every time the minimum wage goes up, we have to raise the wages for all our employees to maintain the differential they deserve. As wages go up, costs just go up to take away the wage increase. We can't hire entry-level youth at these wages and the jobs will go to people who are age 21. Sixteen year olds are just learning the soft skills of work and shouldn't be paid $12 per hour. The bill needs some compromise for tipped employees, and then to be passed to avoid an initiative establishing even a higher wage. The bill fails to take into account the true costs of additional fees and benefits paid by employers for health care, sick leave, retirement, and bonuses. There needs to be consideration of teen wages and training wages. We already have an indexed minimum wage that is supposed to solve these problems. International competition in agriculture makes it impossible to pass these costs along.

Persons Testifying: PRO: Representative Farrell, prime sponsor; Jolinda Stephens, WA State Unitarian Universalist Voices for Justice; Teague Crenshaw, Associated Students of

Bellevue College, Vice President of Legislative Affairs; Melantha Jenkins, Associated Student Government President; Marilyn Watkins, Economic Opportunity Institute; Lori Pfingst, Budget and Policy Center; Michael Ramos, Church Council of Greater Seattle; Tiffany Turner, Main Street Alliance, business owner; Lily Montes, Service Employees International Union (SEIU) 775; Demetrius Bolden, Safeway employee, United Food and Commercial Workers (UFCW) 21 member; Liz Atkinson-Pattinson, Nick Powell, Olive Garden worker, Working WA; Don Orange, Dan Olmstead, Main Street Alliance, small business owners; Phil Anderson, home care worker, SEIU 775; Tali Weitzman, Taco Bell employee, Working WA; Samantha Chase, Haggen employee, UFCW 21 member.

CON: Patrick Connor, National Federation of Independent Business, WA; Jasmine Donavan, Dicks Drive In; JoReen Brinkman, JCB Hospitality; Robert Bleu, Shining Ocean; Madeline White, Merle Norman Cosmetics; Don Stolz, Stolz NW Grocery Stores; Victor Mena, Recreational Gaming Assn.; Tracey Larsen, owner, Pacific Dairy Queen; Carolyn Logue, WA Food Industry Assn.; Bob Battles, Assn. of WA Business; Scott Dilley, WA Farm Bureau.

Persons Signed in to Testify But Not Testifying: No one.

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Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties

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MINIMUM WAGE EFFECTS ACROSS STATE BORDERS: ESTIMATES USING CONTIGUOUS COUNTIES

Arindrajit Dube, T. William Lester, and Michael Reich*

Abstract—We use policy discontinuities at state borders to identify the effects of minimum wages on earnings and employment in restaurants and other low-wage sectors. Our approach generalizes the case study method by considering all local differences in minimum wage policies between 1990 and 2006. We compare all contiguous county-pairs in the United States that straddle a state border and find no adverse employment effects. We show that traditional approaches that do not account for local economic conditions tend to produce spurious negative effects due to spatial heterogeneities in employment trends that are unrelated to minimum wage policies. Our findings are robust to allowing for long-term effects of minimum wage changes.

I. Introduction

THE minimum wage literature in the United States can be characterized by two different methodological approaches. Traditional national-level studies use all cross-state variation in minimum wages over time to estimate effects (Neumark & Wascher, 1992, 2007). In contrast, case studies typically compare adjoining local areas with different minimum wages around the time of a policy change. Examples of such case studies include comparisons of New Jersey and Pennsylvania (Card & Krueger, 1994, 2000) and San Francisco and neighboring areas (Dube, Naidu, & Reich, 2007). On balance, case studies have tended to find small or no disemployment effects. Traditional national-level studies, however, have produced a more mixed verdict, with a greater propensity to find negative results.

This paper assesses the differing identifying assumptions of the two approaches within a common framework and shows that both approaches may generate misleading results: each approach fails to account for unobserved heterogeneity in employment growth, but for different reasons. Similar to individual case studies, we use policy discontinuities at state borders to identify the effect of minimum wages, using only variation in minimum wages within each of these cross-state pairs. In particular, we compare all contiguous county-pairs in the United States that are located on opposite sides of a state border.[1] By considering all such pairs, this paper generalizes the case study approach by using all local differences in minimum wages in the United States over sixteen and a half years. Our primary focus is on restaurants, since they are the most intensive users of minimum wage workers, but we also examine other low-wage industries, and we use county-level data on earnings and employment from the Quarterly Census of Employment and Wages (QCEW) between 1990 and 2006.

We also estimate traditional specifications with only panel and time period fixed effects, which use all cross-state variations in minimum wages over time. We find that traditional fixed-effects specifications in most national studies exhibit a strong downward bias resulting from the presence of unobserved heterogeneity in employment growth for less skilled workers. We show that this heterogeneity is spatial in nature. We also show that in the presence of such spatial heterogeneity, the precision of the individual case study estimates is overstated. By essentially pooling all such local comparisons and allowing for spatial autocorrelation, we address the dual problems of omitted variables bias and bias in the estimated standard errors.

This research advances the current literature in four ways. First, we present improved estimates of minimum wage effects using local identification based on contiguous country pairs and compare these estimates to national-level estimates using traditional fixed-effects specifications. Both local and traditional estimates show strong and similar positive effects of minimum wages on restaurant earnings, but the local estimates of employment effects are indistinguishable from 0 and rule out minimum wage elasticities more negative than -0.147 at the 90% level or -0.178 at the 95% level. Unlike individual case studies to date, we show that our results are robust to cross-border spillovers, which could occur if restaurant wages and employment in border counties respond to minimum wage hikes across the border.

In contrast to the local estimates, traditional estimates using only panel and time period fixed effects produce negative employment elasticities of -0.176 or greater in magnitude. The difference between these two sets of findings has important welfare implications. The traditional fixed-effects estimates imply a labor demand elasticity close to -1 (around -0.787), which suggests that minimum wage increases do not raise the aggregate earnings of affected workers very much. In contrast, our local estimate using contiguous county rules out, at the 95% level, labor demand elasticities more negative than -0.482, suggesting that the minimum wage increases substantially raise total earnings at these jobs.

Second, we provide a way to reconcile the conflicting results. Our results indicate that the negative employment effects in national-level studies reflect spatial heterogeneity

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[1] State border discontinuities have also been used in other contexts, for example, by Holmes (1998) and Huang (2008).

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and improper construction of control groups. We find that in the traditional fixed-effects specification, employment levels and trends are negative prior to the minimum wage increase. In contrast, the levels and trends are close to 0 for our local specification, which provides evidence that contiguous counties are valid controls. Consistent with this finding, when we include state-level linear trends or use only within–census division or within–metropolitan area variation in the minimum wage, the national-level employment elasticities come close to 0 or even positive.

Third, we consider and reject several other explanations for the divergent findings. We rule out the possibility of anticipation or lagged effects of minimum wage increases—a concern raised by the typically short window used in case studies. We use distributed lags covering a 6-year window around the minimum wage change and find that for our local specification, employment is stable both prior to and after the minimum wage increase. We obtain similar results when we extend our analysis to accommodation and food services, and retail. Our local estimates for the broader low-wage industry categories of accommodation and food services and retail also show no disemployment effects. Hence, the lack of an employment effect is not a phenomenon restricted to restaurants. Overall, the weight of the evidence clearly points to an omitted variables bias in national-level estimates due to spatial heterogeneity, which is effectively controlled for by our local estimates.

Finally, in the presence of spatial autocorrelation, the reported standard errors from the individual case studies usually overstate their precision. As we show in this paper, the odds of obtaining a large positive or negative elasticity from a single case study is nontrivial. This result establishes the importance of pooling across individual case studies to obtain more reliable inference, a point made in earlier papers.

The rest of the paper is organized as follows. Section II briefly reviews the literature, with a focus on identifying assumptions. Section III describes our data and how we construct our samples, while section IV presents our empirical strategy and main results. Section V examines the robustness of our findings and extends our results to other low-wage industries, Section VI provides our conclusions.

II. Related Literature

The vast U.S. minimum wage literature was thoroughly reviewed by Brown (1999). On the most contentious issue of employment effects, studies since Brown's review article continue to obtain conflicting findings (for example, Neumark & Wascher, 2007; Dube et al., 2007). In discussing this literature, we highlight what to us is the most critical aspect of prior research: the key divide in the minimum wage literature is along methodological lines—between local case studies and traditional national-level approaches that use all cross-state variations. Our reading of the literature suggests that this difference in methods may account for much of the difference in results.

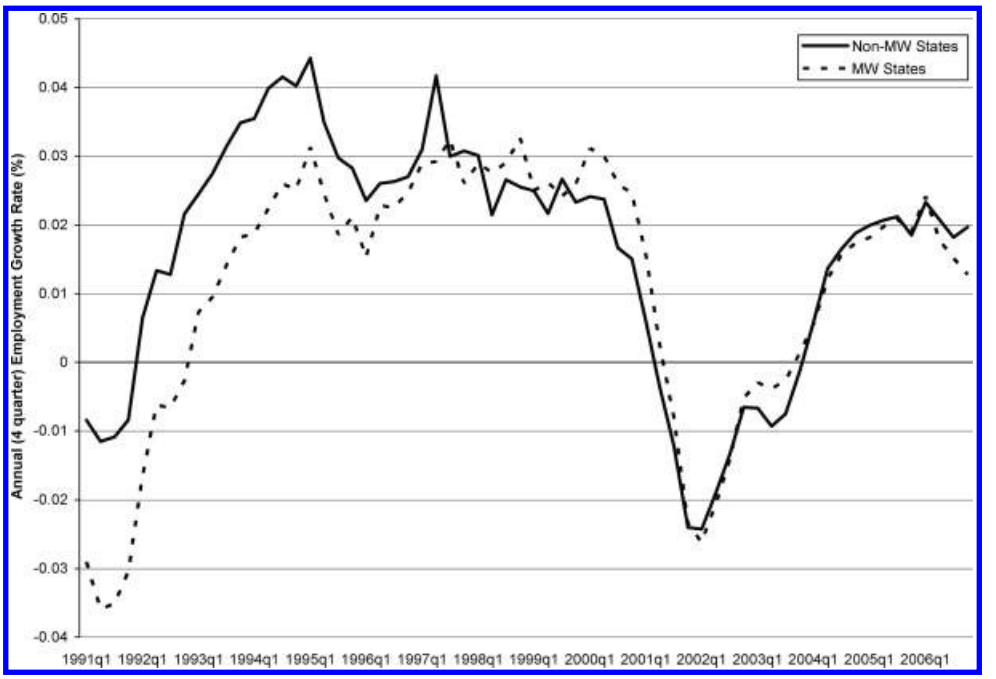
Local case studies typically use fast food chain restaurant data obtained from employers. The restaurant industry is of special interest because it is both the largest and the most intensive user of minimum wage workers. Studies focusing on the restaurant industry are arguably comparable to studies of teen employment, as the incidence of minimum wage workers is similar among both groups, and many of the teens earning the minimum wage are employed in this sector. Card and Krueger (1994, 2000) and Neumark and Wascher (2000) use case studies of fast food restaurant chains in New Jersey and Pennsylvania to construct local comparisons. Card and Krueger (1994) find a positive effect of the minimum wage on employment. However, using administrative payroll data from Unemployment Insurance (ES202) records, Card and Krueger (2000) do not detect any significant effects of the 1992 New Jersey statewide minimum wage increase on restaurant employment. Moreover, they obtain similar findings when the 1996–1997 federal increases eliminated the New Jersey–Pennsylvania differential. Neumark and Wascher (2000) find a negative effect using payroll data provided by restaurants in those two states.

A more recent study (Dube et al., 2007) compares restaurants in San Francisco and the adjacent East Bay before and after implementation of a citywide San Francisco minimum wage in 2004 that raised the minimum from $6.75 to $8.50, with further increases indexed annually to local inflation. Considering both full-service and fast food restaurants, Dube et al. do not find any significant effects of the minimum wage increase on employment or hours.[2] As with the other case studies, however, their data contain a limited before-and-after window. Consequently they cannot address whether minimum wage effects occur with a longer lag. Equally important, individual case studies are susceptible to overstating the precision of the estimates of the minimum wage effect, as they treat individual firm-level observations as being independent (they do not account for spatial autocorrelation). The bias in the reported standard errors is exacerbated by the homogeneity of minimum wages within the treatment and control areas (a point made in Donald & Lang, 2007, and more generally in Moulton, 1990).

Most traditional national-level panel studies use data from the CPS and cross-state variation in minimum wages to identify employment effects. These studies tend to focus on employment effects among teens. Neumark and Wascher (1992) obtain significant negative effects of minimum wages on employment of teenagers, with an estimated elasticity of -0.14. Neumark and Wascher (2007) extend their previous analysis, focusing on the post-1996 period and including state-level linear trends as controls, which their

[2] They do find a shift from part-time to full-time jobs, and a large increase in worker tenure, and an increase in price among fast food restaurants.

FIGURE 1.—ANNUAL EMPLOYMENT GROWTH RATE, MINIMUM WAGE STATES VERSUS NON–MINIMUM WAGE STATES



Source: QCEW.

Annual private sector employment growth rates calculated on a four-quarter basis (for example, 1991Q1 is compared to 1990Q1). Minimum wage states are the seventeen states plus the District of Columbia that had a minimum wage above the federal level in 2005. These states are Alaska, California, Connecticut, Delaware, Florida, Hawaii, Illinois, Maine, Massachusetts, Minnesota, New Jersey, New York, Oregon, Rhode Island, Vermont, Washington, and Wisconsin.

specification tests find cannot be excluded. They obtain mixed results, with negative effects only for minority teenagers, with results varying substantially depending on groups and specifications.[3]

In our view, traditional panel studies do not control adequately for heterogeneity in employment growth. A state fixed effect will control for level differences between states, but both minimum wages and overall employment growth vary substantially over time and space (see figure 1). As recently as 2004, no state in the South had a state minimum wage. Yet the South has been growing faster than the rest of the nation, for reasons entirely unrelated to the absence of state-based minimum wages. Figure 1 illustrates this point more generally by displaying year-over-year employment growth rates for the seventeen states with a minimum wage higher than the federal level in 2005 and for all the other states.

Figure 1 also shows that spatial heterogeneity has a time-varying component. Considering the seventeen states (plus Washington, D.C.) that had a minimum wage above the federal level in 2005, average employment growth in these states was consistently lower than employment growth in the rest of the country between 1991 and 1996. These two groups then had virtually identical growth between 1996 and 2006. Since overall employment growth is not plausibly affected by minimum wage variation, we are observing time-varying differences in the underlying characteristics of the states.

By itself, heterogeneity in overall employment growth may not appear to be a problem, since most estimates control for overall employment trends. Nonetheless, using states with very different overall employment growth as controls is problematic. The presence of such heterogeneity in overall employment suggests that controls for low-wage employment using extrapolation, as is the case using traditional fixed-effects estimates, may be inadequate. Our results indicate that this is indeed the case.[4]

Including state-level linear trends (as in Neumark & Wascher, 2007) does not adequately address the problem, since the estimated trends may themselves be affected by minimum wages. Whether inclusion of these linear trends corrects for unobserved heterogeneity in employment prospects, or whether they absorb low-frequency variation in the minimum wage cannot be answered within such a framework.[5] While we report estimates with state-level trends as additional specifications, our local estimates do not rely on such parametric assumptions.

To summarize, a major question for the recent minimum wage literature concerns whether the differing findings result

[3] Orrenius and Zavodny (2008) use the CPS and also find negative effects on teens.

[4] Other heterogeneities may arise from correlations of minimum wage changes with differential costs of living, regulatory effects on local housing markets, and variations in regional and local business cycle patterns and adjustments.

[5] Indeed, in Neumark and Wascher (2007), the measured disemployment effects for teenagers as a whole become insignificant once state-level linear trends are included.

from a lack of adequate controls for unobserved heterogeneity in most national panel estimates, the lack of sufficient lag time in the case studies, or the overstatement of precision of estimates in the local case studies. As we show in this paper, the key factor is the first: unobserved heterogeneity contaminates the existing estimates that use national variation. And this heterogeneity has a distinct spatial component.

III. Data Sources and Construction of Samples

In this section we discuss why we chose restaurants as the primary industry to study minimum wage effects and a description of our data set and sample construction.

A. Choice of Industry

Restaurants employ a large fraction of all minimum wage workers. In 2006, they employed 29.9% of all workers paid within 10% of the state or federal minimum wage, making restaurants the single largest employer of minimum wage workers at the three-digit industry level (authors' analysis of the Current Population Survey from 2006). Restaurants are also the most intensive users of minimum wage workers, with 33% of restaurant workers earning within 10% of minimum wage at the three-digit level. No other industry has such high intensity of use of minimum wage workers. Given the prevalence of low-wage workers in this sector, changes in minimum wage laws will have more bite for restaurants than for businesses in other industries.

Given our focus on comparing neighboring counties, a focus on restaurants allows us to consider a much larger set of counties than if we considered other industries employing minimum wage workers, as many of these counties do not have firms in these industries.

Finally, studying restaurants also has the advantage of comparability to studies using the CPS that are focused on teens. The proportion of workers near or at the minimum wage is similar among all restaurant workers and all teenage workers, and many teenage minimum wage workers are employed in restaurants. The similarity of coverage rates makes the minimum wage elasticities for the two groups comparable, with the caveat that the elasticities of substitution for these two groups may vary. At the same time, focusing on restaurants allows us to better compare our results with previous case study research, which also were limited to restaurants.[6]

Although our primary focus is on restaurants, we also present results for the accommodation and food services sector (a broader category than restaurants) and for the retail sector. Finally, as a counterfactual exercise, we present results for manufacturing, an industry whose workforce includes very few minimum wage workers. This industry's wages and employment should not be affected by minimum wage changes.

B. Data Sources

Our research design is built on the importance of making comparisons among local economic areas that are contiguous and similar, except for having different minimum wages. The Current Population Survey (CPS) is not well suited for this purpose due to small sample size and the lack of local identifiers. The best data set with employment and earnings information at the county-level is the Quarterly Census of Employment and Wages (QCEW), which provides quarterly county-level payroll data by detailed industry.[7] The data set is based on ES-202 filings that every establishment is required to submit quarterly for the purpose of calculating payroll taxes related to unemployment insurance. Since 98% of workers are covered by unemployment insurance, the QCEW constitutes a near-census of employment and earnings.[8] We construct a panel of quarterly observations of county-level employment and earnings for Full Service Restaurants (NAICS 7221) and Limited Service Restaurants (NAICS 7222). The full sample frame consists of data from the first quarter of 1990 through the second quarter of 2006 (66 quarters).[9] BLS releases employment and wage data for restaurants for all 66 quarters (the balanced panel) for 1,380 of the 3,109 counties in our 48 states (we exclude Alaska and Hawaii, as they do not border other states).[10]

Our two primary outcome measures are average earnings and total employment of restaurant workers. Our earnings measure is the average rate of pay for restaurant workers. BLS divides the total restaurant payroll in each county in a given quarter by the total restaurant employment level in each county for that quarter, and then reports the average weekly earnings on a quarterly basis. The QCEW does not measure hours worked. In section IVD, we partly address the possibility of hours reduction by comparing the magnitude of our estimates on weekly earnings to what would be expected given the proportion of workers earning minimum wage in the absence of any hours adjustments.

[6] By including all restaurants, both limited service and full service, we incorporate any substitution that might occur among differentially affected components of the industry. Neumark (2006) suggests that take-out stores, such as pizza parlors, might be most affected by a minimum wage increase, thereby buffering effects on fast food restaurants, for which demand may rise relative to take-out shops. By including all restaurants, our analysis accounts for any such intra-restaurant substitution. Moreover, the closest substitute to restaurants consists of food (prepared or unprepared) purchased in supermarkets; this industry has a much lower incidence of minimum wage workers, ruling out such substitution effects.

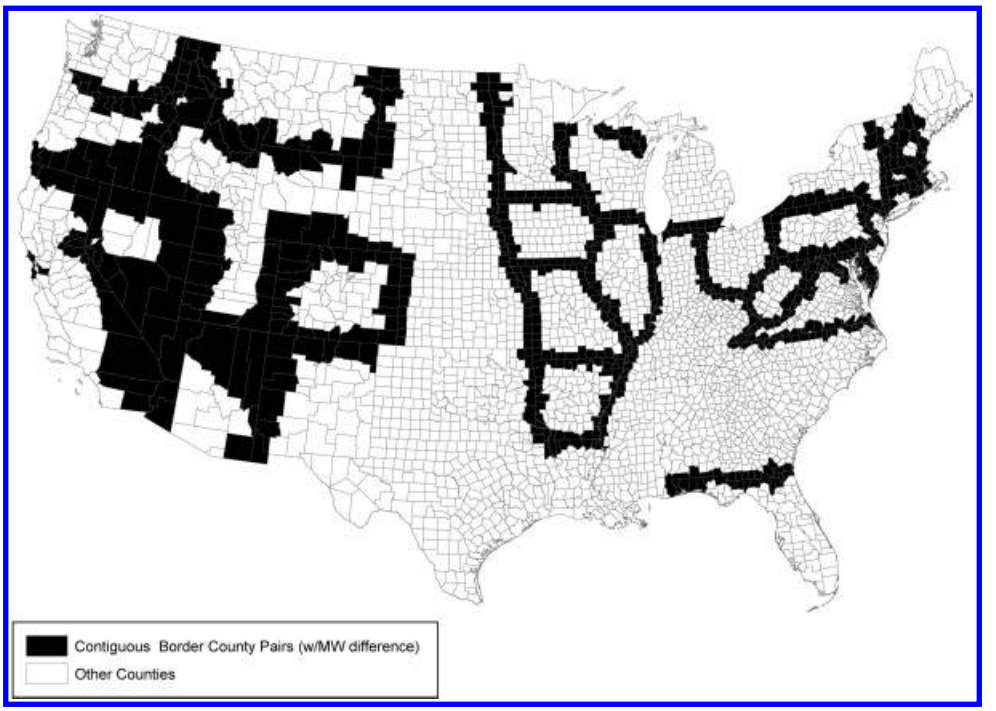
[7] County Business Patterns (CBP) constitutes an alternative data source. In section VB, we discuss the shortcomings of the CBP data set for our purposes and also provide estimates using this data set as a robustness check on our key results.

[8] The 2% who are not covered are primarily certain agricultural, domestic, railroad, and religious workers.

[9] BLS began using the NAICS-based industry classification system in 2001; data are available on a reconstructed NAICS basis (rather than SIC) back to 1990.

[10] Section VC reports the results including counties with partial reporting. Results for this unbalanced panel were virtually the same.

FIGURE 2.—CONTIGUOUS BORDER COUNTY-PAIRS IN THE UNITED STATES WITH A MINIMUM WAGE DIFFERENTIAL, 1990–2006Q2



We merge information on the state (or local) and federal minimum wage in effect in each quarter from 1990q1 to 2006q2 into our quarterly panel of county-level employment and earnings. During the sample period, the federal minimum wage changed in 1991–1992 and again in 1996–1997. The number of states with a minimum wage above the federal level ranged from 3 in 1990 to 32 in 2006.

C. *Sample Construction*

Our analysis uses two distinct samples: a sample of all counties and a sample of contiguous border county-pairs. In section IVB, where we present our empirical specification comparing contiguous border counties, we explain the need for the latter sample in greater detail. Our replication of more traditional specifications uses the full set of counties with balanced panels. This all counties (AC) sample consists of 1,381 out of the 3,081 counties in the United States. The number of counties with a balanced panel of reported data yields a national sample of 91,080 observations.

The second sample consists of all the contiguous county-pairs that straddle a state boundary and have continuous data available for all 66 quarters.[11] We refer to this sample as the contiguous border county-pair (CBCP) sample. The QCEW provides data by detailed industry only for counties with enough establishments in that industry to protect confidentiality. Among the 3,108 counties in the mainland United States, 1,139 lie along a state border. We have a full (66 quarters) set of restaurant data for 504 border counties. This yields 316 distinct county-pairs, although we keep unpaired border counties with full information in our border sample as well. Among these, 337 counties and 288 county-pairs had a minimum wage differential at some point in our sample period.[12] Figure 2 displays the location of these counties on a map of the United States. Since we consider all contiguous county-pairs, an individual county will have p replicates in our data set if it is part of p cross-state pairs.[13]

Table 1 provides descriptive statistics for the two samples. Comparing the AC sample (column 1) to the CBCP sample (column 2), we find that they are quite similar in terms of population, density, employment levels, and average earnings.

D. *Contiguous Border Counties as Controls*

Contiguous border counties represent good control groups for estimating minimum wage effects if there are substantial differences in treatment intensity within cross-state county-pairs, and a county is more similar to its cross-state counterpart than to a randomly chosen county. In contrast, panel and period fixed-effects models used in the national-

[11] As we report below, this exclusion has virtually no impact on our results.

[12] We also use variation in minimum wage levels within metropolitan statistical areas, which occur when the official boundaries of a metropolitan area span two or more states. We use the OMB's 2003 definition of metropolitan areas. Of the 361 core-based statistical areas defined as metropolitan, 24 cross state lines. See note 16 for a full list of cross-state metropolitan areas.

[13] The issue of multiple observations per county is addressed by the way we construct our standard errors. See section IVC.

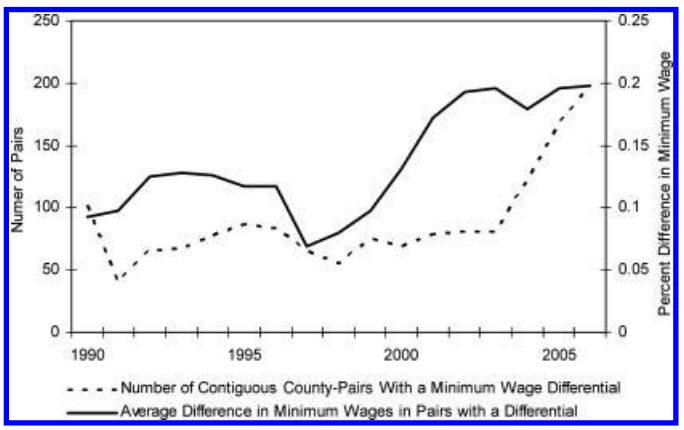
TABLE 1.—DESCRIPTIVE STATISTICS

	(1) All-County Sample		(2) Contiguous Border County-Pair Sample	
	Mean	s.d.	Mean	s.d.
Population, 2000	180,982	423,425	167,956	297,750
Population density, 2000	465	2,553	556	3,335
Land area (square miles)	1,107	1,761	1,380	2,470
Overall private employment	32,179	119,363	32,185	101,318
Restaurant employment	4,508	10,521	4,185	7,809
Restaurant average weekly earnings ($)	171	44	172	46
Accommodation and food services employment	13,226	32,334	12,865	26,862
Accommodation and food services average weekly earnings ($)	273	64	273	67
Retail employment	4,703	14,642	4,543	11,545
Retail average weekly earnings ($)	306	77	304	77
Manufacturing employment	6,608	20,323	6,312	14,100
Manufacturing average weekly earnings ($)	573	202	576	204
Minimum wage	4.84	0.66	4.84	0.67
Number of counties	1,380		504	
Number of county-pairs	NA		318	
Number of states	48		48	

Sample means are reported for all counties in the United States and for all contiguous border county-pairs with a full balanced panel of observations. Standard deviations are reported next to each mean. Weekly earnings and minimum wages are in nominal dollars.

Sources: *QCEW*; U.S Department of Labor, Employment Standards Administration, Wage and Hour Division. U.S. Bureau of the Census, *2000 Census*.

FIGURE 3.—NUMBER OF COUNTY-PAIRS WITH MINIMUM WAGE DIFFERENTIAL AND AVERAGE MINIMUM WAGE DIFFERENTIAL



level estimates implicitly assume that one county in the United States is as good a control as any other.

Figure 3 displays for each year the number of counties that are part of a contiguous county-pair that exhibits a minimum wage differential, as well as the average minimum wage gap in each year. The number of counties that provide the variation to identify a minimum wage effect is sizable, with an increase after 2003. Moreover, there is a substantial pay gap among these counties, and this gap increases in later years in the sample. Between 1990 and 2006, the minimum wage gap between contiguous pairs was between 7% and 20%, and the gap was greater in the later years. In other words, contiguous counties display substantial variation in minimum wages over this period, which allows us to identify minimum wage effects within contiguous county-pairs.

Second, contiguous counties are relatively similar, and hence form better controls, especially with respect to underlying employment trends. We provide more direct evidence on the importance of comparability in section IVE, where we estimate the dynamic response of employment to changes in the minimum wage. We show there that the lead terms capturing employment levels and trends prior to minimum wage increases are much better behaved when we use contiguous county-pairs as controls.

IV. Empirical Strategy and Main Results

A. *Specifications Using the All Counties Sample*

To replicate findings from traditional approaches in the literature, we first estimate earnings and employment effects using the all-counties (AC) sample, including county and period fixed effects. Although the analysis takes place at the county rather than the state level, the specifications are analogous to those in Neumark and Wascher (1992):

$$\ln y_{it} = \alpha + \eta \ln(MW_{it}) + \delta \ln(y_{it}^{TOT}) + \gamma \ln(pop_{it}) + \phi_i + \tau_t + \varepsilon_{it}. \quad (1)$$

This specification controls for the log of total private sector employment (or average private sector earnings) denoted as $\ln(y_{it}^{TOT})$, and the log of county-level population $\ln(pop_{it})$ when we estimate employment effects.[14] The ϕ_i term represents a county fixed effect. Crucially, the time period fixed effects (τ_t) are assumed to be constant across counties, which rules out possibly heterogeneous trends.

As two intermediate specifications that control for heterogeneous time trends at a coarse level, we also present estimates that allow the period fixed effects to vary across the

[14] We use county-level Census Bureau population data, which are reported on an annual basis.

nine census divisions and additionally include state-level linear time trends:

$$\ln y_{it} = \alpha + \eta \ln(w_{it}^{M}) + \delta \ln(y_{it}^{TOT}) + \gamma \ln(pop_{it}) + \phi_i + \tau_{ct} + \varepsilon_{it} \quad (2)$$

$$\ln y_{it} = \alpha + \eta \ln(w_{it}^{M}) + \delta \ln(y_{it}^{TOT}) + \gamma \ln(pop_{it}) + \phi_i + \tau_{ct} + \xi_s I_s \cdot t + \varepsilon_{it}. \quad (3)$$

The term τ_{ct} sweeps out the between-census division variation, and estimates are based on only the variation within each census division. In equation (3), I_s is a dummy for state s, and ξ_s is a state-specific trend.

Finally, we include a specification with MSA-specific time effects:

$$\ln y_{it} = \alpha + \eta \ln(w_{it}^{M}) + \delta \ln(y_{it}^{TOT}) + \gamma \ln(pop_{it}) + \phi_i + \tau_{mt} + \varepsilon_{it}. \quad (4)$$

The term τ_{mt} in equation (4) sweeps out the variation between metropolitan statistical areas across the United States. In this case, η is identified on the basis of minimum wage differences within individual metropolitan areas.[15] Within-MSA variation occurs when a given metropolitan definition includes counties from two or more states whose minimum wage levels differ at least once during the sample period.[16] The cross-MSA specification, equation (4), is similar to our local county-pair specification presented above. The main difference is the relatively smaller set of counties providing identifying variation, as the number of cross-state metropolitan areas is much smaller than the number of state border segments.

Together, equations (2), (3), and (4) allow us to characterize the nature of bias in the traditional fixed-effects estimates by considering progressively finer controls for spatial heterogeneity; they constitute intermediate specifications as compared to our contiguous county-pair specification below.

[15] For the San Francisco–Oakland–Fremont MSA, variation in the minimum wage results from San Francisco's 2004 minimum wage increase, which is indexed annually.

[16] Cross-state metropolitan areas include: Allentown-Bethlehem-Easton, PA–NJ; Boston-Cambridge-Quincy, MA–NH; Chicago-Naperville-Joliet, IL–IN–WI; Cumberland, MD–WV; Davenport-Moline-Rock Island, IA–IL; Duluth, MN–WI; Fargo, ND–MN; Grand Forks, ND–MN; Hagerstown-Martinsburg, MD–WV; La Crosse, WI–MN; Lewiston, ID–WA; Minneapolis-St. Paul-Bloomington, MN–WI; New York-Northern New Jersey-Long Island, NJ–NY; Omaha-Council Bluffs, NE–IA; Philadelphia-Camden-Wilmington, PA–NJ–DE; Portland-Vancouver-Beaverton, OR–WA; Providence-New Bedford-Fall River, RI–MA; San Francisco-Oakland-Fremont, CA; Sioux City, IA–NE–SD; South Bend-Mishawaka, IN–MI; St. Louis, MO–IL; Washington-Arlington-Alexandria, DC–VA–MD; Weirton-Steubenville, WV–OH; Youngstown-Warren-Boardman, OH–PA.

B. *Identification Using the Contiguous Border County-Pair Sample*

Our preferred identification strategy exploits variation between contiguous counties straddling a common state boundary and uses the sample with all such contiguous border county-pairs. Since this strategy involves a change in samples (going from the AC to CBCP sample) as well a change in specification, we also estimate an analog to equation (1) with common time period fixed effects in the CBCP sample, where y_{ipt} and e_{ipt} denote that counties may be repeated for all pairs they are part of:

$$\ln y_{ipt} = \alpha + \eta \ln(MW_{it}) + \delta \ln(y_{it}^{TOT}) + \gamma \ln(pop_{it}) + \phi_i + \tau_t + \varepsilon_{ipt}. \quad (5)$$

Finally, for our preferred specification, we allow for pair-specific time effects (τ_{pt}), which use only variation in minimum wages within each contiguous border county-pair:

$$\ln y_{ipt} = \alpha + \eta \ln(w_{it}^{M}) + \delta \ln(y_{it}^{TOT}) + \gamma \ln(pop_{it}) + \phi_i + \tau_{pt} + \varepsilon_{ipt}. \quad (6)$$

Our identifying assumption for this local specification is $E\left(\ln(w_{it}^{M}), \varepsilon_{ipt}\right) = 0$, that is, minimum wage differences within the pair are uncorrelated with the differences in residual employment (or earnings) in either county.

An important observation is that equation (6) is not identified using the AC sample and including pair period effects for all contiguous county-pairs. At first blush, this may seem odd, as we could identify within-MSA effects by including a set of MSA-period dummies as in equation (4). However, county-pairs do not form a unique partitioning (unlike an MSA). Each observation would have many pair-period dummies, and we would need to include a vector of such pair-period effects τ_{pt}. But the number of all contiguous county-pairs far exceeds the number of counties in the United States. Therefore, if we were to use the AC sample and include pair-period dummies for all contiguous pairs, the number of variables that we would need to estimate would far exceed the number of observations. Even for the set of border counties and cross-border pairs, the model is under identified if we try to jointly estimate all the pair-identified coefficients, since we have 754 pairs and 504 border counties. Given this problem, we use the CBCP sample to identify equation (6).

What allows us to identify equation (6) using the CBCP? Note that the CBCP sample stacks each border county-pair, so that a particular county will be in the sample as many times as it can be paired with a neighbor across the border. Here τ_{pt} is the coefficient for each pair-period dummy for each of the 754 pairs. Given our sample construction, each observation has a nonzero entry only for a single pair-period dummy. This property allows us to mean difference all the variables within each pair-period group, treating τ_{pt} as a

nuisance parameter. Equation (6) is identified using the CBCP sample because we do not try to estimate each pair-period coefficient taking into account the cross-correlations of all pairs. We do not need to do this, as each pair provides a consistent estimate of the treatment effect based on our identifying assumption that $E\left(\ln(w_{it}^{M}), \varepsilon_{ipt}\right) = 0$. Hence, equation (6) uses the within-pair variation across all pairs and effectively pools the estimates.

C. Standard Errors

The OLS standard errors are subject to three distinct sources of possible bias. For all specifications, there is positive serial correlation in employment at the county level, and the treatment variable (minimum wage) is constant within each state. Both of these factors cause the standard errors to be biased downward (see Moulton, 1990; Kedzi, 2004; and Bertrand, Duflo, & Mullainathan, 2004). For estimates using the all-county sample, we cluster the standard errors at the state level to account for these biases.

For our sample of all contiguous border county-pairs, the presence of a single county in multiple pairs along a border segment induces a mechanical correlation across county-pairs, and potentially along an entire border segment.[17] Formally, this implies that $E(e_{ipt}, e_{i'p't'}) \neq 0$ if $i, i' \in S$, or if $p, p' \in B$. The residuals are not independent if the counties are within the same state S or if the two pairs are within the same border segment B.

To account for all these sources of correlation in the residuals, standard errors for estimates based on the contiguous border county-pair sample are clustered on the state and border segment separately.[18] The variance-covariance matrix with this two-dimensional clustering can be written as $VC_{S,B} = VC_S + VC_B\text{-}VC_{S\cap B}$. Finally, our standard errors also correct for arbitrary forms of heteroskedasticity.

D. Main Findings

Table 2 reports the earnings and employment effects for all six specifications—each one with or without including the log of average private sector earnings (or total private sector employment) as controls.

The earnings elasticities all range between 0.149 and 0.232.[19] All of these coefficients are significant at the 1% level. It is reassuring that the impact of the minimum wage in the traditional specification 1 (0.217) is quite similar to the impact in our local specification 6 (0.188) that compares contiguous counties. This result rules out the possibility that

TABLE 2.—MINIMUM WAGE EFFECTS ON EARNINGS AND EMPLOYMENT

	All-County Sample						Contiguous Border County-Pair Sample					
	(1)		(2)		(3)	(4)	(5)				(6)	
ln Earnings												
lnMWt	0.224***	0.217***	0.204***	0.195***	0.219***	0.210*** 0.153***	0.149***	0.232***	0.221***	0.200***	0.188***	
	(0.033)	(0.028)	(0.038)	(0.034)	(0.037)	(0.034) (0.030)	(0.028)	(0.032)	(0.032)	(0.065)	(0.060)	
Ln Employment												
lnMWt	−0.211**	−0.176*	−0.028	−0.023	0.054	0.039 0.052	0.032	−0.137*	−0.112	0.057	0.016	
	(0.095)	(0.096)	(0.066)	(0.068)	(0.055)	(0.050) (0.084)	(0.078)	(0.072)	(0.076)	(0.118)	(0.098)	
lnpop or lnpop+lntotprivatesector	1.04***	1.05***	1.04***	1.05***	1.07***	1.05*** 1.30***	1.21***	0.95***	0.97***	1.12***	1.11***	
	(0.060)	(0.058)	(0.048)	(0.043)	(0.045)	(0.039) (0.065)	(0.048)	(0.073)	(0.073)	(0.190)	(0.189)	
P values for H0:												
bs = b1 for s=2,3,4, bs = b4 for s=6				0.022		0.066	0.011				0.056	
Labor demand elasticity		−0.787*		−0.114		0.183	0.211		−0.482**		0.079	
		(0.427)		(0.332)		(0.219)	(0.507)		(0.235)		(0.286)	
Controls												
Census division × period dummies			Y	Y	Y	Y						
State linear trends					Y	Y						
MSA × period dummies							Y	Y				
County-pair × period dummies										Y		Y
Total private sector		Y		Y		Y	Y		Y			Y

Sample size equals 91,080 for specifications 1, 2, and 3 of the all-county sample and 48,348 for specification 4 (which is limited to MSA counties) and 70,620 for the border county-pair sample. All of the employment regressions control for the log of annual county-level population. Total private sector controls refer to log of average total private sector earnings or log of employment. All samples and specifications include county fixed effects. Specifications 1, 3, and 5 include period fixed effects. Specification 3 also includes state-level linear trends. For specifications 2, 4, and 6, period fixed effects are interacted with each census division, metropolitan area, and county-pair, respectively. Robust standard errors, in parentheses, are clustered at the state level for the all-county samples (specifications 1–4) and on the state *and* border segment levels for the border pair sample (specifications 5 and 6). Probability values are reported for tests under the null hypothesis that the minimum wage coefficients are equal across specification 1 and specifications 2, 3, and 4 and between specifications 5 and 6. For the labor demand elasticity, we jointly estimate the earnings and employment equations using seemingly unrelated regression, and the labor demand elasticity is computed as the ratio of the employment effect divided by the earnings effect. The standard errors for the SUR are clustered at the same level as indicated before. Significance levels: *10%, **5%, ***1%.

[17] A border segment is defined as the set of all counties on both sides of a border between two states.

[18] For more details, see Cameron, Gelbach, and Miller (2006). The number of clusters on both these dimensions exceeds forty, which is large enough to allow reliable inference using clustered standard errors.

[19] Given the double-log specification, throughout the paper we refer to the treatment coefficient η as the elasticity. However, for values that are not close to 0, the true elasticity is $\exp(\eta)$—in this case, $\exp(0.22) = 0.25$.

TABLE 3.—PREEXISTING TRENDS IN EMPLOYMENT AND EARNINGS AND VALIDITY OF CONTROLS

	Specification 1		Specification 4		Specification 6	
	Restaurants	All Private Sector	Restaurants	All Private Sector	Restaurants	All Private Sector
			ln Earnings			
η_{t-12}	0.002	−0.013	−0.042	−0.005	0.029	0.025
	(0.019)	(0.016)	(0.036)	(0.044)	(0.048)	(0.043)
η_{t-4}	0.001	−0.001	0.051	0.007	0.068	0.051
	(0.042)	(0.036)	(0.061)	(0.053)	(0.080)	(0.081)
Trend	−0.001	0.012	0.093***	0.012	0.039	0.026
$(\eta_{t-4}-\eta_{t-12})$	(0.029)	(0.024)	(0.034)	(0.024)	(0.059)	(0.053)
N	82,800	82,787	43,980	43,969	64,200	64,174
			ln Employment			
η_{t-12}	−0.071	−0.037	0.025	0.005	0.009	0.025
	(0.057)	(0.027)	(0.069)	(0.034)	(0.067)	(0.068)
η_{t-4}	−0.194*	−0.076	−0.016	0.004	0.050	0.084
	(0.115)	0.061	(0.127)	(0.051)	(0.172)	(0.145)
Trend	−0.124*	−0.039	−0.041	−0.002	0.041	0.058
$(\eta_{t-4}-\eta_{t-12})$	(0.070)	(0.035)	(0.077)	(0.033)	(0.134)	(0.095)
N	82,800	82,787	43,980	43,969	64,200	64,174
Controls						
MSA × period dummies			Y	Y		
County-pair × period dummies					Y	Y

Here $t-j$ denotes j quarters prior to the minimum wage change. η_{t-12} is the coefficient associated with $(\ln(MW_{t-4}) - \ln(MW_{t-12})$ term in the regression; η_{t-4} is the coefficient associated with $(\ln(MW_t) - \ln(MW_{t-4})$ term; and all specifications also include contemporaneous minimum wage $\ln(MW_t)$ as a regressor in levels. All specifications include county fixed effects, and all the employment specifications include log of county-level population. Specification 1 includes common time dummies; specification 4 includes MSA-specific time dummies; and specification 6, county–pair specific time dummies. Robust standard errors in parentheses are clustered at the state level (for specifications 1 and 3), and at the state and border segment level for specification 6. Significance levels: *10%, **5%, ***1%.

the employment effects may be different in the local specification because minimum wages may be differentially binding.

In contrast, the employment effects vary substantially among specifications. The employment effects in the traditional specification in the AC sample (specification 1) range between −0.211 and −0.176, depending on whether controls for overall private sector employment are included and between −0.137 and −0.112 in the CBCP sample (specification 4). We also report the implied labor demand elasticities by jointly estimating the earnings and employment effects using seemingly unrelated regression where the residuals from the earnings and employment equations are allowed to be correlated across equations (while also accounting for correlation of the residuals within clusters). The implied labor demand elasticities for the traditional fixed-effects specifications are −0.787 and −0.482 in the AC and CBCP samples (specifications 1 and 5) and are significant at the 10% and 5% level, respectively. Overall, the traditional specifications generate negative minimum wage and labor demand elasticities that are similar in magnitude to previous CPS-based panel studies that focus on teenagers.

In contrast, even intermediate forms of control for spatial heterogeneity through the inclusion of either census division–specific time period fixed effects (specification 2), division–specific time fixed effects and state-level linear time trends (specification 3), or metropolitan area–specific time fixed effects (specification 4) leads the coefficient to be close to 0 or positive. In our preferred specification 6, we find that comparing only within contiguous border county-pairs, the employment elasticity is 0.016 when we also control for overall private sector employment. Bounds for this estimate rule out elasticities more negative than −0.147 at the 90% confidence level and −0.178 at the 95% confidence level.[20] The implied labor demand elasticities are also, as expected, close to 0 and insignificant at conventional levels.[21]

The results are consistent with the hypothesis that the traditional approach with common time period fixed effects suffer from serious omitted variables bias arising from spatial heterogeneity. Table 3 reports probability tests for the equality of the employment elasticity estimates across specifications. In the AC sample, we test coefficients from specifications 2, 3, and 4 to the coefficient in specification 1, and in the CBPC sample, we test the coefficients from specification 6 to specification 5.[22] The p-values are 0.022, 0.066, 0.011, and 0.056, respectively—showing that in all cases, we can reject the null that the controls for spatial heterogeneity do not affect the minimum wage estimates at least at the 10% level.

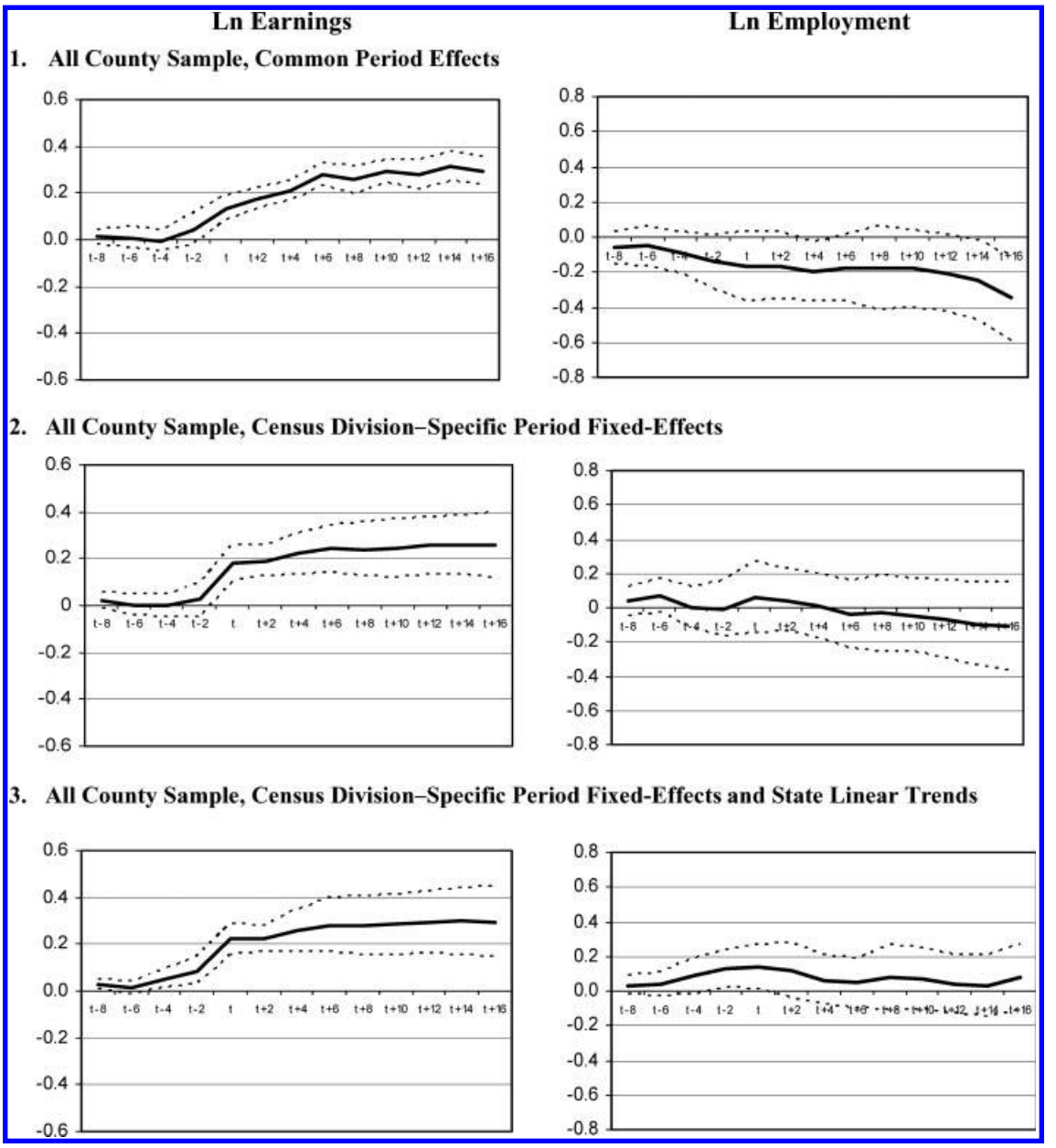
In table A1 in Appendix A, we also report estimates for each of the five primary specifications (1, 2, 4, 5, and 6)

[20] A comparison of the standard errors with and without clustering shows that the unclustered standard errors are understated by a factor between five and twelve, suggesting that the implied precision of some of the estimates in the literature may have been overstated because of inattention to correcting for correlated error terms. But since the data sets in question are different, further research is needed to confirm this hypothesis.

[21] The estimated coefficients for log population reported in table 2 are around unity across the relevant specifications. When both log population and log of private sector employment are included, the sum of the coefficients is always close to unity. This result suggests that results would be virtually identical if we had normalized all employment by population; we corroborate this in section VB for our preferred specification.

[22] We test for the cross-equation stability of the coefficients by jointly estimating the equations using seemingly unrelated regression (SUR), allowing for the standard errors to be clustered at the appropriate levels.

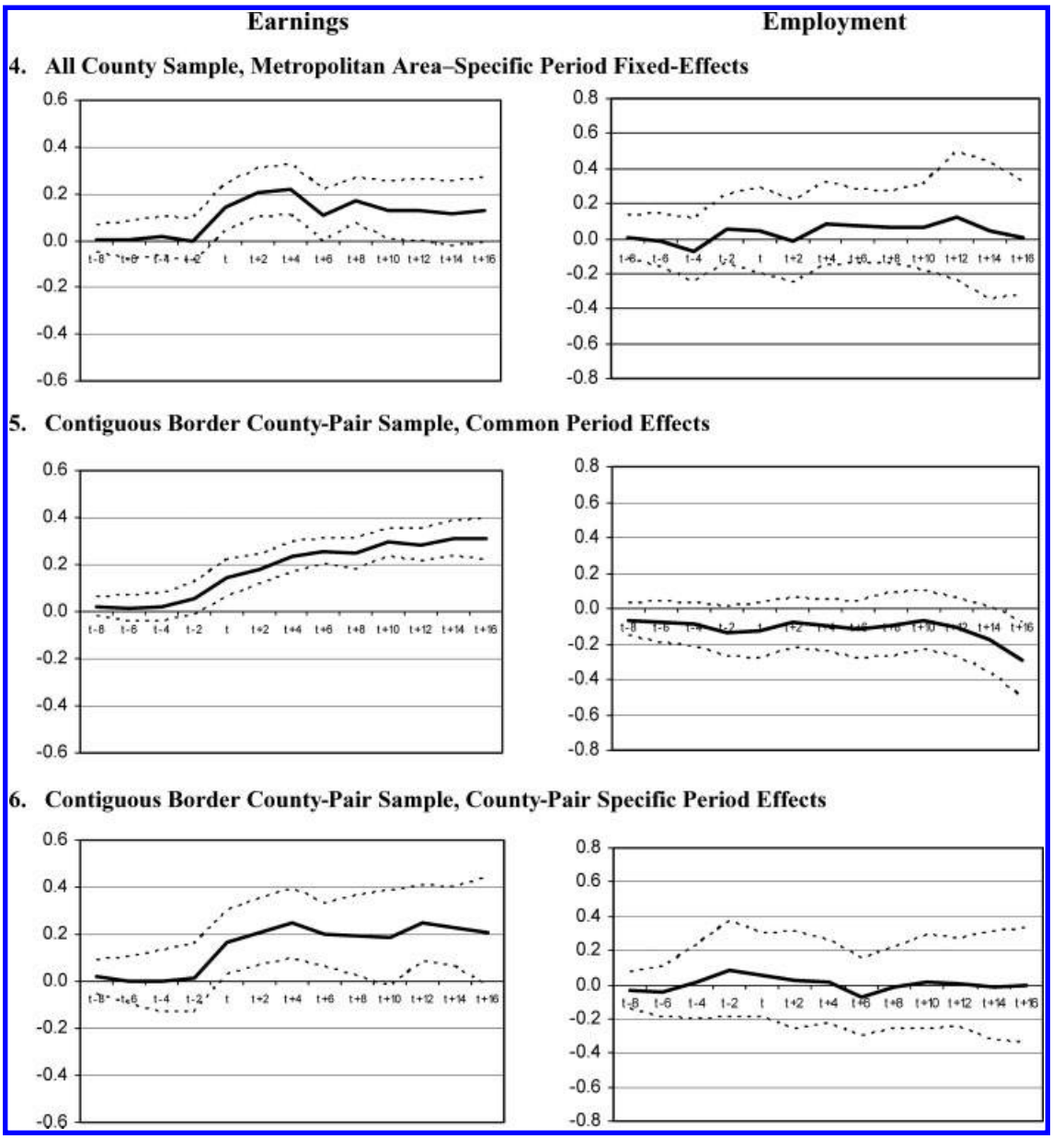
FIGURE 4.—TIME PATHS OF MINIMUM WAGE EFFECTS, BY SAMPLE AND SPECIFICATION



with and without the inclusion of a state-level time trend (specification 3 is just specification 2 with such a trend and has been reported in table 2). We find that the traditional specifications with common time effects (1 and 5) are particularly sensitive to the inclusion of such a linear trend. The sensitivity of the estimates from the traditional specification (1) to the inclusion of a linear time trend does not necessarily imply that it is biased. Inclusion of parametric trends may "overcontrol" if minimum wages themselves reduce the employment trends of minimum wage workers, as the two coefficients are estimated jointly under functional form assumptions. However, the estimates from including such linear time trends in our local specification (6) are virtually identical with respect to both the point estimate and the standard error. This combination of evidence provides further internal validity to our local specification using discontinuity at the policy borders.

One limitation of the QCEW data is that we do not observe hours of work. Therefore, although the effect of minimum wages on head count employment is around 0 in our local specification, it is possible that there is some reduction in hours. Here we provide some rough calculations that place bounds on the hours effect. To begin, note that the minimum wage elasticity of weekly earnings is 0.188. This elasticity reflects the combined effect on hourly wages and weekly hours. If we can use auxiliary estimates

FIGURE 4.—(*CONTINUED*)



The cumulative response of minimum wage increases using a distributed lag specification of four leads and sixteen lags based on quarterly observations. All specifications include county fixed effects and control for the log of annual county-level population. Specifications 1 and 4 (panels 1 and 4) include period fixed effects. Specification 3 includes state-level linear trends. Specification 2 includes census division–specific period fixed effects, and specification 5 includes county-pair–specific period fixed effects. For all specifications, we display the 90% confidence interval around the estimates in dotted lines. The confidence intervals were calculated using robust standard errors clustered at the state level for specifications 1, 2, and 4 (panels 1, 2, and 4) and at both the state level and the border segment level for our local estimators (panels 3, 5, and 6).

on how much earnings "should" rise absent an hours effect, we can approximate the effect on hours.

Using the 2006 CPS, we find that 23.0% of restaurant workers (at the three-digit NAICS level) earn no more than the minimum wage. The difference between our earnings elasticity of 0.188 and this 0.230 figure suggests a −0.042 elasticity for hours. It is likely, however, that some workers below the minimum wage do not get a full increase because of tip credits in some states, that some additional workers above the old minimum wage but below the new minimum get a raise, and that some workers even above the new minimum wage get a raise because of wage spillovers.

While a full accounting of these effects is beyond the scope of this paper, we can provide a very approximate bound for a 10% increase in the minimum wage. About 32.5% of restaurant workers nationally are paid no more than 10% above the minimum wage.[23] Assuming a uniform distribution of wages between the new and old minimum suggests a minimum wage elasticity for hours of −0.090. However, this estimate is likely to be an upper bound, as not all of those below the minimum will get a full increase. We conclude that the elasticity of weekly earnings is relatively

[23] Authors' calculations based on the current population survey.

close to the percentage of workers earning the minimum wage and that the fall in hours is unlikely to be large.

E. Dynamic Responses to Minimum Wage Increases

Changes in outcomes around the actual times of minimum wage changes provide additional evidence on the long-term effects of minimum wages, as well on the credibility of a research design by evaluating trends prior to the minimum wage change. Since we have numerous and overlapping minimum wage events in our sample, we do not employ a pure event study methodology using specific minimum wage changes. Instead, we estimate all the five specifications with distributed lags spanning 25 quarters, where the window ranges from $t + 8$ (eight quarters of leads) to $t - 16$ (sixteen quarters of lags) in increments of two quarters:

$$\begin{aligned}\ln y_{it} = \alpha + \sum_{j=-4}^{7}(\eta_{-2j}\Delta_2 \ln(w^M_{i,t+2j})) + \eta_{-16} \\ \times \ln(w^M_{i,t-16}) + \delta \ln(y^{TOT}_{it}) + \gamma \ln(pop_{it}) + \phi_i \\ + (\textit{Time Controls}) + \varepsilon_{it}.\end{aligned} \tag{7}$$

Here Δ_2 represents a two-quarter difference operator. Specifying all but the last (the sixteenth) lag in two-quarter differences produces coefficients representing cumulative as opposed to contemporaneous changes to each of the leads and lags in minimum wage.[24] *Time controls* refer to either common time effects (with and without state-time trends), or division, MSA, or county-pair–specific time effects, depending on the specification.

Figure 4 reports the estimated cumulative response of minimum wage increases. The full set of coefficients and standard errors underlying the figure is reported in table A2 in the Appendix A. The cumulative response plots consistently show sharp increases in earnings centered around time t— the time of the minimum wage increase. The maximal effects range from 0.215 to 0.316, depending on the specification, and most of the increase occurs within a few quarters after the minimum wage change.

With regard to employment, the estimates from the traditional fixed-effects specification (1) show that restaurant employment is both unusually low and falling during the two years prior to the minimum wage increase, and it continues to fall subsequently. This general pattern obtains when the same specification is estimated using the border county-pair sample (specification 5) with common time effects. In contrast, the cumulative responses for the local estimates (specification 6) using variation within contiguous county-pairs is quite different. First, we see relatively stable coefficients for the leads centered around 0. Second, we do not detect any delayed effect from the increase in the minimum wage with sixteen quarters of lags, though the precision of the estimates is lower for longer lags. Intermediate specifications (2, 3, and 4) with coarser controls for heterogeneity in employment show similar results to the local specification (6).

Baker, Benjamin, and Stanger (1999) proposed a reconciliation for divergent findings in the minimum wage literature by suggesting that short-term effects of minimum wages (those associated with high-frequency variation in minimum wage) are close to 0, while the longer-run effects (associated with low-frequency variation) are negative. We do not find any evidence in our data to support this conclusion. Long-run estimates in our local specification are very similar to shorter-run estimates, and both are close to 0. In contrast, the measured long-term effects in specifications that do not account for heterogeneous trends are more biased downward than are short-run estimates in those models.

We also formally test for the presence of preexisting trends that seem to contaminate the traditional fixed-effects specification and whether contiguous counties are more valid controls. To do so, we now employ somewhat longer leads in the minimum wage and estimate the following equation:

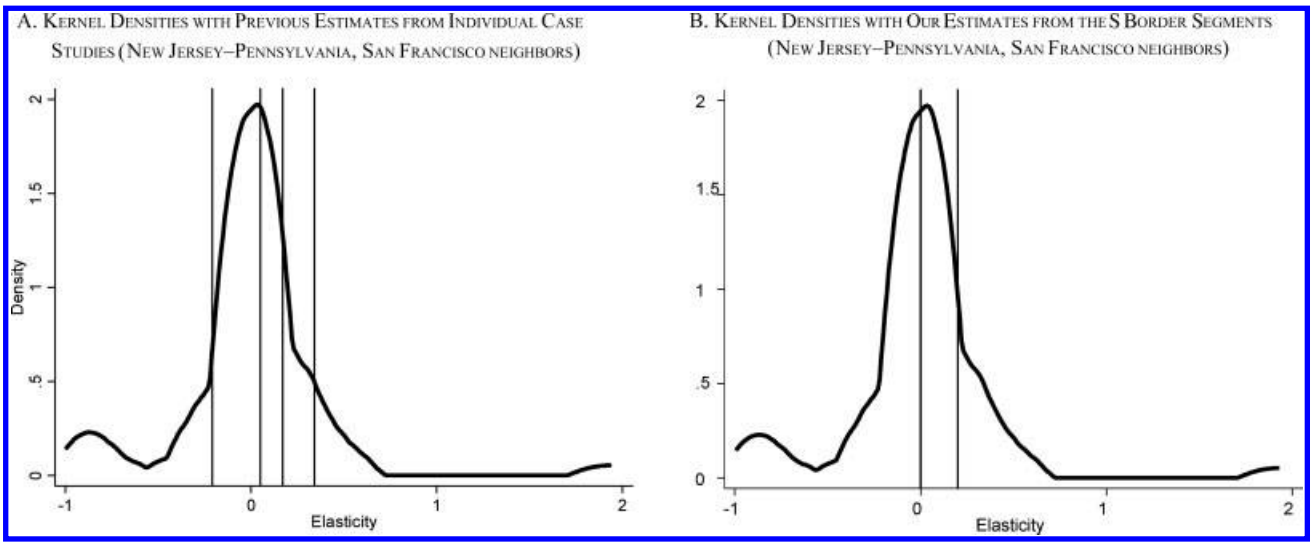
$$\begin{aligned}\ln y_{it} = \alpha + \eta_{12}(\ln(w^M_{i,t+12} - w^M_{i,t+4})) \\ + \eta_4(\ln(w^M_{i,t+4} - w^M_{i,t})) + \eta_0 \ln(w^M_{i,t}) \\ + \gamma \ln(pop_{it}) + \phi_i + (\textit{Time Controls}) + \varepsilon_{it}.\end{aligned} \tag{8}$$

This specification is of the same structure as equation (7) in terms of using differences and levels to produce a cumulative response to a minimum wage shock, but is focused only on the leading terms. Here η_{12} captures the level of $\ln(y)$ 12 quarters (3 years) prior to a log point minimum wage shock, and η_4 captures the level 4 quarters (1 year) prior to the shock. We report point estimates and standard errors for these two terms, as well as $(\eta_4 - \eta_{12})$, which captures the trend between $(t - 12)$ and $(t - 4)$, where t is the year of the minimum wage change. We do so for the traditional fixed-effects specification (1) with common time dummies, specification 4 with MSA-specific dummies, and our preferred contiguous border county-pair specification (6) with pair-specific time dummies. Table 3 reports the results for restaurant employment, total private sector employment, average restaurant earnings, and average private sector earnings.

In terms of earnings, neither the traditional specification (1) nor our preferred specification (6) shows any pretrends

[24] Using leads and lags for every quarter, as opposed to every other quarter, produces virtually identical results. We choose this specification to reduce the number of reported coefficients while keeping the overall window at 25 quarters. Also, the reason we use only 8 quarters of leads is to keep the estimation sample in the dynamic specification the same as the contemporaneous one, since at the time of writing, we had 2 years of minimum wages after 2006q2, the last period in our estimation sample. When we test preperiod leads below, we use 12 quarters of leads to better identify preexisting trends.

FIGURE 5.—DISTRIBUTION OF ELASTICITIES FROM INDIVIDUAL BORDER SEGMENTS AND SPECIFIC CASE STUDY ESTIMATES



Both graphs show the (same) kernel density estimate of the distribution of elasticities from each of the 64 border segments with a minimum wage differential, using a bandwidth of 0.1. In panel A, estimates from previous individual case studies (New Jersey–Pennsylvania and San Francisco–neighboring counties) are superimposed as vertical lines. These are Neumark and Wascher (2000), −0.21; Dube et al. (2007), 0.03; Card and Krueger (2000), 0.17; and Card and Krueger (1994), 0.34. In panel B, the vertical lines represent specific estimates of the same two borders using our data: New Jersey–Pennsylvania is −0.001; San Francisco–neighboring counties is 0.20.

for either overall earnings or restaurant earnings. The cross-state MSA specification seems to show some positive pretrend for restaurant earnings, though the level coefficients for both $(t - 12)$ and $(t - 4)$ are relatively small.

More importantly, we find evidence of a preexisting negative trend in restaurant employment for the fixed-effects specification. Restaurant employment was clearly low and falling during the $(t - 12)$ to $(t - 4)$ period. The η_4 coefficient and the trend estimate $(\eta_4 - \eta_{12})$ are both negative (−0.194 and −0.124, respectively), and significant at the 10% level. In contrast, none of the employment lead terms are ever significant or sizable in our contiguous county specification or in the cross-state MSA specification. Overall, the findings here provide additional internal validity to our research design and show that contiguous counties provide reliable controls for estimating minimum wage effects on employment. And they demonstrate that the assumption in traditional fixed-effects specification that all counties are equally comparable (conditional of observables) is erroneous due to the presence of spatial heterogeneity.

F. Implications for the Individual Case Study Literature

The local specification comparing contiguous counties can be interpreted as producing a pooled estimate from individual case studies. To facilitate this interpretation, in this section we report estimates of equation (6) separately for each of the 64 border segments that have a minimum wage difference over the period under study. We plot the resulting density of the minimum wage elasticities for employment in figure 5. For illustrative purposes, we also include in figure 5 our estimates for some key individual case studies (New Jersey–Pennsylvania and San Francisco–surrounding areas) that have been the subject of individual case studies. Panel A plots the estimates in the literature as overlaid vertical lines; panel B plots our corresponding estimates for the same border segments.

As figure 5 indicates, the estimated employment elasticities from individual case studies are concentrated around 0. If we construct a pooled estimate by averaging these individual estimates, the estimate (−0.006) is virtually identical to the estimate from specification 6 in table 2, while the standard error (0.049) is somewhat smaller.[25] However, figure 5 also shows that the probability of obtaining an individual estimate that is large—either positive or negative—is nontrivial, which can explain why estimates for individual case studies have sometimes varied. Estimates for individual case studies are less precisely measured than suggested by the reported standard errors based on only the sampling variance, as the latter does not account for spatial autocorrelation. Therefore, while any given case study provides a consistent point estimate accounting for spatial heterogeneity, the pooled estimate is much more informative than an individual case study when it comes to statistical inference.

G. Falsification Tests Using Spatially Correlated Placebo Laws

To provide a direct assessment of how the national estimates are affected by spatial heterogeneity, in Appendix B, we present estimates of the effect of spatially correlated fictitious placebo minimum wages on restaurant employment for counties in states that never had a minimum wage other than the federal one. Our strategy is to consider only states

[25] The findings on the standard error are not surprising, as treating each border segment as a single observation is similar to clustering on the border segment. Our double-clustering also accounts for the additional correlation of error terms across multiple border segments for the same state.

that have exactly the same minimum wage profiles, but that happen to be located in a "neighborhood" with higher minimum wages. If there is no confounding spatial correlation between minimum wage increases and employment growth, the estimated elasticity from the fictitious minimum wage should be 0.

More precisely, we start with the full set of border county-pairs in the United States. We then construct two samples: (1) all border counties in states that have a minimum wage equal to the federal minimum wage during this whole period, and hence have no variation in the minimum wage among them (we call this the *placebo sample*, as the true minimum wage is constant within this group), and (2) all border counties that are contiguous to states that have a minimum wage equal to the federal minimum wage during this whole period. We call this the *actual sample*, as the minimum wage varies within this group. The exact specifications and other details as well as the estimates are presented in Appendix B.

As reported in table B1 in Appendix B, we obtain results similar to the national estimates (in table 2), with an employment effect of −0.21. The standard errors are larger due to the smaller sample size. The earnings effects are strong and essentially the same as before. When we examine the effect of the neighbor's minimum wage on the county in the placebo sample, we do not find significant earnings effects. This is expected, since the minimum wages in these counties are identical and unchanging. However, we find large negative employment effects from these fictitious placebo laws. Although minimum wages never differed among these states, changes in the placebo (or neighboring) minimum wages are associated with large apparent employment losses, with an elasticity of −0.12.

As we discuss in section VA, we do not find actual (causal) cross-border spillovers in earnings or employment. Therefore, the estimates from placebo laws provide additional evidence that spatial heterogeneity in low-wage employment prospects is correlated with minimum wages, and these trends seriously confound minimum wage effects in traditional models using national-level variation.

V. Robustness Tests

A. Cross-Border Spillovers

Although we find positive earnings effects and insignificant employment effects in table 2 and figure 4, spillovers between the treatment and control counties may be affecting our results. Spillovers may occur when either the labor or product market within a county-pair is linked. We have two sets of theoretical spillover possibilities, each associated with a specific labor market model. In the case of a perfectly competitive labor market, the increase in wage rates and the resulting disemployment in county A might reduce earnings and increase employment in county B. This model suggests that the disemployment effects will be stronger in counties across the state border than in the interior counties of the state that raises the minimum wage. We call this the *amplification effect*.

In the case of a labor market model with worker search costs, the possibility of employment at a higher minimum wage in county A across the border pressures employers in county B to partly match the earnings increase. In this case, the rise in wages in A leads to a rise in wages in B. This possibility could also arise in an efficiency wage model, in which the reference point for workers in B changes as they see their counterparts across the border earning more. Either way, the wage increase in A would result in a decrease in employment in A and B. If that is the case, comparing border counties will understate the true effect, and the observed disemployment effect will be larger in the interior counties. We call this the *attenuation effect*.

To test for the possibility of any border spillovers, we compare the effect on border counties to the effect on the counties in the interior of the state, which are less likely to be affected by such spillovers. We estimate the following spatial differenced specification:

$$\left(\ln y_{ipt} - \ln\overline{y_{st}}\right) = \alpha + \eta \ln(w_{it}^{M}) + \delta\left(\ln y_{ipt}^{TOT} - \ln\overline{y_{st}^{TOT}}\right) + \gamma\left(\ln pop_{ipt} - \ln\overline{pop_{st}}\right) + \phi_i + \tau_{pt} + \varepsilon_{it}. \tag{9}$$

Here, $\overline{y_{st}}$ refers to the average employment (or earnings) of restaurant workers in the interior counties of state s in time t and serves as a control for possible spillover effects. We use all counties in the state interior (not adjacent to a county in a different state) that report data for all quarters. Similarly $\overline{y_{st}^{TOT}}$ is the average employment (or earnings) of all private sector workers in the interior counties. The spatial differencing of the state interior means that the coefficient η is the effect of a change in the minimum wage on one side of the border on the outcome relative to the state interior, in relation to the relative outcome on the other side of the border. In terms of employment, a significant negative coefficient for η indicates an amplification effect when we consider contiguous border counties, while a positive coefficient indicates an attenuation effect. We also present results from using just the interior counties while considering the same cross-state pairs:[26]

$$\ln\overline{y_{st}} = \alpha + \eta \ln(w_{it}^{M}) + \delta \ln\overline{y_{st}^{TOT}} + \gamma \ln\overline{pop_{st}} + \phi_i + \tau_{pt} + \varepsilon_{it}. \tag{10}$$

When we difference our county-level outcome from the state interior, as in equation (10), we are introducing a mechanical correlation in the dependent and control variables

[26] Here the unit of observation is still county by period, so there are duplicated observations (as the statewide aggregates are identical for all counties within a state). However, since we cluster on both state and the border counties, the duplication of observations does not bias our standard errors. The reason we follow this strategy is to keep the same number of counties (per state) as in equation (9).

TABLE 4.—TESTS OF CROSS-BORDER SPILLOVER EFFECTS FROM MINIMUM WAGE CHANGES

	(1) Border Counties	(2) Border Counties	(3) Interior Counties	(4) Spillover = (Border − Interior)
		ln Earnings		
$lnMW_t$	0.188***	0.165***	0.164	−0.008
	(0.060)	(0.056)	(0.113)	(0.112)
		ln Employment		
$lnMW_t$	0.016	0.011	0.042	−0.058
	(0.098)	(0.109)	(0.107)	(0.139)
Sample	Baseline CBCP	Spillover	Spillover	Spillover
N	70,620	69,130	69,130	69,130
Controls				
County-pair × period dummies	Y	Y	Y	Y
Total private sector	Y	Y	Y	Y

The spillover sample (columns 2, 3, 4) restricts observations to states with interior counties; Delaware, Rhode Island, Washington, D.C., and San Francisco border segments are dropped from the baseline sample. Population control refers to the log of annual county-level population. Overall private sector controls refer to log of average private sector earnings or log of overall private sector employment depending on the regression. All samples and specifications include county fixed effects and county-pair–specific time effects as noted in the table. Robust standard errors in parentheses. We report the maximum of the standard errors that are clustered on (1) the state only, (2) the border segment only, and (3) the state and border segment separately. In all cases, the largest standard errors resulted from clustering on the state and border segment separately. Significance levels: *10%, **5%, ***1%.

across counties within the same state, even when they are not on the same border segment. This correlation is accounted for, however, in our calculation of standard errors, as we allow two-dimensional clustering by state and by each border segment.

Table 4 presents our spillover estimates for both employment and earnings. Since some border counties do not have an "interior" to be compared to, the sample changes as we look at the interior counties, or when we difference the border county with interior controls. For this reason, we report the coefficient of our baseline county-pair results on the CBCP sample (column 1) as well as for the subsample (column 2) for which we can match counties with state interiors; this subsample excludes Delaware, Rhode Island, Washington, D.C., and San Francisco border segments.

The earnings effect is slightly smaller when we restrict our sample to counties in states that have an "interior" (column 2). When we examine the border and interior sets of counties separately, the effects are virtually identical—0.165 and 0.164, respectively—although the standard error is larger for the interior county specification. The spillover measure is close to 0 (−0.008) and not significant.

We also do not find any statistically significant spillover effects on employment. When we compare interior counties only (column 3), the measured effect is a small positive (0.042), while when we consider the border counties (column 2), the effect is close to 0 (0.011), and it is similar to our baseline results in column 1 (0.016). The magnitude of the spillover from the double-differenced specification is small (−0.058) and not statistically significant.[27] Overall, we do not find any evidence that wage or employment spillovers are contaminating our local estimates.

[27] The results from the spatial differenced specification (column 4) are not expected to be numerically identical to subtracting column 3 from column 2, as each regression is estimated separately, allowing for different coefficients for covariates. But they are numerically close.

B. Results Using the County Business Patterns Data Set and Employment/Population

As an additional validation of our findings, we compare estimates from our preferred specifications with the QCEW to identical specifications using the County Business Patterns (CBP) data set. The CBP data are available annually for 1990 to 2005. Several shortcomings of the CBP data led us to use the QCEW as our primary data set. Besides being reported only annually, the actual number of counties disclosing employment levels is less than in the QCEW—1,219 versus 1,380. For other counties, CBP provides an employment range only. While useful for some descriptive purposes, these observations are not usable to estimate changes in employment. Finally, and most important, because of changes in industry classifications, the CBP is available by SIC industries from 1990 to 1997 and by NAICS industries from 1998 to 2005. This break in the series adds further noise to the data, making inference based on the CBP over this period less reliable. To make the data as comparable as possible to the QCEW, we use SIC 5812 (eating places) for 1990–1997 and NAICS 7221 (full-service restaurants) and 7,222 (limited-service restaurants) for 1998–2005. As an additional specification check, we also report results from a regression in which the dependent variable is ln(*employment/population*); in this case, the total private sector employment control is also normalized by population, and we do not include ln(*population*) as an additional control.

Table 5 presents results for both the QCEW and CBP data sets, with and without controls for total private sector earnings or employment, depending on the regression. For both the earnings and the employment regressions, the point estimates for both log earnings or log employment are very close in both data sets and for both specifications. In the employment regressions with controls for overall private sector employment, the positive but not significant effect with the QCEW (0.016) becomes a negative but not significant effect with the CBP (−0.034). While the point

TABLE 5.—COMPARING MINIMUM WAGE EFFECTS FOR RESTAURANT INDUSTRY ACROSS DATA SETS AND DEPENDENT VARIABLES

	Contiguous Border County-Pair Sample					
	(1)		(2)		(3)	
	ln Earnings		*ln Employment*		*ln (Emp/Pop)*	
			QCEW			
$lnMW_t$	0.200***	0.188***	0.057	0.016	0.049	0.009
	(0.065)	(0.060)	(0.118)	(0.098)	(0.115)	(.095)
			CBP			
$lnMW_t$	0.247***	0.220**	−0.019	−0.034	−0.052	−0.073
	(0.081)	(0.092)	(0.132)	(0.127)	(0.128)	(0.133)
Controls						
County-pair × period dummies	Y	Y	Y	Y	Y	Y
Total private sector		Y		Y		Y

Sample sizes equal 70,620 (quarterly observations) for QCEW and 14,992 (annual observations) for CBP (County Business Patterns). Specifications for ln Employment include log of annual county-level population. Total private sector controls refer to log of average private sector earnings or log of total private sector employment, depending on the regression. All samples and specifications also include county fixed effects and county-pair–specific period fixed effects. Robust standard errors, in parentheses, are clustered on the state and border segment levels. Significance levels: *10%, **5%, ***1%.

CBP provides data at the four-digit SIC level from 1990 through 1997 and the six-digit NAICS level from 1998 onward. Given the level of detail in the CBP, SIC 5812 "eating places" is the most disaggregated industry that captures restaurants. We make a consistent approximation of the restaurant sector (SIC 5812) after 1997 by combining NAICS 7221 "full-service restaurants" and 7,222 "limited-service restaurants" for 1998–2005.

estimates are quite similar, the standard errors are larger in the CBP data set, which could result from the smaller sample size or added noise due to changes in industry classification. Overall, we conclude that our main findings hold across the two data sets.[28]

Finally, whether we include population as a control or normalize all employment measures by population does not materially affect the findings using the QCEW. The estimates from specification 2 (which controls for log population) and specification 3 (which normalizes employment by population) vary somewhat more when we consider the CBP, but the standard errors for the CBP are also larger, which is consistent with the data problems with the CBP that we noted above.

C. Sample Robustness

Our CBCP sample consists of a balanced panel of 1,070 county replicates (504 counties) for which restaurant employment is reported for all 66 quarters. Some counties contain too few restaurants to satisfy nondisclosure requirements. To check for the possibility that excluding the 452 counties with partial information affects our results, we estimate the minimum wage elasticity keeping those counties in the sample. We do not report these results in the tables for space considerations, but we find that the two sets of estimates are very similar. While the elasticity (standard error) from the balanced panel regression is 0.016 (0.098), the elasticity from the unbalanced panel is −0.023 (0.105).[29]

Some of the border counties in the western part of the country cover large geographic areas, raising the question of whether estimates using such contiguous counties are really local. As another robustness test, we drop border counties that cover more than 2,000 square miles. Our estimates are virtually identical: when we exclude these 59 large counties, the employment elasticity (standard error) changes from 0.016 (0.098) to 0.013 (0.084). (These results are not reported in the tables.)

D. Minimum Wage Effects by Type of Restaurant

Most previous minimum wage studies of restaurants examined only the limited-service (fast food) segment of the restaurant industry. To make our study more comparable to that literature, we present results here separately for limited-service and full-service restaurants. We also explore briefly the impact of tip credit policies.

These results for our preferred specification are reported in table 6. The estimated earnings effects are positive and significant for both limited-service and full-service restaurants. The earnings effect is somewhat greater among limited-service restaurants than among full-service restaurants (0.232 versus 0.187), which is to be expected since limited-service restaurants have a higher proportion of minimum wage workers. The employment effects in table 6 are positive but not significant for both restaurant sectors, as was the case for the restaurant industry as a whole in table 2.[30] In other words, the results we report in table 2 for the entire restaurant industry hold when we consider limited- and full-service restaurants separately.

The magnitude and significance of our earnings effects do not support the hypothesis that tip credits attenuate minimum wage effects on earnings or employment of full-service restaurant workers.[31] Why might this be? First,

[28] Results for other specifications using the CBP are qualitatively similar and are available on request.

[29] One might worry that counties with minimum wage increases may become more likely to drop below the reporting threshold. However, if we estimate equation (1) but replace the dependent variable with a dummy for missing observation, the minimum wage coefficient is negative, small, and insignificant.

[30] The standard errors of the employment coefficients, however, are greater than in table 2.

[31] Tip credits, which apply in 43 states, permit restaurant employers to apply a portion of the earnings that workers receive from tips against the mandated minimum wage. In most tip credit states, employers can pay tipped workers an hourly wage that is less than half of the state or federal minimum wage. Since 1987, the federal tip credit has varied between 40% and 50% of the minimum wage.

TABLE 6.—MINIMUM WAGE EFFECTS, BY TYPE OF RESTAURANT AND IN OTHER LOW-WAGE SECTORS: CONTIGUOUS BORDER COUNTY-PAIR SAMPLE

	ln Earnings	*ln Employment*
Type of restaurant		
Limited service	0.232***	0.019
	(0.080)	(0.151)
Full service	0.187**	0.059
	(0.091)	(0.206)
Other low-wage industries		
Accommodation and food services	0.189**	0.090
	(0.089)	(0.213)
Retail	0.011	−0.063
	(0.051)	(0.066)
Accommodation and food services plus retail (stacked)	0.076**	−0.032
	(0.029)	(0.042)
Manufacturing	−0.019	−0.044
	(0.102)	(0.200)
Controls		
County-pair × period dummies	Y	Y
Total private sector		

Sample sizes are: limited-service restaurants (90,222); full-service restaurants (84,876); accommodation and food services (84,744), retail (150,150), accommodation and food services and retail (84,348); and manufacturing (121,770). All specifications include controls for the log of annual county-level population. All samples and specifications include county fixed effects and county-pair–specific-period fixed effects. The stacked estimate is computed by estimating a common minimum wage effect for the two industries by stacking the data by industry; this specification includes industry-specific county fixed effects, industry-specific population effects, and county-pair X industry X period dummies. Robust standard errors, in parentheses, are clustered at the state and border segment levels. Significance levels: *10%, **5%, ***1%.

some tipped workers are not minimum wage workers, since employers are required to include reported tips in the payroll data that make up the QCEW. Even if tips are not fully reported, it is unclear why the proportion that is reported would change; therefore, an increase in the minimum wage will increase reported earnings. Indeed, this is what we find. Second, when minimum wages increase, competitive pressures may lead to similar increases in base pay for all workers, whether or not they receive tips.[32]

Overall, we conclude that the results are not driven by tip credits, as the earnings effects are strong in both limited- and full-service restaurants, and also when we consider only states with tip credits. Moreover, the employment effects are small for both subsectors and for the full sample, as well as the states with tip credits.

E. Minimum Wage Effects in Other Low-Wage Sectors

Thus far, we have focused on the impact of minimum wages on workers in the restaurant sector, the most intensive user of minimum wage workers. In this section, we extend our analysis to other low-wage sectors. We use the 2006 Current Population Survey to estimate the use of minimum wage workers by sectors. At the two-digit level, the most intensive users of minimum wage workers are accommodation and food services (hotels and other lodging places, restaurants, bars, catering services, mobile food stands, and cafeterias) and retail. Accommodation and food services accounts for 33.0% of all workers paid minimum or near minimum wages (within 10% of the relevant federal or state minimum wage), and 29.4% of workers in this sector are paid minimum or near-minimum wages. Retail accounts for 16.4% of all such minimum or near–minimum wage workers, and these workers make up 8.8% of the retail workforce. Together, the accommodation and food services sector plus the retail sector account for 49.4% of all employees in the United States who are paid within 10% of the federal or state minimum wage.

As the results in table 6 show, we find a positive and significant treatment effect of minimum wages on earnings for the accommodations and food services sector. The magnitude of the effect is quite similar to that for restaurants. Since these broader sectors constitute a sizable share of overall private sector employment in many counties, these estimates do not include a control for total private employment (the results including the control are almost identical). The estimated effect on employment is again positive (0.090) but not statistically significant. The standard error of the employment coefficient for accommodation and food services is somewhat larger, however, than for restaurants in table 2.

For the retail sector, which has higher average wages than accommodation and food services, we do not find a significant treatment effect on earnings; the estimated employment effect is −0.063 but not statistically significant. We also estimate the average effect in accommodation and food services and retail together by stacking the industry data and including industry-pair-period dummies. Here, we find a smaller but significant treatment effect on earnings and a positive but not significant effect on employment. To provide a falsification test, we also estimate the same specifications for manufacturing, since only 2.8% of the manufacturing workforce earns within 10% of the minimum wage. Reassuringly, both the estimated treatment and employment effects are insignificant for this sector.

In summary, the estimated treatment effects are smaller in sectors with higher average wages, and no significant employment effects are discernible in any of these sectors. We conclude that our key findings hold when we examine the low-wage sectors more broadly.

VI. Discussion and Conclusions

In this paper, we use a local identification strategy that takes advantage of all minimum wage differences between pairs of contiguous counties. Our approach addresses the twin concerns that heterogeneous spatial trends can bias the estimated minimum wage effects in traditional approaches using time and place fixed effects, and that not accounting for spatial autocorrelation overstates the precision in individual case studies.

For cross-state contiguous counties, we find strong earnings effects and no employment effects of minimum wage increases. By generalizing the local case studies, we show that the differences in the estimated elasticities in the two

[32] To examine this question more directly, we repeated our estimates using only the 43 states that have tip credits. The earnings effects remain strong, and the employment effects remain indistinguishable from 0 (results available on request).

sets of studies result from insufficient controls for unobserved heterogeneity in employment growth in the national-level studies using a traditional fixed-effects specification. The differences do not arise from other possible factors, such as using short before-after windows in local case studies.

The large negative elasticities in the traditional specification are generated primarily by regional and local differences in employment trends that are unrelated to minimum wage policies. This point is supported by our finding that neighborhood-level placebo minimum wages are negatively associated with employment in counties with identical minimum wage profiles. Our local specification performs better in a number of tests of internal validity. Unlike traditional fixed-effects specification, it does not have spurious negative (or positive) preexisting trends and is robust to the inclusion of state-level time trends as added controls.

How should one interpret the magnitude of the difference between the local and national estimates? The national-level estimates suggest a labor demand elasticity close to -1. This implies that an increase in the minimum wage has a very small impact on the total income earned by affected workers. In other words, these estimates suggest that the policy is not useful for raising the earnings of low-wage workers, as the disemployment effect annuls the wage effect for those who are still working. However, statistical bounds (at the 95% confidence level) around our contiguous county estimates of the labor demand elasticity as identified from a change in the minimum wage rule out anything above -0.48 in magnitude. This result suggests that minimum wage increases do raise the overall earnings at these jobs, although there may be differential effects by demographic groups due to labor-labor substitution.

Do our findings carry over to affected groups other than restaurant workers? Although we cannot address this question directly, the results in a companion paper (Allegretto, Dube, & Reich, 2008) using the CPS suggest an affirmative answer. In that paper, we find that allowing spatial trends at the census division level reduces the measured disemployment level substantially when we consider the response of teen employment to minimum wage increases. Additionally, and parallel to our findings here, we find that the measured disemployment effects disappear once we control for state-level trends in the underlying teenage employment. This evidence suggests that our findings are relevant beyond the restaurant industry.

Several factors warrant caution in applying these results. First, although the differences in minimum wages across the United States (and in our local subsamples) are sizable, our conclusion is limited by the scope of the actual variation in policy; our results cannot be extrapolated to predict the impact of a minimum wage increase that is much larger than what we have experienced over the period under study. A second caveat concerns the impact on hours. The rough estimates presented here suggest that the impact on hours is not likely to be large; however, our estimates in this regard are only suggestive. Third, our data do not permit us to test whether restaurants respond to minimum wage increases by hiring more skilled workers and fewer less skilled ones. The estimates in this paper are more about the impact of minimum wage on low-wage jobs than low-wage workers.

These caveats notwithstanding, our results explain the sometimes conflicting results in the existing minimum wage literature. For the range of minimum wage increases over the past several decades, methodologies using local comparisons provide more reliable estimates by controlling for heterogeneity in employment growth. These estimates suggest no detectable employment losses from the kind of minimum wage increases we have seen in the United States. Our analysis highlights the importance of accounting for such heterogeneity in future work on this topic.

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APPENDIX A

Additional Specifications with State Linear Trends and Dynamic Response

TABLE A1.—EFFECT OF INCLUDING STATE LINEAR TREND ON MINIMUM WAGE EMPLOYMENT EFFECTS

	All-County Sample						Contiguous Border County-Pair Sample			
	(1)		(2)		(4)		(5)		(6)	
					Ln Employment					
$lnMW_t$	−0.176*	0.035	−0.023	0.039	0.032	0.120**	−0.112	0.031	0.016	−0.002
	(0.096)	(0.038)	(0.068)	(0.050)	(0.078)	(0.058)	(0.076)	(0.056)	(0.098)	(0.119)
Controls										
Census division × period dummies			**Y**	**Y**						
MSA × period dummies					**Y**	**Y**				
County-pair × period dummies									**Y**	**Y**
State linear trends		**Y**		**Y**		**Y**		**Y**		**Y**

Sample size equals 91,080 for specifications 1 and 2 of the all-county sample and 48,348 for specification 3 (which is limited to MSA counties) and 70,620 for the border county-pair sample. All specifications control for the log of annual county-level population and total private sector employment. All samples and specifications include county fixed effects. Specifications 1, 2, and 5 include period fixed effects. For specifications 2, 3, and 5, period fixed effects are interacted with each census division, metropolitan area, and county-pair, respectively. Robust standard errors, in parentheses, are clustered at the state level for the all-county samples (specifications 1–3) and on the state and border segment levels for the border pair sample (specifications 4 and 5). Significance levels: *10%, **5%, ***1%.

TABLE A2.—DYNAMIC RESPONSE TO MINIMUM WAGE CHANGES

	All-County Sample				Contiguous Border County-Pair Sample	
	(1)	(2)	(3)	(4)	(5)	(6)
			ln Earnings			
$\Delta lnMW_{(t-8)}$	0.012	0.022	0.028**	0.006	0.021	0.018
	(0.019)	(0.020)	(0.014)	(0.036)	(0.026)	(0.044)
$\Delta lnMW_{(t-6)}$	0.010	0.003	0.013	0.002	0.012	0.002
	(0.027)	(0.027)	(0.018)	(0.048)	(0.035)	(0.060)
$\Delta lnMW_{(t-4)}$	−0.006	0.000	0.051**	0.017	0.018	0.001
	(0.028)	(0.029)	(0.023)	(0.049)	(0.037)	(0.080)
$\Delta lnMW_{(t-2)}$	0.044	0.025	0.086**	−0.001	0.053	0.014
	(0.041)	(0.043)	(0.037)	(0.056)	(0.041)	(0.086)
$\Delta lnMW_{(t)}$	0.133***	0.183***	0.220***	0.140**	0.142***	0.163**
	(0.032)	(0.046)	(0.038)	(0.061)	(0.049)	(0.083)
$\Delta lnMW_{(t+2)}$	0.177***	0.192***	0.226***	0.204***	0.180***	0.209**
	(0.028)	(0.039)	(0.034)	(0.063)	(0.038)	(0.087)
$\Delta lnMW_{(t+4)}$	0.209***	0.220***	0.257***	0.215***	0.233***	0.247***
	(0.025)	(0.052)	(0.056)	(0.063)	(0.040)	(0.090)
$\Delta lnMW_{(t+6)}$	0.281***	0.241***	0.281***	0.109	0.254***	0.197**
	(0.029)	(0.062)	(0.070)	(0.067)	(0.035)	(0.083)
$\Delta lnMW_{(t+8)}$	0.255***	0.241***	0.281***	0.169***	0.247***	0.192*
	(0.036)	(0.070)	(0.077)	(0.058)	(0.040)	(0.105)
$\Delta lnMW_{(t+10)}$	0.292***	0.243***	0.283***	0.129*	0.295***	0.183
	(0.031)	(0.076)	(0.080)	(0.076)	(0.035)	(0.124)
$\Delta lnMW_{(t+12)}$	0.277***	0.257***	0.294***	0.128	0.283***	0.245**
	(0.038)	(0.074)	(0.080)	(0.081)	(0.042)	(0.098)
$\Delta lnMW_{(t+14)}$	0.316***	0.260***	0.297***	0.116	0.309***	0.230**
	(0.039)	(0.077)	(0.087)	(0.084)	(0.045)	(0.103)
$lnMW_{(t+16)}$	0.294***	0.259***	0.294***	0.128	0.307***	0.210
	(0.035)	(0.083)	(0.090)	(0.083)	(0.053)	(0.139)
Controls						
Census division × period dummies		Y	Y			
State-specific time trends			Y			
MSA × period dummies				Y		
County-pair × period dummies						Y
Total private sector	Y	Y	Y		Y	Y

TABLE A2.—CONTINUED

	All-County Sample				Contiguous Border County-Pair Sample	
	(1)	(2)	(3)	(4)	(5)	(6)
				ln Employment		
$\Delta lnMW_{(t-8)}$	−0.060	0.036	0.034	0.009	−0.065	−0.038
	(0.057)	(0.050)	(0.034)	(0.072)	(0.057)	(0.065)
$\Delta lnMW_{(t-6)}$	−0.051	0.071	0.040	−0.010	−0.081	−0.041
	(0.070)	(0.061)	(0.044)	(0.093)	(0.070)	(0.090)
$\Delta lnMW_{(t-4)}$	−0.084	0.000	0.088	−0.069	−0.090	0.012
	(0.072)	(0.071)	(0.062)	(0.108)	(0.074)	(0.130)
$\Delta lnMW_{(t-2)}$	−0.143	−0.008	0.130*	0.055	−0.133	0.088
	(0.093)	(0.099)	(0.067)	(0.118)	(0.086)	(0.167)
$\Delta lnMW_{(t)}$	−0.168	0.061	0.139*	0.044	−0.126	0.053
	(0.117)	(0.127)	(0.078)	(0.148)	(0.092)	(0.150)
$\Delta lnMW_{(t+2)}$	−0.166	0.043	0.117	−0.016	−0.082	0.027
	(0.117)	(0.109)	(0.094)	(0.142)	(0.086)	(0.171)
$\Delta lnMW_{(t+4)}$	−0.200*	0.009	0.062	0.084	−0.098	0.015
	(0.103)	(0.112)	(0.086)	(0.143)	(0.089)	(0.151)
$\Delta lnMW_{(t+6)}$	−0.180	−0.036	0.047	0.069	−0.122	−0.074
	(0.114)	(0.120)	(0.088)	(0.127)	(0.100)	(0.139)
$\Delta lnMW_{(t+8)}$	−0.175	−0.034	0.077	0.068	−0.094	−0.017
	(0.142)	(0.136)	(0.115)	(0.125)	(0.110)	(0.145)
$\Delta lnMW_{(t+10)}$	−0.180	−0.047	0.072	0.064	−0.065	0.011
	(0.135)	(0.128)	(0.109)	(0.146)	(0.102)	(0.166)
$\Delta lnMW_{(t+12)}$	−0.206	−0.070	0.040	0.124	−0.107	0.009
	(0.131)	(0.138)	(0.100)	(0.223)	(0.100)	(0.158)
$\Delta lnMW_{(t+14)}$	−0.250*	−0.096	0.030	0.043	−0.178	−0.013
	(0.137)	(0.147)	(0.106)	(0.238)	(0.114)	(0.193)
$lnMW_{(t+16)}$	−0.349**	−0.109	0.079	0.003	−0.292**	−0.007
	(0.147)	(0.157)	(0.113)	(0.198)	(0.132)	(0.202)
Controls						
Census division × period dummies		Y				
State-specific time trends			Y			
MAS × period dummies				Y		
County-pair × period dummies						Y
Total private sector	Y	Y	Y	Y	Y	Y

Sample size equals 91,080 for specifications 1, 2, and 4 of the all-county sample and 48,348 for specification 3 (which is limited to MSA counties) and 70,620 for the border-county-pair sample. All specifications control for the log of annual county-level population. Total private sector controls refer to log of average total private sector earnings or log of employment. All samples and specifications include county fixed effects. Specifications 1, 4, and 5 include period fixed effects. Specification 4 also includes state-level linear trends. For specifications 2, 3, and 5 period fixed effects are interacted with each census division, metropolitan area, and county-pair, respectively. Robust standard errors, in parentheses, are clustered at the state level for the all-county samples (specifications 1–4) and on the state and border segment levels for the border pair sample (specifications 5 and 6). Significance levels: *10%, **5%, ***1%.

APPENDIX B

Falsification Test: Specifications and Estimates

First, we estimate a panel and time period fixed effects model using the actual sample:

$$\ln y_{it} = \alpha + \eta \ln(w_{it}^{M}) + \delta \ln(y_{it}^{TOT}) + \gamma \ln(pop_{it}) + \phi_i + \tau_t + \varepsilon_{it}. \quad \text{(B1)}$$

This is identical to equation (1) with only county and time fixed effects, and reproduced here for clarity. We expect the elasticity η to be similar as before, though the estimation sample is now restricted from all counties to those in the limited sample of border counties next to states that have only a federal minimum wage.

We then take our placebo sample of counties that had only the federal minimum wage throughout the period ($w_t^M = w_t^{M,\,federal}$). We assign to each of these border counties (i) a placebo minimum wage that is equal to the actual minimum wage faced by its cross-state contiguous neighbor (n) that period. We then estimate the "effect" of this fictitious placebo minimum wage on employment for the set of counties in our placebo sample. We include county and time fixed effects as controls, analogous to the national-level panel estimates. Our specification is

$$\ln y_{it} = \alpha + \eta_n \ln(w_{nt}^{M}) + \delta \ln(y_{it}^{TOT}) + \gamma \ln(pop_{it}) + \phi_i + \tau_t + \varepsilon_{it}. \quad \text{(B2)}$$

The minimum wage variable w_{nt}^M is the minimum wage of the county's cross-state neighbor (denoted again as n). The elasticity η_n with respect to the fictitious minimum wage from one's neighbor should be 0, as this set of counties has identical minimum wage profiles. If it is instead similar to the η from equation (B1), we have evidence that the national-level estimates (using only time and county fixed effects) are biased because of the presence of spatial heterogeneity. As before, we restrict our analysis to balanced panels with full reporting of data.

Panel A in table B1 shows the results from equation (B1) using the actual sample, while panel B shows the results from the placebo sample (equation B2). We find a negative effect in both samples (though imprecise), with elasticities exceeding −0.1 in magnitude, suggesting bias in the canonical specification.

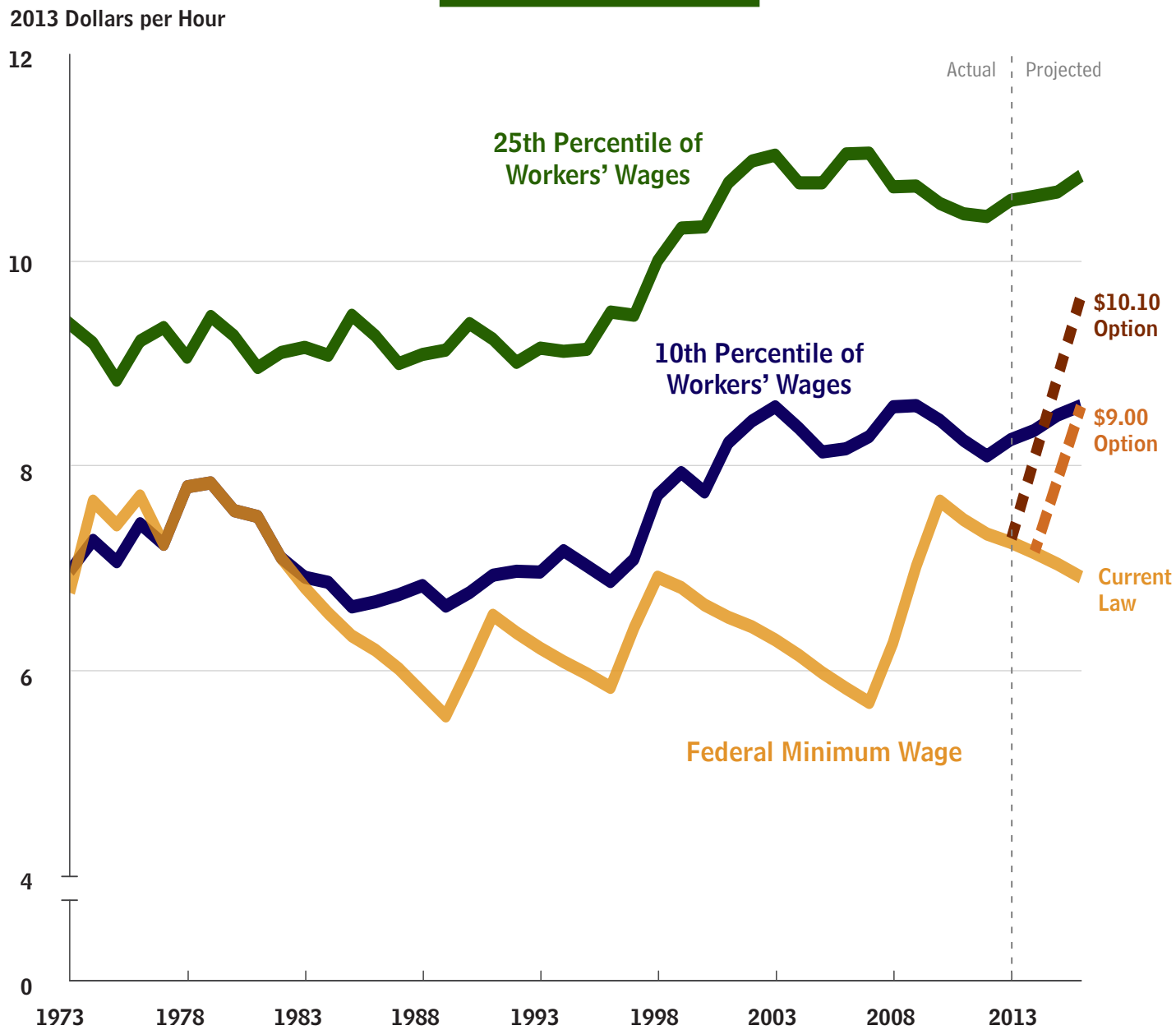
TABLE B1.—FALSIFICATION TESTS: PLACEBO MINIMUM WAGES ON EARNINGS AND EMPLOYMENT

	(1) Ln Earnings	(2) Ln Employment
A. ***Actual minimum wage sample***		
All counties	0.265***	−0.208
	(0.045)	(0.149)
B. ***Placebo minimum wage sample***		
All counties	0.079	−0.123
	(0.056)	(0.158)

Actual minimum wage sample is restricted to those border counties that are next to states that never had a minimum wage higher than the federal level during the sample period. Placebo estimates (B) restrict the sample to border counties in states that never had a minimum wage higher than the federal level. Panel A estimates the effect of the own-county log minimum wage on own-county log restaurant earnings and employment. In contrast, panel B estimates the effect of the neighbor's log minimum wage (the placebo) on own-county log restaurant earnings and employment. Both panels control for county fixed effects and period fixed effects. All specifications include controls for the log of annual county-level population and log of either total private sector earnings (1) or employment (2). Robust standard errors in parentheses are clustered at the state level. Significance levels: *10%, **5%, and ***1%.

CBO

The Effects of a Minimum-Wage Increase on Employment and Family Income



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Notes

Estimates of the effect on employment of the options to increase the minimum wage are rounded to the nearest 100,000 workers.

Numbers in the text, tables, and figures may not add up to totals because of rounding.

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The Effects of a Minimum-Wage Increase on Employment and Family Income

Summary

Increasing the minimum wage would have two principal effects on low-wage workers. Most of them would receive higher pay that would increase their family's income, and some of those families would see their income rise above the federal poverty threshold. But some jobs for low-wage workers would probably be eliminated, the income of most workers who became jobless would fall substantially, and the share of low-wage workers who were employed would probably fall slightly.

What Options for Increasing the Minimum Wage Did CBO Examine?

For this report, the Congressional Budget Office (CBO) examined the effects on employment and family income of two options for increasing the federal minimum wage:

- A "$10.10 option" would increase the federal minimum wage from its current rate of $7.25 per hour to $10.10 per hour in three steps—in 2014, 2015, and 2016. After reaching $10.10 in 2016, the minimum wage would be adjusted annually for inflation as measured by the consumer price index.
- A "$9.00 option" would raise the federal minimum wage from $7.25 per hour to $9.00 per hour in two steps—in 2015 and 2016. After reaching $9.00 in 2016, the minimum wage would not be subsequently adjusted for inflation.

What Effects Would Those Options Have?

The $10.10 option would have substantially larger effects on employment and income than the $9.00 option would—because more workers would see their wages rise; the change in their wages would be greater; and, CBO expects, employment would be more responsive to a minimum-wage increase that was larger and was subsequently adjusted for inflation. The net effect of either option on the federal budget would probably be small.

Effects of the $10.10 Option on Employment and Income. Once fully implemented in the second half of 2016, the $10.10 option would reduce total employment by about 500,000 workers, or 0.3 percent, CBO projects. As with any such estimates, however, the actual losses could be smaller or larger; in CBO's assessment, there is about a two-thirds chance that the effect would be in the range between a very slight reduction in employment and a reduction in employment of 1.0 million workers (see Table 1).

Many more low-wage workers would see an increase in their earnings. Of those workers who will earn up to $10.10 under current law, most—about 16.5 million, according to CBO's estimates—would have higher earnings during an average week in the second half of 2016 if the $10.10 option was implemented.[1] Some of the people earning slightly more than $10.10 would also have higher earnings under that option, for reasons discussed below. Further, a few higher-wage workers would owe their jobs and increased earnings to the heightened demand for goods and services that would result from the minimum-wage increase.

1. In addition to the people who became jobless, some workers earning less than $10.10 per hour and not covered by minimum-wage laws would also not have increased earnings.

Table 1.

Estimated Effects on Employment, Income, and Poverty of an Increase in the Federal Minimum Wage, Second Half of 2016

	$10.10 Option[a]	$9.00 Option[b]
Change in Employment		
Central estimate[c]	-500,000 workers	-100,000 workers
Likely range[d]	Very slight decrease to -1.0 million workers	Very slight increase to -200,000 workers
Number of Workers With Hourly Wages Less Than the Proposed Minimum Whose Earnings Would Increase in an Average Week[e]	16.5 million	7.6 million
Change in Real Income (2013 dollars, annualized)[f]		
Families whose income is below the poverty threshold	$5 billion	$1 billion
Families whose income is between one and three times the poverty threshold	$12 billion	$3 billion
Families whose income is between three and six times the poverty threshold	$2 billion	$1 billion
Families whose income is six times the poverty threshold or more	-$17 billion	-$4 billion
Change in the Number of People Below the Poverty Threshold[g]	-900,000	-300,000

Source: Congressional Budget Office based on monthly and annual data from the Census Bureau's Current Population Survey.

a. The minimum wage would rise (in three steps, starting in 2014) to $10.10 by July 1, 2016, and then be indexed to inflation.

b. The minimum wage would rise (in two steps, starting in 2015) to $9.00 by July 1, 2016, and would not be subsequently indexed to inflation.

c. Uses values at or near the midpoints of estimated ranges for key inputs.

d. In CBO's assessment, there is a two-thirds chance that the actual effect would be within this range.

e. Some of the people with hourly wages slightly above the proposed minimum wage would also have increased earnings under the options.

f. Changes in real (inflation-adjusted) income include increases in earnings for workers who would receive a higher wage, decreases in earnings for workers who would be jobless because of the minimum-wage increase, losses in income for business owners, decreases in income because of increases in prices, and increases in income generated by higher demand for goods and services.

g. Calculated using before-tax family cash income. Poverty thresholds vary with family size and composition. The definitions of income and of poverty thresholds are those used to determine the official poverty rate and are as defined by the Census Bureau. CBO projects that in 2016, the poverty threshold (in 2013 dollars) will be about $18,700 for a family of three and $24,100 for a family of four.

The increased earnings for low-wage workers resulting from the higher minimum wage would total $31 billion, by CBO's estimate.[2] However, those earnings would not go only to low-income families, because many low-wage workers are not members of low-income families. Just 19 percent of the $31 billion would accrue to families with earnings below the poverty threshold, whereas 29 percent would accrue to families earning more than three times the poverty threshold, CBO estimates.[3]

Moreover, the increased earnings for some workers would be accompanied by reductions in real (inflation-adjusted) income for the people who became jobless because of the minimum-wage increase, for business owners, and for consumers facing higher prices. CBO examined family

2. All effects on income are reported for the second half of 2016; annualized (that is, multiplied by two); and presented in 2013 dollars.

3. Poverty thresholds vary with family size and composition; CBO projects that in 2016, the poverty threshold (in 2013 dollars) will be about $18,700 for a family of three and $24,100 for a family of four.

income overall and for various income groups, reaching the following conclusions:

- Once the increases and decreases in income for all workers are taken into account, overall real income would rise by $2 billion.
- Real income would increase, on net, by $5 billion for families whose income will be below the poverty threshold under current law, boosting their average family income by about 3 percent and moving about 900,000 people, on net, above the poverty threshold (out of the roughly 45 million people who are projected to be below that threshold under current law).
- Families whose income would have been between one and three times the poverty threshold would receive, on net, $12 billion in additional real income. About $2 billion, on net, would go to families whose income would have been between three and six times the poverty threshold.
- Real income would decrease, on net, by $17 billion for families whose income would otherwise have been six times the poverty threshold or more, lowering their average family income by 0.4 percent.

Effects of the $9.00 Option on Employment and Income. The $9.00 option would reduce employment by about 100,000 workers, or by less than 0.1 percent, CBO projects. There is about a two-thirds chance that the effect would be in the range between a very slight increase in employment and a reduction in employment of 200,000 workers, in CBO's assessment. Roughly 7.6 million workers who will earn up to $9.00 per hour under current law would have higher earnings during an average week in the second half of 2016 if this option was implemented, CBO estimates, and some people earning more than $9.00 would have higher earnings as well.

The increased earnings for low-wage workers resulting from the higher minimum wage would total $9 billion; 22 percent of that sum would accrue to families with income below the poverty threshold, whereas 33 percent would accrue to families earning more than three times the poverty threshold, CBO estimates.

For family income overall and for various income groups, CBO estimates the following:

- Once the increases and decreases in income for all workers are taken into account, overall real income would rise by $1 billion.
- Real income would increase, on net, by about $1 billion for families whose income will be below the poverty threshold under current law, boosting their average family income by about 1 percent and moving about 300,000 people, on net, above the poverty threshold.
- Families whose income would have been between one and three times the poverty threshold would receive, on net, $3 billion in additional real income. About $1 billion, on net, would go to families whose income would have been between three and six times the poverty threshold.
- Real income would decrease, on net, by $4 billion for families whose income would otherwise have been six times the poverty threshold or more, lowering their average family income by about 0.1 percent.

Effects of a Minimum-Wage Increase on the Federal Budget. In addition to affecting employment and family income, increasing the federal minimum wage would affect the federal budget directly by increasing the wages that the federal government paid to a small number of hourly employees and indirectly by boosting the prices of some goods and services purchased by the government. Most of those costs would need to be covered by discretionary appropriations, which are capped through 2021 under current law.

Federal spending and taxes would also be indirectly affected by the increases in real income for some people and the reduction in real income for others. As a group, workers with increased earnings would pay more in taxes and receive less in federal benefits of certain types than they would have otherwise. However, people who became jobless because of the minimum-wage increase, business owners, and consumers facing higher prices would see a reduction in real income and would collectively pay less in taxes and receive more in federal benefits than they would have otherwise. CBO concludes that the net effect on the federal budget of raising the minimum wage would probably be a small decrease in budget deficits for several years but a small increase in budget deficits thereafter. It is unclear whether the effect for the coming decade as a whole would be a small increase or a small decrease in budget deficits.

The Current Federal Minimum Wage

The federal minimum wage was established by the Fair Labor Standards Act of 1938 (FLSA) and currently applies to about two-thirds of workers in the public and private sectors. Workers whose compensation depends heavily on tips (such as waiters and bartenders) are subject to a special arrangement: The regular minimum wage applies to their compensation including tips, and a lower cash minimum wage applies to their compensation excluding tips. The FLSA also has exceptions for workers and employers of certain types, including a provision permitting employers to pay teenage workers $4.25 per hour during their first 90 days of employment.[4]

The nominal federal minimum wage has risen over the years. The most recent changes, which took effect in July 2007, raised the minimum wage in three steps from $5.15 per hour (in nominal dollars) to $7.25 in July 2009, where it stands today.[5] However, the real value of the minimum wage has both risen and fallen, as the nominal increases have subsequently been eroded by inflation (see Figure 1).[6] That erosion was most pronounced between January 1981 and April 1990 and between September 1997 and July 2007—each a period of nearly 10 years during which the nominal value of the minimum wage was unchanged.

Many states and localities have minimum-wage laws that apply, along with federal law, to employers within their jurisdiction. In recent years, states and localities have been particularly active in boosting their minimum wage; as of January 2014, 21 states and the District of Columbia had a minimum wage that was higher than the federal one. In 11 of those states, the minimum wage is adjusted automatically each year with inflation, and in four more, plus the District of Columbia, future increases have already been legislated. In California, for example, the minimum wage is scheduled to increase from $8.00 to $9.00 in July 2014 and to $10.00 in January 2016. Some localities also have minimum wages that are higher than the applicable state or federal minimum wage; in San Francisco, for instance, the minimum wage is $10.74 per hour. Another 20 states have minimum wages equal to the federal minimum wage (and linked to it, in some cases). In some of those states, the state laws apply to some workers and employers who are not covered by the FLSA. At the moment, about half of all workers in the United States live in states where the applicable minimum wage is more than $7.25 per hour. The applicable minimum wage in those states ranges from $7.40 to $9.32 per hour (see Figure 2).

Minimum-wage workers are sometimes thought of primarily as teenagers from nonpoor families who are working part time, but that is not the case now. Of the 5.5 million workers who earned within 25 cents of the minimum wage in 2013, three-quarters were at least 20 years old and two-fifths worked full time. Their median family income was about $30,000, CBO estimates. (Some of the family incomes within that group of workers were substantially higher or lower than that amount, in part because the number of working adults in their families varied.)

Two Options for Increasing the Federal Minimum Wage

Lawmakers have proposed various options for increasing the federal minimum wage, including several that would increase it to $10.10 per hour and subsequently index it

4. For details about the FLSA's minimum-wage requirements, see Fair Labor Standards Act of 1938, as amended, 29 U.S.C. §201 et seq. (2012). See also Department of Labor, "Minimum Wage and Overtime Pay" (accessed January 8, 2014), www.dol.gov/compliance/guide/minwage.htm.

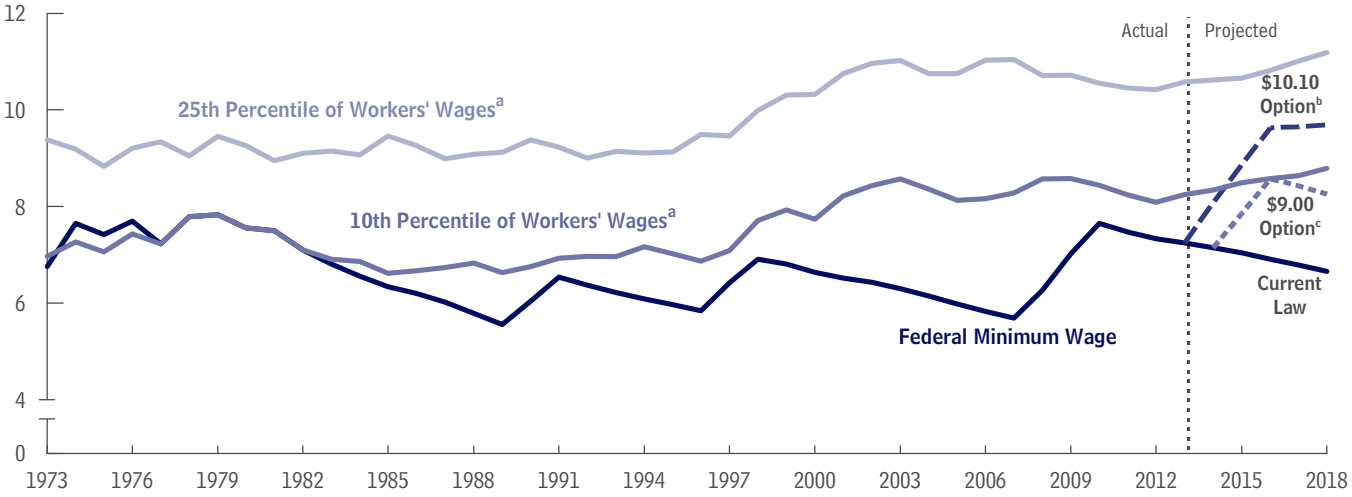
5. After CBO completed its analysis of increasing the federal minimum wage, the President issued an executive order, entitled "Minimum Wage for Contractors," that established a minimum wage of $10.10 per hour for certain individuals working under new contracts with the federal government, beginning on January 1, 2015. That order slightly reduces the number of workers who would be affected by increasing the federal minimum wage and thus slightly reduces the estimated effects presented in this report.

6. Adjusted for inflation, the federal minimum wage reached its historical peak in 1968. In that year, its value in 1968 dollars was $1.60, which is equal to $8.41 in 2013 dollars if the conversion is done with the price index for personal consumption expenditures published by the Bureau of Economic Analysis. CBO generally uses that index when adjusting labor market data for inflation, considering it a more accurate measure than a common alternative—the consumer price index for all urban consumers (CPI-U), which is published by the Bureau of Labor Statistics (BLS). According to many analysts, the CPI-U overstates increases in the cost of living because it does not fully account for the fact that consumers generally adjust their spending patterns as some prices change relative to other prices and because of a statistical bias related to the limited amount of price data that BLS can collect. The value of $1.60 in 1968 dollars is equal to $10.71 in 2013 dollars if the conversion is done with the CPI-U.

Figure 1.

Workers' Hourly Wages and the Federal Minimum Wage, 1973 to 2018

(2013 dollars per hour)



Source: Congressional Budget Office based on monthly data from the Census Bureau's Current Population Survey and on data from the Department of Labor.

Note: CBO converted wages to 2013 dollars using the price index for personal consumption expenditures published by the Bureau of Economic Analysis. For example, nominal values in 2016 of $10.10 and $9.00 were adjusted downward to account for projected inflation between 2013 and 2016. After 2016, the minimum wage under the $10.10 option would increase slightly in the 2013 dollars shown in this figure because it would be indexed to the consumer price index, which would grow faster than the price index for personal consumption expenditures, CBO projects. Values for the federal minimum wage—both actual values and projected values under the $10.10 option, the $9.00 option, and current law—are as of July 1 of each year.

a. The hourly wage of workers not paid hourly was estimated as their weekly earnings divided by their usual hours worked per week. Values after those for 2013 are projected under current law.

b. The minimum wage would rise (in three steps, starting in 2014) to $10.10 by July 1, 2016, and then be indexed to inflation.

c. The minimum wage would rise (in two steps, starting in 2015) to $9.00 by July 1, 2016, and would not be subsequently indexed to inflation.

for inflation.[7] CBO has assessed the impact of such an option, as well as the impact of a smaller increase that would boost the minimum wage to $9.00 per hour and would not link future increases to inflation. (See Appendix A for information about how CBO conducted its assessments.) The options that CBO analyzed would not change other provisions of the FLSA, such as the one that applies to wages for teenage workers during their first 90 days of employment.

A $10.10 Option

CBO examined an option that would increase the federal minimum wage from $7.25 per hour to $8.20 on July 1, 2014; to $9.15 one year after that; and to $10.10 after another year. The increase in the minimum wage between 2014 and 2016 under this option would be about 40 percent, roughly the same percentage as the total increase from 2007 to 2009 but larger than several earlier increases. Each year after that, the minimum wage would rise with the consumer price index.[8]

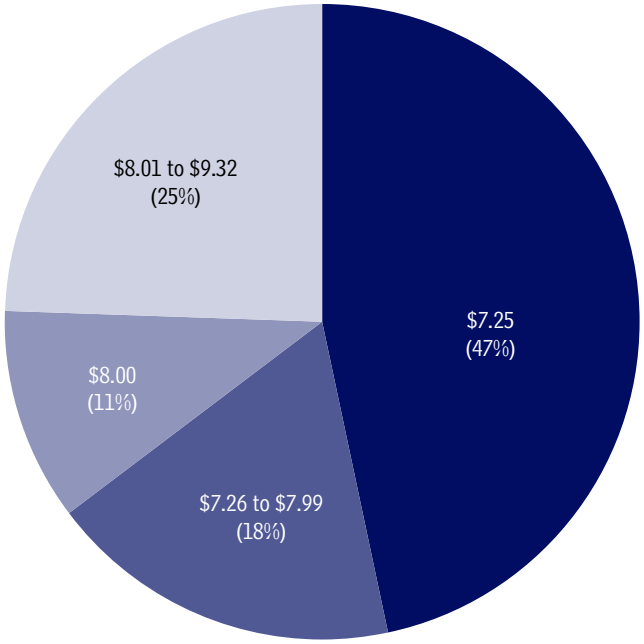
In addition, this option would raise the minimum cash wage for tipped workers from $2.13 per hour to $4.90 in three steps timed to coincide with the changes in the minimum wage. Then, starting in 2017, the minimum

7. See, for example, S. 460, the Fair Minimum Wage Act of 2013; S. 1737, the Minimum Wage Fairness Act; and H.R. 3939, the Invest in United States Act of 2014. Another proposal (H.R. 3746, the Fair Minimum Wage Act of 2013) would increase the minimum wage to $11.00 and subsequently index it for inflation.

8. The $10.10 option is based on the provisions of S. 460, the Fair Minimum Wage Act of 2013. (The FLSA and S. 460 also apply to Puerto Rico and certain other U.S. territories, but because of limitations in available data, CBO's analysis is limited to the effects of minimum-wage increases on employment and family income in the 50 states and the District of Columbia.)

Figure 2.

Shares of All Workers, by States' Applicable Minimum Wage, 2014



Source: Congressional Budget Office based on monthly data from the Census Bureau's Current Population Survey and on data from the Department of Labor.

Note: As of January 1, 2014, 21 states and the District of Columbia had a minimum wage above the federal minimum wage. The highest was $9.32 in the state of Washington.

cash wage for tipped workers would rise by 95 cents each year until it reached 70 percent of the minimum wage (which would occur in 2019, by CBO's estimate); in subsequent years, it would be tied to inflation.

A $9.00 Option

CBO also examined a smaller change that would increase the federal minimum wage from $7.25 per hour to $8.10 on July 1, 2015, and to $9.00 on July 1, 2016. The minimum cash wage for tipped workers would increase when the minimum wage increased, and by the same percentage. The increase in the minimum wage would start one year later than it would under the $10.10 option. Like previous minimum-wage increases, this one would not be indexed to subsequent inflation. This $9.00 option is more similar than the $10.10 option to minimum-wage increases studied in the economics literature in a number of respects: the size of the increase, the portion of the workforce that it would affect, and the fact that its real value would be eroded over time.

How Increases in the Minimum Wage Affect Employment and Family Income

In general, increases in the minimum wage probably reduce employment for some low-wage workers. At the same time, however, they increase family income for many more low-wage workers.

Employment

According to conventional economic analysis, increasing the minimum wage reduces employment in two ways. First, higher wages increase the cost to employers of producing goods and services. The employers pass some of those increased costs on to consumers in the form of higher prices, and those higher prices, in turn, lead the consumers to purchase fewer of the goods and services. The employers consequently produce fewer goods and services, so they hire fewer workers. That is known as a scale effect, and it reduces employment among both low-wage workers and higher-wage workers.

Second, a minimum-wage increase raises the cost of low-wage workers relative to other inputs that employers use to produce goods and services, such as machines, technology, and more productive higher-wage workers. Some employers respond by reducing their use of low-wage workers and shifting toward those other inputs. That is known as a substitution effect, and it reduces employment among low-wage workers but increases it among higher-wage workers.

However, conventional economic analysis might not apply in certain circumstances. For example, when a firm is hiring more workers and needs to boost pay for existing workers doing the same work—to match what it needs to pay to recruit the new workers—hiring a new worker costs the company not only that new worker's wages but also the additional wages paid to retain other workers. Under those circumstances, which arise more often when finding a new job is time-consuming and costly for workers, increasing the minimum wage means that businesses have to pay the existing workers more, whether or not a new employee was hired; as a result, it lowers the additional cost of hiring a new employee, leading to increased employment. There is a wide range of views among economists about the merits of the conventional analysis and of this alternative.

The low-wage workers whose wages are affected by increases in the minimum wage include not only those workers who would otherwise have earned less than the

minimum but also, in some cases, workers who would have earned slightly more than the minimum. After a minimum-wage increase, some employers try to preserve differentials in pay that existed before—for example, so that supervisors continue to be paid more than the people they supervise—by raising the wages of people who previously earned a little more than the new minimum. Also, some wages determined by collective bargaining agreements are tied to the federal minimum wage and could therefore increase. As a result, an increase in the minimum wage causes some workers who would otherwise have earned slightly more than the new minimum wage to become jobless, for the same reasons that lower-wage workers do; at the same time, some firms hire more of those workers as substitutes for the workers whose wages were required to be increased.

The change in employment of low-wage workers caused by a minimum-wage increase differs substantially from firm to firm. Employment falls more at firms whose customers are very sensitive to price increases, because demand for their products or services declines more as prices rise, so those firms cut production more than other firms do. Employment also falls more at firms that can readily substitute other inputs for low-wage workers and at firms where low-wage workers constitute a large fraction of input costs. However, when low-wage workers have fewer employment alternatives overall, employment can fall less at firms that offset some of the increased costs with higher productivity from employees' working harder to keep their better-paying jobs and with the lower cost of filling vacant positions that results from higher wages' attracting more applicants and reducing turnover. Some firms, particularly those that do not employ many low-wage workers but that compete with firms that do, might see demand rise for their goods and services as their competitors' costs rise; such firms would tend to hire more low-wage workers as a result.

The change in employment of low-wage workers also differs over time. At first, when the minimum wage rises, some firms employ fewer low-wage workers, while other firms do not; the reduced employment is concentrated in businesses and industries where higher prices result in larger reductions in demand. Over a longer time frame, however, more firms replace low-wage workers with inputs that are relatively less expensive, such as more productive higher-wage workers. Thus, the percentage reduction in employment of low-wage workers is generally greater in the long term than in the short term, in CBO's assessment. (However, the total reduction in employment might be smaller in the long term; that total depends not only on the percentage reduction in employment of low-wage workers but also on the number of such workers, which could decline over time if wage growth for low-wage workers exceeded any increase in the minimum wage, all else being equal.)

Employers might respond to an increase in the minimum wage in ways other than boosting prices or substituting other inputs for low-wage workers. For example, they might partly offset a minimum-wage increase by reducing other costs, including workers' fringe benefits (such as health insurance or pensions) and job perks (such as free meals). As a result, a higher minimum wage might increase total compensation (which includes benefits and perks) less than it increased cash wages alone. That, in turn, would give employers a smaller incentive to reduce their employment of low-wage workers. However, such benefit reductions would probably be modest, in part because low-wage workers generally receive few benefits related to pensions or health insurance. In addition, tax rules specify that employers who reduce low-wage workers' nonwage benefits can face unfavorable tax treatment for higher-wage workers' nonwage benefits. Employers can also partly offset higher wages for low-wage workers by reducing either formal training or informal mentoring and coaching. The evidence on how much employers reduce benefits, training, or other costs is mixed. (For examples of such evidence, see Appendix B.)

An increase in the minimum wage also affects the employment of low-wage workers in the short term through changes in the economywide demand for goods and services. A higher minimum wage shifts income from higher-wage consumers and business owners to low-wage workers. Because those low-wage workers tend to spend a larger fraction of their earnings, some firms see increased demand for their goods and services, boosting the employment of low-wage workers and higher-wage workers alike. That effect is larger when the economy is weaker, and it is larger in regions of the country where the economy is weaker.

Low-wage workers are not the only ones whose employment can be affected by a minimum-wage increase; the employment of higher-wage workers can be affected as well, in several ways. Firms that cut back on production tend to reduce the number of both higher-wage workers and low-wage workers. But once a minimum-wage

increase makes higher-wage workers relatively less expensive, firms sometimes hire more of them to replace a larger number of less productive low-wage workers. Another factor affecting higher-wage workers is the increase in the economywide demand for goods and services. All in all, a higher minimum wage tends to increase the employment of higher-wage workers slightly, according to CBO's analysis.

Family Income

For most families with low-wage workers, a higher minimum wage boosts family income, because of the increase in earnings that many of those workers (including those whose wages were slightly above the new minimum) receive. A much smaller number of low-wage workers become jobless and therefore experience a decline in earnings because of the higher minimum wage.

For families with low-wage workers, the effect of a higher minimum wage depends on how many such workers are in a family, whether those workers become jobless (and, if so, for how long), and whether there are other changes in family income. For instance, the decline in income from losing a job can be offset in part by increases in nonlabor income, such as unemployment compensation, or by increases in the work of other family members.

For business owners, family income (including income for shareholders) falls to the extent that firms' profits are reduced. In addition, real family income for many people tends to fall a bit, because the increase in prices of goods and services reduces families' purchasing power.

The effects on total national income of an increase in the minimum wage differ in the long term and in the short term. In the long term, the key determinant of the nation's output and income is the size and quality of the workforce, the stock of productive capital (such as factories and computers), and the efficiency with which workers and capital are used to produce goods and services (known as total factor productivity). Raising the minimum wage probably reduces employment, in CBO's assessment. In the long term, that reduction in the workforce lowers the nation's output and income a little, which means that the income losses of some people are slightly larger than the income gains of others. In the short term, by contrast, the nation's output and income can deviate from the amounts that would typically arise from a given workforce, capital stock, and productivity in response to changes in the economywide demand for goods and services. Raising the minimum wage increases that demand, in CBO's assessment, because the families that experience increases in income tend to raise their consumption more than the families that experience decreases in income tend to reduce their consumption. In the short term, that increase in demand raises the nation's output and income slightly, which means that the income losses of some people are slightly smaller than the income gains of others.

CBO's Findings About Employment and Family Income

CBO estimated the effects on employment and family income of both the $10.10 option and the $9.00 option for raising the federal minimum wage.[9] CBO's estimates are for the second half of 2016 because that would be the point at which the minimum wage reached $10.10 under the first option and $9.00 under the second. In either case, the increase in the minimum wage would have two principal effects on low-wage workers: The large majority would have higher wages and family income, but a much smaller group would be jobless and have much lower family income. Once the other changes in income were taken into account, families whose income would be below six times the poverty threshold under current law would see a small increase in income, on net, and families whose income would be higher under current law would see reductions in income, on net. In addition, in either case, higher-wage workers would see a small increase in the number of jobs.

Increases in the minimum wage would raise the wages not only for many workers who would otherwise have earned less than the new minimum but also for some workers who would otherwise have earned slightly more than the new minimum, as discussed above. CBO's analysis focused on workers who are projected to earn less than $11.50 per hour in 2016 under current law (who, in this report, are generally referred to as low-wage workers). People with certain characteristics are more likely to be in that group and are therefore more likely to be affected by increases in the minimum wage like those that CBO examined. For example, in 2016, 88 percent of the

9. For an estimate of the effect on employment of a previous proposal to increase the minimum wage, see Congressional Budget Office, private-sector mandate statement for S. 277, the Fair Minimum Wage Act of 2001 (May 9, 2001), www.cbo.gov/publication/13043.

people earning such wages will be at least 20 years old, 56 percent will be female, and 91 percent will not have attained a bachelor's degree, CBO estimates (see Table 2).

Effects of the Options on Employment

According to CBO's central estimate, implementing the $10.10 option would reduce employment by roughly 500,000 workers in the second half of 2016, relative to what would happen under current law.[10] That decrease would be the net result of two effects: a slightly larger decrease in jobs for low-wage workers (because of their higher cost) and an increase of a few tens of thousands of jobs for other workers (because of greater demand for goods and services).[11] By CBO's estimate, about 1½ percent of the 33 million workers who otherwise would have earned less than $11.50 per hour would be jobless—either because they lost a job or because they could not find a job—as a result of the increase in the minimum wage.

Those job losses among low-wage workers would be concentrated among people who are projected to earn less than $10.10 an hour under current law. Some workers who would otherwise have earned between $10.10 and $11.50 per hour would also see an increase in their wages, which would tend to reduce their employment as well, CBO estimates. However, some firms might hire more of those workers as substitutes for the lower-paid workers whose wages had been increased. Those two factors would probably be roughly offsetting, CBO anticipates, so the number of such workers who were employed would probably not change significantly.

The overall reduction in employment could be smaller or larger than CBO's central estimate. In CBO's assessment, there is about a two-thirds chance that the effect of the $10.10 option would be in the range between a very slight decrease in employment and a decrease of 1.0 million workers; thus, there is a one-third chance that the effect would be either above or below that range. The most important factors contributing to the width of the range are uncertainty about the growth of wages over the next three years (which influences the number of workers who would be affected by the minimum-wage increase, as well as the extent to which the increase would raise their wages) and uncertainty about the responsiveness of employment to an increase in wages. For example, if wage growth under current law was slower than CBO projects, implementing the increase would result in more people with increased wages and a greater reduction in employment than CBO's central estimate suggests.

Under the $9.00 option, employment would decline by about 100,000 workers in the second half of 2016, relative to what it would be under current law, according to CBO's central estimate. That estimate is much smaller than the central estimate for the $10.10 option for three reasons: Fewer workers would be affected; the change in their wages would be smaller; and four aspects of the $9.00 option would make employment in 2016 less responsive to a minimum-wage increase, CBO expects.[12] The first of those four aspects is that the $9.00 option is not indexed to inflation, so some employers would probably refrain from reducing employment, knowing that inflation would erode the cost of paying higher wages. Second, under the $9.00 option, the second half of 2016 arrives one year after the initial increase in the minimum wage—rather than two years, as under the $10.10 option—and employers would be less likely to reduce employment soon after an increase in the minimum wage than they would be over a longer period. Third, because the cost of paying higher wages under the $9.00 option is smaller than that of the $10.10 option, CBO expects that fewer employers would find it desirable to incur the adjustment costs of reducing employment (such as installation of new equipment). Fourth, the $9.00 option would apply to a smaller share of the workforce. Four percent of the labor hours in the economy will be worked

10. A central estimate is one that uses values at or near the midpoints of estimated ranges for key inputs.

11. In this report, phrases referring to changes in the number of jobs are used interchangeably with phrases referring to changes in employment. Technically, however, if a low-wage worker holds multiple jobs and loses one of them, that would represent a reduction of one job but no change in employment (because the worker would remain employed). About 5 percent of low-wage workers will hold more than one job under current law, CBO projects. Therefore, for any given reduction in employment, the reduction in the number of jobs will be slightly larger.

12. Under the $9.00 option, the central estimate of the responsiveness of employment to a change in the applicable minimum wage is -0.075 for teenagers, for example, which means that the employment of teenagers would be reduced by three-quarters of one percent after a 10 percent change in the minimum wage. The equivalent estimate under the $10.10 option is -0.10. See Appendix A for more information.

Table 2.

Projected Characteristics of Low-Wage Workers, Second Half of 2016

Characteristic	Percentage of All Workers With Characteristic Who Will Be Low-Wage	Percentage of Low-Wage Workers With Characteristic
Age		
16 to 19	87	12
20 and older	22	88
All	24	100
Sex		
Female	28	56
Male	21	44
All	24	100
Educational Attainment		
Less than high school	58	21
High school graduate or some college	30	70
Bachelor's degree	7	10
All	24	100
Hours Worked per Week		
Fewer than 35	58	47
35 or more	16	53
All	24	100
Number of Employees in Firm		
Fewer than 50	30	48
50 or more	19	52
All	24	100

Source: Congressional Budget Office based on monthly and annual data from the Census Bureau's Current Population Survey.

Note: Low-wage workers are people who are projected, under current law in the second half of 2016, to be paid less than $11.50 per hour.

by people who will earn up to $9.00 per hour under current law and who would either receive a wage increase or be jobless if the $9.00 option was implemented, CBO estimates. In contrast, about 10 percent of labor hours will be worked by people who will earn up to $10.10 per hour under current law and who would either receive a wage increase or be jobless if the $10.10 option was implemented. Thus, the $9.00 option would cause a correspondingly smaller increase in costs, which employers would be likely to absorb less through reductions in employment and more in other ways.

In CBO's assessment, there is a two-thirds chance that the effect of the $9.00 option would be in the range between a very slight increase in the number of jobs and a loss of 200,000 jobs.[13] If employment increased under either option, in CBO's judgment, it would probably be because increased demand for goods and services (resulting from the shift of income from higher-income to lower-income people) had boosted economic activity and generated more jobs than were lost as a direct result of the increase in the cost of hiring low-wage workers.

CBO has not analyzed the effects of either option on the number of hours worked by people who would remain employed or on the decision to search actively for work and join the labor force by people who would not

13. In a recent survey, leading economists were asked whether they agreed with the statement that "raising the federal minimum wage to $9 per hour would make it noticeably harder for low-skilled workers to find employment." When the results were weighted by the respondents' confidence, 40 percent of the economists agreed with the statement, 38 percent disagreed, and 22 percent were uncertain. However, the survey did not specify how large a drop in employment was meant by "noticeably harder . . . to find employment." See University of Chicago Booth School of Business, "Minimum Wage" (published February 26, 2013; accessed January 8, 2014), http://tinyurl.com/aa52pfo.

otherwise be working. Therefore, the agency has not reported the effects of the options on full-time-equivalent employment or on the unemployment rate.

Effects of the Options on Family Income

Among the 33 million low-wage workers earning less than $11.50 per hour in the second half of 2016 under current law, CBO estimates, real earnings would increase by $31 billion as a result of higher wages if the $10.10 option was implemented. (All amounts of income reported for that period are annualized—that is, multiplied by two—and reported in 2013 dollars.) About 16.5 million workers who will earn less than $10.10 per hour under current law would receive higher wages, CBO estimates, and some workers who will earn between $10.10 and $11.50 per hour under current law would receive higher wages as well.[14] Most of the additional income would accrue to families with fairly low income, but a substantial portion would also be received by low-wage workers in higher-income families—29 percent and 6 percent by families who would otherwise have had income greater than three and six times the federal poverty threshold, respectively.

That increase in income resulting from higher wages would be accompanied by reductions of a similar amount in real income from several other sources: decreases in earnings for workers who would be jobless because of the minimum-wage increase; losses in income for business owners; and increases in prices of goods and services, which would reduce people's purchasing power. In addition, a few higher-wage workers would be employed and earn more because of increased demand for goods and services resulting from the minimum-wage increase.

Once all those factors are taken into account, CBO estimates that the net changes in real income would be an increase of about $5 billion for families whose income would have been below the poverty threshold under current law; an increase of $12 billion for families whose income would have been between one and three times the poverty threshold; an increase of $2 billion for families whose income would have been between three and six times the poverty threshold; and a *decrease* of $17 billion for families whose income would have been greater than that (see Figure 3). (In 2016, six times the poverty threshold will be roughly $120,000 for a family of three and $150,000 for a family of four, CBO projects.) According to CBO's estimates, the increase in earnings for the few low-wage workers living in that last group of families would be more than offset by income reductions, in part because the losses in business income and in real income from price increases would be concentrated in those families (see Table 3).

Families whose income will be below the poverty threshold in 2016 under current law will have an average income of $10,700, CBO projects (see Table 4 on page 14). The agency estimates that the $10.10 option would raise their average real income by about $300, or 2.8 percent. For families whose income would otherwise have been between the poverty threshold and 1.5 times that amount, average real income would increase by about $300, or 1.1 percent. The increase in average income would be smaller, both in dollar amounts and as a share of family income, for families whose income would have been between 1.5 times and six times the poverty threshold. And for families whose income would otherwise have been greater than six times the poverty threshold, the total effect of the $10.10 option would be a reduction in average real income of about $700, or 0.4 percent. But the effects of a minimum-wage increase on family income would vary even among families with similar incomes under current law. For example, many families with income less than six times the poverty threshold would see their income rise; but income for a smaller set of those families would decline, because some low-wage workers would lose jobs that they would otherwise have.

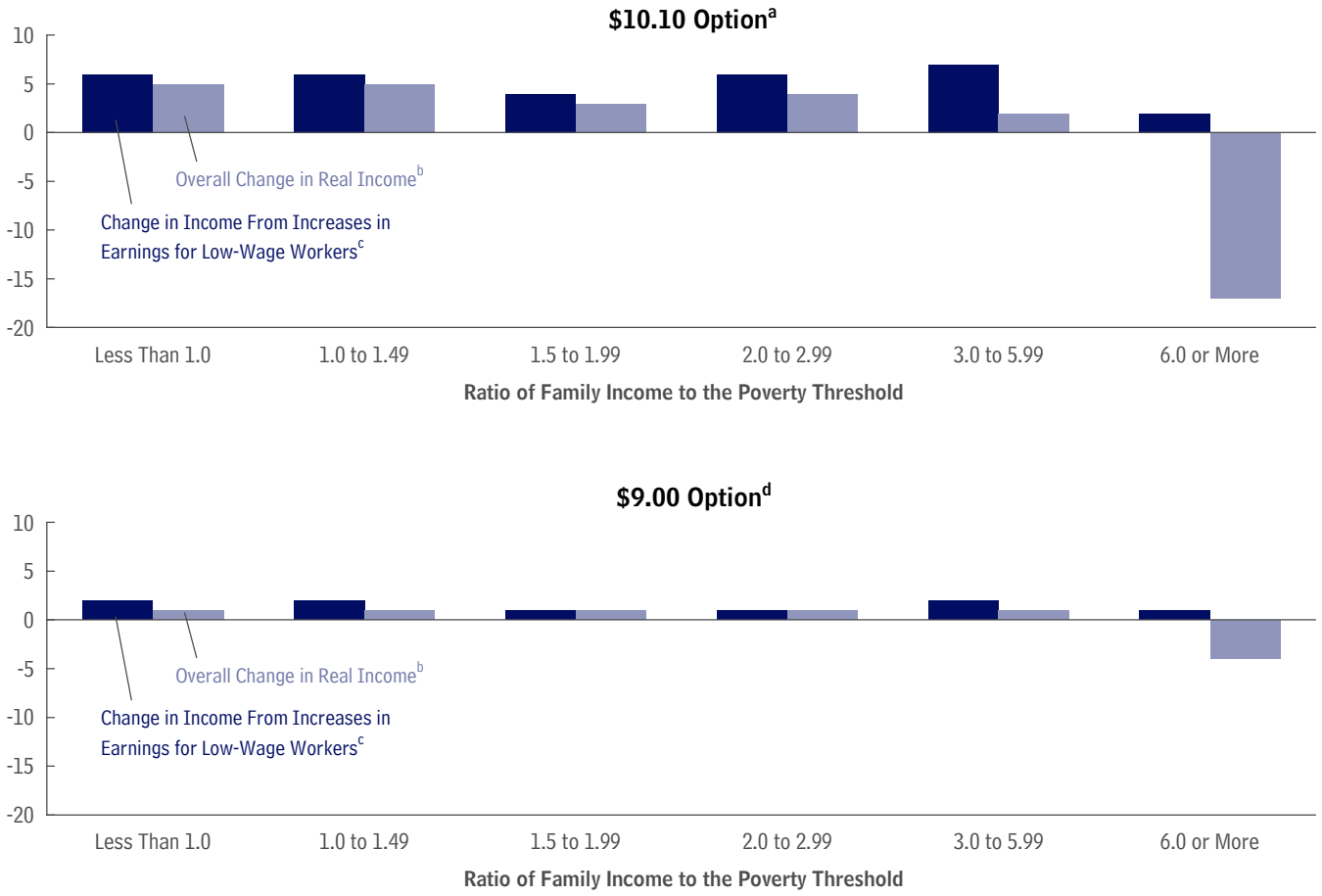
Under current law, CBO projects, there will be roughly 45 million people in families whose income is below the poverty threshold in 2016. The $10.10 option would reduce that number by about 900,000, or 2 percent, according to CBO's estimate. That estimate takes into account both families whose income would increase and move them out of poverty and families whose income would fall and move them into poverty. The estimate uses a measure of family income called cash income, which is used to determine the official poverty rate. Cash income includes earnings and cash transfers from the government, such as Supplemental Security Income benefits. It excludes noncash transfers, such as benefits from Medicaid and the Supplemental Nutrition Assistance Program (SNAP, formerly known as the Food Stamp program); taxes; and tax credits, such as the earned

14. CBO did not estimate the number of workers in the latter group who would receive higher wages as a result of the increase in the minimum wage; instead, it applied an estimated average percentage increase in wages to all workers in that group. See Appendix A for more information.

Figure 3.

Estimated Effects on Real Family Income of an Increase in the Federal Minimum Wage, Second Half of 2016

(Billions of 2013 dollars, annualized)



Source: Congressional Budget Office based on annual data from the Census Bureau's Current Population Survey.

Note: Calculated using before-tax family cash income. Poverty thresholds vary with family size and composition. The definitions of income and of poverty thresholds are those used to determine the official poverty rate and are as defined by the Census Bureau. CBO projects that in 2016, the poverty threshold (in 2013 dollars) will be about $18,700 for a family of three and $24,100 for a family of four.

a. The minimum wage would rise (in three steps, starting in 2014) to $10.10 by July 1, 2016, and then be indexed to inflation.

b. Changes in real (inflation-adjusted) income include increases in earnings for workers who would receive a higher wage, decreases in earnings for workers who would be jobless because of the minimum-wage increase, losses in income for business owners, decreases in income because of increases in prices, and increases in income generated by higher demand for goods and services.

c. Increases in earnings for workers who are projected, under current law, to be paid less than $11.50 per hour.

d. The minimum wage would rise (in two steps, starting in 2015) to $9.00 by July 1, 2016, and would not be subsequently indexed to inflation.

income tax credit (EITC). (Because the EITC provides cash to many lower-income families, it is sometimes compared with the federal minimum wage in discussions about how to boost lower-income families' resources; see Box 1 on page 15.)

Implementing the $9.00 option would have a smaller effect on family income and on the number of people in poverty than implementing the $10.10 option would. About 7.6 million workers who will earn less than $9.00 per hour under current law would receive higher wages, CBO estimates, and so would some workers who will earn more than $9.00 per hour under current law. Once all factors are taken into account, CBO estimates that the net changes in total real income would be an increase of about $1 billion for families whose income

Table 3.

Projected Shares of Workers, by Family Income Group, Second Half of 2016

Ratio of Family Income to the Poverty Threshold	Percentage of All Workers	Percentage of Low-Wage Workers[a]
Less Than 1.0	6	20
1.0 to 1.49	6	16
1.5 to 1.99	7	14
2.0 to 2.99	16	18
3.0 to 5.99	39	24
6.0 or More	26	9
Total	100	100

Source: Congressional Budget Office based on annual data from the Census Bureau's Current Population Survey.

Note: Calculated using before-tax family cash income. Poverty thresholds vary with family size and composition. The definitions of income and of poverty thresholds are those used to determine the official poverty rate and are as defined by the Census Bureau. CBO projects that in 2016, the poverty threshold (in 2013 dollars) will be about $18,700 for a family of three and $24,100 for a family of four.

a. Low-wage workers are people who are projected, under current law in the second half of 2016, to be paid less than $11.50 per hour.

would otherwise have been below the poverty threshold; increases totaling $4 billion for families whose income would have been between one and six times the poverty threshold; and a decrease of about $4 billion for families with higher income, as the declines in income for business owners and the loss of purchasing power would more than offset the increases in earnings for low-wage workers in that group. The agency estimates that average real family income would increase by about $100, or 0.9 percent, for families whose income would have been below the poverty threshold, and that the number of people living in such families would decline by about 300,000, or two-thirds of one percent. That is one-third of the decline in the number of people in poverty that would occur under the $10.10 option, CBO projects. For families whose income would otherwise have been six times the poverty threshold or more, average real family income would be lower by 0.1 percent.

The effects of the two options on average family income and on the number of people living in poverty are difficult to project accurately. Those effects depend on many things, including the extent to which the higher minimum wage would reduce employment, the length of time that people are not working, and the rate at which wages will grow over time under current law. The larger the reduction in employment for a given increase in the minimum wage, the less effective the policy would be at raising families out of poverty. And if wages grew more quickly under current law than CBO projects, fewer workers would have their wages increased under the options, and the effect on poverty would be smaller. (If those wages grew less quickly than CBO projects, the effect would be larger.)

The Effect of an Increase in the Minimum Wage on the Federal Budget

An increase in the federal minimum wage would directly affect the federal budget by requiring the government to increase wages for a small number of hourly federal employees. A minimum-wage increase would also indirectly affect the budget by boosting the prices of some goods and services purchased by the government. Most of those added costs for wages, goods, and services would need to be covered by discretionary appropriations, which are capped through 2021 under current law. If the caps were not adjusted, federal budget deficits would not be affected by the higher costs, but the benefits and government services that could be provided under the existing caps would be reduced. If, instead, lawmakers adjusted the caps to cover the higher costs, and if future appropriations equaled those higher caps, then deficits would be larger.

In addition, an increase in the federal minimum wage would indirectly affect the federal budget by changing people's income—raising real income for some workers while reducing the real income of people who would be jobless because of the minimum-wage increase, of business owners, and of consumers facing higher prices. As a group, the workers receiving an earnings increase would pay more in taxes and receive less in benefits than they would have otherwise, reducing the federal budget deficit; however, the workers, business owners, and consumers with reduced income would pay less in taxes and receive more in benefits, increasing the deficit.

Table 4.

Estimated Effects on Average Real Family Income of an Increase in the Federal Minimum Wage, Second Half of 2016

Ratio of Family Income to the Poverty Threshold	Average Real Family Income Before the Wage Change (2013 dollars, annualized)	Change in Average Real Family Income	
		2013 Dollars, Annualized	Percent
		$10.10 Option[a]	
Less Than 1.0	10,700	300	2.8
1.0 to 1.49	26,300	300	1.1
1.5 to 1.99	36,300	200	0.6
2.0 to 2.99	51,400	200	0.4
3.0 to 5.99	86,600	*	**
6.0 or More	182,200	-700	-0.4
		$9.00 Option[b]	
Less Than 1.0	10,700	100	0.9
1.0 to 1.49	26,300	100	0.4
1.5 to 1.99	36,300	100	0.3
2.0 to 2.99	51,400	100	0.2
3.0 to 5.99	86,600	*	**
6.0 or More	182,200	-200	-0.1

Source: Congressional Budget Office based on annual data from the Census Bureau's Current Population Survey.

Notes: Changes in real (inflation-adjusted) income include increases in earnings for workers who would receive a higher wage, decreases in earnings for workers who would be jobless because of the minimum-wage increase, losses in income for business owners, decreases in income because of increases in prices, and increases in income generated by higher demand for goods and services. Results are weighted by the number of people in the family; for example, when CBO calculated the averages, a family of three would be represented three times.

Calculated using before-tax family cash income. Poverty thresholds vary with family size and composition. The definitions of income and of poverty thresholds are those used to determine the official poverty rate and are as defined by the Census Bureau. CBO projects that in 2016, the poverty threshold (in 2013 dollars) will be about $18,700 for a family of three and $24,100 for a family of four.

* = between zero and $50; ** = between zero and 0.05 percent.

a. The minimum wage would rise (in three steps, starting in 2014) to $10.10 by July 1, 2016, and then be indexed to inflation.

b. The minimum wage would rise (in two steps, starting in 2015) to $9.00 by July 1, 2016, and would not be subsequently indexed to inflation.

CBO anticipates that the increases in income would be larger than the decreases in income for a few years after an increase in the minimum wage but would be smaller thereafter, as discussed earlier in the report. Further, for reasons discussed below, CBO anticipates that the effective marginal tax rate—that is, the combination of increased taxes and decreased benefits for each additional dollar of income—for the increases in income would probably be slightly larger than the effective marginal tax rate for the decreases in income. Combining those factors, CBO concludes that the net effect on the federal budget of raising the minimum wage would probably be a small decrease in budget deficits for several years but a small increase in budget deficits thereafter. It is unclear whether the effect for the coming decade as a whole would be a small increase or a small decrease in budget deficits.[15]

15. Cost estimates produced by CBO and the staff of the Joint Committee on Taxation (JCT) typically reflect the convention that macroeconomic variables, such as nominal output and the average price level, remain fixed at the values that they are projected to reach under current law. That is a long-standing convention—one that has been followed in the Congressional budget process since it was established in 1974 and by JCT since the early 1960s. Therefore, in producing a cost estimate for legislation that would increase the minimum wage, CBO and JCT would not incorporate some of the effects that such an increase would probably have on the economy. CBO was not able to assess how that approach might affect the estimated budgetary impact of increasing the minimum wage.

Box 1.

The Minimum Wage and the Earned Income Tax Credit

The earned income tax credit (EITC) provides cash assistance through the federal income tax system to low- and moderate-income families on the basis of their earnings, adjusted gross income, and family structure.[1] At first, as family earnings rise above zero (the "phase-in" range), EITC benefits increase; when earnings reach a certain point, the benefits stop increasing; when earnings reach a higher point (the beginning of the "phase-out" range), the benefits decline; and when earnings are high enough, the benefits end.[2] The maximum credit in 2014 is $5,460 for people with two qualifying children, for example. In 2016, the Congressional Budget Office (CBO) projects, the earnings level at which EITC benefits end will range from $15,100 for an unmarried worker without children to $54,300 for a married couple with three or more children.

Using the Minimum Wage or the EITC to Boost the Resources of Low-Income Families

To achieve any given increase in the resources of lower-income families would require a greater shift of resources in the economy if done by increasing the minimum wage than if done by increasing the EITC.[3] The reason is that a minimum-wage increase would add to the resources of most families of low-wage workers regardless of those families' income; for example, one-third of low-wage workers would be in families whose income was more than three times the federal poverty threshold in 2016, and many of those workers would see their earnings rise if the minimum wage rose. By contrast, an increase in the EITC would go almost entirely to lower-income families.

The Interaction of the Minimum Wage and the EITC

An increase in the minimum wage would affect EITC benefits in different ways for different families. Many families whose income was initially within the phase-in range of the EITC schedule would find that increased earnings led to additional EITC benefits. But families whose income was initially in the phaseout range of the schedule would find that income gains from a higher minimum wage were partly offset by a reduction in EITC benefits. And families whose income was initially between the phase-in and phaseout ranges (a range in which EITC benefits do not change as earnings rise) and remained in that range after the minimum-wage increase would see no change in their EITC benefits. As for higher-income families with low-wage workers, they would not have been eligible for the EITC in the first place.

The EITC encourages more people in low-income families to work—particularly unmarried custodial parents, often mothers, for whom the EITC is larger than it is for people without children.[4] That increase in the number of available workers tends to reduce workers' wages, allowing some of the benefit of the EITC to accrue to employers, rather than to the workers themselves.[5] An increase in the minimum wage would shift some of that benefit from employers to workers by requiring the former to pay the latter more.

1. Adjusted gross income is income from all sources not specifically excluded from the tax code, minus certain deductions.

2. For a more extensive description of the EITC, see Congressional Budget Office, *Refundable Tax Credits* (January 2013), www.cbo.gov/publication/43767.

3. In a 2007 analysis, CBO compared the cost to employers of a change in the minimum wage that increased the income of poor families by a given amount to the cost to the federal government of a change in the EITC that increased the income of poor families by roughly the same amount. The cost to employers of the change in the minimum wage was much larger than the cost to the federal government of the change in the EITC. See Congressional Budget Office, *Response to a Request by Senator Grassley About the Effects of Increasing the Federal Minimum Wage Versus Expanding the Earned Income Tax Credit* (attachment to a letter to the Honorable Charles E. Grassley, January 9, 2007), www.cbo.gov/publication/18281. Most of the budgetary effect of an increase in the EITC shows up as an increase in spending, rather than as a reduction in revenues, because the credit is refundable and most of the total benefits represent amounts that are paid out rather than amounts that are used to offset other tax liabilities.

4. See Bruce D. Meyer and Dan T. Rosenbaum. "Welfare, the Earned Income Tax Credit, and the Labor Supply of Single Mothers," *Quarterly Journal of Economics*, vol. 116, no. 3 (August 2001), pp. 1063–1114, http://www.jstor.org/stable/2696426; and Nada Eissa and Jeffrey B. Liebman, "Labor Supply Response to the Earned Income Tax Credit," *Quarterly Journal of Economics*, vol. 111, no. 2 (May 1996), pp. 605–637, http://www.jstor.org/stable/2946689.

5. See David Lee and Emmanuel Saez, "Optimal Minimum Wage Policy in Competitive Labor Markets," *Journal of Public Economics*, vol. 96, no. 9 (October 2012), pp. 739–749, http://dx.doi.org/10.1016/j.jpubeco.2012.06.001; and Jesse Rothstein, "Is the EITC as Good as an NIT? Conditional Cash Transfers and Tax Incidence," *American Economic Journal: Economic Policy*, vol. 2, no. 1 (February 2010), pp. 177–208, http://www.jstor.org/stable/25760056.

Effects for People Whose Income Would Rise

As a group, the workers whose income rose because of a minimum-wage increase would consequently pay more in taxes and receive less in benefits.[16] CBO has previously estimated that the effective federal marginal tax rate on earnings for low- and moderate-income workers is 32 percent, on average; that is, the combination of increased taxes and decreased benefits equals, on average, about one-third of such a worker's added earnings.[17] CBO expects that workers receiving an increase in earnings from a boost to the minimum wage would face a similar rate, on average. Therefore, CBO expects that the reduction in the deficit associated with people whose earnings would rise would be about 32 percent of the increase in earnings for those workers.

Part of that deficit reduction would result from increased tax payments for the workers who were earning more. The largest part of that increase would consist of payroll taxes assessed for Social Security and Medicare, which are paid at a combined rate of 15.3 percent by most employees and employers.[18] The increase in earnings for some workers would also increase the amount that they owed in income taxes before refundable tax credits were taken into account, although almost all of them would owe no tax or be in one of the two lowest federal income tax brackets. In addition, benefits from the EITC would fall for workers whose annual income was in the range where the credits decrease with income (see Box 1). (However, those benefits would rise for workers whose annual income remained in the income range where the credits increase with income, and some workers with increased earnings would qualify for a larger child tax credit.)

The rest of the deficit reduction would result from less federal spending (aside from the effects on refundable earned income and child tax credits) for the workers receiving an increase in earnings. Spending on cash and near-cash transfer programs (such as SNAP and Supplemental Security Income) would decline for those workers, because the amount of those benefits generally falls as income rises.[19] In addition, spending for premium assistance tax credits and cost-sharing subsidies for health insurance purchased through exchanges would decline for people who will be receiving such support under current law, because the amount of that support also generally falls as income rises.[20]

The estimated effective federal marginal tax rate of 32 percent does not include the budgetary effects of some people's moving out of Medicaid coverage or into subsidized insurance coverage through exchanges because their earnings had increased.[21] Some of those effects would raise federal costs and others would lower them. In particular, some people who will be eligible for Medicaid

16. In the short term, some people would also see an increase in income because, as discussed earlier in the report, an increase in the minimum wage would boost economywide demand for goods and services and thereby generate an increase in the nation's total output and income. That additional income would raise federal taxes and lower benefits. By contrast, in the long term, and also as discussed earlier in the report, an increase in the minimum wage would generate a decrease in total output and income. That loss in income would lower federal taxes and raise benefits; those effects are incorporated in the discussion in the following section.

17. Congressional Budget Office, *Effective Marginal Tax Rates for Low- and Moderate-Income Workers* (November 2012), www.cbo.gov/publication/43709. Table 6 in that report shows an aggregate marginal rate for 2014 of 34.8 percent. Subtracting the marginal rate attributable to state income taxes yields a federal marginal rate of 32.2 percent. That rate includes the effects of federal income and payroll taxes and of refundable earned income, child, and premium assistance tax credits for health insurance purchased through exchanges. It also includes changes in benefits under SNAP and cost-sharing subsidies provided to some participants in health insurance exchanges. That report was published before the enactment of the American Taxpayer Relief Act of 2012, but CBO estimates that the average federal marginal rate for 2014 would remain at about 32 percent after incorporating the effects of that act.

18. The 12.4 percent Social Security portion of that tax is paid on earnings up to a threshold ($117,000 in 2014).

19. Some researchers have examined the change in cash and near-cash transfer payments that would result from a minimum-wage increase. See Linda Giannarelli, Kye Lippold, and Michael Martinez-Schiferl, *Reducing Poverty in Wisconsin: Analysis of the Community Advocates Public Policy Institute Policy Package* (Urban Institute, June 2012), http://tinyurl.com/q7jb8v6 (PDF, 2.1 MB); and Linda Giannarelli, Joyce Morton, and Laura Wheaton, *Estimating the Anti-Poverty Effects of Changes in Taxes and Benefits with the TRIM3 Microsimulation Model* (Urban Institute, April 2007), http://tinyurl.com/p75lejh (PDF, 2.9 MB). The authors estimate that the reduction in transfer payments for those receiving an increase in earnings would be roughly 4 percent of that increase in earnings.

20. A small portion of the premium assistance tax credits represents a reduction in revenues.

21. There would also be budgetary effects of some people's moving between eligibility categories for Medicaid and some people's moving between Medicaid and the Children's Health Insurance Program.

under current law and would receive higher earnings because of a minimum-wage increase would lose eligibility for Medicaid. Some of those people would gain eligibility for subsidized coverage through exchanges and would choose to take up that coverage; for those people, federal costs would rise. However, some of the people who would lose eligibility for Medicaid would not gain eligibility for subsidized coverage through exchanges (because their income would still be too low) or would gain eligibility but would choose not to take up that coverage (in part because they would have to pay a portion of their premiums themselves); for those people, federal costs would fall. Moreover, some people who, under current law, will not be eligible either for Medicaid or for subsidized coverage through exchanges (because they live in a state that has not expanded Medicaid coverage under the Affordable Care Act but will have too little income to qualify for the subsidies) would gain eligibility for subsidized coverage through exchanges and would choose to take up that coverage; for those people, federal costs would rise. The net federal cost of those various shifts would be small, CBO expects.

Effects for People Whose Income Would Fall

Apart from the group of workers whose earnings rose because of a minimum-wage increase, other people would generally see a reduction in real income, CBO estimates. Some of the reduction would consist of lower earnings for workers who became jobless for at least part of a year because of the change in policy. Some would consist of lower profits for business owners. The remainder would come from higher prices, which would reduce real income. However, it is unclear how much of the total reduction in income would come from each of those sources, and that allocation would affect the impact of a minimum-wage increase on the federal budget. CBO has not estimated the effective federal marginal tax rate for that collection of reductions in income, but the agency anticipates that it would probably be slightly smaller than the effective federal marginal tax rate for the people who would receive higher income.

CBO estimates that workers who were jobless for at least part of a year because of the minimum-wage increase would suffer a loss of real income. As a result, those workers would pay less in taxes and receive more in benefits. The effective federal marginal tax rate for those workers would be similar in magnitude to the rate for workers whose earnings rose.

CBO estimates that profits would also be lower. The lower profits would mean less in personal and corporate income tax receipts. CBO expects that some of the reduction in profits would be for businesses subject to the corporate tax, which would lower corporate tax receipts; the reduction in profits would also indirectly reduce personal income tax receipts, because stockholders' dividend income and realized capital gains on corporate stock would be lower. For those firms, CBO estimates that the decline in corporate and personal tax payments would amount to roughly one-third of the decline in profits. However, some of the reduction in profits would be for firms not subject to the corporate tax, most of whose income is directly subject to the individual income tax. For those firms, the resulting reduction in individual income tax payments could be somewhat lower, as a share of the reduction in profits, than the estimated one-third decline for firms subject to the corporate tax.

Prices would rise as a result of a minimum-wage increase, according to CBO's analysis. That increase in prices would raise federal transfer payments, because some of those payments, such as Social Security, are automatically indexed to changes in the price level. An increase in prices would also reduce federal personal income taxes, because many parameters of the tax system change automatically when the price level rises. Federal spending that is not subject to statutory caps and is not indexed to changes in the price level might also increase, although the extent of that increase would depend on the concentration of minimum-wage workers in the sectors of the economy in which the federal government was doing such spending. CBO was not able to estimate the effective marginal tax rate from the collection of changes in taxes and spending that would take place because of price changes.

Appendix A: The Basis of CBO's Findings

This appendix describes the steps that the Congressional Budget Office (CBO) took to arrive at the estimates in this report—estimates of the number of low-wage workers affected by the two options for increasing the minimum wage; of the responsiveness of employment to changes in the minimum wage; of the options' total effects on employment; and of the options' effects on family income.

How CBO Estimated the Number of Workers Who Would Be Affected by the Options

CBO estimated the number of workers who would be directly affected by the two options for increasing the federal minimum wage. Directly affected workers are those whose wages would otherwise have been below the new federal minimum and who therefore would either receive a higher wage or become jobless if the new federal minimum was imposed. In 2016, CBO estimates, about 17.0 million workers would be directly affected by the $10.10 option and 7.7 million by the $9.00 option. CBO also estimated the number of workers whose wages would otherwise have been slightly above (as defined later in this section) the new federal minimum in 2016 and who would probably also be affected by a change in the minimum wage. Under the $10.10 option, there would be 8.0 million such workers; under the $9.00 option, 4.1 million. (The 33 million workers mentioned in the text—which refers to all workers who are projected to earn less than $11.50 under current law—includes not only the 17.0 million directly affected workers under the $10.10 option and the 8.0 million workers with wages slightly above $10.10 but also some workers, generally at the low end of that range, who are not covered by minimum-wage laws and some workers, at the high end of that range, who live in states projected to have high minimum wages in 2016 and who therefore would probably not be affected by a change in the federal minimum.)

Of the 17.0 million workers directly affected by the $10.10 option, 16.5 million would end up with higher earnings during an average week in the second half of 2016, and 500,000 would end up jobless and therefore with lower earnings (as estimated using the approach described below). Of the 7.7 million workers directly affected by the $9.00 option, 7.6 million would end up with higher earnings during an average week in the second half of 2016, and 100,000 would end up jobless and therefore with lower earnings, according to CBO's estimate.

Workers Who Would Be Directly Affected by Increases in the Minimum Wage

CBO estimated the number of directly affected workers in three main steps: calculating the distribution of hourly wages in 2013; projecting the wage distribution in 2016 under current law; and identifying the workers who would be directly affected by a change in the federal minimum wage in 2016.

In the first step, CBO calculated hourly wages for all workers in calendar year 2013, using monthly data from the Census Bureau's Current Population Survey (CPS), which collects information from about 60,000 households. The CPS is designed to be representative of the U.S. civilian population as a whole; each observation in the survey represents a number of people, and that number is the observation's "sample weight." CBO used those sample weights to estimate effects for the entire population on the basis of the people who were surveyed. When respondents to the survey did not report an hourly wage, their hourly wages were calculated as their usual earnings

per week divided by their usual hours worked per week.[1] Because calculated wages are subject to error, CBO adjusted those wages to be a weighted average of a worker's calculated wage and the average wage of workers with similar characteristics—increasing calculated wages that were below the group average and decreasing wages that were above it.[2]

In the second step, CBO applied forecasts of employment and wage growth to the hourly wages that it had calculated for 2013 to project the distribution of workers' hourly wages in 2016 under current law. CBO expects that very high-wage workers will experience faster wage growth in the next several years than will workers as a whole, so the forecast of wage growth for low-wage workers used in this analysis was smaller than the one in the agency's overall economic forecast. The forecast of wage growth also accounted for the penalties, imposed under the Affordable Care Act, that some employers will pay for not providing qualifying health insurance; those employers will probably pass along the cost of those penalties to their workers in the form of reduced wages.[3] In addition, CBO accounted for prospective increases in some states' minimum wages, including both changes scheduled in current state laws and changes projected on the basis of how states have changed their minimum wages in the past. That adjustment boosted projected wage growth for workers in those states. Altogether, CBO projected that nominal wages of low-wage workers—for example, those at the 10th percentile of the wage distribution—would grow at an average annual rate of 2.9 percent between 2013 and 2016 under current law.

1. If the number of hours that the respondents usually worked per week varied, CBO used the number of hours that they reported having worked during the week prior to the survey. If that number was unavailable, CBO used the average hours of full-time or part-time workers, as appropriate. If the Census Bureau imputed an hourly wage for the worker, CBO used that wage.

2. That adjustment is based in part on findings from Thomas Lemieux, "Increasing Residual Wage Inequality: Composition Effects, Noisy Data, or Rising Demand for Skill?" *American Economic Review*, vol. 96, no. 3 (June 2006), pp. 461–498, http://dx.doi.org/10.1257/aer.96.3.461.

3. See Congressional Budget Office, *The Budget and Economic Outlook: 2014 to 2024* (February 2014), Appendix C, www.cbo.gov/publication/45010. That forecast of wage growth was made in December 2013 and does not account for subsequent developments.

In the third step, CBO identified workers who would be directly affected by a change in the federal minimum wage in 2016. That group includes most workers projected to have hourly wages lower than the new minimum. However, it does not include 2.6 million low-wage workers who, CBO projects, would not be covered or affected by the Fair Labor Standards Act (FLSA).[4] The group of directly affected workers does include 3.5 million workers who, though they may not be covered by the FLSA, are expected by CBO to be affected by an increase in the federal minimum because their hourly wages tend to be as concentrated near the minimum as are the wages of workers covered by the FLSA; those 3.5 million workers consist of employees of small firms, workers in occupations generally exempt from the FLSA, and teenagers in their first 90 days of employment.[5]

CBO distinguished tipped from nontipped workers because a separate minimum cash hourly wage applies to workers who receive more than $30 per month in tips. Under the FLSA and many state laws, employers may pay such workers a lower cash hourly wage if tips bring their total hourly earnings above the minimum hourly wage. To estimate the number of tipped workers, CBO applied the lower minimum cash wage to workers in 11 occupations (such as waiter, bartender, and hairdresser) whose compensation depends heavily on tips. They constitute about 10 percent of low-wage workers.

Other Workers Who Would Probably Be Affected by Increases in the Minimum Wage

CBO also considered the effects of a minimum-wage increase on the wages and employment of workers whose wages would otherwise have been higher than the new

4. To project the percentage of low-wage workers who would not be covered or affected by the FLSA in 2016, CBO estimated the share earning less than the federal minimum wage (or their state's minimum wage, if higher) in 2013, which was 12 percent. Because the agency concluded that nontipped workers who reported being paid up to 25 cents less, and tipped workers who reported being paid up to 13 cents less, than the federal minimum wage—or the state minimum, if it was higher—had probably misreported their wages, it did not count such workers as being paid less than the minimum wage. The analysis does not account for localities' minimum wages because it uses data from the CPS, which does not identify the localities in which respondents work.

5. Department of Labor, "Wages and Hours Worked: Minimum Wage and Overtime Pay" (accessed January 23, 2014), www.dol.gov/compliance/guide/minwage.htm.

federal minimum in 2016. Those effects could be positive or negative for any particular worker, depending on whether that worker's value to a firm would be higher or lower if lower-wage workers became more expensive to employ. Available research, however, suggests that the average effect on the wages of those workers would be positive. (See Appendix B for a list of studies that CBO reviewed.)

In its analysis, CBO assumed that such "ripple effects" would probably apply to workers whose projected wage in 2016 was up to the amount that would result from an increase that was 50 percent larger than the increase in their effective minimum wage (incorporating both their state minimum and the new federal minimum) under either option. Thus, in states where the current minimum wage is $7.25, CBO anticipates that workers earning up to about $11.50 per hour would probably be affected by the $10.10 option. In states with a higher minimum wage, the ripple effect would be much smaller. For instance, under current California law, the minimum wage is scheduled to increase to $10.00 in 2016, and in that state, only workers earning up to $10.15 per hour would probably be affected by an increase to $10.10 in the federal minimum, by CBO's estimate.

Ripple effects added 8.0 million potentially affected workers to CBO's analysis under the $10.10 option and 4.1 million under the $9.00 option. Although CBO estimates that wage increases under the options are much more likely for those workers than for workers with still higher wages, the agency does not expect that all of them would receive wage increases. CBO did not have a basis for estimating the total number of workers whose earnings would rise, although that number would be less than the total number of potentially affected workers.

Uncertainty in the Estimates

Estimates of the total number of potentially affected workers are uncertain for at least four reasons. The first and most important is that, if CBO's forecast of wage growth for low-wage workers between 2013 and 2016 is either too high or too low, the result will be an underestimate or an overestimate, respectively, of the number of workers who would be directly affected by a change in the federal minimum wage. Second, determining whether workers are covered by the FLSA on the basis of what they report to the CPS yields inaccuracies. For instance, some respondents undoubtedly misreported their wages, earnings, or hours worked, leading CBO to classify some unaffected workers as affected and vice versa; similarly, the use of occupation to classify people as tipped workers results in inaccuracies.[6] Third, changes in states' minimum wages could be different from what CBO projects. Fourth, the ripple effects could be smaller or larger than CBO projects.

How CBO Estimated the Responsiveness of Employment to Increases in Minimum Wages

CBO reviewed a large body of research to estimate how adopting either of the two options for increasing the minimum wage would affect employment. Such research typically calculates an employment elasticity—that is, the percentage change in employment induced by a percentage change in the minimum wage. Researchers have generally focused on the employment of workers with low average wages, such as teenagers, high school dropouts, and workers in low-wage industries. Initially focusing on estimates of the employment elasticity for teenagers (in part because they were the most commonly studied group), CBO arrived at a teen-employment elasticity for each of the options, after accounting for the fact that the $10.10 option differed significantly from the scenarios explored by prior research. CBO then synthesized the teen elasticities with broader research to construct elasticities for adults. (See Appendix B for a bibliography of the research that CBO reviewed.)

The elasticities discussed in this section would apply only to directly affected workers and not to others whose wages would be higher than the new minimum wages under the options. For example, CBO concluded that the $9.00 option probably would not affect the employment of workers who would earn more than $9.00 in 2016 under current law (except by increasing overall demand for goods and services, an effect discussed below). That conclusion was the result of considering two opposing factors. On the one hand, wages would probably increase for some of those workers (such as the supervisors of minimum-wage workers), as firms sought to maintain a differential between their wages and those of employees earning the minimum wage—and that wage increase

6. For a discussion of mismeasured wage rates, see, for example, John Bound, Charles Brown, and Nancy Mathiowetz, "Measurement Error in Survey Data," in James J. Heckman and Edward Leamer, eds., *Handbook of Econometrics*, vol. 5 (Elsevier, 2001), pp. 3705–3843, http://dx.doi.org/10.1016/S1573-4412(01)05012-7.

would tend to lower employment. On the other hand, some firms would probably employ more workers with wages higher than the new minimum, because the productivity of those workers relative to their wages would be higher than that of workers whose wages had been pushed up by the minimum-wage increase.

Elasticities for Teenagers Under the $9.00 Option

CBO reviewed the economic research to develop a range of estimates of the elasticity of teen employment with respect to a change in the minimum wage under the $9.00 option. On the basis of that review, CBO selected a central estimate of that elasticity of -0.075; in other words, a 10 percent increase in the minimum wage would reduce employment among teenage workers by three-quarters of one percent. However, there is considerable uncertainty about that elasticity, and CBO developed a range of estimates to reflect that uncertainty. The high end of the likely range was -0.15 and the low end was zero. In CBO's assessment, there is about a two-thirds chance that the effect of the $9.00 option on the employment of teenage workers would lie within that range. Some studies, however, have found that increases in the minimum wage raise employment slightly, while others have found much larger negative effects on employment than are reflected in CBO's range.

Several factors influenced CBO's conclusion about the range of elasticities for teenagers. First, CBO put more weight on studies using certain methodologies than on other studies. Several studies compare employment rates among states that have different minimum wages but otherwise similar labor markets; such analyses plausibly isolate the effects of minimum wages from the effects of national economic changes, such as fluctuations in the business cycle. Other studies try to isolate the employment effects of minimum-wage increases by comparing the national employment rate in years when the minimum wage was high to the rate in years when the minimum wage was low. CBO put the most weight on the studies of state-by-state differences, judging those studies to have estimated more accurately the effects of minimum wages on employment. Changes in state minimum wages are sometimes related to local economic conditions in ways that could lead elasticity estimates based on those changes to be higher or lower than the elasticity that would apply to similar changes in law in the future; CBO considered studies that took a variety of approaches to addressing that issue.

Second, CBO considered the role of publication bias in its analysis. Academic journals tend to publish studies whose reported effects can be distinguished from no effect with a sufficient degree of statistical precision. According to some analyses of the minimum-wage literature, an unexpectedly large number of studies report a negative effect on employment with a degree of precision just above conventional thresholds for publication. That would suggest that journals' failure to publish studies finding weak effects of minimum-wage changes on employment may have led to a published literature skewed toward stronger effects. CBO therefore located its range of plausible elasticities slightly closer to zero—that is, indicating a weaker effect on employment—than it would have otherwise.

Third, CBO considered whether economic conditions in 2016 could lead the responsiveness of employment to an increase in the minimum wage to be larger than it had been in the past. One recent study has found evidence that the employment elasticity is more negative when unemployment is high. However, CBO projects a national unemployment rate of about 6 percent for 2016—a rate similar to the average of unemployment rates during the periods studied in the literature from which CBO drew elasticity estimates.[7] CBO therefore did not adjust its central elasticity estimates to account for economic conditions in 2016.

However, the extent to which employment would respond to changes in the minimum wage in 2016 in the same way that it has in past years is uncertain. For example, the relatively slow growth in the wages of low-wage workers observed in the past few decades has been partly attributed by many analysts to growth in information and other technologies, which have automated some of the tasks traditionally done by those workers. Continued improvements in such technology will probably lead to the automation of some other tasks that they still perform, such as payment collection at retail stores. The pace of technological innovation, though, is difficult to predict. Uncertainty about future developments in the labor market is reflected in CBO's range of estimates.

7. See Congressional Budget Office, *The Budget and Economic Outlook: 2014 to 2024* (February 2014), www.cbo.gov/publication/45010. For additional information about CBO's projections of future labor market conditions, see Congressional Budget Office, *The Slow Recovery of the Labor Market* (February 2014), www.cbo.gov/publication/45011.

Elasticities for Teenagers Under the $10.10 Option

In analyzing the $10.10 option, CBO used a central estimate of the elasticity of employment for teenagers of -0.10, with a likely range from a very slight negative amount to -0.20. Four main factors differentiate the $10.10 option from the $9.00 option and from policies studied in previous research, leading CBO to conclude that the elasticity would be larger (in absolute value) under the $10.10 option.

First, the $10.10 option would index the minimum wage to inflation and would therefore result in a higher minimum wage for many years in the future. The federal minimum wage has not been previously indexed to inflation, and some employers may have refrained from reducing employment in response to prior minimum-wage increases, realizing that inflation would soon erode the cost of those increases. Therefore, an indexed minimum wage would probably reduce employment more than a nonindexed minimum wage would—and neither the $9.00 option nor most policies studied in past research are indexed.

Second, most studies measure changes in employment over a short term, typically a year or two. However, employment reductions after a minimum-wage increase are probably larger over a longer term, in part because those reductions may be less attributable to the elimination of existing low-wage jobs than to slower *growth* in the number of low-wage jobs, which is difficult to detect in short-term studies. CBO assessed the effects of both options in the second half of 2016—two years after the first step of the $10.10 option, but only one year after the first step of the $9.00 option. That longer lag between the initiation of the option and the evaluation date led CBO to estimate a larger elasticity for the $10.10 option than for the $9.00 option.

Third, raising the minimum wage from $7.25 to $10.10 represents a 39 percent increase, which would be larger than most of the increases that have been studied, and CBO expects that employment would be more responsive to a larger increase.[8] Many employers incur adjustment costs when they reduce staffing (especially if that requires restructuring their operations), which may deter them from laying off low-wage workers in response to a small increase in the minimum wage. But the savings from not having those employees are more likely to exceed the adjustment costs when the minimum-wage increase is large.[9]

Fourth, the $10.10 option would apply to a larger fraction of the workforce—one that accounts for about 10 percent of all hours worked, CBO projects—than many previous increases did. It would do so not only because the percentage increase is large, but also because the minimum wage before the increase would be higher in real (inflation-adjusted) terms than it was before many previous increases (see Figure 1 on page 5).[10] For example, although the percentage increase in the federal minimum wage from 2007 to 2009 was similar to the one projected under the $10.10 option, the fraction of the workforce affected under that option would be about five times as large (see Table A-1).[11] When a greater proportion of a firm's work hours are affected by the minimum wage, the adjustment cost per worker of reducing staffing (again, especially if the firm is restructuring its operations) is probably smaller, making the firm more likely to reduce employment.

Translating Elasticities From Previous Research for Use in CBO's Analysis

In order to project the change in employment that would result from the $9.00 and $10.10 options, CBO

8. The last increase in the federal minimum wage, implemented between 2007 and 2009, constituted a 41 percent increase, but earlier percentage increases were typically lower. Some states have implemented large percentage increases in the minimum wage, however. New York, for example, increased its minimum wage from $5.15 to $7.15 per hour—a 39 percent increase—between 2005 and 2007.

9. In addition, at the same time that the proposed increases in the minimum wage would take effect, the Affordable Care Act's requirement that many employers provide health insurance (or pay a penalty if they do not) will impose an additional cost on employers for some low-wage workers who do not currently have employment-based health insurance. CBO expects that the cost will ultimately be borne by workers through lower wages; but before that adjustment has fully taken effect, the cost further boosts the likelihood that employers' savings from reducing the size of their workforces would exceed their adjustment costs.

10. The 10 percent of work hours affected in 2016 by the $10.10 option is not directly comparable to the percentage of workers projected to make less than $10.10 per hour in 2016 as reported in Figure 1. That percentage is based on a count of workers, rather than of hours worked, and it includes workers making less than $10.10 who are not covered by the FLSA.

11. The 10 percent of work hours affected in 2016 by the $10.10 option reported above differs from the 11.4 percent in 2016 reported in Table A-1 mainly because of the different definition of directly affected workers used in Table A-1 to create a consistent series over time.

Table A-1.

Comparing Changes in the Federal Minimum Wage Since 1980 With Changes Under the Two Options

Year of the Minimum-Wage Increase[a]	Percentage of Workers Earning Between the Old and New Minimum Wages	Percentage of Hours Worked by Workers Earning Between the Old and New Minimum Wages
	Changes Since 1980	
1980	10.9	8.6
1981	11.7	9.2
1990	4.3	3.2
1991	5.2	4.0
1996	3.4	2.5
1997	5.8	4.3
2007	1.3	0.9
2008	1.9	1.4
2009	2.7	2.0
Average	**5.3**	**4.0**
	Projected Changes Under the $9.00 Option[b]	
2015	3.9	2.3
2016	7.7	5.7
Average	**5.8**	**4.0**
	Projected Changes Under the $10.10 Option[c]	
2014	6.3	4.7
2015	10.0	7.7
2016	14.1	11.4
Average	**10.1**	**7.9**

Source: Congressional Budget Office based on the Census Bureau's Current Population Survey and on data from the Department of Labor.

Note: For the analysis in this table, to create a consistent series over time, CBO focused on groups of workers earning between the old minimum wage and the new minimum wage that was scheduled to take effect within a year. To allow for some misreporting of wages, workers earning slightly below the old minimum wage were also included. The hours worked were those reported prior to the increase in the minimum wage. Those groups of workers differ from the groups of directly affected workers under the options discussed elsewhere in this report because they do not account for any wage growth, within the year prior to the new minimum wage's taking effect, that would have occurred if the minimum wage had not been raised, or for increases in state minimum wages that would have increased workers' wages during the period.

a. The amendments to the Fair Labor Standards Act of 1938 mandating the minimum wage increases for these years were enacted in 1977, 1989, 1996, and 2007.

b. The minimum wage would rise (in three steps, starting in 2014) to $10.10 by July 1, 2016, and then be indexed to inflation.

c. The minimum wage would rise (in two steps, starting in 2015) to $9.00 by July 1, 2016, and would not be subsequently indexed to inflation.

converted the elasticity estimates that it drew from the literature on teenage workers to elasticity estimates for directly affected teenagers and adults.

Elasticities for Directly Affected Teenagers. The research discussed above typically defines employment elasticity (e) as the responsiveness in the employment ($\%\Delta E$) of a group of workers, such as teenagers, to a change in the applicable minimum wage ($\%\Delta MW$—that is, the change in the federal or state minimum, whichever is higher), as shown in the following equation:

$$e_{literature} = \frac{\%\Delta E}{\%\Delta MW}$$

The elasticity ranges reported earlier in this appendix are based on that approach so that they will be more easily comparable to the elasticities typically reported in the research literature. In its calculations, however, CBO used

elasticities that were modified in two ways to be more accurate estimates of the effect of the options.

The first modification that CBO made arose because the literature typically focuses on the historical employment response of *all* teenagers to a change in the minimum wage. Many of those teenagers initially had low wages and, when the minimum wage rose, received a wage increase (or were rendered jobless); but many other teenagers had wages that were higher than the new minimum and therefore were largely unaffected by the change. In contrast, CBO's approach examines the responsiveness of employment of only *directly affected* teenagers to a change in the minimum wage—that is, the responsiveness of employment of those who would otherwise earn less than the new minimum wage. When analyzing the $10.10 option, for example, CBO's approach focuses on the responsiveness of teenage workers who would have earned less than $10.10 per hour in 2016 if the option had not been implemented. The two approaches are similar, but they can yield different results when the fraction of teenagers with low wages varies over time and with policy changes. In CBO's view, an approach that focuses on the response of low-wage workers is more accurate.

The second modification that CBO made was to use elasticities that relate employment not to changes in the minimum wage itself but to average changes in workers' wages induced by a change in the minimum wage. (For instance, a worker who would otherwise have earned $9.00 per hour would receive a 12 percent increase if the minimum wage rose to $10.10. However, the minimum wage for that worker would rise from $7.25 to $10.10, an increase of 39 percent.) The elasticities that are typically reported in the literature are scaled to the increase in the minimum wage itself—but for two reasons, an approach relying on them is not as well suited for projecting the change in employment resulting from a future change in the minimum wage. First, that approach does not incorporate information about the distribution of workers' wages. For example, in a projection of the effect of the $10.10 option, it would make no difference, under that approach, whether most workers would otherwise have earned $7.25 or $10.09. Second, that approach regards all directly affected workers as equally likely to lose their jobs after a minimum-wage increase, no matter what they would otherwise have been paid. In CBO's view, by contrast, workers whose wages are just below the new minimum wage are more likely to remain employed after it increases than workers who are earning substantially less and are probably less valuable to the employer. CBO's approach accounts for the distribution of workers' wages and for the difference in the likelihood of losing one's job.

CBO calculated the responsiveness of employment among directly affected teenagers by dividing the elasticities drawn from the literature by the portion of employed teenagers who would earn less than the new minimum wage before its implementation (p_{direct}) and then multiplying by the ratio of the percentage change in the applicable minimum wage ($\%\Delta MW$) to the average percentage change in the wages of those teenagers ($\%\Delta W_{direct}$).[12] The following equation shows the calculation:

$$e_{direct} \equiv \frac{\%\Delta E_{direct}}{\%\Delta W_{direct}} = \frac{e_{literature}}{p_{direct}} \times \frac{\%\Delta MW}{\%\Delta W_{direct}}$$

CBO calculated those conversion factors using CPS data from 1979 through 2009. The CPS data indicate that past increases in the minimum wage typically affected about a third of employed teenagers and were typically about 50 percent higher than the average of the wage changes necessary for compliance with the new minimum. Thus, elasticities for directly affected teenagers are about 4.5 times higher, CBO estimates, than the teen-employment elasticities with respect to the change in the applicable minimum wage discussed in the previous section.

Elasticities for Directly Affected Adults. Much less research has been conducted on the responsiveness of adult employment to minimum-wage increases than on the responsiveness of teenage employment. Using the available information, CBO concluded that the elasticity for directly affected adults was about one-third of the elasticity for directly affected teenagers, and the agency

12. A similar conversion was used in Charles Brown, "Minimum Wages, Employment, and the Distribution of Income," in Orley Ashenfelter and David Card, eds., *Handbook of Labor Economics*, vol. 3B (Elsevier, 1999), pp. 2101–2163, http://tinyurl.com/omxr3p7, and in David Neumark and William L. Wascher, *Minimum Wages* (MIT Press, 2008), http://mitpress.mit.edu/books/minimum-wages. The conversion relies on the assertion that the increase in the minimum wage does not have a net effect on employment for workers earning more than the new minimum wage. As discussed earlier, CBO concluded that the research supports that assertion, with the exception of the increase in employment that would result from greater overall demand for goods and services. The adjustment made to account for that increase in employment is discussed in the section "How CBO Estimated the Total Effects of the Options on Employment."

applied that proportional adjustment to the central estimates and likely ranges of elasticities for teens discussed above.

Some studies have found large elasticities for particular groups of adults, such as high school dropouts or African Americans in their 20s, but most of the adults who would be affected by the $9.00 and $10.10 options would not fall into those categories. A study that tracked directly affected adults regardless of their education, age, or race suggests that their employment is less sensitive to increases in the minimum wage than that of directly affected teenagers. One explanation for that lower degree of responsiveness is that employers facing an excess of workers or of job applicants tend to favor adults over teenagers. Supporting that explanation is research suggesting that encouraging employment among low-wage parents reduces employment among younger, childless adults.

CBO also reviewed studies that examined the response of employment to changes in the minimum wage for other groups of workers, such as those in particular industries. Those results were broadly consistent with CBO's findings for teenagers and adults after being adjusted to avoid apples-to-oranges comparisons. For example, several studies of the food and drink industry measured elasticities in terms of the change in all employment in the industry stemming from a change in the applicable minimum wage. Many of the employees at those businesses did not have wages low enough to be directly affected by a minimum-wage change; that factor largely accounts for differences between the smaller elasticities typically reported in studies of the food-and-drink industry and CBO's estimates of elasticities for directly affected workers.

How CBO Estimated the Total Effects of the Options on Employment

CBO's central estimates that the $10.10 and $9.00 options would reduce employment by roughly 500,000 and 100,000 workers, respectively, were based on four main factors. Two were discussed above: the number of low-wage workers directly affected by the options and the responsiveness of the employment of low-wage workers to increases in minimum wages. The remaining two factors were the change in the wages of directly affected workers and the increase in demand for goods and services caused by each option. To calculate the total effect on employment, CBO multiplied estimates of the first three factors together for teenagers; did the same for adults; added the results; and then added an amount to account for the fourth factor. To reflect the considerable uncertainty in estimating the total employment effect, CBO also reported a range within which, in the agency's assessment, there was about a two-thirds chance that the actual effect would lie.

The Increase in the Wages of Directly Affected Workers

CBO first projected wages for all workers in 2016 under current law; it then increased wages that would be below the new minimum wage under consideration to equal that new minimum. The difference between the directly affected workers' wages before and after that adjustment was used to calculate the average percentage changes in directly affected workers' wages (before accounting for job losses caused by the minimum-wage increase). Under the $10.10 option, CBO projects average percentage changes of about 18 percent for teenagers and 14 percent for adults. The projected changes are smaller under the $9.00 option—10 percent for teenagers and 8 percent for adults. All those percentage changes are lower than the percentage changes in the minimum wage itself because most low-wage workers in 2016 would earn more than $7.25 under current law.

The Increase in Demand for Goods and Services

Raising the minimum wage would have four direct effects on the aggregate demand for goods and services. First, consumption would be reduced among people who became jobless because of the minimum-wage increase. In estimating that effect, CBO accounted for lower savings and some borrowing by people who would thereby avoid a sharp reduction in their standard of living. Second, additional spending by affected workers with earnings increases would boost demand. Third, demand would be reduced because business owners and shareholders would absorb part of the cost of the minimum-wage increase in the form of reduced profits and therefore would reduce their spending. Fourth, demand would also be reduced because affected employers would pass part of their increased costs on to consumers in the form of higher prices for goods and services; those higher prices would reduce the average consumer's purchasing power, resulting in less spending by consumers after adjusting for inflation. (For examples of the research that CBO reviewed on these topics, see Appendix B.)

On balance, according to CBO's analysis, raising the minimum wage would increase demand for goods and services because, taken together, the second, third, and fourth direct effects would shift income from business owners and consumers (as a whole) to low-wage workers. Low-wage workers generally spend a larger share of each dollar they receive than the average business owner or consumer does; thus, when a dollar from business owners or consumers is shifted to low-wage workers, overall spending increases. The increase in demand from that shifting of income would be larger than the decrease in demand from the reduced consumption of people who became jobless, CBO estimates.

Increasing the minimum wage would also have indirect effects on demand that could either enhance or reduce the direct effects. For instance, the greater demand for goods and services just described would prompt some companies to increase investment to bolster their future production, further boosting demand. But higher prices of goods and services sold by companies employing minimum-wage workers would cause consumers to shift their purchases to other companies, potentially creating bottlenecks until those companies adjusted to the increased demand. On net, the indirect effects would reduce demand, according to CBO's central estimates. (Under current conditions, the indirect effects would increase demand, CBO estimates, but they would reduce demand in 2016 because the economy will be stronger and the Federal Reserve would therefore be more active in offsetting the direct increase in demand by raising interest rates.)

The increased demand for goods and services that would result from an increase in the minimum wage would have a short-term impact, boosting employment by a few tens of thousands of workers in the second half of 2016 under the $10.10 option, CBO estimates. The agency's estimation approach was similar to the one that it used to assess the effects of the American Recovery and Reinvestment Act of 2009 (ARRA) and of various policies designed to increase output and employment—but adjusted to account for the much stronger economy projected for late 2016.[13] Specifically, CBO estimated the impact of both the $10.10 option and the $9.00 option on demand while accounting for both the direct and indirect effects. Then CBO estimated the effect of those changes in demand on productivity, hours worked per worker, and employment, using historical relationships as a guide. Changes in demand would affect employment gradually, over several quarters, because part of a rise in output would initially result in higher productivity and hours worked per worker, rather than in increased employment.

The overall increase in demand from boosting the minimum wage, and the resulting increase in employment, are represented in the findings of most previous research only to a small extent. For example, a study of impacts on directly affected workers captures the macroeconomic effects only on those workers, not on all workers. Also, a study of a minimum-wage increase in a given state may capture its effects on demand for in-state goods but not for out-of-state goods. After analyzing the importance of such factors, CBO concluded that previous research incorporated roughly 10 percent of the overall effects on aggregate demand. CBO therefore reduced its estimate of the economywide demand effects of a minimum-wage increase by about 10 percent to avoid double-counting those effects.

Uncertainty in the Estimates

CBO produced a range of estimates of the effect of increasing the minimum wage on employment by analyzing various sources of uncertainty. The three most important were the growth in wages of affected workers under current law over the next three years, the responsiveness of employment to changes in wages, and the extent to which an increase in aggregate demand because of higher labor earnings would increase employment. CBO concluded that two further sources of uncertainty—sampling variability in the CPS and the level of state minimum wages in 2016—were relatively insignificant.

To estimate a range of values for wage growth, CBO examined the history of wage growth rates and the extent to which those rates varied over three-year periods. To estimate a range for the responsiveness of employment to changes in wages, CBO used the elasticity ranges developed for the two options that were discussed above. CBO measured uncertainty in aggregate demand effects by

13. See Congressional Budget Office, *Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output From October 2012 Through December 2012* (February 2013), www.cbo.gov/publication/43945; and testimony of Douglas W. Elmendorf, Director, Congressional Budget Office, before the Senate Committee on the Budget, *Policies for Increasing Economic Growth and Employment in 2012 and 2013* (November 15, 2011), www.cbo.gov/publication/42717.

using methods similar to those that it used in its analysis of ARRA.[14]

Building on those ranges of wage growth, elasticities, and aggregate demand effects, CBO generated simulations of effects on employment that incorporated the likelihood that wage growth could be higher or lower by a certain amount, the likelihood that elasticities could be larger or smaller to a certain extent, and other sources of uncertainty. CBO used the results of those estimates to form a range for the effect on employment of each policy option. There is a two-thirds chance, in CBO's assessment, that the actual effects would be within the ranges reported.

How CBO Estimated the Effects of the Options on Family Income

CBO analyzed the effects on family income of the two options for increasing the federal minimum wage by comparing a projected distribution of family income in 2016 under current law with the distribution that would prevail if the federal minimum wage was increased to either $10.10 or $9.00. The monthly data from the CPS that CBO used in its analysis of employment did not contain the information on family income necessary for this analysis, so CBO instead used data from the CPS Annual Social and Economic Supplement (ASEC) that was administered in March 2013, which reported family income and individuals' earnings for calendar year 2012.

Wages and Family Income Under Current Law

Before it could estimate the effect of the two options on family income in 2016, CBO needed to project family income under current law. CBO used a two-step process similar to the one that it used in its employment analysis—first calculating hourly wages and annual family income in 2012 and then using those calculations to project wages and family income in 2016.

Hourly Wages and Annual Family Income in 2012. CBO estimated the hourly wages of workers and annual income of families in 2012 by using data from the 2013 ASEC. Workers' hourly wages were calculated as their annual earnings divided by the number of hours they worked during the year (calculated as the number of hours they usually worked per week times the number of weeks they worked during the year).[15] As in its analysis of employment, CBO adjusted workers' calculated wages up or down to move their wage toward the average wage for workers with similar observable characteristics.

However, when CBO used those data to project workers' wages in 2016, it found far fewer workers who would be directly affected by the change in the minimum wage than it had in its analysis of employment.[16] The discrepancy probably arose because of greater measurement error in the ASEC than in the monthly CPS, which reports wages according to people's responses to a direct question about how much they earn per hour. CBO therefore further adjusted the distribution of hourly wages calculated from the ASEC to match more closely the analogous distribution from the monthly CPS, mostly by adjusting some workers' wages up to the minimum wage projected to apply to them in 2016 under current law.[17]

CBO also used the ASEC to measure the distribution of before-tax family cash income in 2012, which is the measure that the Census Bureau uses to determine the official poverty rate. That measure of income includes labor earnings, capital and business income, and other private sources of income, as well as cash transfers from the government, such as Supplemental Security Income (SSI) and Social Security (both Old-Age and Survivors

14. Felix Reichling and Charles Whalen, *Assessing the Short-Term Effects on Output of Changes in Federal Fiscal Policies*, Working Paper 2012-08 (Congressional Budget Office, May 2012), www.cbo.gov/publication/43278.

15. CBO did not exclude observations for which the Census Bureau imputed annual earnings, the number of hours of work per week, or the number of weeks worked per year.

16. To be consistent with the analysis of the number of workers affected by an increase in the minimum wage, CBO identified nontipped workers who were paid up to 25 cents less and tipped workers who were paid up to 13 cents less than the federal minimum wage—or the state minimum if it was higher—as workers who would be affected by a change in the minimum wage.

17. As it did in estimating the number of affected workers, CBO identified tipped workers as those in 11 occupations (such as waiter, bartender, and hairdresser) whose compensation depends heavily on tips. Throughout its analysis, CBO applied to those workers the lower minimum wage for tipped workers.

Insurance and Disability Insurance payments).[18] It does not include noncash government transfers, such as benefits provided through the Supplemental Nutrition Assistance Program (SNAP), Medicaid, or Medicare, nor does it reflect the taxes people pay or the tax credits they receive, such as the earned income tax credit (EITC).

Projecting Hourly Wages and Annual Family Income in 2016. CBO used the calculations described above and its forecasts of growth in wages and other income to project the distribution of hourly wages and annual family income in 2016.[19] As in the employment analysis, the forecast of wage growth used for this analysis was smaller than the agency's overall forecast of wage growth because CBO expects that very high-wage workers will experience faster wage growth in the next several years than other workers will.[20] In addition, CBO accounted for prospective increases in some states' minimum wages, including changes scheduled in current state laws and changes projected on the basis of how states have changed their minimum wages in the past.

To project family income in 2016, CBO used its forecasts of growth in the components of income when they were available—as they were for interest and dividends, for example. CBO projected that the other components of income will grow at the same rate that the price index for personal consumption expenditures does in CBO's forecast. CBO estimated that the number of workers will increase according to the agency's forecast of employment growth between 2013 and 2016. The rate of growth in the number of nonworking family members was similarly matched to the agency's forecasts of growth in the nonworking population.

18. Specifically, before-tax family cash income includes wage and salary earnings; pension or retirement income; income from self-employment, Temporary Assistance for Needy Families (TANF), Supplemental Security Income, Social Security, child support, unemployment compensation, workers' compensation, disability benefits, educational assistance, and financial assistance from outside the household; and other cash income.

19. See Congressional Budget Office, *The Budget and Economic Outlook: 2014 to 2024* (February 2014), www.cbo.gov/publication/45010.

20. In addition, the Affordable Care Act's requirement that many employers provide health insurance (or pay a penalty if they do not) will impose an additional cost on employers for some low-wage workers who do not currently have employment-based health insurance. CBO expects that the cost will ultimately be borne by workers through lower wages.

Estimating the Effects of Increases in the Minimum Wage on Family Income

The steps described above show how CBO formed an estimate of the distribution of hourly wages and family income in 2016 under current law. CBO then estimated how a higher minimum wage would affect family income in 2016. To do that, CBO first estimated the effect of an increase in the minimum wage on workers' annual earnings. CBO then projected how that change in earnings, along with several other factors, would change family income.

Changes in the Annual Earnings of Workers. CBO estimated the effect of increases in the minimum wage on the annual earnings of low-wage workers using methods similar to those used in its analysis of employment. The higher wages of two groups were multiplied by the workers' projected 2016 annual hours of work to estimate their annual earnings under the options. The first group consisted of workers who were projected to have wages lower than the new minimum in 2016 under current law. The second group consisted of workers whose projected wages in 2016 would be up to as much as $11.50; as in its analysis of the number of affected workers, CBO estimated that wages would rise for people in that category, on average.

The wages of the first group were initially adjusted up to the new minimum, and then further adjustments for ripple effects were made in both groups. Specifically, those ripple effects were projected to extend up to the amount that would result from an increase that was 50 percent larger than the increase in their applicable federal or state minimum wage under either option. Ripple effects were included for workers whose wages under current law were projected to be slightly less and slightly more than the minimum wages under each option, respectively. The ripple effects were the largest for workers who, under current law, would have earned precisely the minimum wage that would be set under the option. On average, the ripple effects were substantially smaller than the increases in wages needed to bring workers up to the new minimum.

CBO's analysis of annual earnings also accounted for reductions in employment—and therefore in some workers' earnings—that would result from the increases in the minimum wage. Here, CBO used the same employment elasticities that it used in its analysis of the options' effects on employment. Employment reductions were restricted to workers who would have had, under current law, an

hourly wage less than the new minimum. Workers who would have had wages between the new minimum and $11.50 were not considered to be at risk of losing employment as a result of the minimum-wage increase, as discussed above.

The reductions in employment would be concentrated more among teenage workers than among older workers, CBO expects, both because they tend to have lower wages and because their employment typically responds more sharply to changes in the minimum wage (as discussed above). Among workers at least 20 years old, CBO anticipates that the reductions in employment would be disproportionately concentrated among those who would have had the lowest wages under current law (apart from those to whom the minimum wage would not apply). Because many low-wage workers move in and out of employment within a year, CBO estimated the effects of the employment loss among low-wage workers by assuming that the affected people worked, on average, about half as many weeks as they otherwise would have; CBO therefore lowered projected earnings by 50 percent for twice as many workers as the projected number of people who would become jobless (rather than lowering earnings by 100 percent for a number of workers equal to the number of people who would become jobless).

Changes in the Annual Income of Families. An increase in the minimum wage would not only affect family income by changing workers' earnings. It would also result in losses in income for business owners, decreases in real income for many people because of increases in prices, and increases in some people's income generated by higher demand for goods and services. To determine the economywide effect on total income, CBO subtracted the output lost because of the decline in employment from the output gained because of the increase in the aggregate demand for goods and services. On balance, the total amount of real income in the economy would increase by $2 billion in 2016 under the $10.10 option, CBO projects, and by $1 billion under the $9.00 option.

In CBO's estimation, overall real income would increase for families with income less than six times the poverty threshold but would decrease for higher-income families, because both the income losses for business owners and the increase in prices would have the greatest effects on those higher-income families. In CBO's estimation, about 1 percent of the reduction in real income from those two factors would fall on people living in families whose income was below the poverty threshold, whereas about 70 percent would fall on people living in families whose income was more than six times the poverty threshold.

CBO used those estimates of the change in income for families to project how many families would move into and out of poverty.[21] Following the official definition of poverty, CBO did not consider the effects of a minimum-wage increase on taxes, tax credits, or noncash transfer payments in its calculations. (CBO has not analyzed the effects of minimum-wage increases on a measure of income that accounts for taxes, tax credits, or noncash transfers.) Some of those effects would partly offset the gain to families from a higher minimum wage. For example, workers who received higher wages because of an increase in the minimum wage would pay more payroll taxes (though they would later be eligible for more Social Security benefits), and some of their families would be eligible to receive less in noncash means-tested benefits, such as those provided by SNAP. The amount of the EITC received by workers in poor families would increase in some cases and decrease in others, depending on each worker's earnings and family income.

Uncertainty in the Estimates

There is considerable uncertainty about the effects of minimum-wage increases on family income. Some of the sources of uncertainty are the same as those in CBO's analysis of employment; they involve wage growth, the elasticity of employment with respect to the change in the minimum wage, and the magnitude of the macroeconomic response that would result from the redistribution of income. However, there are some additional sources of uncertainty in the analysis of the options' effects on family income. They include the following:

- The effect on total income and on the income of families with different amounts of income is uncertain because of various factors, including how much spending varies by family income, the extent to which people avoid sharp changes in consumption when their income changes, the relative magnitudes of

21. The Census Bureau's poverty thresholds, which identify the income level below which families are classified as being in poverty, were projected to grow at the same rate that CBO forecast for growth in the consumer price index for urban consumers, or CPI-U. That approach is consistent with the fact that poverty thresholds are updated annually for inflation with the CPI-U.

profit reductions and price increases by firms paying increased wages, and the magnitude of indirect effects on demand.

- It is uncertain how the reduction in employment resulting from a minimum-wage increase would be distributed among families during 2016. In its analysis, CBO distributed that employment reduction among families on the basis of the age and the wages under current law of the workers who live in those families. Alternative distributions would produce different effects on family income and poverty.

- The effect of a higher minimum wage on the behavior of other people who live in low-wage workers' families is uncertain. For example, someone in that situation might work fewer hours in response to a spouse's higher earnings—or more hours, if the spouse lost employment as a result of the higher minimum wage. In general, such responses would probably offset to some extent the effects of the options on low-wage workers' family income.

Comparing CBO's Approach With Other Approaches

CBO's estimates of the effect of increasing the minimum wage on family income are based on a "simulation" approach.[22] That is, CBO estimated what the distribution of family income was likely to be in 2016 under current law and then projected how a higher minimum wage would alter that distribution by projecting wages and employment (and then earnings and family income). CBO then projected the effect on the poverty rate by comparing each family's poverty status under current law with its poverty status under the two options.

An alternative approach to forecasting the effect of a minimum-wage increase on poverty rates is to estimate the historical correlation between the poverty rate and the minimum wage and to use that correlation to project a change in the poverty rate for a given change in the minimum wage. Some of the estimates produced by studies taking that approach would imply that the $10.10 policy would reduce poverty by more than CBO has estimated. (See Appendix B for examples of such studies.)

There are several reasons that the two approaches may yield different results. It might be, for example, that CBO's analysis underestimates the increase in income that would accrue to poor families if the minimum wage was increased. That underestimate might occur if the minimum wage raised earnings for workers projected to have wages above the new minimum by more than CBO has estimated. It might also be that an increase in the minimum wage would alter family structure—through increased marriage rates, for example—in ways that reduced the number of families whose income was below the poverty threshold; such effects would be captured in the historical correlation approach but not in CBO's simulation approach. Alternatively, the effect on poverty of a minimum-wage increase might vary over time—for example, if the number of low-wage workers in families with income near the poverty threshold varied over time. If that was true, the correlation analysis might be less informative than CBO's simulation method, which uses more current data.

22. Also, CBO's analysis of income focuses on *family* income, in part because that is how official poverty measures are determined. Some analysts, however, have focused on *households* as the unit over which income is shared. CBO expects that the results using that alternative measure would yield qualitatively similar results, in this instance.

Appendix B: Research About the Effects of Minimum-Wage Increases

To develop its estimates of the effects of minimum-wage increases on employment and family income, the Congressional Budget Office (CBO) drew on the following research.

Reviews of Research About Employment Effects

For studies that analyze the central tendency of other studies' estimates of employment effects, accounting for journals' tendency to publish studies that find significant effects, see Dale Belman and Paul Wolfson, "Does Employment Respond to the Minimum Wage? A Meta-Analysis of Recent Studies From the New Minimum Wage Research," in *What Does the Minimum Wage Do?* (Upjohn Institute, forthcoming), http://tinyurl.com/p475ahg (PDF, 224 KB);

Hristos Doucouliagos and T. D. Stanley, "Publication Selection Bias in Minimum-Wage Research? A Meta-Regression Analysis," *British Journal of Industrial Relations*, vol. 47, no. 2 (June 2009), pp. 406–428, http://dx.doi.org/10.1111/j.1467-8543.2009.00723.x; and

David Card and Alan B. Krueger, "Time-Series Minimum-Wage Studies: A Meta-Analysis," *American Economic Review: Papers and Proceedings*, vol. 85, no. 2 (May 1995), pp. 238–243, www.jstor.org/stable/2117925.

For reviews that examine the methods and data used in the research literature that estimates employment effects of the minimum wage, see Sylvia Allegretto and others, *Credible Research Designs for Minimum Wage Studies*, Discussion Paper 7638 (Institute for the Study of Labor, September 2013), http://tinyurl.com/ld9rwmg; and

David Neumark and William L. Wascher, "Minimum Wages and Employment," *Foundations and Trends in Microeconomics*, vol. 3, no. 1–2 (March 2007), pp. 1–182, http://tinyurl.com/o7cngec.

For a review of the literature on the effect of Britain's minimum wage (which was introduced in 1999), see Low Pay Commission, *National Minimum Wage*, Report 2013 (April 2013), Chapter 2, pp. 19–74, http://tinyurl.com/m6bbe93.

For a review of the literature on mechanisms that might explain small employment effects, see John Schmitt, *Why Does the Minimum Wage Have No Discernible Effect on Employment?* (Center for Economic and Policy Research, February 2013), http://tinyurl.com/b54lk8m.

For a literature review that covers a variety of effects, including the effects found in other countries, see David Neumark and William L. Wascher, *Minimum Wages* (MIT Press, 2008), http://mitpress.mit.edu/books/minimum-wages.

For reviews of that book, see Arindrajit Dube, "*Minimum Wages*. By David Neumark and William L. Wascher," *Journal of Economic Literature*, vol. 49, no. 3 (September 2011), http://dx.doi.org/10.1257/jel.49.3.719.r18; and

Richard V. Burkhauser, "*Minimum Wages*. By David Neumark and William L. Wascher," *Industrial and Labor Relations Review*, vol. 64, no. 1 (September 2010), pp. 202–203, http://tinyurl.com/o3gy5bg.

For a review of the research literature before 1999, see Charles Brown, "Minimum Wages, Employment, and the Distribution of Income," in Orley C. Ashenfelter and David Card, eds., *Handbook of Labor Economics*, vol. 3, part B (Elsevier, 1999), pp. 2101–2163, http://tinyurl.com/mmkdrme.

For an early review of the literature from an international perspective, see Organisation for Economic Co-operation and Development, "Making the Most of the Minimum: Statutory Minimum Wages, Employment and Poverty," in *OECD Employment Outlook 1998—Towards an Employment-Centred Social Policy* (OECD Directorate for Labour and Social Affairs, June 1998), Chapter 2, http://tinyurl.com/q6rs9a2.

For an early review of the new minimum-wage research from the first half of the 1990s, see David Card and Alan B. Krueger, *Myth and Measurement: The New Economics of the Minimum Wage* (Princeton University Press, 1995), http://press.princeton.edu/titles/5632.html.

For a very early review of the literature, see Charles Brown, Curtis Gilroy, and Andrew Kohen, "The Effect of the Minimum Wage on Employment and Unemployment," *Journal of Economic Literature*, vol. 20, no. 2 (June 1982), pp. 487–528, www.jstor.org/stable/2724487.

Other Research About Employment Effects

CBO also considered the following studies, which are generally too recent to have been covered by the reviews listed above.

For studies focused on employment among teenagers, see Laura Giuliano, "Minimum Wage Effects on Employment, Substitution, and the Teenage Labor Supply: Evidence From Personnel Data," *Journal of Labor Economics*, vol. 31, no. 1 (January 2013), pp. 155–194, http://dx.doi.org/10.1086/666921;

Yusuf Soner Baskaya and Yona Rubinstein, "Using Federal Minimum Wages to Identify the Impact of Minimum Wages on Employment and Earnings Across the U.S. States" (draft, Department of Economics Workshop, University of Chicago, December 2012), http://tinyurl.com/lmjohgl (PDF, 580 KB); and

Sylvia A. Allegretto, Arindrajit Dube, and Michael Reich, "Do Minimum Wages Really Reduce Teen Employment? Accounting for Heterogeneity and Selectivity in State Panel Data," *Industrial Relations*, vol. 50, no. 2 (April 2011), pp. 205–240, http://dx.doi.org/10.1111/j.1468-232X.2011.00634.x.

For a recent study that focuses on how the effects of minimum-wage increases vary with economic conditions, see John T. Addison, McKinley L. Blackburn, and Chad D. Cotti, "Minimum Wage Increases in a Recessionary Environment," *Labour Economics*, vol. 23 (August 2013), pp. 30–39, http://dx.doi.org/10.1016/j.labeco.2013.02.004.

For analyses of changes in employment in industries where low wages are prevalent, see William E. Even and David A. Macpherson, "The Effect of the Tipped Minimum Wage on Employees in the U.S. Restaurant Industry," *Southern Economic Journal*, vol. 80, no. 3 (January 2014), pp. 633–655, http://tinyurl.com/kv6fz6c;

Jonathan Meer and Jeremy West, *Effects of the Minimum Wage on Employment Dynamics* (draft, Texas A&M University, December 2013), http://tinyurl.com/cllro5p (PDF, 2.9 MB).

Arindrajit Dube, *Minimum Wages and Aggregate Job Growth: Causal Effect or Statistical Artifact?* Discussion Paper 7674 (Institute for the Study of Labor, October 2013), http://tinyurl.com/kx6t2yz;

David Neumark, J. M. Ian Salas, and William Wascher, *Revisiting the Minimum Wage-Employment Debate: Throwing Out the Baby With the Bathwater?* Working Paper 18681 (National Bureau of Economic Research, January 2013), www.nber.org/papers/w18681;

John T. Addison, McKinley L. Blackburn, and Chad D. Cotti, "The Effect of Minimum Wages on Labour Market Outcomes: County-Level Estimates from the Restaurant-and-Bar Sector," *British Journal of Industrial Relations*, vol. 50, no. 3 (September 2012), pp. 412–435, http://tinyurl.com/ot9apya; and

Arindrajit Dube, T. William Lester, and Michael Reich, "Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties," *Review of Economics and Statistics*, vol. 92, no. 4 (November 2010), pp. 945–964, http://dx.doi.org/10.1162/rest_a_00039.

For recent studies that examine changes in employment among a variety of groups that earn low wages, on average, see Arindrajit Dube, T. William Lester, and Michael Reich, *Minimum Wage Shocks, Employment Flows and Labor Market Frictions*, Working Paper 149-13 (Institute for Research on Labor and Employment, June 2013), www.irle.berkeley.edu/workingpapers/149-13.pdf (3.4 MB); and

Joseph J. Sabia, Richard V. Burkhauser, and Benjamin Hansen, "Are the Effects of Minimum Wage Increases Always Small? New Evidence From a Case Study of New York State," *Industrial and Labor Relations Review*, vol. 65, no. 2 (April 2012), pp. 350–376, http://tinyurl.com/mn566b3.

For examples of earlier studies about effects on adults with low wages, see David Neumark, Mark Schweitzer, and William Wascher, "Minimum Wage Effects Throughout the Wage Distribution," *Journal of Human Resources*, vol. 39, no. 2 (Spring 2004), pp. 425–450, http://tinyurl.com/ncgswlg;

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For examples of research on the long-term effects of changes in minimum wages, see Isaac Sorkin, "Are There Long-Run Effects of the Minimum Wage?" (draft, University of Michigan, October 2013), https://sites.google.com/site/isaacsorkin/papers;

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For a reexamination of earlier research using time series methods, see Nicolas Williams and Jeffrey A. Mills, "The Minimum Wage and Teenage Employment: Evidence From Time Series," *Applied Economics*, vol. 33, no. 3 (February 2001), pp. 285–300, http://dx.doi.org/10.1080/00036840122088.

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For analysis of the effects of minimum-wage changes on family income and the poverty rate, see Joseph J. Sabia and Robert B. Nielsen, "Minimum Wages, Poverty, and Material Hardship: New Evidence From the SIPP," *Review of Economics of the Household* (January 2013), http://dx.doi.org/10.1007/s11150-012-9171-8;

Arindrajit Dube, "Minimum Wages and the Distribution of Family Incomes" (draft, University of Massachusetts, Amherst, December 2013), http://tinyurl.com/muab8nc (PDF, 1.52 MB);

David Neumark and William Wascher, "Does a Higher Minimum Wage Enhance the Effectiveness of the Earned Income Tax Credit?" *Industrial and Labor Relations Review*, vol. 64, no. 4 (July 2011), pp. 712–746, http://tinyurl.com/looy95w;

Joseph J. Sabia and Richard V. Burkhauser, "Minimum Wages and Poverty: Will a $9.50 Federal Minimum Wage Really Help the Working Poor?" *Southern Economic Journal*, vol. 76, no. 3 (January 2010), pp. 592–623, http://dx.doi.org/10.4284/sej.2010.76.3.592;

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About This Document

This Congressional Budget Office (CBO) report was prepared in response to interest expressed by a number of Members of Congress. In keeping with CBO's mandate to provide objective, impartial analysis, the report contains no recommendations.

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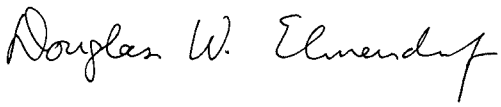
Jeffrey Kling and Robert Sunshine reviewed the report, Benjamin Plotinsky edited it, and Jeanine Rees prepared it for publication. The report is available on the agency's website (www.cbo.gov/publication/44995).



Douglas W. Elmendorf
Director

February 2014

Select Findings From "Who would Be Affected by an Increase in Seattle's Minimum Wage?"

Report for the City of Seattle, Income Inequality Advisory Committee

Definitions: Minimum Wage Worker: Those making the state's minimum wage. Low Income Worker: Those making below $15/hour.

Seattle's Low-Wage Workers:

- About 100,000 people working in Seattle earn less than $15/hr.
- There are twice as many Seattle residents making between minimum wage and $15, as there are making the minimum wage.
- Seattle's population of minimum wage workers is larger than the number of jobs in Seattle that pay minimum wage.
    - 40 percent of those with minimum wage jobs in Seattle live outside of Seattle.
    - 55 percent of Seattle residents with a minimum wage job work in Seattle (45 percent work outside of Seattle).
- Poverty:
    - For Seattle residents making minimum wage, 40% have family income below the poverty level.
    - For Seattle residents making low wages (but above minimum wage), 13 percent have family income below the poverty level.
- About 10 percent of Seattle's low wage workers are on food stamps. About 2 percent get "welfare" (eg, TANF).
- Age:
    - 48% of Seattle residents earning the minimum wage are less than 25; 21 percent are over 44.
    - 16 percent of Seattle residents in low-wage jobs above the minimum wage are under 25; 33 percent are over 44.
- Gender: Seattle's Minimum wage workers are disproportionately female (57/43) but there are more male than female low wage workers (47/53).

- Employment Status (FT/PT):
    - More than 1/3 of minimum wage workers work PT.
    - The vast majority of workers earning above $12 are employed FT.

Seattle's Low-Wage Employers:

- Over half of Seattle's minimum wage workers are employed in food services, retail trade, and health and social assistance. For *all* low-wage earners, about 1/3 are in these three industries.
- In 3 percent of Seattle establishments, 30 percent or more of all employees earn the minimum wage. In 27% of all establishments, 30 percent or more of employees are low-wage employees.

Simulated Effect of an Increase in the Minimum Wage.

Effect of a Change in Minimum Wage to either $12.12 or $15. Note: This is a Static Analysis, which means it assumes the only change is that wages go up. The potential for any employer adjustment (eg, relocation, changes in types of jobs offered, etc) is ignored.

- Increasing the minimum wage to $12.12/hr would reduce Seattle's poverty rate from 13.6% to 10.6%. With an increase to $15/hr, it would go from 13.6% to 9.4%.
- With an increase to $12.12, a typical worker earning the minimum wage would see their income go up by 30% (by $2,912).
- With an increase to $15.00 a typical worker earning the minimum wage would see their income go up by 51% (by $5,907).
- Simulations of business costs suggest that at $15/hour, payroll costs may increase by 9 to 23%, depending on the composition of the workforce. It would be higher if a change in the minimum wage resulted in the "pay ladder" above the new minimum within the firm also changing.
- Effect on Benefits: Food Stamps
    - For each $1 increase in earnings among low income workers with food stamps, food stamp benefits would decline by 23c to 33c.

Note on Data Sources: ***American Community Survey*** was used for information on wages, demographic characteristics of individuals, family income of individuals, families in poverty, amount received by social transfers (food stamps, etc), family size, occupation, and location of job.

Washington State Employment Security Department was used for information on employers located in Seattle. This includes type of industry of each employer, the number of employees, and the wages of workers within each establishment.

Draft Report: Minimum Wage and Low Wage Jobs in Tacoma in 2013

Scott Bailey
Regional Economist
Washington Employment Security Department
Labor Market and Performance Analysis Branch

June 18, 2015

1. Definitions

This analysis is based on individual wage records for jobs covered by unemployment insurance which are filed by employers every quarter. Federal employment is not included, and employment at private households (NAICS 814) is not included due to data issues. It should be noted that in 2013 the latter included almost 7,000 home health caretakers paid by the Department of Health & Human Services, many of whom might be affected if the minimum wage were increased.

Because the data are quarterly, they don't correspond to the typical employment numbers reported on a monthly or annual basis. Some of the jobs are of very short duration (as low as one hour in the quarter) while many are full-time (typically 520 hours per quarter) or more.

In 2013, the minimum wage in Washington was $9.19 per hour. For the purposes of this report, a minimum wage job was defined as any job that paid within two percent of the minimum.

The data in this report are reported in two forms: the number of wage records in a particular wage range, and the number of full-time equivalent (FTE) jobs, where one FTE job in 2013 equaled 2,088 hours worked. If the question is, how many jobs at any point in time are minimum-wage jobs, the former will overstate the role of minimum wage jobs in the economy, because many low-wage jobs are of short-duration. The latter will understate the number of workers, because, for example, two half-time minimum-wage jobs will be counted as one FTE minimum-wage job; but it will accurately reflect the impact on businesses.

2. Low-wage jobs in Tacoma

In 2013, for employers located within the city limits of Tacoma, 2.8 percent of all FTE jobs were minimum-wage jobs. Another 13.2 percent of FTE jobs paid above the minimum but below $12.50 per hour. Finally, 8.0 percent of FTE jobs paid between $12.50 and $14.99 per hour.

	All jobs	Minimum wage ($9.01 to $9.37)	$9.38 to $12.49 per hour	$12.50 to $14.99 per hour
FTE Jobs	81,204	2,241	10,679	6,496
Percent of total	100.0%	2.8%	13.2%	8.0%
Wage records	111,205	6,149	20,139	9,235
Percent of total	100.0%	5.5%	18.1%	8.3%

The percent of wage records in these wage ranges was higher: 5.5 percent at the minimum, 18.1 percent between the minimum but below $12.50 per hour, and 8.3 percent from $12.50 to $14.99 per hour. Again, many of these wage records were of short duration because they were temporary or due to high rates of turnover.

3. Low-wage jobs in Tacoma by industry

Industry detail is shown in the tables below.

The first table shows the percent of FTE jobs in each wage range by industry. In Tacoma in 2013, just over a third (34.0 percent) of all minimum wage jobs were in food services, and just over a fifth were in health care & social assistance (21.6 percent) and retail trade (20.2 percent), respectively. These three industries accounted for three-fourths of all minimum-wage jobs. They also accounted for over 60 percent of FTE jobs paying between the minimum and $12.50 per hour, and almost half of those paying from $12.50 to $14.99 per hour.

	All FTE jobs	Minimum wage ($9.01 to $9.37)	$9.38 to $12.49 per hour	$12.50 to $14.99 per hour	$15.00 per hour and higher
Manufacturing	9.9%	3.2%	5.0%	7.6%	11.3%
Retail Trade	10.1%	20.2%	24.4%	19.8%	6.2%
Business Services	6.0%	4.7%	8.1%	7.5%	5.5%
Health Care & Social Assistance	22.9%	21.6%	21.7%	20.1%	23.5%
Accommodations	0.6%	3.5%	2.3%	1.0%	0.2%
Food Services	5.4%	34.0%	15.0%	8.4%	2.4%
State & Local Government	17.7%	2.2%	4.5%	7.6%	21.6%
All Other	27.4%	10.6%	19.0%	27.9%	29.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

The second table shows the percent of FTE jobs in each industry by wage range. In Tacoma in 2013, less than one percent of FTE manufacturing jobs paid the minimum wage. Another 6.6 percent of manufacturing jobs paid above the minimum but below $12.50 per hour, and 6.1 percent paid from $12.50 to $14.99 per hour. Finally, 86.4 percent paid $15.00 per hour or higher.

	All FTE jobs	Minimum wage ($9.01 to $9.37)	$9.38 to $12.49 per hour	$12.50 to $14.99 per hour	$15.00 per hour and higher
Manufacturing	100.0%	0.5%	6.9%	7.6%	84.9%
Retail Trade	100.0%	5.5%	31.9%	15.8%	46.8%
Business Services	100.0%	2.1%	17.8%	10.0%	70.1%
Health Care & Social Assistance	100.0%	2.6%	12.5%	7.0%	77.9%
Accommodations	100.0%	15.5%	48.3%	13.3%	22.9%
Food Services	100.0%	17.3%	36.3%	12.3%	34.0%
State & Local Government	100.0%	0.3%	3.4%	3.4%	92.8%
All Other	100.0%	1.1%	8.7%	7.6%	82.6%
Total	100.0%	2.8%	13.2%	8.0%	76.1%

In contrast, 17.3 percent of food services employment paid the minimum wage, 36.3 percent paid above the minimum but below $12.50 per hour, and 12.3 percent paid $12.50 to $14.99 per hour. Only 34.0 percent paid $15.00 per hour or more.

4. Low-wage jobs in Tacoma by size of employer

The final table shows employment by size of employer (according to the employer's total state employment) for the private sector for each of the different wage ranges. In Tacoma, as is true in most locales, larger employers tend to pay more.

Size of employer (statewide employment)	All FTE jobs	Minimum wage ($9.01 to $9.37)	$9.38 to $12.49 per hour	$12.50 to $14.99 per hour	$15.00 per hour and higher
<10	3.8%	4.2%	4.7%	4.8%	2.9%
10-19	4.7%	7.6%	5.9%	5.8%	3.4%
20-49	6.6%	11.3%	8.9%	8.5%	4.5%
50-99	11.9%	11.5%	12.7%	13.2%	10.9%
100-249	9.6%	11.3%	12.6%	12.2%	7.0%
250-499	14.2%	10.9%	13.2%	13.6%	15.1%
500+	49.2%	43.1%	42.0%	41.9%	56.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Summary Characteristics of Tacoma Residents' by Wages

Analysis Performed by Neil Kilgren of the Puget Sound Regional Council based on 2007 PUMS data

Charts prepared by the Office of Management and Budget

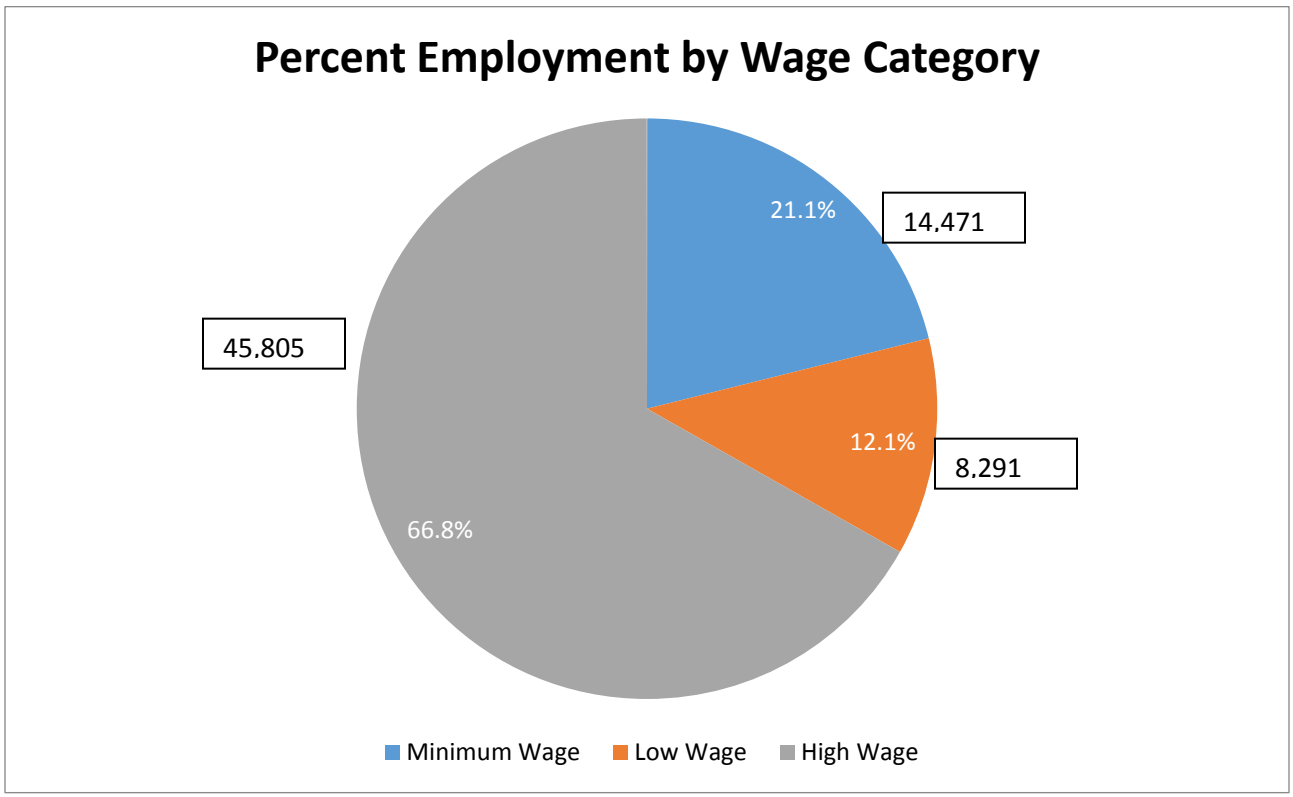
Definition:

- Minimum wage: Workers making less than $10.47/hour (minimum wage was $7.93 in 2007)
- Low wage: $10.47-$15/hour
- High Wage: above $15/hour

Universe: Data is about Tacoma residents. Many of these residents work outside of Tacoma, but we do not have information on who they are or how many of them there are. (Similarly, many non-residents work in Tacoma, but they are not represented here.)

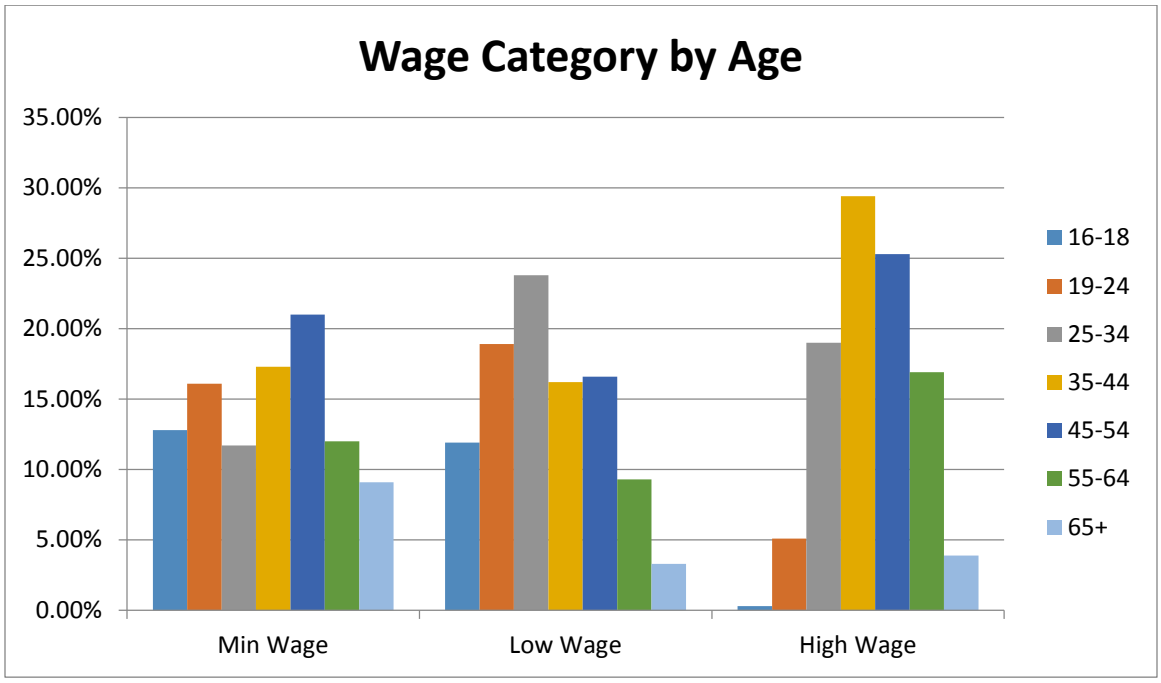
In 2007, the PUMS data identifies 92,000 residents who were employed in the last five years. This analysis is based on those who worked in the last 12 months, of which there are 68,567 (about 75%). When providing information on family income, the analysis dropped individuals who lived alone, and only looked at those who lived with at least one other family member (49,184 individuals, which means 28 % of those in this analysis, live as single individuals).

Main findings:

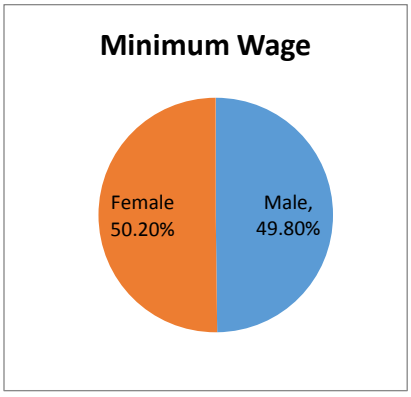


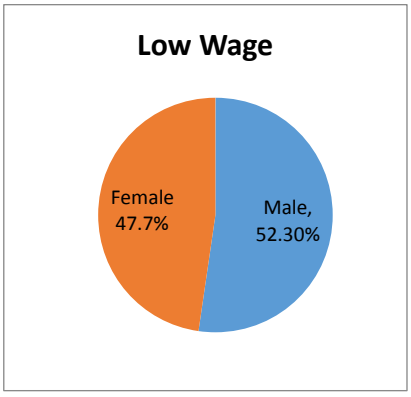
Analysis uses 2007 PUMS data

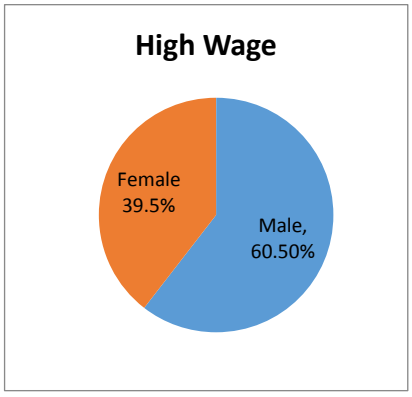
Wage Category by Age						
	Minimum Wage		Low Wage		High Wage	
16-18	1,850	12.8%	989	11.9%		0.3%
19-24	2,324	16.1%	1,564	18.9%		5.1%
25-34	1,696	11.7%	1,971	23.8%		19.0%
35-44	2,508	17.3%	1,346	16.2%		29.4%
45-54	3,043	21.0%	1,374	16.6%		25.3%
55-64	1,730	12.0%	770	9.3%		16.9%
65+	1,320	9.1%	277	3.3%		3.9%



Wage Category by Sex						
	Min Wage		Low Wage		High Wage	
Male	7,211	49.8%	4,338	52.3%	27,734	60.5%
Female	7,260	50.2%	3,953	47.7%	18,071	39.5%



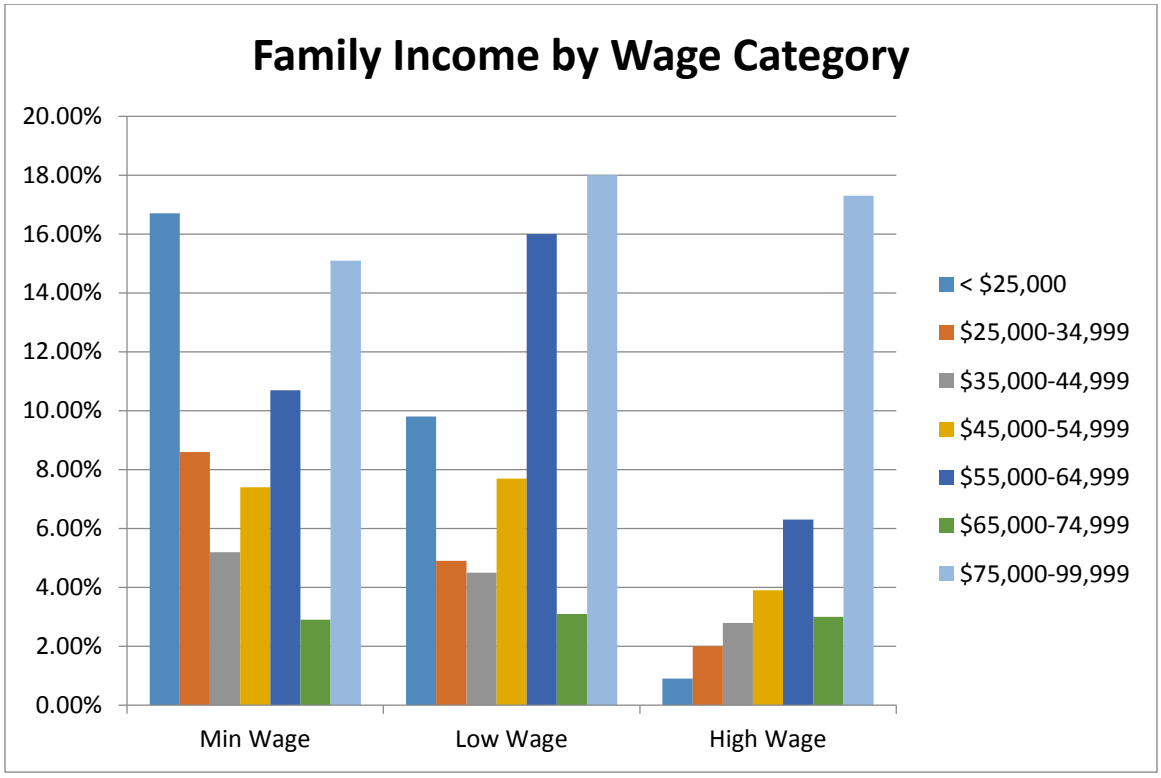




Analysis uses 2007 PUMS data

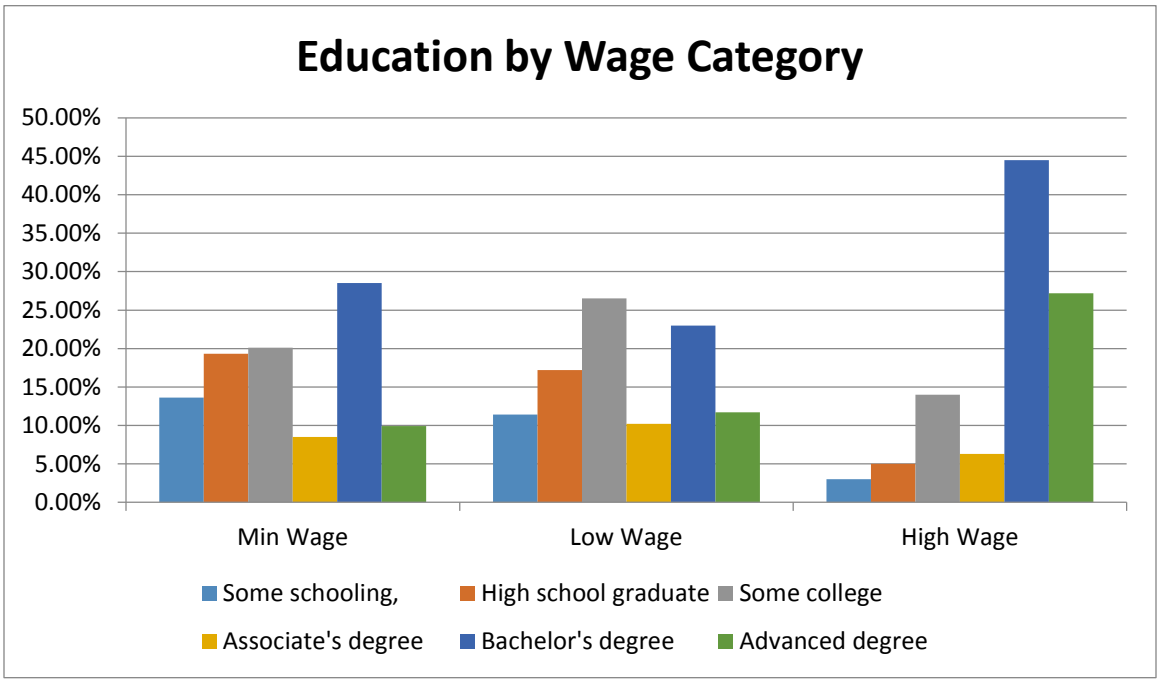
Family Income by Wage Category *(Housing Weights)*						
	Minimum Wage		Low Wage		High Wage	
< $25,000	1,978	16.7%	577	9.8%	275	0.9%
$25,000-34,999	1,020	8.6%	290	4.9%	637	2.0%
$35,000-44,999	619	5.2%	267	4.5%	890	2.8%
$45,000-54,999	869	7.4%	456	7.7%	1,240	3.9%
$55,000-64,999	1,267	10.7%	946	16.0%	1,980	6.3%
$65,000-74,999	337	2.9%	183	3.1%	937	3.0%
$75,000-99,999	1,785	15.1%	1,067	18.0%	5,446	17.3%
$100,000+*	3,935	33.3%	2,128	36.0%	20,055	63.7%

**Data set includes workers during the last year who live in families. This category includes workers who may live at home with high-income parents, such as teens. $100,000+ was excluded in graph below.*



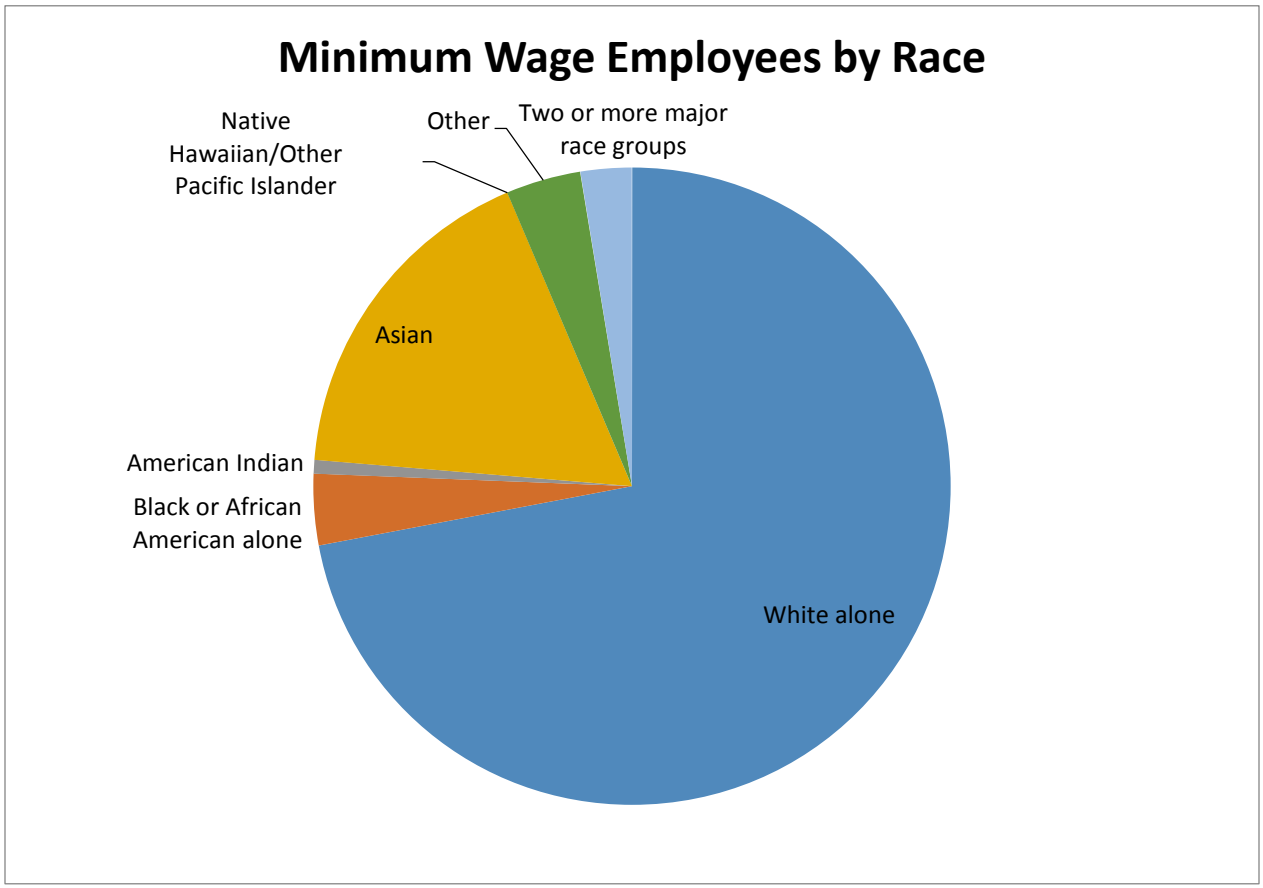
Analysis uses 2007 PUMS data

Education by Wage Category						
	Minimum Wage		Low Wage		High Wage	
Some schooling, no HS diploma	1,969	13.6%	949	11.4%	1,376	3.0%
High school graduate	2,797	19.3%	1,422	17.2%	2,279	5.0%
Some college, no degree	2,910	20.1%	2,195	26.5%	6,417	14.0%
Associate's degree	1,237	8.5%	847	10.2%	2,885	6.3%
Bachelor's degree	4,125	28.5%	1,910	23.0%	20,388	44.5%
Advanced degree	1,433	9.9%	968	11.7%	12,460	27.2%



Analysis uses 2007 PUMS data

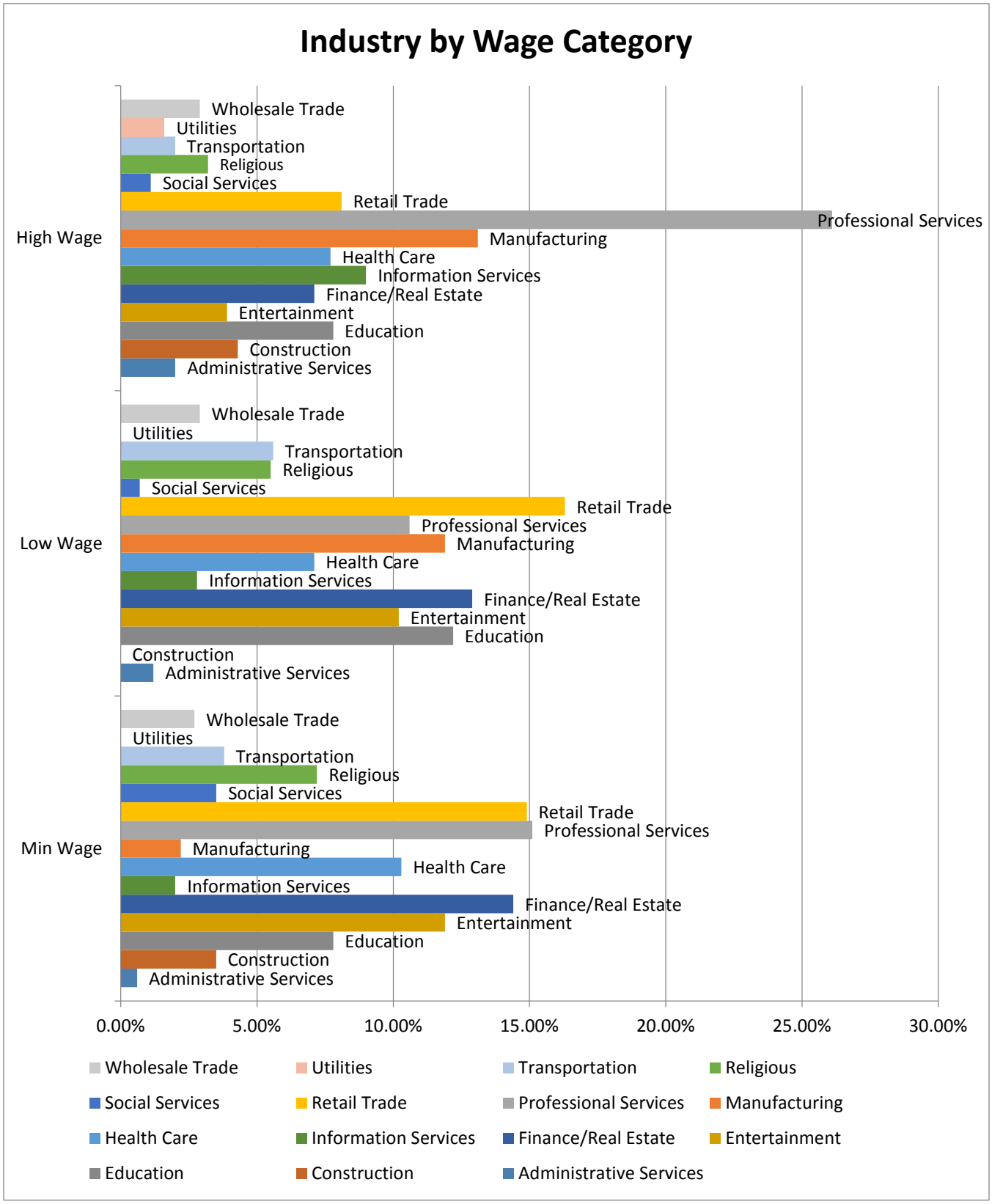
Wage Category by Race						
	Minimum Wage		Low Wage		High Wage	
White alone	10,434	72.1%	5,693	68.7%	31,791	69.4%
Black or African American alone	518	3.6%	555	6.7%	956	2.1%
American Indian alone	101	0.7%	0	0.0%	0	0.0%
Asian alone	2,497	17.3%	1,347	16.2%	10,777	23.5%
Native Hawaiian/Other Pacific Islander	0	0.0%	0	0.0%	349	0.8%
Some other race alone	548	3.8%	47	0.6%	1,130	2.5%
Two or more major race groups	373	2.6%	649	7.8%	802	1.8%



Analysis uses 2007 PUMS data

Wage Category by Industry						
	Minimum Wage		Low Wage		High Wage	
Administrative Services	91	0.6%	101	1.2%	927	2.0%
Construction	506	3.5%	NA	NA	1,968	4.3%
Education	1,128	7.8%	1,012	12.2%	3,554	7.8%
Entertainment	1,726	11.9%	845	10.2%	1,764	3.9%
Finance, Real Estate, and Insurance	2,080	14.4%	1,073	12.9%	3,273	7.1%
Information Services	293	2.0%	236	2.8%	4,123	9.0%
Health Care	1,496	10.3%	592	7.1%	3,533	7.7%
Manufacturing	317	2.2%	989	11.9%	5,998	13.1%
Professional services	2,188	15.1%	878	10.6%	11,970	26.1%
Retail Trade	2,155	14.9%	1,350	16.3%	3,732	8.1%
Social Services	504	3.5%	61	0.7%	515	1.1%
Personal Services, Religious	1,048	7.2%	453	5.5%	1,476	3.2%
Transportation	553	3.8%	461	5.6%	918	2.0%
Utilities	NA	NA	NA	NA	737	1.6%
Wholesale Trade	386	2.7%	240	2.9%	1,317	2.9%

Analysis uses 2007 PUMS data



Analysis uses 2007 PUMS data

Wage Indexation

- The purpose of indexing wages is to keep the purchasing power of a given dollar wage constant; this is what economists call the ***real wage*.**

- The purchasing power of a dollar wage is affected by changes in the **price level** (average of all prices).

  - If the price level rises (inflation) then the real wage falls.

  - If the price level decreases (deflation) then the real wage rises.

- In the long run, the Federal Reserve (“FED”) controls changes in the price level but they have only partial control from month-to-month.

- The FED is unofficially committed to the price level **rising 2% per year**, although they have been below that target the last several years.

- As a practical matter it is very difficult to measure changes in all prices, especially in a timely manner. Therefore, economists rely on estimations or proxies for the price level. Some index proxies include:

  - 1) Consumer Price Index (CPI)
  - 2) Producer Price Index (PPI)
  - 3) GDP Price Deflator

- Because CPI focuses on expenditures of consumers, it is the index most appropriate for adjusting the nominal (dollar) wage to keep purchasing power constant.

- The two most commonly used CPI indexes

1) **CPI-U** All Urban Consumers

- Based on expenditures of all families in urban areas.
- Represents about 88% of the total US population

2) **CPI–W** Urban Wage Earners and Clerical Workers

- Families in urban areas where more than one-half of the family's income is earned from clerical or hourly-wage occupations
- Represents about 29% of the total US population

- CPI-W is used for escalation (wage indexation) primarily in blue-collar cost-of-living adjustments (COLA)
- CPI-U is used in most other escalation agreements

- There are subset indexes, measuring price level changes fro smaller geographical areas. However, their sample sizes are much smaller and, as such, subject to substantial larger sampling errors (volatility).
- There are other indexes that make “seasonal adjustments” but due to time lag issues, these are seldom used for wage indexation.

Issues to Consider – *applying an average*

- Any index is an average. Therefore, individual price changes will be higher and lower than the average.
- The average change is a good approximation of the change in purchasing power of an employee. However, an employer's ability to pay is based on an specific price – which may bear no correlation to the average change.
- As long as the average index change is relatively small, this minimizes the probably that the difference between the two will be significant.

Issues to Consider – *Upward Bias in CPI*

- It is well known amongst economists that standard CPI indexes (both CPI-U and CPI-W) overestimate actual price level changes. The reason is well understood.
- For this reason the Bureau of Labor Statistics (BLS) computes another CPI index, call a “chained” index that corrects for the bias. The aforementioned indexes are called “unchained.”
- While this is the most “theoretically correct” CPI index its lag in estimation does not make it practical, as of now, for wage indexation

Issues to Consider – *Include Deflation*

- Proper indexing must make adjustments when the price index rises (inflation) **AND** when the price index falls (deflation).

- To ignore deflation is inconsistent with the purpose of indexing.

- While the event of significant deflation is unlikely, to ignore it has potential for serious economic instability.

Computation Issue

- A common method of computing the adjustment is to use the index number for one month (e.g. September) and compare it to the index number 12 months earlier.
- For example, for Sept 2014 CPI-W index was 234.170

  for Sept 2013 CPI-W index was 230.537

Thus the adjustment is 1.576%.

This problem with this method is that it is ***volatile***. If the adjustment month of December-to-December had been chosen, the change would have been only 0.32%.

In the table below, annual (month-to-month) changes are computed for the last 15 years. Notice the wide variation in adjustments depending on the month chosen. For example, in 2009 the variation went from 3.364% (Dec) to -2.671% (July), a difference of over 6%. Even when change in an index is small the variation can be significant.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2001	3.68357	3.54354	2.79929	3.27381	3.68609	3.19149	2.5974	2.658	2.58216	1.99297	1.63839	1.28881
2002	0.87362	0.75406	1.21669	1.32565	0.80275	0.74456	1.32336	1.61105	1.25858	1.89655	2.13011	2.37131
2003	2.59815	3.16638	3.2055	2.27531	2.04778	2.10347	1.98751	2.09513	2.25989	1.91765	1.57835	1.63842
2004	1.80079	1.5067	1.44204	2.05784	2.95429	3.17372	2.951	2.60677	2.43094	3.20974	3.6626	3.39077
2005	2.98507	2.96866	3.11646	3.65123	2.86952	2.59039	3.29908	3.83784	5.17799	4.66488	3.53319	3.49462
2006	4.13312	3.68393	3.55249	3.68034	4.31579	4.47133	4.29319	3.90422	1.74359	0.92213	1.75801	2.44156
2007	1.83454	2.23687	2.71992	2.5	2.7553	2.6717	2.25904	1.80311	2.76663	3.72487	4.61941	4.34939
2008	4.64924	4.38694	4.25448	4.23886	4.48147	5.55011	6.18753	5.92916	5.41765	3.83874	0.6824	-0.4685
2009	**-0.505**	**-0.2634**	**-0.9223**	**-1.3161**	**-1.8864**	**-1.9752**	**-2.6712**	**-1.9006**	**-1.681**	**-0.2983**	**2.27067**	**3.36404**
2010	3.33884	2.82331	3.04365	2.90153	2.56258	1.35895	1.6017	1.44396	1.41206	1.45309	1.29574	1.68113
2011	1.80272	2.34822	3.04367	3.63856	4.12378	4.06053	4.1085	4.25807	4.37785	3.92316	3.7546	3.20725
2012	3.14972	3.11766	2.85423	2.37617	1.63531	1.57917	1.2942	1.6702	2.00994	2.21078	1.69739	1.67577
2013	1.48018	1.94368	1.33405	0.85326	1.23522	1.75459	2.00206	1.45471	1.03119	0.77246	1.12006	1.45425
2014	1.55395	0.95943	1.41155	1.96288	2.09983	2.04346	1.93016	1.5936	1.57589	1.52088	1.05528	0.32072

- To minimize volatility, an alternative is to take the average over a year. In other words, compute the annual change for each month and then take the average for all the months (using 12 data points instead of 1). This significantly lowers the volatility.

Year	Ave Annual
2001	2.74463
2002	1.35902
2003	2.23946
2004	2.59893
2005	3.51574
2006	3.24164
2007	2.8534
2008	4.09568
2009	-0.6487
2010	2.07638
2011	3.55391
2012	2.10588
2013	1.36964
2014	1.5023

Examples -- Seattle

- The index used is CPI-W, the adjustment period used is September-to-September, and ignores deflation

- Uses a broad, less volatile measure
- Month-to-month is more volatile
- Ignoring deflation makes the impact of volatility worse

Examples – Tacoma Initiative

- Index is CPI-W for Seattle-Tacoma-Bremerton, the adjustment period used is September-to-September, and deflation is ignored.

- Small sub-sample used is volatile
- Adjustment method is volatile
- Ignoring deflation makes impact of volatility worse

Things to consider

- For the benefit of both the employees and employers, try to minimize the volatility
- Proper indexing must include deflation; while the probability of deflation is low, to ignore it when it happens is serious
- Consider putting in some type of “safety valve” if the change in the price level exceeds some number, say plus or minus 5%. When this happens the probability of a significant difference between specific prices and the averages increases and becomes problematic.

Tacoma Minimum Wage Task Force Public Comment Report

(Period from June 2, 2015 – June 15, 2015)

June 8, 2015

An open letter to any interested party

Subject: $15 per hour minimum wage in Tacoma
Reference: Referendum on the ballot

This is information on the effect the minimum wage of $15 per hour will have on a small business in Tacoma. Cascade Park Communities have been providing care for over 250 low income vulnerable and aged individuals for the past 20 years. These three facilities are as follows. Cascade Park Vista is a 124 bed assisted living facility with 95% of our residents on Medicaid. Cascade Park Gardens is an 80 bed memory care facility with 90 % of our residents on Medicaid. Cascade Park Active Day is an Adult Day Health Care Program with an average daily attendance of 70 clients, many who have memory loss or traumatic brain injuries. All of these clients are on some form of government assistance.

65% of our 120 full time employees are making less than $15 per hour. Implementing the proposed wage would increase our expenses by $637,000 per year (based on our payroll for 2014). Increasing our revenue would be a logical response to this additional expense. However, our primary source of revenue is government funding, primarily by DSHS and the rates are set by the legislature. We have not had a reimbursement increase for the past 8 years (we received a 2% decrease 2 years ago because of the State Budget) and the implementation of the Affordable Care Act has placed us at a barely break-even basis. The State legislature is currently arguing between giving us a 2.5% increase or none.

It would be appropriate to provide higher wages to all employees provided there was the revenue to support the additional expense. It would require an additional 9.7% increase in revenue for us to stay at a break even situation if the minimum wage was $15 per hour. Any Business that does not provide a reasonable return on capital invested beyond break-even point is not sustainable. That is true with us in this situation

There will not be many, if any, winners by implementation of the$15 per hour proposal. Losers in our case could include our business, our employees out of work, our residents placed in more expensive settings such as nursing homes, and the State paying for these increased costs with a budget for nursing homes. The total economic, social, and cultural effect on other business in the City of Tacoma is unknown but there are likely many organizations that would have a similar impact. The few employees who would benefit from the increased pay would be competing with those currently better qualified for the higher wage rate.

During any deliberations you or your friends have on the impact of this proposal, please consider the facts I have presented. I will be available to anyone with questions regarding this letter.

Very truly yours,

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Tacoma Minimum Wage Task Force Public Comment Report

(Period from June 2, 2015 – June 15, 2015)

June 11, 2015

First and foremost, thank you to all of the task force members who have volunteered their time and talents to this endeavor. An important and high-impact task faces you. It requires a lot of personal time and dedication. I appreciate what you are doing.

I am a local small business owner. I have been able to attend one of your meetings. My take-away from that meeting: the most important task you have at this point is define some terms (definitions). There are many different voices around the table, and many different backgrounds, thus assumptions. If you use terms without defining them, you have a hard time coming to agreement.

- Minimum Wage vs Living Wage.
  - These two terms were used synonymously by several members at different times. I do not believe they are synonymous. There was a great link on your task force website last week showing studies of what living wage would be in Tacoma. (Based on a MIT study) http://livingwage.mit.edu/counties/53053n
  - Entry level jobs can be a good thing for the economy and those lucky enough to have them and the training that goes along with them
- Profession vs. Job
  - Again, are they synonymous? There are college courses designed around these terms, and I think that most would agree that they are not synonymous.
  - Not all jobs were designed to be professions. EG. A high school tutor might hope someday to be a professional educator, but they (HS students) are not in a professional capacity when grading papers.
  - Most commonly agreed to components of a profession: 1) Self-regulating 2) Has a code of Conduct of some sort 3) Long term outlook (a calling) 4) specialized knowledge/training
- Small Business vs Business.
  - Not all businesses are equal in size and impact.
  - There is a sliding scale of business size/profit margin/# of employees
  - Creating a new mandate that does not recognized the differences in businesses will close some businesses.
  - Some see this as acceptable "collateral damage" if the great good is served
  - A one size fits all measure could disincentivize small business ownership in Tacoma
- Data Collection
  - Please look at data concerning business as well as workers; Gross Income vs. Profit as reported in taxes. Number of employees does not necessarily = large business; The profit margin on many small business is small

Again, thank you for taking the time to read this and to serve on the Task Force.

Best Regards,

Jennifer Jensen
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Tacoma Minimum Wage Task Force Public Comment Report

(Period from June 2, 2015 – June 15, 2015)

June 11, 2015

Hello,

I am in support of a $15 minimum wage for adults and teens who have to earn a living wage and care for themselves -- though on second thought, I guess with the cost of education nowadays, I couldn't object to teens also making $15 an hour!

Sincerely, Linda Frank, Tacoma

June 15, 2015

City of Tacoma Minimum Wage task force,

My husband is the president of a very small engineering firm in Tacoma. He has 3 partners and 7 employees. Over the years, he's hired a few students from Bates and Tacoma Community Colleges. These young people came from less than ideal financial and family situations. They were hired by the recommendations of their teachers as being intelligent, very hard workers. Some are now office managers, some are engineering students. They were each hired at minimum wage while our business paid to complete their education, spent hours mentoring and training them, paying for licensing classes and test fees. Our business has also hired a few summer college student interns at minimum wage to give them an understanding of what their chosen field might look like as they receive hours of mentoring. The majority of these workers, after they completed their training, have remained very loyal employees who have quickly gone on to earn a much higher wage. They've received education, training and a good job they might not have otherwise.

The cost of college tuition is skyrocketing. If the city of Tacoma decides to raise the minimum wage to $15, our small business cannot absorb that higher wage until workers are trained enough to bill for their work hours. We'll be forced to discontinue the above business model of investing in training inexperienced young, disadvantaged workers at the entry level. We'll have to focus on hiring graduate students who already completed their education, training, licensing and are actually worth the $15 / hour entry level pay. This will essentially cut out entry level positions from our small businesses and many others, thus leaving struggling students out in the cold on their own

Maybe you should push for higher wages in steps as employees are trained and productive?
Example: hired at $9.47 for first 3-6 months. $10.47 for the next 3-6 months. $11.47 for the next 3-6 months, up to the $15 / hour minimum ... or by that time, depending on the complexity of the business and job description, many workers could earn more!! Please don't force businesses to cut out their entry level jobs!!!

- Cathy Phillips

Tacoma Minimum Wage Task Force Public Comment Report

(Period from June 15, 2015 – June 18, 2015)

June 15, 2015

Members of the Tacoma Minimum Wage Task Force,

I work on labor policy for the Freedom Foundation, a right-of-center policy think tank based in Olympia. I've been closely involved with the minimum wage debates in Washington for the last two years.

Just so there isn't any doubt, I take the position that, while often well-intentioned, raising the minimum wage does more harm than good.

In my experience, there are many poor arguments out there on this issue. Statistics and research are often misinterpreted.

To help provide you with some resources to consider, this is the first of several short updates discussing various aspects of this debate.

Please do not take anything I say at face value, but weigh it against the other arguments out there. I welcome your feedback.

Inflation:

Supporters of raising the minimum wage often argue that it hasn't kept up with inflation, or the cost of living. They frequently point to the purchasing power of the minimum wage in 1968, which was worth $10.88 in 2015 dollars. Washington State's current minimum wage is $9.47.

1. But the current state minimum wage is not out-of-line with historic trends. The selection of 1968 as the benchmark year is deliberate. The purchasing value of the minimum wage hit its all-time high in 1968.

   When the minimum wage was first created in 1938, it was worth $4.20 in today's dollars, less than half of the current state minimum. From 1938 to 2015, the minimum wage prevailing in Washington (sometimes the federal minimum was higher, sometimes the state minimum was) averaged a purchasing power of $7.87 in today's dollars.

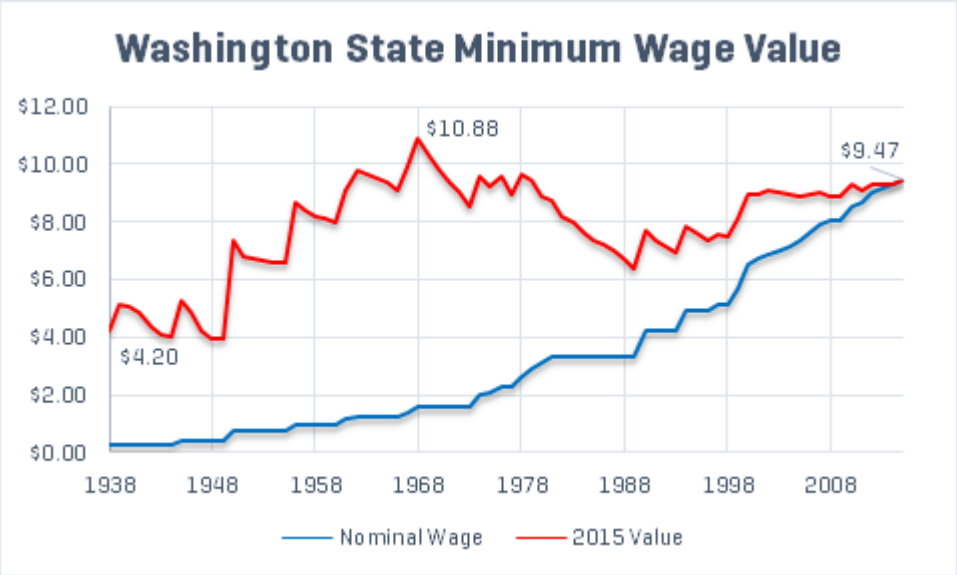
   In other words, Washington's current minimum wage of $9.47 is noticeably higher than the historic average value of the minimum wage of $7.87.

2. Additionally, the state minimum wage law passed in 1998 provided for automatic yearly increases based on inflation, meaning that the current state minimum wage will continue to keep pace with cost of living increases.

3. The creation of the Earned Income Tax Credit (EITC) in 1975 helped compensate for the decline in the purchasing power of the minimum wage that occurred during the 1980s and '90s. The Congressional Research Service describes the EITC as, "a refundable tax credit available to eligible workers with relatively low earnings. Under current law there are two categories of EITC recipients: childless adults and families with children. Because the credit is refundable, an EITC recipient need not owe taxes to receive the benefits."

Tacoma Minimum Wage Task Force Public Comment Report

(Period from June 15, 2015 – June 18, 2015)



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- Gene Falk, "The Earned Income Tax Credit (EITC): An Overview," Congressional Research Service, October 2014.

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Tacoma Minimum Wage Task Force Public Comment Report

(Period from June 15, 2015 – June 18, 2015)

June 16, 2015

I would like to share my perspective as a University Place based business that has several clients in Tacoma.

1. My employees make $15 or more already. My clients and vendors in many cases do not. The impacts on my business are increased costs for the products and services I'm delivering. In some cases my vendors may have to downsize the workforce, which means slower response times to my clients. This will negatively impact my customer service delivery.

2. Despite my employees making more than $15, it has an impact on perceived earnings relative to other sectors of the workforce, and I may be pressured to raise my wages even more to accommodate. The cost to maintain some parity would be over $34,000 a year.

3. We just recently raised prices to attempt to get enough revenue to offer health insurance. My larger competitors offer that to employees and I've had a hard time getting good employees as a result. The revenue from the increase will now have to go do the difference in wages and I still won't be able to offer any other benefits.

4. Our staffing is highly mobile, about 60% of our clients are in Tacoma even though we're in University Place. Due to our current workloads there's no way I can afford to cut any staff.

5. Based on my time as a business owner in this economy, I feel that a minimum wage change is a good thing, and I'd like to see Tacoma achieve $13/hour within 3 years. It has to be phased-in with allowances for micro-businesses, with no link to CPI or other mandated COL adjustments, and a threshold for compliance based on number of employees. Micro businesses need to grow and compete - they cannot do that if they're held to the same standards as deep-pocketed corporations that will shrug off this increase.

Thank you,
Wade Stewart

June 16, 2015

The unfortunate bottom line is many actually most of our lower dollar staff members are not personally motivated enough to warrant such an increase, currently we have no one at just the minimum but an increase that you are proposing will get many people dismissed from our co. And those left (albeit few) will have to do the jobs for those that will be gone. Basically most will lose their jobs and we will replace with far fewer, but individuals who are self motivated and worthy of the extreme increase in salary.

Tacoma Minimum Wage Task Force Public Comment Report

(Period from June 15, 2015 – June 18, 2015)

June 16, 2015

Members of the Tacoma Minimum Wage Task Force,

Today I'd like to briefly address whether the minimum wage has kept up with the productivity of the labor force.

Some advocates of raising the minimum wage contend that it has failed to keep up with increases in workers' productivity. Supporters argue that compensation largely tracked with productivity until 1968, when wage growth began to lag behind productivity increases. Consequently, they argue that workers are not being fairly compensated for their labor.

The productivity/minimum wage contrast was first promulgated by the left-leaning Center for Economic and Policy Research (CEPR) in 2012, which compared increases in the productivity of the average worker to the increases in the purchasing power of the minimum wage. CEPR contended that, "If the minimum wage had continued to move with average productivity after
1968, it would have reached $21.72 per hour in 2012."

Cast in this light, calls to boost the minimum wage to $10, $12 or even $15 an hour appear much more reasonable.

However, there are serious problems with this comparison.

1. There is serious debate about whether average wage growth has actually lagged behind average productivity increases. A detailed analysis of the issue by the right-leaning Heritage Foundation determined that, properly measured, the value of workers' wages and benefits continue to growth with productivity. The Heritage report notes:

   "Harvard Professor Martin Feldstein, the former President of the National Bureau of Economic Research, concluded that the apparent divergence results from using the wrong data to measure pay and productivity. Using the correct data, he finds that pay and productivity have both grown together. Dean Baker, director of the left-leaning Center for Economic and Policy Research, and staff at the Federal Reserve Bank of St. Louis also come to that conclusion. Georgetown Professor Stephen Rose likewise finds that the apparent gap between pay and productivity collapses under scrutiny. He concludes that economic growth resulting from productivity growth continues to benefit working Americans."

2. Regardless, however, the productivity and compensation of average workers tells us nothing about the productivity of the average *minimum wage* worker. In order to begin to be relevant, the data would need to show that the productivity of minimum wage workers was increasing faster than their compensation. I have yet to see any evidence that this is the case, and some to the contrary.

   For example, while the Dept. of Labor's Bureau of Labor Statistics (BLS) does not track minimum wage workers' productivity, it recently released information about the productivity of restaurant employees. Because many restaurant employees' hourly wages (not counting tips) are fairly low, they are frequently featured prominently in minimum wage debates.

> According to the BLS, labor productivity for employees of "food services and drinking places" increased by an average of 0.6 percent per year from 1987 to 2013. Over the same period, pay for these workers increased by an average of 5.1 percent per year.
>
> Put simply, from 1987 to 2013, restaurant worker compensation increased more than eight times as fast as restaurant worker productivity.

For these reasons, I find the argument that the minimum wage has failed to keep up with productivity to be unproven and unconvincing.

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June 17, 2015

Members of the Tacoma Minimum Wage Task Force,

An increasingly common argument used by supporters of raising the minimum wage is that boosting entry-level workers' income will prompt them to spend more, thus stimulating the economy and local businesses. President Obama, Governor Inslee, local millionaire Nick Hanauer and labor activists have all made variations of this argument.

Unfortunately, the argument is logically unsound and empirically unsupported.

1. Some minimum wage supporters simply take the number of workers earning less than a proposed minimum wage, multiply it by the wage increase per worker, and conclude that increasing the wage floor creates millions of dollars in new consumer spending in the economy. Left-leaning Puget Sound Sage has used this method to estimate that a $15 minimum wage in Seattle would generate millions in new economic activity.

   However, such simplistic estimates are of little value since they fail to account for the other effects of a minimum-wage increase — reduced business spending, higher prices and decreased employment.

As the Congressional Budget Office noted in a report last year,

"The increased earnings for some workers would be accompanied by reductions in real (inflation-adjusted) income for the people who became jobless because of the minimum-wage increase, for business owners, and for consumers facing higher prices."

The fundamental flaw in the argument is that it assumes the additional income received by entry-level workers is new money in the economy when, in reality, it has simply been redistributed from businesses that must raise prices or cut back on human labor (layoffs, reduced hiring, fewer hours for employees, more automation) in response.

2. Furthermore, the evidence indicates that, overall, the economy is no better off in the end.
    a. Minimum wage expert Professor David Neumark of the University of California-Irvine has noted that "there is simply no evidence" to support the claim that raising the minimum wage stimulates the economy.
    b. Professor Sylvia Allegretto of the University of California-Berkeley, whose research has often been used by minimum wage supporters, has admitted that her research does not show that the minimum wage stimulates the economy.
    c. In a 2010 paper published by the right-leaning Employment Policies Institute, Dr. Joseph Sabia of the U.S. Military Academy at West Point concluded that, "Far from stimulating an economy, an increase in the minimum wage has no discernible impact on overall GDP [Gross Domestic Product] and could actually hinder growth in certain low-wage sectors."

3. Minimum wage supporters frequently misinterpret studies to argue in favor of a positive economic stimulus from the minimum wage.
    a. A 2011 study by Daniel Aaronson, Sumit Agarwal and Eric French of the Chicago Federal Reserve found, unsurprisingly, that households benefiting from a minimum wage increase spent more. However, they specifically warned that their study is "silent about the aggregate effects of a minimum wage hike."

        The same research team has documented some of the negative consequences of a higher minimum wage. In a 2006 paper, Aaronson and French found that a 10 percent increase in the minimum wage decreased employment in the restaurant industry by 1 to 3 percent.

        Furthermore, Aaronson and French concluded in a 2007 study that "restaurant prices unambiguously rise" following a minimum wage increase.

        Taking only the negative employment effects into account led the researchers to conclude in a 2013 paper, "A minimum wage hike provides stimulus for a year or so, but serves as a drag on the economy beyond that."

    b. Minimum wage supporters in the state legislature have pointed to a 2006 paper by Marshall Fisher, Jayanth Krishna and Serguei Netessin of the University of Pennsylvania which found that, "increasing associate payroll by $1 at a given store is associated with a sales lift of anywhere from $4 to $28."

        However, the paper had nothing to do with the minimum wage, but rather about how retail stores could structure their payroll and staffing to optimize sales.

> Responding to my email inquiry about the nature of his paper, Professor Fisher confirmed that "those citing the paper [in support of the minimum wage] are mis-interpreting it."

In sum, both reason and existing economic evidence confirm that raising the minimum wage simply redistributes existing wealth in a manner that appears to have slightly negative effects on the overall economy. No new economic activity is generated and no new wealth is created. No net economic stimulus should be expected from raising the minimum wage.

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- Joseph Sabia, "Failed Stimulus: Minimum Wage Increases and Their Failure to Boost Gross Domestic Product," Employment Policies Institute, December 2010.
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- Marshall Fisher, Jayanth Krishna and Serguei Netessin, "Retail Store Execution: An Empirical Study," The Wharton School, University of Pennsylvania, October 2006.

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June 18, 2015

Authors: Bronwyn Clarke & Sophie Nop

Dear Minimum Wage Taskforce Members:

We are writing to you on behalf of the Associated Students of the University of Washington Tacoma (ASUWT). As official representatives of 4,500 students – of whom approximately 75 are student employees funded by student-initiated fees – we have a significant interest in a minimum wage policy that results in net benefits for students at our university and others in the Tacoma region. Furthermore, UW Tacoma's identity as an urban-serving university drives us to advocate for a policy that will mitigate negative unintended consequences in the broader Tacoma community.

Before we outline our specific recommendations, it is important to note one thing: We do not yet have an official opinion in favor of or against a minimum wage increase. Because this issue came to a head toward the end of our academic year, we have not had the time to assess students' views on this issue.

This summer and fall, we will form a taskforce to gather student views, collect impact data, and work with university administration on how to approach this issue.

But considering the prevailing support for a minimum wage increase among the members of *this* Taskforce, we think it wise to advocate for specific policy components that will benefit students and contribute to an effective policy for the Tacoma region as a whole. To this end, we support the following:

1. **A proportionate minimum wage exemption (or a tax credit) for employers who offer on-the-job professional development, paid managerial training, and/or educational credit to their employees.** If one of the fundamental goals of a minimum wage increase is to foster upward income mobility, then employees of all ages need to be provided with opportunities to enhance their skills so that they can move into positions with higher pay. A policy that incentivizes employers to offer these learning opportunities by providing them with a proportionate financial exemption (or a similar tax credit) from the minimum wage requirement would lay the foundation for workers to pursue higher wages on their own.
2. **A phased-in policy contingent upon positive periodic economic assessments.** Given the apparently ambiguous research on the effects of a minimum wage increase and this Taskforce's stated commitment to a "data-driven" decision, we find Dr. Modarres' proposal to be prudent and absolutely necessary. We would add that a baseline assessment of Tacoma's regional economy should be conducted *prior* to a policy taking effect so that the causal effects of a minimum wage increase can be determined. In the interest of an objective evaluation, we also suggest that this economic assessment be conducted by a research committee comprised of a City of Tacoma economic analyst, at least two economists from different universities in the Tacoma region, and at least two independent policy analysts from semi-local think tanks that hold differing positions on the political spectrum.

In addition to these specific policy recommendations, we urge the Taskforce members to consider the potential negative consequences that a minimum wage increase would have on people with minimal prior work experiences (generally high school students and college students). An increase in the minimum wage will likely induce employers to pass over less-skilled/experienced candidates for more-skilled/experienced candidates that they won't have to spend extra time and money training. We are concerned that this issue has not been considered adequately in the Taskforce's meetings thus far. This concern derives from our position as representatives of UW Tacoma students and the responsibility we feel to the students of the greater Tacoma region.

Finally, we'd like to draw your attention to the significant financial strain that a $15 minimum wage would exert on student-directed budgets at universities in the Tacoma region. At UW Tacoma, even a $13 minimum wage would exert considerable compression costs on the student funds that finance student employment positions. Our current levels of services and employment would be unsustainable under a $15 minimum wage. Please note these are just the facts; we are not advocating for or against a minimum wage increase.

Thank you in advance for taking into account students' stake in this issue and our specific policy recommendations. At the end of the day, ASUWT is committed to a minimum wage policy that positively affects students. When UW Tacoma makes its decision on how to proceed with this issue as an autonomous public university, we will advocate for the course of action that is best for students.

Sincerely,

Sophie Nop Bronwyn Clarke ASUWT President ASUWT Director of Finance snop@uw.edu bronwync@uw.edu

June 18, 2015

Dear Minimum Wage Taskforce Members,

Having listened to the conversation tonight about a minimum wage policy distinction between large businesses and small businesses, we have one more point to add:

If large businesses are defined as 50 or more employees, then universities employing student workers in the Tacoma region **will be categorized as large businesses.** These student employees are funded from two sources: tuition $$ or fees authorized and allocated by students. At UW Tacoma, these fees go into a fund called the Services & Activities Fund, which currently stands at about $2 million. This fund is used to employ approximately 75 student employees. This year, 10 student positions were eliminated to accommodate an increase to an $11 minimum wage. If universities are categorized as large businesses, this committee will be forced to choose between decreasing student positions and services or increasing student fees.

In addition, student jobs at universities frequently involve more benefits than the pay alone - leadership development, service-provider experience, skill acquisition, health benefits, flexible scheduling, and convenience are some of the benefits that student employees at our university receive. These student positions would get lumped in with the university's total hiring count - i.e., faculty, administration, and salaried staff that are not affected by a minimum wage increase. This is why university student employers should not be considered large businesses at 50 employees or more.

Please consider the unique status of university student employers when choosing to define large businesses as 50+ employees across the board.

Sincerely,

Sophie Nop Bronwyn Clarke ASUWT President ASUWT Director of Finance snop@uw.edu bronwync@uw.edu

June 18, 2015

Members of the Tacoma Minimum Wage Task Force,

The past three briefings have discussed important issues, but were peripheral to perhaps the biggest question surrounding the minimum wage: does raising the minimum wage harm employment?

There is too much information on this question to cover every study that has been done on the topic. Instead, I will endeavor to provide an overview of the development of the debate in broader terms.

Opponents of raising the minimum wage contend that increasing the cost of human labor will cause employers to purchase less of it, reasoning that the economic laws of supply and demand apply to labor just as they do to any other good or service. Employers can use less human labor by: laying off low-skilled workers; reducing the hours of entry-level employees; cutting employee benefits; replacing less-skilled workers with employees that have more education or experience; replacing human labor with automation; or limiting their future hiring and expansion.

Supporters of raising the minimum wage contend that the evidence indicates that a higher minimum wage does not noticeably reduce employment opportunities. In many cases, they explain their research by contending that raising the minimum wage will produce an economic stimulus as low-wage workers spend more money, and that the resulting increase in jobs will outweigh any jobs lost because of the higher wage. Others argue that a higher minimum wage will increase workers' productivity and be good for the business in the long run, or that businesses have enough profit to pay for the raises without making any other changes.

Yesterday's briefing dealt with the unfounded stimulus argument. The argument about higher productivity implies that "greedy" business owners don't know what's best for them and need to be forced to adopt more profitable business practices. While this may be true for a few businesses, it seems unlikely to be the case generally. As for profits, a few businesses that employ minimum workers (by no means all) likely make enough profit to mathematically afford an increase in the minimum wage without taking other mitigating steps. But that doesn't mean that they *will* respond by simply throwing up their hands and eating the increase, especially if employees are unable to produce enough value to offset the increased cost of their employment.

All of this leaves many minimum wage supporters without a clear theoretical explanation for why their studies indicate the minimum wage doesn't kill jobs.

Below is a brief overview of the history and research related to the effect of the minimum wage on jobs and employment:

1. Up until 1994, the general economic consensus was that increasing the minimum wage would decrease employment of low-wage employees. In 1981, the economists on the Congressional Minimum Wage Study Commission concluded that "studies typically find that a 10 percent increase in the minimum wage reduces teenage employment by one to three percent."
2. In 1994, Princeton economists David Card and Alan Krueger published a study which looked at fast food employment following a minimum wage increase in New Jersey. The original Card and Krueger study was based on phone interviews with employers, and concluded that New Jersey's increased minimum wage resulted in a 17.6 percent increase in employment compared to neighboring Pennsylvania, which did not raise its minimum wage. However, two years later, economists David Neumark (University of California-Irvine) and William Wascher (Federal Reserve) published a paper for the National Bureau of Economic Research debunking the Card and Kruger paper. When the Card-Krueger study was repeated by Neumark and Wascher using actual payroll data for the same fast food restaurants, employment among the New Jersey restaurants actually declined by 4.6 percent relative to Pennsylvania. Card and Krueger repeated their study with different data in 2000 and concluded that the higher minimum wage did not boost employment in New Jersey after all. Nevertheless, the original Card-Krueger paper is still often cited as proof that the minimum wage does not harm employment.
3. In 2007, Neumark and Wascher published a review of modern minimum wage studies. Two-thirds of the studies concluded that a higher minimum wage had negative employment effects, and 85 percent of the studies Neumark and Wascher considered to be the most credible pointed to negative employment effects.
4. Since 2007, about a half dozen economists (including Michael Reich of the University of California-Berkeley, Ken Jacobs of UC Berkeley, Sylvia Allegretto of UC Berkley, Arin Dube of the University of Massachusetts-Amherst, and William Lester of the University of North Carolina) have published a series of studies using a new methodology and purport to find that

moderate minimum wage increases have no discernable effect on employment. This new methodology relied on comparing employment in jurisdictions that had increased the minimum wage to employment in neighboring jurisdictions that did not.

5. In 2012, David Neumark, Ian Salas and William Wascher published a paper evaluating the methodology of the new minimum wage research and concluding that, "…neither the conclusions of these studies nor the methods they use are supported by the data." Neumark, Salas and Wascher contend that comparing neighboring jurisdictions often results in an apples-to-oranges comparison. For instance, it wouldn't make sense to compare King County (population of 2 million+, 3.3% unemployment) to neighboring Kittitas County (population of 42,000, 5.9% unemployment). The economies are too dissimilar, and the effects of a higher minimum wage in the city is likely to be obscured by its generally strong economy as the region's urban center. It is more appropriate, they argue, to compare jurisdictions based on similarity rather than simply proximity.
6. In 2014, the Congressional Budget Office reviewed the literature on the minimum wage, split the difference between the studies, and concluded that a federal minimum wage of $10.10 would eliminate about 500,000 and as many as 1 million jobs nationwide.
7. It's also important to bear in mind that there are many ways in which job opportunities for low-skilled individuals could decrease following a minimum wage hike that would not show up as decreased overall employment.
    - **a.** For instance, in a 2013 study, Jonathan Meer of Texas A&M University and Jeremy West of the Massachusetts Institute of Technology argued that, "the minimum wage reduces net job growth, primarily through its effect on job creation by expanding establishments," or, in other words, jobs never created.
    - **b.** Reductions in employee hours or benefits decrease workers' pay without registering as jobs lost. For example, a 2012 paper by Dr. Aaron Yelowitz of the University of Kentucky examined San Francisco's $10.24 minimum wage (as of 2012) and concluded that every dollar increase in a city's compensation floor causes a 26-hour reduction in the number of hours worked per year by younger employees. His paper also argued that every dollar increase in the minimum wage boosted unemployment for young workers by 4.5 percentage points and decreases their participation in the labor force by two percentage points.
    - **c.** If employers hire more skilled/educated workers over less-skilled/educated workers, the total number of jobs may remain the same while still making it harder for the least-skilled individuals to find work. As David Neumark, Ian Salas and William Wascher explained in a 2012 paper, "The minimum wage can lead employers to substitute higher-skilled workers for lower-skilled workers without reducing net employment very much."

Overall, I think the evidence is pretty clear. As common sense would indicate, increasing the cost of labor will make it that much harder for the least-skilled, least-educated workers to find employment. After all, an employer is not likely to hire someone if they can't produce enough value for the business to offset the cost of paying them. Effectively, the minimum wage criminalizes low-skill, entry-level jobs. While there is little disagreement that small increases in the minimum wage have moderate consequences, the larger the increase, the larger the consequences.

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- David Card and Alan Krueger, "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania," *The American Economic Review*, September 1994.

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- Aaron Yelowitz, "The Labor Market Effects of Citywide Compensation Floors: Evidence from San Francisco and Other 'Superstar' Cities," Employment Policies Institute, October 2012.

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Tacoma Minimum Wage Task Force Public Comment Report

(Period from June 19, 2015 – June 25, 2015)

June 19, 2015

Members of the Tacoma Minimum Wage Task Force,

Traditionally, the intended purpose of raising the minimum wage has been to help low-wage workers earn more and alleviate poverty.

While there is some debate as the effect of a higher minimum wage on employment, existing research strongly indicates that the minimum wage is woefully ineffective at reducing poverty.

Though certainly *some* workers will be raised out of poverty following a minimum wage increase, others will lose their jobs or see their hours cut. Others will pay more for goods and services as prices rise. On net, the minimum wage appears to be a very poor poverty-reduction tool.

1. In a 2012 paper, Professor David Neumark of the University of California-Irvine provided a succinct summary of the relevant research, writing:

   Research for the United States on state minimum wage increases generally fails to find evidence that minimum wages help the poor, and sometimes even suggests that minimum wages increase the number of poor or low-income families… Thus, the existing research literature provides no solid evidence of beneficial distributional effects of minimum wages for poor or low-income families on the whole. As a result, there is no basis for concluding that minimum wages reduce the proportion of families living in poverty or near poverty. Minimum wages do not deliver beneficial distributional effects that might offset the negative employment effects they cause.

2. It is difficult to improve upon the overview of this issue provided in a peer-reviewed study published in 2010 by Joseph Sabia of American University and Richard Burkhauser of Cornell University, so I will simply provide excerpts for your consideration:

   While reducing poverty among the working poor is a laudable policy goal, the evidence suggests that minimum wage increases have thus far provided little more than symbolic support to this population (Card and Krueger 1995; Neumark and Wascher 2002; Gundersen and Ziliak 2004; Burkhauser and Sabia 2007; Leigh 2007; Sabia 2008). Several explanations have been offered for this finding. Card and Krueger (1995) emphasize that minimum wages fail to reduce poverty because many poor Americans do not work. Others have argued that even among the working poor, the relationship between earning a low hourly wage rate and living in poverty is weak and has become weaker over time (Stigler 1946; Burkhauser, Couch, and Glenn 1996; Burkhauser and Sabia 2007). Moreover, even among affected workers, there is strong evidence that increases in the minimum wage reduce the employment of low-skilled workers (Neumark and Wascher 2008). While an increase in the minimum wage will lift out of poverty the families of some low-skilled workers who remain employed, other low-skilled workers will lose their jobs or have their hours significantly cut, reducing their income and dropping their families into poverty (Neumark and Wascher 2002; Neumark, Schweitzer, and Wascher 2004, 2005; Sabia 2008).

   … We find no evidence that minimum wage increases between 2003 and 2007 lowered state poverty rates. Moreover, we find that the newly proposed federal minimum wage increase from $7.25 to $9.50 per hour, like the last increase from $5.15 to $7.25 per hour, is not well targeted to the working poor.

…We estimate that nearly 1.3 million jobs will be lost if the federal minimum wage is increased to $9.50 per hour, including 168,000 jobs currently held by the working poor… We conclude that further increases in the minimum wage will do little to reduce poverty...

When calculating the effect of the minimum wage on poverty, many studies try to take into account the reduced employment of low-skilled workers. However, as Sabia and Burkhauser point out, even when operating under the "optimistic assumption" that a higher minimum wage does not harm employment, significant research has shown that, "…workers living in poor households received few of the benefits of past minimum wage increases because their hourly wages were already greater than the proposed state or federal minimum wages. Instead, most of the benefits went to second or third earners living in households well above the poverty line."

Stating the obvious, Sabia and Burkhauser note that, "One important critique of these simulations is that they overstate the benefits of minimum wages to the working poor because they ignore employment effects."

In other words, significant research has shown that even under a best-case scenario in which raising the minimum wage has no negative effect on employment, studies still show that it does little to help alleviate poverty.

3. Sabia and Burkhauser's research has been confirmed by a very recent study, published in April, by Thomas MaCurdy of Stanford University (a copy of the study is attached). As a side note, I strongly recommend reading the introduction to his paper. It provides a relatively short and accessible outline of the debate over the minimum wage before getting into the technical details of his study.

   For the purposes of argument, MaCurdy's study assumed that increasing the minimum wage would not reduce employment and that businesses would pay for the higher labor costs entirely through price increases. Again, for the purposes of argument, MaCurdy also assumes that the price increases will not decrease demand for goods and services. MaCurdy recognizes that neither of these assumptions is accurate, but makes them in order to examine the "distributional effects" of a higher minimum wage; put simply, how low-income vs. high-income households would be affected.

   Even under this incredibly favorable scenario, MaCurdy finds that the minimum wage is "an ineffectual antipoverty policy." From his conclusion:

   Whereas fewer than one in four low-income families benefit from a minimum wage increase of the sort adopted in 1996, all low-income families pay for this increase through higher prices, rendering three in four low-income families as net losers. Meanwhile, many higher-income families are net winners…

   Because price increases hit low-income households the hardest and many low-income households do not benefit from a higher minimum wage, MaCurdy describes the minimum wage as "more regressive than a typical state sales tax," concluding that:

Far more poor families suffer reductions in resources than those who gain, and as many rich families gain as poor families. These income transfer properties of the minimum wage reveal it to be an ineffectual antipoverty policy.

4. Even David Card and Alan Krueger (authors of the first study claiming the minimum wage didn't reduce employment) have described the minimum wage as "blunt instrument" for increasing the income of the poor, and note that the effect of minimum wages on the overall poverty rate is "statistically undetectable." Their primary explanation is that most individuals in poverty do not have jobs, and therefore will not benefit from a higher minimum wage.

While it is easy to "see" the happy worker who gets a pay bump following a minimum wage hike, we must not forget about the essentially invisible poor family that has to pay more for food, or the entry-level employee who has his hours cut as employers respond to higher costs.

Sources:

- David Neumark, "Should Missouri Raise its Minimum Wage?" Show-Me Institute, September 2012.
- Joseph Sabia and Richard Burkhauser, "Minimum Wages and Poverty: Will a $9.50
- Federal Minimum Wage Really Help the Working Poor?" *Southern Economic Journal*, 2010.
- Thomas MaCurdy, "How Effective Is the Minimum Wage at Supporting the Poor?" *Journal of Political Economy*, April 2015.
- David Card and Alan Krueger, "Myth and Measurement: The New Economics of the Minimum Wage," Princeton University Press, 1995.

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(Attachment 1)

June 22, 2015

Members of the Tacoma Minimum Wage Task Force,

Many advocates of raising the minimum wage point to Washington State as an example that a higher minimum wage is good for the economy. Since voters passed Initiative 688 in 1998, Washington has had the highest state-level minimum wage in the country. The initiative also required the minimum wage to increase annually to account for inflation.

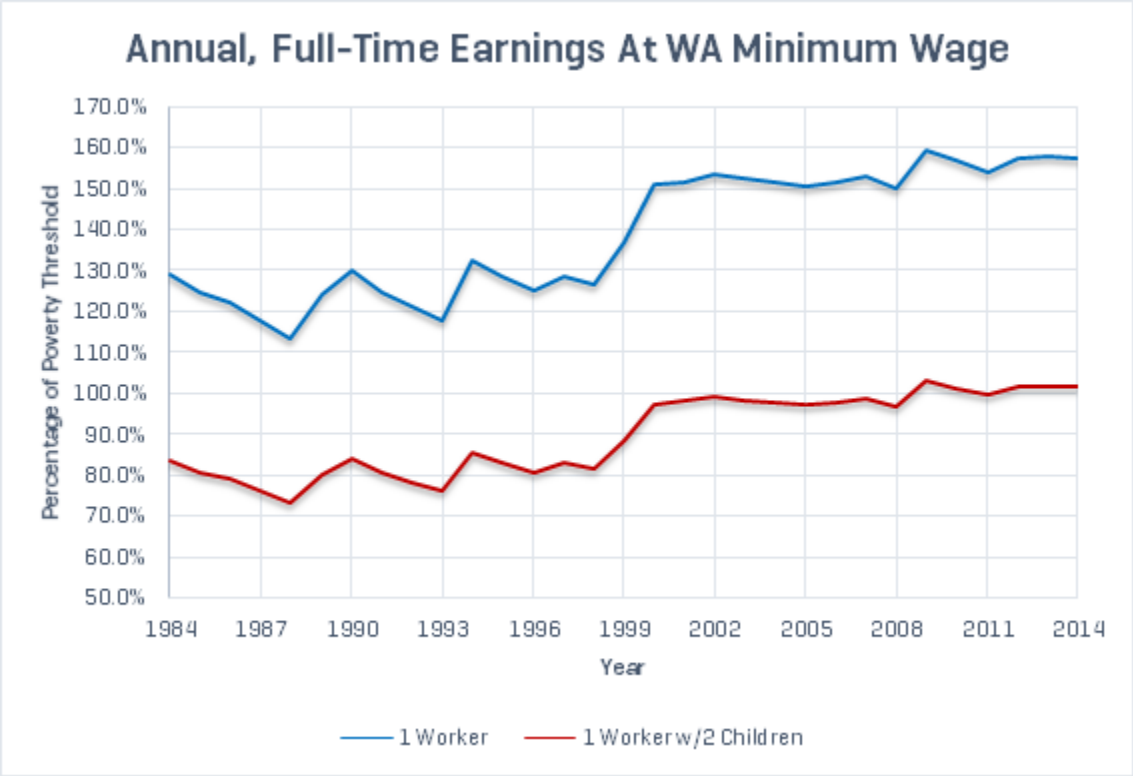
Yet, at the same time, unemployment and poverty typically lag the national average, while job growth often exceeds the national average. Surely, minimum wage supporters argue, this must mean that the high minimum wage has been good for Washington's economy.

As you may have guessed, however, there are some big problems with this line of argument. For starters, correlation does not prove causation. In other words, just because two phenomenon are true at the same time (Washington has the highest state minimum wage and low unemployment) does not mean that one caused the other. It could quite possibly be true that Washington's high minimum wage has harmed job growth for certain workers while the overall state economy remained exceptionally healthy.

So has Washington's high minimum wage helped the economy or not? Washington's minimum wage law has been on the books for over 15 years now, which allows us to examine several trends over a long time period. The information below is compiled from the Bureau of Labor Statistics and the Census Bureau. Please reference the attached report for specific sources and data citations.

1. Poverty

While the intent of I-688 may have been to decrease poverty, it appears to have accomplished little. The chart below tracks the changes in how a Washington minimum wage workers' full-time annual salary stacks up against the poverty threshold.

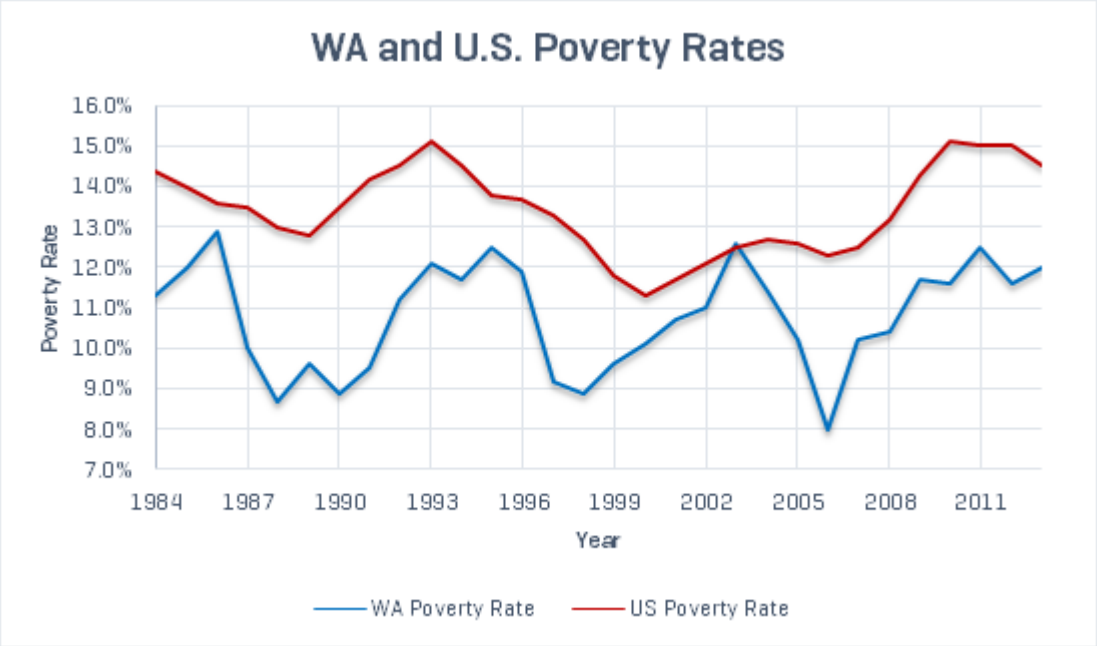


Key Points:

- When I-688 was passed in 1998, full-time minimum wage workers earned 126 percent of the poverty threshold. A worker with any dependents fell below the poverty line. Single, full-time minimum wage workers supporting two children under 18 earned 82 percent of the poverty threshold.

- Sixteen years later, in 2014, full-time minimum wage workers earned 157 percent of the poverty threshold and workers with two children earned 102 percent of the poverty line.

Despite I-688's dramatic increase in the minimum wage compared to the poverty threshold, and despite the fact that Washington had the nation's highest minimum wage, the state poverty rate (the percentage of Washington residents living below the poverty threshold) changed little relative to the national poverty rate.



Key Points:

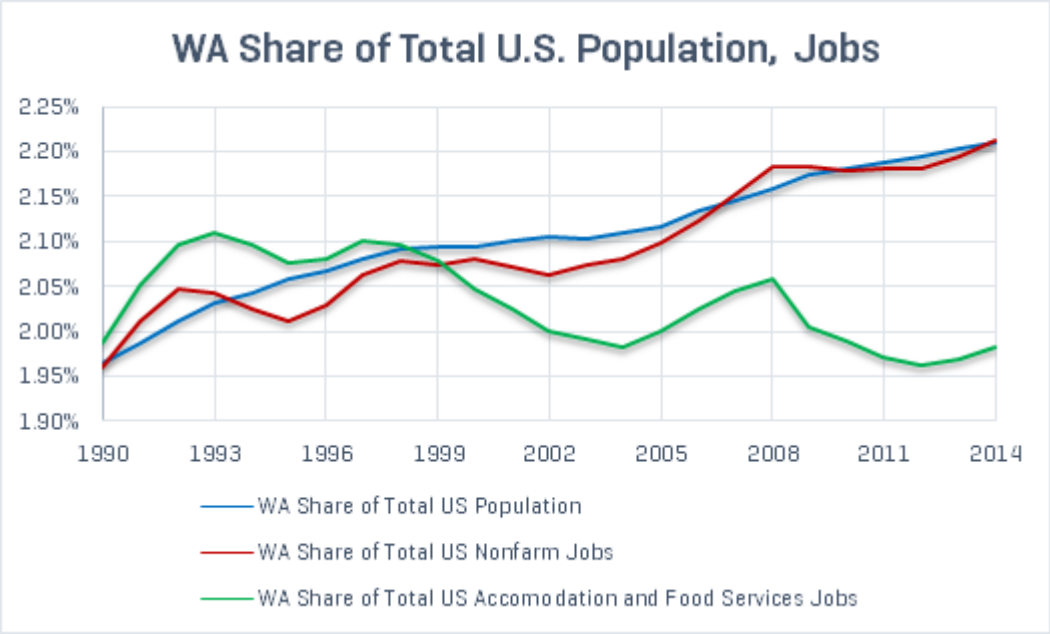
- The state poverty rate has historically trailed the national rate, even prior to the passage of I-688 in 1998.
- The only time that Washington's poverty rate exceeded the national rate was in 2003, following four years of increases in the poverty rate that began the year I-688 took effect.
- The average state poverty rate for the 15 years preceding passage of I-688 (1984-1998) was 10.7 percent. The average national poverty rate for the same period was 13.8 percent. The average state poverty rate for the 15 years following passage of I-688 (1999-2013) was 10.9 percent, a slight increase, while the national poverty rate for the same period was 13.1 percent, a slight decrease.

All other things being equal, minimum wage supporters would expect the poverty rate to decrease when the minimum wage increases. Despite the fact that Washington's minimum wage rose substantially in the years since 1998, there was no noticeable change in the state poverty rate.

However, even this data is only correlative. There are two possible interpretations of the data: (1) The minimum wage increase was ineffective at decreasing poverty, or (2) it did reduce poverty beginning in 1998 but other factors at the same time began to increase poverty, canceling out the anti-poverty effect of the higher minimum wage.

2. Employment

Minimum wage advocates like to point out that the total number of restaurant jobs increased in Washington following passage of I-688 (restaurant jobs are often cited as typical minimum wage jobs). However, a closer look indicates that the growth rate for these jobs slowed dramatically, especially when compared to Washington population and overall jobs growth.



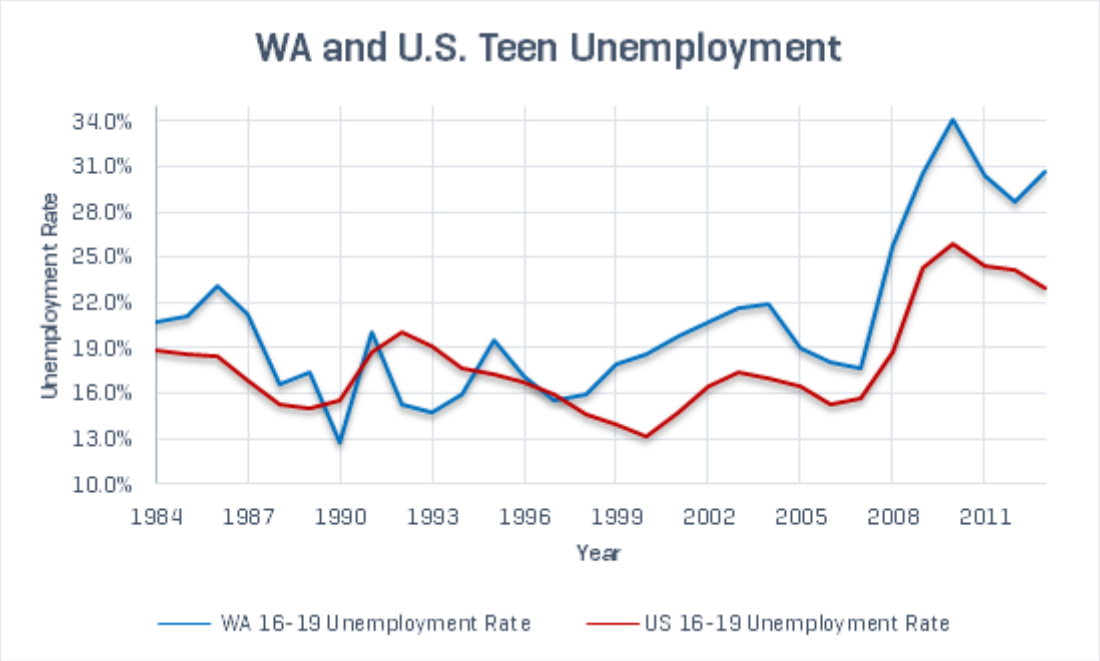
Key Points:

- Washington's share of total U.S. accommodation and food service industry jobs (mainly hotels and restaurants) exceeded Washington's share of total U.S. nonfarm employment and total U.S. population every year from 1990 until implementation of I-688 in 1999.
- Since the passage of I-688, Washington's share of total accommodation and food service jobs has substantially declined, even while the state's share of the nation's population and total jobs have steadily increased.
- When voters passed I-688 in 1998, Washington had 2.09 percent of the nation's population, 2.08 percent of the nation's jobs and 2.10 percent of the nation's accommodation and food service jobs. As of 2014, Washington's share of the population had increased to 2.21 percent, its share of the nation's jobs had increased to 2.21 percent, while its share of total U.S. accommodation and food services jobs had declined to 1.98 percent.
- While Washington's share of the nation's population increased by 5.7 percent since passage of I-688 in 1998, and its share of total U.S. jobs increased by 6.3 percent, the state's share of U.S. accommodation and food services jobs fell by 5.7 percent.

Again, since the data is correlative, there are two possible interpretations: (1) Washington's high minimum wage dramatically slowed job growth in low-wage sectors like hotels and restaurants, or (2) some other policy or economic change unique to Washington took effect at the same time the minimum wage was increased and caused the decline in jobs growth.

3. Unemployment

While the sky has not fallen in on Washington's robust economy since passage of I-688, job prospects for the least-skilled and least-educated workers have certainly declined. The chart below compares Washington's teen unemployment rate to the national rate before and after passage of I-688.



Key Points:

- For the 15 years preceding the implementation of I-688 (1984-1998), teen unemployment in Washington generally followed national trends, with Washington's teen unemployment rate higher than the national rate in 10 out of 15 years. The worst year in the period for Washington teens occurred in 1986, when the state's teen unemployment rate was 4.7 percentage points higher than the national rate.
- Washington's teen unemployment rate has surpassed the national rate every year since the passage of I-688. At the peak of the recession in 2010, Washington's teenage unemployment rate was 8.2 points higher than the unemployment rate for teens nationwide.

This correlative data means either: (1) the increase in Washington's minimum wage dramatically reduced job prospects for teens or (2) some other policy or economic change unique to Washington took place at the same time the minimum wage law was passed and is responsible for raising the unemployment rate for teens.

Conclusion

While the information presented above is purely correlative, it is worth noting how directly the observed changes in Washington's economy after passage of I-688 align with the projections of minimum wage

skeptics. Just as significant is the lack of any indication that enacting the nation's highest minimum wage produced the gains promised by labor activists in any measurable or lasting way.

At the time, supporters of I-688 claimed that raising the minimum wage and indexing it to inflation would end poverty wage jobs and depoliticize the issue in the future. The very fact that Tacoma and the state are again embroiled in debates about whether to raise the minimum wage speaks to the ineffectiveness of prior efforts.

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(Attachment 2)

June 22, 2015

Gentlemen:

Pertaining to the current wage increase proposal, I have some thoughts. If landlords would roll back rents to the 2007 levels minimum wage earners could afford incremental wage increases. If grocery stores would roll back grocery prices to 2007 levels, wage earners could afford to buy groceries for their families with incremental wage increases. If gasoline refiners would roll back gasoline prices to the 2007 level, they would still be making record profits. That's just a few examples. When the cost of living was increasing 8% to 15% a year and the minimum wage was going up 2% to 3% a year, who cared about that? Wage earners are so far behind right now, employers will never get them caught up. Business owners have been reaping record profits for the last ten years. Now it's time to pay up. It still doesn't get minimum wage earners even. Sweden, Denmark and Norway make out just fine at $25 an hour. $15 an hour is a gift for employers, it should be more. Employers should consider themselves lucky. They will make out just fine.

There's plenty of money in the budget for wage increases if there wasn't so much waste. I can tell by looking at your streets that you plain can't manage money. I come from Plano Texas. Infrastructure comes first in Plano. They manage to replace streets, sidewalks and curbs when needed. Most with federal grants. Does Tacoma mange their federal grants? After Infrastructure is taken care of, you can spend the rest on something else. It's not rocket science.

Federally, taxpayers have paid billions in taxes to maintain bridges. Yet, there's no money for repairs. Where did all the money go? Nobody knows. What a mystery. It's clear that the government of Tacoma has lost control, can't manage money and should hire a money manager.

Sincerely,

Larry Bell

Tacoma Minimum Wage Task Force Public Comment Report

(Period from June 19, 2015 – June 25, 2015)

June 22, 2015

Greetings:
I hope the committee in its deliberations will reflect that the minimum wage proposals do not meet the criterion of a actual living wage.
James H. Williams, PhD, MSW

Living Wage Calculation for Pierce County, Washington
The living wage shown is the hourly rate that an **individual** must earn to support their family, if they are the sole provider and are working full-time (2080 hours per year). All values are **per adult in a family** unless otherwise noted. The state minimum wage is the same for all individuals, regardless of how many dependents they may have. The poverty rate is typically quoted as gross annual income. We have converted it to an hourly wage for the sake of comparison.
For further detail, please reference the technical documentation here.

Hourly Wages	1 Adult	1 Adult 1 Child	1 Adult 2 Children	1 Adult 3 Children	2 Adults (One Working)	2 Adults (One Working) 1 Child	2 Adults (One Working) 2 Children	2 Adults (One Working) 3 Children	2 Adults	2 Adults 1 Child	2 Adults 2 Children	2 Adults 3 Children
Living Wage	$10.29	$22.68	$26.84	$34.61	$16.89	$20.71	$23.30	$27.13	$8.44	$12.47	$14.77	$17.71
Poverty Wage	$5.00	$7.00	$9.00	$11.00	$7.00	$9.00	$11.00	$13.00	$3.00	$4.00	$5.00	$6.00
Minimum Wage	$9.32	$9.32	$9.32	$9.32	$9.32	$9.32	$9.32	$9.32	$9.32	$9.32	$9.32	$9.32

Typical Expenses

These figures show the individual expenses that went into the living wage estimate. Their values vary by family size, composition, and the current location.

Annual Expenses	1 Adult	1 Adult 1 Child	1 Adult 2 Children	1 Adult 3 Children	2 Adults (One Working)	2 Adults (One Working) 1 Child	2 Adults (One Working) 2 Children	2 Adults (One Working) 3 Children	2 Adults	2 Adults 1 Child	2 Adults 2 Children	2 Adults 3 Children
Food	$3,607	$5,319	$8,002	$10,607	$6,612	$8,234	$10,627	$12,932	$6,612	$8,234	$10,627	$12,932
Child Care	$0	$7,875	$11,659	$15,443	$0	$0	$0	$0	$0	$7,875	$11,659	$15,443
Medical	$1,679	$5,761	$5,550	$5,614	$4,326	$5,550	$5,614	$5,581	$4,326	$5,550	$5,614	$5,581
Housing	$7,560	$11,988	$11,988	$17,664	$9,204	$11,988	$11,988	$17,664	$9,204	$11,988	$11,988	$17,664
Transportation	$4,054	$7,382	$8,509	$9,970	$7,382	$8,509	$9,970	$9,525	$7,382	$8,509	$9,970	$9,525
Other	$2,284	$3,971	$4,344	$5,250	$3,971	$4,344	$5,250	$4,905	$3,971	$4,344	$5,250	$4,905
Required annual income after taxes	$19,184	$42,297	$50,051	$64,549	$31,496	$38,624	$43,449	$50,608	$31,496	$46,499	$55,108	$66,051
Annual taxes	$2,210	$4,873	$5,766	$7,436	$3,628	$4,449	$5,005	$5,830	$3,628	$5,357	$6,348	$7,609
Required annual income before taxes	$21,393	$47,169	$55,817	$71,985	$35,124	$43,073	$48,454	$56,438	$35,124	$51,855	$61,456	$73,660

Typical Annual Salaries

These are the typical annual salaries for various professions in this location.

Occupational Area	Typical Annual Salary
Management	$103,870
Business & Financial Operations	$68,040
Computer & Mathematical	$99,410
Architecture & Engineering	$85,240

Occupational Area	Typical Annual Salary
Life, Physical, & Social Science	$63,320
Community & Social Service	$42,660
Legal	$75,440
Education, Training, & Library	$47,270
Arts, Design, Entertainment, Sports, & Media	$45,560
Healthcare Practitioners & Technical	$72,920
Healthcare Support	$31,940
Protective Service	$46,060
Food Preparation & Serving Related	$22,410
Building & Grounds Cleaning & Maintenance	$27,060
Personal Care & Service	$23,900
Sales & Related	$29,100
Office & Administrative Support	$36,200
Farming, Fishing, & Forestry	$26,200
Construction & Extraction	$51,270
Installation, Maintenance, & Repair	$48,300
Production	$36,730
Transportation & Material Moving	$33,490

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June 23, 2015

To the Members of the Tacoma Minimum Wage Task Force:

Attached is a press release that the Northwest Grocery Association (NWGA) has sent to the Tacoma City Council and released to the media. I hope that the enclosed poll results will be received as a valuable tool in your work to determine the components of a minimum wage proposal to be sent to Tacoma voters.

As the representative of 15 grocery stores in your city providing jobs for over 1500 employees, NWGA hopes to provide you with a valuable perspective in positive ways to reach your goal of raising the minimum wage without hurting small and low margin businesses such as the grocery industry. In our view, the common challenges before us are as follows:

- How to improve the wages of employees of businesses that come to market with a low wage / no benefit strategy
- How to reward employers who already pay above the minimum wage and provide employer paid benefits such as health insurance and paid time off
- How to mitigate cuts in benefits and flexibility as a means to meeting a higher mandated wage
- Finding an appropriate minimum wage level within the boundaries of Tacoma's economic framework

I believe you will find that the public supports our common goals as stated above and the poll provides a great framework in which to build a proposal that we all can implement.

Thank you for your consideration of this material and you find our representative Holly Chisa (hollychisa@hpcadvocacy.com) ready to assist you.

Joe Gilliam
President
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503.685.6293
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(Attachment 3)

Tacoma Minimum Wage Task Force Public Comment Report

(Period from June 19, 2015 – June 25, 2015)

June 24, 2015

Minimum Task Force Members,

I feel there should be an "entry level" minimum wage. We have employed high school and college students in the summer for almost 40 years. They bring enthusiasm but very little experience or work ethic. We try to instill some of those qualities in them so they can be more prepared for the working world. As with all businesses the value of your product or service is what is perceived by the consumer.

Since I am a "consumer" of their labor in my pragmatic business perception of their entry level positon is they are of little value to my company. If the cost of their labor is increased I will no longer bother to employ them. That means the normal $9.47 they would have gotten becomes $0.

The second point I would like to make is that according to several sources the cost of living in Seattle is much higher than Tacoma. I will go on the low end of around 20% - 25% higher than in Tacoma. I would not mind Tacoma parallel Seattle's minimum wage but with the cost of living difference taken into account.

Jim Rich, CML, EL06
Guardian Security
5424 S Tacoma Way
Tacoma WA 98409
1-253-474-5855
1-800-474-5855

June 25, 2015

I would like everyone to stop and think about what a big wage increase will do to us Seniors. We are on a fixed income and will not receive raises on our income. If this raise goes through it will our ability to do community service because our cost of living will take the cash we now spend to do the extra we now do. Everyone needs to understand employees earn more by being an asset to their employers not expect top dollar just to show up.

If you have been watching KIRO News about what the Seattle increase has caused for employers that are now having employees asking for less hours so they can still receive subsidized housing, food stamps, health care, etc.

I expect you all to look at the cost to all residents of Tacoma while making this very serious decision.

Donna M. Buck

Tacoma Minimum Wage Task Force Public Comment Report

(Period from June 19, 2015 – June 25, 2015)

June 25, 2015

South Tacoma Business District Association
Brenda Valentine President
PO Box 9445 - Tacoma WA 98490-0445
Phone: 253-475-5676

City of Tacoma
Minimum Wage Task Force

Dear Esteemed Committee Members,

The Executive Board of the South Tacoma Business District Association has met and discussed the possible impact of the $15Now on member businesses. After much deliberation, we have decided that although not ideal, we would recommend the following alternative to the $15Now proposition as it is currently written:

- Increase the minimum wage to $12 per hour, phased in over 2 years (this is a 25% increase from the current minimum wage)
- Small businesses with less than 100 employees would be allowed the full two years to phase in the increase.
- Restaurants whose employees receive tips would be "exempt"
- Calculating medical/health benefits as well as paid sick days, vacation days and retirement programs into the equation
- Exempting first-time hires, trainees and interns, youth and chronically unemployed people – the state minimum wage should apply to these types of employees
- Remove collective bargaining units from the minimum wage ordinance
- Exempt businesses that do not sell their products in Tacoma but export them out of the city

We thank you for your time and consideration. We realize the commitment you made to take on this project was substantial and we applaud your efforts. Please let us know if we can be of any assistance.

Brenda Valentine, President
South Tacoma Business District Association
253-272-3553 (Direct Line)

June 25, 2015

Members of the Tacoma Minimum Wage Task Force,

As a final note, I wanted to pass on a summary of a recent study that I came across this week.

In November, economists Jeffrey Clemens and Michael Wither of the University of California-San Diego released a study which took a new approach to examining the effect of the minimum wage on employment.

They used data sources that allowed them to track the earnings of individual low-skilled workers prior to and through the increase in the federal minimum wage from $5.15 to $7.25 between 2007 and 2009. Studies typically only examine industries or demographic groups that tend to have a higher concentration of low-skilled workers, rather than analyzing specific individuals.

As the authors explain,

> *Past work focuses primarily on the minimum wage's effects on particular demographic groups, such as teenagers, and/or specific industries, like food service and retail. While minimum and sub-minimum wage workers are disproportionately represented among these groups, both are selected snapshots of the relevant population. Furthermore, it is primarily low skilled adults, rather than teenage dependents, who are the intended beneficiaries of anti-poverty efforts. Assessing the minimum wage from an anti-poverty perspective thus requires characterizing its effects on the broader population of low-skilled workers, which we are able to do.*

Among their many findings, Clemans and Wither conclude:

- "Increases in the minimum wage significantly reduced the employment of low-skilled workers. By the second year following the $7.25 minimum's implementation, we estimate that targeted workers' employment rates had fallen by 6 percentage points (8 percent)."
- "In addition to reducing employment, we find that binding minimum wage increases increased the likelihood that targeted individuals work without pay (by 2 percentage points or 12 percent). This novel effect is concentrated among individuals with at least some college education. We take this as suggestive that such workers' entry level jobs are relatively readily posted as [unpaid] internships. For low-skilled, low-education workers, the entire change in the probability of having no earnings comes through unemployment."
- "We estimate that binding minimum wage increases reduced the average monthly income of low-skilled workers by $97 in the short-run and $153 in the medium-run."
- "The effect of binding minimum wage increases on the incidence of poverty was statistically indistinguishable from 0."
- "Binding minimum wage increases reduced the medium-run class mobility of low-skilled workers. Such workers became significantly less likely to rise to the lower middle class earnings threshold of $1500 per month. The reduction was particularly large for low-skilled workers with relatively little education… It appears that binding minimum wage increases blunted these workers' prospects for medium-run economic mobility by reducing their short-run access to opportunities for accumulating experience and developing skills. This period's minimum wage increases may thus have made the first rung on the earnings ladder more difficult for low-skilled workers to reach."

- "Our best estimate is that this period's minimum wage increases resulted in a 0.7 percentage point decline in the national employment-to-population ratio for adults aged 16 to 64. This accounts for 14 percent of the total decline in the employment-to population ratio over this time period."

I have attached copies of the previous briefings for your reference.

Please feel free to contact me with any thoughts or questions you may have.

Best,

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(Attachment 4)

CHICAGO JOURNALS

How Effective Is the Minimum Wage at Supporting the Poor?
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How Effective Is the Minimum Wage at Supporting the Poor?

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This study investigates the antipoverty efficacy of minimum wage policies. Proponents of these policies contend that employment impacts are negligible and suggest that consumers pay for higher labor costs through imperceptible increases in goods prices. Adopting this empirical scenario, the analysis demonstrates that an increase in the national minimum wage produces a value-added tax effect on consumer prices that is more regressive than a typical state sales tax and allocates benefits as higher earnings nearly evenly across the income distribution. These income-transfer outcomes sharply contradict portraying an increase in the minimum wage as an antipoverty initiative.

I. Introduction

The widespread popularity of raising the minimum wage draws heavily on its appeal as an antipoverty policy, which relies on two beliefs: first, raising the minimum wage will increase the incomes of poor families, and second, the minimum wage imposes little or no public or social costs. Indeed, in 2006 a group of more than 650 economists signed a widely distributed statement issued by the Economic Policy Institute expressing these sentiments in support of legislation calling for a 40 percent increase in the federal minimum wage. This support along with broad

Aspects of the arguments and approach in this study have appeared in several non-peer-reviewed reports and working papers written by me (and different coauthors) since the late 1990s. These reports/papers greatly benefited from discussion, comments, and expert research assistance from Frank McIntyre, Peggy O'Brien-Strain, and Selen Opcin. For this updated paper and newly produced empirical results, I gratefully acknowledge many useful contributions from Kevin Mumford.

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acceptance of these beliefs encouraged policy makers in Washington, DC, to raise the minimum wage from $5.15 in 2007 to $7.25 in 2009.

The policy debate over the minimum wage principally revolves around its effectiveness as an antipoverty program. A popular image used by both sides of the debate consists of families with breadwinners who earn low wages to support their children. Policies that raise the wages of these workers increase their earnings and contribute to their escaping poverty. As a counterbalance to this impact, opponents of the minimum wage argue that wage regulation causes some low-wage workers to lose their jobs and they will suffer income drops. The issue, then, becomes a trade-off: some low-income breadwinners will gain and others will lose. Promoters of the minimum wage retort that employment losses are quite small, and consequently, the workers who gain far exceed those who lose.

In addition to potential adverse employment effects, opponents of minimum wages further counter the belief that the minimum wage assists poor families by documenting that many minimum wage workers are not breadwinners of low-income families. They are, instead, often teenagers, single heads of household with no children, or not even members of low-income families. Promoters of the minimum wage admit that some of these groups may also benefit from the wage increase, but since few workers lose jobs, they contend that the minimum wage still benefits low-income families with children.

The notion that the minimum wage can be increased with little or no economic cost underlies many advocates' assessments of the effectiveness of the minimum wage in its antipoverty role. Most economists agree that imposing wage controls on labor will not raise total income in an economy; indeed, elementary economics dictates that such market distortions lead to reduced total income, implying fewer overall benefits than costs. If, however, one presumes that employment losses do not occur and total income does not fall, then the minimum wage debate becomes a disagreement over how it redistributes income. The efficacy of a minimum wage hike as an antipoverty program depends on who benefits from the increase in earnings and who pays for these higher earnings. Whereas a number of studies have documented who benefits, who pays is earnings far less obvious. But someone must pay for the higher earnings received by the low-wage workers.

At the most simplistic level, the employer pays for the increase. However, businesses do not actually pay, for they are merely conduits for transactions among individuals. Businesses have three possible responses to the higher labor costs imposed by the minimum wage. First, they can reduce employment or adjust other aspects of the employment relationship (e.g., fewer fringe benefits or training opportunities), in which case some low-wage workers pay themselves through loss of their jobs or by receiving fewer nonsalary benefits; second, firms can lose profits, in

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which case owners pay; and, third, employers can increase prices, wherein consumers pay.

Of these three sources, entertaining that low-wage workers bear any cost of the minimum wage has been largely dismissed by proponents in recent years on the basis of several (albeit much disputed) studies that found little or no job loss following historical increases in federal and state minimum wages. While the extra resources needed to cover higher labor costs could theoretically come out of profits, several factors suggest that this source is the least likely to bear costs. Capital and entrepreneurship are highly mobile and will eventually leave any industry that does not yield a return comparable to that earned elsewhere. This means that capital and entrepreneurship, and hence profits, will not bear any significant portion of a "tax" imposed on a particular factor of production. Stated differently, employers in low-wage industries are typically in highly competitive industries such as restaurants and retail stores, and the only option for these low–profit margin industries becomes lowering exposure to low-wage labor or raising prices. With jobs presumed to be unaffected, this leaves higher prices as the most likely candidate for covering minimum wage costs. In fact, supporters of minimum and living wage initiatives often admit that slight price increases pay for higher labor costs following minimum wage hikes.

To evaluate, then, the redistributive effects of the minimum wage adopting the view implicitly held by its advocates, this study examines the antipoverty effectiveness of this policy presuming that firms raise prices to cover the full amount of their higher labor costs induced by the rise in wages. In particular, the analysis simulates the economy taking into account both who benefits and who pays for a minimum wage increase assuming that its costs are all passed on solely in the form of higher consumer prices. The families bearing the costs of these higher prices are those consumers who purchase the goods and services produced with minimum wage labor. In actuality, most economists expect that some of these consumers would respond to the higher prices by purchasing less, but such behaviors directly contradict the assertion of no employment effects since lower purchases mean that fewer workers would be needed to satisfy demand. Consequently, to keep faith with the view held by proponents, the simulations carried out in this study assume that consumers do not alter their purchases of the products and services produced by low-wage labor and they bear the full cost of the minimum wage rise. This approach, then, maintains the assumption of a steady level of employment, the "best-case" scenario asserted by minimum wage proponents. Although highly stylized and probably unrealistic, the following analysis demonstrates that the minimum wage can have unintended and unattractive distributional effects, even in the absence of the employment losses predicted by economic theory.

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To evaluate the distributional impacts of an increase in the minimum wage, this study investigates the circumstances applicable in the 1990s when the federal minimum wage increased from $4.25 in 1996 to $5.15 in 1997.[1] To identify families supported by low-wage workers and to measure the effects on their earnings and income, this analysis uses data from waves 1–3 of the 1996 Survey of Income and Program Participation (SIPP). To translate the higher earnings paid to low-wage workers into the costs of the goods and services produced by them, this study relies on national input-output tables constructed by the Minnesota Impact Analysis for Planning (IMPLAN) Group, matched to a time period comparable with SIPP's. To ascertain which families purchase the goods and services produced by low-wage workers and how much more they pay when prices rise to pay for minimum wage increases, this study uses data from the Consumer Expenditure Survey (CES), again matched to the same time period as SIPP's. The contribution of this study is not to estimate the distribution of benefits of the minimum wage, nor is it to estimate the effect on prices; both of these impacts have already been examined in the literature. Instead, the goal of this paper is to put the benefit and cost sides together to infer the net distributional impacts of the minimum wage on different categories of families and to translate this impact into a format readily accessible to economists and policy makers.

To provide an economic setting for evaluating the distributional measures presented here, this study develops a general equilibrium (GE) framework incorporating minimum wages. This model consists of a two-sector economy with the two goods produced by three factors of production: low-wage labor, high-wage labor, and capital. A particular specification of this GE model justifies the computations performed in the analysis, and entertaining alterations in its behavioral elements permits an assessment of how results might change with alternative economic assumptions. The model proposed here goes well beyond what is currently available in the literature, which essentially relies on a Heckscher-Ohlin approach with fixed endowments (supplies) of labor and capital inputs. In contrast, the GE model formulated in this study admits flexible elasticities for both input supplies and consumer demand, as well as a wide range of other economic factors.

Seven sections make up the remainder of this paper. Section II reviews the economics literature on the responses available to employers to pay for the higher labor costs imposed by the minimum wage, and it relates these survey findings to the simulation method used in this paper. Section III overviews the methodology and data used to carry out the simulations of minimum wage impacts. Section IV characterizes who ben-

[1] This increase was done in two steps: an increase from $4.25 to $4.75 on October 1, 1996, and then to $5.15 on September 1, 1997. Adjusting for inflation, the $5.15 minimum wage in 1997 was worth about $7.00 in 2010.

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efits from an increase in the national minimum wage, and Section V describes who pays for this increase. Section VI calculates the net distributional effects of a rise in the minimum wage. Section VII discusses limitations of the analytical approach used here within a coherent GE model of the distributional impacts of the minimum wage. Finally, Section VIII summarizes the findings.

II. Paying for the Minimum Wage

This section reviews the economics literature on how employers respond to the higher labor costs imposed by the minimum wage and relates the findings from this literature to the simulation method used in this paper. The distributional effects of a minimum wage increase depend in part on who pays the costs of the policy change. The literature has focused on three possible responses (not mutually exclusive): first, employers could respond by reducing the hours of work or the number of employees (workers pay); second, firms could increase prices (consumers pay); and/or third, businesses could not respond at all, which would leave them with lower profits (owners pay). The first three subsections below discuss the economic reasoning and evidence for each of these responses, and the last subsection specifies the assumptions maintained in the following simulation analysis.

A. Reducing Employment

Economics research on the minimum wage has predominantly focused on the issue of employment losses. This focus draws on a fundamental tenet of economic theory: all else being equal, agents purchase less of a good as its price rises. According to this theory, not only will employers reduce their employment to mitigate costs associated with a minimum wage hike, they will also tend to reduce output and/or increase the utilization of other factors of production. For each potential employee, the firm decides whether having additional hours will increase the firm's revenue sufficiently to justify that worker's wage. For some firms, the extra revenue generated by the least productive workers becomes insufficient to justify their wages, so employment falls. In this scenario, low-wage workers bear part of the cost of an increase in the minimum wage through reduction in employment and hours of work (also possibly through reductions in forms of compensation other than earnings).[2] The

[2] In addition to reducing fringe benefits and training, minimum wage employers can also presumably demand greater effort (i.e., higher productivity) from the minimum wage workers who remain employed. Given the limited fringe benefits and training in these jobs, increased effort may well present a more important margin of adjustment. Moreover, higher wages may lower employment costs through reduced turnover. However, as in the

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vast majority of the debate over the minimum wage revolves around measuring the rate at which a rise in the minimum wage affects employment.

Prior to the 1990s, economists widely held the view that minimum wage increases primarily adversely affect the employment of young workers under age 25. In their survey of 25 time-series studies of youth employment published between 1970 and 1981, Brown, Gilroy, and Kohen (1982) conclude that a 10 percent increase in the minimum wage can be expected to reduce teenage employment by 1–3 percent according to existing empirical evidence; in their review of a smaller number of cross-section studies, the estimated decrease in teenage employment ranged from zero to over 3 percent for a 10 percent increase in the minimum wage. The accumulated research of this era generally maintains that young adults beyond the teenage years experience notably smaller negative employment impacts than their teenage counterparts.

Research in the 1990s onward challenged this conventional wisdom through a series of studies that exploited variation in state-specific minimum wages above the federal level as a primary source of data to measure the impacts of the minimum wage. This literature, comprising more than 100 papers written over the past two decades, has become known as the "new minimum wage research." The most influential work in this literature finds no negative employment effects, and some studies even suggest that employment increases in reaction to minimum wage hikes. Card and Krueger's 1995 book *Myth and Measurement* compiles some of the most prominent work in this area. Card and Krueger (1994) examine fast-food employment in New Jersey and Pennsylvania before and after the 1992 increase in New Jersey's minimum wage. With point estimates suggesting a positive employment effect, Card and Krueger conclude, "we believe that, on average, the employment effects of a minimum-wage increase are close to zero" (383). Other studies discussed in *Myth and Measurement*, including Card (1992a, 1992b) and Katz and Krueger (1992), further support this conclusion. More recent studies by Card and Krueger (2000), Zavodny (2000), Dube, Naidu, and Reich (2007), Dube, Lester, and Reich (2010), and Allegretto, Dube, and Reich (2011) produce similar findings. As economic rationales for explaining their empirical findings, this line of research predominantly cites two characterizations of labor markets: a monopsonistic labor market of the sort discussed by Stigler (1946) and bilateral search models with heterogeneous workers of the sort proposed in Lang and Kahn (1998).

This challenge of the conventional wisdom about minimum wage impacts has not gone unanswered in the literature. Several studies directly

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case of greater effort, optimal selection of such counterbalancing factors is already available to employers through voluntarily raising wages, and thus, mandated minimum wages can be expected to raise unit labor costs overall, which must be paid for by some source(s).

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critique the approaches used to derive the "new" conclusions (e.g., Deere, Murphy, and Welch 1995; Kim and Taylor 1995; Welch 1995; Burkhauser, Couch, and Wittenburg 2000; Neumark and Wascher 2000). Others studies confirm the consensus view of the 1980s and find negative employment effects primarily concentrated among younger workers (e.g., Currie and Fallick 1996; Neumark 2001; Williams and Mills 2001; Neumark and Wascher 2002; Neumark, Schweitzer, and Wascher 2004).[3] Further, the surveys of Brown (1999) and Neumark and Wascher (2007) point out that much of the empirical work in the "new" research actually estimates small and negative employment responses to increases in minimum wages.

Nevertheless, the widely held view today in the economics profession maintains that relatively modest increases in the minimum wage exert negligible impacts on employment. In particular, according to a survey of senior faculty from the top research universities in the United States conducted by the Initiative on Global Markets, only 40 percent (confidence weighted) believe that raising the federal minimum wage would make it noticeably harder for low-skilled workers to find employment.[4] Advocates of the minimum wage often cite such consensus when arguing that impacts on employment can be ignored.

B. Raising Prices

A cost of the minimum wage commonly acknowledged by its advocates concerns its impacts on prices. The labor demand curve, which leads to the basic conclusions about employment effects, assumes that product prices are held constant. This is a reasonable assumption for firms that compete with other firms that are not affected by the minimum wage increase, such as overseas or high-tech firms that employ higher-wage workers. However, many of the industries that employ minimum wage workers do not compete in such markets. These include the types of service industries that make up the largest share of low-wage employers: eating and drinking establishments and retail trade. For these industries, an increase in the minimum wage principally represents an industrywide increase in costs. Therefore, prices for low-wage goods will rise. (Output could also fall, depending on the price sensitivity of consumers, but this reaction is often presumed not to occur to avoid the implications for re-

[3] The book entitled *Minimum Wages* published in 2010 by Neumark and Wascher summarizes the findings of these studies and many others.

[4] More precisely, 40 percent agree that raising the minimum wage would adversely affect the employment of low-wage workers, 38 percent disagreed, and 22 percent are uncertain. Only 16 percent do not favor indexing the minimum wage to inflation as a desirable antipoverty policy (see http://www.igmchicago.org/igm-economic-experts-panel/poll-results?SurveyID=SV_br0IEq5a9E77NMV).

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duction in employment.) In this price increase scenario, some of the burden of the minimum wage increase falls on the consumers of low-wage products.

Although rigorous research on the subject is somewhat limited, a body of work has developed examining the impact of a minimum wage on prices. The basic theoretical predictions were first noted by Stigler (1946) and have been further described by Hamermesh (1993) and Aaronson and French (2007). Lemos (2008) surveys the empirical literature in this area and presents evidence supporting the claim that prices rise as a result of minimum wage increases. Synthesizing the findings of nearly 30 studies, this survey assesses estimated price elasticities in response to minimum wage increases equal up to 0.4 for food prices and up to 0.04 for overall prices.

One set of studies directly estimates price impacts (e.g., Card and Krueger 1995; Aaronson 2001; Lemos 2006; MacDonald and Aaronson 2006; Aaronson, French, and MacDonald 2008). Aaronson (2001), for example, explores the effects of increasing the minimum wage on restaurant prices using a competitive market model. From several data sources on restaurant prices in the United States and Canada, Aaronson's results show that a 1 percent increase in the minimum wage leads to a statistically significant increase of approximately 0.07 percent in restaurant prices in both countries. Moreover, he finds that these price adjustments are short-run phenomena concentrated in the quarters before and after the enactment of the minimum wage increase. Card and Krueger (1995, 54) conclude that "prices rose 4% faster as a result of the minimum-wage increase" based on a comparison of price growth in New Jersey and Pennsylvania after a minimum wage increase in New Jersey, although the impacts on prices are imprecisely estimated in their cross-state comparisons. Still, Card and Krueger surmise that two different sources of data (city-specific consumer price indexes and observations on hamburger prices collected by the American Chamber of Commerce Research Association) indicate the same pattern of faster price increases in areas more affected by minimum wage increases. In fact, they find that the relationship between higher wages and these higher prices approximates the labor share of product costs, a result consistent with the theory that the majority of the costs are being passed on in higher prices.

Another set of studies indirectly estimate price impacts of minimum wages using input-output models to trace wage increases on the interindustry flow of goods and services to simulate impacts on employment, output, and prices in the aggregate economy and various market sectors. Assuming a full pass-through effect, no substitution effects, no employment effects, and no spillover effects, Wolf and Nadiri (1981) used an input-output model and data from the Current Population Survey to estimate the price effects attributable to the 1963, 1972, and 1979 min-

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imum wage increases. They estimate that a 10–25 percent minimum wage increase raises prices by 0.3–0.4 percent. Under similar assumptions, Lee and O'Roark (1999) use an input-output model to estimate price effects in the food and food service industries. They calculate that a 50-cent minimum wage increase would raise consumer prices of food and kindred products by approximately 0.3 percent. Moreover, the same increase would raise prices by 0.9 percent in eating and drinking establishments, an industry with a higher concentration of minimum wage workers and a larger share of labor costs. They also consider the potential impacts of wage spillovers that refer to increases in wages that occur for those earning slightly more than the minimum wage. This spillover leads to consumer prices increasing slightly more, but never by more than 1.5 percent in eating and drinking establishments and by 0.4 percent in food and kindred products.

Not all empirical studies find evidence of rising prices in response to a minimum wage increase. Katz and Krueger (1992), Machin, Manning, and Rahman (2003), and Draca, Machin, and Van Reenen (2011) do not obtain statistically significant impacts. But this evidence is not compelling since the predicted impacts of minimum wages on prices are small and price data are highly variable and influenced by many factors.

While the precise magnitude of the responsiveness of prices to minimum wage hikes is not firmly established, the direction of the price response seems clear. Most economists and policy makers accept the view that higher minimum wages translate into higher prices for the goods and services produced either directly or intermediately by low-wage workers affected by these policies. At least some of the burden of the increased wage bills faced by low-wage firms is passed on to the consumer through higher prices.

C. Reducing Profits

Since the minimum wage forces employers to pay higher wages, many policy makers and voters presume that minimum wages will be paid out of employer profits. However, a variety of reasons lead one to suspect that profits will not be a significant source for paying the costs of minimum wages. Most economic theory does not suggest that profits are a likely source of covering costs. Rebitzer and Taylor (1995), for example, show in a simple employment matching model with a large number of employers that the introduction of a minimum wage does not reduce profits for employers. Also, Card and Krueger (1995) demonstrate that the introduction of a minimum wage in an efficiency wage model does not reduce profits for employers.

From a less formal perspective, low-wage employers are less likely than other employers to have large profits. The firms that typically employ

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low-wage workers are in highly competitive industries. Internal Revenue Service data from corporate income tax returns for major industries that employ low-wage workers (e.g., food stores, eating and drinking establishments, retail trade and department stores) show that most of these industries have lower net incomes than the average across all industries. Low-wage workers are also more likely to work for small employers (e.g., see Card and Krueger 1995). Small employers face greater competition in both the labor market and the product market, meaning that they are unable to command monopoly power in the hiring of workers or in the setting of product prices and therefore have lower profits.

Moreover, even among the most profitable firms, capital is likely to bear little, if any, of the costs of a wage increase. This is especially true for large, publicly traded firms. It is a general result in public finance that taxes are borne by those who are least able to adjust. Capital stock markets are extremely efficient, and the supply of capital is very price sensitive, meaning that a small decrease in returns to capital will cause investors to move their money into a firm with better returns. Firms therefore cannot reduce the returns on their stock and still expect investment.

Unfortunately, little empirical research exists on this subject. Card and Krueger (1995) use an event study of stock prices of firms that employ many low-wage workers such as McDonald's and Wal-Mart. However, stock prices follow investors' expectations about future profitability, so the connection between stock prices and the minimum wage is tenuous at best. Card and Krueger find little systematic relationship between excess returns and news about minimum wage changes. Using data from the United Kingdom, Draca et al. (2011) find some evidence suggesting that the minimum wage reduces firm profits in the very short run, but the long-run impacts are left unanswered.

In the case of small business employers, responses in entrepreneurial resources and capital investments to increases in factor prices are likely to occur over longer periods but would nonetheless mostly neutralize impacts on profits. While entrepreneurs may not be able to shift rapidly from an industry because of their specific skills and fixed costs, those on the margin will do so over time. The opportunity cost of small business entrepreneurs is to become highly paid employees. A reduction in their "profits" (i.e., their earnings) will induce the least profitable of them to move to their next-best alternatives through the closure of establishments. Consequently, just like capital, entrepreneurial resources will shift out of those industries with increased factor costs until equalization of returns is reestablished across industries.

Thus, despite the popular belief that firms pay for minimum wage increases through lower profits, there is little empirical evidence to date supporting this hypothesis, and basic economics suggests compelling reasons this would be a minor factor. In fact, the discussion of the GE

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model later in this paper outlines why economic theory could predict that returns to capital (and, thus, profits) can be expected to rise in response to an increase in the minimum wage when employment losses are assumed not to occur for the labor receiving this wage.

D. *Assumptions on Paying for Minimum Wages in Assessing Distributional Consequences*

To depict the circumstances deemed most likely to apply by minimum wage advocates, the analysis below assumes that no employment or profit losses occur as a result of minimum wage increases. Although many economists remain convinced that increases in the minimum wage will decrease employment, the recent literature on this subject has convinced most policy makers that such employment effects are very minimal. While many in the public policy community intimate that minimum wage increases are paid out of firm profits, no reliable evidence supports this position and few minimum wage advocates in the United States cite this position.[5] This leaves price adjustments as the source for paying for minimum wage increases. If all the costs of the minimum wage are passed on to consumers in the form of higher prices, then price increases should reflect the wage increase multiplied by labor's share of the total cost. In order to have no job or profit loss, consumers must continue to purchase the same amount of low-wage goods at the higher price. Thus, our simulations make three related assumptions:

- consumers do not reduce consumption as prices rise,
- all increased labor costs are passed on in higher prices, and
- low-wage workers remain employed at the same number of hours after the minimum wage rises.

Taken together, these three assumptions provide a setting for simulating the expected effects of minimum wage increases in a relatively straightforward manner. One need not believe that all these assumptions hold in reality, preferring instead to believe that firms pay for minimum wage hikes through all possible sources. This simulation environment, however, depicts a world with no job loss, which is the notion popularly maintained by proponents of the minimum wage. The simulation findings provide a basis for understanding the effectiveness of the minimum wage in redistributing resources across the household income distribution.

[5] If minimum wages do reduce profits, then their effects on the income distribution may be more progressive than measured in this study, since stockholders tend to be more wealthy Americans. However, how much more progressive is unclear since many Americans, even ones who are not particularly wealthy, own stock through private and public retirement portfolios.

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III. Overview of Methodology and Data

Although the above discussion primarily focuses on payment sources for costs, one must also consider the benefit side of the picture to understand the distributional effects of a minimum wage. The two sides of the simulation analysis—benefits and costs—presented below require different data sets. This section presents an overview of these data and the methodology applied to measure the benefits and costs of an increase in the minimum wage.

A. Description of Data

To calculate the benefits of a minimum wage increase, the analysis relies on data from SIPP, a nationally representative survey of households conducted by the US Census Bureau. To depict circumstances relevant to the 1996 increase in the federal minimum wage, the analysis uses data from waves 1–3 of the 1996 SIPP; the dates covered by these survey waves place them before the 1996 change in the minimum wage. The SIPP data provide information on households, families, and individuals over 15 years of age, including monthly data on income and earnings by source, wages, hours worked, demographic characteristics, family structure, and public-assistance program participation. These data permit identification of low-wage workers, their occupations and industries, their family income, and sufficient information to determine income tax burdens under alternative income scenarios using the National Bureau of Economic Research (NBER) income tax simulator (TAXSIM) program. The following analysis uses SIPP to simulate both the before- and after-tax effects of a minimum wage increase on the earnings and incomes of families with various characteristics.

To translate the effects of price increases induced by a minimum wage on families' costs of consumption, the analysis relies on data from the CES matched to the same time period as SIPP. The CES is a nationally representative survey of households conducted by the US Bureau of Labor Statistics that includes information on family expenditures on a comprehensive and detailed array of goods and services. It also incorporates a number of income measures and demographic characteristics. Although the income and demographic measures in the CES are not as detailed as those in SIPP, both data sets identify comparable categories of families characterized by their position in the income distribution, poverty level, welfare status, and family structure.

To trace the higher earnings of workers affected by the minimum wage to the prices of the products produced by these workers, the analysis uses national input-output data constructed by the IMPLAN Group. These IMPLAN input-output tables summarize databases on employment, value

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added, output, and product demand for 528 industrial sectors in all states and counties in the United States.[6]

B. *Overview of Methodology*

Figure 1 illustrates the steps that make up the methodology implemented below to simulate the distributional consequences of increases in the minimum wage. In the figure, data sets are listed in a bold font, and the arrows indicate inputs into the next step.

Starting with SIPP data in this figure, the first step calculates the effect of the 1996 increase in the minimum wage on the earnings of affected workers and on their family income, assuming no change in hours worked. Section IV.A describes the precise formulation of these calculations. This information is then used for both the benefit and the cost sides of the computations.

On the benefit side, these SIPP calculations measure how much the income of each individual family in the survey changes as a result of the wage increase. The second step computes the distribution of these benefits across families categorized by their income quintiles, poverty levels, extent of dependence on low-wage earnings, welfare recipient status, and demographic characteristics. To translate benefits into after-tax values, the third step applies the NBER TAXSIM calculator to each family's circumstances to determine how much of these additional benefits (i.e., earnings) are reduced through federal, state, and payroll taxes. This produces the final after-tax benefits for each family. The last step on the benefit side generates the distribution of after-tax benefits for the same family categorizations used for the before-tax distributions. Section IV presents these findings.

On the cost side, computations of the minimum wage increase are far more challenging. Inferring the shares of costs borne by the different categories of families requires two sets of calculations: (i) measures of how much prices rise by commodity in response to the minimum wage increase and (ii) the effects of these price increases on the consumption costs by family given its expenditure composition across commodities.

Computing measures of price impacts requires two steps after the first step described above making up the SIPP calculations measuring how much the labor cost of each individual rises as a result of a minimum wage increase. Using information in SIPP on each low-wage worker's industry of employment, the second step computes the amounts that labor costs rise in each industry. In addition to higher wage costs, employers must also pay higher payroll taxes, primarily in the form of employers'

[6] The IMPLAN data come from data collected by the Bureau of Economic Analysis, the Bureau of Labor Statistics, and the Census Bureau, among other sources.

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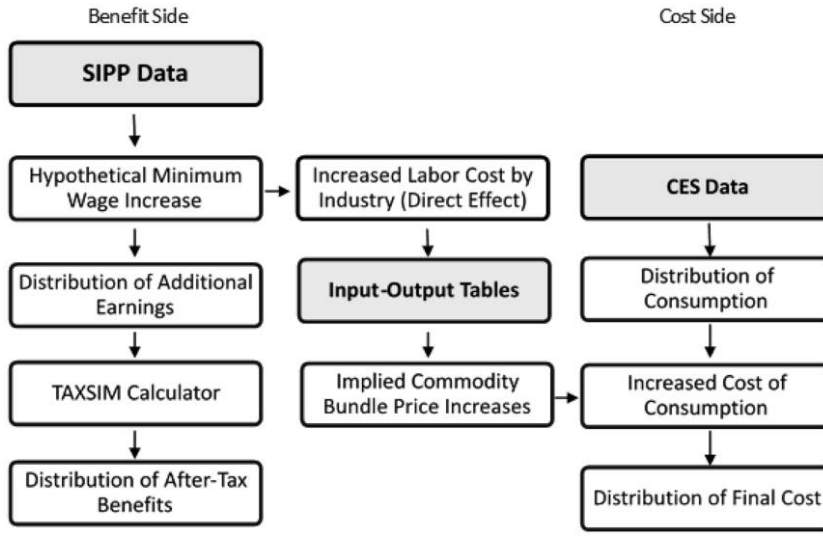

FIG. 1.—Data and methodology overview

contributions to Social Security. Both higher wages and taxes are included in the increased labor costs computed by industry. Then, the third step translates these higher employment costs (i.e., direct costs) into price increases for each final consumer good and service using the IMPLAN input-output tables. This is simply an accounting exercise consistent with the assumption that firms respond to higher labor costs by increasing prices. Sections V.A and V.B present details on the calculation of final price increases.

Computing measures of consumption costs involves two additional steps building on the second and third steps implemented above in calculating price impacts. The fourth step on the cost side uses data from the CES to identify the composition and levels of consumption by different family types for each good and service and translates commodity price increases into consumption cost increases for each family, assuming no change in the family's quantities consumed. The fifth and last step categorizes families in the CES by income quintiles, consumption quintile, poverty status, welfare participation, and other family characteristics and computes the distributions of increased consumption costs across these categories. Section V.C presents these findings.

Finally, to infer the net effects of an increase in minimum wages, Section VI integrates the benefits and cost allocations across and within family types to compute the overall distributions for each category of families. The analysis also calculates the aggregate benefits and cost transfers through a minimum wage increase. Increases in the minimum wage are

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known to have spillover effects on raising the wages of workers just above the minimum wage, which is ignored in this analysis. While the following calculations do not measure these effects, computations done in supplemental work analogous to those implemented below produce distributional findings fully compatible with those presented in this paper.

IV. Who Benefits from Increases in the Minimum Wage?

This section first shows how to calculate the additional pretax and posttax earnings for each family induced by an increase in the minimum wage and then examines how these additional earnings are distributed across families by a variety of characteristics with emphasis on particular types of families that might be considered the most important targets of minimum wage policy. Finally, the section reviews previous research done on the distribution of benefits.

A. *Calculating Pretax and After-Tax Benefits of Families with Low-Wage Workers*

Family gross earnings and income are raised by the combined increase in earnings of all family members; this change in family earnings is the pretax benefit and is calculated as follows. For each worker in the family identified as earning an hourly wage below the new legally specified minimum wage level in 1996, the analysis assumes that his or her hourly wage rises to the new minimum, that is, from as low as $4.25 (the old minimum) to exactly $5.15 (in 1996 dollars). The computations use the new wage rate and annual number of hours worked to calculate the implied increase in total earnings for each worker during the year assuming that there is no change in hours of work. For workers earning less than the old minimum wage of $4.25, the analysis assumes that they also receive a $0.90 wage increase, which does not bring them up to the full $5.15 per hour. The computations assume no spillover benefits for workers already earning more than the new minimum wage.

For the after-tax benefit, the analysis adjusts the increased income for federal and state income taxes (fully incorporating the net effects of the Earned Income Tax Credit [EITC]) and for payroll taxes using the NBER TAXSIM program. These calculations account for the dependent status of young workers as this plays an important role in determining tax liability.[7] These calculations also assume that all married couples are joint taxpayers. Because of data limitations, all taxpayers are assumed to

[7] In 1996, taxpayers could claim a dependent exemption if they had a dependent under age 18 or had a dependent under age 23 who was a full-time student. The computations

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take the standard deduction rather than itemize their deductions, which should have little impact on low-income taxpayers.

B. Distribution of Benefits across Families by Income: Before and After Tax

Using the before- and after-tax benefits calculated for each family in SIPP, one can compute the shares of benefits received by families sorted by a variety of characteristics, including income quintiles, income as a multiple of the poverty level, presence of children, headship and marriage status, wage rate levels, and dependency on public assistance. Table 1 presents the distributions of benefits across different partitions of families.

To highlight the distribution of benefits across family income, panel A of table 1 segments families into five income quintiles and reports the average levels and distribution of benefits (i.e., higher earnings) across these quintiles. For each quintile, column 5 shows the share of families that include one or more minimum wage workers (i.e., those who benefit from the minimum wage increase). The result is perhaps surprising for those unfamiliar with similar findings in the literature. The minimum wage population is almost equally distributed across the income distribution. While 22.3 percent of all families have one or more minimum wage workers, only slightly more (22.6 percent) families in the lowest quintile include low-wage workers and therefore benefit from the minimum wage increase. This is nearly identical to the 22.7 percent of families in the highest income quintile that have a worker who benefits from a minimum wage increase. Thus, approximately one in five families benefit, regardless of their income.

The more relevant question of "Where do the dollars go?" is addressed in columns 2–4 of table 1. If high-income households have low-wage workers who typically work fewer hours than the low-wage workers at the bottom of the distribution (e.g., part-time teenagers as opposed to family breadwinners), then one would expect the additional dollars from the wage increase to flow disproportionately to the poorer families. Column 2 presents the distribution of additional earnings due to the minimum wage increase across the five quintiles. If the benefits were identically distributed across all families, each quintile would receive about 20 percent of the extra earnings and more than its share of the additional earnings if it receives more than 20 percent. This is essentially the story revealed in table 1: benefits are evenly divided across quintiles.

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here assume that any child under age 18 who lived at home for some part of the sample period and earned less than $20,000 (in 1996 dollars) was claimed as a dependent by the parent(s). Children under age 23 who reported being enrolled in college were also assumed to be claimed as dependents by the parent(s). The TAXSIM program fully accounts for these factors in its calculations of income taxes and EITC.

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The 40 percent of families at the bottom of the income distribution receive only 38.3 percent of the additional earnings from the minimum wage. Conversely, the top 40 percent of families receive 40.3 percent of the extra earnings. The minimum wage increase distributes money to families at all income levels with little preference given to any group.

Since the US tax system is progressive, the distribution of extra earnings changes when calculating the shares of earnings after taxes, as reported in column 3. The poorest families lose less of their extra earnings to taxes: their share drops only 2.2 points from 19.9 percent to 17.7 percent. Those families in the highest income quintile fare worse: their share drops 6 percentage points from 18.6 percent to 12.6 percent. The distributional impact of the tax system is also apparent from comparing the average value of after-tax benefits for families that have a minimum wage worker as reported in column 4 of table 1. Again, low-income families benefit more than high-income families, though not by as much as might have been expected. Through taxation, the government captures about one-quarter of the total benefits from the minimum wage increase.

These calculations ignore the potential loss of cash and in-kind welfare benefits for families under and near the poverty level whose income rises as a result of the minimum wage. The computation of after-tax benefits performed in this analysis includes transfers from the EITC program, but not from such income support programs as Temporary Assistance to Needy Families (TANF), Aid to Families with Dependent Children (AFDC), and food stamps. Accounting for these welfare transfers would strictly worsen the distributional consequences of the minimum wage conveyed by this study.

C. Benefits to Other Target Families

While ranking families by income does not take into account family size, poverty levels do. Panel C of table 1 report the shares of minimum wage benefits going to families with income and sizes measured against multiples of the poverty threshold. As shown in the after-tax shares in table 1, 13.4 percent of benefits go to families below the poverty threshold. However, nearly 30 percent of the after-tax benefits go to families with incomes that are more than three times the poverty threshold. Thus, the majority of the additional earnings do not go to poor (or near-poor) families.

Another primary target of the minimum wage consists of families dependent on the earnings from a low-wage worker for a substantial part of total family earnings. Panel D of table 1 lists results for four different specifications of families with children that rely on the earnings of low-wage employees: families for which more than 50 percent of their total earnings comes from employment that pays (i) no more than $5.15 per

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TABLE 1
MINIMUM WAGE BENEFITS BY VARIOUS FAMILY TYPES

Family Type	Percent of All Families (1)	Percent of Pretax Benefits (2)	Percent of After-Tax Benefits (3)	Average After-Tax Benefits Families with Minimum Wage Worker ($) (4)	Percent of Families with Minimum Wage Worker (5)
A. Income quintile:					
Lowest income quintile	20.0	19.9	17.7	595	22.6
2nd income quintile	20.0	18.4	13.5	518	19.7
Middle income quintile	20.0	21.4	15.7	525	22.6
4th income quintile	20.0	21.7	15.0	475	24.0
Highest income quintile	20.0	18.6	12.6	421	22.7
B. Taxes:					
Federal income taxes	. . .	. . .	14.6	. . .	. . .
State income taxes	. . .	. . .	3.0	. . .	. . .
Payroll taxes (FICA)	. . .	. . .	7.9	. . .	. . .
C. Poverty level:					
Less than half the poverty threshold	5.3	3.6	3.9	502	22.0
50%–100% of the poverty threshold	8.9	10.7	9.5	603	26.7
1–2 times the poverty threshold	18.4	20.7	17.4	573	25.2
2–3 times the poverty threshold	16.1	17.3	14.0	552	23.9
More than 3 times the poverty threshold	51.2	46.1	29.6	436	20.1

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D. Wages: families with children where ≥50% earnings (1996 $) come from:					
Jobs paying at most $5.15/hour	1.7	9.9	8.7	774	99.8
Jobs paying at most $6.00/hour	3.7	14.8	12.5	660	76.7
Jobs paying at most $7.50/hour	7.0	20.1	16.3	588	60.2
Jobs paying at most $10.00/hour	12.5	28.1	22.2	543	49.3
E. Family type:					
Married	48.9	57.3	40.7	488	26.0
Married with children (under 18)	25.6	39.0	28.0	485	34.3
Single	48.8	40.4	31.9	546	18.2
Single with children (under 18)	10.6	14.4	12.3	513	34.2
Families below 2 times poverty with children	11.1	18.5	15.5	563	37.9
Families below poverty with children	5.0	7.4	7.5	599	38.0
Welfare recipient families	18.2	24.8	20.3	549	30.9
Welfare recipients with children	9.5	16.5	13.8	548	40.2
Families with minimum wage worker	22.3	100.0	75.3	511	100.0

NOTE.—This table uses the 1996 SIPP data on all workers aged 15 and over to compute the impact of a $0.90 increase in the 1996 minimum wage, as described in the text. Column 4 reports after-tax benefits in 2010 dollars.

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hour, (ii) no more than $6.00 per hour, (iii) no more than $7.50 per hour, and (iv) no more than $10.00 per hour. Not surprisingly, table 1 shows that these target families receive larger after-tax benefits on average and receive a disproportionate share of minimum wage benefits. For example, families in the third category receive 20 percent of all minimum wage benefits, even though they make up only 7 percent of all families. However, even when the low-wage threshold is expanded to include wages as high as $10.00 per hour, only 22 percent of total after-tax minimum wage benefits go to these target families.

Panel E of table 1 presents projected allocations for married and single families, distinguishing those with children. In general, families with children receive more benefits than those without. Families with children below twice the poverty level receive only 15.5 percent of the total after-tax minimum wage benefits. Table 1 also gives results for families who received welfare at some time during the year. With welfare interpreted as public cash aid and/or food stamps, welfare recipient families with children account for 9.5 percent of families, and they are projected to receive 13.8 percent of the after-tax additional earnings generated by a minimum wage increase.

D. Previous Research on the Distribution of Benefits

This assessment of the distribution of benefits mostly replicates early work by Gramlich (1976), Johnson and Browning (1983), Burkhauser and Finegan (1989), Horrigan and Mincy (1993), and Burkhauser and Sabia (2007). These studies also document that many low-wage workers are members of high-income families. This is especially true for teenagers who are distributed throughout the entire family income distribution and often find employment in minimum wage jobs. This literature consistently shows that while the minimum wage has a small effect on earnings inequality, it has virtually no effect on income inequality.[8] Johnson and Browning (1983) and Horrigan and Mincy (1993) focus on the distribution of minimum wage benefits by family income quintile and show that the additional minimum wage earnings are only mildly redistributive, with somewhat larger benefits going to families in the second to lowest income quintile. Burkhauser and Finegan (1989) and Burkhauser et al. (2000) focus on the distribution of benefits by families' income measured as multiples of the poverty threshold. They find that the distribution of

[8] Several sets of results in table 1 are not elsewhere in the literature: most important, benefits going to families who depend on low-wage employment for more than half of total family earnings and to families who participate in a welfare program. The findings for these groups, however, fit with the well-established conclusion of this literature: the minimum wage represents a very blunt policy instrument for providing benefits to low-income families.

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benefits is not significantly different from the population shares. Burkhauser and Finegan (1989), for example, find that only 18 percent of workers who benefit from a minimum wage increase had a family income that was below the poverty threshold. Burkhauser et al. (2000) find that only 13 percent of affected workers were in poverty. Card and Krueger (1995) report similar results, as do Burkhauser and Sabia (2007), who report benefit shares not only on the distribution of minimum wage benefits by family income quintile but also for near-poor families defined by poverty levels.

E. Summary: Distribution of Benefits

Minimum wage policy offers an inefficient mechanism for boosting the incomes of families that policy makers typically think of as the intended beneficiaries of minimum wage increases: poor families, those supported primarily by low-wage work, and those on welfare. About 35 percent of the total increase in after-tax benefits goes to families with income less than two times the poverty threshold, a common definition of the working poor or near-poor; nearly 13 percent goes to families principally supported by low-wage workers defined as earning wages at or below 117 percent (= \$6.00/\$5.15) of the new 1996 minimum wage; and only about 14 percent goes to families with children on welfare.

Unlike most public income support programs, increased earnings from the minimum wage are taxable. Over 25 percent of the increased earnings are collected back as income and payroll taxes, including the net effect of EITC, which subsidizes low-earning families. Even after taxes, 27.6 percent of increased earnings go to families in the top 40 percent of the income distribution.

V. Who Pays for Increases in the Minimum Wage?

If employment and profits are unaffected, then the cost of the minimum wage increase is covered through higher prices. As prices rise on the goods and services produced by low-wage workers, all consumers of these products are essentially subsidizing the low-wage workers. The following discussion shows that prices rise on a wide variety of goods, imposing across-the-board price increases that hit all consumers.

To assess the distributional impacts of these price increases, Section V.A relies on national input-output tables to calculate how much individual product prices must rise to cover the new labor costs induced by the minimum wage increase, and Section V.B summarizes the findings produced by this analysis. From the employer's perspective, the increase in labor costs will be greater than the increase in earnings since employers will also have to pay higher payroll tax contributions. These price calcu-

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lations assume a national market with the new prices imposed on all consumers. The analysis then translates these price increases into total consumption cost by family, and Section V.C describes the allocation of these consumption costs across families broken down by their income and demographic characteristics.

A. *Attributing Labor Costs to Price Increases*

The first step in determining who pays for the minimum wage hike involves calculating the impact of the increased labor costs on the total cost of final goods and services. The following analysis assumes that, if the cost of labor increases in a particular industry, then the price of that industry's output will rise to increase consumer expenditures by the same amount. There are two ways for the total cost of goods to increase after a minimum wage increase. First, there is the direct effect on the cost of labor for industries hiring low-wage workers. Second, there is the indirect effect through intermediate goods. While a portion of an industry's output is consumed by final users (e.g., households and government), the rest of the output is allocated to intermediate use, where the output of the original industry becomes an input for another. Thus, even if an industry employs no minimum wage workers, the prices for that industry's output may rise because the industry uses goods or contracts for services produced with minimum wage labor. This feedback through intermediate uses continues ad infinitum, so the price shock from the wage hike propagates throughout the economy.

The calculations begin by determining the industries that employ low-wage workers. From the SIPP, one can identify all industries that employed workers at wages below the new minimum of $5.15. Considering all low-wage workers in a given industry, one can infer the total increase in industry labor costs resulting from the wage hike, including additional employer contributions for Social Security. Denote these increases by the vector x_0.

The next step is to translate these cost changes into price increases of final goods. The input-output tables provide information to construct the square matrix B, where the (i, j) element of this matrix represents the share of commodity j produced by industry i. In this representation of the economy, the vector $y_0 = B'x_0$ specifies the initial increase in costs to produce each commodity or commodity bundle,[9] where elements of the vector x_0 measure the increases in labor costs for each industry attributable to the minimum wage hike. To account for the phenomenon that many commodities are used as inputs in the production of other com-

[9] Commodity bundles are given broad definitions such as food inside the home, food outside the home, rent or home ownership costs, automobile expenditures, etc.

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modities, input-output tables specify a square matrix U, where the (i, j) element of this matrix represents the proportion of commodity i's output used by industry j. Given these specifications, the vector $y_1 = (I + B'U')B'x_0$ constitutes first-round carryover cost incorporating the price increases of intermediate goods. After a sufficiently large number of iterations, the long-run vector of costs arising from the initial increase in labor expenses equals $y_\infty = (I - B'U')^{-1}B'x_0$. To allocate these increased costs into the final uses of production, input-output frameworks provide data to construct diagonal matrices F_k with diagonal elements f_{ki} designating the fraction of commodity i's total production that goes to final use k, where $k = 1, \ldots, 5$ identifies one of the following five categories of final use: households, gross investment, government, inventories, and exports and imports.[10] When results are combined, the amount of increased costs passed on to final-use category k is $F_k y_\infty$. Finally, to close the system, one must allocate final-use costs for gross investment and inventories to consumption goods in order not to lose their higher costs in the computations of price increases. In the case of gross investment, this computational analysis treats investment as a form of intermediate goods and allocates their costs in proportion to each industry's use of capital as reported by the Bureau of Economic Analysis 1992 Capital Flow Table.[11] The analysis treats residential investment as a final consumption good. In the case of inventories, the analysis allocates costs proportionally to the two domestic final users: households and government.

Given these computations, the analysis is now parallel to the starting point on the benefits side. The CES specifies the levels of goods and services consumed by each family. To calculate price effects, one must bundle these products into industries and commodities consistent with the input-output tables. For example, the commodities grocery stores, dairy product stores, retail bakeries, and food stores are mapped into the goods expenditure category "food inside the home." Given these mappings, one can add up the price increases calculated above across bundles to compute the increased expenditures required for a family to maintain its original level of consumption after the price increases implied by the minimum wage increase.

As with the benefit side, analyzing costs at the family level relates expenditure increases to family characteristics. In particular, one can measure the additional consumption costs allocated to families according to their income and consumption quintile, income relative to the poverty

[10] The IMPLAN input-output tables have 10 final-use sectors, which this analysis aggregates into the consumption groups considered in this paper.

[11] The Bureau of Economic Analysis investment data by using industry are available online at http://www.bea.gov/industry/capflow_data.htm. These 1992 data are closest to year 1996, which is analyzed in this study.

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level, welfare status, marriage status, classification as female headship, and the presence of children.

B. Price Increases from Increased Labor Costs

While the computations below account for all goods and services, one can better understand the cost of the minimum wage on prices by considering the effect on a subset of heavily affected industries. Table 2 lists the 23 industries with the largest number of minimum wage workers. These 23 most heavily affected industries account for 75 percent of all minimum wage jobs. Column 1 presents the percentage of all workers employed in the designated industry benefiting from the 1996 increase of $0.90 in the federal minimum wage. Column 2 gives the per-

TABLE 2
MINIMUM WAGE JOBS AND COST INCREASE BY INDUSTRY

Industry	Percent All Minimum Wage Jobs (1)	Percent All Minimum Wage Hours (2)	Percent Direct Costs (3)	Percent Final Costs (4)
Eating and drinking places	20.97	18.45	18.67	19.83
Other retail trade	6.36	5.60	5.02	5.20
Grocery stores	6.31	5.24	4.49	4.58
Elementary and secondary schools	4.07	4.20	5.00	5.50
Household miscellaneous personal services	3.66	3.35	3.98	4.24
Government	2.96	3.42	4.19	1.43
Colleges and universities	2.89	2.29	2.63	2.87
Miscellaneous entertainment and recreation	2.86	2.26	2.15	2.42
Department stores	2.69	2.31	1.78	1.97
Construction	2.52	3.00	2.94	2.63
Hotels and motels	2.22	2.27	2.03	1.01
Wholesale goods	2.02	2.47	2.37	1.44
Child day care services	1.68	1.54	1.52	1.75
Apparel and accessories	1.58	1.95	2.05	2.18
Agricultural production crops	1.55	1.92	2.15	.81
Motor vehicle dealers	1.51	2.03	1.99	2.39
Movies and videos	1.37	1.02	.93	.49
Real estate	1.27	1.67	1.96	4.82
Health services	1.24	1.22	1.14	1.51
Trucking and warehousing	1.23	1.96	2.23	.74
Apparel and accessory stores	1.21	.89	.76	.88
Nursing and personal care facilities	1.18	1.15	.86	1.17
Religious organizations	1.16	1.22	1.45	1.69

NOTE.—The 1996 SIPP data on all workers aged 15 and over are used in cols. 1 and 2 to determine the industry of workers who benefit from the $0.90 increase in the 1996 minimum wage, as described in the text. The IMPLAN input-output tables are used in combination with the SIPP data in cols. 3 and 4 to calculate the direct and final costs as described in the text.

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centage of all hours worked by employees benefiting from the minimum wage increase. Column 3 reports the percentage of total direct labor cost increases by industry, and column 4 lists the percentage of total final costs (which includes the increased cost of intermediate goods).

For a number of consumption goods, the final cost increase is lower (in dollar value, not just percentage) than the direct increase in labor costs. This can occur when the final users of the outputs live outside the United States. In these instances, the United States exports some of the costs of the wage increase. Alternatively, the costs may be redirected to government expenditures (which are not tracked). Final costs can also be larger than direct costs when the industry uses as inputs the output from other industries employing low-wage workers. For example, a large part of the construction industry involves building residential homes, which then become an input to the real estate industry that sells the homes; thus, much of the direct costs to the construction industry show up in the real estate industry's final costs.

Table 3 reports the share of the total national cost increase accounted for by commodities grouped into broad consumption categories in column 1. Prices increased for a very long list of goods purchased by families. As expected, food outside the home accounts for the largest share of additional costs since eating and drinking establishments make up the industry most affected by the increased labor costs.

The magnitude of the final price increase depends on the size of the labor cost increase relative to the industry's overall costs of production. For each good, dividing the additional costs by the total expenditures yields a percentage cost increase. The discussion below refers to these price increases as "implicit incremental tax rates" on household consumption goods. Essentially, these tax rates identify the amount by which consumer prices must increase to cover the total costs added by the minimum wage hike.

Table 3 presents these incremental price increases by broad commodity bundles in column 2. These price increases may at first appear relatively small; one of the largest rates is only 1.85 percent for food outside the home. However, a 0.0185 tax rate increase is large when compared to common state-level sales tax rates. The largest incremental price increases occur for education and social services, moving and storage, miscellaneous personal services such as beauty and barber shops, and food outside the home. It is worth noting that, although these price increases appear small enough to justify the assumption that consumption levels do not change, most families facing these higher prices do not receive additional earnings, so the higher prices will require either a reduction in consumption in nonaffected goods or a reduction in savings.

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TABLE 3
MINIMUM WAGE JOBS AND COST INCREASE BY INDUSTRY

Commodity Bundle (Industry)	Share of Increased Cost Accounted for by Commodity (%) (1)	Implicit Incremental Tax Rate on Commodity (2)
Food: outside home	21.04	.0185
Education and social services	11.06	.0280
Food: inside home	9.56	.0034
Other: general trade	9.06	.0005
Other: personal consumption	7.80	.0004
Health care and insurance	7.72	.0004
Household: personal services	6.21	.0200
Housing: rent	5.15	.0025
Entertainment and recreation	3.87	.0097
Household: clothing	3.44	.0035
Transportation: car	3.20	.0012
Household: utilities	2.57	.0018
Banking and financial services	2.41	.0029
Household: child care	1.85	.0100
Transportation: auto service	1.51	.0030
Housing: hotels	.95	.0053
Household: furniture	.79	.0027
Household: moving and storage	.65	.0235
Household: laundry and cleanings	.32	.0034
Transportation: air travel	.32	.0016
Household: legal services	.26	.0029
Household: computers and office supplies	.15	.0010
Household: landscape services	.12	.0013
Household: appliance repair	.02	.0012

NOTE.—The 1996 SIPP data and the IMPLAN input-output tables are used in combination to calculate the final cost by commodity, as described in the text.

The price increases reported in table 3 are well within the range found elsewhere in the literature. As reviewed briefly in Section II, the estimated elasticities for responses in prices to increases in the minimum wage fall between 0.04 and 0.4. The computations in this paper consider a 21.2 percent increase in the minimum wage from $4.25 to $5.15. This implies that price increases should be between 0.0085 and 0.085 on average. As shown in column 2 of table 3, the implicit tax rates found in this paper are, on average, in the lower part of this range.

C. Distribution of Costs across Families

The costs paid by each family for the 1996 increase in the minimum wage are determined by applying the implicit tax rates in table 3 to the data on individual consumption goods and services reported in the CES for each family. As with the benefit side, one can further aggregate these costs by family characteristics including income quintile, income relative

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to the poverty level, and family structure.[12] Additionally, one can also aggregate costs for families by consumption quintile.

Table 4 reports the percentage of minimum wage costs borne by those in the specified quintile or family type in column 2 and the average annual cost in column 3. On average, families pay $136 (in 2010 dollars) more per year for their purchases to pay for the 1996 increase in the minimum wage. The amount a particular family pays depends on its level of consumer expenditures, which typically varies by income. These costs range from $74 annually for families in the lowest category to $250 for the richest families. Families in the highest income quintile pay 31.7 percent of the costs of the minimum wage, whereas the poorest 20 percent pay only 9.3 percent of the costs. Families living in poverty pay only 8.3 percent of the costs, compared to the 51 percent of costs paid by families with incomes greater than three times the poverty threshold.

Unsurprisingly, the costs of the minimum wage increase are more correlated with consumption than with income. According to table 4, families in the lowest consumption quintile bear only 5.3 percent of the cost while those in the highest consumption quintile bear 37.6 percent, though, as seen in column 4, the cost is a larger percentage of annual expenditure for families in the lowest consumption quintile compared to those in the highest consumption quintile. This indicates that families with lower levels of consumption disproportionately purchase the goods produced with the larger shares of minimum wage labor.

D. Summary: Cost Incidence of Minimum Wage Is More Regressive than Sales Tax

One of the realities of minimum wage policy is that families are unlikely to associate these minor price increases directly with the wage increase. Imagine, however, a value-added or sales tax that had the identical effect. That is, instead of increasing wages, the government could impose a value-added tax on specific products and distribute the proceeds from the tax to supplement the earnings of low-wage workers. Of course, no such tax is being considered, but it is useful to consider the price effects in this context.

Given this "value-added tax" interpretation of the price increases, the implicit tax rates reported in table 3 needed to pay for the 1996 hike in the minimum wage for the most affected commodity groups fall in the range 0.04–2.8 percent. The consequences of these differential tax rates across commodities on the total cost of a family's consumption depend

[12] No doubt the broad industry categories applied in this analysis may mask some of the regressivity in calculated price increases. Poor people shop at Wal-Mart and eat at McDonald's, while the rich are more likely to eat and shop in places where few or no workers earn the minimum wage.

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TABLE 4
MINIMUM WAGE COSTS PAID BY VARIOUS FAMILY TYPES

Consumer Group	Percent All Families (1)	Percent Minimum Wage Costs (2)	Average Annual Cost per Family ($) (3)	Cost as Percentage of Annual Family Expenditure (4)
A. Income quintile:				
Lowest income quintile	20.0	9.3	74	.59
2nd income quintile	20.0	10.9	86	.50
Middle income quintile	20.0	14.4	114	.51
4th income quintile	20.0	19.5	154	.54
Highest income quintile	20.0	31.7	250	.58
B. Consumption quintile:				
Lowest consumption quintile	20.0	5.3	42	.63
Mid-low consumption quintile	20.0	9.0	71	.56
Middle consumption quintile	20.0	13.3	105	.56
Mid-high consumption quintile	20.0	20.6	163	.57
Highest consumption quintile	20.0	37.6	297	.52
C. Consumption sectors:				
All families (domestic)	100.0	85.9	136	.54
Federal, state, and local government	. . .	7.6	. . .	. . .
Foreign consumers	. . .	6.7	. . .	. . .
D. Poverty level:				
Less than half the poverty threshold	6.3	3.4	85	.63
50%–100% of the poverty threshold	9.9	4.9	78	.54
1–2 times the poverty threshold	23.3	12.9	88	.51
2–3 times the poverty threshold	18.6	13.7	116	.51
More than 3 times the poverty threshold	41.9	51.0	193	.56
E. Family type:				
Married	52.3	55.7	169	.54
Married with children under 18	24.2	27.4	180	.54
Single	47.7	30.0	100	.56
Single with children under 18	8.5	5.9	111	.53
All families with children under 18	32.6	33.3	162	.54
Families below 2 times poverty with children	12.9	8.2	101	.49
Families below poverty with children	5.3	2.8	84	.47
Welfare recipient families	9.8	4.4	71	.46
Welfare recipients with children	4.6	2.1	74	.46

NOTE.—This table relies on the Consumer Expenditure Survey to calculate family consumption of goods for which there was a minimum wage–induced price increase. Differences between this table and table 1 with respect to the characterization of families are due to differences between the CES and SIPP data. Column 3 reports average annual cost in 2010 dollars.

on the degree to which the family purchases the commodities apportioned the higher rates. Column 4 of table 4 shows the combined impact of these implicit tax rates given the consumption patterns of families grouped by various family characteristics. One sees from these results that the poorest families typically pay the higher aggregated rates. Rates decrease monotonically from 0.63 percent for families in the lowest

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consumption quintile to 0.52 percent in the highest. Rates are larger for the lowest income quintile than for the highest and even larger than for the middle quintiles. The same pattern holds for families with income measured compared to the poverty level. Welfare recipients are the only lower-income group who incur lower implicit tax rates on consumption than the average incurred for all families.

State sales taxes often specifically exclude goods that are considered necessities, such as health care, housing, and food purchases. The aim of excluding these goods is to lessen the regressivity of the sale tax since low-income families purchase a disproportionately larger share of these goods in their overall spending. Interpreted as a sales tax, the minimum wage price increases do exactly the opposite. Prices tend to go up most on those goods that make up a larger fraction of consumption for the poor. So, although the rich pay more in terms of dollars, a "minimum wage tax" is more regressive than a typical sales tax.

VI. Net Effects of Minimum Wage Increases

The policy question posed in the introduction rests on the effectiveness of the minimum wage in targeting resources to poor families, where effective targeting means that benefits accrue disproportionately to low-income families and the costs fall disproportionately on high-income families. The previous two sections separately examined the benefits and the costs of the minimum wage for different categories of families, assuming that all costs are passed through as higher prices. Section VI.A now brings these two sides together to explore the net effects across different groups of families to assess how well a minimum wage increase targets resources to the poor. Section VI.B summarizes the aggregate costs and benefits for US workers, consumers, and taxpayers.

A. Net Distributional Effects by Family Characteristics

According to results from the previous sections, families paid $136 annually, on average, in higher consumption costs to fund the 1996 increase of $0.90 in the federal minimum wage and families received $114, on average, annually in benefits through higher earnings. The cost is larger than the benefit, on average, primarily because of taxation; the cost to employers including payroll taxation exceeds the after-tax benefit to consumers.

Although the data from SIPP and CES are not fully compatible, integrating information in tables 1 and 4 by matching the quintile estimates for benefits and costs provides evidence of the net distributional effects of the minimum wage increase. Two kinds of families make up each income group: those with low-wage workers and those without.

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These two kinds of families provide the basis for understanding the effect of a minimum wage law on the income distribution since not all families benefit but all families pay higher prices. The average annual cost listed in table 4 is the costs that all families pay as a result of the rise in prices. The benefits listed in table 1 go only to families with a minimum wage worker.

Table 5 integrates the findings of tables 1 and 4 to depict the circumstances of families within each income quintile and of the population at large. Column 3 reports the net benefits to families with a minimum wage worker, and column 4 presents the net benefits to families without a minimum wage worker. Because families without a minimum wage worker receive no benefits, column 4 comes directly from the average annual cost given in column 3 of table 4. The final column of table 5 reports the net benefit for all families in the income quintile (a weighted average of cols. 3 and 4, where cols. 1 and 2 are the weights).

Table 5 reveals a large amount of income redistribution between families within the bottom income quintile.[13] While the 22.6 percent of families in the bottom income quintile with a minimum wage worker gain $521 on average, the 77.5 percent of families without a minimum wage worker lose $74 on average. Thus, the minimum wage increase is equivalent to taking $74 from 3.4 poor families, for a total of $252, and then giving this amount plus an additional $269 from nonpoor families to one poor family with a minimum wage worker. Nearly half the total income redistribution to families with minimum wage workers in the lowest income quintile comes from other poor families. Looking at column 5, it is clear that there is redistribution from wealthy families to poorer families, though there are large differences between families with and without a minimum wage worker within each income quintile.[14]

As one moves up the income distribution, the costs begin to outweigh the benefits, so that the average family in the highest income quintile pays $154 more in costs than it receives in benefits. However, high-income families with a minimum wage worker still averaged more in additional earnings than they paid in higher prices. Averaging across all

[13] The benefits and costs calculated throughout this analysis represent only a snapshot of families in a year and fail to recognize that the presence of minimum wage workers in and the income quintiles of families invariably shifts over time, potentially by large amounts. Thus, when viewed in a life cycle context, a far greater portion of families will benefit by having a member who is a minimum wage worker than is portrayed in table 5. At the same time, the share of benefits going to these families over a longer horizon will be smaller than depicted in the table. Similar circumstances could, of course, arise in consumption patterns. An interesting research task would be to follow households over longer periods, but this would require data beyond those used in this study.

[14] No standard errors associated with either estimation error or data quality appear in table 5 or in any other table. The computational approach implemented in this study corresponds to familiar calibration methods applied throughout economics, and the measured impacts presented here should be interpreted accordingly.

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TABLE 5
NET EFFECTS OF THE MINIMUM WAGE INCREASE BY INCOME QUINTILE

	SHARE OF FAMILIES		AVERAGE NET BENEFIT/COST FOR FAMILIES ($)		
INCOME QUINTILE	With a Minimum Wage Worker (1)	Without a Minimum Wage Worker (2)	With a Minimum Wage Worker (3)	Without a Minimum Wage Worker (4)	All Families (5)
Lowest income quintile	22.4	77.5	521	−74	60
2nd income quintile	19.9	80.1	427	−86	16
Middle income quintile	22.5	77.5	412	−114	5
4th income quintile	24.1	75.9	318	−154	−40
Highest income quintile	22.5	77.5	172	−250	−154
All families	22.3	77.7	370	−136	−23

NOTE.—This table relies on SIPP and CES together with the IMPLAN input-output data to perform the calculations. Columns 1 and 2 come directly from table 1. Columns 3–5 depend on both SIPP and CES data, but the income quintiles come from the CES data. All dollar values are inflation adjusted to 2010 dollars using the Consumer Price Index for All Urban Consumers.

families yields a negative net effect since 25.5 percent of benefits go to taxes.

B. Aggregate Costs and Benefits

In considering the benefits and costs, the previous discussion primarily concentrates on the individual effects for different types of families. However, it is helpful to know the total magnitude and distribution of the minimum wage increase among workers, taxpayers, and consumers. Nationwide, the above analysis predicts that the 1996 wage law resulted in higher annual expenditures of $15 billion in 2010 dollars. The cost of this minimum wage increase is nearly half the amount spent in 1996 by the federal government on the EITC program, on the AFDC/TANF program, or on the food stamp program.

Panel A of table 6 summarizes the allocation of these total benefits across different economic groups. From the national minimum wage increase, low-wage workers receive $14 billion annually in higher gross earnings but only $10 billion in higher after-tax income. The remainder goes to income and payroll taxes.

Panel B of table 6 presents the cost side of the ledger, with costs split among taxpayers and consumers, both inside and outside the United States (because of exports). US consumers pay nearly $13 billion an-

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TABLE 6
ALLOCATION OF PROJECTED AGGREGATE BENEFITS AND COSTS (2010 $ MILLIONS)

	Allocation	Amount ($)
	A. Aggregate Benefits	
All low-wage workers and taxpayers	Total increase in earnings and tax payments	15,079
Minimum wage workers	Increase in employees' after-tax earnings	10,548
	Increase in employees' gross earnings	14,007
Taxpayers	Total payroll and income tax gains from increased low-wage earnings	4,531
	B. Aggregate Costs	
All consumers and taxpayers	Total increase in expenditures on goods and services produced by low-wage labor	15,079
US consumers	Increase in spending on consumer goods	12,920
Consumers outside United States	Increase in spending on consumer goods	1,016
US taxpayers	Increase in federal, state, and local government expenditures	1,143

NOTE.—The table uses the SIPP and the CES together with the IMPLAN input-output data to perform the calculations. All dollar values are inflation adjusted to 2010 dollars using the Consumer Price Index for All Urban Consumers.

nually through higher prices, and consumers outside the United States and US taxpayers roughly equally split covering the $15 billion cost of the minimum wage increase. On net, the aggregate cost for domestic consumers exceeds the increase in after-tax earnings by more than $2 billion. This net loss shows up in table 5 as the negative per-family net benefit listed in the last row and column.

VII. Projecting Impacts of Economic Factors on Distributional Effects

The measurement approach implemented above constitutes a simple accounting structure that ignores the potential counterbalancing impacts of economic forces, which raises concerns about the validity of the estimates since such behavioral factors will surely activate to prevent violation of budget constraints. Economic models in the empirical minimum wage literature do not offer an adequate framework for assessing how such behavioral elements might change the above distributional findings because these models focus on labor markets alone in partial equilibrium settings.[15] To create a flexible framework for evaluating the possible impacts of behavioral factors, the Appendix formulates a gen-

[15] For a review of economic models in the minimum wage literature, see Brown et al. (1982).

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eral equilibrium model that incorporates the essential economic elements needed to understand the limitations of the empirical findings in this study.

GE models incorporating minimum wages can be found in the existing literature, but their features make them unsuitable for this analysis. A series of studies in the international trade literature, spawned by Johnson (1969) and Brecher (1974, 1980), construct GE models adapting the familiar Edgeworth-Bowley and Heckscher-Ohlin frameworks to investigate the impacts of minimum wages. A critical drawback of these frameworks relates to their dependence on fixed endowments of labor and capital inputs, implying the absence of any input supply responses. Moreover, these models mostly consider only a single type of labor and household,[16] and their key results primarily rest on assumptions about international trade.

The GE model developed in the Appendix consists of a two-commodity economy with three factors of production: low-wage labor, high-wage labor, and capital. The key feature is that only one of the commodities is produced by low-wage labor. A "low-wage" commodity is produced by all three factors of production, and a second "high-wage" good is produced without any low-wage labor. Three types of households make up the economy: low-wage households, high-wage households, and nonworking households. High-wage households own capital, but the key results do not critically rely on this assumption. To complete compatibility with the empirical framework used above, the model also includes both foreign and government sectors, with both sectors consuming both commodities along with all types of households. Taxes on labor income fund government. Finally, a fixed-coefficient production function makes up the production technology, which is consistent with the input-output analysis utilized above.

The following discussion considers three formulations of this GE model to interpret and qualify the empirical findings presented above. The first specification fully justifies the calculations performed in the above accounting exercise, making them entirely consistent with a particular variant of a market economy. The second specification allows for flexible elasticities in the supplies of factor inputs in response to the cost increases resulting from a rise in the minimum wage. The third formulation briefly explores how relaxing the key behavioral assumptions needed to produce no employment effects for minimum wage workers could influence estimates of distributional impacts.

[16] As an exception, Flug and Galor (1986) introduce skilled and unskilled labor without capital. This study still maintains the assumption of fixed labor supplies in the short run, and it focuses on analyzing the long-run influence of a minimum wage on encouraging skill acquisition through human capital accumulation.

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A. Economic Specification Supporting Simple Accounting Calculations

To impose the popular belief of no employment effects induced by increases in the minimum wage, the first formulation of the GE model in the Appendix assumes that all consumer groups (i.e., low-wage households, high-wage households, nonworking households, foreign households, and government) have perfectly inelastic demands for the good produced by low-wage labor. This specification further imposes the commonly held belief that high-wage workers are unresponsive to changes in their after-tax wages.

This GE specification directly predicts the distributional numbers presented above. In response to an increase in the minimum wage (i.e., the wage of low-wage workers), low-wage households increase their consumption of high-wage goods to the same extent that other consumer groups jointly reduce theirs. The degree of increase in consumption by low-wage households depends on the magnitude of their hours worked compared to the amounts they consume of low-wage goods, with increases being larger the lower the share of low-wage goods consumed by minimum wage households.

Tax revenues do indeed rise in this specification paid entirely by minimum wage workers through their higher earnings. Because of the perfect inelasticities assumed in the model, all households without low-wage workers decrease their consumption of high-wage goods to cover the higher taxes and after-tax earnings of low-wage workers. The input-output framework applied above allocates government resources to the direct purchase of goods (e.g., supplies and services used by government) according to historical purchase patterns and does not explicitly recognize government income transfers. One can, however, conceptually entertain having the government instead transfer added resources to various consumer groups and have them undertake the consumption.[17] Assuming that policy makers have the sole goal of undoing the adverse distributional effects of a minimum wage increase, an interesting question becomes whether the government has sufficient incremental resources and inclination to compensate the lowest-income groups for their losses.

To explore the viability of such income transfer policy options, table 6 predicts that the government receives $4.5 billion in additional tax revenues and must spend $1.1 billion in higher costs on low-wage goods to maintain its original demands. This leaves $3.4 billion to be spent on high-wage goods or to be transferred to households. Consider having the government transfer these net resources to those households without minimum wage workers that reduced their consumption in response

[17] To be fully consistent with computations performed in the previous analysis, consumer groups would need to undertake purchases in the same composition as assumed for government in the IMPLAN input-output model.

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to higher prices, with the lowest-income households receiving priority in the transfers. To assess how far the government could conceptually make up the consumption losses of the lowest income groups, one can calculate the net aggregate losses of each income quintile using the results in table 5 and the numbers of households in each category. Converting the averages and shares reported in this table to group totals,[18] households without a minimum wage worker in the lowest income quintile suffered an aggregate net cost of $1.1 billion due to the price increases induced by raising the minimum wage, the second-lowest quintile without a minimum wage worker incurred $1.3 billion in aggregate losses, and the middle quintile suffered $1.7 billion in aggregate losses. Thus, through transfers, the government could conceptually cover the losses of the lowest-income households without minimum wage workers up to about the median income.

The idea of using the extra tax revenues implied by this specialized specification of the GE model as a governmental transfer to mitigate the adverse distributional consequences of a minimum wage increase has not been considered elsewhere in the literature to my knowledge; nor has it ever been a part of minimum wage legislation. Operationalizing such a policy dictates that government would need to allocate a significant share of the incremental tax resources to transfers to the poorest families without minimum wage workers; moreover, this allocation would need to be cash transfers appropriate for compensating the relevant disadvantaged families, such as Social Security for the elderly, unemployment insurance and welfare for the nonworking poor, and income support (e.g., food stamps and EITC) for the working poor. The determination of these transfers would be exceedingly complex, and government has not shown itself to be especially capable of earmarking sources of tax revenues to spending priorities even when they are simple and directly mandated by law (such as Social Security taxes for only pensions and gas taxes for only highways).

B. Incorporating Supply Responses in Factor Inputs

The Appendix next considers what happens in the GE model when the elasticities of the supply of labor and capital are made flexible, allowing for complete responses to changes in economic circumstances. The model still assumes perfectly inelastic demands for the good produced by low-wage labor for all consumer groups. This GE formulation implies that high-wage workers increase their labor supply in response to the price increases resulting from a rise in the minimum wage. They do so to mit-

[18] The total number of households represented by the 1996 data used in the above empirical analysis is 95.5 million, with about 19.1 million making up each quintile.

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igate fully reducing consumption of the high-wage good to pay for the increase in prices of the minimum wage good. Consumption of the high-wage good decreases for high-wage households, but less than otherwise would be the case if their labor supply were completely unresponsive to changes in after-tax wage rates. Consequently, the amount of tax revenue obtained by the government will rise further, leaving more room for the government to potentially compensate low-income households for some of their losses assuming this were deemed the priority of the transfer of extra revenues.

Contrary to a popular notion that costs for increasing the minimum wage come out of profits, the GE model indicates that profits will rise in response to the increase if the model incorporates a positive sloping supply function for capital inputs. In particular, the GE model shows that the returns to capital must rise to provide for the expansion in production of high-wage goods induced by the increase in the labor supply of high-wage households. This increased capital cost leads to higher prices of all goods, including those produced by minimum wage workers. This lowers the amounts of the high-wage goods that can be consumed by all households—recall that consumption of the low-wage good is constant—which worsens the welfare of consumers. A household's net position will depend on its extent of capital ownership and its composition of consumption of the capital-intensive goods. Presuming that low-income households are likely to be minor owners of capital, they will be made worse off with a flexible capital supply and more government transfers would be required to compensate them for a minimum wage increase.

C. GE Specifications Implying Employment Effects for Unskilled Workers

Relaxing the perfectly inelastic restriction on the demand for goods produced by minimum wage labor can be expected to induce a decline in the quantities of these goods in response to an increase in the minimum wage, though the GE model formally implies ambiguous effects. The GE model predicts that the consumption of low-wage goods declines for all consumer groups without minimum wage workers;[19] and for low-wage households, consumption can conceptually go either way depending on the relative elasticities of their preferences for hours of work versus the good produced by these hours and their shares in the consumption and production of this good. The overall outcome in the GE model depends on the sizes of these net effects and the share of low-wage households in the economy. Unless low-wage households entirely make up for the declines in the demands by other groups, which is unlikely since only about

[19] This ignores possible increases from households owning large amounts of capital, which could experience increases if the price of capital rises sufficiently in response to a heightened minimum wage.

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one in four households have a minimum wage worker, the consumption of low-wage goods will decline overall according to the GE model. Correspondingly, this decline in demand translates into a loss of employment for minimum wage workers since the fixed-coefficient production technology dictates a proportional decrease in the hours worked by low-wage households.

While such employment losses reduce the total benefits received by low-wage households attributable to a minimum wage increase, the distributional impacts depend on how employment reductions occur across these households. In particular, if job losses principally take place among minimum wage workers from high-income families (e.g., teenagers, secondary workers), then the employment effects would enhance rather than diminish the transfer of income from the rich to the poor. Somewhat paradoxically, then, such employment losses would improve the antipoverty properties of minimum wage policy.

Alternatively, employment losses could function against low-income families and worsen the redistribution effects even more than portrayed above. Within the low-wage group, higher-skilled workers are more likely to remain employed (or to be drawn into the labor force) while lower-skilled workers would have a lower probability of employment. The issue becomes whether higher-skilled workers reside in low- or high-income families. If teenagers, students, and supplementary workers from the higher-income families are the higher skilled,[20] then employment losses go disproportionately against low-income families and further would hinder the redistribution effectiveness of the minimum wage depicted above.

Another source of employment losses for minimum wage workers would arise in the GE model if the fixed-coefficient production technology were abandoned and factor inputs could be substituted for one another at some flexible rate. Even with perfectly inelastic demands for goods produced by low-wage labor, a rise in the minimum wage would induce substitution of other factors of production for low-wage labor, resulting in reductions in employment. Similarly to the discussion above, the distribution implications of such employment effects would depend on who becomes unemployed among minimum wage families.

It is well beyond the scope of this study to attempt to weigh the different impacts described above in the GE settings allowing for employment effects to revise the measures of distributional impacts of the minimum wage. One would need to specify the elasticities of consumer demands for all goods by all groups (including foreign), their labor sup-

[20] This feature arises, e.g., in the search model developed by Lang and Kahn (1998). In testing this model, they find evidence that minimum wage laws shift employment away from adults in favor of teenagers and students. Adult breadwinners from lower-income families may be the least skilled.

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ply elasticities, capital supply elasticities, allocations of income/resources across types of households, production technologies and intensities of labor and capital in the production of different goods, and even government behavior. The literature does not provide estimates for many of these quantities in a context that would make them compatible with one another to produce a coherent set of predictions.[21]

VIII. Summary of Findings

Advocates of higher minimum wages often cite helping poor families as the primary motive for raising its value. They argue that families primarily supported by low-wage earnings will receive a substantial portion of the benefits and, moreover, that increasing minimum wages imposes very little public or social cost. Supporters contend that employment impacts experienced by low-wage workers are small, if any at all, and the pass-through of labor costs to prices induces negligible changes.

Using data from SIPP and CES for the year 1996, the exercise described in this paper simulates the distributional impacts of the rise in the federal minimum wage from $4.25 to $5.15 implemented in 1996–97; in 2010 dollars, this increase corresponds to a change from $5.91 to $7.00. Following the assumptions maintained by advocates, the simulation presumes (i) that low-wage workers earned this higher wage with no change in their employment or any reduction in other forms of compensation, (ii) that these higher labor costs were fully passed on to consumers through higher prices, and (iii) that consumers simply paid the extra amount for the goods produced by low-wage labor with no change in their quantities purchased. The cost of this increase is about $15 billion, which was nearly half the amount spent by the federal government on such antipoverty programs as the federal EITC, AFDC/TANF, or food stamp program. The analysis assesses the extent to which various categories of families benefit from higher earnings and the amounts that these groups pay more as consumers through higher prices. Combining these two sides yields a picture of who gains and who pays for minimum wage increases, including the net effects for families.

On the benefit distribution side, as other research has shown, the picture portrayed by this analysis sharply contradicts the view held by proponents of the minimum wage. Low-wage families are typically not low-income families. The increased earnings received by the poorest fam-

[21] The challenges would be even more formidable if one were to attempt to estimate directly who actually benefited from and who actually paid for the 1996 increase in the federal minimum wage in a GE setting. Not only would the data requirements be formidable, one would need compatible estimates for all consumer groups linked to the types of employers that they work for. Moreover, complications would arise in recognizing that neither labor nor goods can be segregated simply into the low-wage and high-wage categories exploited in the GE framework developed in the Appendix.

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ilies are only marginally higher than those of the wealthiest. One in four families in the top fifth of the income distribution has a low-wage worker, which is the same share as in the bottom fifth. Virtually as much money goes to the highest-income families as to the lowest. While advocates compare the wage levels to the poverty threshold for a family to make the case for raising the minimum wage, less than $1 in $5 of the additional earnings goes to families with children that rely on low-wage earnings as their primary source of income. Moreover, as a pretax increase, 22 percent of the incremental earnings are taxed away as Social Security contributions and state and federal income taxes. The message of these findings is clear: raising wages wastefully targets the poor contrary to conventional wisdom.

Turning to who pays the costs of an increase in the federal minimum wage through higher prices, the analysis reveals that the richest fifth of families do pay a much larger share (three times more) than those in the poorest fifth. This outcome reflects the fact that the wealthier families simply consume much more. However, when viewed as a percentage of expenditures, the picture looks far less appealing. Expressed as a percentage of families' total nondurable consumption, the extra costs from higher prices are slightly above 0.5 percent for families at large. The picture worsens further when one considers costs as a percentage of the types of consumption normally included in the calculation of state sales taxes, which excludes a number of necessities such as food and health care. More important, the minimum wage costs as a share of "taxable" annual expenditures monotonically fall with families' income. In other words, the costs imposed by the minimum wage are paid in a way that is more regressive than a sales tax.

On net, the minimum wage does redistribute income slightly in favor of lower-income families, with higher-income families paying more in increased prices than they benefit from the rise in their earnings. However, adverse impacts occur within income groups. Whereas fewer than one in four low-income families benefit from a minimum wage increase of the sort adopted in 1996, all low-income families pay for this increase through higher prices, rendering three in four low-income families as net losers. Meanwhile, many higher-income families are net winners.

Political support for the minimum wage largely depends on the apparent clarity of who benefits and the inability to trace who pays for the wage increase, irrespective of whether costs are paid through higher prices, lower profits, or cutbacks in jobs or employee benefits. As shown in this study, the benefits created by the minimum wage go to families essentially evenly distributed across the income distribution; and, when minimum wage increases are paid through higher prices, the induced rise in consumption costs mimics the imposition of a value-added or sales tax with a higher tax rate enacted on the goods and services pur-

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chased disproportionately by low-income families. Effectively, then, a minimum wage increase emulates imposition of a "national consumption tax" that is more regressive than a typical state sales tax, with its proceeds allocated to families unrelated to their income. Far more poor families suffer reductions in resources than those who gain, and as many rich families gain as poor families. These income transfer properties of the minimum wage reveal it to be an ineffectual antipoverty policy.

Appendix

General Equilibrium Model Incorporating Minimum Wages

This appendix formulates a general equilibrium (GE) model that motivates the calculations presented in this study and that allows for assessing the impacts of relaxing the stringent economic behavioral assumptions need to fully justify these calculations. The following model includes two goods produced by three factor inputs: low-wage labor, high-wage labor, and capital. Five groups consume these goods: low-wage households, high-wage households, nonworking households, a foreign sector, and a government sector. A key feature of this model is that only one of the goods uses low-wage labor as an input and production has a fixed-coefficient technology, which enables development of a specification that implies no employment effects in response to changes in the minimum wage.

Section A describes the production technology of the GE model, and Section B characterizes the demand structure of its economy. Section C presents the implications of raising the minimum wage assuming perfectly inelastic demands for the low-wage good; this specification implies no employment effects on minimum wage workers. Section D presents details of a specification of the GE model that is consistent with the computations performed in this study. Finally, Section E briefly explores how alternative behavioral elements in the GE framework are likely to affect impacts of a minimum wage on equilibrium values of goods and inputs and on distributional consequences.

A. Production Technology and Costs

This GE model consists of a two-sector economy: a "low-wage" and a "high-wage" good. The low-wage good (x) is produced by all three factors of production: low-wage labor (ℓ), high-wage labor (h), and capital (k). The high-wage good (y) is produced with high-wage labor (h) and capital (k) but without any low-wage labor (ℓ). Consistent with the input-output framework used in the paper's empirical calculations, the following fixed-coefficient production functions make up the production technology:

$$x = \min(\alpha_\ell \ell,\ \alpha_h h_x,\ \alpha_k k_x) \quad \text{and} \quad y = \min(\beta_h h_y,\ \beta_k k_y). \tag{A1}$$

The production function coefficients α_ℓ, α_h, α_k, β_h, and β_k determine the intensities of labor and capital inputs. The quantities h_x and h_y and k_x and k_y measure the amounts of high-wage labor and capital serving as inputs in the production

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of the goods x and y; no subscript appears for the low-wage labor input ℓ since this factor is used only in the production of good x.

A fixed-coefficient production technology is well known to imply the following relationships linking factor inputs and outputs:

$$\begin{aligned} x &= \alpha_\ell \ell = \alpha_h h_x = \alpha_k k_x, \\ \ell &= \frac{x}{\alpha_\ell},\ h_x = \frac{x}{\alpha_h},\ k_x = \frac{x}{\alpha_k}, \end{aligned} \tag{A2}$$

and

$$\begin{aligned} y &= \beta_h h_y = \beta_k k_y, \\ h_y &= \frac{y}{\beta_h},\ k_y = \frac{y}{\beta_k}. \end{aligned} \tag{A3}$$

Defining $k = k_x + k_y$ and $h = h_x + h_y$, the above relationships imply

$$k = k_x + k_y = \frac{\alpha_h}{\alpha_k} h_x + \frac{\beta_h}{\beta_k} h_y = \frac{\beta_h}{\beta_k} h + \left(\frac{\alpha_h}{\alpha_k} - \frac{\beta_h}{\beta_k} \right) h_x, \tag{A4}$$

which is exploited below in the derivation of comparative-static results.

The corresponding cost and price structure implied by this production technology takes the form

$$\begin{aligned} C_x &= \omega \ell + h_x + r k_x = \left(\frac{\omega}{\alpha_\ell} + \frac{1}{\alpha_h} + \frac{r}{\alpha_k} \right) x = P_x x, \\ C_y &= h_y + r k_y = \left(\frac{1}{\beta_h} + \frac{r}{\beta_k} \right) y = P_y y, \end{aligned} \tag{A5}$$

where ω denotes the wage of ℓ (relative to the wage of high-skilled, high-wage labor), r designates the input price of capital (relative to the wage of high-skilled labor), P_x equals the price of good x, and P_y equals the price of good y.

B. Household Sectors and Consumer Groups: Demands for Goods and Labor Supply

Three types of households make up the economy: "high-wage" households, "low-wage" households, and "nonworking" households. In addition, product demands are determined by a government and foreign sector.

1. High-Wage Households

High-wage households select their consumer demands for goods y_h and x_h and their labor supply h by solving the following utility optimization problem:

$$\max U_h(y_h,\ h,\ x_h) \quad \text{subject to } h - \tau_h + (rk - q) = P_x x_h + P_y y_h; \tag{A6}$$

the quantity τ_h in the budget constraint represents the income tax levied on hours of work h; $\tau_h = \tau_h(h)$ is a monotonically increasing convex function of h. This GE formulation presumes that only high-wage households own capital, which accounts for the term $rk - q$ in their budget constraint. The quantity rk measures the income received by these households, and q constitutes the cost of

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supplying capital; $q = q(k)$ is a monotonically increasing convex function of k. One can think of the function q as incorporating payments of taxes on capital income, but this generalization is ignored in the current construction of the GE model to simplify the exposition.

To characterize preferences for high-wage households, designate their marginal rates of substitution (MRS) between the high-wage good and hours of work and between the low-wage good and hours of work as

$$M_h(y_h,\ h,\ x_h) = M_h = -\frac{\partial U_h}{\partial y_h}\Big/\frac{\partial U_h}{\partial h} > 0,$$
$$S_h = -\frac{\partial U_h}{\partial x_h}\Big/\frac{\partial U_h}{\partial h} > 0. \tag{A7}$$

Quasi concavity of preferences in consumption y_h and in leisure (i.e., $-h$) implies

$$\frac{\partial M_h}{\partial y_h} < 0 \quad \text{and} \quad \frac{\partial M_h}{\partial h} < 0. \tag{A8}$$

Analogous preference assumptions would imply the same inequality properties for S_h.

Equilibrium values of goods x_h and y_h and labor supply h must satisfy the first-order conditions

$$\begin{aligned} M_h(y_h,\ h,\ x_h) &= M_h\left(\frac{1}{P_y}[h - \tau_h + (rk - q) - P_x x_h],\ h,\ x_h\right) \\ &= \frac{P_y}{1 - \tau_h'}, \\ S_h &= \frac{P_x}{1 - \tau_h'}, \end{aligned} \tag{A9}$$

where $\tau_h' > 0$ denotes the marginal tax rate on hours of work h. Equilibrium values of capital inputs k satisfy

$$r = q' \equiv \frac{\partial q}{\partial k} > 0 \quad \text{and} \quad q'' = \frac{\partial^2 q}{\partial k^2} > 0, \tag{A10}$$

where the inequalities follow from the properties of the function q.

2. Low-Wage Households

Low-wage households select their consumer demands for goods y_ℓ and x_ℓ and their labor supply ℓ by solving the following utility optimization problem:

$$\max U_\ell(y_\ell,\ \ell,\ x_\ell) \quad \text{subject to } \omega\ell - \tau_\ell = P_x x_\ell + P_y y_\ell; \tag{A11}$$

the quantity τ_ℓ in the budget constraint represents the income tax levied on hours of work ℓ; $\tau_\ell = \tau_\ell(\omega\ell)$ is a monotonically increasing function of earning $\omega\ell$.

One can define expressions for the MRS relationships M_ℓ and S_ℓ analogous to (A7) with properties (A8).

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Equilibrium values of goods x_ℓ and y_ℓ and labor supply ℓ must satisfy conditions

$$M_\ell\left(\frac{1}{P_y}(\omega\ell - \tau_\ell - P_x x_\ell),\ \ell,\ x_\ell\right) = \frac{P_y}{(1-\tau'_\ell)\omega},$$
$$S_\ell = \frac{P_x}{(1-\tau'_\ell)\omega}, \tag{A12}$$

where $\tau'_\ell > 0$ denotes the marginal tax rate on hours of work ℓ.

3. Nonworking Households

Nonworking households select their consumer demands for goods x_n and y_n by solving the following utility optimization problem:

$$\max U_n(y_n,\ x_n) \quad \text{subject to } \tau_n = P_x x_n + P_y y_n; \tag{A13}$$

τ_n represents transfers from the government. One can also readily introduce capital returns as another source of income for these households without any substantive change in the key results below, but again this is not done to simplify the exposition.

One can define expressions for nonworking households' MRS function R_n between goods y and x with properties analogous to (A7).

Equilibrium values of goods y_n and x_n must satisfy conditions

$$R_n = R_n\left(\frac{1}{P_y}(\tau_n - P_x x_n),\ x_n\right) = \frac{P_y}{P_x}. \tag{A14}$$

4. Government and Foreign Sectors

The model includes both foreign and government sectors, with taxes on labor income funding government. Goods demand for government must satisfy

$$\tau_\ell + \tau_h = \tau_n + P_x x_g + P_y y_g. \tag{A15}$$

A similar representation can be introduced for the foreign sector.

C. GE Specification with Perfectly Inelastic Demands for the Minimum Wage Good

The initial formulation of the GE model considered here assumes perfectly inelastic demands for good x for all categories of consumers, which implies in equilibrium that all of the following quantities are fixed: x_h, x_ℓ, x_n, x_g, x, ℓ, h_x, and k_x. Under this assumption, the discussion below describes the impacts of raising the minimum wage on the behavior of the five consumer groups.

1. Impacts of Minimum Wage Increase on High-Wage Households

A standard comparative-statics analysis provides the information necessary for evaluating the effects of raising ω on the values of high-wage households' de-

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mand for y_h and their supply of h and k. As the first step, total differentiation of the right-hand-side MRS equilibrium condition in (A9) with respect to ω with x_h held fixed yields

$$\frac{\partial M_h}{\partial y_h}\frac{dy_h}{d\omega} + \frac{\partial M_h}{\partial h}\frac{dh}{d\omega} = \tau_h''\frac{P_y}{(1-\tau_h')^2}\frac{dh}{d\omega} + \frac{1}{1-\tau_h'}\frac{q''}{\beta_k}\frac{dk}{d\omega}. \tag{A16}$$

As the second step, total differentiation of the budget constraint (A6) with respect to ω with x_h held fixed yields[22]

$$(1-\tau_h')\frac{dh}{d\omega} + q''k\frac{dk}{d\omega} = \frac{1}{\alpha_\ell}x_h + \frac{q''}{\alpha_k}x_h\frac{dk}{d\omega} + P_y\frac{dy_h}{d\omega} + \frac{q''}{\beta_k}y_h\frac{dk}{d\omega}. \tag{A17}$$

Total differentiation of (A4) holding x (and, therefore, h_x) constant yields $dk/d\omega = (\beta_h/\beta_k)(dh/d\omega)$, which substituted into (A17) produces

$$\frac{dy_h}{d\omega} = -\frac{1}{P_y}\frac{x_h}{\alpha_\ell} + \frac{1}{P_y}\left[(1-\tau_h') + q''\frac{\beta_h}{\beta_k}\left(k - \frac{x_h}{\alpha_k} - \frac{y_h}{\beta_k}\right)\right]\frac{dh}{d\omega}. \tag{A18}$$

The quantity $k - y_h/\beta_k - x_h/\alpha_k > 0$ since all capital is not fully exhausted by the consumption of high-wage households, and the entire quantity multiplying $dh/d\omega$ is therefore positive.

As the third and final step, substitution of relationship (A18) into (A16) yields

$$\begin{aligned}\left\{\frac{\partial M_h}{\partial y_h}\cdot\frac{1}{P_y}\left[(1-\tau_h') + q''\frac{\beta_h}{\beta_k}\left(k - \frac{y_h}{\beta_k} - \frac{x_h}{\alpha_k}\right)\right]\right.\\ \left. + \frac{\partial M_h}{\partial h} - \frac{\tau_h'' P_y}{(1-\tau_h')^2} - \frac{q''\beta_h}{(1-\tau_h')\beta_k^2}\right\}\frac{dh}{d\omega} = \frac{\partial M_h}{\partial y_h}\cdot\frac{x_h}{P_y\alpha_\ell}.\end{aligned} \tag{A19}$$

Since the expression in the right-hand brace of relationship (A19) multiplying $dh/d\omega$ is negative and the right-hand side of this relationship is also negative, this relationship implies

$$\frac{dh}{d\omega} \geq 0 \quad \text{and} \quad \frac{dk}{d\omega} \geq 0, \tag{A20}$$

where the second inequality follows from differentiation of (A4) and using the first inequality. Consequently, with this specification of the GE model, a rise in the minimum wage leads to an increase in the hours worked by high-wage households.

2. Impacts of a Minimum Wage Increase on Low-Wage Households

A similar comparative-statics exercise provides the information needed to assess the impacts of raising ω on the values of low-wage households' demand for y_ℓ. (Recall that their labor supply ℓ remains constant.) This demand response is determined by total differentiation of their budget constraint ($P_y y_\ell = \omega\ell - \tau_\ell - P_x x_\ell$) with x_ℓ and ℓ held fixed, which yields

[22] This result uses $dP_x/d\omega = 1/\alpha_\ell + q''/\alpha_k \cdot dk/d\omega$ and $dP_y/d\omega = q''/\beta_k \cdot dk/d\omega$, which follows $P_x = \omega/\alpha_\ell + 1/\alpha_h + r/\alpha_k$ and $P_y = 1/\beta_h + r/\beta_k$ from (A5) and (A10).

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$$\frac{dy_\ell}{d\omega} = \frac{1}{P_y}\left[(1-\tau'_\ell)\ell - \frac{x_\ell}{\alpha_\ell}\right] - \frac{q''}{P_y}\frac{\beta_h}{\beta_k}\left(\frac{x_\ell}{\alpha_k} + \frac{y_\ell}{\beta_k}\right)\frac{dh}{d\omega}. \tag{A21}$$

(This derivation relies on the differentiation relationships exploited in obtaining [A19].)

3. Impacts of a Minimum Wage Increase on Nonworking Households and Other Sectors

The implied effect of the consumption of nonworking households is essentially a special case of the high-wage household without a labor supply response option and no capital ownership. Adapting (A18) without an own labor supply response creates the following relationship showing the effect of raising the minimum wage for nonworking households on their demand for the low-wage good:

$$\frac{dy_n}{d\omega} = \frac{1}{P_y}\left(\frac{d\tau_n}{d\omega} - \frac{x_n}{\alpha_\ell}\right) - \frac{q''}{P_y}\frac{\beta_h}{\beta_k}\left(\frac{x_n}{\alpha_k} + \frac{y_n}{\beta_k}\right)\frac{dh}{d\omega}. \tag{A22}$$

A similar expression can be derived for the government and foreign sectors, but to do so provides no insights beyond what already appears above.

D. GE Specification Consistent with Empirical Calculations in the Study

In addition to having no employment effects occur for low-wage workers in response to changes in the minimum wage as accomplished above by assuming perfectly inelastic demands for good x, the calculations performed in this study also maintain the behavioral assumption that the labor supply of high-wage workers is also perfectly inelastic. This no–employment impact characterization of the economy mimics the critical notions advocated by many supporters of minimum wage policies.

For high-wage households, if one introduces the commonly held belief that the labor supply of the high-wage households is entirely unresponsive to their wages, then (A18) reduces to

$$\frac{dy_h}{d\omega} = -\frac{1}{P_y}\frac{x_h}{\alpha_\ell} < 0. \tag{A23}$$

Comparison with (A18) reveals that the decline in the demand for high-wage goods by high-wage households is mitigated when these households have elastic labor supplies and respond positively to compensate for the loss of resources arising from higher prices for the low-wage good induced by increasing the minimum wage.

For low-wage households, (A21) simplifies to

$$\frac{dy_\ell}{d\omega} = \frac{1}{P_y}\left(\ell - \frac{x_\ell}{\alpha_\ell} - \tau'_\ell\ell\right). \tag{A24}$$

The quantity $\ell - x_\ell/\alpha_\ell > 0$ since all of the low-wage good is not fully consumed by low-wage households. Consequently, the consumption of the high-wage good by

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low-wage households increases unless the progressivity of taxation overcomes this effect.

Finally, for nonworking households, (A22) reduces to

$$\frac{dy_n}{d\omega} = \frac{1}{P_y}\left(\frac{d\tau_n}{d\omega} - \frac{x_n}{\alpha_\ell}\right). \tag{A25}$$

Accordingly, consumption of the high-wage good by these households will decline because the loss of resources attributable to higher prices for the low-wage good induced a higher minimum wage, unless sufficient governmental transfers make up for the difference. Note that all of these transfers come from minimum wage households through their higher taxation on earning.

Relationships (A18), (A19), (A21), and (A22) determine the effects of increasing the minimum wage in a GE framework with the consumer demands for the low-wage good assumed to be perfectly inelastic. With the labor supply response of high-wage workers also deemed to be perfectly inelastic, these relationships become (A23), (A24), and (A25). When combined with the analogous relationships for the government and foreign sections, this specification of a GE model is consistent with the accounting computations presented in this study.

E. Evaluating Minimum Wage Impacts under More Flexible Behavioral Assumptions

The above relationships provide insights into how business owners share in the costs of increasing the minimum wage in this GE setting. If the supply of capital inputs is perfectly elastic—which could arise when international markets set rates of return and the foreign sector supplies incremental capital at a constant rate—then $q'' = 0$. In this case, all of the simplifications for the demands of low-wage and nonworking households in Section D apply without assuming that high-wage households have unresponsive labor supply. The income earned by capital is unaffected by the minimum wage.

Alternatively, if one relaxes this elasticity assumption and allows the supply of capital to involve increasing costs (as captured by $q = q(k)$), then raising the minimum wage will increase the returns to capital (and profits). When high-wage households have responsive labor supply, a rise in the minimum wage induces an increase in the hours worked by these households (see [A20]), and capital inputs must rise to accommodate increased production of the high-wage good. Relationship (A19) shows that $dh/d\omega$ (and $dk/d\omega$) declines as the marginal costs of capital ($q'' > 0$) increase. The impact on the demand for y_h is formally ambiguous according to relationship (A18) because of the contribution of capital returns to the income of high-wage households. However, this is not the case for the demands y_ℓ and y_n, which unambiguously decline according to relationships (A21) and (A22) as the marginal costs of capital q'' increases.

Loss of employment will occur for low-wage labor when the production technology allows for flexible factor substitution among inputs, and this will be true even with perfectly inelastic demands for goods produced by low-wage workers. Without the fixed-coefficient production technology, a rise in the minimum wage would induce substitution of other factors of production against low-wage labor in the GE specification presented above.

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Relaxing the perfect inelasticity of the demands for low-wage goods invokes operation of the MRS relationships S_h, S_ℓ, and R_n characterized by relationships (A7) along with equilibrium conditions (A9) for all consumer groups. Conventional demand income and substitution effects apply. High-wage and nonworking households will substitute against the low-wage good in response to its higher price, contributing to a decline in its aggregate demand. This effect also operates for low-wage workers, but the increase in their wages more than compensates for the rise in higher prices given the production technologies maintained in this GE framework. The impact on their labor supply depends on the familiar forces determining whether workers exhibit backward-bending labor supply. Given these counterbalancing forces, the overall impact in this GE setting will depend on the size of these net effects and the share of low-wage households in the economy. Because the fixed-coefficient production technology requires the hours of work of low-wage workers and the goods produced by this labor to remain in fixed proportions, an overall decline in the demand for low-wage goods would necessarily translate into a loss of employment for minimum wage workers.

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PROMISES MADE, PROMISES BROKEN: THE FAILURE OF WASHINGTON STATE'S MINIMUM WAGE LAW

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PROMISES MADE, PROMISES BROKEN: THE FAILURE OF WASHINGTON STATE'S MINIMUM WAGE LAW

INTRODUCTION

In 1998, Washington voters approved Initiative 688, dramatically boosting the state minimum wage from $5.15 to $5.70 on Jan. 1, 1999, and to $6.50 on Jan. 1, 2000, and, for the first time in the U.S., indexing the minimum wage to inflation.

Supporters of the initiative argued at the time its passage would "end poverty-wage work from the fields of eastern Washington to the garment-assembly plants hidden behind Seattle's skyline to the explosion of low-paying service-sector jobs that surround us."[1]

In addition to combating poverty, automatically increasing the minimum wage each year to keep up with inflation was supposed to "depoliticize the issue"[2] or, as the Washington State Labor Council put it, "take the politics out of this issue, and put the fairness back."[3]

Sixteen years after I-688's implementation, however, the minimum wage is as political as ever. Despite having the nation's highest state minimum wage, labor activists are pressing for an even larger increase in the minimum wage to at least $15 an hour using much the same arguments that were used to pass I-688 in 1998: No working person should live in poverty, a higher minimum wage will stimulate the economy, and job growth will not be harmed.

An analysis of I-688's effect on Washington's poverty rate, job growth and unemployment, however, indicates the minimum wage initiative has failed to measurably deliver on its promises.

There is no doubt that I-688 dramatically increased the state minimum wage. Before passage of I-688, a full-time minimum wage worker could live above the poverty line only if single. As of 2014, a full-time minimum wage worker could support two children just above the poverty threshold.

But despite the significant increase in the state minimum wage relative to the poverty threshold, Washington's poverty rate has remained essentially unchanged. At the same time, while the state's overall job market has performed well, job growth in low-wage industries like accommodation and food service has slowed substantially.

The decrease in employment in these sectors does not necessarily indicate that workers are moving on to more profitable fields. While the state's teen unemployment rate generally mirrored the national rate before the minimum wage initiative, Washington's teen unemployment rate has signifanctly surpassed the national rate every year since I-688's passage.

Furthermore, despite claims that a higher minimum wage would boost the economy through additional consumer spending, all the economic evidence to date continues to indicate minimum wage hikes are a net drain on the economy.

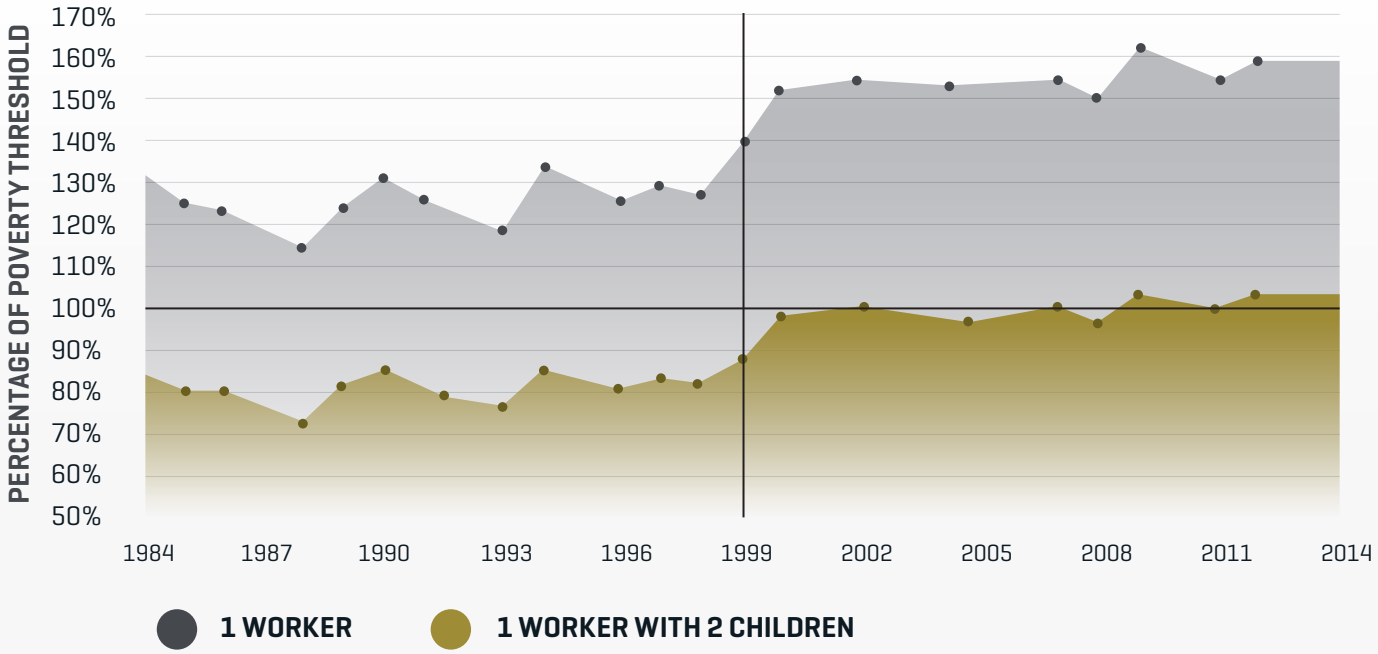
Given I-688's poor track record, state and local voters and policymakers should seriously consider the potential consequences before enacting further, unprecedented increases in the minimum wage.

POVERTY

> *"The primary impetus to increase the minimum wage is to enable people who work full-time to earn their way out of poverty."*
>
> – *John Burbank, "Increasing the Minimum Wage: Initiative 688," Economic Opportunity Institute, September 1998.*[4]

While the intent of I-688 may have been to decrease poverty, it appears to have accomplished little. The chart below tracks the changes in how a Washington minimum wage workers' full-time annual salary stacks up against the poverty threshold.

ANNUAL, FULL-TIME EARNINGS AT WA MINIMUM WAGE



KEY POINTS

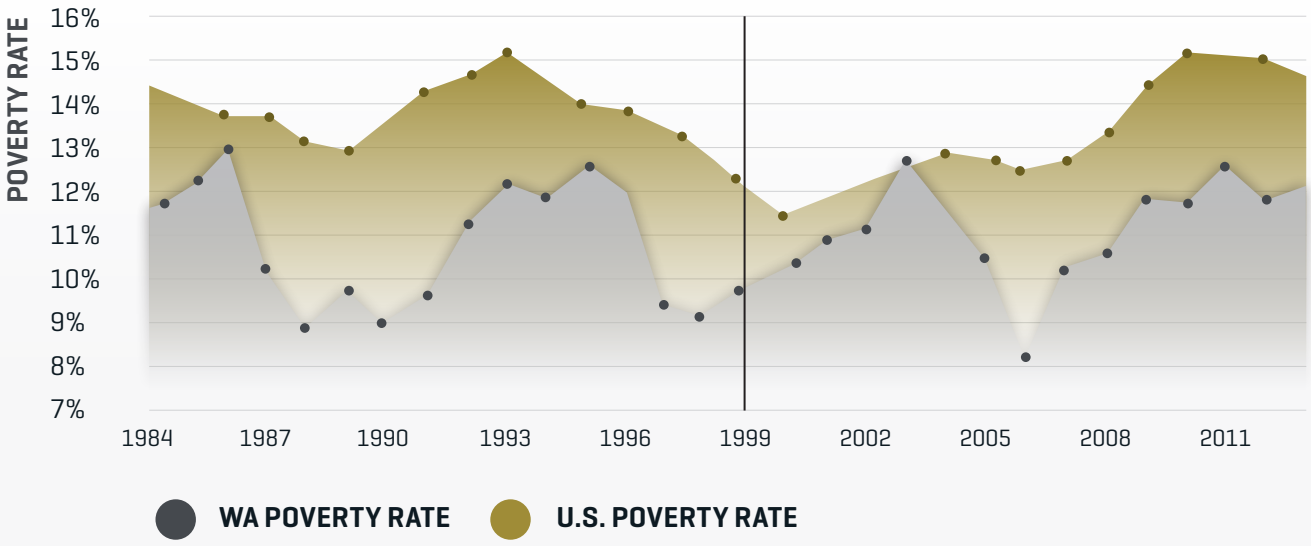
1. When I-688 was passed in 1998, full-time minimum wage workers earned 126 percent of the poverty threshold. A worker with any dependents fell below the poverty line. Single, full-time minimum wage workers supporting two children under 18 earned 82 percent of the poverty threshold.

2. Sixteen years later, in 2014, full-time minimum wage workers earned 157 percent of the poverty threshold and workers with two children earned 102 percent of the poverty line.

POVERTY

Despite I-688's dramatic increase in the minimum wage compared to the poverty threshold, and despite the fact that Washington had the nation's highest minimum wage, the state poverty rate (the percentage of Washington residents living below the poverty threshold) changed little relative to the national poverty rate.

WA AND U.S. POVERTY RATES



KEY POINTS

1. The fact that Washington's poverty rate lags behind the national average is sometimes referenced as evidence that the state's high minimum wage has been good for the poor.[5] However, the state poverty rate has historically trailed the national rate, even prior to the passage of I-688 in 1998.

2. The only time that Washington's poverty rate exceeded the national rate was in 2003, following four years of increases in the poverty rate that began the year I-688 took effect.

3. The average state poverty rate for the 15 years preceding passage of I-688 (1984-1998) was 10.7 percent. The average national poverty rate for the same period was 13.8 percent. The average state poverty rate for the 15 years following passage of I-688 (1999-2013) was 10.9 percent, a slight increase, while the national poverty rate for the same period was 13.1 percent, a slight decrease.

4. Despite the fact that Washington's minimum wage rose substantially in the years since 1998, there was no noticeable change in the state poverty rate. This is in line with recent research showing "the failure of minimum wage hikes as an antipoverty policy."[6]

POVERTY

Year	Poverty Line - 1 Worker	Poverty Line - 1 Worker w/2 Children	WA Minimum Wage	Annual FT Minimum Wage Salary in WA	% of Poverty Line - 1 Worker	% of Poverty Line - 1 Worker w/2 Children	WA Poverty Rate	US Poverty Rate
2014	$12,316	$19,073	$9.32	$19,385.60	157.4%	101.6%	N/A	N/A
2013	$12,119	$18,769	$9.19	$19,115.20	157.7%	101.8%	12.0%	14.5%
2012	$11,945	$18,498	$9.04	$18,803.20	157.4%	101.6%	11.6%	15.0%
2011	$11,702	$18,123	$8.67	$18,033.60	154.1%	99.5%	12.5%	15.0%
2010	$11,344	$17,568	$8.55	$17,784.00	156.8%	101.2%	11.6%	15.1%
2009	$11,161	$17,285	$8.55	$17,784.00	159.3%	102.9%	11.7%	14.3%
2008	$11,201	$17,346	$8.07	$16,785.60	149.9%	96.8%	10.4%	13.2%
2007	$10,787	$16,705	$7.93	$16,494.40	152.9%	98.7%	10.2%	12.5%
2006	$10,488	$16,242	$7.63	$15,870.40	151.3%	97.7%	8.0%	12.3%
2005	$10,160	$15,735	$7.35	$15,288.00	150.5%	97.2%	10.2%	12.6%
2004	$9,827	$15,219	$7.16	$14,892.80	151.5%	97.9%	11.4%	12.7%
2003	$9,573	$14,824	$7.01	$14,580.80	152.3%	98.4%	12.6%	12.5%
2002	$9,359	$14,494	$6.90	$14,352.00	153.3%	99.0%	11.0%	12.1%
2001	$9,214	$14,269	$6.72	$13,977.60	151.7%	98.0%	10.7%	11.7%
2000	$8,959	$13,874	$6.50	$13,520.00	150.9%	97.4%	10.1%	11.3%
1999	$8,667	$13,423	$5.70	$11,856.00	136.8%	88.3%	9.6%	11.8%
1998	$8,480	$13,133	$5.15	$10,712.00	126.3%	81.6%	8.9%	12.7%
1997	$8,350	$12,931	$5.15	$10,712.00	128.3%	82.8%	9.2%	13.30%
1996	$8,163	$12,641	$4.90	$10,192.00	124.9%	80.6%	11.9%	13.7%
1995	$7,929	$12,278	$4.90	$10,192.00	128.5%	83.0%	12.5%	13.8%
1994	$7,710	$11,940	$4.90	$10,192.00	132.2%	85.4%	11.7%	14.5%
1993	$7,518	$11,642	$4.25	$8,840.00	117.6%	75.9%	12.1%	15.1%
1992	$7,299	$11,304	$4.25	$8,840.00	121.1%	78.2%	11.2%	14.5%
1991	$7,086	$10,973	$4.25	$8,840.00	124.8%	80.6%	9.5%	14.2%
1990	$6,800	$10,530	$4.25	$8,840.00	130.0%	84.0%	8.9%	13.5%
1989	$6,451	$9,990	$3.85	$8,008.00	124.1%	80.2%	9.6%	12.8%
1988	$6,155	$9,531	$3.35	$6,968.00	113.2%	73.1%	8.7%	13.0%
1987	$5,909	$9,151	$3.35	$6,968.00	117.9%	76.1%	10.0%	13.5%
1986	$5,701	$8,829	$3.35	$6,968.00	122.2%	78.9%	12.9%	13.6%
1985	$5,593	$8,662	$3.35	$6,968.00	124.6%	80.4%	12.0%	14.0%
1984	$5,400	$8,363	$3.35	$6,968.00	129.0%	83.3%	11.3%	14.4%

DATA NOTES

The annual, full-time minimum wage salary calculations are computed by multiplying the hourly minimum wage by 40 hours per week for 52 weeks per year.

DATA SOURCES

U.S. poverty rate:
U.S. Census Bureau, Current Population Survey Annual Social and Economic Supplements.
http://www.census.gov/hhes/www/poverty/publications/pubs-cps.html

Washington poverty rate:
U.S. Census Bureau, Current Population Survey Annual Social and Economic Supplements, Historical Poverty Tables, Table 21, "Number of Poor and Poverty Rate, By State."
http://www.census.gov/hhes/www/poverty/data/historical/people.html

Poverty threshold:
U.S Census Bureau, Poverty thresholds by Size of Family and Number of Children.
http://www.census.gov/hhes/www/poverty/data/threshld/

Washington minimum wage levels:
Washington State Dept. of Labor and Industries, "History of Washington Minimum Wage."
http://www.lni.wa.gov/WorkplaceRights/Wages/Minimum/History/default.asp

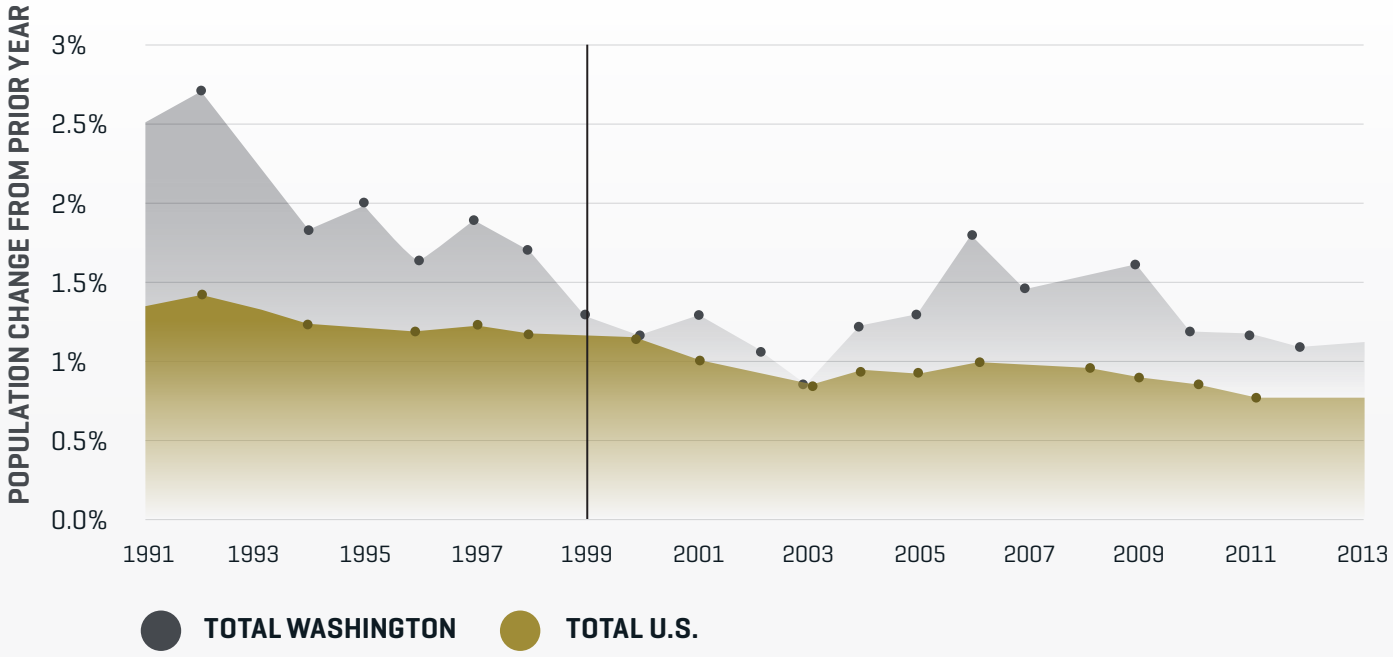
U.S. minimum wage levels:
U.S. Dept. of Labor, Wage and Hour Division, "History of Federal Minimum Wage Rates Under the Fair Labor Standards Act, 1938 – 2009."
http://www.dol.gov/whd/minwage/chart.htm

EMPLOYMENT

> *"Increasing the minimum wage is an effective tool for raising the earnings of low-wage workers without lowering their employment opportunities or harming the overall economy."*
>
> – *John Burbank, "Increasing the Minimum Wage: Initiative 688," Economic Opportunity Institute, September 1998.* [7]

As they do today, minimum wage advocates in 1998 contended that the government could raise the wage floor without negatively affecting job growth or employment. Washington's generally robust population and job growth is often referenced as proof that having the nation's highest minimum wage did not harm the state's economy. The chart below indicates that Washington's population growth has consistently exceeded the national growth rate.

POPULATION GROWTH

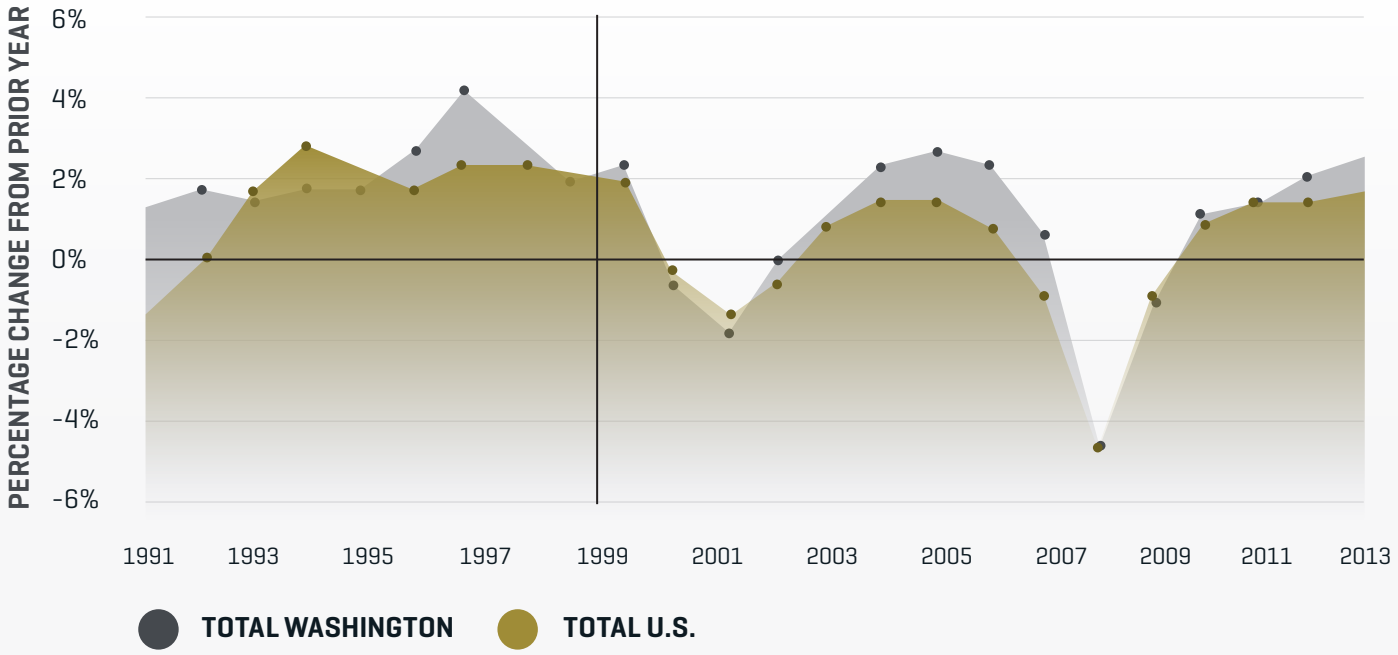


KEY POINTS

1. Washington's population growth rate has consistently exceeded the national rate since 1990, except in 2003 when both Washington's population and the total U.S. population grew by .86 percent.

Similarly, Washington's overall job growth has generally outpaced national growth since 1991, as indicated by the chart below.

NONFARM EMPLOYMENT GROWTH



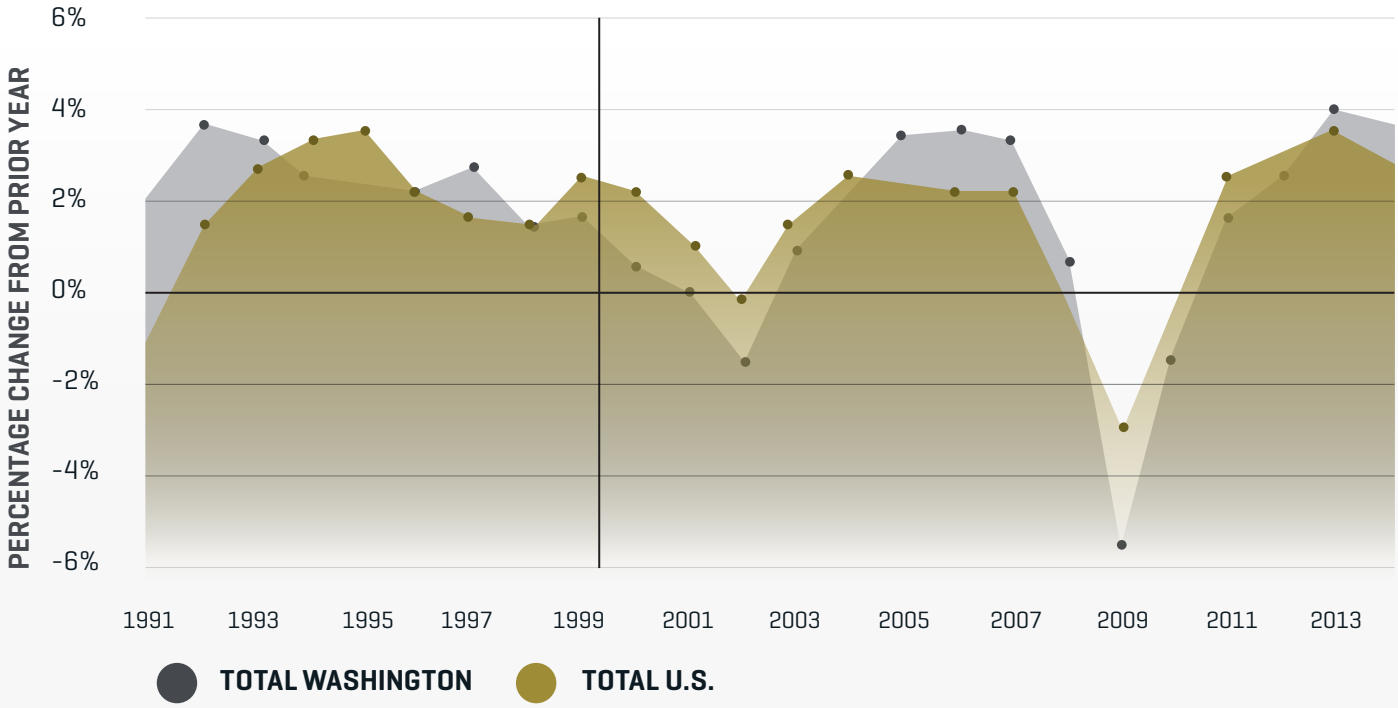
KEY POINTS

1. Growth in Washington's total nonfarm employment exceeded the national rate in 15 of the 24 years since 1991. Washington's strong overall labor market has led some observers to argue that the state's high minimum wage has not negatively affected job growth.[8]

EMPLOYMENT

Despite the increases in Washington's population and overall employment, however, industries with a predominance of entry-level, low-wage jobs have not fared as well. The chart below compares Washington's growth in accommodation and food service jobs (mainly hotel and restaurant jobs, as defined by NAICS sector 72)[9] to the national rate.

TOTAL ACCOMMODATION AND FOOD SERVICE EMPLOYMENT



KEY POINTS

1. Prior to the passage of I-688 in 1998, growth in Washington's accommodation and food service employment generally tracked national trends.

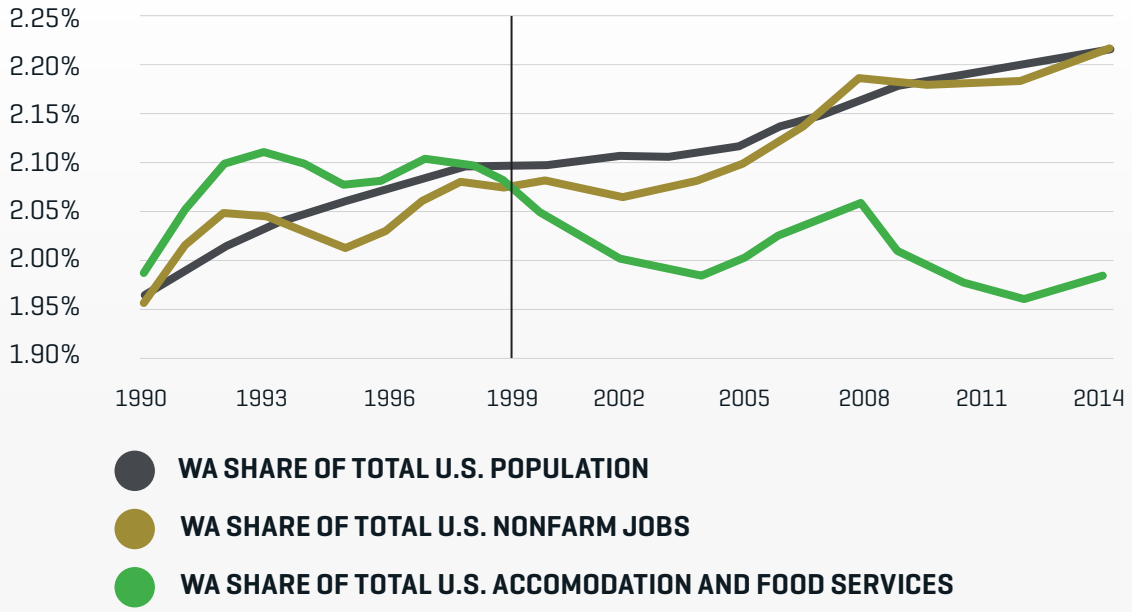
2. After the passage of I-688, job growth in Washington's accommodation and food service sector slowed and, from 2001-2002, actually declined. The industry did experience strong growth from 2004-2006, when the state's population and overall jobs growth surged, but the state shed twice as many accommodation and food service jobs as the nation when the recession took hold from 2008-2010.

3. Despite the fact that Washington's population increased faster than the national rate every year since 1991 and total nonfarm employment increased faster in Washington than the nation 15 out of the 24 years since 1991, growth in Washington's accommodation and food service industry exceeded the national rate in only six of the 17 years since passage of I-688 in 1998.

EMPLOYMENT

The increases in Washington's population and total employment, coupled with the decline in accommodation and food services jobs, meant that Washington's share of the nation's accommodation and food service jobs has declined noticeably relative to its population and total jobs.

WA SHARE OF TOTAL U.S. POPULATION, JOBS



KEY POINTS

1. Washington's share of total U.S. accommodation and food service industry jobs exceeded Washington's share of total U.S. nonfarm employment and total U.S. population every year from 1990 until implementation of I-688 in 1999.

2. Since the passage of I-688, Washington's share of total accommodation and food service jobs has substantially declined, even while the state's share of the nation's population and total jobs have steadily increased.

3. When voters passed I-688 in 1998, Washington had 2.09 percent of the nation's population, 2.08 percent of the nation's jobs and 2.10 percent of the nation's accommodation and food service jobs. As of 2014, Washington's share of the population had increased to 2.21 percent, its share of the nation's jobs had increased to 2.21 percent, while its share of total U.S. accommodation and food services jobs had declined to 1.98 percent.

4. While Washington's share of the nation's population increased by 5.7 percent since passage of I-688 in 1998, and its share of total U.S. jobs increased by 6.3 percent, the state's share of U.S. accommodation and food services jobs fell by 5.7 percent.

EMPLOYMENT

Year	WA % of US Pop.	WA NF Jobs	% Change From Prior Year	US NF Jobs	% Change From Prior Year	WA % of US NF Jobs	WA AFS Jobs	% Change From Prior Year	US AFS Jobs	% Change From Prior Year	WA Share of US AFS Jobs
2014	2.21%	3076.5	2.78%	139023.3	1.93%	2.21%	250	3.80%	12606.2	3.10%	1.98%
2013	2.20%	2993.2	2.37%	136393.8	1.71%	2.19%	240.8	4.07%	12226.7	3.61%	1.97%
2012	2.20%	2924	1.69%	134098.3	1.71%	2.18%	231.4	2.68%	11800.3	3.22%	1.96%
2011	2.19%	2875.4	1.30%	131843.2	1.21%	2.18%	225.4	1.82%	11432.7	2.69%	1.97%
2010	2.18%	2838.7	-0.94%	130268.6	-0.73%	2.18%	221.4	-1.06%	11133.3	-0.23%	1.99%
2009	2.17%	2865.5	-4.34%	131220.4	-4.34%	2.18%	223.7	-5.20%	11158.5	-2.70%	2.00%
2008	2.16%	2995.6	0.89%	137169.3	-0.56%	2.18%	236	0.77%	11468.3	0.10%	2.06%
2007	2.15%	2969.3	2.58%	137934.8	1.12%	2.15%	234.2	3.45%	11456.7	2.47%	2.04%
2006	2.14%	2894.6	2.93%	136403.3	1.80%	2.12%	226.4	3.56%	11180.7	2.36%	2.02%
2005	2.12%	2812.1	2.63%	133996.4	1.72%	2.10%	218.6	3.54%	10922.6	2.61%	2.00%
2004	2.11%	2740.1	1.40%	131731.7	1.09%	2.08%	211.1	2.28%	10644.8	2.74%	1.98%
2003	2.10%	2702.1	0.30%	130314.7	-0.24%	2.07%	206.4	1.09%	10361	1.55%	1.99%
2002	2.10%	2694.2	-1.49%	130628	-1.10%	2.06%	204.2	-1.19%	10202.7	-0.06%	2.00%
2001	2.10%	2735.1	-0.40%	132079.5	0.04%	2.07%	206.6	0.18%	10208.4	1.34%	2.02%
2000	2.09%	2746	2.48%	132029.7	2.16%	2.08%	206.3	0.84%	10073.7	2.42%	2.05%
1999	2.09%	2679.6	2.22%	129240.1	2.45%	2.07%	204.5	1.76%	9835.5	2.59%	2.08%
1998	2.09%	2621.4	3.35%	126148.9	2.61%	2.08%	201	1.61%	9587.4	1.80%	2.10%
1997	2.08%	2536.5	4.34%	122941.9	2.60%	2.06%	197.8	2.80%	9418.2	1.79%	2.10%
1996	2.07%	2431	2.96%	119826.7	2.05%	2.03%	192.4	2.49%	9253	2.35%	2.08%
1995	2.06%	2361.2	1.94%	117416.4	2.65%	2.01%	187.8	2.66%	9040.6	3.64%	2.08%
1994	2.04%	2316.2	2.17%	114390.5	3.11%	2.02%	182.9	2.76%	8723.2	3.45%	2.10%
1993	2.03%	2267	1.78%	110937.1	1.97%	2.04%	178	3.46%	8432.2	2.80%	2.11%
1992	2.01%	2227.3	2.06%	108797.6	0.33%	2.05%	172	3.82%	8202.7	1.54%	2.10%
1991	1.99%	2182.3	1.63%	108435.5	-1.00%	2.01%	165.7	2.24%	8078.6	-0.92%	2.05%
1990	1.96%	2147.3		109530.4		1.96%	162.1		8153.9		1.99%

DATA NOTES

In the chart on the previous page, NF = "Nonfarm" and AFS = "Accommodation and food services." Total jobs numbers are listed in thousands. Nonfarm employment numbers and accommodation and food services numbers come from the Bureau of Labor Statistics' Current Employment Statistics (CES). Above charts reflect the 12-month average employment for each year. State-level CES data is only available back to 1990.

DATA SOURCES

Bureau of Labor Statistics, Current Employment Statistics (CES). Series ID numbers for the pertinent CES datasets are provided below:

U.S. nonfarm employment: CES0000000001
Washington nonfarm employment: SMS53000000000000001
U.S. accommodation and food services employment: CES7072000001
Washington accommodation and food services employment: SMS53000007072000001

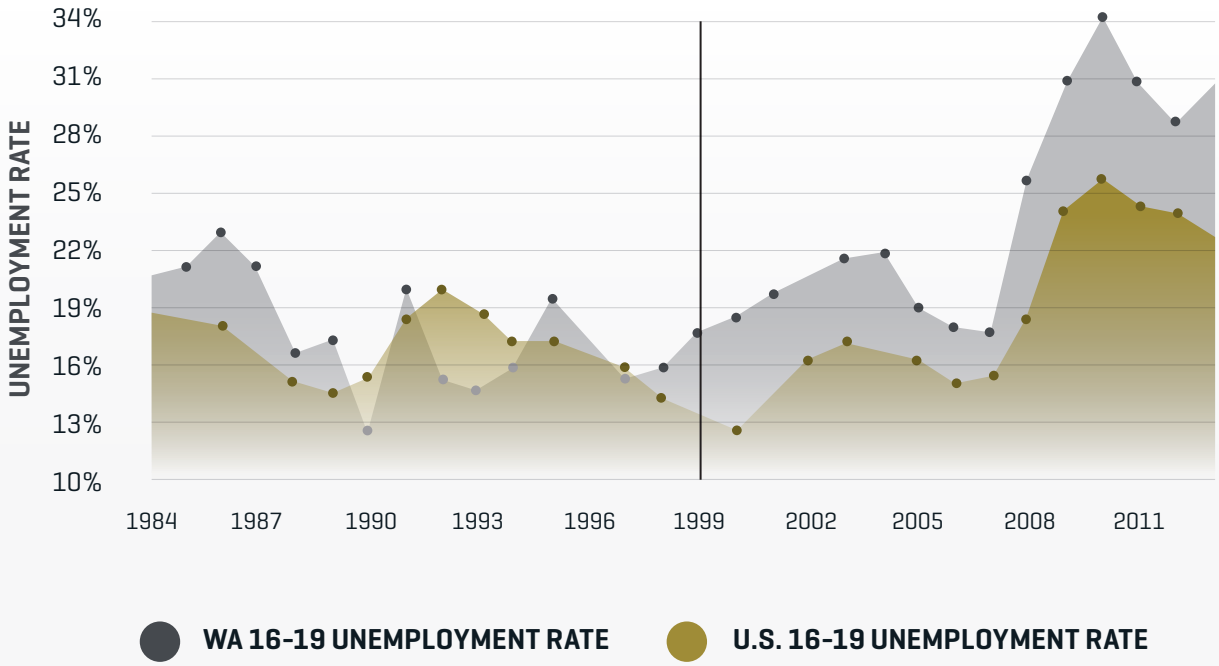
U.S. Census Bureau

UNEMPLOYMENT

> *"The opponents of Initiative 688 are like Chicken Little crying the sky is falling. Whenever a minimum wage increase is contemplated, they always warn of impending job losses. But it never happens, and they never go back and look at the data that shows that there are not statistically significant impacts on jobs from minimum wage increases."*
>
> – *John Burbank, "Employment and the Minimum Wage," Economic Opportunity Institute, October 1998.*[10]

While the sky has not fallen in on Washington's robust economy since passage of I-688, job prospects for the least-skilled and least-educated workers have certainly declined. The chart below compares Washington's teen unemployment rate to the national rate before and after passage of I-688.

WA AND U.S. TEEN UNEMPLOYMENT



UNEMPLOYMENT

KEY POINTS: WA AND U.S. TEEN UNEMPLOYMENT

1. The decline in the number of entry-level jobs in industries like accommodation and food services that followed passage of I-688 corresponded with elevated unemployment for low-skilled workers like teens.

2. For the 15 years preceding the implementation of I-688 (1984-1998), teen unemployment in Washington generally followed national trends, with Washington's teen unemployment rate higher than the national rate in 10 out of 15 years. The worst year in the period for Washington teens occurred in 1986, when the state's teen unemployment rate was 4.7 percentage points higher than the national rate.

3. Washington's teen unemployment rate has surpassed the national rate every year since the passage of I-688. At the peak of the recession in 2010, Washington's teenage unemployment rate was 8.2 points higher than the unemployment rate for teens nationwide.

DATA NOTES

Unemployment rates included in the charts are 12-month averages.

DATA SOURCES

U.S. teen unemployment rate:
Bureau of Labor Statistics, Current Employment Statistics, Series ID LNS14000012.

Washington teen unemployment rate:
Obtained by request from the Bureau of Labor Statistics. Author can provide a copy of the data file upon request.

Year	WA 16-19 Unemployment Rate	US 16-19 Unemployment Rate
2013	30.6%	22.9%
2012	28.6%	24.1%
2011	30.4%	24.4%
2010	34.1%	25.9%
2009	30.5%	24.3%
2008	25.7%	18.7%
2007	17.6%	15.7%
2006	18.0%	15.3%
2005	19.0%	16.5%
2004	21.9%	17.0%
2003	21.7%	17.4%
2002	20.7%	16.5%
2001	19.8%	14.7%
2000	18.6%	13.1%
1999	17.9%	13.9%
1998	16.0%	14.6%
1997	15.5%	16.0%
1996	17.2%	16.7%
1995	19.5%	17.3%
1994	15.9%	17.6%
1993	14.8%	19.1%
1992	15.3%	20.1%
1991	20.0%	18.7%
1990	12.8%	15.6%
1989	17.4%	15.0%
1988	16.6%	15.3%
1987	21.2%	16.9%
1986	23.1%	18.4%
1985	21.1%	18.6%
1984	20.7%	18.9%

THE MISSING STIMULUS

> *"The greater the proportion of minimum wage workers in a local economy, the bigger and more positive the economic impact of increasing the minimum wage becomes. Minimum wage workers spend a higher proportion of their income on immediate consumption than higher-income workers do. In fact, increasing the minimum wage may have a disproportionately positive impact in rural low-income areas."*
>
> – *John Burbank, "Increasing the Minimum Wage: Rebuttal to NFIB/WRA Anti-minimum Wage Arguments," Economic Opportunity Institute, February 2001.* [11]

Years after I-688's passage, both national and state advocates of higher minimum wage laws have failed to provide any evidence that minimum wage hikes stimulate the economy or benefit local businesses.

Minimum wage proponents will sometimes use demographic information to estimate the number of employees that would be affected by a proposed minimum wage.[12] Proponents then multiply the number of affected workers by the additional amount they would earn if all received a raise to the new minimum and everything else remained constant.

This unrealistic analysis allows advocates to trumpet alleged increases in economic activity of millions or billions of dollars, but fails to account for the decreased employment and increased prices that typically accompany minimum wage increases. After all, the money to pay the employee raises has to come from somewhere; it is not "new" money.

While certain low-skill employees will certainly be able to spend more money following a minimum wage hike, the evidence indicates that their higher spending power is more than offset by other factors.

Advocates sometimes refer to a 2011 study by researchers at the Chicago Federal Reserve that found, unsurprisingly, that households benefitting from a minimum wage increase spend more than they did previously. The authors specifically warn, however, that their study is "silent about the aggregate effects of a minimum wage hike."[13]

In prior papers, the same researchers documented some of the negative consequences of a higher minimum wage, including decreased employment[14] and higher prices.[15]

When the researchers took only the negative employment effects of a higher minimum wage into account, they concluded in a 2013 study, "A minimum wage hike provides stimulus for a year or so, but serves as a drag on the economy beyond that."[16]

Some minimum wage advocates, like Rep. Laurie Jinkins (D-Tacoma), have cited[17] a 2006 paper[18] by Marshall Fisher of the Wharton School at the University of Pennsylvania that concluded strategic changes in payroll can boost monthly retail sales as proof that the minimum wage is an economic stimulus. However, the paper had to do with increasing efficiency on the store's side and made no mention of the minimum wage or its effects on the wider economy. In response to an email inquiry, Professor Fisher confirmed that "those citing the paper (to support the minimum wage) are misinterpreting it."

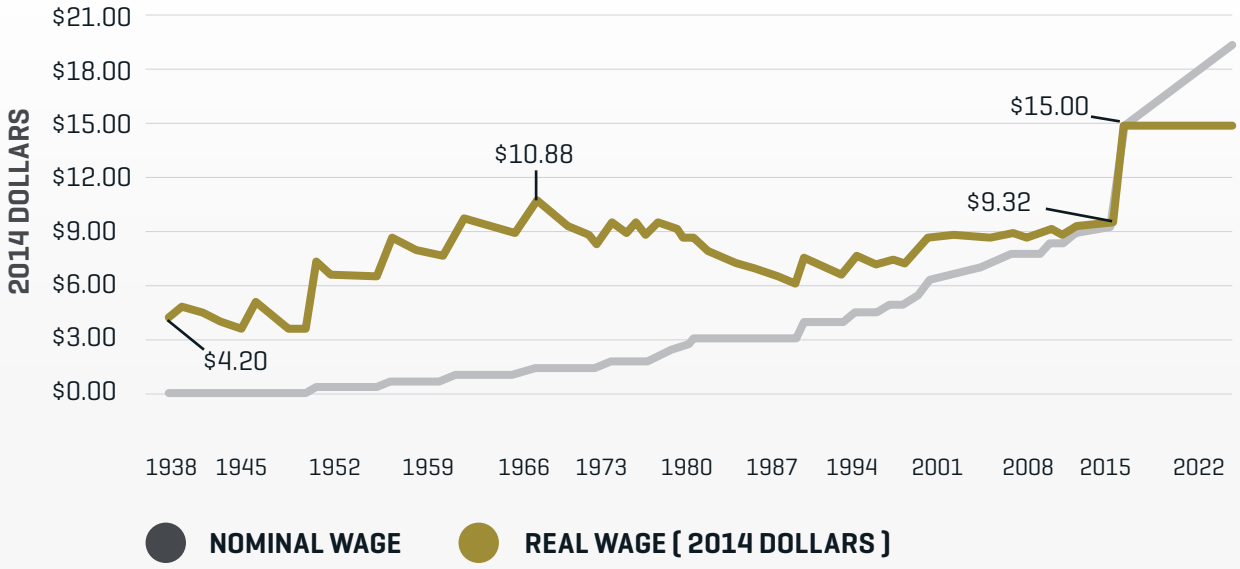
On the other hand, a 2010 study by Joseph Sabia, now at San Diego State University, concluded, "Far from stimulating an economy, an increase in the minimum wage has no discernible impact on overall GDP and could actually hinder growth in certain low-wage sectors."[19]

The one-sidedness of the debate on the issue has lead minimum-wage expert David Neumark of the University of California-Irvine to conclude, "There is simply no evidence" that boosting the minimum wage stimulates the economy through consumer spending.[20]

A $15 MINIMUM WAGE?

While I-688's minimum wage increase was significant by historic standards, a $15 minimum wage in Washington state would far exceed the magnitude of any prior increase

VALUE OF WASHINGTON MINIMUM WAGE



KEY POINTS

1. While some argue that the minimum wage has not kept up with inflation, this is not generally the case in Washington. Though below its 1968 peak, the purchasing power of Washington's current minimum wage of $9.47 is well above its historic average value of $7.85 (2014 dollars).

2. A $15 minimum wage would represent a $5.53 (58.4 percent) increase above its current level.

3. An increase of this magnitude has never been attempted in any measurable way. Though the city of SeaTac adopted a $15 minimum wage initiative in November of 2013, ongoing litigation and the narrow drafting of the initiative have prevented all but a handful of businesses from being subject to the requirement.[21] Seattle's $15 minimum wage ordinance will not be fully phased in until 2025, and the first increase in Seattle's minimum wage, to $11 an hour, only recently occurred.[22]

DATA NOTES

The above chart projects a $15 minimum wage taking effect on Jan. 1, 2016. The chart also assumes the minimum wage will be indexed to inflation and increase an average of 3 percent per year.

DATA SOURCES

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CONCLUSION

While the information presented in this report is purely correlative, it is startling how directly the observed changes in Washington's economy after passage of I-688 align with the projections of minimum wage skeptics. Just as significant is the lack of any indication that enacting the nation's highest minimum wage produced the gains promised by labor activists in any measurable or lasting way.

Despite the heated rhetoric about ending "poverty-wage jobs," the state poverty rate failed to decline beyond its historic levels. At the same time Washington's economy was performing strongly overall, job growth in low-wage industries slowed following the increased minimum wage and has yet to recover. Low-skilled workers like teens have consistently had a more difficult time finding work and getting a foothold in the job market. Economy-infusing spending increases from low-wage workers have not been measured or proven, while research continues to indicate that minimum wage increases do not lead to net economic growth.

If nothing else, the fact that Washington yet again finds itself embroiled in a debate over an issue that was supposed to be "depoliticized" 16 years ago is a testament to the long-term ineffectiveness of I-688. As labor activists renew their drive to boost government wage floor regulations still further, I-688's track record should give voters and policymakers reason to think twice.

ENDNOTES

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6 Thomas MaCurdy, "The Minimum-Wage Stealth Tax on the Poor," Wall Street Journal, February 22, 2015. *www.wsj.com/articles/thomas-macurdy-the-minimum-wage-stealth-tax-on-the-poor-1424644567*

7 John Burbank, "Increasing the Minimum Wage: Initiative 688," Economic Opportunity Institute, September, 1998. *www.eoionline.org/wp/wp-content/uploads/minimum-wage/IncreasingMinimumWageI688-Sep98.pdf*

8 Joni Balter, "Where a Higher Minimum Wage Hasn't Killed Jobs," Bloomberg, February 24, 2014. *www.bloombergview.com/articles/2014-02-21/where-a-higher-minimum-wage-hasn-t-killed-jobs*

9 The U.S. Census Bureau's North American Industry Classification System defines Sector 72, "Accommodation and Food Services," as "establishments providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption. The sector includes both accommodation and food services establishments because the two activities are often combined at the same establishment. Excluded from this sector are civic and social organizations; amusement and recreation parks; theaters; and other recreation or entertainment facilities providing food and beverage services." *www.census.gov/cgi-bin/sssd/naics/naicsrch?code=72&search=2012%20NAICS%20Search*

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11 John Burbank, "Increasing the Minimum Wage: Rebuttal to NFIB/WRA Anti-minimum Wage Arguments," Economic Opportunity Institute, February, 2001. *www.eoionline.org/wp/wp-content/uploads/minimum-wage/IncreaseingMinWageRebutNFIB-WRB-Feb01.pdf*

12 Maxford Nelsen, "Does increasing the minimum wage stimulate the economy?," Seattle Times, May 1, 2014. *www.seattletimes.com/opinion/guest-does-increasing-the-minimum-wage-stimulate-the-economy/*

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15 Daniel Aaronson, Eric French, and James MacDonald, "The Minimum Wage, Restaurant Prices, and Labor Market Structure," Chicago Federal Reserve, August 3, 2007. *www.chicagofed.org/digital_assets/publications/working_papers/2004/wp2004_21.pdf*

16 Daniel Aaronson and Eric French, "How does a federal minimum wage hike affect aggregate household spending?," Chicago Fed Letter, No. 313, August 2013. *www.chicagofed.org/digital_assets/publications/chicago_fed_letter/2013/cflaugust2013_313.pdf*

17 On March 3, 2015, Rep. Jinkins tweeted, "When we #RaiseTheWage, middle class families spend that extra money on goods and services. Raising the minimum wage stimulates our economy." When challenged by the author to provide support for her position, Rep. Jinkins tweeted, "Every $1 raise in total payrol gains $4 to $28 boost in store monthly sales. study by Wharton professor Marshall Fisher." Full conversation is available here: *twitter.com/MaxfordNelsen/status/573186640320995328*

18 Marshall L. Fisher, Jayanth Krishnan and Serguei Netessine, "Retail Store Execution: An Empirical Study," October 24, 2006. *qbox.wharton.upenn.edu/documents/opim/research/Retail%20Paper-Version16.pdf*

19 Joseph Sabia, "Failed Stimulus: Minimum Wage Increases and Their Failure to Boost Gross Domestic Product," Employment Policies Institute, December 2010. *www.epionline.org/studies/r131/*

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21 Ashley Gross, "Wash. High Court To Hear Appeal In SeaTac Minimum Wage Lawsuit," KPLU News, June 23, 2014. *www.kplu.org/post/wash-high-court-hear-appeal-seatac-minimum-wage-lawsuit*

22 City of Seattle, Office of the Mayor, "$15 Minimum Wage," *murray.seattle.gov/minimumwage/*

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Attachment 3

NORTHWEST Grocery Association SUPPLY • WHOLESALE • RETAIL

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E-mail info@nwgrocery.org or Visit Web site www.nwgrocery.org

For Immediate Release: **Contact Joe Gilliam, 503.685.6293**

TACOMA VOTERS STRONGLY OPPOSE $15 PER HOUR MINIMUM WAGE; SUPPORT ALTERNATIVE PROPOSAL

An effort to impose an immediate $15 per hour minimum wage in Tacoma is strongly opposed by Tacoma voters in a poll just released by the Northwest Grocery Association. The Poll, completed June 11th of 250 Tacoma voters by Moore Information, showed initial opposition to the proposal 69% to 27% with only 4% undecided.

When voters were informed of the other components of the plan such as granting police powers to the city for investigating violations, the possibility of felony penalties, a ten year record keeping requirement for employers, and the creation of a new permanent city commission to oversee future minimum wage hikes, the opposition grew 8 points to 77% with only 21% in favor of the proposal.

The silver lining for entry level workers and Tacoma employers is the voters did support a more modest increase in the minimum wage if it were phased in over three years with credit given to employers that provide employer paid health insurance benefits and paid time off.

The alternative proposal would increase the minimum wage to $12 per hour over three years, would allow all taxable income to be used in calculating the minimum wage, and would give up to $1 per hour credit for both the actual hourly cost of employer paid health insurance and paid time off. This proposal found 68% support amongst voters with 28% opposed and only 4% undecided.

"We found in the poll there is strong support to change the status quo and increase the minimum wage in Tacoma. In addition, we found that the current $15 NOW movement is too extreme for Tacoma's economy and voters recognize the value of giving employers time to phase in the increase and recognize the value of employer paid benefits such as health insurance that often times mean as much to an employee as their cash wages", said Joe Gilliam, President of the Northwest Grocery Association.

Tacoma Mayor Marilyn Strickland has established a citizens committee to consider an alternative to the $15 NOW ballot measure that may result in two competing ballot measures. Gilliam said the poll contemplated this possibility and asked voters how they would vote on the two proposals side by side. The poll showed that 52% of the voters would support only the $12 per hour proposal, 10% would vote yes for both, 24% would vote no on both proposals, and 9 % would support only the $15 per hour proposal. The end result would be the $12 per hour proposal winning passage 62% to 33% with 5% undecided and the $15 per hour proposal failing 19% to 76% with 5% undecided.

The Northwest Grocery Association serves as the spokesperson for the Pacific Northwest's grocery industry by promoting the common interests and issues of its membership by providing current communications, leadership and member services. www.nwgrocery.org

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MOORE INFORMATION
OPINION RESEARCH • STRATEGIC ANALYSIS

NWGA Tacoma Minimum Wage Poll Summary
CITY OF TACOMA VOTERS (N=250)
JUNE 10-11, 2015

A) Before Hearing Details of Plans:

Q. Would you vote yes to support or no to oppose a ballot measure that increased the minimum wage in Tacoma to $15 dollars per hour, effective immediately

Total YES	27%
Total NO	69%
Undecided	4%

Q. Would you vote yes to support or no to oppose a ballot measure that increased the minimum wage in Tacoma to $12 dollars per hour, phased in over three years

Total YES	68%
Total NO	26%
Undecided	6%

B) After Hearing Details of Plans:

$15 NOW Detail Summary: Granting New Police Powers to City; Felony Penalties; 10 Year Record Keeping Requirement; New City Minimum Wage Commission; Does Not Include Commissions and Tips; Applies to Workers Visiting/Delivering in Tacoma.

Q. After everything you just heard, would you vote yes to support or no to oppose a ballot measure that increased the minimum wage in Tacoma to $15 dollars per hour, effective immediately?

Total YES	21%	(-6 change)
Total NO	77%	(+8 change)
Undecided	2%	(-2 change)

$12 Alternative Detail Summary: Three Year Phase-in; Including all taxable income including commissions and tips in wage calculation; Up to $1 per hour credit for actual hourly cost of employer paid health insurance; Up to $1 per hour credit for actual hourly cost of paid time off;

Q. After everything you just heard, would you vote yes to support or no to oppose a ballot measure that increased the minimum wage in Tacoma to $12 dollars per hour, phased in over three years?

Total YES	68%	(0 change)
Total NO	28%	(+2 change)
Undecided	4%	(-2 change)

C) Side by Side on the Same Ballot

Q. Another option is to place both proposals on the ballot and have voters decide between the two. If both measures appeared on the same ballot, how would you vote?

YES for both the $15 and the $12 ballot measures	10%
YES for the $15 and NO for the $12 ballot measures	9%
YES for the $12 and NO for the $15 ballot measures	52%
NO for both the $15 and the $12 Proposal	24%
Undecided	5%

Total YES for $15;	10% + 9% =	19%
Total NO for $15;	52% +24% =	76%
Undecided;		5%

Total YES for $12;	10% + 52% =	62%
Total NO for $12;	9% +24% =	33%
Undecided;		5%

Members of the Tacoma Minimum Wage Task Force,

I work on labor policy for the Freedom Foundation, a right-of-center policy think tank based in Olympia. I've been closely involved with the minimum wage debates in Washington for the last two years.

Just so there isn't any doubt, I take the position that, while often well-intentioned, raising the minimum wage does more harm than good.

In my experience, there are many poor arguments out there on this issue. Statistics and research are often misinterpreted.

To help provide you with some resources to consider, this is the first of several short updates discussing various aspects of this debate.

Please do not take anything I say at face value, but weigh it against the other arguments out there. I welcome your feedback.

Inflation:

Supporters of raising the minimum wage often argue that it hasn't kept up with inflation, or the cost of living. They frequently point to the purchasing power of the minimum wage in 1968, which was worth $10.88 in 2015 dollars. Washington State's current minimum wage is $9.47.

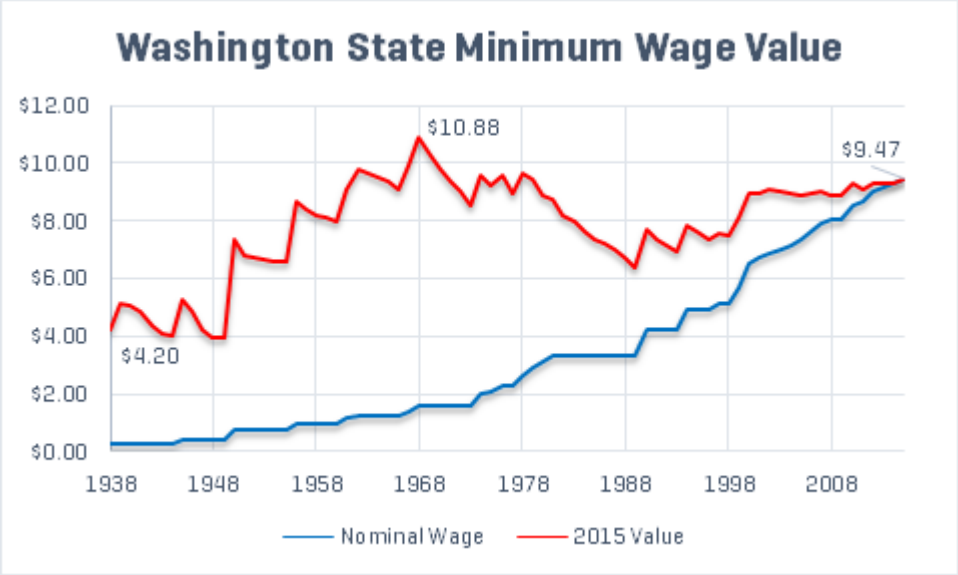
1. But the current state minimum wage is not out-of-line with historic trends. The selection of 1968 as the benchmark year is deliberate. The purchasing value of the minimum wage hit its all-time high in 1968.

   When the minimum wage was first created in 1938, it was worth $4.20 in today's dollars, less than half of the current state minimum. From 1938 to 2015, the minimum wage prevailing in Washington (sometimes the federal minimum was higher, sometimes the state minimum was) averaged a purchasing power of $7.87 in today's dollars.

   In other words, Washington's current minimum wage of $9.47 is noticeably higher than the historic average value of the minimum wage of $7.87.

2. Additionally, the state minimum wage law passed in 1998 provided for automatic yearly increases based on inflation, meaning that the current state minimum wage will continue to keep pace with cost of living increases.

3. The creation of the Earned Income Tax Credit (EITC) in 1975 helped compensate for the decline in the purchasing power of the minimum wage that occurred during the 1980s and '90s. The Congressional Research Service describes the EITC as, "a refundable tax credit available to eligible workers with relatively low earnings. Under current law there are two categories of EITC recipients: childless adults and families with children. Because the credit is refundable, an EITC recipient need not owe taxes to receive the benefits."



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- Gene Falk, "The Earned Income Tax Credit (EITC): An Overview," Congressional Research Service, October 2014.

Members of the Tacoma Minimum Wage Task Force,

Today I'd like to briefly address whether the minimum wage has kept up with the productivity of the labor force.

Some advocates of raising the minimum wage contend that it has failed to keep up with increases in workers' productivity. Supporters argue that compensation largely tracked with productivity until 1968, when wage growth began to lag behind productivity increases. Consequently, they argue that workers are not being fairly compensated for their labor.

The productivity-minimum wage contrast was first promulgated by the left-leaning Center for Economic and Policy Research (CEPR) in 2012, which compared increases in the productivity of the average worker to the increases in the purchasing power of the minimum wage. CEPR contended that, "If the minimum wage had continued to move with average productivity after 1968, it would have reached $21.72 per hour in 2012."

Cast in this light, calls to boost the minimum wage to $10, $12 or even $15 an hour appear much more reasonable.

However, there are serious problems with this comparison.

1. There is serious debate about whether average wage growth has actually lagged behind average productivity increases. A detailed analysis of the issue by the right-leaning Heritage Foundation determined that, properly measured, the value of workers' wages and benefits continue to growth with productivity. The Heritage report notes:

   "Harvard Professor Martin Feldstein, the former President of the National Bureau of Economic Research, concluded that the apparent divergence results from using the wrong data to measure pay and productivity. Using the correct data, he finds that pay and productivity have both grown together. Dean Baker, director of the left-leaning Center for Economic and Policy Research, and staff at the Federal Reserve Bank of St. Louis also come to that conclusion. Georgetown Professor Stephen Rose likewise finds that the apparent gap between pay and productivity collapses under scrutiny. He concludes that economic growth resulting from productivity growth continues to benefit working Americans."

2. Regardless, however, the productivity and compensation of average workers tells us nothing about the productivity of the average *minimum wage* worker. In order to begin to be relevant, the data would need to show that the productivity of minimum wage workers was increasing faster than their compensation. I have yet to see any evidence that this is the case, and some to the contrary.

   For example, while the Dept. of Labor's Bureau of Labor Statistics (BLS) does not track minimum wage workers' productivity, it recently released information about the productivity of restaurant employees. Because many restaurant employees' hourly wages

(not counting tips) are fairly low, they are frequently featured prominently in minimum wage debates.

According to the BLS, labor productivity for employees of "food services and drinking places" increased by an average of 0.6 percent per year from 1987 to 2013. Over the same period, pay for these workers increased by an average of 5.1 percent per year.

Put simply, from 1987 to 2013, restaurant worker compensation increased more than eight times as fast as restaurant worker productivity.

For these reasons, I find the argument that the minimum wage has failed to keep up with productivity to be unproven and unconvincing.

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- John Schmmitt, "The Minimum Wage is Too Damn Low," Center for Economic and Policy Research, March 2012.
- James Sherk, "Productivity and Compensation: Growing Together," The Heritage Foundation, July 2013.
- U.S. Dept. of Labor, Bureau of Labor Statistics, "Productivity and Costs by Industry: Mining, Wholesale Trade, Retail Trade, and Food Services and Drinking Places Industries, 2013," August 2014.

Members of the Tacoma Minimum Wage Task Force,

An increasingly common argument used by supporters of raising the minimum wage is that boosting entry-level workers' income will prompt them to spend more, thus stimulating the economy and local businesses. President Obama, Governor Inslee, local millionaire Nick Hanauer and labor activists have all made variations of this argument.

Unfortunately, the argument is logically unsound and empirically unsupported.

1. Some minimum wage supporters simply take the number of workers earning less than a proposed minimum wage, multiply it by the wage increase per worker, and conclude that increasing the wage floor creates millions of dollars in new consumer spending in the economy. Left-leaning Puget Sound Sage has used this method to estimate that a $15 minimum wage in Seattle would generate millions in new economic activity.

   However, such simplistic estimates are of little value since they fail to account for the other effects of a minimum-wage increase — reduced business spending, higher prices and decreased employment.

   As the Congressional Budget Office noted in a report last year,

   "The increased earnings for some workers would be accompanied by reductions in real (inflation-adjusted) income for the people who became jobless because of the minimum-wage increase, for business owners, and for consumers facing higher prices."

   The fundamental flaw in the argument is that it assumes the additional income received by entry-level workers is new money in the economy when, in reality, it has simply been redistributed from businesses that must raise prices or cut back on human labor (layoffs, reduced hiring, fewer hours for employees, more automation) in response.

2. Furthermore, the evidence indicates that, overall, the economy is no better off in the end.
   a. Minimum wage expert Professor David Neumark of the University of California-Irvine has noted that "there is simply no evidence" to support the claim that raising the minimum wage stimulates the economy.
   b. Professor Sylvia Allegretto of the University of California-Berkeley, whose research has often been used by minimum wage supporters, has admitted that her research does not show that the minimum wage stimulates the economy.
   c. In a 2010 paper published by the right-leaning Employment Policies Institute, Dr. Joseph Sabia of the U.S. Military Academy at West Point concluded that, "Far from stimulating an economy, an increase in the minimum wage has no discernible impact on overall GDP [Gross Domestic Product] and could actually hinder growth in certain low-wage sectors."
3. Minimum wage supporters frequently misinterpret studies to argue in favor of a positive economic stimulus from the minimum wage.
   a. A 2011 study by Daniel Aaronson, Sumit Agarwal and Eric French of the Chicago Federal Reserve found, unsurprisingly, that households benefiting from a

minimum wage increase spent more. However, they specifically warned that their study is "silent about the aggregate effects of a minimum wage hike."

The same research team has documented some of the negative consequences of a higher minimum wage. In a 2006 paper, Aaronson and French found that a 10 percent increase in the minimum wage decreased employment in the restaurant industry by 1 to 3 percent.

Furthermore, Aaronson and French concluded in a 2007 study that "restaurant prices unambiguously rise" following a minimum wage increase.

Taking only the negative employment effects into account led the researchers to conclude in a 2013 paper, "A minimum wage hike provides stimulus for a year or so, but serves as a drag on the economy beyond that."

b. Minimum wage supporters in the state legislature have pointed to a 2006 paper by Marshall Fisher, Jayanth Krishna and Serguei Netessin of the University of Pennsylvania which found that, "increasing associate payroll by $1 at a given store is associated with a sales lift of anywhere from $4 to $28."

However, the paper had nothing to do with the minimum wage, but rather about how retail stores could structure their payroll and staffing to optimize sales.

Responding to my email inquiry about the nature of his paper, Professor Fisher confirmed that "those citing the paper [in support of the minimum wage] are mis-interpreting it."

The upshot: Both reason and existing economic evidence confirm that raising the minimum wage simply redistributes existing wealth in a manner that appears to have slightly negative effects on the overall economy. No new economic activity is generated and no new wealth is created. No net economic stimulus should be expected from raising the minimum wage.

Sources:

- Congressional Budget Office, "The Effects of a Minimum-Wage Increase on Employment and Family Income," February 2014.
- David Neumark, "Should Missouri Raise its Minimum Wage?" Show-Me Institute, September 2012.
- Sylvia Allegretto, comments made during podcast interview, "Neumark, Allegretto Debate Minimum Wage Impact," Bloomberg, February 2013.
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Members of the Tacoma Minimum Wage Task Force,

The past three briefings have discussed important issues, but were peripheral to perhaps the biggest question surrounding the minimum wage: does raising the minimum wage harm employment?

There is too much information on this question to cover every study that has been done on the topic. Instead, I will endeavor to provide an overview of the development of the debate in broader terms.

Opponents of raising the minimum wage contend that increasing the cost of human labor will cause employers to purchase less of it, reasoning that the economic laws of supply and demand apply to labor just as they do to any other good or service. Employers can use less human labor by: laying off low-skilled workers; reducing the hours of entry-level employees; cutting employee benefits; replacing less-skilled workers with employees that have more education or experience; replacing human labor with automation; or limiting their future hiring and expansion.

Supporters of raising the minimum wage contend that the evidence indicates that a higher minimum wage does not noticeably reduce employment opportunities. In many cases, they explain their research by contending that raising the minimum wage will produce an economic stimulus as low-wage workers spend more money, and that the resulting increase in jobs will outweigh any jobs lost because of the higher wage. Others argue that a higher minimum wage will increase workers' productivity and be good for the business in the long run, or that businesses have enough profit to pay for the raises without making any other changes.

Yesterday's briefing dealt with the unfounded stimulus argument. The argument about higher productivity implies that "greedy" business owners don't know what's best for them and need to be forced to adopt more profitable business practices. While this may be true for a few businesses, it seems unlikely to be the case generally. As for profits, a few businesses that employ minimum workers (by no means all) likely make enough profit to mathematically afford an increase in the minimum wage without taking other mitigating steps. But that doesn't mean that they *will* respond by simply throwing up their hands and eating the increase, especially if employees are unable to produce enough value to offset the increased cost of their employment.

All of this leaves many minimum wage supporters without a clear theoretical explanation for why their studies indicate the minimum wage doesn't kill jobs.

Below is a brief overview of the history and research related to the effect of the minimum wage on jobs and employment:

1. Up until 1994, the general economic consensus was that increasing the minimum wage would decrease employment of low-wage employees. In 1981, the economists on the Congressional Minimum Wage Study Commission concluded that "studies typically find that a 10 percent increase in the minimum wage reduces teenage employment by one to three percent."

2. In 1994, Princeton economists David Card and Alan Krueger published a study which looked at fast food employment following a minimum wage increase in New Jersey. The original Card and Krueger study was based on phone interviews with employers, and concluded that New Jersey's increased minimum wage resulted in a 17.6 percent increase in employment compared to neighboring Pennsylvania, which did not raise its minimum wage. However, two years later, economists David Neumark (University of California-Irvine) and William Wascher (Federal Reserve) published a paper for the National Bureau of Economic Research debunking the Card and Kruger paper. When the Card-Krueger study was repeated by Neumark and Wascher using actual payroll data for the same fast food restaurants, employment among the New Jersey restaurants actually declined by 4.6 percent relative to Pennsylvania. Card and Krueger repeated their study with different data in 2000 and concluded that the higher minimum wage did not boost employment in New Jersey after all. Nevertheless, the original Card-Krueger paper is still often cited as proof that the minimum wage does not harm employment.
3. In 2007, Neumark and Wascher published a review of modern minimum wage studies. Two-thirds of the studies concluded that a higher minimum wage had negative employment effects, and 85 percent of the studies Neumark and Wascher considered to be the most credible pointed to negative employment effects.
4. Since 2007, about a half dozen economists (including Michael Reich of the University of California-Berkeley, Ken Jacobs of UC Berkeley, Sylvia Allegretto of UC Berkley, Arin Dube of the University of Massachusetts-Amherst, and William Lester of the University of North Carolina) have published a series of studies using a new methodology and purport to find that moderate minimum wage increases have no discernable effect on employment. This new methodology relied on comparing employment in jurisdictions that had increased the minimum wage to employment in neighboring jurisdictions that did not.
5. In 2012, David Neumark, Ian Salas and William Wascher published a paper evaluating the methodology of the new minimum wage research and concluding that, "…neither the conclusions of these studies nor the methods they use are supported by the data." Neumark, Salas and Wascher contend that comparing neighboring jurisdictions often results in an apples-to-oranges comparison. For instance, it wouldn't make sense to compare King County (population of 2 million+, 3.3% unemployment) to neighboring Kittitas County (population of 42,000, 5.9% unemployment). The economies are too dissimilar, and the effects of a higher minimum wage in the city is likely to be obscured by its generally strong economy as the region's urban center. It is more appropriate, they argue, to compare jurisdictions based on similarity rather than simply proximity.
6. In 2014, the Congressional Budget Office reviewed the literature on the minimum wage, split the difference between the studies, and concluded that a federal minimum wage of $10.10 would eliminate about 500,000 and as many as 1 million jobs nationwide.
7. It's also important to bear in mind that there are many ways in which job opportunities for low-skilled individuals could decrease following a minimum wage hike that would not show up as decreased overall employment.
    a. For instance, in a 2013 study, Jonathan Meer of Texas A&M University and Jeremy West of the Massachusetts Institute of Technology argued that, "the minimum wage reduces net job growth, primarily through its effect on job creation by expanding establishments," or, in other words, jobs never created.

b. Reductions in employee hours or benefits decrease workers' pay without registering as jobs lost. For example, a 2012 paper by Dr. Aaron Yelowitz of the University of Kentucky examined San Francisco's $10.24 minimum wage (as of 2012) and concluded that every dollar increase in a city's compensation floor causes a 26-hour reduction in the number of hours worked per year by younger employees. His paper also argued that every dollar increase in the minimum wage boosted unemployment for young workers by 4.5 percentage points and decreases their participation in the labor force by two percentage points.

c. If employers hire more skilled/educated workers over less-skilled/educated workers, the total number of jobs may remain the same while still making it harder for the least-skilled individuals to find work. As David Neumark, Ian Salas and William Wascher explained in a 2012 paper, "The minimum wage can lead employers to substitute higher-skilled workers for lower-skilled workers without reducing net employment very much."

Overall, I think the evidence is pretty clear. As common sense would indicate, increasing the cost of labor will make it that much harder for the least-skilled, least-educated workers to find employment. After all, an employer is not likely to hire someone if they can't produce enough value for the business to offset the cost of paying them. Effectively, the minimum wage criminalizes low-skill, entry-level jobs. While there is little disagreement that small increases in the minimum wage have moderate consequences, the larger the increase, the larger the consequences.

Sources:

- Charles Brown, Curtis Gilroy, Andrew Kohen, "The Effect of the Minimum Wage on Employment and Unemployment," National Bureau of Economic Research, January 1982.
- David Card and Alan Krueger, "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania," *The American Economic Review*, September 1994.
- David Neumark and William Wascher, "The Effect of New Jersey's Minimum Wage Increase on Fast Food Employment: A Re-Evaluation Using Payroll Records," National Bureau of Economic Research, August 1995.
- David Card and Alan Krueger, "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania: Reply," *The American Economic Review*, December 2000.
- David Neumark and William Wascher, "Minimum Wages and Employment," *Foundations and Trends in Economics*, 2007.
- David Neumark, Ian Salas and William Wascher, "Revisiting the Minimum Wage-Employment Debate: Throwing Out the Baby with the Bathwater?" Employment Policies Institute, September 2012.
- Congressional Budget Office, "The Effects of a Minimum-Wage Increase on Employment and Family Income," February 2014.
- Jonathan Meer and Jeremy West, "Effects of the Minimum Wage on Employment Dynamics," National Bureau of Economic Research, December 2013.

- Jonathan Meet and Jeremy West, "The Minimum Wage and Employment Dynamics," Private Enterprise Research Center, Texas A&M University, Policy Brief 1301.
- Aaron Yelowitz, "The Labor Market Effects of Citywide Compensation Floors: Evidence from San Francisco and Other 'Superstar' Cities," Employment Policies Institute, October 2012.

Members of the Tacoma Minimum Wage Task Force,

Traditionally, the intended purpose of raising the minimum wage has been to help low-wage workers earn more and alleviate poverty.

While there is some debate as the effect of a higher minimum wage on employment, existing research strongly indicates that the minimum wage is woefully ineffective at reducing poverty.

Though certainly *some* workers will be raised out of poverty following a minimum wage increase, others will lose their jobs or see their hours cut. Others will pay more for goods and services as prices rise. On net, the minimum wage appears to be a very poor poverty-reduction tool.

1. In a 2012 paper, Professor David Neumark of the University of California-Irvine provided a succinct summary of the relevant research, writing:

   Research for the United States on state minimum wage increases generally fails to find evidence that minimum wages help the poor, and sometimes even suggests that minimum wages increase the number of poor or low-income families… Thus, the existing research literature provides no solid evidence of beneficial distributional effects of minimum wages for poor or low-income families on the whole. As a result, there is no basis for concluding that minimum wages reduce the proportion of families living in poverty or near poverty. Minimum wages do not deliver beneficial distributional effects that might offset the negative employment effects they cause.

2. It is difficult to improve upon the overview of this issue provided in a peer-reviewed study published in 2010 by Joseph Sabia of American University and Richard Burkhauser of Cornell University, so I will simply provide excerpts for your consideration:

   While reducing poverty among the working poor is a laudable policy goal, the evidence suggests that minimum wage increases have thus far provided little more than symbolic support to this population (Card and Krueger 1995; Neumark and Wascher 2002; Gundersen and Ziliak 2004; Burkhauser and Sabia 2007; Leigh 2007; Sabia 2008). Several explanations have been offered for this finding. Card and Krueger (1995) emphasize that minimum wages fail to reduce poverty because many poor Americans do not work. Others have argued that even among the working poor, the relationship between earning a low hourly wage rate and living in poverty is weak and has become weaker over time (Stigler 1946; Burkhauser, Couch, and Glenn 1996; Burkhauser and Sabia 2007). Moreover, even among affected workers, there is strong evidence that increases in the minimum wage reduce the employment of low-skilled workers (Neumark and Wascher 2008). While an increase in the minimum wage will lift out of poverty the families of some low-skilled workers who remain employed, other low-skilled workers will lose their jobs or have their hours significantly cut, reducing their income and dropping their families into poverty (Neumark and Wascher 2002; Neumark, Schweitzer, and Wascher 2004, 2005; Sabia 2008).

… We find no evidence that minimum wage increases between 2003 and 2007 lowered state poverty rates. Moreover, we find that the newly proposed federal minimum wage increase from $7.25 to $9.50 per hour, like the last increase from $5.15 to $7.25 per hour, is not well targeted to the working poor.

…We estimate that nearly 1.3 million jobs will be lost if the federal minimum wage is increased to $9.50 per hour, including 168,000 jobs currently held by the working poor… We conclude that further increases in the minimum wage will do little to reduce poverty...

When calculating the effect of the minimum wage on poverty, many studies try to take into account the reduced employment of low-skilled workers. However, as Sabia and Burkhauser point out, even when operating under the "optimistic assumption" that a higher minimum wage does not harm employment, significant research has shown that, "…workers living in poor households received few of the benefits of past minimum wage increases because their hourly wages were already greater than the proposed state or federal minimum wages. Instead, most of the benefits went to second or third earners living in households well above the poverty line."

Stating the obvious, Sabia and Burkhauser note that, "One important critique of these simulations is that they overstate the benefits of minimum wages to the working poor because they ignore employment effects."

In other words, significant research has shown that even under a best-case scenario in which raising the minimum wage has no negative effect on employment, studies still show that it does little to help alleviate poverty.

3. Sabia and Burkhauser's research has been confirmed by a very recent study, published in April, by Thomas MaCurdy of Stanford University (a copy of the study is attached). As a side note, I **strongly recommend** reading the introduction to his paper. It provides a relatively short and accessible outline of the debate over the minimum wage before getting into the technical details of his study.

   For the purposes of argument, MaCurdy's study assumed that increasing the minimum wage would not reduce employment and that businesses would pay for the higher labor costs entirely through price increases. Again, for the purposes of argument, MaCurdy also assumes that the price increases will not decrease demand for goods and services. MaCurdy recognizes that neither of these assumptions is accurate, but makes them in order to examine the "distributional effects" of a higher minimum wage; put simply, how low-income vs. high-income households would be affected.

   Even under this incredibly favorable scenario, MaCurdy finds that the minimum wage is "an ineffectual antipoverty policy." From his conclusion:

   Whereas fewer than one in four low-income families benefit from a minimum wage increase of the sort adopted in 1996, all low-income families pay for this increase

through higher prices, rendering three in four low-income families as net losers. Meanwhile, many higher-income families are net winners…

Because price increases hit low-income households the hardest and many low-income households do not benefit from a higher minimum wage, MaCurdy describes the minimum wage as "more regressive than a typical state sales tax," concluding that:

Far more poor families suffer reductions in resources than those who gain, and as many rich families gain as poor families. These income transfer properties of the minimum wage reveal it to be an ineffectual antipoverty policy.

4. Even David Card and Alan Krueger (authors of the first study claiming the minimum wage didn't reduce employment) have described the minimum wage as "blunt instrument" for increasing the income of the poor, and note that the effect of minimum wages on the overall poverty rate is "statistically undetectable." Their primary explanation is that most individuals in poverty do not have jobs, and therefore will not benefit from a higher minimum wage.

While it is easy to "see" the happy worker who gets a pay bump following a minimum wage hike, we must not forget about the essentially invisible poor family that has to pay more for food, or the entry-level employee who has his hours cut as employers respond to higher costs.

Sources:

- David Neumark, "Should Missouri Raise its Minimum Wage?" Show-Me Institute, September 2012.
- Joseph Sabia and Richard Burkhauser, "Minimum Wages and Poverty: Will a $9.50
- Federal Minimum Wage Really Help the Working Poor?" *Southern Economic Journal*, 2010.
- Thomas MaCurdy, "How Effective Is the Minimum Wage at Supporting the Poor?" *Journal of Political Economy*, April 2015.
- David Card and Alan Krueger, "Myth and Measurement: The New Economics of the Minimum Wage," Princeton University Press, 1995.

Members of the Tacoma Minimum Wage Task Force,

Many advocates of raising the minimum wage point to Washington State as an example that a higher minimum wage is good for the economy. Since voters passed Initiative 688 in 1998, Washington has had the highest state-level minimum wage in the country. The initiative also required the minimum wage to increase annually to account for inflation.

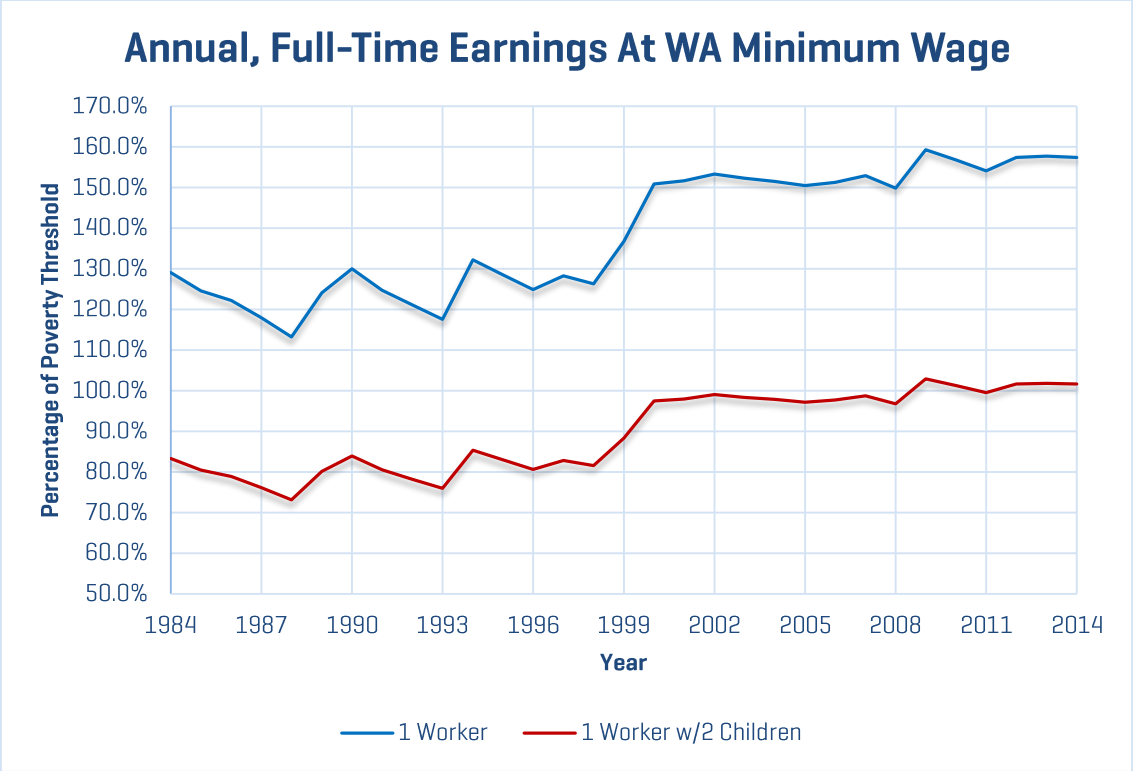
Yet, at the same time, unemployment and poverty typically lag the national average, while job growth often exceeds the national average. Surely, minimum wage supporters argue, this must mean that the high minimum wage has been good for Washington's economy.

As you may have guessed, however, there are some big problems with this line of argument. For starters, correlation does not prove causation. In other words, just because two phenomenon are true at the same time (Washington has the highest state minimum wage and low unemployment) does not mean that one caused the other. It could quite possibly be true that Washington's high minimum wage has harmed job growth for certain workers while the overall state economy remained exceptionally healthy.

So has Washington's high minimum wage helped the economy or not? Washington's minimum wage law has been on the books for over 15 years now, which allows us to examine several trends over a long time period. The information below is taken from a Freedom Foundation report (attached) on the minimum wage. Please reference the report for sources and data citations.

1. Poverty

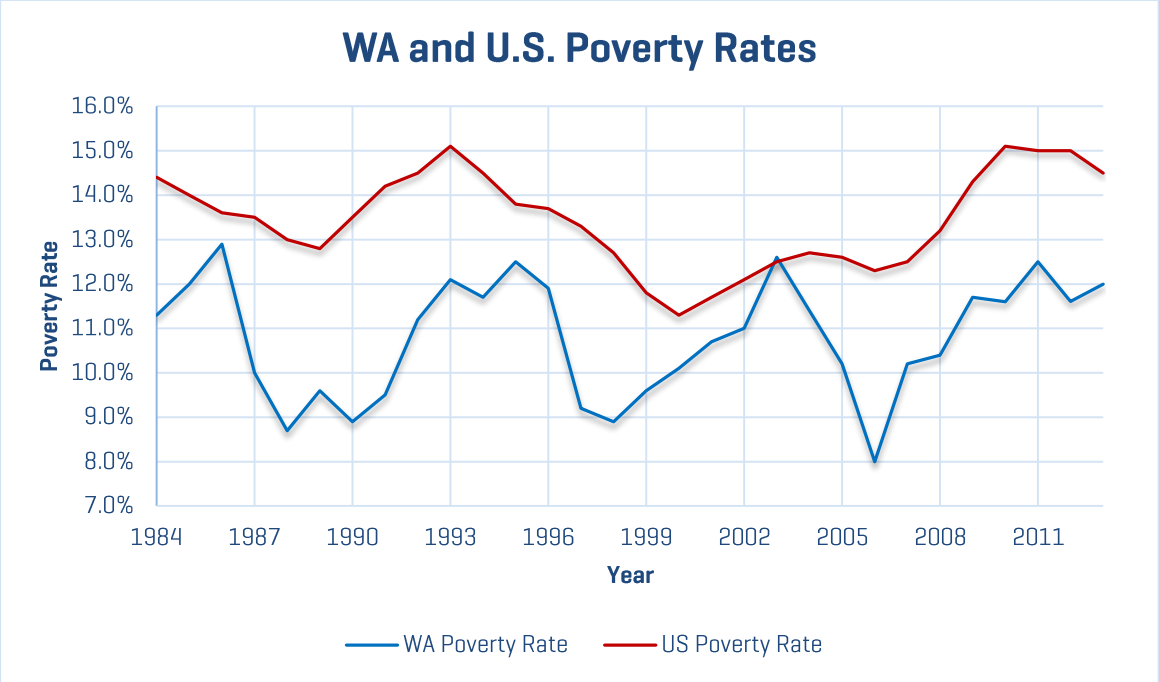
While the intent of I-688 may have been to decrease poverty, it appears to have accomplished little. The chart below tracks the changes in how a Washington minimum wage workers' full-time annual salary stacks up against the poverty threshold.



Key Points:

- When I-688 was passed in 1998, full-time minimum wage workers earned 126 percent of the poverty threshold. A worker with any dependents fell below the poverty line. Single, full-time minimum wage workers supporting two children under 18 earned 82 percent of the poverty threshold.
- Sixteen years later, in 2014, full-time minimum wage workers earned 157 percent of the poverty threshold and workers with two children earned 102 percent of the poverty line.

Despite I-688's dramatic increase in the minimum wage compared to the poverty threshold, and despite the fact that Washington had the nation's highest minimum wage, the state poverty rate (the percentage of Washington residents living below the poverty threshold) changed little relative to the national poverty rate.



Key Points:

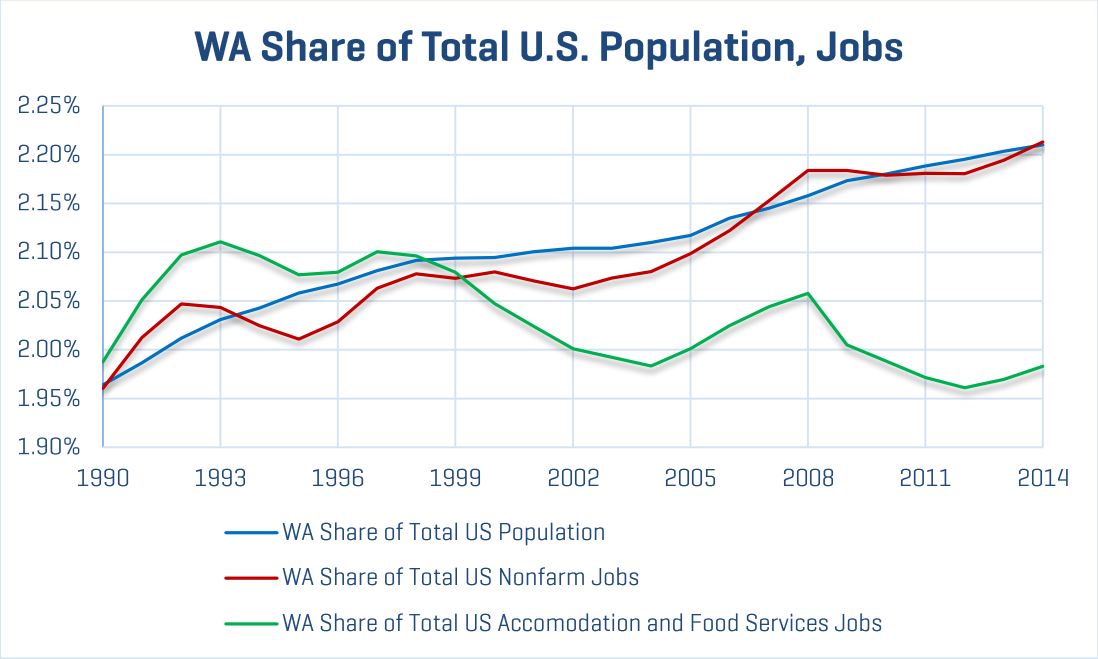
- The state poverty rate has historically trailed the national rate, even prior to the passage of I-688 in 1998.
- The only time that Washington's poverty rate exceeded the national rate was in 2003, following four years of increases in the poverty rate that began the year I-688 took effect.
- The average state poverty rate for the 15 years preceding passage of I-688 (1984-1998) was 10.7 percent. The average national poverty rate for the same period was 13.8 percent. The average state poverty rate for the 15 years following passage of I-688 (1999-2013) was 10.9 percent, a slight increase, while the national poverty rate for the same period was 13.1 percent, a slight decrease.

All other things being equal, minimum wage supporters would expect the poverty rate to decrease when the minimum wage increases. Despite the fact that Washington's minimum wage rose substantially in the years since 1998, there was no noticeable change in the state poverty rate.

However, even this data is only correlative. There are two possible interpretations of the data: (1) The minimum wage increase was ineffective at decreasing poverty, or (2) it did reduce poverty beginning in 1998 but other factors at the same time began to increase poverty, canceling out the anti-poverty effect of the higher minimum wage.

2. Employment

Minimum wage advocates like to point out that the total number of restaurant jobs increased in Washington following passage of I-688 (restaurant jobs are often cited as typical minimum wage jobs). However, a closer look indicates that the growth rate for these jobs slowed dramatically, especially when compared to Washington population and overall jobs growth.



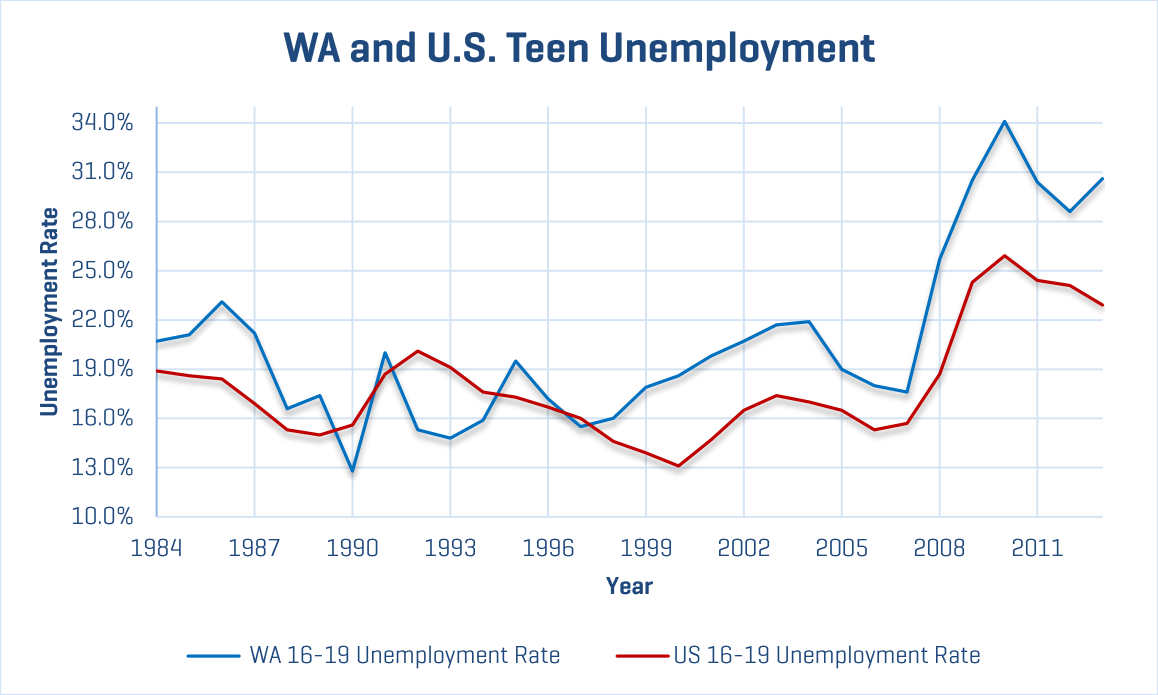
Key Points:

- Washington's share of total U.S. accommodation and food service industry jobs (mainly hotels and restaurants) exceeded Washington's share of total U.S. nonfarm employment and total U.S. population every year from 1990 until implementation of I-688 in 1999.
- Since the passage of I-688, Washington's share of total accommodation and food service jobs has substantially declined, even while the state's share of the nation's population and total jobs have steadily increased.
- When voters passed I-688 in 1998, Washington had 2.09 percent of the nation's population, 2.08 percent of the nation's jobs and 2.10 percent of the nation's accommodation and food service jobs. As of 2014, Washington's share of the population had increased to 2.21 percent, its share of the nation's jobs had increased to 2.21 percent, while its share of total U.S. accommodation and food services jobs had declined to 1.98 percent.
- While Washington's share of the nation's population increased by 5.7 percent since passage of I-688 in 1998, and its share of total U.S. jobs increased by 6.3 percent, the state's share of U.S. accommodation and food services jobs fell by 5.7 percent.

Again, since the data is correlative, there are two possible interpretations: (1) Washington's high minimum wage dramatically slowed job growth in low-wage sectors like hotels and restaurants, or (2) some other policy or economic change unique to Washington took effect at the same time the minimum wage was increased and caused the decline in jobs growth.

3. Unemployment

While the sky has not fallen in on Washington's robust economy since passage of I-688, job prospects for the least-skilled and least-educated workers have certainly declined. The chart below compares Washington's teen unemployment rate to the national rate before and after passage of I-688.



Key Points:

- For the 15 years preceding the implementation of I-688 (1984-1998), teen unemployment in Washington generally followed national trends, with Washington's teen unemployment rate higher than the national rate in 10 out of 15 years. The worst year in the period for Washington teens occurred in 1986, when the state's teen unemployment rate was 4.7 percentage points higher than the national rate.
- Washington's teen unemployment rate has surpassed the national rate every year since the passage of I-688. At the peak of the recession in 2010, Washington's teenage unemployment rate was 8.2 points higher than the unemployment rate for teens nationwide.

This correlative data means either: (1) the increase in Washington's minimum wage dramatically reduced job prospects for teens or (2) some other policy or economic change unique to Washington took place at the same time the minimum wage law was passed and is responsible for raising the unemployment rate for teens.

Conclusion

While the information presented above is purely correlative, it is impressive how directly the observed changes in Washington's economy after passage of I-688 align with the projections of minimum wage skeptics. Just as significant is the lack of any indication that enacting the nation's

highest minimum wage produced the gains promised by labor activists in any measurable or lasting way.

At the time, supporters of I-688 claimed that raising the minimum wage and indexing it to inflation would end poverty wage jobs and depoliticize the issue in the future. The very fact that Tacoma and the state are again embroiled in debates about whether to again raise the minimum wage speaks to the ineffectiveness of prior efforts.

Members of the Tacoma Minimum Wage Task Force,

As a final note, I wanted to pass on a summary of a recent study that I came across this week.

In November, economists Jeffrey Clemens and Michael Wither of the University of California-San Diego released a study which took a new approach to examining the effect of the minimum wage on employment.

They used data sources that allowed them to track the earnings of individual low-skilled workers prior to and through the increase in the federal minimum wage from $5.15 to $7.25 between 2007 and 2009. Studies typically only examine industries or demographic groups that tend to have a higher concentration of low-skilled workers, rather than analyzing specific individuals.

As the authors explain,

> *Past work focuses primarily on the minimum wage's effects on particular demographic groups, such as teenagers, and/or specific industries, like food service and retail. While minimum and sub-minimum wage workers are disproportionately represented among these groups, both are selected snapshots of the relevant population. Furthermore, it is primarily low skilled adults, rather than teenage dependents, who are the intended beneficiaries of anti-poverty efforts. Assessing the minimum wage from an anti-poverty perspective thus requires characterizing its effects on the broader population of low-skilled workers, which we are able to do.*

Among their many findings, Clemans and Wither conclude:

- "Increases in the minimum wage significantly reduced the employment of low-skilled workers. By the second year following the $7.25 minimum's implementation, we estimate that targeted workers' employment rates had fallen by 6 percentage points (8 percent)."
- "In addition to reducing employment, we find that binding minimum wage increases increased the likelihood that targeted individuals work without pay (by 2 percentage points or 12 percent). This novel effect is concentrated among individuals with at least some college education. We take this as suggestive that such workers' entry level jobs are relatively readily posted as [unpaid] internships. For low-skilled, low-education workers, the entire change in the probability of having no earnings comes through unemployment."
- "We estimate that binding minimum wage increases reduced the average monthly income of low-skilled workers by $97 in the short-run and $153 in the medium-run."
- "The effect of binding minimum wage increases on the incidence of poverty was statistically indistinguishable from 0."
- "Binding minimum wage increases reduced the medium-run class mobility of low-skilled workers. Such workers became significantly less likely to rise to the lower middle class earnings threshold of $1500 per month. The reduction was particularly large for low-skilled workers with relatively little education… It appears that binding minimum wage increases blunted these workers' prospects for medium-run economic mobility by

reducing their short-run access to opportunities for accumulating experience and developing skills. This period's minimum wage increases may thus have made the first rung on the earnings ladder more difficult for low-skilled workers to reach."

- "Our best estimate is that this period's minimum wage increases resulted in a 0.7 percentage point decline in the national employment-to-population ratio for adults aged 16 to 64. This accounts for 14 percent of the total decline in the employment-to population ratio over this time period."

I have attached copies of the previous briefings for your reference.

Please feel free to contact me with any thoughts or questions you may have.