### **CITY EXHIBIT LIST**



**HEARING DATE:** Thursday, July 24, 2025 at 1:30 p.m. **FILE NUMBER:** HEX2025-069 (SV 124.1459)

FILE NAME: Board of Regents of the University of Washington, Petitioner

EXHIBIT NUMBER	EXHIBIT DESCRIPTION	SUBMITTED BY	A	E	W	COMMENT
EX. C-1	Preliminary Report	City of Tacoma, Real Property Services ("COT, RPS")	X			
EX. C-2	Aerial Maps (2)	COT, RPS	X			
EX. C-3	Plat Map – Map of New Tacoma	COT, RPS	X			
EX. C-4	Petitioner – Topographical Survey	COT, RPS	X			
EX. C-5	Petitioner – Criteria Memo (response to TMC 9.22.070)	COT, RPS	X			
EX. C-6	UWT Traffic Study	COT, RPS	X			
EX. C-7	PW/Traffic/Transportation Division Comments	COT, RPS	X			
EX. C-8	ES/Engineering Comments	COT, RPS	X			
EX. C-9	Tacoma Water Comments	COT, RPS	X			
EX. C-10	Lumen/Century Link Comments	COT, RPS	X			

**KEY** 

A = Admitted

E = Excluded

W = Withdrawn

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**HEARING DATE:** Thursday, July 24, 2025 at 1:30 p.m. **FILE NUMBER:** HEX2025-069 (SV 124.1459)

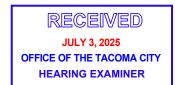
FILE NAME: Board of Regents of the University of Washington, Petitioner

EXHIBIT NUMBER	EXHIBIT DESCRIPTION	SUBMITTED BY	A	E	W	COMMENT
EX. C-11	PDS/Zoning Comments	COT, RPS	X			
EX. C-12	Pierce Transit Comments	COT, RPS	X			
EX. C-13	Comcast Comments	COT, RPS	X			
EX. C-14	RPS/In-Lieu Comments	COT, RPS	X			
EX. C-15	ES/Solid Waste Comments	COT, RPS	X			
EX. C-16	Tacoma Fire Comments	COT, RPS	X			
EX. C-17	PW/Traffic/Transportation Division Comments	COT, RPS	X			
EX. C-18	PSE Comments	COT, RPS	X			
EX. C-19	Exhibit C-1 Errata Sheet - Page 4 Correction	COT, RPS	X			Filed/received on July 24, 2025.
EX. C-		COT, RPS				
EX. C-		COT, RPS				

KEY E = Excluded

A = Admitted

W = Withdrawn



#### PRELIMINARY REPORT

#### PREPARED FOR THE HEARING EXAMINER BY REAL PROPERTY SERVICES

For the Hearing to be Held Thursday, July 24, 2025 at 1:30 PM

PETITIONER: BOARD OF REGENTS OF THE UNIVERSITY
OF WASHINGTON
FILE NO. 124.1459

#### A. SUMMARY OF REQUEST:

Real Property Services has received a petition to vacate a portion of South 19<sup>th</sup> Street, lying between Market Street and Jefferson Avenue, to allow for future growth and development. The area is shown on the attached map, Exhibit 2.

#### B. GENERAL INFORMATION:

#### 1. Legal Description of Vacation:

THAT PORTION OF RIGHT OF WAY OF SOUTH 19TH STREET LYING WITHIN THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 20 NORTH, RANGE 3 EAST, W.M., IN PIERCE COUNTY, WASHINGTON.

MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THAT PORTION OF SOUTH 19TH STREET EASTERLY OF THE WEST MARGIN OF BLOCK 1707, MAP OF NEW TACOMA, WASHINGTON TERRITORY, ACCORDING TO PLAT FILED FOR RECORD FEBRUARY 3, 1875 IN THE OFFICE OF THE COUNTY AUDITOR, IN PIERCE COUNTY, WASHINGTON, EXTENDED SOUTHERLY TO THE CENTERLINE OF SAID SOUTH 19TH STREET, AND THE WEST MARGIN OF BLOCK 1907 OF SAID PLAT EXTENDED NORTHERLY TO SAID CENTERLINE, AND SOUTH 19TH STREET LYING WESTERLY OF A LINE BETWEEN THE SOUTHEAST CORNER OF SAID BLOCK 1707 AND THE NORTHEAST CORNER OF SAID BLOCK 1907.

SITUATE IN THE CITY OF TACOMA, PIERCE COUNTY, STATE OF WASHINGTON.

#### 2. Notification:

9.22.060 NOTICE OF PUBLIC HEARING The Public Works Department shall cause a 30-day notice to be given of the pendency of the petition by written notice posted in three of the most public places in the City, a like notice in a conspicuous place on the street or alley sought to be vacated, a like notice in a newspaper of general circulation in the City, and a like notice to the legal property owners of all property abutting the right of way requested for vacation as enumerated on the applicant's vacation petition, and to any other interested parties of record. In addition to posting notices of the hearing, the Public Works Department shall mail a copy of the notice to all owners and occupants of the property which lies within 300 feet of the street or alley to be vacated. The said notice shall contain the statement that a petition has been filed to vacate the street or alley described in the notice, together with a statement of the time and place fixed for the hearing of the petition.

In all cases where the proceeding is initiated by the City Council without a petition having been signed by the owners of more than two-thirds of the property abutting upon the part of the street or alley sought to be vacated, notice shall be sent as provided above. Failure to send notice by mail to any such property owner where the current address for such property owner is not a matter of public record shall not invalidate any proceedings in connection with the proposed street vacation.

#### C. PUBLIC NOTICE:

Real Property Services in conjunction with the City of Tacoma Clerk's office issued the following public notice:

The Public Hearing Notices and the yellow public notice signs were posted on June 18, 2025:

- 1. Placed yellow public notice sign at the northeast corner of South 19<sup>th</sup> Street and Market Street.
- 2. Placed yellow public notice sign at the southwest corner of South 19<sup>th</sup> and Court C.
- 3. Public notice memo placed into the glass display case located on the first floor of the Municipal building abutting the Finance Department.
- 4. Public notice memo advertised on the City of Tacoma web site at address: <a href="https://www.cityoftacoma.org/cms/one.aspx?objectId=2283">https://www.cityoftacoma.org/cms/one.aspx?objectId=2283</a>
- 5. Public Notice advertised in the Daily Index newspaper.
- 6. Public Notice mailed to all parties of record within the **300** feet of vacation request.
- 7. Public Notice advertised on Municipal Television Channel 12.

#### D. PURPOSE OF REQUEST:

The Petitioner plans on acquiring the portion of South 19<sup>th</sup> Street, lying between Market Street and Jefferson Avenue, to allow for future growth and development of the University of Washington Tacoma campus.

#### E. HISTORY:

The City acquired the South 19<sup>th</sup> Street right of way in the Map of New Tacoma, W.T., according to plat filed for record February 3, 1875 in the Office of the County Auditor.

#### F. PHYSICAL LAND CHARACTERISTICS:

South 19<sup>th</sup> Street is an 80 foot wide sloped street right of way with sidewalk, curb and gutter, and 90 minute parallel parking on both the north and south sides of the right of way.

#### G. APPLICABLE SECTIONS OF THE OFFICIAL CODE OF THE CITY OF TACOMA:

9.22.010 PETITION TO VACATE AUTHORIZED: The owners of an interest in any real estate abutting on any street or alley who may desire to vacate any street or alley, or any part thereof, shall petition to the City Council to make vacation in the manner hereafter provided in this chapter and pursuant to RCW 35.79 or the City Council may itself initiate by Resolution such vacation procedure. The City Council shall require the petitioners to compensate the City in an amount which equals one-half of the appraisal value of the area vacated; provided that if the street or alley has been a public right of way for 25 years or more, the City shall be compensated in an amount equal to the full appraised value of the area vacated; provided that when the vacation is initiated by the City or the City Council deems it to be in the best interest of the City, all or any portion of such compensation may be waived. Except as provided below, one-half of the revenue received hereunder shall be devoted to the acquisition, improvement, and maintenance of public open space land and one-half may be devoted to transportation projects and the management and maintenance of other City owned lands and unimproved rights-of-way.

In the case of vacations of rights-of-way in the tide flats area, defined as easterly of the Thea Foss Waterway (inclusive of the Murray Morgan Bridge), northerly of State Route 509 and westerly of Marine View Drive, the total revenue received hereunder shall be devoted to transportation projects in the tide flats area.

9.22.040 PUBLIC'S RIGHT TO TRAVEL – UTILITIES: Vacation of any portion of a street that is designated as an arterial under Section 11.05.490 of the Municipal Code shall be of a minor nature only and shall not unreasonably limit the public's right to travel upon said street or interfere with the ancillary right to occupy said street for utility purposes.

CRITERIA: Section 9.22.070 of the Official Code of the City of Tacoma. The following criteria have been considered:

1. That the vacation will provide a public benefit and/or will be for a public purpose.

- 2. That the right-of-way vacation shall not adversely affect the street pattern or circulation of the immediate area or the community as a whole.
- 3. That the public need shall not be adversely affected.
- 4. That the right-of-way is not contemplated or needed for future public use.
- 5. That no abutting owner becomes landlocked or his access will not be substantially impaired; i.e., there must be an alternative mode of ingress and egress, even if less convenient.
- 6. That vacation of right-of-way shall not be in violation of RCW 35.79.035

#### Regarding the above Criteria, Real Property Services finds the following:

- 1. The vacation is a public benefit because it places the property on the tax rolls and facilitates private improvements.
- 2. City of Tacoma Traffic Engineering has been consulted regarding this petition and does not object.
- 3. The petition has been considered by City staff and outside quasi-governmental agencies and it does not adversely affect the public need; and
- 4. The right of way is not needed for future public use.
- 5. No abutting owner becomes landlocked nor will their access be substantially impaired.
- 6. The vacated area is not close to a body of water as contemplated under RCW 35.79.035.

#### H. ADDITIONAL INFORMATION:

The area to be vacated has not been assessed for sanitary sewers and is subject to a Connection Charge In-Lieu-of-Assessment per T.M.C. 12.08.350. Should the petitioner wish to clear this item from title, please contact Public Works Department, Real Property Services, for the assessment amount. Please note that the ordinance establishing the rate of assessment is updated every few years, and the amount quoted may increase in the future. When the petitioner has submitted a development plan, an in lieu of amount will be computed.

#### I. PROJECT RECOMMENDATIONS:

As part of the City's review process for street vacation petitions, notice of this application was mailed to various City departments as well as many outside quasi-governmental agencies. These agencies, as noted below, have provided comments and recommended conditions to the Real Property Services Division. These comments, where appropriate, have been incorporated in the "Recommended Conditions of Approval" section of this preliminary report.

Preliminary Report – Exhibit C-1 Aerial Maps (2) – Exhibit C-2 Plat Map – Exhibit C-3 Petitioner Petition Topographical Survey – Exhibit C-4 Petitioner Proposed – TMC 9.22.070 Memo – Exhibit C-5 Petitioner Petition – UWT Traffic Study – Exhibit C-6

#### **Recommended Conditions**

#### Payment of Fees

PW/Traffic/Transportation Division – Recommended Conditions - Exhibit C-7 ES/Engineering – Easement Reservation Requirement - Exhibit C-8 Tacoma Water – Easement Reservation Requirement – Exhibit C-9 Lumen/CenturyLink – Easement Reservation Requirement - Exhibit C-10

#### **Advisory Comments**

PDS/Zoning – No Objection with Comment – Exhibit C-11
Pierce Transit – No Objection with Comment – Exhibit C-12
Comcast – No Objection with Comment - Exhibit C-13
RPS/In-Lieu – No Objection - Exhibit C-14
ES Solid Waste – No Objection – Exhibit C-15
Tacoma Fire– No Objection – Exhibit C-16
PW/Transportation/Parking – Exhibit C-17
Puget Sound Energy – No Objection - Exhibit C-18
Tacoma Power/Rail/NCE Network (Previously Click!) – No Objection –
See Exhibit C-9

#### J. RECOMMENDED CONDITIONS OF APPROVAL:

Should this street vacation request be approved, the Real Property Services Division recommends that the following conditions be made conditions of approval for this street vacation petition.

#### 1. PAYMENT OF FEES

The petitioner shall compensate the City in an amount equal to the full appraised value of the area vacated. One-half of the revenue received shall be devoted to the acquisition, improvement and maintenance of public open space land and one-half may be devoted to transportation projects and /or management and maintenance of other City owned lands and unimproved rights-of-way. *TMC 9.22.010* 

#### 2. PW/TRAFFIC ENGINEERING/TRANSPORTATION DIVISION

- a. Please contact Jennifer Kammerzell at (253) 591-5511 regarding PW/Traffic Engineering/Transportation Division's comments.
- b. As outlined in the attachments, the City will require street improvements and easements related to the City infrastructure.

c. UWT will be responsible for initiating and completing the work under a Work Order and/or SDEV permit with a UWT contractor. The City will not complete the work and will not reimburse, nor will the City reimburse UWT for any work already completed, since any of those improvements were not City requested or authorized. Any phased closure will impact travel and public right-of-way, which will necessitate permit requirements from the City and be subject to City review and approval. Additionally, any existing or future responsibility for the ongoing maintenance will be solely with UWT.

#### 3. ENVIRONMENTAL SERVICES (ES)

- a. Please contact Teresa Dressler at (253) 502-2187/tdressle@tacoma.gov regarding ES's comments.
- b. A 40 foot stormwater easement must be reserved for the 48 inch storm pipe (highlighted in the exhibit) running easterly down South 19<sup>th</sup> Street.

A 20 foot easement must also be reserved for the catch basin lead (highlighted in the exhibit).

#### 4. TACOMA WATER

- a. Please contact Greg Muller at (253) 337-3164 regarding Tacoma Power's comments.
- b. Tacoma Water requests an easement reservation over the North half of S 19th St. proposed for vacation, with the following conditions:

No permanent structures, retaining walls, fences, trees are permitted within easement. Light landscaping with grass and/or small shrubbery is permitted. Tacoma Water facilities must remain accessible at all times.

If existing water facilities need to be relocated or adjusted, they will be relocated by Tacoma Water at the developer's expense.

Any damage to Tacoma Water facilities will be repaired by Tacoma Water crews at the expense of the developer.

#### 5. LUMEN/CENTURYLINK

- a. Please contact Tom Hoopes at (407) 592-1794 regarding Lumen's comments.
- b. A 10 foot wide easement must be obtained over a portion of the proposed vacate area

#### **K. ADVISORY COMMENTS:**

#### 1. PDS/ZONING

a. Please contact Shanta Franz at (253) 591-5388 regarding PDS Zoning's comments.

b. PDS Zoning does not object to the vacation; but, it does advise that the proposed vacation(s) will create a large, super block. The City will continue to review future development permit applications using the City's South Downtown Subarea Plan and the Pedestrian and Bicycle Support Standards under TMC 13.06.090.F. (or as amended) to provide safe, efficient alternative modes of travel (e.g., pedestrian, bicycles, etc.) through the UWT campus and around the Downtown Tacoma neighborhood.

#### 2. PIERCE TRANSIT

- a. Please contact Tina Vaslet at (253) 983-2706 regarding Pierce Transit's comments.
- b. Pierce Transit (PT) does not object to the vacation. PT notes: the PT Training Department evaluated the proposed change, and due to the incline on S 17th & Market, as well as the sightline restrictions, they are opting for Option B, as shown in the exhibit. This routing will allow PT to retain bus stop 1344 at Jefferson & S 19th.

#### 3. COMCAST

- a. Please contact Matthew Cruzan at (253) 256-8408 regarding Comcast's comments.
- b. Comcast notes that it has facilities that are outside of the vacate area, but that still may impact it.

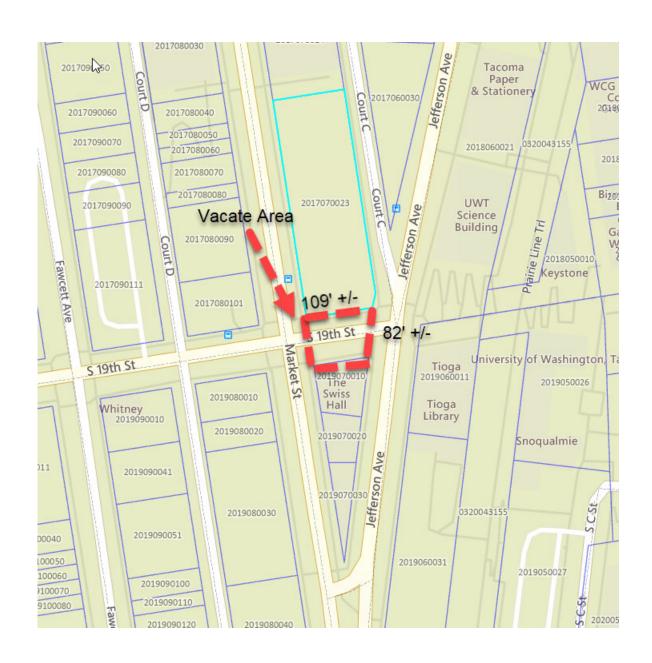
#### 4. NO OBJECTION

No objection or additional comment was received from: RPS/In-Lieu; ES/Solid Waste; Tacoma Fire; PW/Parking; PSE; and Tacoma Power/Rail/NCE Network (Previously Click!)

ATTACHMENT: Vacation Jacket containing all pertinent maps and papers.







#### **UNIVERSITY OF WASHINGTON**

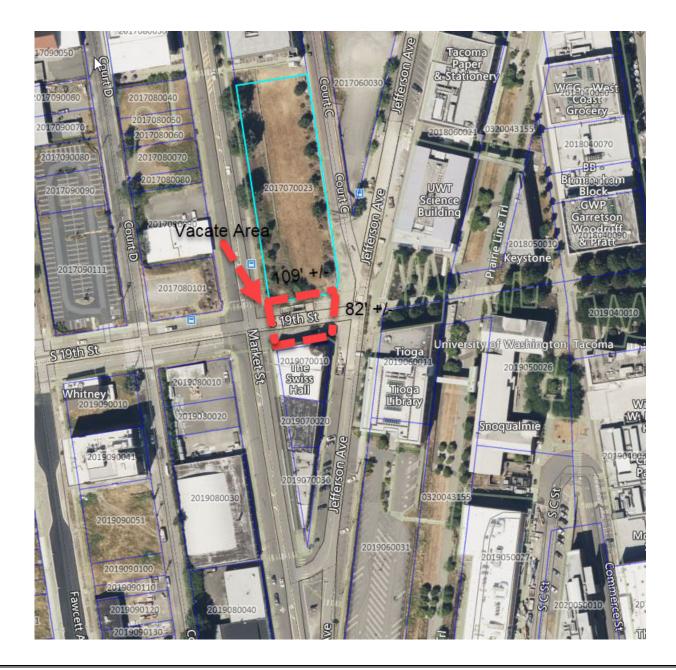
STREET VACATION NO. 124.1459

PORTION OF S. 19<sup>TH</sup> ST., LYING BETWEEN S. MARKET ST. & JEFFERSON AVENUE

SW 1/4 SEC. 04, T20N, R3E

**NOT TO SCALE** 





# UNIVERSITY OF WASHINGTON

STREET VACATION NO. 124.1459

PORTION OF S. 19<sup>TH</sup> ST., LYING BETWEEN S. MARKET ST. & JEFFERSON AVENUE

SW 1/4 SEC. 04, T20N, R3E

**NOT TO SCALE** 

#### Exhibit C-3

RECEIVED

JULY 3, 2025

OFFICE OF THE TACOMA CITY **HEARING EXAMINER** 

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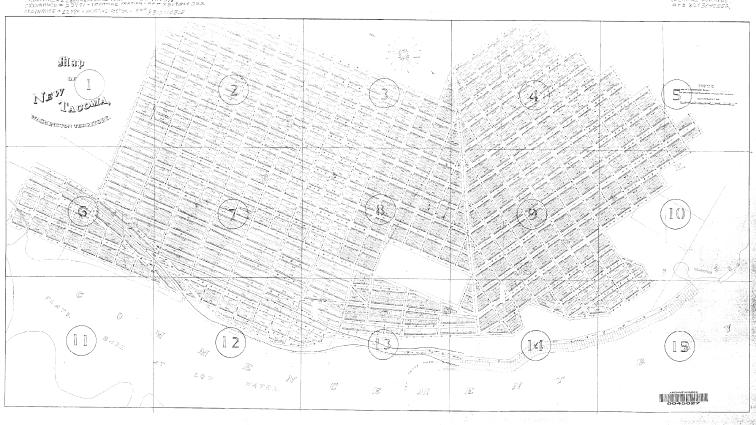
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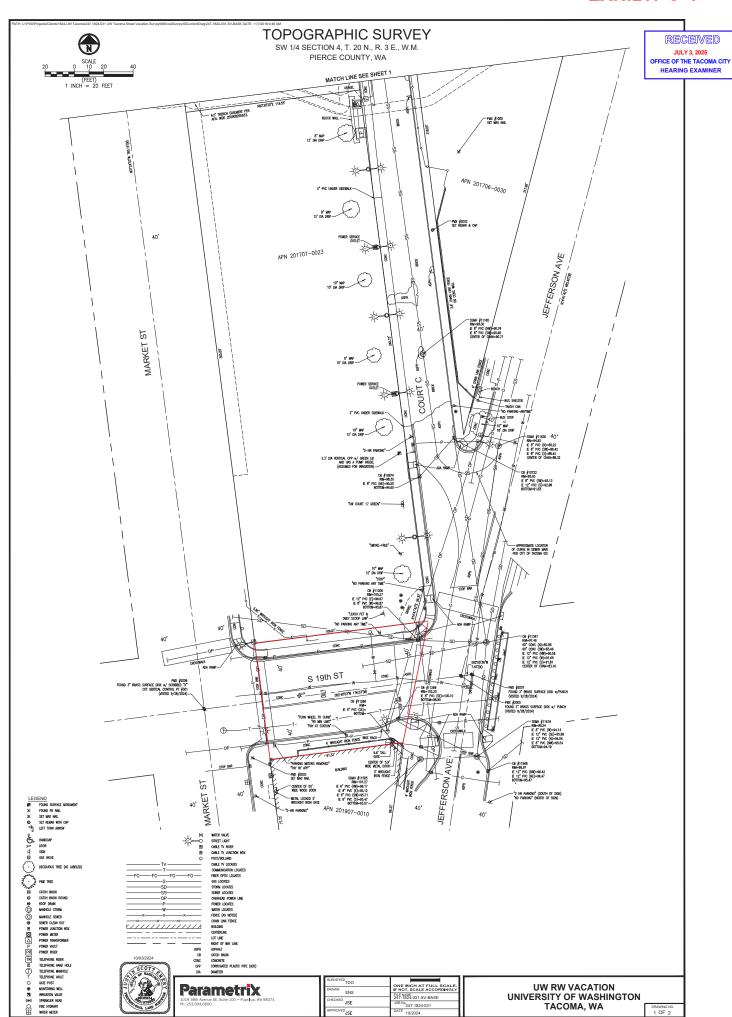
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#### **EXHIBIT C-5**

#### **Attachment A**

# CITY OF TACOMA PETITION TO VACATE RIGHT OF WAY



#### Area to be vacated:

South 19th Street, between the Market Street right-of-way and the Jefferson Street right-of-way (ROW), would be vacated. The University of Washington Tacoma (UWT) owns the two lots abutting the ROW to be vacated. (See Attachment B for legal description and map.)

#### Proposed Uses and TMC 9.22.070 criteria:

- 1. Public Benefit and/or Public Purpose Vacation of this section of South 19th Street is anticipated to allow for the following public benefits and purposes: the growth and development of the UWT campus, a public institution, in a manner that enhances the pedestrian experience and ties lower and upper elevations of the campus; accommodate increased open space and tree canopy; increased public benefit of aesthetic, accessibility, and safety improvements; elimination of a dangerous condition and site of a previous fatality and near misses with vehicles coming into campus pedestrian zones; and reduction in City of Tacoma roadway maintenance. Future development in this area would improve pedestrian lighting and sidewalks/pathways (See Attachment C.)
- 2. Not adversely affect the street pattern or circulation of the community South 19th Street, east of the Jefferson Street ROW to Pacific Street was previously vacated and closed. It currently accommodates a significant open, landscaped public area in the center of the UWT campus. North-south through traffic would continue on Jefferson and Market Streets; east-west through traffic would continue on South 21st, South 19th from Market Street, and on South 17th Streets. Pierce Transit does not operate on this section of South 19th Street between Market and Jefferson Streets. Future development would ensure required emergency vehicle access to abutting properties (all owned by UWT). As described in the Traffic Impact Analysis for this vacation (see Attachment D), no impacts to circulation in the community area are anticipated.
- 3. <u>Public need shall not be adversely affected</u> As noted in item 2 above, no impacts to the community area are anticipated for circulation and public need would only be enhanced by providing additional program space for a public institution, an enhanced pedestrian experience, and increased safety for pedestrians, bicyclists and motorists.
- 4. The ROW is not contemplated or needed for future public use The UWT 2008 Campus Master Plan identifies this South 19th Street vacation as part of the campus vision (see Attachment C).
- 5. <u>No abutting owner becomes landlocked or access impaired</u> The UWT surrounds the proposed ROW vacation and no access is anticipated to be impaired.

6.	<u>Vacation shall not be in violation of RCW 35.79.035</u> – The proposed ROW is not abutting any
	body of water and will not violate RCW 35.79.035.

JULY 3, 2025
OFFICE OF THE TACOMA CITY
HEARING EXAMINER

# 19<sup>th</sup> Street and Court C Street Vacations Traffic Impact Analysis

Prepared for:

University of Washington Tacoma

August 9, 2024

TC23-0087

FEHR / PEERS

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# $19^{\text{th}}$ Street and Court C Street Vacations Traffic Impact Analysis August 9, 2024

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# **Executive Summary**

This Traffic Impact Analysis (TIA) assesses the potential transportation-related impacts from the proposed vacation of portions of 19<sup>th</sup> Street and Court C on the University of Washington Tacoma (UWT) Campus. The analysis looks at two scenarios. **Scenario 1** is the closure of 19<sup>th</sup> Street from Market Street to Jefferson Avenue. **Scenario 2** is that same closure of 19<sup>th</sup> Street and the closure of Court C between 17<sup>th</sup> Street and Jefferson Avenue. The primary reasons UWT is proposing these street vacations are to improve safety for students, faculty and visitors traveling to, from, or through the UWT Campus and to plan for future campus expansion.

Seven intersections were evaluated around the proposed street vacations, with level of service (LOS) determined for each intersection under Existing (2024) conditions based on collected traffic count data. These counts were forecasted to Horizon (2030) No Action levels using an annual growth rate of 1 percent and LOS was determined for each intersection. Vehicles were then redistributed to model the forecasted condition with the street closures for Horizon (2030) Scenario 1 and Horizon (2030) Scenario 2 and LOS was determined for each intersection. The findings of these analyses indicate all the studied intersections currently operate within acceptable LOS and the street vacations of both Scenario 1 and Scenario 2 under forecasted conditions do not change the LOS from Existing (2024) or Horizon (2030) No Action conditions.

The street vacations will allow for the extension of the existing cross-campus pedestrian circulation and reduce conflicts between pedestrians, cyclists and vehicles traveling north or south on Market Street and Jefferson Avenue. The 19<sup>th</sup> Street vacation will allow for further opportunities to improve pedestrian crossings with the available space from the no longer needed southbound left and eastbound through lanes at the intersection of 19<sup>th</sup> Street and Market Streets. The closure of Court C will eliminate the confusing intersection of Court C and Jefferson Avenue.

The proposed vacations would not have significant impacts to the operations of transit, or emergency response. One hydrant will need to be relocated with the vacation of 19<sup>th</sup> Street.

A parking analysis was also performed to determine the impact the proposed street closures would have on available on-street parking on and near campus. Parking counts were collected to estimate current peak on-street parking demand. The findings of this parking analysis determined the vacation of 19<sup>th</sup> Street of Scenario 1 would result in an estimated net reduction of 5 on-street parking spaces and the vacation of Court C would result in an estimated net reduction of 9 on-street parking spaces, resulting in an overall net reduction of 14 on-street parking spaces with both vacations of Scenario 2. The collected data suggests the on-street parking spaces that would be removed with the street vacations are the least occupied spaces in the study area and the current observed peak on-street parking demand on the impacted segments could be accommodated in the available nearby on-street parking spaces. The parking needs associated with future campus expansion will be evaluated in UWT's update to their Campus Master Plan, and any changes to accommodate future parking needs will be implemented as campus expansion occurs.



# Introduction

# **Purpose**

This Traffic Impact Analysis (TIA) assesses the potential transportation-related impacts from the proposed vacation of portions of 19<sup>th</sup> Street and Court C on the University of Washington Tacoma (UWT) Campus. The analysis looks at two scenarios. **Scenario 1** is the closure of 19<sup>th</sup> Street from Market Street to Jefferson Avenue. **Scenario 2** is that same closure of 19<sup>th</sup> Street and the closure of Court C between 17<sup>th</sup> Street and Jefferson Avenue. This analysis assumes access to the parking garage below Court 17 Apartments, onstreet parking directly in front of Court 17 Apartments, and the upper Pinkerton Lot parking spaces will be maintained with the Court C closure. **Figure 1** shows the project location and proposed vacations for Scenario 1 and Scenario 2.

This study evaluates and compares the level of service (LOS) for seven intersections around the proposed street vacations for existing conditions, forecasted 2030 conditions, and forecasted 2030 conditions with the street vacations for Scenario 1 and Scenario 2. This study analyzes the effect the street vacations will have on the availability of campus on street parking. This analysis will also discuss the impact the street vacations will have on active transportation, transit, emergency vehicle access, and ADA compliance.

# Scope

The scope of work for this TIA was determined through scoping conversations with City of Tacoma staff on August 17, 2023, and email correspondence on August 24, 2023. This TIA assesses potential transportation impacts during the weekday morning and evening peak periods. The study examines traffic operations and impacts at the following seven study intersections. The intersection control type is noted in parentheses.

- 1. Market Street & S 17th Street (Side-Street Stop Control)
- 2. Court C & S 17th Street (Side-Street Stop Control)
- 3. Jefferson Avenue & S 17th Street (Side-Street Stop Control)
- 4. Market Street & S 19th Street (Signalized)
- 5. Market Street & Jefferson Avenue (Side-Street Stop Control)
- 6. Jefferson Avenue & S 21st Street (Signalized)
- 7. Jefferson Avenue & S 19th Street (All-Way Stop Control)





**Figure 1: Project Location and Study Intersections** 

Source: Fehr & Peers, 2024.



# **Analysis Methodology**

The term "Level of Service" (LOS) refers to the operational performance of an intersection or roadway, measured quantitatively and reported qualitatively on a scale from A to F. LOS A indicates free-flowing operations with minimal delay, while LOS F indicates forced and unpredictable flows with excessive delays. It is important to note that LOS A may not be the ideal condition for every user or context within a transportation network. In **Table 1**, each LOS letter designation is briefly explained, including the average delay per vehicle for both signalized and unsignalized intersections. Fehr & Peers employed the Highway Capacity Manual 6th Edition (HCM 6th Edition) methodology, an industry standard that utilizes distinct quantitative assessments for signalized and unsignalized intersections. The LOS for signalized and all-way stop-controlled (AWSC) intersections is determined by a weighted average of all approach delays, while the LOS for side-street stop-controlled (SSSC) intersections is determined by the poorest-performing intersection approach. The City of Tacoma defines its Level of Service standard for intersection as LOS D.

**Table 1: Level of Service Descriptions** 

LOS	Signalized Description Intersections		Unsignalized Intersections
		Avg. Delay (sec/veh) <sup>1</sup>	Avg. Delay (sec/veh) <sup>2</sup>
Α	Free Flow / Insignificant Delay Extremely favorable progression. Individual users are virtually unaffected by others in the traffic stream.	< 10.0	< 10.0
В	Stable Operations / Minimum Delays Good progression. The presence of other users in the traffic stream becomes noticeable.	> 10.0 to 20.0	> 10.0 to 15.0
С	Stable Operations / Acceptable Delays Fair progression. The operation of individual users is affected by interactions with others in the traffic stream	> 20.0 to 35.0	> 15.0 to 25.0
D	Approaching Unstable Flows / Tolerable Delays Marginal progression. Operating conditions are noticeably more constrained.	> 35.0 to 55.0	> 25.0 to 35.0
E	Unstable Operations / Significant Delays Can Occur Poor progression. Operating conditions are at or near capacity.	> 55.0 to 80.0	> 35.0 to 50.0
F	Forced, Unpredictable Flows / Excessive Delays Unacceptable progression with forced or breakdown of operating conditions.	> 80.0	> 50.0

<sup>&</sup>lt;sup>1</sup>Overall intersection LOS and average delay (seconds/vehicle) for all approaches.

Source: Fehr & Peers descriptions, based on Highway Capacity Manual 6th Edition.



<sup>&</sup>lt;sup>2</sup>Worst movement LOS and delay (seconds/vehicle) only.

# Existing (2024)

# **Purpose**

This section summarizes the Existing (2024) conditions for all modes utilizing the network in and around the University of Washinton Tacoma campus, including roadway facilities, transit, and pedestrian/bicycle facilities. With this analysis, background traffic operational deficiencies (if any) can be identified.

### **Traffic Conditions**

Traffic Counts

Vehicle, pedestrian, and bicycle counts were collected by IDAX Data Solutions at the study intersections while class was in session on Wednesday, January 10<sup>th</sup>, 2024, from 7:00 AM – 9:00 AM and 4:00 PM – 6:00 PM. These counts are intended to represent typical commuting travel patterns. Traffic counts at 19<sup>th</sup> Street and Jefferson Avenue were estimated using proportional balancing between surrounding study intersections. The observed volumes during the existing AM and PM weekday peak hour are illustrated in **Figure 2**. The traffic counts are included in **Appendix A**.





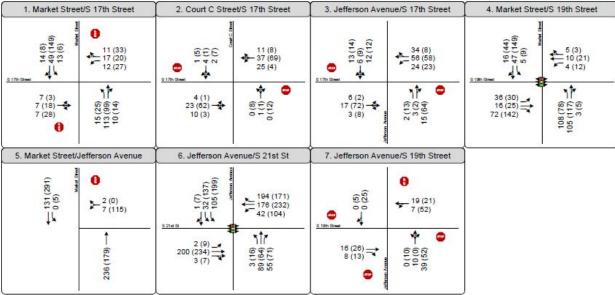


Figure 2: Existing Volume at Study Intersections AM(PM)

Source: Fehr & Peers, 2024.



#### Level of Service Analysis

The HCM 6<sup>th</sup> Edition delay thresholds were used to compute the LOS at each study intersection for the existing weekday AM and PM peak hour conditions. The results of the level of service analysis are reported in **Table 2** (see **Appendix B** for detailed LOS reports). These results serve as a base for the analysis of the impacts of the proposed street vacations.

The LOS and delay for SSSC intersections is determined by the worst performing approach. The LOS and delay for signalized and AWSC intersections is determined by the weighted average of all approach delays. As previously noted, the level of service standard for intersections in the City of Tacoma is LOS D. The findings of the analysis indicate that none of the study intersections operate below acceptable levels of delay in existing conditions.

Table 2: Existing (2024) Weekday Conditions Level of Service

	Intersection				Worst Movement <sup>1</sup> Overall Intersection				
ID	Location	Period	Control	Movement <sup>3</sup>	Delay Sec/Veh	LOS	Delay Sec/Veh	LOS	
1	Market Street & S 17th Street	AM	SSSC	WB LT	11	В	-	-	
	Warket Street & S Trui Street	PM	3330	WB LT	13	В	-	-	
2	Court C & S 17th Street	AM	SSSC	NB	10	В	-	-	
	Court C & 5 17th Street	PM	333C	SB	10	В	-	-	
3	Jefferson Avenue & S 17th	AM	SSSC	NB LT	10	В	-	-	
	Street	PM	333C	NB LT	11	В	-	-	
4	Maylest Chroat Q. C 10th Chroat	AM	Cianal	-	-	-	17	В	
	Market Street & S 19th Street	PM	Signal PM	-	-	-	18	В	
5	Market Street & Jefferson	AM	555	WB	11	В	-	-	
	Avenue	PM	SSSC	WB	15	С	-	-	
6	Jefferson Avenue & S 21st	AM	Cianal	-	-	-	25	С	
	Street	PM	Signal	-	-	-	31	С	
7	Jefferson Avenue & S 19th	AM	AVACC	-	-	-	7	Α	
	Street	PM	AWSC	-	-	-	8	Α	

#### NOTES:

- 1. This represents the worst movement LOS and is only reported for unsignalized intersections using HCM 6 methodology.
- 2. This represents the overall intersection LOS and is only reported for signalized intersections using the HCM 6 methodology.
- 3. NB=Northbound, SB=Southbound, EB=Eastbound, WB=Westbound, LT= Left Turn. Source: Fehr & Peers, 2024.



# Horizon (2030) No Action

# **Purpose**

This section summarizes the Horizon (2030) No Action conditions for the study intersections. With this analysis, deficiencies (if any) can be identified that could likely occur in the future without the proposed street vacations.

### **Traffic Conditions**

Forecast Volumes

Existing (2024) traffic volumes are increased to estimate horizon year (2030) traffic volumes. Based on conversations with the City of Tacoma, an annual growth rate of 1% was determined as an acceptable method of forecasting future traffic volumes. The forecasted volumes during the existing AM and PM weekday peak hour are illustrated in **Figure 3**.



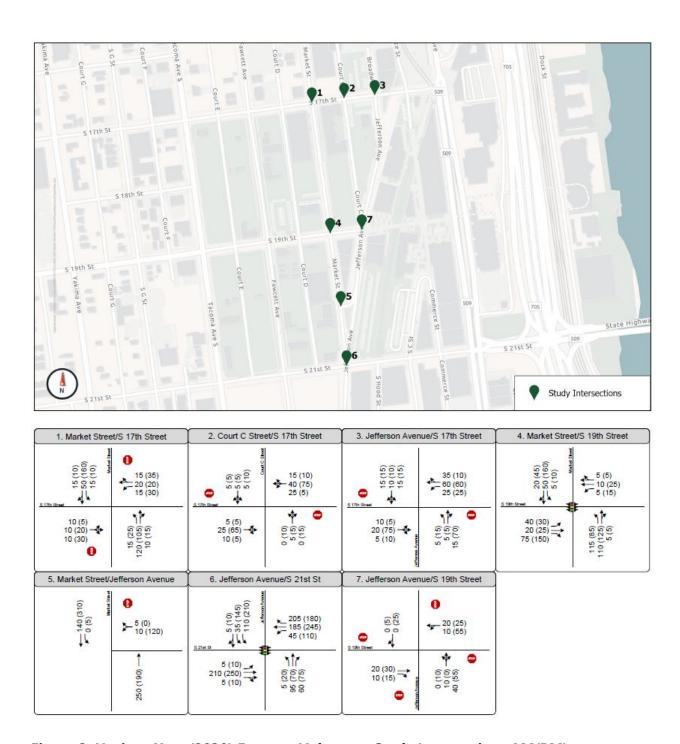


Figure 3. Horizon Year (2030) Forecast Volume at Study Intersections AM(PM)



#### Level of Service Analysis

The HCM 6<sup>th</sup> Edition delay thresholds were used to compute the LOS at each study intersection for the forecasted 2030 no-action weekday AM and PM peak hour conditions. The results of the level of service analysis are reported in **Table 3** (see **Appendix B** for detailed LOS reports). These results serve as a base for the analysis of the impacts of the proposed street vacations.

The LOS and delay for SSSC intersections is determined by the worst performing approach. The LOS and delay for signalized and AWSC intersections is determined by the weighted average of all approach delays. As previously noted, the level of service standard for intersections in the City of Tacoma is LOS D. The findings of the analysis indicate that none of the study intersections operate below acceptable levels of delay in Horizon (2030) No Action conditions.

Table 3: Horizon Year (2030) No Action Weekday Conditions Level of Service

	Intersectio		Worst		Overall Intersection <sup>2</sup>			
ID	Location	Period	Control	Movement <sup>3</sup>	Delay Sec/Veh	LOS	Delay Sec/Veh	LOS
1	Market Street & S 17th Street	AM	ccc	WB LT	11	В	-	-
	ivialket Street & 5 17th Street	PM	SSSC	WB LT	11	В	-	-
2	C- 1 C 0 C 17th Ct 2 1	AM	cccc	NB	10	В	-	-
	Court C & S 17th Street	PM	SSSC	SB	10	В	-	-
3	Jefferson Avenue & S 17th	AM	ccc	NB LT	10	В	-	-
	Street	PM	SSSC	NB LT	11	В	-	-
4	Market Street & S 19th Street	AM	Cianal	-	-	-	17	В
	Market Street & S 19th Street	PM	Signal	-	-	-	18	В
5	Market Street & Jefferson	AM	cccc	WB	11	В	-	-
	Avenue	PM	SSSC	WB	16	С	-	-
6	Jefferson Avenue & S 21st	AM	Cianal	-	-	-	25	С
	Street	PM	Signal	-	-	-	32	С
7	Jefferson Avenue & S 19 <sup>th</sup>	AM	AVAICE	-	-	-	7	Α
	Street	PM	AWSC	-	-	-	8	Α

#### NOTES:

- 1. This represents the worst movement LOS and is only reported for unsignalized intersections using HCM 6 methodology.
- 2. This represents the overall intersection LOS and is only reported for signalized intersections using the HCM 6 methodology.
- 3. NB=Northbound, SB=Southbound, EB=Eastbound, WB=Westbound, LT= Left Turn. Source: Fehr & Peers, 2024.



# Horizon Year (2030) Scenario 1

# **Purpose**

This section summarizes the Horizon (2030) Scenario 1 conditions for the study intersections. With this analysis, deficiencies (if any) can be identified that could likely occur in the future with the proposed street vacation of 19<sup>th</sup> Street.

### **Traffic Conditions**

Trips Redistributed

The traffic volumes were redistributed through the study intersections to estimate the Horizon (2030) Scenario 1 conditions. Given the street network arrangement and surrounding land uses, it is assumed all vehicles entering the west end of the proposed vacation of 19<sup>th</sup> Street intend to park on campus (described as ingress trips in this report) and all vehicles entering the east end of the proposed vacation of 19<sup>th</sup> street originate from an on-campus parking spot and are leaving UWT Campus (described as egress trips in this report). **Figure 4** depicts the redistributed paths of vehicles ingress vehicles and **Figure 5** depicts the redistributed paths of egress vehicles for Scenario 1. These redistribution diagrams were used to adjust the volumes of the Horizon (2030) No Action conditions to estimate the volumes for Horizon (2030) Scenario 1 conditions. The Scenario 1 volumes during the AM and PM weekday peak hour are illustrated in **Figure 6**.





Figure 4: Scenario 1 Ingress Volume Redistribution Source: Fehr & Peers, 2024.

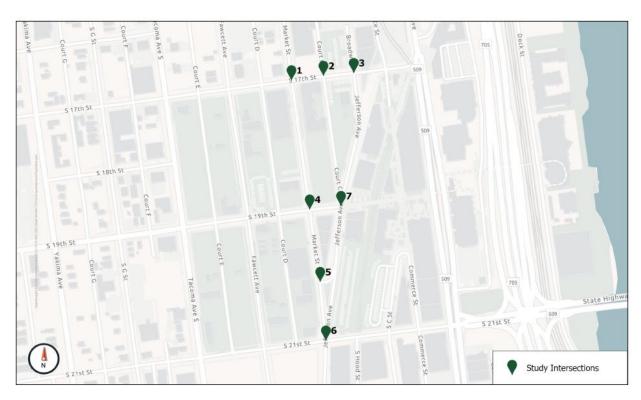




Figure 5: Scenario 1 Egress Volume Redistribution

Source: Fehr & Peers, 2024.





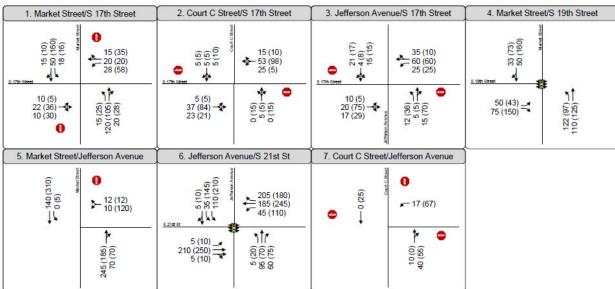


Figure 6: Horizon Year (2030) Scenario 1 Volume at Study Intersections AM(PM) Source: Fehr & Peers, 2024.



#### Level of Service Analysis

The HCM 6<sup>th</sup> Edition delay thresholds were used to compute the LOS at each study intersection for the forecasted 2030 Scenario 1 weekday AM and PM peak hour conditions. The results of the level of service analysis are reported in **Table 4** (see **Appendix B** for detailed LOS reports).

The LOS and delay for SSSC intersections is determined by the worst performing approach. The LOS and delay for signalized and AWSC intersections is determined by the weighted average of all approach delays. As previously noted, the level of service standard for intersections in the City of Tacoma is LOS D. The findings of the analysis indicate that none of the study intersections operate below acceptable levels of delay in Horizon (2030) Scenario 1 conditions.

Table 4: Horizon Year (2030) Scenario 1 Weekday Level of Service

Intersection				Worst	Overall Intersection <sup>2</sup>			
ID	Location	Period	Control	Movement <sup>3</sup>	Delay Sec/Veh	LOS	Delay Sec/Veh	LOS
1	Maylest Charact D. C 17th Charact	AM	CCCC	WB LT	11	В	-	-
	Market Street & S 17th Street	PM	SSSC	WB LT	13	В	-	-
2	Co 1 C 0: C 17th Chart	AM	ccc	NB	11	В	-	-
Court C & S	Court C & S 17th Street	PM	SSSC	SB	11	В	-	-
3	Jefferson Avenue & S 17th	AM	CCCC	NB	11	В	-	-
	Street	PM	SSSC	NB LT	11	В -	-	
4		AM	Cianal	-	-	-	15	В
	Market Street & S 19th Street	PM	Signal	-	-	-	17	В
5	Market Street & Jefferson	AM	6666	WB	11	В	-	-
	Avenue	PM	SSSC	WB	15	С	-	-
6	Jefferson Avenue & S 21st	AM	C'I	-	-	-	25	С
	Street PM Sign	Signal	-	-	-	32	С	
7	Jefferson Avenue & S 19 <sup>th</sup>	AM		-	-	-	7	Α
	Street	PM	AWSC	-	-	-	7	Α

#### NOTES:

- 1. This represents the worst movement LOS and is only reported for unsignalized intersections using HCM 6 methodology.
- 2. This represents the overall intersection LOS and is only reported for signalized intersections using the HCM 6 methodology.
- 3. NB=Northbound, SB=Southbound, EB=Eastbound, WB=Westbound, LT= Left Turn. Source: Fehr & Peers, 2024.



# Horizon Year Scenario 2 Conditions

# **Purpose**

This section summarizes the Horizon (2030) Scenario 2 conditions for the study intersections. With this analysis, deficiencies (if any) can be identified that could likely occur in the future with the proposed street vacation of 19th Street and Court C.

### **Traffic Conditions**

Trips Redistributed

The traffic volumes were redistributed through the study intersections to estimate the Horizon (2030) Scenario 2 conditions. All the redistributed vehicles from Scenario 1 also apply for Scenario 2. In addition, volumes were adjusted to account for the vacation of Court C. Given the street network arrangement and surrounding land uses, it is assumed all vehicles entering the south end of the proposed vacation of Court C intend to park on Court C (described as ingress trips in this report) and all vehicles exiting the south end of the proposed vacation of Court C originate from a parking spot on Court C and are leaving UWT Campus (described as egress trips in this report). **Figure 7** depicts the redistributed paths of vehicles ingress vehicles and **Figure 8** depicts the redistributed paths of egress vehicles for Scenario 2. These redistribution diagrams were used to adjust the volumes of the Horizon (2030) No Action conditions to estimate the volumes for Horizon (2030) Scenario 2 conditions. The Scenario 2 volumes during the AM and PM weekday peak hour are illustrated in **Figure 9**.



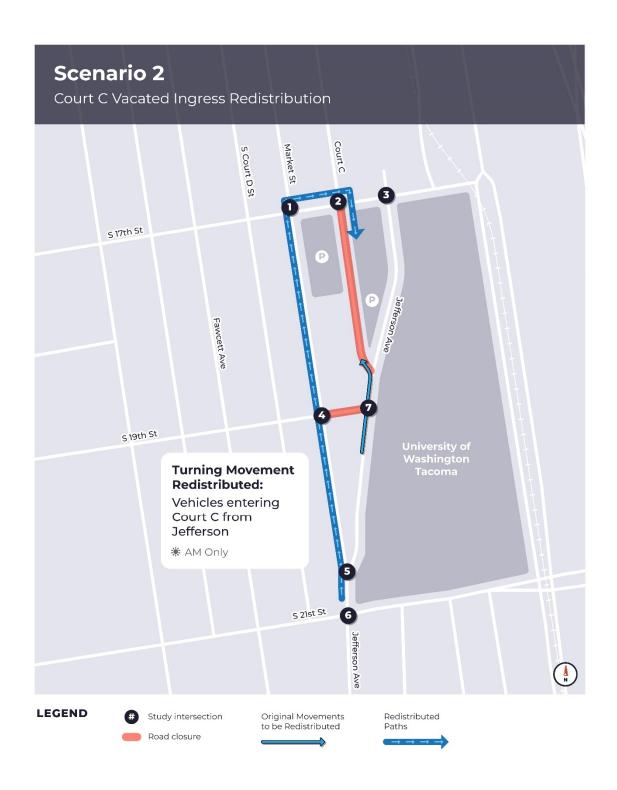


Figure 7: Scenario 2 Ingress Volume Redistribution

Source: Fehr & Peers, 2024.



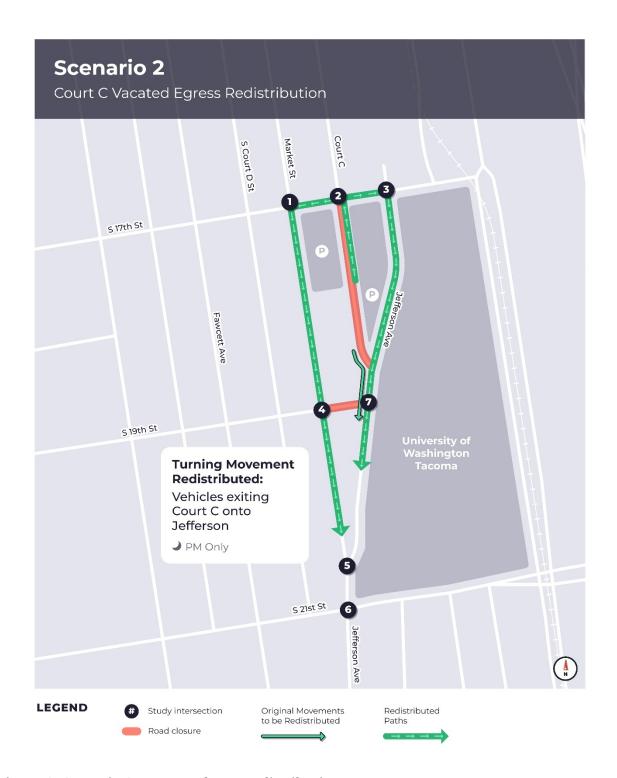
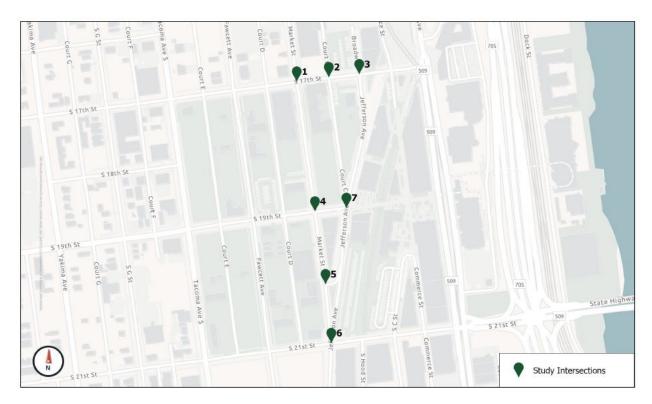


Figure 8: Scenario 2 Egress Volume Redistribution

Source: Fehr & Peers, 2024.





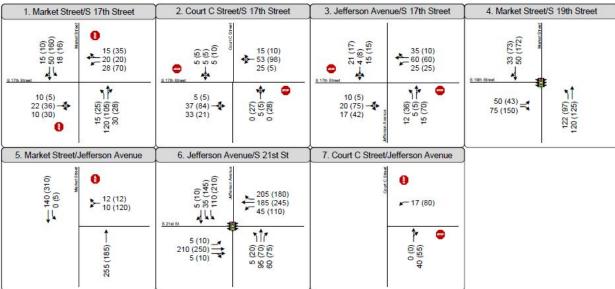


Figure 9: Horizon Year (2030) Scenario 2 Volume at Study Intersection AM(PM) Source: Fehr & Peers, 2024.



#### Level of Service Analysis

The HCM 6<sup>th</sup> Edition delay thresholds were used to compute the LOS at each study intersection for the forecasted 2030 Scenario 2 weekday AM and PM peak hour conditions. The results of the level of service analysis are reported in **Table 5** (see **Appendix B** for detailed LOS reports).

The LOS and delay for SSSC intersections is determined by the worst performing approach. The LOS and delay for signalized and AWSC intersections is determined by the weighted average of all approach delays. As previously noted, the level of service standard for intersections in the City of Tacoma is LOS D. The findings of the analysis indicate that none of the study intersections operate below acceptable levels of delay in Horizon (2030) Scenario 2 conditions.

Table 5: Horizon Year (2030) Scenario 2 Weekday Level of Service

	Intersection	on		Worst	Movemen	it <sup>1</sup>	Over Intersed	
ID	Location	Period	Control	Movement <sup>3</sup>	Delay Sec/Veh	LOS	Delay Sec/Veh	LOS
1	Market Street & S 17 <sup>th</sup> Street	AM	SSSC	WB LT	11	В	-	-
	Market Street & S 17" Street	PM	222C	WB LT	13	В	-	-
2	Court C & S 17 <sup>th</sup> Street	AM	CCCC	NB	11	В	-	-
	Court C & S 17 " Street	PM	SSSC	SB	11	В	-	-
3	Jefferson Avenue & S 17 <sup>th</sup>	AM	CCCC	NB LT	11	В	-	-
	Street	PM	SSSC	NB LT	11	В	-	-
4	Market Street & S 19 <sup>th</sup> Street	AM	C:l	-	-	-	15	В
	Market Street & 5 19 "Street	PM	Signal	-	-	-	17	В
5	Market Street & Jefferson	AM	CCCC	WB	11	В	-	-
	Avenue	PM	SSSC	WB	15	С	-	-
6	Jefferson Avenue & S 21st	AM	C'a a a l	-	-	-	25	С
	Street	PM	Signal	-	-	-	32	С
7	Jefferson Avenue & S 19th	AM	AVAICC	-	-	-	7	Α
	Street	PM	AWSC	-	-	-	7	Α

#### NOTES:

- 1. This represents the worst movement LOS and is only reported for unsignalized intersections using HCM 6 methodology.
- 2. This represents the overall intersection LOS and is only reported for signalized intersections using the HCM 6 methodology.
- 3. NB=Northbound, SB=Southbound, EB=Eastbound, WB=Westbound, LT= Left Turn.

Source: Fehr & Peers, 2024.



## Active Transportation

## **Pedestrian and Bike Facilities**

A primary motivation for the vacation of 19<sup>th</sup> Street and Court C is to improve and expand pedestrian and bike facilities on campus and provide infrastructure that encourages safe and comfortable use for all users.

Cross Campus Pedestrian Route

A series of steps and ramps provide an east-west pedestrian connection through the heart of the UWT campus along the extension of 19<sup>th</sup> Street. The route is lit and interspersed with trees, landscaping, and benches. It provides connection between Pacific Avenue to Jefferson Avenue that is entirely motor-vehicle free. It provides direct access to many campus facilities and allows for quick access to the Tacoma Link Light Rail Line on Pacific Avenue. The Prairie Line Trail bisects this pedestrian route and is a mile-long linear park that links the waterfront, downtown, and Brewery Districts to UWT Campus, extending this carfree and car-light realm north and south.

The proposed vacation of 19<sup>th</sup> Street would allow this Pedestrian Route to extend further west to Market Street as the campus grows up the hill. The extension of this cross-campus pedestrian route is depicted in the UWT 2008 Campus Master Plan. The vacation of 19<sup>th</sup> Street would allow for the extension of separated and efficient cross-campus pedestrian circulation and ensure a direct connection to transit facilities, encouraging their ridership. The 19<sup>th</sup> Street vacation and extension of this pedestrian route would also allow for increased area for students, faculty, and visitors to enjoy well designed outdoor space, bringing increased vitality to campus. **Figure 10** shows the existing and proposed extension of this Cross Campus Pedestrian Route.

The proposed Court C vacation also allows for additional space for campus development, which could include additional pedestrian circulation improvements.





**Figure 10: Cross Campus Pedestrian Route** *Background Source: https://www.tacoma.uw.edu/campus-map* 



#### Sidewalks & Pedestrian Crossings

Sidewalks are located along the streets within the study area. Recent projects have installed curb ramps and intersections and improved sidewalk conditions.

#### 19th Street Vacation

The vacation of 19<sup>th</sup> Street would require the reconfiguration of the intersections of 19<sup>th</sup> Street with Market Street and Jefferson Avenue. Currently the eastern leg of the intersection of 19<sup>th</sup> Street and Market Street does not have a striped crossing or curb ramps on the southeastern corner of the intersection. With the 19<sup>th</sup> Street closure, any future redesign of this vacated leg would require the sidewalk along the eastern side of Market Street to be modified and extended through the intersection and built to meet minimum City of Tacoma and ADA standards. This would greatly reduce conflicts between pedestrians and vehicles and improve comfort for people traveling north or south on the eastern side of Market Street. The removal of the eastern leg of the intersection of 19<sup>th</sup> Street and Market Street will also eliminate the need for the dedicated southbound left turn and eastbound through lanes. The available space for these no longer needed lanes provides further opportunities to improve pedestrian crossings with treatments such as median refuge islands or curb bump outs, which would reduce the travel distance that pedestrians are exposed to conflicts with motor vehicles.

Additionally, the western leg of the intersection of 19<sup>th</sup> Street and Jefferson Avenue was recently improved to include a striped crosswalk and curb ramps. With the 19<sup>th</sup> Street closure, any future redesign of this vacated leg would require the sidewalk along the western side of Jefferson Avenue to be modified and extended through the intersection and built to meet minimum City of Tacoma and ADA standards. This would reduce conflicts between pedestrians and vehicles and improve comfort for people traveling north or south on the western side of Jefferson Avenue.

#### **Court C Vacation**

The vacation of Court C would require the reconfiguration of the intersection of Court C and Jefferson Avenue. The existing geometry of this intersection and its proximity to the intersection of 19<sup>th</sup> Street and Jefferson Avenue can lead to confusing and difficult movements for users entering or exiting Court C at this intersection, many of whom may misinterpret pavement markings that direct channelization and intended allowable movements. The closure of Court C would eliminate this intersection altogether. With the Court C closure, any future redesign of this vacated leg would require the sidewalk along the western side of Jefferson Avenue to be modified and extended through the intersection and built to meet minimum City of Tacoma and ADA standards. This would reduce conflicts between pedestrians and vehicles and improve comfort for people traveling north or south on the western side of Jefferson Avenue.

## **Bicycle Facilities**

There are no dedicated bicycle facilities on the streets in the study area. The vacation of 19<sup>th</sup> Street and Court C would improve cyclist separation and comfort by reducing the number of crossings and conflicts with vehicles and eliminating the confusing intersection of Court C and Jefferson Avenue.



## **Transit**

There are eight bus stops within or adjacent to the study area. None of these bus stops are located on the segments of the proposed street vacations. The Pierce Transit bus routes servicing these bus stops were reviewed and none of the routes utilize the segments of the proposed street vacation nor are they likely utilize them for temporary or future re-routes. Therefore, all transit service can be maintained without mitigation if the proposed sections of 19<sup>th</sup> Street and Court C are vacated. The Pierce Transit Bus Route Map is included in **Appendix C**.

# Safety

## **Road Safety**

WSDOT manages a collision database that contains details about location features, collision types, contributing circumstances, and other factors associated with recorded collisions. An analysis of collision data from the past five years (2018-2022) was conducted to identify collision patterns at the seven study intersections. The 2023 collision data remains unreleased and was not incorporated into the safety analysis for this TIA. Details of the 5-year collision history at the study intersections are presented in **Table 6**. A total of 30 collisions occurred at the study intersections, with an additional 3 occurring along segments within the study area. Of these collisions, 8 resulted in possible/minor injury, while 2 resulted in serious injury. Of these serious injury collisions, one was with a pedestrian while the other was a fixed object collision for an eastbound vehicle failing to turn properly at 19<sup>th</sup> Street and Jefferson Avenue. No collisions resulting in fatality occurred within the study area. Two vehicle-to-pedestrian collisions occurred within the study area:

- The first occurred during daylight at the intersection of S 17th Street & Market Street. A vehicle approaching from the west and turning left towards the north, struck a pedestrian due to a failure to yield the right of way, resulting in a potential injury.
- Another pedestrian collision took place at Market Street & Jefferson Avenue, involving one
  vehicle and one pedestrian. This occurred in dark, no streetlight in rainy weather, where the
  vehicle was going straight from south to north and hit the pedestrian in the primary traffic lane
  which resulted in suspected serious injury.

The potential street vacations would both remove key conflict points between pedestrians and vehicles at the crossings near 19<sup>th</sup> Street and Court C; these street vacations also provide potential opportunities to construct additional separated facilities in these locations.



**Table 6: Study Intersection Collisions 2018-2022** 

Location	Total	Unknown	No Apparent Injury	Possible Injury	Suspected Minor Injury	Suspected Serious Injury	Fatality
Market Street & S 17th Street	11	0	6	2	3	0	0
Court C & S 17th Street	0	0	0	0	0	0	0
Jefferson Avenue & S 17th Street	0	0	0	0	0	0	0
Market Street & S 19th Street	5	0	3	2	0	0	0
Market Street & Jefferson Avenue	1	0	0	0	0	1	0
Jefferson Avenue & S 21st Street	10	2	8	0	0	0	0
Jefferson Avenue & S 19th Street	3	0	1	1	0	1	0

Source: WSDOT Collision Data, Fehr & Peers, 2024.

## **Emergency Response**

The vacation of 19<sup>th</sup> Street and Court C is not anticipated to have significant impact on emergency response vehicles because neither street is an effective through route. Emergency access to all future buildings will be appropriately designed. One existing hydrant is located on the north side of 19<sup>th</sup> Street and will need to be relocated with the vacation of 19<sup>th</sup> Street.



# Parking Analysis

## **Purpose**

The parking analysis estimated the net reduction of on-street parking spaces with the vacations of 19<sup>th</sup> Street and Court C and evaluated the available nearby on-street parking capacity to accommodate the net reduction.

This Parking supply and occupancy data were collected by IDAX Data Solutions while class was in session on Wednesday, January 10<sup>th</sup>, 2024, during the peak four hours of the day (10:00 AM – 1:00 PM) along the following roadway segments. The collected data is included in **Appendix A**.

- Court C from Jefferson Avenue to 17<sup>th</sup> Street
- Market Street from 21st Street to 17th Street
- 17<sup>th</sup> Street from Pacific Avenue to Fawcett Avenue
- Jefferson Avenue from Markey Street to 17<sup>th</sup> Street

## **On-Street Parking Supply**

On-street parking in the study area includes a mixture of paid and free parking. Parking limits include 90-minute, 2-hour, and 3-hour parking. **Figure 11** shows the UWT Campus Parking Map. The total on-street parking supply in the study area is 258 spaces. Note that total on-street supply does not include the 10 permitted spaces of the Upper Pinkerton Lot on Court C and does include the 7 on-street spaces on 19<sup>th</sup> Street between Market Street and Jefferson Avenue. Generally, on-street parking is considered at maximum capacity when it is 85% occupied. This is to account for inefficiencies that sometimes occur with unmarked street parking and the inability of every available spot to be found by someone wishing to park. The maximum capacity of the on-street parking in the study area is assumed to be 219 spaces.

## **Parking Supply Impacts**

The vacation of 19<sup>th</sup> Street will eliminate 7 on-street parking spaces (3 spaces on the north side of 19<sup>th</sup> Street and 4 spaces on the south side of 19th Street). The curb line of Market Street and Jefferson Avenue will be extended to close 19<sup>th</sup> Street. No new on-street parking spaces can be added to Market Street because the new length of curb is within the intersection of 19<sup>th</sup> Street and Market Street. This analysis assumes that the reconstruction of Jefferson Avenue would include curb bump outs to reduce the distance for pedestrians to cross Jefferson Avenue and extend the cross-campus pedestrian connection. The curb bump-outs would reduce the available curb length for on-street parking with reconstruction. Two new on-street parking spaces could be added Jefferson Avenue when accounting for curb bump-outs. The resulting impact on the on-street parking supply because of the vacancy of 19<sup>th</sup> Street is a net reduction of 5 on-street parking spaces.



The vacation of Court C would maintain access to the parking garage below Court 17 Apartments, on-street parking directly in front of Court 17 Apartments, and the upper Pinkerton Lot parking spaces. The vacation of Court C will eliminate 14 on-street parking spaces along the west side of Court C, south of the parking garage. Ten on-street parking spaces would remain on Court C. The curb line of Jefferson Avenue will be extended to close Court C and five new on-street spaces could be added to Jefferson Avenue. These five spaces are in addition to the two new spaces from the vacation of 19<sup>th</sup> Street as described above. The resulting impact of the on-street parking supply with the vacancy of Court C is a net reduction of 9 on-street parking spaces. This would result in an overall reduction of 14 on-street parking spaces with the vacation of both 19<sup>th</sup> Street and Court C.

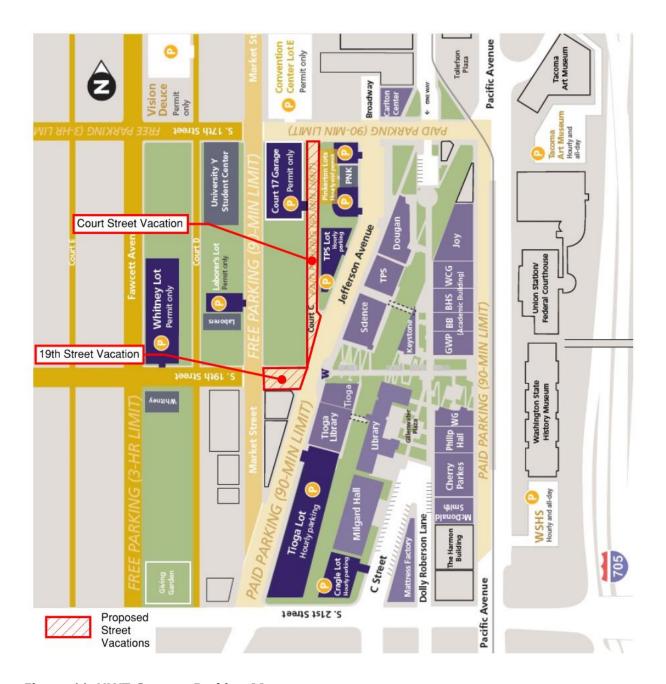
Peak on-street parking demand was observed to be 213 spaces occupied at 11 AM. Court C was observed to have consistently low demand ranging from 21% to 58% occupied, among the lowest occupied segments observed. **Figure 12** summarizes the observed parking occupancy. During on-street parking demand (11 AM), 9 of the 24 available on-street parking spaces were occupied on Court C. After the closure of Court C there will be 10 remaining on-street parking spaces that could accommodate the demand for 9 parking spaces observed at 11 AM. If an 85% maximum parking capacity is assumed, one vehicle would be displaced. The one vehicle could reasonably be accommodated in nearby available capacity of parking spaces observed at that time, such as on 17<sup>th</sup> Street between Market Street and Jefferson Avenue.

The highest occupancy observed on Court C was at 12 PM with 14 spaces occupied. After the closure of Court C there would be 10 on-street parking spaces available, resulting in 4 displaced vehicles (6 displaced vehicles if an 85% maximum parking capacity is assumed). These 4 to 6 vehicles could reasonably be accommodated in nearby available parking spaces observed at that time, such as on 17<sup>th</sup> Street or Jefferson Avenue.

The 7 parking spaces on the proposed vacation of 19<sup>th</sup> Street are understood to have very low occupancy. The low demand is likely attributable to the steep grade of the street requiring the curbing of wheels and the street configuration that does not make it obvious that parking is allowed on this portion of 19<sup>th</sup> Street.

Parking demand for future campus expansion will be analyzed with future projects. This analysis only examined the impacts to on-street parking due to the proposed street vacations and not future campus expansion projects.





**Figure 11: UWT Campus Parking Map** 

Background Source: https://www.tacoma.uw.edu/fa/facilities/transportation/parking-maps



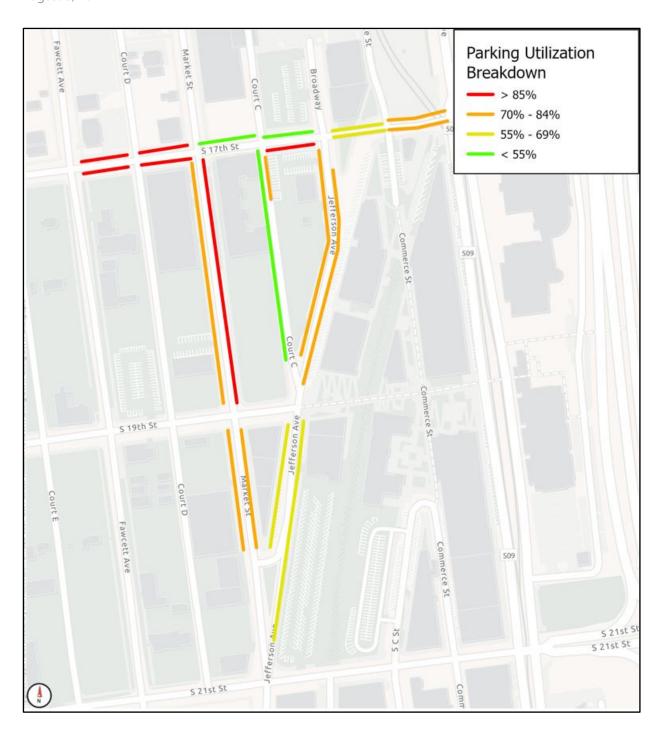


Figure 12: 2024 Parking Occupancy for Facilities Near UWT Source: Fehr & Peers, 2024.



## Conclusions

The proposed vacations of 19<sup>th</sup> street and Court C were analyzed, and the results indicated no change in LOS from Existing (2024) Conditions or Horizon (2030) No Action conditions for Scenario 1 or Scenario 2.

The proposed vacations will allow for the extension of the existing cross-campus pedestrian circulation and allow for UWT campus expansion. The vacations will reduce conflicts between pedestrians, cyclists and vehicles traveling north or south on Market Street and Jefferson Avenue. The 19<sup>th</sup> Street vacation will allow for further opportunities to improve pedestrian crossings with the available space from the no longer needed southbound left and eastbound through lanes at the intersection of 19<sup>th</sup> Street and Market Streets. The closure of Court C will eliminate the confusing intersection of Court C and Jefferson Avenue.

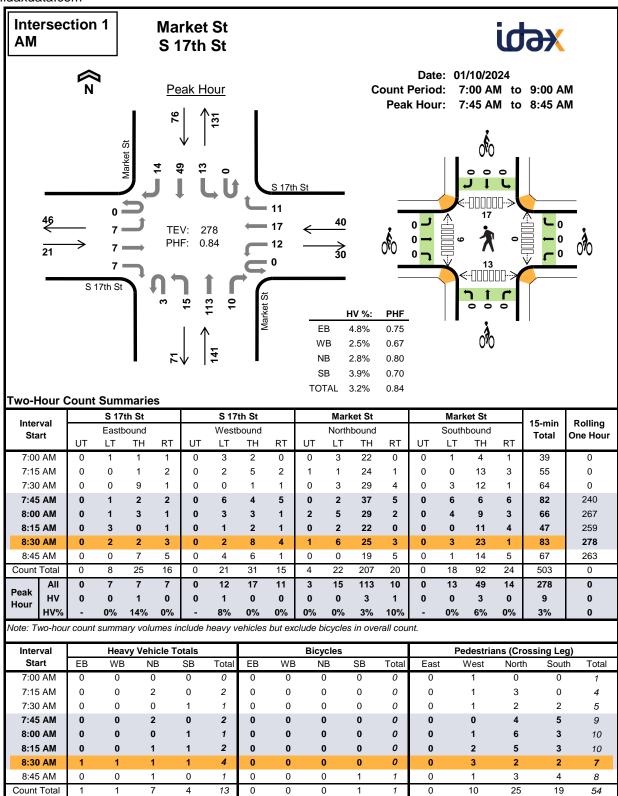
The proposed vacations would not have significant impacts to the operations of transit, or emergency response. One hydrant will need to be relocated with the vacation of 19<sup>th</sup> Street.

The vacation of 19<sup>th</sup> Street will result in an estimated net reduction of 5 on-street parking spaces. The vacation of Court C will result in an estimated net reduction of 9 on-street parking spaces, resulting in an overall net reduction of 14 on-street parking spaces with the vacation of both 19<sup>th</sup> Street and Court C. The on-street parking spaces that would be removed on 19<sup>th</sup> Street and Court C were observed to have lower demand compared to other locations in the study area. The observed existing parking capacity is reasonably able to accommodate estimated displaced vehicles resulting from the street vacations.



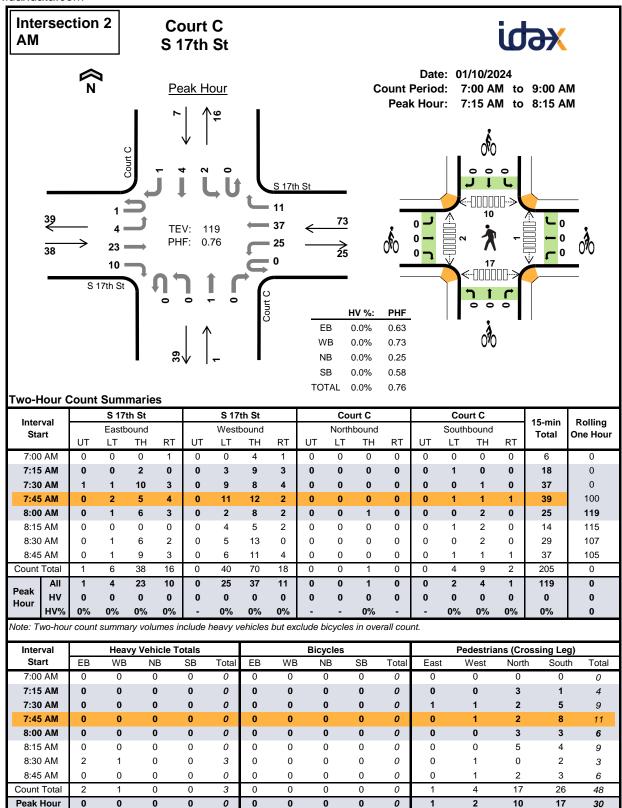
## **Appendix A – Traffic & Parking Counts**

Peak Hour



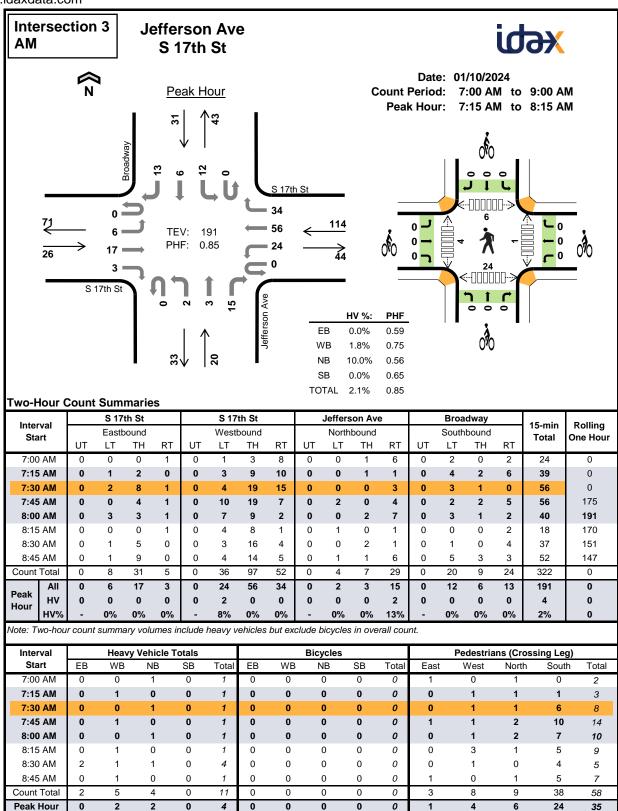
lutamial		S 17	th St			S 17	th St			Mark	et St			Mark	cet St		45	Dalling
Interval Start		Easth	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	5
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	6
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	6
8:30 AM	0	0	1	0	0	1	0	0	0	0	0	1	0	0	1	0	4	9
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	8
Count Total	0	0	1	0	0	1	0	0	0	0	6	1	0	0	4	0	13	0
Peak Hour	0	0	1	0	0	1	0	0	0	0	3	1	0	0	3	0	9	0

Interval		S 17th S	t		S 17th S	t		Market S	it		Market S	it	15-min	Dalling
Interval Start	Е	Eastboun	d	٧	Vestbour	nd	١	lorthbour	nd	S	outhbour	nd	Total	Rolling One Hour
Otare	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	Total	One riou
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Count Total	0	0	0	0	0	0	0	0	0	1	0	0	1	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Two-Hour (	Count	Sum	marie	s - H	eavy \	<b>Vehic</b>	les											
I4		S 17	th St			S 17	th St			Cou	ırt C			Cou	ırt C		45	D - III
Interval Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

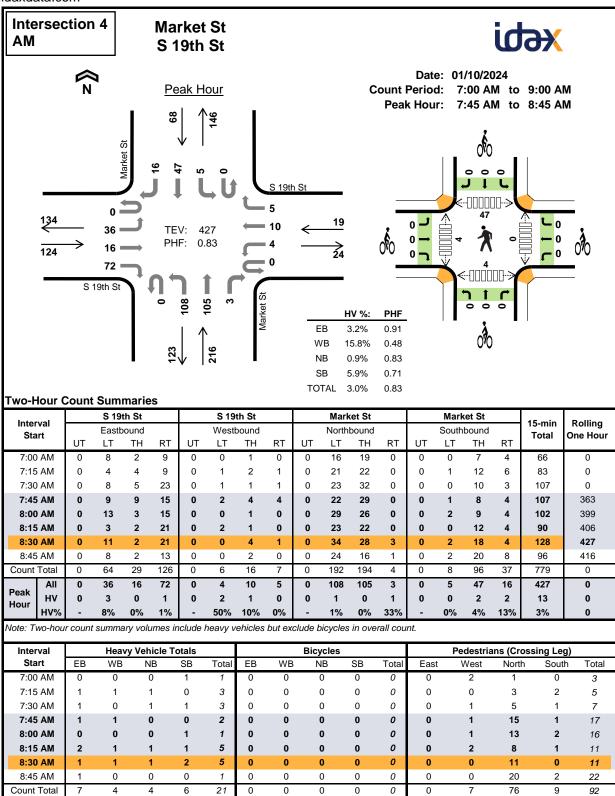
Interval		S 17th S	t		S 17th S	t		Court C			Court C		15-min	Rolling
Start	Е	astboun	d	٧	Vestbour	ıd	N	lorthbour	nd	S	outhbour	nd	Total	One Hour
0	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.10 1.10
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Two-Hour (	Count	Sum	marie	s - He	eavy \	<b>Vehic</b>	les											
I4		S 17	th St			S 17	th St			Jeffers	on Ave	•		Broa	dway		45	D-III
Interval Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One Hour
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	4
8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	4
8:30 AM	0	0	2	0	0	0	1	0	0	0	0	1	0	0	0	0	4	7
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	7
Count Total	0	0	2	0	0	4	1	0	0	0	0	4	0	0	0	0	11	0
Peak Hour	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	4	0

Interval		S 17th S	t		S 17th S	t	Je	fferson A	Ave	E	Broadwa	у	15-min	Rolling
Start	Е	astboun	d	٧	Vestbour	ıd	N	lorthbour	nd	S	outhbour	nd	Total	One Hour
0	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.10 1.10
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

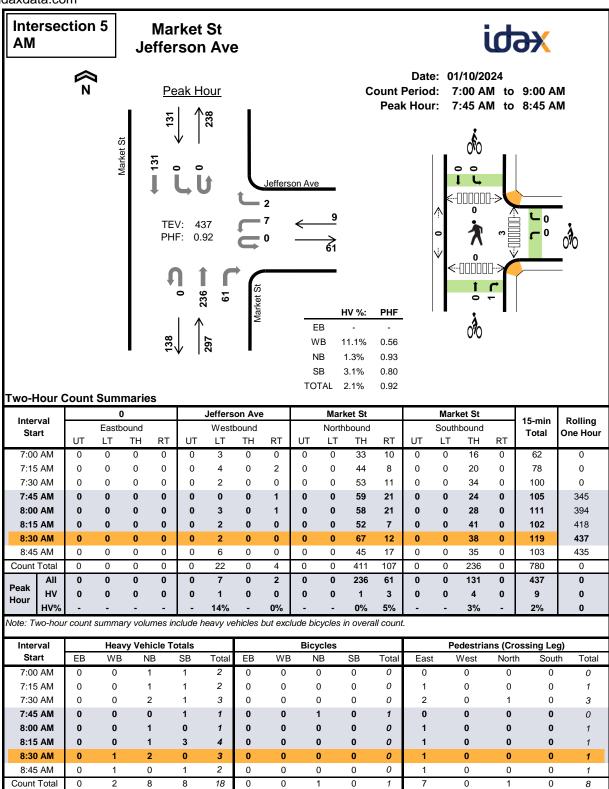
Peak Hour



Two-Hour (	Count	Sum	marie	s - H	eavy \	<b>Vehic</b>	les											
lutam al		S 19	th St			S 19	th St			Mark	ket St			Mari	cet St		45	D - III
Interval Start		Easth	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One Hour
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
7:15 AM	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	3	0
7:30 AM	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	3	0
7:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	9
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	9
8:15 AM	0	1	0	1	0	1	0	0	0	1	0	0	0	0	1	0	5	11
8:30 AM	0	1	0	0	0	0	1	0	0	0	0	1	0	0	1	1	5	13
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	12
Count Total	0	5	0	2	0	3	1	0	0	1	2	1	0	0	2	4	21	0
Peak Hour	0	3	0	1	0	2	1	0	0	1	0	1	0	0	2	2	13	0

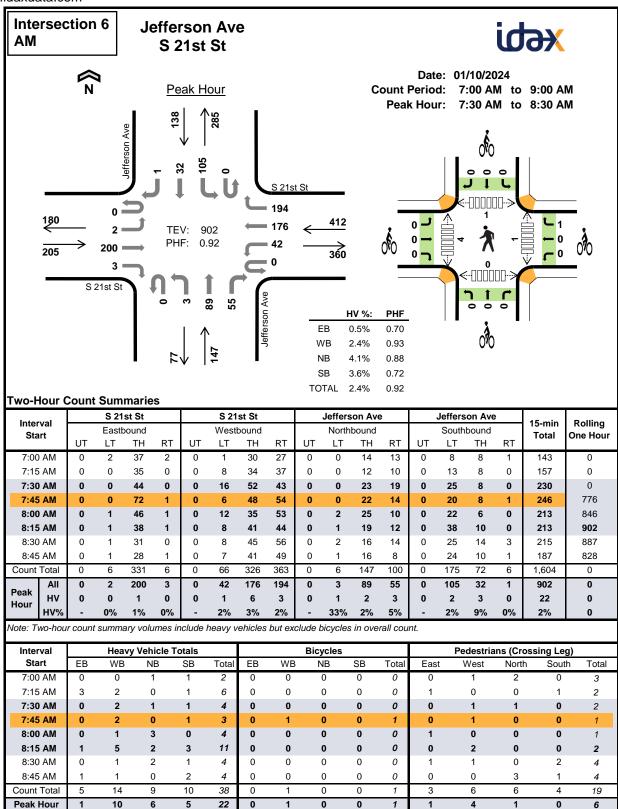
Interval		S 19th S	t		S 19th S	t		Market S	it		Market S	t	15-min	Rolling
Start	Е	Eastboun	d	٧	Vestboun	ıd	N	lorthbour	nd	S	outhbour	nd	Total	One Hour
0	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hr



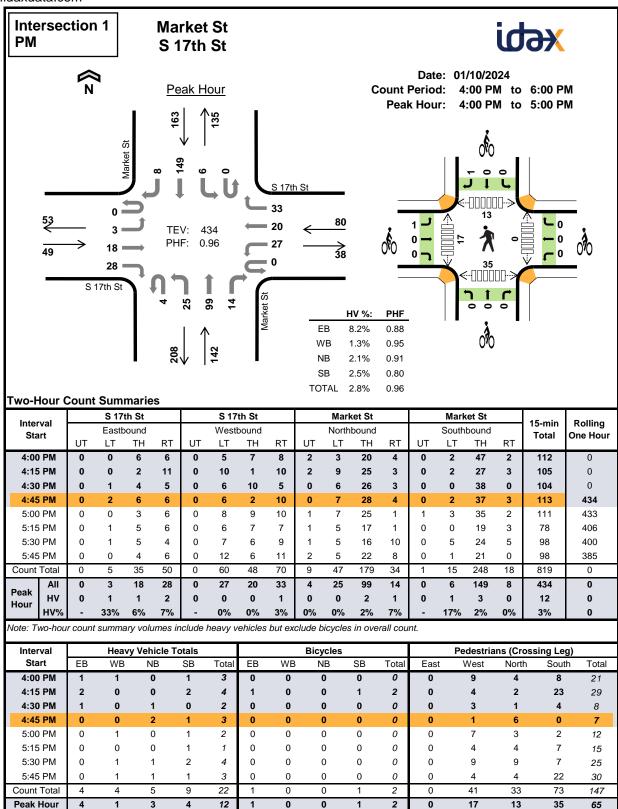
		(	)			Jeffers	on Ave	<del>)</del>		Mark	et St			Mark	et St		4	
Interval Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Start	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One riou
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	3	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	8
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	7
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4	9
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	3	9
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2	10
Count Total	0	0	0	0	0	2	0	0	0	0	3	5	0	0	8	0	18	0
Peak Hour	0	0	0	0	0	1	0	0	0	0	1	3	0	0	4	0	9	0

Internal		0		Je	fferson A	Ave		Market S	it	I	Market S	t	45	D. III
Interval Start		Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
O.a	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Peak Hour	0	0	0	0	0	0	0	0	1	0	0	0	1	0



I		S 21	st St			S 21	st St			Jeffers	on Ave	•		Jeffers	on Ave	)	45!	D - 111
Interval Start		Easth	ound			Westl	oound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
7:15 AM	0	0	3	0	0	1	0	1	0	0	0	0	0	0	1	0	6	0
7:30 AM	0	0	0	0	0	1	0	1	0	0	1	0	0	1	0	0	4	0
7:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	3	15
8:00 AM	0	0	0	0	0	0	1	0	0	0	1	2	0	0	0	0	4	17
8:15 AM	0	0	1	0	0	0	3	2	0	1	0	1	0	1	2	0	11	22
8:30 AM	0	0	0	0	0	0	1	0	0	0	1	1	0	1	0	0	4	22
8:45 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2	0	4	23
Count Total	0	0	5	0	0	2	7	5	0	1	4	4	0	3	7	0	38	0
Peak Hour	0	0	1	0	0	1	6	3	0	1	2	3	0	2	3	0	22	0

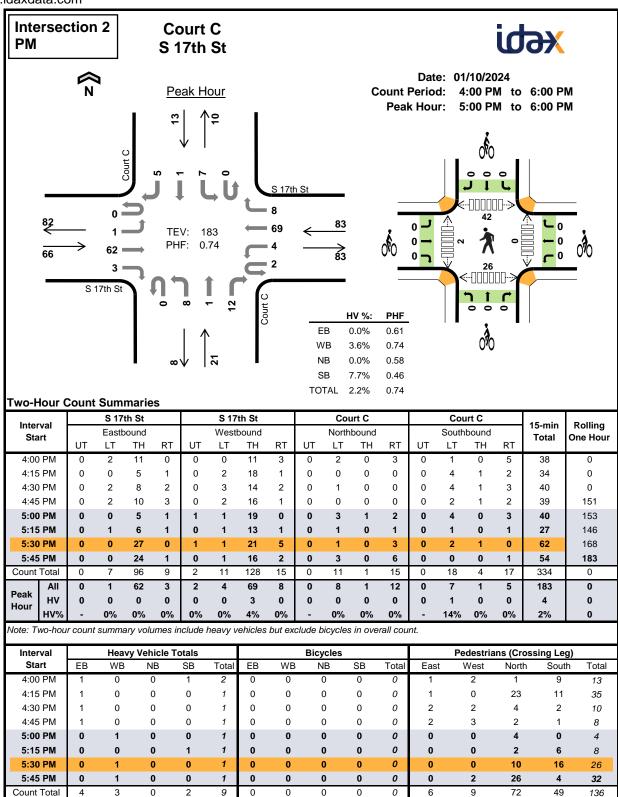
Interval		S 21st St	t		S 21st S	t	Je	fferson /	Ave	Je	fferson A	Ave	15-min	Rolling
Start	E	Eastboun	d	٧	Vestbour	nd	١	Northbour	nd	S	outhbour	nd	Total	One Hour
J.a.i.	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	. • • • •	0.101.104.1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	1	0	0	0	0	0	0	1	0
Peak Hour	0	0	0	0	0	1	0	0	0	0	0	0	1	0



Two-Hour (	Count	Sum	marie	s - He	eavy \	<b>Vehic</b>	les											
Interval		S 17	th St			S 17	th St			Mari	ket St			Mari	cet St		45	Dalling
Interval Start		Easth	oound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
4:00 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	3	0
4:15 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	1	1	0	4	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	12
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	11
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	8
5:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	4	10
5:45 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	3	10
Count Total	0	1	1	2	0	0	0	4	0	0	4	1	0	2	7	0	22	0
Peak Hour	0	1	1	2	0	0	0	1	0	0	2	1	0	1	3	0	12	0

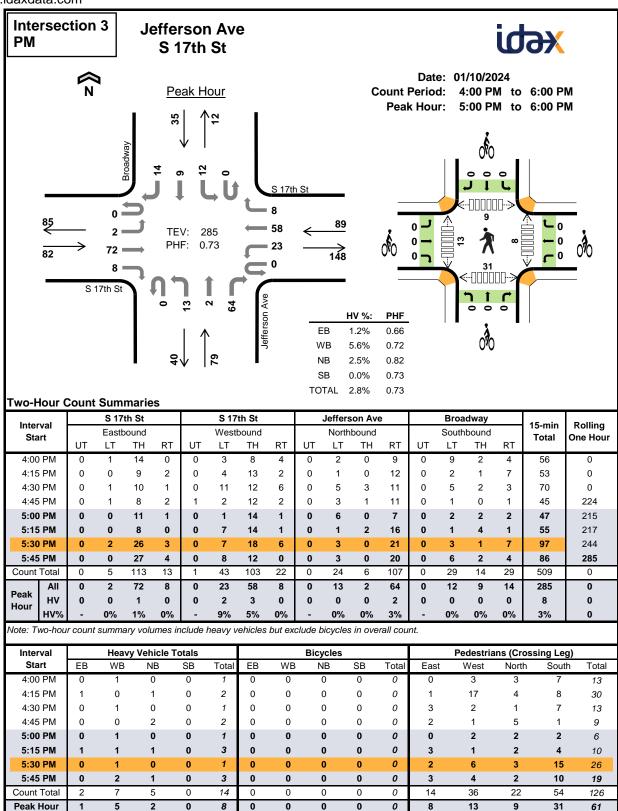
Interval		S 17th S	t		S 17th S	t		Market S	it		Market S	it	15-min	Rolling
Start	E	Eastboun	d	٧	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	Total	One Hour
O.L	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	. • • • • •	0.101.104.1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	0	0	0	0	0	0	0	0	0	1	2	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	1	0	0	0	0	0	0	0	0	0	0	1	2	0
Peak Hour	1	0	0	0	0	0	0	0	0	0	0	1	2	0

Peak Hour



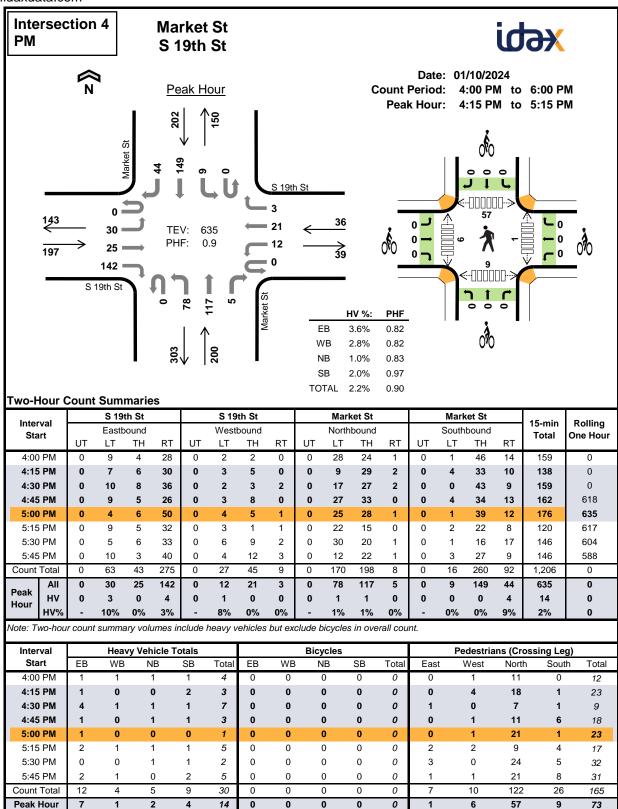
Interval		S 17	th St			S 17	th St			Cou	ırt C			Cou	ırt C		45	Rolling
Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	υT	LT	TH	RT	Total	One moun
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	4
5:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	4
5:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	4
Count Total	0	3	1	0	0	0	3	0	0	0	0	0	0	1	0	1	9	0
Peak Hour	0	0	0	0	0	0	3	0	0	0	0	0	0	1	0	0	4	0

Interval		S 17th S	t		S 17th S	t		Court C	;		Court C		15-min	Rolling
Start	E	Eastboun	d	٧	Vestbour	nd	١	lorthbour	nd	S	outhbour	nd	Total	One Hour
J.a	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.10 1.10
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Interval		S 17	th St			S 17	th St			Jeffers	on Ave	•		Broa	dway		45	Dalling
Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	6
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	6
5:15 PM	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	3	7
5:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	7
5:45 PM	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	3	8
Count Total	0	0	2	0	0	4	3	0	0	0	0	5	0	0	0	0	14	0
Peak Hour	0	0	1	0	0	2	3	0	0	0	0	2	0	0	0	0	8	0

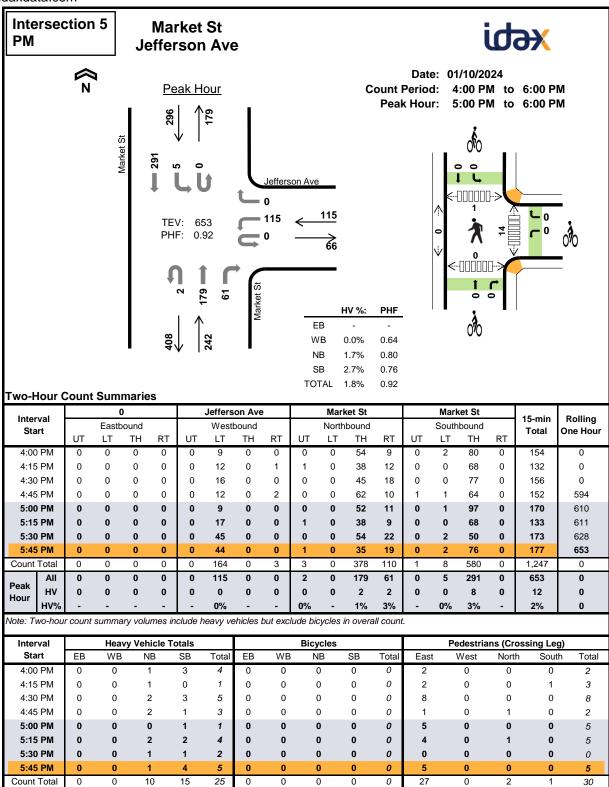
Interval		S 17th S	t		S 17th S	t	Je	fferson /	Ave	E	Broadwa	у	15-min	Rolling
Start	Е	Eastboun	d	٧	Vestbour	nd	N	Northbour	nd	S	outhbour	nd	Total	One Hour
J.a	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Two-Hour (	Count	Sum	marie	s - He	eavy \	Vehic	les											
lutam al		S 19	th St			S 19	th St			Mark	ket St			Mark	cet St		45	D - III
Interval Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	Ono mou
4:00 PM	0	0	0	1	0	1	0	0	0	1	0	0	0	0	1	0	4	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0
4:30 PM	0	1	0	3	0	1	0	0	0	1	0	0	0	0	0	1	7	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	3	17
5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	14
5:15 PM	0	1	0	1	0	1	0	0	0	1	0	0	0	0	0	1	5	16
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2	11
5:45 PM	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2	0	5	13
Count Total	0	5	0	7	0	4	0	0	0	4	1	0	0	0	4	5	30	0
Peak Hour	0	3	0	4	0	1	0	0	0	1	1	0	0	0	0	4	14	0

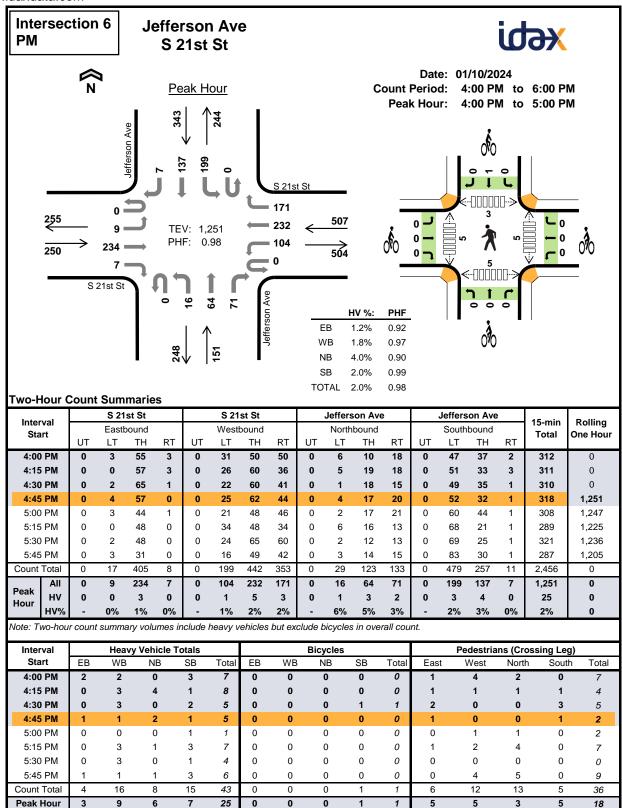
Interval		S 19th S	t		S 19th S	t	I	Market S	it	- 1	Market S	t	15-min	Rolling
Start	Е	astboun	d	٧	Vestbour	ıd	N	lorthbour	nd	S	outhbour	nd	Total	One Hour
0	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.10 1.10
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hr



			)			leffers	on Ave	,		Mark	cet St			Mark	et St			
Interval			oound				bound				bound				bound		15-min	Rolling
Start	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One Hour
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	3	13
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	10
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	4	13
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	10
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4	0	5	12
Count Total	0	0	0	0	0	0	0	0	0	0	6	4	0	0	15	0	25	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	2	2	0	0	8	0	12	0

Internal		0		Je	fferson A	Ave		Market S	St	ı	Market S	t	45	D. III.
Interval Start	- 1	Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
J.a	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Two-Hour (	Count	Sum	marie	s - He	eavy \	<b>Vehic</b>	les											
lutamal.		S 21	st St			S 21	st St			Jeffers	on Ave	•		Jeffers	on Ave	)	45	D-III
Interval Start		Easth	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Start	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	. Stai	O.IO FIOUR
4:00 PM	0	0	2	0	0	0	1	1	0	0	0	0	0	2	1	0	7	0
4:15 PM	0	0	0	0	0	1	2	0	0	1	1	2	0	0	1	0	8	0
4:30 PM	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2	0	5	0
4:45 PM	0	0	1	0	0	0	1	0	0	0	2	0	0	1	0	0	5	25
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	19
5:15 PM	0	0	0	0	0	1	1	1	0	0	1	0	0	2	1	0	7	18
5:30 PM	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1	0	4	17
5:45 PM	0	0	1	0	0	0	1	0	0	0	1	0	0	1	1	1	6	18
Count Total	0	0	4	0	0	2	9	5	0	1	5	2	0	7	7	1	43	0
Peak Hour	0	0	3	0	0	1	5	3	0	1	3	2	0	3	4	0	25	0

## Two-Hour Count Summaries - Bikes

Interval		S 21st St	t		S 21st S	t	Je	fferson A	Ave	Je	fferson A	Ave	15-min	Rolling
Interval Start	Е	astboun	d	V	Westbound			lorthbour	nd	S	outhbour	nd	Total	One Hour
Otare	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	Total	One near
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	1	0	1	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	1	0	1	0

Note: U-Turn volumes for bikes are included in Left-Turn, if any.



Segment IDs

ID	Street	Reference	Side T	otal_Supply	3-Hr_Supply	/ 2-Hr_Supply	90Min_Supply	Zipcar_Supply	Permit_Supply	ADA_Supply
1	Court C	Btwn Jefferson to Off-Street	Ε	0	0	0	0	0	0	0
2	Court C	Btwn S 17th St to Jefferson	W	24	0	24	0	0	0	0
3	Court C	(Off-Street)	Ε	10	0	0	0	0	8	2
4	Market St	Btwn Jefferson Ave to S 19th St	Е	15	0	0	15	0	0	0
5	Market St	Btwn S 19th St to Jefferson Ave	W	9	0	0	9	0	0	0
6	Market St	Btwn S 19th St to S 17th St	Е	15	0	0	15	0	0	0
7	Market St	Btwn S 17th St to S 19th St	W	28	0	0	28	0	0	0
8	S 17th St	Btwn Market St to Court C	S	0	0	0	0	0	0	0
9	S 17th St	Btwn Court C to Jefferson Ave	S	4	0	4	0	0	0	0
10	S 17th St	Btwn Jefferson Ave to Commerce St	S	3	0	0	3	0	0	0
11	S 17th St	Btwn Commerce St to Pacific Ave	S	2	0	0	0	2	0	0
12	S 17th St	Btwn Pacific Ave to Commerce St	N	3	0	0	3	0	0	0
13	S 17th St	Btwn Commerce St to Jefferson Avenue	N	3	0	0	3	0	0	0
14	S 17th St	Btwn Jefferson Ave to Court C	N	4	0	4	0	0	0	0
15	S 17th St	Btwn Court C to Market St	N	2	0	2	0	0	0	0
16	S 17th St	Btwn S Court D St to Market St	S	8	8	0	0	0	0	0
17	S 17th St	Btwn Market St to S Court D St	N	10	0	0	10	0	0	0
18	S 17th St	Btwn S Court D St to Fawcett Ave	N	6	0	0	6	0	0	0
19	S 17th St	Btwn Fawcett Ave to S Court D St	S	7	7	0	0	0	0	0
20	Jefferson Ave	Btwn Market St to S 19th St	Е	30	0	30	0	0	0	0
21	Jefferson Ave	Btwn S 19th St to S 17th St	Е	48	0	45	0	0	0	3
22	Jefferson Ave	Btwn S 17th St to Court C	W	13	0	13	0	0	0	0
23	Jefferson Ave	Btwn S 19th St to Market St	W	17	0	17	0	0	0	0
				261	15	139	92	2	8	5

ID	Street	Reference	10am_Total_	Occ 10am_Total_Occ_Pc 10am	_TimeLimited_Occ	10am_ADA	10am_Illegal_Occ
1	Court C	Btwn Jefferson to Off-Street	0	0.0%	0	0	0
2	Court C	Btwn S 17th St to Jefferson	5	20.8%	5	0	0
3	Court C	(Off-Street)	9	90.0%	7	2	0
4	Market St	Btwn Jefferson Ave to S 19th St	11	73.3%	11	0	0
5	Market St	Btwn S 19th St to Jefferson Ave	7	77.8%	7	0	0
6	Market St	Btwn S 19th St to S 17th St	13	86.7%	13	0	0
7	Market St	Btwn S 17th St to S 19th St	22	78.6%	22	0	0
8	S 17th St	Btwn Market St to Court C	0	0.0%	0	0	0
9	S 17th St	Btwn Court C to Jefferson Ave	3	75.0%	3	0	0
10	S 17th St	Btwn Jefferson Ave to Commerce St	2	66.7%	2	0	0
11	S 17th St	Btwn Commerce St to Pacific Ave	2	100.0%	0	0	2
12	S 17th St	Btwn Pacific Ave to Commerce St	2	66.7%	2	0	0
13	S 17th St	Btwn Commerce St to Jefferson Avenue	1	33.3%	1	0	0
14	S 17th St	Btwn Jefferson Ave to Court C	0	0.0%	0	0	0
15	S 17th St	Btwn Court C to Market St	0	0.0%	0	0	0
16	S 17th St	Btwn S Court D St to Market St	8	100.0%	8	0	0
17	S 17th St	Btwn Market St to S Court D St	10	100.0%	10	0	0
18	S 17th St	Btwn S Court D St to Fawcett Ave	8	133.3%	7	0	1
19	S 17th St	Btwn Fawcett Ave to S Court D St	7	100.0%	7	0	0
20	Jefferson Ave	Btwn Market St to S 19th St	17	56.7%	17	0	0
21	Jefferson Ave	Btwn S 19th St to S 17th St	37	77.1%	34	3	0
22	Jefferson Ave	Btwn S 17th St to Court C	11	84.6%	11	0	0
23	Jefferson Ave	Btwn S 19th St to Market St	6	35.3%	6	0	0
			101				

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ID	Street	Reference	11am_Total_Occ	11am_Total_Occ_Pc 1	.1am_TimeLimited_O	cc 11am_ADA 1	.1am_Illegal_Occ
1	Court C	Btwn Jefferson to Off-Street	0	0.0%	0	0	0
2	Court C	Btwn S 17th St to Jefferson	9	37.5%	9	0	0
3	Court C	(Off-Street)	9	90.0%	8	1	0
4	Market St	Btwn Jefferson Ave to S 19th St	12	80.0%	12	0	0
5	Market St	Btwn S 19th St to Jefferson Ave	7	77.8%	7	0	0
6	Market St	Btwn S 19th St to S 17th St	17	113.3%	16	0	1
7	Market St	Btwn S 17th St to S 19th St	22	78.6%	22	0	0
8	S 17th St	Btwn Market St to Court C	0	0.0%	0	0	0
9	S 17th St	Btwn Court C to Jefferson Ave	4	100.0%	4	0	0
10	S 17th St	Btwn Jefferson Ave to Commerce St	2	66.7%	2	0	0
11	S 17th St	Btwn Commerce St to Pacific Ave	4	200.0%	2	0	2
12	S 17th St	Btwn Pacific Ave to Commerce St	3	100.0%	3	0	0
13	S 17th St	Btwn Commerce St to Jefferson Avenue	2	66.7%	2	0	0
14	S 17th St	Btwn Jefferson Ave to Court C	1	25.0%	1	0	0
15	S 17th St	Btwn Court C to Market St	0	0.0%	0	0	0
16	S 17th St	Btwn S Court D St to Market St	8	100.0%	8	0	0
17	S 17th St	Btwn Market St to S Court D St	12	120.0%	11	0	1
18	S 17th St	Btwn S Court D St to Fawcett Ave	7	116.7%	6	0	1
19	S 17th St	Btwn Fawcett Ave to S Court D St	7	100.0%	7	0	0
20	Jefferson Ave	Btwn Market St to S 19th St	26	86.7%	26	0	0
21	Jefferson Ave	Btwn S 19th St to S 17th St	45	93.8%	42	3	0
22	Jefferson Ave	Btwn S 17th St to Court C	11	84.6%	11	0	0
23	Jefferson Ave	Btwn S 19th St to Market St	14	82.4%	14	0	0
			222				

222

ID	Street	Reference	12pm_Total_Occ	12pm_Total_Occ_Pc	12pm_TimeLimited_O	cc 12pm_ADA 1	2pm_Illegal_Occ
1	Court C	Btwn Jefferson to Off-Street	0	0.0%	0	0	0
2	Court C	Btwn S 17th St to Jefferson	14	58.3%	14	0	0
3	Court C	(Off-Street)	8	80.0%	7	1	0
4	Market St	Btwn Jefferson Ave to S 19th St	12	80.0%	12	0	0
5	Market St	Btwn S 19th St to Jefferson Ave	7	77.8%	7	0	0
6	Market St	Btwn S 19th St to S 17th St	14	93.3%	14	0	0
7	Market St	Btwn S 17th St to S 19th St	22	78.6%	22	0	0
8	S 17th St	Btwn Market St to Court C	0	0.0%	0	0	0
9	S 17th St	Btwn Court C to Jefferson Ave	4	100.0%	4	0	0
10	S 17th St	Btwn Jefferson Ave to Commerce St	3	100.0%	3	0	0
11	S 17th St	Btwn Commerce St to Pacific Ave	0	0.0%	0	0	0
12	S 17th St	Btwn Pacific Ave to Commerce St	2	66.7%	2	0	0
13	S 17th St	Btwn Commerce St to Jefferson Avenue	3	100.0%	3	0	0
14	S 17th St	Btwn Jefferson Ave to Court C	4	100.0%	4	0	0
15	S 17th St	Btwn Court C to Market St	2	100.0%	2	0	0
16	S 17th St	Btwn S Court D St to Market St	8	100.0%	8	0	0
17	S 17th St	Btwn Market St to S Court D St	9	90.0%	8	0	1
18	S 17th St	Btwn S Court D St to Fawcett Ave	7	116.7%	6	0	1
19	S 17th St	Btwn Fawcett Ave to S Court D St	7	100.0%	7	0	0
20	Jefferson Ave	Btwn Market St to S 19th St	25	83.3%	25	0	0
21	Jefferson Ave	Btwn S 19th St to S 17th St	37	77.1%	34	3	0
22	Jefferson Ave	Btwn S 17th St to Court C	10	76.9%	10	0	0
23	Jefferson Ave	Btwn S 19th St to Market St	16	94.1%	16	0	0
			214				

ID	Street	Reference	1pm_Total_Occ	1pm_Total_Occ_Pc 1p	om_TimeLimited_Oc	c 1pm_ADA 1	pm_Illegal_Occ
1	Court C	Btwn Jefferson to Off-Street	0	0.0%	0	0	0
2	Court C	Btwn S 17th St to Jefferson	5	20.8%	5	0	0
3	Court C	(Off-Street)	3	30.0%	3	0	0
4	Market St	Btwn Jefferson Ave to S 19th St	12	80.0%	12	0	0
5	Market St	Btwn S 19th St to Jefferson Ave	6	66.7%	6	0	0
6	Market St	Btwn S 19th St to S 17th St	11	73.3%	11	0	0
7	Market St	Btwn S 17th St to S 19th St	19	67.9%	19	0	0
8	S 17th St	Btwn Market St to Court C	0	0.0%	0	0	0
9	S 17th St	Btwn Court C to Jefferson Ave	3	75.0%	3	0	0
10	S 17th St	Btwn Jefferson Ave to Commerce St	1	33.3%	1	0	0
11	S 17th St	Btwn Commerce St to Pacific Ave	0	0.0%	0	0	0
12	S 17th St	Btwn Pacific Ave to Commerce St	2	66.7%	2	0	0
13	S 17th St	Btwn Commerce St to Jefferson Avenue	2	66.7%	2	0	0
14	S 17th St	Btwn Jefferson Ave to Court C	1	25.0%	1	0	0
15	S 17th St	Btwn Court C to Market St	1	50.0%	1	0	0
16	S 17th St	Btwn S Court D St to Market St	8	100.0%	8	0	0
17	S 17th St	Btwn Market St to S Court D St	10	100.0%	9	1	0
18	S 17th St	Btwn S Court D St to Fawcett Ave	6	100.0%	5	1	0
19	S 17th St	Btwn Fawcett Ave to S Court D St	7	100.0%	7	0	0
20	Jefferson Ave	Btwn Market St to S 19th St	15	50.0%	15	0	0
21	Jefferson Ave	Btwn S 19th St to S 17th St	35	72.9%	32	3	0
22	Jefferson Ave	Btwn S 17th St to Court C	6	46.2%	6	0	0
23	Jefferson Ave	Btwn S 19th St to Market St	7	41.2%	7	0	0
			160				

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## **Appendix B – LOS Calculations**

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ች	<b>f</b>		ች	ĵ.		*	<b>f</b>	
Traffic Vol, veh/h	7	7	7	12	17	11	15	113	10	13	49	14
Future Vol, veh/h	7	7	7	12	17	11	15	113	10	13	49	14
Conflicting Peds, #/hr	17	0	13	13	0	17	6	0	0	0	0	6
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	39	-	-	79	-	-	75	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	_	0	-	_	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	5	5	5	2	2	2	3	3	3	4	4	4
Mvmt Flow	8	8	8	14	20	13	18	135	12	15	58	17
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	314	286	86	295	288	158	81	0	0	147	0	0
Stage 1	103	103	-	177	177	-	-	-	-	-	-	-
Stage 2	211	183	_	118	111	_	_	_	_	_	_	_
Critical Hdwy	7.15	6.55	6.25	7.12	6.52	6.22	4.13	_	_	4.14	_	_
Critical Hdwy Stg 1	6.15	5.55	0.20	6.12	5.52	0.22		_	_		_	_
Critical Hdwy Stg 2	6.15	5.55	_	6.12	5.52	_	_	_	_	_	_	_
Follow-up Hdwy	3.545	4.045	3.345	3.518	4.018	3.318	2.227	_	_	2.236	_	_
Pot Cap-1 Maneuver	633	618	964	657	622	887	1510	_	_	1423	_	_
Stage 1	896	804	-	825	753	-		_	_	20	_	_
Stage 2	784	743	-	887	804	-	_	_	_	-	_	_
Platoon blocked, %					J. 1			_	_		_	_
Mov Cap-1 Maneuver	584	600	947	625	604	873	1501	_	-	1423	_	-
Mov Cap-2 Maneuver	584	600	-	625	604	-	-	_	_		-	_
Stage 1	880	790	-	815	744	-	_	-	-	-	_	-
Stage 2	730	734	-	850	790	-	_	-	-	-	-	-
Approach	EB			WB			NB			SB		
	10.5			10.6			0.8			1.3		
HCM Control Delay, s HCM LOS	10.5 B			10.6 B			0.0			1.3		
I IOIVI LOS	D			В								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR		VBLn1\		SBL	SBT	SBR		
Capacity (veh/h)		1501	-	-	676	625	687	1423	-	-		
HCM Lane V/C Ratio		0.012	-	-			0.049		-	-		
HCM Control Delay (s)		7.4	-	-	10.5	10.9	10.5	7.6	-	-		
HCM Lane LOS		Α	-	-	В	В	В	Α	-	-		
HCM 95th %tile Q(veh	)	0	-	-	0.1	0.1	0.2	0	-	-		

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	4	23	10	25	37	11	0	1	0	2	4	1
Future Vol, veh/h	4	23	10	25	37	11	0	1	0	2	4	1
Conflicting Peds, #/hr	17	0	10	10	0	17	2	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e, # -	0	_	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	30	13	33	49	14	0	1	0	3	5	1
Major/Minor I	Major1		<u> </u>	Major2		<u> </u>	Minor1		N	/linor2		
Conflicting Flow All	80	0	0	53	0	0	184	203	48	187	202	75
Stage 1	-	-	-	-	-	-	57	57	-	139	139	-
Stage 2	-	-	-	-	-	-	127	146	-	48	63	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1531	-	-	1566	-	-	781	697	1027	778	698	992
Stage 1	-	-	-	-	-	-	960	851	-	869	785	-
Stage 2	-	-	-	-	-	-	882	780	-	971	846	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1506	-	-	1551	-	-	752	662	1016	749	663	974
Mov Cap-2 Maneuver	-	-	-	-	-	-	752	662	-	749	663	-
Stage 1	-	-	-	-	-	-	948	840	-	852	755	-
Stage 2	-	-	-	-	-	-	854	750	-	966	835	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.8			2.5			10.4			10.1		
HCM LOS							В			В		
Minor Lane/Major Mvm	nt l	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :	SBLn1			
Capacity (veh/h)		662	1506	-	-	1551	-	-	719			
HCM Lane V/C Ratio		0.002		_	_	0.021	-	_	0.013			
HCM Control Delay (s)		10.4	7.4	0	_	7.4	0	-	10.1			
HCM Lane LOS		В	A	A	_	Α	A	-	В			
HCM 95th %tile Q(veh)	)	0	0	-	-	0.1	-	_	0			

Existing Year: AM Peak Hour

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ች	î,		ች	f)			4	
Traffic Vol, veh/h	6	17	3	24	56	34	2	3	15	12	6	13
Future Vol, veh/h	6	17	3	24	56	34	2	3	15	12	6	13
Conflicting Peds, #/hr	6	0	24	24	0	6	4	0	1	1	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	78	-	-	-	-	-
Veh in Median Storage,	,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	2	2	2	10	10	10	0	0	0
Mvmt Flow	7	20	4	28	66	40	2	4	18	14	7	15
Major/Minor N	/lajor1			Major2		ı	Minor1		N	/linor2		
Conflicting Flow All	112	0	0	48	0	0	217	228	47	196	210	96
Stage 1	-	-	-	-	-	-	60	60	-	148	148	-
Stage 2	_	_	_	_	_	_	157	168	_	48	62	_
Critical Hdwy	4.1	_	_	4.12	-	-	7.2	6.6	6.3	7.1	6.5	6.2
Critical Hdwy Stg 1	-	_	_	-	_	_	6.2	5.6	-	6.1	5.5	-
Critical Hdwy Stg 2	_	-	-	_	_	_	6.2	5.6	-	6.1	5.5	_
Follow-up Hdwy	2.2	-	_	2.218	_	-	3.59	4.09	3.39	3.5	4	3.3
Pot Cap-1 Maneuver	1490	-	-	1559	-	-	723	658	1000	767	691	966
Stage 1	-	-	-	-	-	-	932	829	-	859	779	-
Stage 2	-	-	-	-	-	-	827	745	-	971	847	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1481	-	-	1523	-	-	675	624	976	732	656	957
Mov Cap-2 Maneuver	-	-	-	-	-	-	675	624	-	732	656	-
Stage 1	-	-	-	-	-	-	906	806	-	850	760	-
Stage 2	-	-	-	-	-	-	788	727	-	944	823	-
Approach	EB			WB			NB			SB		
	1.7			1.6			9.2			9.8		
HCM Control Delay, s HCM LOS	1.7			1.0			9.2 A			9.0 A		
I IOWI LOG							٨			Α		
Minor Lane/Major Mvmt	t 1	NBLn11		EBL	EBT	EBR	WBL	WBT	WBR S			
Capacity (veh/h)		675	892		-	-	1523	-	-	792		
HCM Lane V/C Ratio			0.024		-	-	0.019	-	-	0.046		
HCM Control Delay (s)		10.4	9.1	7.4	0	-	7.4	-	-	9.8		
HCM Lane LOS		В	Α	Α	Α	-	Α	-	-	Α		
HCM 95th %tile Q(veh)		0	0.1	0	-	-	0.1	-	-	0.1		

	۶	<b>→</b>	*	•	<b>←</b>	4	1	<b>†</b>	~	<b>/</b>	ţ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>†</b>	7	7	<b>ተ</b> ኈ		7	f)		7	ĵ∍	
Traffic Volume (veh/h)	36	16	72	4	10	5	108	105	3	5	47	16
Future Volume (veh/h)	36	16	72	4	10	5	108	105	3	5	47	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.95	0.95		0.95	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1663	1663	1663	1885	1885	1885	1811	1811	1811
Adj Flow Rate, veh/h	43	19	29	5	12	2	130	127	3	6	57	7
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	3	3	3	16	16	16	1	1	1	6	6	6
Cap, veh/h	662	835	671	583	1216	195	650	825	19	570	712	87
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1318	1856	1490	1149	2702	434	1345	1834	43	1218	1581	194
Grp Volume(v), veh/h	43	19	29	5	7	7	130	0	130	6	0	64
Grp Sat Flow(s),veh/h/ln	1318	1856	1490	1149	1580	1557	1345	0	1877	1218	0	1776
Q Serve(g_s), s	1.9	0.6	1.1	0.2	0.2	0.3	6.1	0.0	4.1	0.3	0.0	2.1
Cycle Q Clear(g_c), s	2.1	0.6	1.1	0.8	0.2	0.3	8.2	0.0	4.1	4.4	0.0	2.1
Prop In Lane	1.00		1.00	1.00		0.28	1.00		0.02	1.00		0.11
Lane Grp Cap(c), veh/h	662	835	671	583	711	700	650	0	845	570	0	799
V/C Ratio(X)	0.06	0.02	0.04	0.01	0.01	0.01	0.20	0.00	0.15	0.01	0.00	0.08
Avail Cap(c_a), veh/h	662	835	671	583	711	700	650	0	845	570	0	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.8	15.3	15.4	15.5	15.2	15.2	18.0	0.0	16.3	17.5	0.0	15.7
Incr Delay (d2), s/veh	0.2	0.1	0.1	0.0	0.0	0.0	0.7	0.0	0.4	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.3	0.4	0.1	0.1	0.1	2.0	0.0	1.8	0.1	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	15.3	15.5	15.5	15.2	15.2	18.7	0.0	16.6	17.6	0.0	15.9
LnGrp LOS	В	В	В	В	В	В	В	Α	В	В	Α	B
Approach Vol, veh/h		91			19			260			70	
Approach Delay, s/veh		15.7			15.3			17.7			16.0	
Approach LOS		В			В			В			В	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		50.0		50.0		50.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		45.0		45.0		45.0		45.0				
Max Q Clear Time (g_c+l1), s		2.8		6.4		4.1		10.2				
Green Ext Time (p_c), s		0.1		0.3		0.3		0.9				
Intersection Summary												
HCM 6th Ctrl Delay			16.9									
HCM 6th LOS			В									

HCM 6th TWSC 5: Jefferson Avenue & Market Street	Existing Year: AM Peak Hour

Int Delay, s/veh						
init Delay, Siven	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
	₩.	אפאי		NON	JDL	
Lane Configurations		2	226	61		121
Traffic Vol, veh/h	7	2	236	61	0	131
Future Vol, veh/h	7	2	236	61	0	131
Conflicting Peds, #/hr	0	0	0	3	_ 3	_ 0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	87	-
Veh in Median Storage	e, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	11	1	1	3	3
Mvmt Flow	8	2	257	66	0	142
IVIVIIIL I IOW	U		201	00	U	142
Major/Minor	Minor1	<u> </u>	Major1	<u> </u>	Major2	
Conflicting Flow All	435	293	0	0	326	0
Stage 1	293	-	-	-	-	-
Stage 2	142	_	_	_	_	_
Critical Hdwy	6.51	6.31	_	_	4.13	-
Critical Hdwy Stg 1	5.51	0.01	_	_	1.10	_
Critical Hdwy Stg 2	5.51	_	•		•	
			-	-	2 227	
Follow-up Hdwy	3.599	3.399	-	-	2.227	-
Pot Cap-1 Maneuver	562	725	-	-	1228	-
Stage 1	737	-	-	-	-	-
Stage 2	863	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	560	723	-	-	1224	-
Mov Cap-2 Maneuver	560	-	-	-	-	-
Stage 1	735	-	-	-	-	-
Stage 2	863	_	_	_	_	_
Jugo 2	300					
Approach	WB		NB		SB	
HCM Control Delay, s	11.2		0		0	
HCM LOS	В					
Minor Lane/Major Mvn	nt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		-	-	590	1224	-
HCM Lane V/C Ratio		-	-	0.017	-	-
HCM Control Delay (s	)	-	-		0	-
TION CONTION DOING 13						
		-	-	В	А	-
HCM Lane LOS HCM 95th %tile Q(veh	)	- -	-	B 0.1	A 0	_

<u>e. venereen 7 wende</u>	۶	<b>→</b>	•	•	<b>←</b>	4	4	<b>†</b>	<i>&gt;</i>	<b>&gt;</b>	<b>+</b>	<b>√</b>
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<b>∱</b> ∱		7	<b>^</b>	7	Ĭ	<b>†</b>	7	ሻሻ	f)	
Traffic Volume (veh/h)	2	200	3	42	176	194	3	89	55	105	32	1
Future Volume (veh/h)	2	200	3	42	176	194	3	89	55	105	32	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1870	1870	1870	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	2	217	3	46	191	128	3	97	1	114	35	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	2	2	2	4	4	4	4	4	4
Cap, veh/h	6	2400	33	70	1299	1100	175	159	132	169	326	0
Arrive On Green	0.00	0.66	0.66	0.04	0.69	0.69	0.09	0.09	0.09	0.05	0.18	0.00
Sat Flow, veh/h	1810	3646	50	1781	1870	1584	1334	1841	1538	3401	1841	0
Grp Volume(v), veh/h	2	107	113	46	191	128	3	97	1	114	35	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1891	1781	1870	1584	1334	1841	1538	1700	1841	0
Q Serve(g_s), s	0.1	2.6	2.6	3.1	4.2	3.2	0.2	6.1	0.1	4.0	1.9	0.0
Cycle Q Clear(g_c), s	0.1	2.6	2.6	3.1	4.2	3.2	0.2	6.1	0.1	4.0	1.9	0.0
Prop In Lane	1.00		0.03	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	6	1188	1245	70	1299	1100	175	159	132	169	326	0
V/C Ratio(X)	0.34	0.09	0.09	0.66	0.15	0.12	0.02	0.61	0.01	0.68	0.11	0.00
Avail Cap(c_a), veh/h	151	1188	1245	193	1299	1100	405	476	397	368	752	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.7	7.4	7.4	56.9	6.2	6.1	50.2	52.9	50.1	56.1	41.4	0.0
Incr Delay (d2), s/veh	23.9	0.2	0.1	7.6	0.2	0.2	0.0	2.8	0.0	3.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.0	1.1	1.5	1.7	1.1	0.1	3.0	0.0	1.8	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.5	7.6	7.6	64.5	6.5	6.3	50.3	55.7	50.2	59.6	41.5	0.0
LnGrp LOS	F	Α	Α	E	Α	Α	D	E	D	E	D	A
Approach Vol, veh/h		222			365			101			149	
Approach Delay, s/veh		8.3			13.7			55.5			55.3	
Approach LOS		А			В			Е			E	
Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	84.0	10.9	15.3	5.4	88.3		26.3				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	13.0	43.0	13.0	31.0	10.0	46.0		49.0				
Max Q Clear Time (g_c+l1), s	5.1	4.6	6.0	8.1	2.1	6.2		3.9				
Green Ext Time (p_c), s	0.0	1.1	0.1	0.4	0.0	1.3		0.1				
Intersection Summary												
HCM 6th Ctrl Delay			24.7									
HCM 6th LOS			С									

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Existing Year: AM Peak Hour

Intersection		
Intersection Delay, s/veh	7	
Intersection LOS	Α	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations			7		ર્ન			4			î,		
Traffic Vol, veh/h	0	16	8	7	19	0	0	10	39	0	0	0	
Future Vol, veh/h	0	16	8	7	19	0	0	10	39	0	0	0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Heavy Vehicles, %	3	3	3	0	0	0	2	2	2	0	0	0	
Mvmt Flow	0	17	8	7	20	0	0	11	41	0	0	0	
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0	
Approach		EB		WB				NB			SB		
Opposing Approach		WB		EB				SB			NB		
Opposing Lanes		1		2				1			1		
Conflicting Approach Le	eft	SB		NB				EB			WB		
Conflicting Lanes Left		1		1				2			1		
Conflicting Approach R	ight	NB		SB				WB			EB		
Conflicting Lanes Right		1		1				1			2		
HCM Control Delay		7.2		7.3				6.8			0		
HCM LOS		Α		Α				Α			_		

Lane	NBLn1	EBLn1	EBLn <sub>2</sub> V	VBLn1	SBLn1
Vol Left, %	0%	0%	0%	27%	0%
Vol Thru, %	20%	100%	0%	73%	100%
Vol Right, %	80%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	49	16	8	26	0
LT Vol	0	0	0	7	0
Through Vol	10	16	0	19	0
RT Vol	39	0	8	0	0
Lane Flow Rate	52	17	8	27	0
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.051	0.022	0.009	0.032	0
Departure Headway (Hd)	3.544	4.656	3.955	4.164	4.028
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Сар	1007	771	907	862	0
Service Time	1.577	2.371	1.67	2.181	2.065
HCM Lane V/C Ratio	0.052	0.022	0.009	0.031	0
HCM Control Delay	6.8	7.5	6.7	7.3	7.1
HCM Lane LOS	А	Α	Α	Α	N
HCM 95th-tile Q	0.2	0.1	0	0.1	0

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Intersection												
Int Delay, s/veh	3.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ች	f.		ች	ĵ.		ሻ	f)	
Traffic Vol, veh/h	3	18	28	27	20	33	25	99	14	6	149	8
Future Vol, veh/h	3	18	28	27	20	33	25	99	14	6	149	8
Conflicting Peds, #/hr	13	0	35	35	0	13	17	0	0	0	0	17
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	_	_	None	-	_	None	-	-	None	_	_	None
Storage Length	_	_	-	39	_	-	79	_	_	75	_	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	_	0	-	-	0	-	_	0	_	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	8	8	8	1	1	1	2	2	2	2	2	2
Mvmt Flow	3	19	29	28	21	34	26	103	15	6	155	8
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	391	358	211	393	355	124	180	0	0	118	0	0
Stage 1	188	188	-	163	163	124	-	-	-	-	-	-
Stage 2	203	170	_	230	192	_	_	_	_	_	_	_
Critical Hdwy	7.18	6.58	6.28	7.11	6.51	6.21	4.12	_	_	4.12	_	_
Critical Hdwy Stg 1	6.18	5.58	0.20	6.11	5.51	0.21		_	_	-	_	_
Critical Hdwy Stg 2	6.18	5.58	-	6.11	5.51	_	_	_	_	_	_	_
Follow-up Hdwy	3.572	4.072	3.372	3.509	4.009	3.309	2.218	_	_	2.218	_	<u>-</u>
Pot Cap-1 Maneuver	557	559	814	568	572	929	1396	_	_	1470	_	_
Stage 1	800	733	-	841	765	-	-	_	_	-	_	_
Stage 2	785	747	-	775	743	-	_	_	_	-	_	-
Platoon blocked, %	. 00	- 11		. 13	. 10			_	_		_	_
Mov Cap-1 Maneuver	497	537	774	506	550	917	1373	-	-	1470	-	-
Mov Cap-2 Maneuver	497	537	-	506	550		-	_	_	-	_	_
Stage 1	772	718	-	825	750	_	_	_	-	-	_	-
Stage 2	712	733	_	699	728	_	_	_	_	_	-	_
- 13.g- =												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	11			11			1.4			0.3		
HCM LOS	В			В			1.7			0.0		
110111 200												
Minor Lane/Major Mvn	nt	NBL	NBT	NRR	FBI n1\	VBLn1\	VRI n2	SBL	SBT	SBR		
Capacity (veh/h)		1373	ועטו	TADIA	647	506	733	1470	CDT	ODIX		
HCM Lane V/C Ratio		0.019	-	-			0.075		-	-		
HCM Control Delay (s)		7.7	<u>-</u>	-	11	12.5	10.3	7.5	<u>-</u>			
HCM Lane LOS		7.7 A	-	-	В	12.5 B	10.3 B	7.5 A	-	-		
HCM 95th %tile Q(veh	1	0.1	-	-	0.3	0.2	0.2	0	-	-		
HOW SOUL WILL W(VEI)	)	0.1	-	-	0.3	0.2	0.2	U	-	-		

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	1	62	3	4	69	8	8	1	12	7	1	5
Future Vol., veh/h	1	62	3	4	69	8	8	1	12	7	1	5
Conflicting Peds, #/hr	42	0	26	26	0	42	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	_	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	_
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	4	4	4	0	0	0	8	8	8
Mvmt Flow	1	83	4	5	92	11	11	1	16	9	1	7
Major/Minor N	lajor1		I	Major2		N	Minor1			Minor2		
Conflicting Flow All	145	0	0	113	0	0	227	268	111	246	265	142
Stage 1	-	-	-	-	-	-	113	113		150	150	- 1
Stage 2	_	_	_	_	_	_	114	155	_	96	115	_
Critical Hdwy	4.1	_	-	4.14	_	-	7.1	6.5	6.2	7.18	6.58	6.28
Critical Hdwy Stg 1	-	_	_		_	_	6.1	5.5	-	6.18	5.58	-
Critical Hdwy Stg 2	-	-	-	-	_	-	6.1	5.5	-	6.18	5.58	_
Follow-up Hdwy	2.2	_	_	2.236	_	_	3.5	4	3.3	3.572	4.072	3.372
Pot Cap-1 Maneuver	1450	-	-	1464	_	-	733	641	948	695	630	890
Stage 1	-	_	_	_	_	_	897	806	-	838	762	-
Stage 2	-	-	-	-	_	-	896	773	-		789	_
Platoon blocked, %		_	_		_	_				300		
Mov Cap-1 Maneuver	1392	-	-	1428	_	-	704	597	925	652	587	853
Mov Cap-2 Maneuver	_	_	_	-	_	_	704	597	-	652	587	-
Stage 1	-	-	-	-	_	-	874	785	-		728	_
Stage 2	_	_	_	_	_	_	882	739	_	878	768	_
										J. <b>J</b>		
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.4			9.6			10.2		
HCM LOS	0.1			J.7			Α.			В		
							, \					
Minor Lane/Major Mvmt		NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SRI n1			
		807	1392	LDI	LDIX	1428	-	- VIDIV	710			
Capacity (veh/h) HCM Lane V/C Ratio		0.035				0.004	_		0.024			
				-			-	-				
HCM Long LOS		9.6	7.6	0	-	7.5	0		10.2			
HCM O5th % tile O(vah)		Α	A	Α	-	A	Α	-	B			
HCM 95th %tile Q(veh)		0.1	0	-	-	0	-	-	0.1			

Existing Year: PM Peak Hour

Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ች	1•		ች	ĵ.			4	
Traffic Vol, veh/h	2	72	8	23	58	8	13	2	64	12	9	14
Future Vol, veh/h	2	72	8	23	58	8	13	2	64	12	9	14
Conflicting Peds, #/hr	9	0	31	31	0	9	13	0	8	8	0	13
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	_	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	78	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	_	0	-	-	0	-	-	0	_
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	1	1	1	6	6	6	2	2	2	0	0	0
Mvmt Flow	3	96	11	31	77	11	17	3	85	16	12	19
Major/Minor	Major1		1	Major2		1	Minor1		N	Minor2		
Conflicting Flow All	97	0	0	138	0	0	312	298	141	314	298	105
Stage 1	-	-	-	-	-	-	139	139	-	154	154	-
Stage 2	_	_	_	_	_	-	173	159	_	160	144	_
Critical Hdwy	4.11	_	_	4.16	_	_	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	_	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	_	-	_	-	_	_	6.12	5.52	_	6.1	5.5	-
Follow-up Hdwy	2.209	_	-	2.254	-	-		4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1503	_	_	1421	_	_	641	614	907	643	617	955
Stage 1		_	-	-	-	-	864	782	-	853	774	-
Stage 2	-	-	-	-	-	-	829	766	-	847	782	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1490	-	-	1379	-	-	581	576	874	558	579	935
Mov Cap-2 Maneuver	-	-	-	-	-	-	581	576	-	558	579	-
Stage 1	-	-	-	-	-	-	837	757	-	844	750	-
Stage 2	-	-	-	-	-	-	772	742	-	754	757	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			2			10			10.7		
HCM LOS							В			В		
Minor Lane/Major Mvm	nt N	NBLn11	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1		
Capacity (veh/h)		581	861	1490	_	-	1379	-	-	673		
HCM Lane V/C Ratio			0.102		_	_	0.022	-	_	0.069		
HCM Control Delay (s)		11.4	9.7	7.4	0	_	7.7	_	_	10.7		
HCM Lane LOS		В	A	Α	A	-	Α	-	-	В		
HCM 95th %tile Q(veh	)	0.1	0.3	0	-	-	0.1	_	-	0.2		
	,											

HCM 6th LOS

	۶	<b>→</b>	•	•	←	•	4	<b>†</b>	~	<b>&gt;</b>	ļ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<b>†</b>	7	7	ħβ		Ĭ	f)		Ţ	ĵ»	
Traffic Volume (veh/h)	30	25	142	12	21	3	78	117	5	9	149	44
Future Volume (veh/h)	30	25	142	12	21	3	78	117	5	9	149	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.94	0.95		0.94	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	33	28	61	13	23	1	87	130	4	10	166	38
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	3	3	3	1	1	1	2	2	2
Cap, veh/h	645	828	658	614	1544	66	522	818	25	582	662	152
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1283	1841	1461	1228	3432	148	1184	1819	56	1252	1471	337
Grp Volume(v), veh/h	33	28	61	13	12	12	87	0	134	10	0	204
Grp Sat Flow(s),veh/h/ln	1283	1841	1461	1228	1763	1817	1184	0	1875	1252	0	1808
Q Serve(g_s), s	1.5	0.8	2.4	0.6	0.4	0.4	4.9	0.0	4.2	0.5	0.0	7.0
Cycle Q Clear(g_c), s	1.8	0.8	2.4	1.4	0.4	0.4	11.9	0.0	4.2	4.7	0.0	7.0
Prop In Lane	1.00		1.00	1.00		0.08	1.00		0.03	1.00		0.19
Lane Grp Cap(c), veh/h	645	828	658	614	793	818	522	0	844	582	0	814
V/C Ratio(X)	0.05	0.03	0.09	0.02	0.01	0.02	0.17	0.00	0.16	0.02	0.00	0.25
Avail Cap(c_a), veh/h	645	828	658	614	793	818	522	0	844	582	0	814
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.7	15.4	15.8	15.8	15.2	15.2	20.7	0.0	16.3	17.7	0.0	17.0
Incr Delay (d2), s/veh	0.2	0.1	0.3	0.1	0.0	0.0	0.7	0.0	0.4	0.1	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.4	0.9	0.2	0.2	0.2	1.5	0.0	1.9	0.1	0.0	3.1
Unsig. Movement Delay, s/veh		0.1	0.0	0.2	0.2	0.2	1.0	0.0	1.0	0.1	0.0	0.1
LnGrp Delay(d),s/veh	15.9	15.4	16.1	15.8	15.3	15.3	21.4	0.0	16.7	17.7	0.0	17.8
LnGrp LOS	В	В	В	В	В	В	C	A	В	В	A	В
Approach Vol, veh/h		122			37			221			214	
Approach Delay, s/veh		15.9			15.5			18.6			17.8	
Approach LOS		В			В			В			В	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		50.0		50.0		50.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		45.0		45.0		45.0		45.0				
Max Q Clear Time (g_c+l1), s		3.4		9.0		4.4		13.9				
Green Ext Time (p_c), s		0.1		1.1		0.4		0.9				
Intersection Summary												
HCM 6th Ctrl Delay			17.5									
HCM 6th LOC			D									

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В

Existing Year: PM Peak Hour

Intersection						
Int Delay, s/veh	2.7					
		MED	Not	NEE	051	007
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	À		<u></u>	2.1	7	<b>↑</b>
Traffic Vol, veh/h	115	0	179	61	5	291
Future Vol, veh/h	115	0	179	61	5	291
Conflicting Peds, #/hr	0	1	_ 0	_ 14	_ 14	_ 0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	0	-	-	-	87	-
Veh in Median Storage,		-	0	-	-	0
Grade, %	0	-	0	-	_	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	125	0	195	66	5	316
Major/Minor N	/linor1	N	Major1		Major2	
Conflicting Flow All	568	243	0	0	275	0
Stage 1	242	-	-	_	-	-
Stage 2	326	<u>-</u>	_	_	_	_
Critical Hdwy	6.4	6.2	_		4.13	_
Critical Hdwy Stg 1	5.4	-	_	_		_
Critical Hdwy Stg 2	5.4	_			_	
Follow-up Hdwy	3.5	3.3	_	_	2.227	_
Pot Cap-1 Maneuver	488	801			1282	
Stage 1	803	-	_	_	1202	_
Stage 2	736	-	-	-		_
Platoon blocked, %	130	-	_	_	-	_
	100	700	-	-	1265	_
Mov Cap-1 Maneuver	480	790	-	-	1265	-
Mov Cap-2 Maneuver	480	-	-	-	-	-
Stage 1	793	-	-	-	-	-
Stage 2	733	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	15.1		0		0.1	
HCM LOS	С					
NA' I (NA - ' NA	1	NDT	NDDV	MDL .4	ODI	ODT
Minor Lane/Major Mvmt	l .	NBT		VBLn1	SBL	SBT
Capacity (veh/h)		-	-	.00	1265	-
HCM Lane V/C Ratio		-	-		0.004	-
HCM Control Delay (s)		-	-		7.9	-
HCM Lane LOS		-	-	С	A	-
HCM 95th %tile Q(veh)		-	-	1	0	-

	۶	<b>→</b>	•	•	<b>←</b>	4	1	†	~	<b>&gt;</b>	<b>+</b>	✓
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	¥	<b>↑</b> ↑		ň	<b>†</b>	7	Ţ	<b></b>	7	ሻሻ	ĵ»	
Traffic Volume (veh/h)	9	234	7	104	232	171	16	64	71	199	137	7
Future Volume (veh/h)	9	234	7	104	232	171	16	64	71	199	137	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.99		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1841	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	9	239	6	106	237	110	16	65	5	203	140	5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	2	2	2	4	4	4	2	2	2
Cap, veh/h	23	2134	53	131	1232	1042	163	158	131	262	365	13
Arrive On Green	0.01	0.60	0.60	0.07	0.66	0.66	0.09	0.09	0.09	0.08	0.20	0.20
Sat Flow, veh/h	1795	3568	89	1781	1870	1581	1206	1841	1533	3456	1794	64
Grp Volume(v), veh/h	9	120	125	106	237	110	16	65	5	203	0	145
Grp Sat Flow(s),veh/h/ln	1795	1791	1866	1781	1870	1581	1206	1841	1533	1728	0	1858
Q Serve(g_s), s	0.6	3.5	3.5	7.0	5.9	3.1	1.5	4.0	0.4	6.9	0.0	8.1
Cycle Q Clear(g_c), s	0.6	3.5	3.5	7.0	5.9	3.1	1.5	4.0	0.4	6.9	0.0	8.1
Prop In Lane	1.00		0.05	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	23	1071	1116	131	1232	1042	163	158	131	262	0	378
V/C Ratio(X)	0.39	0.11	0.11	0.81	0.19	0.11	0.10	0.41	0.04	0.77	0.00	0.38
Avail Cap(c_a), veh/h	150	1071	1116	193	1232	1042	372	476	396	374	0	759
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.7	10.4	10.4	54.8	8.0	7.5	50.8	52.0	50.3	54.4	0.0	41.3
Incr Delay (d2), s/veh	7.6	0.2	0.2	12.4	0.3	0.2	0.2	1.3	0.1	5.2	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.4	1.5	3.6	2.5	1.1	0.5	1.9	0.1	3.2	0.0	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.4	10.6	10.6	67.1	8.3	7.7	51.0	53.3	50.4	59.6	0.0	41.8
LnGrp LOS	Е	В	В	Е	Α	Α	D	D	D	Е	Α	D
Approach Vol, veh/h		254			453			86			348	
Approach Delay, s/veh		12.6			21.9			52.7			52.2	
Approach LOS		В			С			D			D	
•	4	•	•			•						
Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	13.8	76.8	14.1	15.3	6.6	84.1		29.4				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	13.0	43.0	13.0	31.0	10.0	46.0		49.0				
Max Q Clear Time (g_c+I1), s	9.0	5.5	8.9	6.0	2.6	7.9		10.1				
Green Ext Time (p_c), s	0.1	1.3	0.2	0.3	0.0	1.5		0.7				
Intersection Summary												
HCM 6th Ctrl Delay			31.4									
HCM 6th LOS			С									

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Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	Δ

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations			7		ર્ન			4			î,		
Traffic Vol, veh/h	0	26	13	52	21	0	10	0	52	0	25	5	
Future Vol, veh/h	0	26	13	52	21	0	10	0	52	0	25	5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Heavy Vehicles, %	4	4	4	0	0	0	3	3	3	8	8	8	
Mvmt Flow	0	27	14	55	22	0	11	0	55	0	26	5	
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0	
Approach		EB		WB			NB				SB		
Opposing Approach		WB		EB			SB				NB		
Opposing Lanes		1		2			1				1		
Conflicting Approach Le	eft	SB		NB			EB				WB		
Conflicting Lanes Left		1		1			2				1		
Conflicting Approach Ri	ght	NB		SB			WB				EB		
Conflicting Lanes Right		1		1			1				2		
HCM Control Delay		7.4		7.8			7.1				7.4		
HCM LOS		Α		Α			Α				Α		

Lane	NBLn1	EBLn1	EBLn <sub>2</sub> V	VBLn1	SBLn1
Vol Left, %	16%	0%	0%	71%	0%
Vol Thru, %	0%	100%	0%	29%	83%
Vol Right, %	84%	0%	100%	0%	17%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	62	26	13	73	30
LT Vol	10	0	0	52	0
Through Vol	0	26	0	21	25
RT Vol	52	0	13	0	5
Lane Flow Rate	65	27	14	77	32
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.067	0.036	0.015	0.093	0.037
Departure Headway (Hd)	3.703	4.777	4.076	4.342	4.186
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	952	746	873	821	843
Service Time	1.787	2.529	1.827	2.39	2.271
HCM Lane V/C Ratio	0.068	0.036	0.016	0.094	0.038
HCM Control Delay	7.1	7.7	6.9	7.8	7.4
HCM Lane LOS	Α	Α	Α	Α	Α
HCM 95th-tile Q	0.2	0.1	0	0.3	0.1

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Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		*	ĵ.		ች	ĵ.			ĵ.	
Traffic Vol, veh/h	10	10	10	15	20	15	15	120	10	15	50	15
Future Vol, veh/h	10	10	10	15	20	15	15	120	10	15	50	15
Conflicting Peds, #/hr	17	0	13	13	0	17	6	0	0	0	0	6
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	_	None	-	_	None	-	-	None	-	-	None
Storage Length	-	-	-	39	-	-	79	-	-	75	-	_
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	5	5	5	2	2	2	3	3	3	4	4	4
Mvmt Flow	11	11	11	16	21	16	16	126	11	16	53	16
Major/Minor	Minor2			Minor1			Major1			Major2		
		260			271			^			0	0
Conflicting Flow All	298	268	80	281	271	149	75	0	0	137	0	0
Stage 1	99	99	-	164	164	-	-	-	-	-	-	-
Stage 2	199	169	6.05	117	107	6 22	1 12	-	-	111	-	-
Critical Hdwy	7.15	6.55	6.25	7.12	6.52	6.22	4.13	-	-	4.14	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	2 245	6.12	5.52	2 240	2 227	-	-	2 226	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.518		3.318	2.227	-	-	2.236	-	-
Pot Cap-1 Maneuver	648	633	972	671	636	898	1518	-	-	1435	-	-
Stage 1	900	807	-	838	762	-	-	-	-	-	-	-
Stage 2	796	753	-	888	807	-	-	-	-	-	-	-
Platoon blocked, %	FOC	CAE	054	600	640	000	1500	-	-	1425	-	-
Mov Cap-1 Maneuver	596	615	954	636	618	883	1509	-	-	1435	-	-
Mov Cap-2 Maneuver	596	615	-	636	618	-	-	-	-	-	-	-
Stage 1	886	793	-	829	754	-	-	-	-	-	-	-
Stage 2	740	745	-	846	793	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	10.5			10.5			0.8			1.4		
HCM LOS	В			В								
Minor Lane/Major Mvn	nt	NBL	NBT	NBR	EBLn1V	VBLn1V	VBLn2	SBL	SBT	SBR		
Capacity (veh/h)		1509	-	-	689	636	709	1435	-	-		
HCM Lane V/C Ratio		0.01	-	-	0.046	0.025	0.052	0.011	-	-		
HCM Control Delay (s)		7.4	-	-	10.5	10.8	10.4	7.5	-	-		
HCM Lane LOS		Α	-	-	В	В	В	Α	-	-		
HCM 95th %tile Q(veh	)	0	-	_	0.1	0.1	0.2	0	-	-		

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	5	25	10	25	40	15	0	5	0	5	5	5
Future Vol, veh/h	5	25	10	25	40	15	0	5	0	5	5	5
Conflicting Peds, #/hr	17	0	10	10	0	17	2	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	26	11	26	42	16	0	5	0	5	5	5
Major/Minor I	Major1		N	Major2		N	Minor1		N	/linor2		
Conflicting Flow All	75	0	0	47	0	0	161	179	43	164	176	69
Stage 1	-	-	-	41	-	-	52	52	43	119	119	-
Stage 2	_	-	-	_	-	-	109	127	_	45	57	-
Critical Hdwy	4.1	_		4.1	_	_	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	4.1	_	_	4.1	_	_	6.1	5.5	0.2	6.1	5.5	0.2
Critical Hdwy Stg 1	_	_		_	_		6.1	5.5	_	6.1	5.5	_
Follow-up Hdwy	2.2	_	_	2.2	_	_	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1537	_	_	1573	_	_	809	718	1033	805	721	1000
Stage 1	-	_	_	-	_	_	966	856	-	890	801	-
Stage 2	-	_		_	_	_	901	795	_	974	851	_
Platoon blocked, %		_	_		_	<u>-</u>	301	100		017	001	
Mov Cap-1 Maneuver	1512	_	_	1558	_	_	779	686	1022	774	689	982
Mov Cap-2 Maneuver	-	_	_	-	<u>-</u>	_	779	686	-	774	689	-
Stage 1	_	_	_	_	_	_	954	845	_	873	775	_
Stage 2	<u>-</u>	_	_	_	<u>-</u>	_	873	769	_	964	840	_
Clayo Z							370	, 00		50 <del>7</del>	5-10	
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.9			2.3			10.3			9.6		
HCM LOS							В			Α		
Minor Lane/Major Mvm	nt N	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)		686	1512			1558	-		798			
HCM Lane V/C Ratio			0.003	_		0.017	_	_	0.02			
HCM Control Delay (s)		10.3	7.4	0	_	7.3	0	_	9.6			
HCM Lane LOS		В	A	A	_	Α	A	_	Α			
HCM 95th %tile Q(veh)	)	0	0	-	_	0.1	- '	_	0.1			
						J. 1			J. 1			

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Intersection												
Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ሻ	f.		ሻ	£			4	
Traffic Vol, veh/h	10	20	5	25	60	35	5	5	15	15	10	15
Future Vol, veh/h	10	20	5	25	60	35	5	5	15	15	10	15
Conflicting Peds, #/hr	6	0	24	24	0	6	4	0	1	1	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	78	-	-	-	-	-
Veh in Median Storage	,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	2	2	2	10	10	10	0	0	0
Mvmt Flow	11	21	5	26	63	37	5	5	16	16	11	16
Major/Minor N	/lajor1			Major2			/linor1			/linor2		
Conflicting Flow All	106	0	0	50	0	0	221	228	49	197	212	92
Stage 1	-	-	-	-	-	-	70	70	49	140	140	92
Stage 2	_	_	_	_	_	_	151	158	_	57	72	_
Critical Hdwy	4.1	_	_	4.12	_	_	7.2	6.6	6.3	7.1	6.5	6.2
Critical Hdwy Stg 1	T. I	_	_	- 1.12	<u>-</u>	_	6.2	5.6	-	6.1	5.5	-
Critical Hdwy Stg 2	_	_	_	_	_	_	6.2	5.6	_	6.1	5.5	_
Follow-up Hdwy	2.2	_	_	2.218	<u>-</u>	_	3.59	4.09	3.39	3.5	4	3.3
Pot Cap-1 Maneuver	1498	_	_	1557	_	-	718	658	997	766	689	971
Stage 1	-	_	_	-	_	_	920	821	-	868	785	-
Stage 2	-	_	_	_	-	-	833	752	-	960	839	-
Platoon blocked, %		_	_		_	_	- 555	. 02		- 000	300	
Mov Cap-1 Maneuver	1489	-	-	1521	-	-	666	623	973	729	652	962
Mov Cap-2 Maneuver	-	_	_	-	_	_	666	623	-	729	652	-
Stage 1	_	_	_	-	_	-	891	796	_	856	767	-
Stage 2	_	_	_	_	_	_	791	735	_	930	813	_
A	ED			MD			NID			0.0		
Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.1			1.5			9.5			9.9		
HCM LOS							Α			Α		
Minor Lane/Major Mvm	t 1	NBLn11	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1		
Capacity (veh/h)		666	853	1489	-	-	1521	-	-	777		
HCM Lane V/C Ratio			0.025		_	-	0.017	-	_	0.054		
HCM Control Delay (s)		10.4	9.3	7.4	0	-	7.4	-	-	9.9		
HCM Lane LOS		В	A	Α	A	-	Α	-	_	A		
HCM 95th %tile Q(veh)		0	0.1	0	-	-	0.1	-	-	0.2		
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	۶	<b>→</b>	•	•	<b>←</b>	4	1	<b>†</b>	<i>&gt;</i>	<b>/</b>	<b>†</b>	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>↑</b>	7	7	<b>ተ</b> ኈ		ሻ	f)		7	<b>₽</b>	
Traffic Volume (veh/h)	40	20	75	5	10	5	115	110	5	5	50	20
Future Volume (veh/h)	40	20	75	5	10	5	115	110	5	5	50	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.95	0.95		0.95	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1663	1663	1663	1885	1885	1885	1811	1811	1811
Adj Flow Rate, veh/h	42	21	26	5	11	2	121	116	3	5	53	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	16	16	16	1	1	1	6	6	6
Cap, veh/h	663	835	671	583	1199	209	654	823	21	580	705	93
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1319	1856	1490	1151	2664	465	1350	1829	47	1230	1566	207
Grp Volume(v), veh/h	42	21	26	5	6	7	121	0	119	5	0	60
Grp Sat Flow(s),veh/h/ln	1319	1856	1490	1151	1580	1549	1350	0	1877	1230	0	1773
Q Serve(g_s), s	1.8	0.6	1.0	0.2	0.2	0.2	5.6	0.0	3.7	0.2	0.0	1.9
Cycle Q Clear(g_c), s	2.1	0.6	1.0	0.9	0.2	0.2	7.5	0.0	3.7	4.0	0.0	1.9
Prop In Lane	1.00		1.00	1.00		0.30	1.00		0.03	1.00		0.12
Lane Grp Cap(c), veh/h	663	835	671	583	711	697	654	0	844	580	0	798
V/C Ratio(X)	0.06	0.03	0.04	0.01	0.01	0.01	0.19	0.00	0.14	0.01	0.00	0.08
Avail Cap(c_a), veh/h	663	835	671	583	711	697	654	0	844	580	0	798
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.8	15.3	15.4	15.5	15.2	15.2	17.8	0.0	16.1	17.3	0.0	15.7
Incr Delay (d2), s/veh	0.2	0.1	0.1	0.0	0.0	0.0	0.6	0.0	0.3	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.3	0.4	0.1	0.1	0.1	1.9	0.0	1.7	0.1	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.9	15.4	15.5	15.6	15.2	15.2	18.4	0.0	16.5	17.3	0.0	15.8
LnGrp LOS	В	В	В	В	В	В	В	Α	В	В	Α	<u>B</u>
Approach Vol, veh/h		89			18			240			65	
Approach Delay, s/veh		15.7			15.3			17.5			16.0	
Approach LOS		В			В			В			В	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		50.0		50.0		50.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		45.0		45.0		45.0		45.0				
Max Q Clear Time (g_c+l1), s		2.9		6.0		4.1		9.5				
Green Ext Time (p_c), s		0.0		0.3		0.2		8.0				
Intersection Summary												
HCM 6th Ctrl Delay			16.7									

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Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
		WDK		NDIX		
Lane Configurations	<b>\</b>	E	250	G.E.		140
Traffic Vol, veh/h	10	5	250	65	0	140
Future Vol, veh/h	10	5	250	65	0	140
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	0	-	-	-	87	-
Veh in Median Storage		-	0	-	-	0
Grade, %	0		0			0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	11	11	1	1	3	3
Mvmt Flow	11	5	263	68	0	147
Major/Minor	Minor1	N	Major1	-	Major2	
Conflicting Flow All	447	300	0	0	334	0
	300	300		U	334	-
Stage 1	147	-	-	-	_	-
Stage 2			-	-	4 4 2	-
Critical Hdwy	6.51	6.31	-	-	4.13	-
Critical Hdwy Stg 1	5.51	-	-	-	-	-
Critical Hdwy Stg 2	5.51	-	-	-	- 007	-
Follow-up Hdwy	3.599	3.399	-	-	2.227	-
Pot Cap-1 Maneuver	553	719	-	-	1220	-
Stage 1	731	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	551	717	-	-	1217	-
Mov Cap-2 Maneuver	551	-	-	-	-	-
Stage 1	729	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s			0		0	
HCM LOS	11.2 B		U		U	
HOW LOS	D					
Minor Lane/Major Mvn	nt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		-	-	597	1217	-
HCM Lane V/C Ratio		-	-	0.026	-	-
HCM Control Delay (s)		-	-	11.2	0	-
HCM Lane LOS		_	_	В	A	-
HCM 95th %tile Q(veh	)	-	-	0.1	0	-
	,					

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Horizon Year Baseline Scenario: AM Peak Hour

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>ተ</b> ኈ		ሻ	<b>•</b>	7	ሻ	<b>↑</b>	7	ሻሻ	₽	
Traffic Volume (veh/h)	5	210	5	45	185	205	5	95	60	110	35	5
Future Volume (veh/h)	5	210	5	45	185	205	5	95	60	110	35	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1870	1870	1870	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	5	221	4	47	195	131	5	100	2	116	37	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	2	2	2	4	4	4	4	4	4
Cap, veh/h	14	2383	43	70	1288	1091	175	159	133	171	318	9
Arrive On Green	0.01	0.66	0.66	0.04	0.69	0.69	0.09	0.09	0.09	0.05	0.18	0.18
Sat Flow, veh/h	1810	3628	66	1781	1870	1584	1330	1841	1538	3401	1783	48
Grp Volume(v), veh/h	5	110	115	47	195	131	5	100	2	116	0	38
Grp Sat Flow(s),veh/h/ln	1810	1805	1888	1781	1870	1584	1330	1841	1538	1700	0	1831
Q Serve(g_s), s	0.3	2.7	2.7	3.1	4.3	3.4	0.4	6.3	0.1	4.0	0.0	2.1
Cycle Q Clear(g_c), s	0.3	2.7	2.7	3.1	4.3	3.4	0.4	6.3	0.1	4.0	0.0	2.1
Prop In Lane	1.00		0.03	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	14	1186	1240	70	1288	1091	175	159	133	171	0	327
V/C Ratio(X)	0.36	0.09	0.09	0.67	0.15	0.12	0.03	0.63	0.02	0.68	0.00	0.12
Avail Cap(c_a), veh/h	151	1186	1240	193	1288	1091	404	476	397	368	0	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.2	7.5	7.5	56.8	6.5	6.3	50.2	52.9	50.1	56.0	0.0	41.4
Incr Delay (d2), s/veh	11.2	0.2	0.1	7.8	0.2	0.2	0.0	3.0	0.0	3.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.1	1.1	1.6	1.8	1.2	0.1	3.1	0.1	1.8	0.0	1.0
Unsig. Movement Delay, s/veh		77	77	04.0	0.7	0.0	FO 0	FF 0	<b>50.0</b>	F0 F	0.0	44.5
LnGrp Delay(d),s/veh	70.5	7.7	7.7	64.6	6.7	6.6	50.3	55.9	50.2	59.5	0.0	41.5
LnGrp LOS	E	A	Α	E	Α	Α	D	E	D	E	A	D
Approach Vol, veh/h		230			373			107			154	
Approach Delay, s/veh		9.0			14.0			55.6			55.1	
Approach LOS		Α			В			E			Е	
Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	83.8	11.0	15.4	5.9	87.7		26.4				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	13.0	43.0	13.0	31.0	10.0	46.0		49.0				
Max Q Clear Time (g_c+l1), s	5.1	4.7	6.0	8.3	2.3	6.3		4.1				
Green Ext Time (p_c), s	0.0	1.2	0.1	0.4	0.0	1.3		0.2				
Intersection Summary												
HCM 6th Ctrl Delay			25.1									
HCM 6th LOS			С									

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Intersection Delay, s/veh 7.1	
Intersection LOS A	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations			7		र्स			4			f)		
Traffic Vol, veh/h	0	20	10	10	20	0	0	10	40	0	0	0	
Future Vol, veh/h	0	20	10	10	20	0	0	10	40	0	0	0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Heavy Vehicles, %	3	3	3	0	0	0	2	2	2	0	0	0	
Mvmt Flow	0	21	11	11	21	0	0	11	42	0	0	0	
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0	
Approach		EB		WB				NB			SB		
Opposing Approach		WB		EB				SB			NB		
Opposing Lanes		1		2				1			1		
Conflicting Approach Le	eft	SB		NB				EB			WB		
Conflicting Lanes Left		1		1				2			1		
Conflicting Approach Ri	ight	NB		SB				WB			EB		
Conflicting Lanes Right		1		1				1			2		
HCM Control Delay		7.2		7.4				6.8			0		
HCM LOS		Α		Α				Α			_		

Lane	NBLn1	EBLn1	EBLn2V	VBLn1	SBLn1	
Vol Left, %	0%	0%	0%	33%	0%	)
Vol Thru, %	20%	100%	0%	67%	100%	)
Vol Right, %	80%	0%	100%	0%	0%	)
Sign Control	Stop	Stop	Stop	Stop	Stop	)
Traffic Vol by Lane	50	20	10	30	0	)
LT Vol	0	0	0	10	0	)
Through Vol	10	20	0	20	0	)
RT Vol	40	0	10	0	0	)
Lane Flow Rate	53	21	11	32	0	)
Geometry Grp	2	7	7	5	2	2
Degree of Util (X)	0.052	0.027	0.012	0.037	0	)
Departure Headway (Hd)	3.561	4.66	3.959	4.184	4.048	3
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	;
Cap	1001	770	906	857	0	)
Service Time	1.599	2.376	1.675	2.203	2.091	
HCM Lane V/C Ratio	0.053	0.027	0.012	0.037	0	)
HCM Control Delay	6.8	7.5	6.7	7.4	7.1	
HCM Lane LOS	Α	Α	Α	Α	N	1
HCM 95th-tile Q	0.2	0.1	0	0.1	0	)

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Intersection												
Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		<u>ነ</u>	f)			ĵ.			₽	
Traffic Vol, veh/h	5	20	30	30	20	35	25	105	15	10	160	10
Future Vol, veh/h	5	20	30	30	20	35	25	105	15	10	160	10
Conflicting Peds, #/hr	13	0	35	35	0	13	_ 17	_ 0	_ 0	_ 0	_ 0	_ 17
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None		-	None
Storage Length	-	-	-	39	-	-	79	-	-	75	-	-
Veh in Median Storage	9,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	8	8	8	1	1	1	2	2	2	2	2	2
Mvmt Flow	5	21	31	31	21	36	26	109	16	10	167	10
Major/Minor I	Minor2			Minor1			Major1		1	Major2		
Conflicting Flow All	420	386	224	422	383	130	194	0	0	125	0	0
Stage 1	209	209	-	169	169	-	_	-	-	-	-	-
Stage 2	211	177	-	253	214	-	-	-	-	-	-	-
Critical Hdwy	7.18	6.58	6.28	7.11	6.51	6.21	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.18	5.58	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.18	5.58	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.572	4.072	3.372	3.509	4.009	3.309	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	533	539	801	544	552	922	1379	-	-	1462	-	-
Stage 1	780	718	-	835	761	-	-	-	-	-	-	-
Stage 2	778	741	-	754	727	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	473	517	762	479	529	911	1357	-	-	1462	-	-
Mov Cap-2 Maneuver	473	517	-	479	529	-	-	-	-	-	-	-
Stage 1	753	701	-	819	747	-	-	-	-	-	-	-
Stage 2	703	727	-	674	710	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	11.4			11.3			1.3			0.4		
HCM LOS	В			В			1.0			J. 1		
NA: 1 (0.4 :		ND	NET	Non	-DI (	MDI (	MDL C	051	007	000		
Minor Lane/Major Mvm	nt	NBL	NBT	NBR		VBLn1V		SBL	SBT	SBR		
Capacity (veh/h)		1357	-	-	621	479	722	1462	-	-		
HCM Lane V/C Ratio		0.019	-	-	0.092			0.007	-	-		
HCM Control Delay (s)		7.7	-	-		13	10.4	7.5	-	-		
HCM Lane LOS	,	A	-	-	В	В	В	Α	-	-		
HCM 95th %tile Q(veh	)	0.1	-	-	0.3	0.2	0.3	0	-	-		

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	5	65	5	5	75	10	10	5	15	10	5	5
Future Vol, veh/h	5	65	5	5	75	10	10	5	15	10	5	5
Conflicting Peds, #/hr	42	0	26	26	0	42	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	_	-	-	-	-	_	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	_	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	4	4	4	0	0	0	8	8	8
Mvmt Flow	5	68	5	5	79	11	11	5	16	11	5	5
Major/Minor	laiar1			//aiar2			linar1			Minor		
	lajor1	^		Major2	0		Minor1	0.40		Minor2	0.40	100
Conflicting Flow All	132	0	0	99	0	0	209	249	97	228	246	129
Stage 1	-	-	-	-	-	-	107	107	-	137	137	-
Stage 2	-	-	-	-	-	-	102	142	-	91	109	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.1	6.5	6.2	7.18	6.58	6.28
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.18	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.18	5.58	- 0.70
Follow-up Hdwy	2.2	-	-	2.236	-	-	3.5	4	3.3		4.072	
Pot Cap-1 Maneuver	1466	-	-	1481	-	-	753	657	965	715	646	905
Stage 1	-	-	-	-	-	-	903	811	-	852	772	-
Stage 2	-	-	-	-	-	-	909	783	-	902	794	-
Platoon blocked, %	1.10=	-	-		-	-						
Mov Cap-1 Maneuver	1407	-	-	1444	-	-	719	610	941	666	600	867
Mov Cap-2 Maneuver	-	-	-	-	-	-	719	610	-	666	600	-
Stage 1	-	-	-	-	-	-	877	787	-	815	738	-
Stage 2	-	-	-	-	-	-	892	749	-	877	771	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.4			9.8			10.4		
HCM LOS	J.0			<b>J.</b> ,			A			В		
							, ,					
Minor Lane/Major Mvmt		NBLn1	EBL	EBT	EBR	WBL	WBT	WBR S	SBI n1			
Capacity (veh/h)		789	1407			1444			687			
HCM Lane V/C Ratio			0.004	_		0.004	_		0.031			
HCM Control Delay (s)		9.8	7.6	0	-	7.5	0		10.4			
HCM Lane LOS		9.6 A	7.0 A	A	_	7.5 A	A	-	10.4 B			
HCM 95th %tile Q(veh)		0.1	0	- -	<u>-</u>	0	- -		0.1			
HOW JOHN MILE Q(VEII)		U. I	U	_	-	U	_	_	0.1			

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Intersection												
Int Delay, s/veh	4.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ሻ	ĵ,		ሻ	f)			4	
Traffic Vol, veh/h	5	75	10	25	60	10	15	5	70	15	10	15
Future Vol, veh/h	5	75	10	25	60	10	15	5	70	15	10	15
Conflicting Peds, #/hr	9	0	31	31	0	9	13	0	8	8	0	13
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	78	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	6	6	6	2	2	2	0	0	0
Mvmt Flow	5	79	11	26	63	11	16	5	74	16	11	16
Major/Minor	Major1			Major2			Minor1		N	Minor2		
Conflicting Flow All	83	0	0	121	0	0	273	261	124	272	261	91
Stage 1	-	-	-	121	-	-	126	126	124	130	130	-
Stage 2	_	_		_	_	_	147	135	_	142	131	_
Critical Hdwy	4.11	_		4.16	_	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	4.11	_	_	<del>-</del> .10	_	_	6.12	5.52	0.22	6.1	5.5	0.2
Critical Hdwy Stg 1	_	_	_	_	_	_	6.12	5.52	_	6.1	5.5	-
Follow-up Hdwy	2.209	_	_	2.254	_	_	3.518	4.018		3.5	4	3.3
Pot Cap-1 Maneuver	1520	_	_	1442	_	_	679	644	927	685	647	972
Stage 1	1020	_	_	-	_	_	878	792	JZ1 -	878	792	- 312
Stage 2	_	_	_		_	_	856	785	_	866	792	_
Platoon blocked, %		_	_		<u>-</u>	_	500	, 00		500	102	
Mov Cap-1 Maneuver	1507	_	_	1399	_	_	621	605	893	604	608	952
Mov Cap-2 Maneuver	-	_	_	-	_	_	621	605	-	604	608	-
Stage 1	_	_	_	_	_	_	850	766	-	867	770	-
Stage 2	_	_	-	_	_	_	805	763	_	781	766	_
2.5.50 =							500	. 00			. 00	
				1675			, in			0.5		
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			2			9.8			10.5		
HCM LOS							Α			В		
Minor Lane/Major Mvm	nt I	NBLn11	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1		
Capacity (veh/h)		621	866	1507		-	1399	-	-	701		
HCM Lane V/C Ratio		0.025		0.003	_		0.019	_	_	0.06		
HCM Control Delay (s)		10.9	9.6	7.4	0	_	7.6	_	_	10.5		
HCM Lane LOS		В	Α	A	A	_	Α	_	_	В		
HCM 95th %tile Q(veh	)	0.1	0.3	0	-	_	0.1	_	-	0.2		
TOWN COURT FOUND COLVERN	7	J. 1	3.0	- 0			J. 1			J.L		

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>↑</b>	7	ሻ	<b>∱</b> ∱		ሻ	<b>₽</b>		ሻ	1•	
Traffic Volume (veh/h)	30	25	150	15	25	5	85	125	5	10	160	45
Future Volume (veh/h)	30	25	150	15	25	5	85	125	5	10	160	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.94	0.95		0.94	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	32	26	61	16	26	2	89	132	3	11	168	36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	3	3	3	1	1	1	2	2	2
Cap, veh/h	642	828	658	616	1487	112	522	826	19	581	671	144
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1279	1841	1461	1230	3304	250	1184	1836	42	1251	1492	320
Grp Volume(v), veh/h	32	26	61	16	14	14	89	0	135	11	0	204
Grp Sat Flow(s),veh/h/ln	1279	1841	1461	1230	1763	1791	1184	0	1877	1251	0	1811
Q Serve(g_s), s	1.4	8.0	2.4	0.7	0.4	0.4	5.0	0.0	4.3	0.5	0.0	7.0
Cycle Q Clear(g_c), s	1.9	8.0	2.4	1.5	0.4	0.4	12.0	0.0	4.3	4.8	0.0	7.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00	_	0.02	1.00		0.18
Lane Grp Cap(c), veh/h	642	828	658	616	793	806	522	0	845	581	0	815
V/C Ratio(X)	0.05	0.03	0.09	0.03	0.02	0.02	0.17	0.00	0.16	0.02	0.00	0.25
Avail Cap(c_a), veh/h	642	828	658	616	793	806	522	0	845	581	0	815
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.8	15.3	15.8	15.8	15.2	15.2	20.8	0.0	16.3	17.7	0.0	17.0
Incr Delay (d2), s/veh	0.1	0.1	0.3	0.1	0.0	0.0	0.7	0.0	0.4	0.1	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.3	0.9	0.2	0.2	0.2	1.5	0.0	1.9	0.2	0.0	3.1
Unsig. Movement Delay, s/veh		4= 4	10.1	45.0	45.0	45.0	04.5	0.0	40.7	47.0	0.0	47.0
LnGrp Delay(d),s/veh	15.9	15.4	16.1	15.8	15.3	15.3	21.5	0.0	16.7	17.8	0.0	17.8
LnGrp LOS	В	B	В	В	В	В	С	A	В	В	A	<u>B</u>
Approach Vol, veh/h		119			44			224			215	
Approach Delay, s/veh		15.9			15.5			18.6			17.8	
Approach LOS		В			В			В			В	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		50.0		50.0		50.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		45.0		45.0		45.0		45.0				
Max Q Clear Time (g_c+l1), s		3.5		9.0		4.4		14.0				
Green Ext Time (p_c), s		0.1		1.1		0.4		0.9				
Intersection Summary												
HCM 6th Ctrl Delay			17.5									
HCM 6th LOS			В									

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Intersection						
Int Delay, s/veh	2.7					
		WDD	NDT	NDD	CDI	CDT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	100		100	^=	7	<b>↑</b>
Traffic Vol, veh/h	120	0	190	65	5	310
Future Vol, veh/h	120	0	190	65	5	310
Conflicting Peds, #/hr	0	1	0	14	14	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	87	-
Veh in Median Storage	# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	126	0	200	68	5	326
WWIIICTIOW	120	U	200	00	U	020
Major/Minor N	/linor1	N	//ajor1	1	Major2	
Conflicting Flow All	584	249	0	0	282	0
Stage 1	248	-	-	-	-	-
Stage 2	336	_	-	_	_	_
Critical Hdwy	6.4	6.2	_	_	4.13	_
Critical Hdwy Stg 1	5.4	-	_	_	-	_
Critical Hdwy Stg 2	5.4	_			_	_
Follow-up Hdwy	3.5	3.3	_	_	2.227	_
		795	-	-		-
Pot Cap-1 Maneuver	477		-	-	1275	-
Stage 1	798	-	-	-	-	-
Stage 2	728	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	469	784	-	-	1258	-
Mov Cap-2 Maneuver	469	-	-	-	-	-
Stage 1	788	-	-	-	-	-
Stage 2	725	-	-	_	-	-
J						
Approach	WB		NB		SB	
HCM Control Delay, s	15.5		0		0.1	
HCM LOS	С					
Minor Lane/Major Mvm	1	NBT	NRDV	VBLn1	SBL	SBT
		וטוו	ואוטואי			
Capacity (veh/h)		-	-	469	1258	-
HCM Lane V/C Ratio		-	-	0.269		-
HCM Control Delay (s)		-	-	15.5	7.9	-
HCM Lane LOS		-	-	С	Α	-
HCM 95th %tile Q(veh)		-	-	1.1	0	-

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<b>∱</b> ∱		ሻ	<b>↑</b>	7	7	<b>↑</b>	7	ሻሻ	f)	
Traffic Volume (veh/h)	10	250	10	110	245	180	20	70	75	210	145	10
Future Volume (veh/h)	10	250	10	110	245	180	20	70	75	210	145	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.99		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1841	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	10	255	8	112	250	114	20	71	7	214	148	8
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	2	2	2	4	4	4	2	2	2
Cap, veh/h	25	2090	65	137	1221	1033	164	161	134	273	365	20
Arrive On Green	0.01	0.59	0.59	0.08	0.65	0.65	0.09	0.09	0.09	80.0	0.21	0.21
Sat Flow, veh/h	1795	3542	111	1781	1870	1581	1194	1841	1533	3456	1757	95
Grp Volume(v), veh/h	10	129	134	112	250	114	20	71	7	214	0	156
Grp Sat Flow(s),veh/h/ln	1795	1791	1862	1781	1870	1581	1194	1841	1533	1728	0	1852
Q Serve(g_s), s	0.7	3.8	3.8	7.4	6.4	3.2	1.9	4.4	0.5	7.3	0.0	8.7
Cycle Q Clear(g_c), s	0.7	3.8	3.8	7.4	6.4	3.2	1.9	4.4	0.5	7.3	0.0	8.7
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	25	1057	1098	137	1221	1033	164	161	134	273	0	385
V/C Ratio(X)	0.39	0.12	0.12	0.81	0.20	0.11	0.12	0.44	0.05	0.78	0.00	0.41
Avail Cap(c_a), veh/h	150	1057	1098	193	1221	1033	369	476	396	374	0	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.6	10.9	10.9	54.5	8.3	7.8	50.8	52.0	50.2	54.3	0.0	41.1
Incr Delay (d2), s/veh	7.2	0.2	0.2	14.5	0.4	0.2	0.2	1.4	0.1	6.3	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.6	1.7	3.9	2.7	1.2	0.6	2.1	0.2	3.4	0.0	4.1
Unsig. Movement Delay, s/veh		44.4	44.4	00.0	0.7	0.0	=4.4	<b>50</b> 4	50.0	00.0	0.0	44.0
LnGrp Delay(d),s/veh	65.8	11.1	11.1	69.0	8.7	8.0	51.1	53.4	50.3	60.6	0.0	41.6
LnGrp LOS	E	В	В	E	A	A	D	D	D	E	Α	D
Approach Vol, veh/h		273			476			98			370	
Approach Delay, s/veh		13.1			22.7			52.7			52.6	
Approach LOS		В			С			D			D	
Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	14.3	75.8	14.5	15.5	6.7	83.4		29.9				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	13.0	43.0	13.0	31.0	10.0	46.0		49.0				
Max Q Clear Time (g_c+l1), s	9.4	5.8	9.3	6.4	2.7	8.4		10.7				
Green Ext Time (p_c), s	0.1	1.4	0.2	0.3	0.0	1.6		0.8				
Intersection Summary												
HCM 6th Ctrl Delay			32.1									
HCM 6th LOS			С									

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Intersection					
Intersection Delay, s/ve	eh 7.5				
Intersection LOS	Α				

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations			7		ર્ન			4			î,		
Traffic Vol, veh/h	0	30	15	55	25	0	10	0	55	0	25	5	
Future Vol, veh/h	0	30	15	55	25	0	10	0	55	0	25	5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Heavy Vehicles, %	4	4	4	0	0	0	3	3	3	8	8	8	
Mvmt Flow	0	32	16	58	26	0	11	0	58	0	26	5	
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0	
Approach		EB		WB			NB				SB		
Opposing Approach		WB		EB			SB				NB		
Opposing Lanes		1		2			1				1		
Conflicting Approach Le	eft	SB		NB			EB				WB		
Conflicting Lanes Left		1		1			2				1		
Conflicting Approach R	ight	NB		SB			WB				EB		
Conflicting Lanes Right		1		1			1				2		
HCM Control Delay		7.5		7.9			7.1				7.5		
HCM LOS		Α		Α			Α				Α		

Lane	NBLn1	EBLn1	EBLn <sub>2</sub> V	VBLn1	SBLn1
Vol Left, %	15%	0%	0%	69%	0%
Vol Thru, %	0%	100%	0%	31%	83%
Vol Right, %	85%	0%	100%	0%	17%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	65	30	15	80	30
LT Vol	10	0	0	55	0
Through Vol	0	30	0	25	25
RT Vol	55	0	15	0	5
Lane Flow Rate	68	32	16	84	32
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.071	0.042	0.018	0.102	0.037
Departure Headway (Hd)	3.722	4.788	4.086	4.348	4.214
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Сар	945	744	870	819	836
Service Time	1.815	2.542	1.84	2.401	2.309
HCM Lane V/C Ratio	0.072	0.043	0.018	0.103	0.038
HCM Control Delay	7.1	7.8	6.9	7.9	7.5
HCM Lane LOS	Α	Α	Α	Α	Α
HCM 95th-tile Q	0.2	0.1	0.1	0.3	0.1

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Intersection												
Int Delay, s/veh	4											
		EDT	EDD	WDI	WDT	WDD	NDI	NDT	NDD	CDI	CDT	CDD
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	40	4	40	<u>*</u>	<del>(</del>	4-	<u>ነ</u>	<b>\$</b>	00	ች	<b>₽</b>	4=
Traffic Vol, veh/h	10	22	10	28	20	15	15	120	20	18	50	15
Future Vol, veh/h	10	22	10	28	20	15	15	120	20	18	50	15
Conflicting Peds, #/hr	17	0	13	13	0	17	_ 6	_ 0	_ 0	_ 0	_ 0	_ 6
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None		-	None
Storage Length	-	-	-	39	-	-	79	-	-	75	-	-
Veh in Median Storage	e, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	5	5	5	2	2	2	3	3	3	4	4	4
Mvmt Flow	11	23	11	29	21	16	16	126	21	19	53	16
Major/Minor	Minor2			Minor1			Major1		ı	Major2		
Conflicting Flow All	309	284	80	298	282	154	75	0	0	147	0	0
Stage 1	105	105	-	169	169		-	-	-		-	-
Stage 2	204	179	_	129	113	_	_	_	_	_	_	_
Critical Hdwy	7.15	6.55	6.25	7.12	6.52	6.22	4.13	_	_	4.14	_	_
Critical Hdwy Stg 1	6.15	5.55	- 0.20	6.12	5.52	-		_	_		_	_
Critical Hdwy Stg 2	6.15	5.55	_	6.12	5.52	_	_	_	_	_	_	_
Follow-up Hdwy	3.545	4.045	3.345	3.518	4.018	3.318	2.227	_	_	2.236	_	_
Pot Cap-1 Maneuver	638	620	972	654	627	892	1518	_	_	1423	_	_
Stage 1	893	803	-	833	759	-	-	_	_	- 1.20	_	_
Stage 2	791	746		875	802			_				_
Platoon blocked, %	.01	140		510	302			_	_		_	_
Mov Cap-1 Maneuver	586	601	954	609	608	878	1509	_	_	1423	_	_
Mov Cap-2 Maneuver	586	601	-	609	608	-	-	_	_	- 1.20	_	_
Stage 1	879	788	_	824	751			_	_	_	_	_
Stage 2	735	738	_	818	787	_	_	_	_	_	_	_
Olago Z	100	, 50		310	, 01							
Approach	EB			WB			NB			SB		
HCM Control Delay, s	10.9			10.8			0.7			1.6		
HCM LOS	В			В								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	VBLn1V	VBLn2	SBL	SBT	SBR		
Capacity (veh/h)		1509		_	655	609	700	1423	_	_		
HCM Lane V/C Ratio		0.01	_					0.013	_	_		
HCM Control Delay (s)		7.4	_	_	10.9	11.2	10.4	7.6	_	_		
HCM Lane LOS		A	_	_	В	В	В	Α	_	_		
HCM 95th %tile Q(veh	)	0	_	_	0.2	0.2	0.2	0	_	_		
TOW JOHN JOHN A VENT	7	U			0.2	0.2	0.2	U				

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Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	5	37	23	25	53	15	0	5	0	5	5	5
Future Vol., veh/h	5	37	23	25	53	15	0	5	0	5	5	5
Conflicting Peds, #/hr	17	0	10	10	0	17	2	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	39	24	26	56	16	0	5	0	5	5	5
Major/Minor N	1ajor1		1	Major2		N	Minor1		Λ	/linor2		
Conflicting Flow All	89	0	0	73	0	0	194	212	62	198	216	83
Stage 1	-	-	-	-	-	-	71	71	-	133	133	-
Stage 2	_	<u>-</u>	_	_	<u>-</u>	<u>-</u>	123	141	<u>-</u>	65	83	<u>-</u>
Critical Hdwy	4.1	_	_	4.1	_	_	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-7.1	_	_	-T. I	_	_	6.1	5.5	0.2	6.1	5.5	- 0.2
Critical Hdwy Stg 2	_	_	_	_	_	_	6.1	5.5	_	6.1	5.5	_
Follow-up Hdwy	2.2	<u>-</u>	_	2.2	<u>-</u>	_	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1519	_	_	1540	_	_	770	689	1009	765	685	982
Stage 1	-	_	_	-	_	_	944	840	-	875	790	- 302
Stage 2	_	_	_	_	_	_	886	784	_	951	830	_
Platoon blocked, %		_	_		<u>-</u>	_	000	, 0 7		001	500	
Mov Cap-1 Maneuver	1494	_	_	1525	_	_	741	657	998	735	653	964
Mov Cap-2 Maneuver	-	<u>-</u>	_	-	<u>-</u>	_	741	657	-	735	653	-
Stage 1	_	_	_	_	_	_	933	829	_	858	763	_
Stage 2	_	_	_	_	_	_	858	757	_	941	819	_
5 kg 5 Z							500	, 0,		O T 1	010	
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			2			10.5			9.8		
HCM LOS	0.0						10.5 B			9.0 A		
TOW LOO							D			^		
Minor Lane/Major Mvmt		NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SRI n1			
Capacity (veh/h)		657	1494	-		1525	-	ייייי	763			
HCM Lane V/C Ratio		0.008		-		0.017	-	-	0.021			
HCM Control Delay (s)		10.5	7.4	0	_	7.4	0	_	9.8			
HCM Control Delay (s)					-			-				
HCM 95th %tile Q(veh)		B 0	A 0	A -	-	0.1	A -	-	A 0.1			
HOW SOUT WILLE Q(Ven)		U	U	_	_	U. I	_	_	U. I			

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Intersection												
Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ሻ	î,		*	<b>f</b>			4	
Traffic Vol, veh/h	10	20	17	25	60	35	12	5	15	15	4	21
Future Vol, veh/h	10	20	17	25	60	35	12	5	15	15	4	21
Conflicting Peds, #/hr	6	0	24	24	0	6	4	0	1	1	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	78	-	-	-	-	-
Veh in Median Storage	,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	2	2	2	10	10	10	0	0	0
Mvmt Flow	11	21	18	26	63	37	13	5	16	16	4	22
Major/Minor N	Major1			Major2			/linor1		N	/linor2		
Conflicting Flow All	106	0	0	63	0	0	227	234	55	204	225	92
Stage 1	-	-	-	-	-	-	76	76	-	140	140	92
Stage 2	_	_	_	_	_	_	151	158	_	64	85	_
Critical Hdwy	4.1	_		4.12	_	_	7.2	6.6	6.3	7.1	6.5	6.2
Critical Hdwy Stg 1	- T. I	_	_	- 1.12	<u>-</u>	_	6.2	5.6	-	6.1	5.5	- 0.2
Critical Hdwy Stg 2	_	_	_	_	_	_	6.2	5.6	_	6.1	5.5	_
Follow-up Hdwy	2.2	_	_	2.218	_	_	3.59	4.09	3.39	3.5	4	3.3
Pot Cap-1 Maneuver	1498	-	-	1540	-	-	712	653	990	758	678	971
Stage 1	-	-	-	-	_	-	914	816	-	868	785	-
Stage 2	_	_	_	-	_	-	833	752	-	952	828	_
Platoon blocked, %		-	-		_	-						
Mov Cap-1 Maneuver	1489	-	-	1505	-	-	661	618	966	722	642	962
Mov Cap-2 Maneuver	-	-	-	-	-	-	661	618	-	722	642	-
Stage 1	-	-	-	-	-	-	886	791	-	856	767	-
Stage 2	-	-	-	-	-	-	792	735	-	922	802	-
Approach	EB			WB			NB			SB		
Approach							9.8					
HCM LOS	1.6			1.5						9.6		
HCM LOS							Α			Α		
Minor Lane/Major Mvm	t 1	NBLn11	VBLn2	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1		
Capacity (veh/h)		661	847	1489	-	-	1505	-	-	819		
HCM Lane V/C Ratio		0.019	0.025	0.007	-	-	0.017	-	-	0.051		
HCM Control Delay (s)		10.6	9.4	7.4	0	-	7.4	-	-	9.6		
HCM Lane LOS		В	Α	Α	Α	-	Α	-	-	Α		
HCM 95th %tile Q(veh)		0.1	0.1	0	-	-	0.1	-	-	0.2		

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	۶	•	1	<b>†</b>	ţ	4
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	ሻ	7	7	<b>†</b>	<b>f</b>	
Traffic Volume (veh/h)	50	75	122	110	50	33
Future Volume (veh/h)	50	75	122	110	50	33
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1885	1885	1811	1811
Adj Flow Rate, veh/h	53	31	128	116	53	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	1	1	6	6
Cap, veh/h	783	697	645	835	601	170
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1767	1572	1338	1885	1356	384
Grp Volume(v), veh/h	53	31	128	116	0	68
Grp Sat Flow(s),veh/h/ln	1767	1572	1338	1885	0	1740
Q Serve(g_s), s	1.5	1.0	5.4	3.2	0.0	2.0
Cycle Q Clear(g_c), s	1.5	1.0	7.4	3.2	0.0	2.0
Prop In Lane	1.00	1.00	1.00			0.22
Lane Grp Cap(c), veh/h	783	697	645	835	0	771
V/C Ratio(X)	0.07	0.04	0.20	0.14	0.00	0.09
Avail Cap(c_a), veh/h	783	697	645	835	0	771
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.1	13.9	16.3	14.5	0.0	14.2
Incr Delay (d2), s/veh	0.2	0.1	0.7	0.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.4	1.7	1.4	0.0	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.2	14.0	17.0	14.9	0.0	14.4
LnGrp LOS	В	В	В	В	Α	В
Approach Vol, veh/h	84			244	68	
Approach Delay, s/veh	14.2			16.0	14.4	
Approach LOS	В			В	В	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		44.0		44.0		44.0
Change Period (Y+Rc), s		5.0		5.0		5.0
Max Green Setting (Gmax), s		39.0		39.0		39.0
Max Q Clear Time (g_c+l1), s		9.4		3.5		4.0
Green Ext Time (p_c), s		0.8		0.2		0.3
Intersection Summary						
· ·			15.2			
HCM 6th Ctrl Delay			15.3			
HCM 6th LOS			В			

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Intersection						
Int Delay, s/veh	0.5					
Movement	\M/DI	WBR	NDT	NIDD	CDI	CDT
Movement	WBL	WDK	NBT	NBR	SBL	SBT
Lane Configurations	<b>Y</b>	40	<b>↑</b>	70	ች	110
Traffic Vol, veh/h	10	12	245	70	0	140
Future Vol, veh/h	10	12	245	70	0	140
Conflicting Peds, #/hr	0	0	0	3	_ 3	_ 0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	87	-
Veh in Median Storage	e, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	11	11	1	1	3	3
Mvmt Flow	11	13	258	74	0	147
		,,				
Major/Minor	Minor1	١	//ajor1	ľ	Major2	
Conflicting Flow All	445	298	0	0	335	0
Stage 1	298	-	-	-	-	-
Stage 2	147	-	_	_	_	-
Critical Hdwy	6.51	6.31	-	-	4.13	_
Critical Hdwy Stg 1	5.51	- 0.01	_	_		_
Critical Hdwy Stg 2	5.51	_				_
Follow-up Hdwy		3.399	_		2.227	_
Pot Cap-1 Maneuver	554	721		<u>-</u>	1219	_
•	733			-	1213	
Stage 1		-	-	-	-	-
Stage 2	859	-	-	-	-	-
Platoon blocked, %		= 10	-	-	1010	-
Mov Cap-1 Maneuver	552	719	-	-	1216	-
Mov Cap-2 Maneuver	552	-	-	-	-	-
Stage 1	731	-	-	-	-	-
Stage 2	859	-	-	-	-	-
	14/5				0.5	
Approach	WB		NB		SB	
HCM Control Delay, s	10.9		0		0	
HCM LOS	В					
Minor Long /Maior M	.4	NDT	NDDV	VDL 4	CDI	CDT
Minor Lane/Major Mvn	IL	NBT	NBRV		SBL	SBT
Capacity (veh/h)		-	-	002	1216	-
HCM Lane V/C Ratio		-	-	0.037	-	-
HCM Control Delay (s)		-	-	10.9	0	-
HCM Lane LOS		-	-	В	Α	-
HCM 95th %tile Q(veh	)	-	-	0.1	0	-
	,					

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	۶	<b>→</b>	•	•	<b>—</b>	•	1	<b>†</b>	~	<b>/</b>	<b>+</b>	✓
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>ተ</b> ኈ		ሻ	<b>•</b>	7	ሻ	<b>↑</b>	7	ሻሻ	₽	
Traffic Volume (veh/h)	5	210	5	45	185	205	5	95	60	110	35	5
Future Volume (veh/h)	5	210	5	45	185	205	5	95	60	110	35	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1870	1870	1870	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	5	221	4	47	195	134	5	100	4	116	37	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	2	2	2	4	4	4	4	4	4
Cap, veh/h	14	2383	43	70	1288	1091	175	160	133	171	318	9
Arrive On Green	0.01	0.66	0.66	0.04	0.69	0.69	0.09	0.09	0.09	0.05	0.18	0.18
Sat Flow, veh/h	1810	3628	66	1781	1870	1584	1330	1841	1538	3401	1783	48
Grp Volume(v), veh/h	5	110	115	47	195	134	5	100	4	116	0	38
Grp Sat Flow(s),veh/h/ln	1810	1805	1888	1781	1870	1584	1330	1841	1538	1700	0	1831
Q Serve(g_s), s	0.3	2.7	2.7	3.1	4.3	3.5	0.4	6.3	0.3	4.0	0.0	2.1
Cycle Q Clear(g_c), s	0.3	2.7	2.7	3.1	4.3	3.5	0.4	6.3	0.3	4.0	0.0	2.1
Prop In Lane	1.00		0.03	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	14	1186	1240	70	1288	1091	175	160	133	171	0	327
V/C Ratio(X)	0.36	0.09	0.09	0.67	0.15	0.12	0.03	0.63	0.03	0.68	0.00	0.12
Avail Cap(c_a), veh/h	151	1186	1240	193	1288	1091	404	476	397	368	0	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.2	7.5	7.5	56.8	6.5	6.4	50.2	52.9	50.2	56.0	0.0	41.3
Incr Delay (d2), s/veh	11.2	0.2	0.1	7.8	0.2	0.2	0.0	3.0	0.1	3.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.1	1.1	1.6	1.8	1.2	0.1	3.1	0.1	1.8	0.0	1.0
Unsig. Movement Delay, s/veh		77	77	04.0	0.7	0.0	FO 0	FF 0	<b>50.0</b>	F0 F	0.0	44.5
LnGrp Delay(d),s/veh	70.5	7.7	7.7	64.6	6.7	6.6	50.3	55.9	50.2	59.5	0.0	41.5
LnGrp LOS	E	A	A	E	A	A	D	E	D	E	A	<u>D</u>
Approach Vol, veh/h		230			376			109			154	
Approach Delay, s/veh		9.0			13.9			55.4			55.1	
Approach LOS		Α			В			E			Е	
Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	83.8	11.0	15.4	5.9	87.6		26.4				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	13.0	43.0	13.0	31.0	10.0	46.0		49.0				
Max Q Clear Time (g_c+l1), s	5.1	4.7	6.0	8.3	2.3	6.3		4.1				
Green Ext Time (p_c), s	0.0	1.2	0.1	0.4	0.0	1.4		0.2				
Intersection Summary												
HCM 6th Ctrl Delay			25.1									
HCM 6th LOS			С									

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HCM Control Delay

HCM Lane LOS

HCM 95th-tile Q

7.3

Α

0.1

6.7

Α

0.2

7

Ν

0

Intersection						
Intersection Delay, s/ve	h 69					
Intersection LOS	Α					
IIILEISECLIOII LOS						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	ী		₽			- ↑
Traffic Vol, veh/h	17	0	10	40	0	0
Future Vol, veh/h	17	0	10	40	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	2	2	0	0
Mvmt Flow	18	0	11	42	0	0
Number of Lanes	1	0	1	0	0	1
A Iv	MD		ND			00
Approach	WB		NB			SB
Opposing Approach			SB			NB
Opposing Lanes	0		1			1
Conflicting Approach Le						WB
Conflicting Lanes Left	1		0			1
Conflicting Approach Ri			WB			
Conflicting Lanes Right			1			0
HCM Control Delay	7.3		6.7			0
HCM LOS	Α		Α			-
Lane	1	NBLn1V	VBLn1	SBLn1		
Vol Left, %			100%	0%		
Vol Thru, %		20%		100%		
Vol Right, %		80%	0%	0%		
Sign Control		Stop	Stop	Stop		
Traffic Vol by Lane		50	17	0		
LT Vol		0	17	0		
Through Vol		10	0	0		
RT Vol		40	0	0		
Lane Flow Rate		53	18	0		
Geometry Grp		1	1	1		
Degree of Util (X)		0.051		0		
Degree of Office)  Departure Headway (Ho			4.193			
•	(د	Yes	4.193 Yes	Yes		
Convergence, Y/N		1031	857			
Cap			2.2	1 004		
Service Time		1.495		1.984		
HCM Lane V/C Ratio		0.051	0.021	0		

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Intersection												
Int Delay, s/veh	4.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		44		ች	î,		ች	<b>1</b>		ች	î,	
Traffic Vol, veh/h	5	36	30	58	20	35	25	105	28	16	160	10
Future Vol, veh/h	5	36	30	58	20	35	25	105	28	16	160	10
Conflicting Peds, #/hr	13	0	35	35	0	13	17	0	0	0	0	17
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	- -	- Clop	None	-	-	None	-	-	None	-	-	None
Storage Length	_	_	-	39	_	-	79	_	-	75	_	-
Veh in Median Storage		0	_	-	0	_	-	0	_	-	0	_
Grade, %	- -	0	_	_	0	_	_	0	<u>-</u>	_	0	_
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	8	8	8	1	1	1	2	2	2	2	2	2
Mvmt Flow	5	38	31	60	21	36	26	109	29	17	167	10
IVIVIIIL I IOVV	J	- 30	01	- 00	<b>4</b> 1	- 30	20	100	20		107	10
N.A						_			_			
	Minor2	,		Minor1	, - :		Major1			Major2		
Conflicting Flow All	440	413	224	452	404	137	194	0	0	138	0	0
Stage 1	223	223	-	176	176	-	-	-	-	-	-	-
Stage 2	217	190	-	276	228	-	-	-	-	-	-	-
Critical Hdwy	7.18	6.58	6.28	7.11	6.51	6.21	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.18	5.58	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.18	5.58	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.572	4.072	3.372	3.509	4.009	3.309	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	517	520	801	520	537	914	1379	-	-	1446	-	-
Stage 1	766	708	-	828	755	-	-	-	-	-	-	-
Stage 2	772	732	-	732	717	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	456	496	762	444	512	903	1357	-	-	1446	-	-
Mov Cap-2 Maneuver	456	496	-	444	512	-	-	-	-	-	-	-
Stage 1	739	688	-	812	741	-	-	-	-	-	-	-
Stage 2	697	718	-	634	697	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	12.1			12.5			1.2			0.6		
HCM LOS	В			В						0.0		
200												
Minor Lane/Major Mvn	nt	NBL	NBT	NRD	FRI n1\	VBLn1V	WRI n2	SBL	SBT	SBR		
	iit.		NDT	NDR					JDT	ODK		
Capacity (veh/h)		1357	-	-	578	444	707	1446	-	-		
HCM Cartral Dalay (a)	\	0.019	-	-		0.136			-	-		
HCM Control Delay (s)	)	7.7	-	-	12.1	14.4	10.5	7.5	-	-		
HCM Lane LOS	.\	A	-	-	В	В	В	A	-	-		
HCM 95th %tile Q(veh	1)	0.1	-	-	0.4	0.5	0.3	0	-	-		

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Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4		<u> </u>	4	<b>02</b> .1
Traffic Vol, veh/h	5	84	21	5	98	10	15	5	15	10	5	5
Future Vol, veh/h	5	84	21	5	98	10	15	5	15	10	5	5
Conflicting Peds, #/hr	42	0	26	26	0	42	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	_	_	-	_	_	-	_	_	-	_	_	-
Veh in Median Storage	.# -	0	_	_	0	_	_	0	_	_	0	_
Grade, %	, <i>''</i> -	0	_	_	0	_	_	0	_	_	0	_
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	4	4	4	0	0	0	8	8	8
Mvmt Flow	5	88	22	5	103	11	16	5	16	11	5	5
Major/Minor	laior1		N	Jaior?			Minor1			Minor2		
	//ajor1	^		Major2	0			204			207	150
Conflicting Flow All	156	0	0	136	0	0	261	301	125	281	307	153
Stage 1	-	-	-	-	-	-	135 126	135 166	-	161 120	161 146	-
Stage 2	4.1	-	<del>-</del>	4.14	<del>-</del>	-	7.1	6.5	6.2	7.18	6.58	6.28
Critical Hdwy Critical Hdwy Stg 1	4.1	-	-	4.14	-	-	6.1	5.5	0.2	6.18	5.58	0.20
	-	_	-	_	_	-	6.1	5.5		6.18	5.58	_
Critical Hdwy Stg 2 Follow-up Hdwy	2.2	-	-	2.236	-	-	3.5	5.5	3.3	3.572	4.072	3.372
Pot Cap-1 Maneuver	1436	-	-	1436	-	-	696	615	931	659	597	878
•	1430	-	-	1430	-	-	873	789	931	827	753	0/0
Stage 1 Stage 2	-	_	-	-	-	-	883	765	-	870	765	-
Platoon blocked, %	-	-	-	-	-	-	003	703	-	070	100	-
Mov Cap-1 Maneuver	1379	-	<del>-</del>	1400	-		664	571	908	614	555	841
Mov Cap-2 Maneuver	13/9	_	-	1400	_	-	664	571	900	614	555	041
Stage 1	_	-	<del>-</del>	_	-		848	766	-	791	720	_
Stage 2			_		_	_	866	731	_	846	743	_
Olaye Z				_	_		500	701		070	170	
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.3			10.2			10.8		
HCM LOS							В			В		
Minor Lane/Major Mvm	t N	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :	SBLn1			
Capacity (veh/h)		731	1379	_		1400	_	_	640			
HCM Lane V/C Ratio			0.004	_		0.004	_	_	0.033			
HCM Control Delay (s)		10.2	7.6	0	-	7.6	0	-	10.8			
HCM Lane LOS		В	A	A	_	A	A	_	В			
HCM 95th %tile Q(veh)		0.2	0	-	_	0	-	-	0.1			

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Intersection												
Int Delay, s/veh	5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	LDI	ሻ	<b>1</b>	.,,,,,	ሻ	1>	HUIN	ODL	4	ODIN
Traffic Vol, veh/h	5	75	29	25	60	10	36	5	70	15	8	17
Future Vol, veh/h	5	75	29	25	60	10	36	5	70	15	8	17
Conflicting Peds, #/hr	9	0	31	31	0	9	13	0	8	8	0	13
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	- Olop	None	-	-	None
Storage Length	<u>-</u>	_	-	0	_	-	78	_	-	_	_	-
Veh in Median Storage		0	_	-	0	_	-	0	_	_	0	_
Grade, %		0	_	_	0	_	_	0	<u>-</u>	_	0	_
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	6	6	6	2	2	2	0	0	0
Mymt Flow	5	79	31	26	63	11	38	5	74	16	8	18
IVIVIII I IOW	J	13	JI	20	00	- 11	- 00	J	17	10	U	10
	Major1			Major2			Minor1			/linor2		
Conflicting Flow All	83	0	0	141	0	0	283	271	134	282	281	91
Stage 1	-	-	-	-	-	-	136	136	-	130	130	-
Stage 2	-	-	-	-	-	-	147	135	-	152	151	-
Critical Hdwy	4.11	-	-	4.16	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.209	-	-	2.254	-	-	3.518			3.5	4	3.3
Pot Cap-1 Maneuver	1520	-	-	1418	-	-	669	636	915	674	631	972
Stage 1	-	-	-	-	-	-	867	784	-	878	792	-
Stage 2	-	-	-	-	-	-	856	785	-	855	776	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1507	-	-	1376	-	-	611	597	881	593	593	952
Mov Cap-2 Maneuver	-	-	-	-	-	-	611	597	-	593	593	-
Stage 1	-	-	-	-	-	-	838	757	-	867	770	-
Stage 2	-	-	-	-	-	-	805	763	-	769	750	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			2			10.2			10.4		
HCM LOS	0.5						10.2 B			В		
I IOW LOO							ט			D		
Minor Lane/Major Mvm	nt l	NBLn11		EBL	EBT	EBR	WBL	WBT	WBR S			
Capacity (veh/h)		611	854	1507	-	-		-	-	706		
HCM Lane V/C Ratio			0.092		-	-	0.019	-	-	0.06		
HCM Control Delay (s)		11.3	9.6	7.4	0	-	7.7	-	-	10.4		
HCM Lane LOS		В	Α	Α	Α	-	Α	-	-	В		
HCM 95th %tile Q(veh)	)	0.2	0.3	0	-	-	0.1	-	-	0.2		

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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	ሻ	7	ሻ	<b>†</b>	f)	
Traffic Volume (veh/h)	43	150	97	125	160	73
Future Volume (veh/h)	43	150	97	125	160	73
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1885	1885	1870	1870
Adj Flow Rate, veh/h	45	61	102	132	168	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	1	1	2	2
Cap, veh/h	777	691	504	835	594	198
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1753	1560	1161	1885	1340	447
Grp Volume(v), veh/h	45	61	102	132	0	224
Grp Sat Flow(s), veh/h/ln	1753	1560	1161	1885	0	1786
Q Serve(g_s), s	1.3	2.0	5.4	3.7	0.0	7.0
Cycle Q Clear(g_c), s	1.3	2.0	12.4	3.7	0.0	7.0
Prop In Lane	1.00	1.00	1.00	0.1	0.0	0.25
Lane Grp Cap(c), veh/h	777	691	504	835	0	792
V/C Ratio(X)	0.06	0.09	0.20	0.16	0.00	0.28
Avail Cap(c_a), veh/h	777	691	504	835	0.00	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
,	14.0	14.2	19.6	14.7	0.00	15.6
Uniform Delay (d), s/veh	0.1	0.3	0.9	0.4	0.0	0.9
Incr Delay (d2), s/veh						
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.7	1.6	1.6	0.0	3.0
Unsig. Movement Delay, s/veh		111	00.5	45.4	0.0	10.5
LnGrp Delay(d),s/veh	14.1	14.4	20.5	15.1	0.0	16.5
LnGrp LOS	В	В	С	В	Α	В
Approach Vol, veh/h	106			234	224	
Approach Delay, s/veh	14.3			17.4	16.5	
Approach LOS	В			В	В	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		44.0		44.0		44.0
Change Period (Y+Rc), s		5.0		5.0		5.0
Max Green Setting (Gmax), s		39.0		39.0		39.0
Max Q Clear Time (g_c+l1), s		14.4		4.0		9.0
Green Ext Time (p_c), s		0.9		0.2		1.2
		0.0		0.2		1.4
Intersection Summary						
HCM 6th Ctrl Delay			16.5			
HCM 6th LOS			В			

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Intersection						
Int Delay, s/veh	2.9					
Movement	WBL	WBR	NDT	NBR	SBL	SBT
		NDK	NBT	NDK		
Lane Configurations	120	40	105	70	ጟ	210
Traffic Vol, veh/h	120	12	185	70	5	310
Future Vol, veh/h	120	12	185	70	5	310
Conflicting Peds, #/hr	0	1	0	14	14	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	87	-
Veh in Median Storage	,#0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	126	13	195	74	5	326
		_		_		
	/linor1		/lajor1		Major2	
Conflicting Flow All	582	247	0	0	283	0
Stage 1	246	-	-	-	-	-
Stage 2	336	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.13	-
Critical Hdwy Stg 1	5.4	-	-	-	_	_
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	_	2.227	-
Pot Cap-1 Maneuver	479	797	-	_	1274	_
Stage 1	800	-	_	_		_
Stage 2	728	_	_	_	_	_
Platoon blocked, %	120	_	_	_	_	_
Mov Cap-1 Maneuver	471	786			1257	
				-		
Mov Cap-2 Maneuver	471	-	-	-	-	-
Stage 1	790	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Approach	WB		NB		SB	
	15.3		0		0.1	
HCM LOS			U		U. I	
HCM LOS	С					
Minor Lane/Major Mvm	t	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)			-	489	1257	-
HCM Lane V/C Ratio				0.284		_
HCM Control Delay (s)		_	_	15.3	7.9	_
		-	-			
HCM Of the Of tile Of tech		-	-	C	A	-
HCM 95th %tile Q(veh)		-	-	1.2	0	-

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	۶	<b>→</b>	•	•	<b>+</b>	•	1	<b>†</b>	~	<b>/</b>	<b>+</b>	-✓
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<b>∱</b> ⊅		ሻ	<b>•</b>	7	ሻ	<b>↑</b>	7	ሻሻ	₽	
Traffic Volume (veh/h)	10	250	10	110	245	180	20	70	75	210	145	10
Future Volume (veh/h)	10	250	10	110	245	180	20	70	75	210	145	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.99		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1841	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	10	255	8	112	250	114	20	71	7	214	148	8
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	2	2	2	4	4	4	2	2	2
Cap, veh/h	25	2090	65	137	1221	1033	164	161	134	273	365	20
Arrive On Green	0.01	0.59	0.59	0.08	0.65	0.65	0.09	0.09	0.09	0.08	0.21	0.21
Sat Flow, veh/h	1795	3542	111	1781	1870	1581	1194	1841	1533	3456	1757	95
Grp Volume(v), veh/h	10	129	134	112	250	114	20	71	7	214	0	156
Grp Sat Flow(s),veh/h/ln	1795	1791	1862	1781	1870	1581	1194	1841	1533	1728	0	1852
Q Serve(g_s), s	0.7	3.8	3.8	7.4	6.4	3.2	1.9	4.4	0.5	7.3	0.0	8.7
Cycle Q Clear(g_c), s	0.7	3.8	3.8	7.4	6.4	3.2	1.9	4.4	0.5	7.3	0.0	8.7
Prop In Lane	1.00		0.06	1.00	1001	1.00	1.00	101	1.00	1.00		0.05
Lane Grp Cap(c), veh/h	25	1057	1098	137	1221	1033	164	161	134	273	0	385
V/C Ratio(X)	0.39	0.12	0.12	0.81	0.20	0.11	0.12	0.44	0.05	0.78	0.00	0.41
Avail Cap(c_a), veh/h	150	1057	1098	193	1221	1033	369	476	396	374	0	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.6	10.9	10.9	54.5	8.3	7.8	50.8	52.0	50.2	54.3	0.0	41.1
Incr Delay (d2), s/veh	7.2	0.2	0.2	14.5	0.4	0.2	0.2	1.4	0.1	6.3	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	1.7	0.0	0.0 2.7	0.0	0.0	0.0 2.1	0.0	0.0 3.4	0.0	0.0
%ile BackOfQ(50%),veh/ln Unsig. Movement Delay, s/veh		1.6	1.7	3.9	2.1	1.2	0.6	Z. I	0.2	3.4	0.0	4.1
		11.1	11.1	69.0	8.7	8.0	51.1	53.4	50.3	60.6	0.0	41.6
LnGrp Delay(d),s/veh LnGrp LOS	65.8 E	11.1 B	11.1 B	69.0 E	0. <i>1</i>	6.0 A	51.1 D	55.4 D	50.5 D	60.6 E	0.0 A	41.0 D
		273	В	<u> </u>	476	^	U	98	U		370	
Approach Vol, veh/h Approach Delay, s/veh		13.1			22.7			52.7			52.6	
11 7:		_						_				
Approach LOS		В			С			D			D	
Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	14.3	75.8	14.5	15.5	6.7	83.4		29.9				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	13.0	43.0	13.0	31.0	10.0	46.0		49.0				
Max Q Clear Time (g_c+I1), s	9.4	5.8	9.3	6.4	2.7	8.4		10.7				
Green Ext Time (p_c), s	0.1	1.4	0.2	0.3	0.0	1.6		8.0				
Intersection Summary												
HCM 6th Ctrl Delay			32.1									
HCM 6th LOS			С									

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HCM Lane LOS

HCM 95th-tile Q

Α

0.2

Α

0.3

Α

0.1

Intersection						
Intersection Delay, s/ve	h 73					
Intersection LOS	Α					
III.GI3GOLIOII LOG	$\neg$					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	7		f)			<b>↑</b>
Traffic Vol, veh/h	67	0	0	55	0	25
Future Vol, veh/h	67	0	0	55	0	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	3	3	8	8
Mvmt Flow	71	0	0	58	0	26
Number of Lanes	1	0	1	0	0	1
A	WD		ND			CD.
Approach	WB		NB			SB
Opposing Approach			SB			NB
Opposing Lanes	0		1			1
Conflicting Approach Le						WB
Conflicting Lanes Left	1		0			1
Conflicting Approach R			WB			
Conflicting Lanes Right			1			0
HCM Control Delay	7.7		6.8			7.4
HCM LOS	Α		Α			Α
Lane	N	NBLn1V	VBI n1 S	SBI n1		
Vol Left, %	•		100%	0%		
Vol Thru, %		0%		100%		
Vol Right, %		100%	0%	0%		
Sign Control		Stop	Stop	Stop		
			67	25		
Traffic Vol by Lane		55	67			
LT Vol		0		0		
Through Vol		0	0	25		
RT Vol		55	0	0		
Lane Flow Rate		58	71	26		
Geometry Grp		1	1	1		
Degree of Util (X)			0.083			
Departure Headway (He	d)		4.244			
Convergence, Y/N		Yes	Yes	Yes		
Cap		1018	844	848		
Service Time			2.269			
HCM Lane V/C Ratio			0.084	0.031		
HCM Control Delay		6.8	7.7	7.4		
HOME		Α.	Λ.	۸		

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Intersection												
Int Delay, s/veh	4											
		<b></b>	<b>500</b>	MAI	MOT	14/00	NE	NET	NDD	0.01	0.0.T	222
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4.0	4	4.0	<u></u>	<b>₽</b>		<u>ነ</u>	<del>(</del>		7	f)	
Traffic Vol, veh/h	10	22	10	28	20	15	15	120	30	18	50	15
Future Vol, veh/h	10	22	10	28	20	15	15	120	30	18	50	15
Conflicting Peds, #/hr	17	0	13	13	0	17	_ 6	_ 0	_ 0	_ 0	_ 0	_ 6
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	39	-	-	79	-	-	75	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	5	5	5	2	2	2	3	3	3	4	4	4
Mvmt Flow	11	23	11	29	21	16	16	126	32	19	53	16
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	315	295	80	303	287	159	75	0	0	158	0	0
Stage 1	105	105	-	174	174	-	-	-	-	-	-	-
Stage 2	210	190	_	129	113	_	_	_	_	_	_	_
Critical Hdwy	7.15	6.55	6.25	7.12	6.52	6.22	4.13	_	_	4.14	_	_
Critical Hdwy Stg 1	6.15	5.55	0.20	6.12	5.52	-		_	_	-	_	_
Critical Hdwy Stg 2	6.15	5.55	_	6.12	5.52	_	_	_	_	_	_	_
Follow-up Hdwy	3.545	4.045	3.345	3.518	4.018	3.318	2.227	_	_	2.236	_	_
Pot Cap-1 Maneuver	632	611	972	649	623	886	1518	_	_	1409	_	_
Stage 1	893	803	-	828	755	-		_	_		_	_
Stage 2	785	737	_	875	802	_	_	_	_	_	_	_
Platoon blocked, %	. 00	. 01		313	JUL			_	_		_	_
Mov Cap-1 Maneuver	580	593	954	604	604	872	1509	_	_	1409	_	_
Mov Cap-2 Maneuver	580	593	-	604	604	- 0, 2	-	_	_	- 100	_	_
Stage 1	879	788	_	819	747	_	_	_	_	_	_	_
Stage 2	729	729	_	818	787	_	_	_	_	_	_	_
	. 20	. 20		3.0								
				14/5						0.5		
Approach	EB			WB			NB			SB		
HCM Control Delay, s	11			10.9			0.7			1.6		
HCM LOS	В			В								
Minor Lane/Major Mvn	nt	NBL	NBT	NBR	EBLn1V	VBLn1V	VBLn2	SBL	SBT	SBR		
Capacity (veh/h)		1509	-	-	648	604	696	1409	-	-		
HCM Lane V/C Ratio		0.01	-	_		0.049			-	-		
HCM Control Delay (s)	)	7.4	-	-	11	11.3	10.5	7.6	_	_		
HCM Lane LOS		Α	-	-	В	В	В	Α	-	-		
HCM 95th %tile Q(veh	1)	0	-	-	0.2	0.2	0.2	0	-	_		
	,											

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Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	LDIX	1102	4	11511	1102	4	HOIT	002	4	ODIT
Traffic Vol, veh/h	5	37	33	25	53	15	0	5	0	5	5	5
Future Vol, veh/h	5	37	33	25	53	15	0	5	0	5	5	5
Conflicting Peds, #/hr	17	0	10	10	0	17	2	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	- -	- -	None
Storage Length	_	_	-	_	_	-	_	_	-	_	_	-
Veh in Median Storage,		0	_	_	0	_	_	0	_	_	0	_
Grade, %	π - -	0	_	_	0	<u>-</u>	<u>-</u>	0	<u>-</u>	<u>-</u>	0	<u>-</u>
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mymt Flow	5	39	35	26	56	16	0	5	0	5	5	5
Major/Minar	1-:1			Mais =0			Ain c 4			Aire a mo		
	lajor1			Major2			Minor1	040		/linor2	00-	20
Conflicting Flow All	89	0	0	84	0	0	200	218	68	203	227	83
Stage 1	-	-	-	-	-	-	77	77	-	133	133	-
Stage 2	-	-	-	-	-	-	123	141	-	70	94	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1519	-	-	1526	-	-	763	684	1001	759	676	982
Stage 1	-	-	-	-	-	-	937	835	-	875	790	-
Stage 2	-	-	-	-	-	-	886	784	-	945	821	-
Platoon blocked, %	1.10.1	-	-	1511	-	-	700	GEO.	004	700	CAA	004
Mov Cap-1 Maneuver	1494	-	-	1511	-	-	733	652	991	729	644	964
Mov Cap-2 Maneuver	-	-	-	-	-	-	733	652	-	729	644	-
Stage 1	-	-	-	-	-	-	925	823	-	858	763	-
Stage 2	-	-	-	-	-	-	858	757	-	934	810	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			2			10.6			9.9		
HCM LOS							В			Α		
Minor Lane/Major Mvmt	1	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :	SBLn1			
Capacity (veh/h)		652	1494			1511			757			
HCM Lane V/C Ratio		0.008		_		0.017	_	_	0.021			
HCM Control Delay (s)		10.6	7.4	0	_	7.4	0	_	9.9			
HCM Lane LOS		В	Α	A	_	Α.	A	_	3.5 A			
HCM 95th %tile Q(veh)		0	0	-	_	0.1	_	_	0.1			
HOW JOHN JUHIC Q(VEII)		U	U			0.1			0.1			

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Int Delay, s/veh													
Movement	Intersection												
Lane Configurations	Int Delay, s/veh	4											
Lane Configurations	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	Lane Configurations		4		*	ħ		*	T₃			4	
Future Vol, veh/h  10  20  17  25  60  35  12  515  15  42  10  A  Conflicting Peds, #ihr  6  0  24  24  0  6  4  0  1  1  1  0  4  Stop Control Free Free Free Free Free Free Free Fre		10		17			35			15	15		21
Sign Control   Free   Stop   Stop   Stop   Stop   Stop   Stop RT Channelized   -   None   -   None   -   None   None   -   None   None   -   None   None   -   None   No		10	20	17	25	60	35	12	5	15	15	4	21
Sign Control         Free RTCE Pree Pree RTCE Pree RTCE Pree RTCE Pree RTCE None         Free None         Free None         Free None         Stop None         None         -         -         -         -         -         -         -         -         -         -         -         0         0         -         -         -         0         0         -         -         -         -         0         0         0         0         0         0         0         0         0         0         0         0	Conflicting Peds, #/hr	6	0	24	24	0	6	4	0	1	1	0	4
Storage Length		Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Veh in Median Storage, #         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         0         0         2         2         2         1         1         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <td>RT Channelized</td> <td>-</td> <td>-</td> <td>None</td> <td>-</td> <td>-</td> <td>None</td> <td>-</td> <td>-</td> <td>None</td> <td>-</td> <td>-</td> <td>None</td>	RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Grade, %         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95 <td>Storage Length</td> <td>-</td> <td>-</td> <td>-</td> <td>0</td> <td>-</td> <td>-</td> <td>78</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>	Storage Length	-	-	-	0	-	-	78	-	-	-	-	-
Peak Hour Factor	Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Heavy Vehicles, %			0	-	-	0	-	-	0	-	-	0	-
Mymit Flow         11         21         18         26         63         37         13         5         16         16         4         22           Major/Minor         Major1         Major2         Minor1         Minor2           Conflicting Flow All         106         0         0         63         0         227         234         55         204         225         92           Stage 1         -         -         -         -         -         -         -         140         140         -           Stage 2         -         -         -         -         -         -         151         158         -         64         85         -           Critical Hdwy Stg 1         -         -         -         -         -         -         6.2         5.6         -         6.1         5.5         -           Critical Hdwy Stg 2         -         -         -         -         6.2         5.6         -         6.1         5.5         -           Critical Hdwy Stg 2         -         -         -         -         6.2         5.6         -         6.1         5.5         - <td< td=""><td>Peak Hour Factor</td><td>95</td><td>95</td><td>95</td><td></td><td>95</td><td>95</td><td></td><td></td><td></td><td>95</td><td>95</td><td>95</td></td<>	Peak Hour Factor	95	95	95		95	95				95	95	95
Major/Minor   Major1	Heavy Vehicles, %								10				
Stage 1	Mvmt Flow	11	21	18	26	63	37	13	5	16	16	4	22
Stage 1													
Stage 1	Maior/Minor M	laior1		ı	Maior2		N	/linor1		N	/linor2		
Stage 1			0			0			234			225	92
Stage 2         -         -         -         -         151         158         -         64         85         -           Critical Hdwy         4.1         -         -         4.12         -         -         7.2         6.6         6.3         7.1         6.5         6.2           Critical Hdwy Stg 1         -         -         -         -         6.2         5.6         -         6.1         5.5         -           Critical Hdwy Stg 2         -         -         -         -         6.2         5.6         -         6.1         5.5         -           Follow-up Hdwy         2.2         -         2.218         -         3.59         4.09         3.39         3.5         4         3.3           Pot Cap-1 Maneuver         1498         -         1540         -         712         653         990         758         678         971           Stage 1         -         -         -         -         914         816         -         868         785         -         982         828         -           Platoon blocked, %         -         -         -         -         661         618													
Critical Hdwy       4.1       -       -       4.12       -       -       7.2       6.6       6.3       7.1       6.5       6.2         Critical Hdwy Stg 1       -       -       -       -       -       6.2       5.6       -       6.1       5.5       -         Critical Hdwy Stg 2       -       -       -       -       -       6.2       5.6       -       6.1       5.5       -         Follow-up Hdwy       2.2       -       -       2.218       -       -       3.59       4.09       3.39       3.5       4       3.3         Pot Cap-1 Maneuver       1498       -       -       1540       -       712       653       990       758       678       971         Stage 1       -       -       -       -       -       833       752       -       952       828       -         Platoon blocked, %       -       -       -       -       -       661       618       966       722       642       962         Mov Cap-1 Maneuver       1489       -       1505       -       661       618       -       722       642       -	•	_		_	_								
Critical Hdwy Stg 1       -       -       -       -       6.2       5.6       -       6.1       5.5       -         Critical Hdwy Stg 2       -       -       -       -       6.2       5.6       -       6.1       5.5       -         Follow-up Hdwy       2.2       -       -       2.218       -       -       3.59       4.09       3.39       3.5       4       3.3         Pot Cap-1 Maneuver       1498       -       1540       -       -       712       653       990       758       678       971         Stage 1       -       -       -       -       -       914       816       -       868       785       -         Stage 2       -       -       -       -       -       833       752       -       952       828       -         Platoon blocked, %       -       -       -       -       -       661       618       966       722       642       962         Mov Cap-1 Maneuver       1489       -       1505       -       661       618       -       722       642       -         Stage 1       -       -       -		4.1	-	-	4.12								6.2
Critical Hdwy Stg 2         -         -         -         -         6.2         5.6         -         6.1         5.5         -           Follow-up Hdwy         2.2         -         -         2.218         -         -         3.59         4.09         3.39         3.5         4         3.3           Pot Cap-1 Maneuver         1498         -         1540         -         -         712         653         990         758         678         971           Stage 1         -         -         -         -         914         816         -         868         785         -           Stage 2         -         -         -         -         -         833         752         -         952         828         -           Platoon blocked, %         -         -         -         -         -         661         618         966         722         642         962           Mov Cap-1 Maneuver         -         -         1505         -         -         661         618         966         722         642         962           Mov Cap-2 Maneuver         -         -         -         -         7886         <	•	_	_	_		_	_						
Follow-up Hdwy 2.2 - 2.218 - 3.59 4.09 3.39 3.5 4 3.3  Pot Cap-1 Maneuver 1498 - 1540 - 712 653 990 758 678 971  Stage 1 914 816 - 868 785 - 952 828 - 914 816 - 868 785 - 952 828 - 952 828 - 914 816 - 868 785 - 952 828 - 915 952 828 - 915 952 828 - 915 952 828 - 915 952 828 - 915 952 828 - 915 952 828 - 915 952 828 - 915 952 828 - 915 952 828 - 915 952 828 - 915 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 828 952 952 952 828 952 952 828 952 952 952 828 952 952 952 828 952 952 952 828 952 952 828 952 952 952 952 952 828 952 952 952 952 952 952 952 952 952 952	, ,	-	_	_	_	_	_			-			_
Pot Cap-1 Maneuver		2.2	_	_	2.218	_	_						3.3
Stage 1         -         -         -         914         816         -         868         785         -           Stage 2         -         -         -         -         833         752         -         952         828         -           Platoon blocked, %         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -<			_	-		-	-						
Stage 2         -         -         -         -         833         752         -         952         828         -           Platoon blocked, %         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         <			_	-	-	-	-						
Platoon blocked, %		-	-	-	-	-	-			-			-
Mov Cap-1 Maneuver         1489         -         -         1505         -         -         661         618         966         722         642         962           Mov Cap-2 Maneuver         -         -         -         -         -         661         618         -         722         642         -           Stage 1         -         -         -         -         -         886         791         -         856         767         -           Stage 2         -         -         -         -         -         792         735         -         922         802         -           Approach         EB         WB         NB         SB           HCM Control Delay, s         1.6         1.5         9.8         9.6           HCM LOS         A         A         A         A           Minor Lane/Major Mvmt         NBLn1 NBLn2         EBL         EBT         EBR         WBL         WBT         WBR SBLn1           Capacity (veh/h)         661         847         1489         -         -         1505         -         -         819           HCM Lane V/C Ratio         0.019         0.025			-	-		-	-						
Mov Cap-2 Maneuver         -         -         -         -         661         618         -         722         642         -           Stage 1         -         -         -         -         -         886         791         -         856         767         -           Stage 2         -         -         -         -         -         792         735         -         922         802         -           Approach         EB         WB         NB         NB         SB           HCM Control Delay, s         1.6         1.5         9.8         9.6           HCM LOS         A         A         A           Minor Lane/Major Mvmt         NBLn1 NBLn2         EBL         EBT         EBR         WBL         WBT         WBR SBLn1           Capacity (veh/h)         661         847         1489         -         -         1505         -         -         819           HCM Lane V/C Ratio         0.019         0.025         0.007         -         -         0.017         -         -         0.051           HCM Lane LOS         B         A         A         A         -         A         - <td></td> <td>1489</td> <td>-</td> <td>-</td> <td>1505</td> <td>-</td> <td>-</td> <td>661</td> <td>618</td> <td>966</td> <td>722</td> <td>642</td> <td>962</td>		1489	-	-	1505	-	-	661	618	966	722	642	962
Stage 1         -         -         -         -         886         791         -         856         767         -           Stage 2         -         -         -         -         -         792         735         -         922         802         -           Approach         EB         WB         NB         NB         SB           HCM Control Delay, s         1.6         1.5         9.8         9.6           HCM LOS         A         A         A           Minor Lane/Major Mvmt         NBLn1 NBLn2         EBL         EBT         EBR         WBL         WBT         WBR SBLn1           Capacity (veh/h)         661         847         1489         -         -         1505         -         -         819           HCM Lane V/C Ratio         0.019         0.025         0.007         -         -         0.017         -         -         0.051           HCM Control Delay (s)         10.6         9.4         7.4         0         -         7.4         -         -         9.6           HCM Lane LOS         B         A         A         A         -         A         -         A	•		-	-	-	-	-			-			-
Stage 2		-	-	-	-	-	-	886		-		767	-
Approach         EB         WB         NB         SB           HCM Control Delay, s         1.6         1.5         9.8         9.6           HCM LOS         A         A         A           Minor Lane/Major Mvmt         NBLn1 NBLn2         EBL         EBT         EBR         WBL         WBT         WBR SBLn1           Capacity (veh/h)         661         847         1489         -         -         1505         -         -         819           HCM Lane V/C Ratio         0.019         0.025         0.007         -         -         0.017         -         -         0.051           HCM Control Delay (s)         10.6         9.4         7.4         0         -         7.4         -         -         9.6           HCM Lane LOS         B         A         A         A         -         A         -         A	•	-	-	-	-	-	-	792	735	-	922	802	-
HCM Control Delay, s   1.6   1.5   9.8   9.6     HCM LOS													
HCM Control Delay, s   1.6   1.5   9.8   9.6     HCM LOS	Approach	FB			WB			NR			SB		
Minor Lane/Major Mvmt         NBLn1 NBLn2         EBL         EBT         EBR         WBL         WBT         WBR SBLn1           Capacity (veh/h)         661         847         1489         -         -         1505         -         -         819           HCM Lane V/C Ratio         0.019         0.025         0.007         -         -         0.017         -         -         0.051           HCM Control Delay (s)         10.6         9.4         7.4         0         -         7.4         -         -         9.6           HCM Lane LOS         B         A         A         A         -         A         -         A													
Minor Lane/Major Mvmt         NBLn1 NBLn2         EBL         EBT         EBR         WBL         WBT         WBR SBLn1           Capacity (veh/h)         661         847         1489         -         -         1505         -         -         819           HCM Lane V/C Ratio         0.019         0.025         0.007         -         -         0.017         -         -         0.051           HCM Control Delay (s)         10.6         9.4         7.4         0         -         7.4         -         -         9.6           HCM Lane LOS         B         A         A         A         -         A         -         A	•	1.0			1.0								
Capacity (veh/h) 661 847 1489 1505 819  HCM Lane V/C Ratio 0.019 0.025 0.007 0.017 0.051  HCM Control Delay (s) 10.6 9.4 7.4 0 - 7.4 9.6  HCM Lane LOS B A A A - A - A - A	TIOWI LOG							A			Α		
Capacity (veh/h) 661 847 1489 1505 819  HCM Lane V/C Ratio 0.019 0.025 0.007 0.017 0.051  HCM Control Delay (s) 10.6 9.4 7.4 0 - 7.4 9.6  HCM Lane LOS B A A A - A - A - A									=				
HCM Lane V/C Ratio       0.019 0.025 0.007       -       -       0.017       -       -       0.051         HCM Control Delay (s)       10.6 9.4 7.4 0 -       -       7.4 -       -       -       9.6         HCM Lane LOS       B       A       A       -       A       -       A						EBT			WBT	WBR S			
HCM Control Delay (s) 10.6 9.4 7.4 0 - 7.4 9.6 HCM Lane LOS B A A A - A - A						-			-	-			
HCM Lane LOS B A A A - A A						-	-		-	-			
							-		-	-			
HCM 95th %tile Q(veh) 0.1 0.1 0 0.1 0.2						Α	-		-	-			
	HCM 95th %tile Q(veh)		0.1	0.1	0	-	-	0.1	-	-	0.2		

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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	ሻ	7	ሻ	<b>†</b>	ĵ»	
Traffic Volume (veh/h)	50	75	122	120	50	33
Future Volume (veh/h)	50	75	122	120	50	33
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1885	1885	1811	1811
Adj Flow Rate, veh/h	53	31	128	126	53	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	1	1	6	6
Cap, veh/h	783	697	645	835	601	170
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1767	1572	1338	1885	1356	384
Grp Volume(v), veh/h	53	31	128	126	0	68
Grp Sat Flow(s),veh/h/ln	1767	1572	1338	1885	0	1740
Q Serve(g_s), s	1.5	1.0	5.4	3.5	0.0	2.0
Cycle Q Clear(g_c), s	1.5	1.0	7.4	3.5	0.0	2.0
Prop In Lane	1.00	1.00	1.00			0.22
Lane Grp Cap(c), veh/h	783	697	645	835	0	771
V/C Ratio(X)	0.07	0.04	0.20	0.15	0.00	0.09
Avail Cap(c_a), veh/h	783	697	645	835	0	771
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.1	13.9	16.3	14.6	0.0	14.2
Incr Delay (d2), s/veh	0.2	0.1	0.7	0.4	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.4	1.7	1.6	0.0	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.2	14.0	17.0	15.0	0.0	14.4
LnGrp LOS	В	В	В	В	Α	В
Approach Vol, veh/h	84			254	68	
Approach Delay, s/veh	14.2			16.0	14.4	
Approach LOS	В			В	В	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		44.0		44.0		44.0
Change Period (Y+Rc), s		5.0		5.0		5.0
Max Green Setting (Gmax), s		39.0		39.0		39.0
Max Q Clear Time (g_c+l1), s		9.4		3.5		4.0
Green Ext Time (p_c), s		0.9		0.2		0.3
Intersection Summary						
			1E 4			
HCM 6th Ctrl Delay			15.4			
HCM 6th LOS			В			

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Intersection						
Int Delay, s/veh	0.5					
		WED	NOT	NDD	051	ODT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	À	10	<u></u>		7	<b>↑</b>
Traffic Vol, veh/h	10	12	255	60	0	140
Future Vol, veh/h	10	12	255	60	0	140
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	87	-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	11	11	1	1	3	3
Mvmt Flow	11	13	268	63	0	147
Major/Minor	Minera		Anic -1		Mais-2	
	Minor1		Major1		Major2	
Conflicting Flow All	450	303	0	0	334	0
Stage 1	303	_	-	-	-	-
Stage 2	147	-	-	-	-	-
Critical Hdwy	6.51	6.31	-	-	4.13	-
Critical Hdwy Stg 1	5.51	-	-	-	-	-
Critical Hdwy Stg 2	5.51	-	-	-	-	-
Follow-up Hdwy	3.599		-	-	2.227	-
Pot Cap-1 Maneuver	550	716	-	-	1220	-
Stage 1	729	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	548	714	-	-	1217	-
Mov Cap-2 Maneuver	548	-	-	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	859	-	-	-	-	-
A 1	MD		ND		0.0	
Approach	WB		NB		SB	
HCM Control Delay, s	11		0		0	
HCM LOS	В					
Minor Lane/Major Mvm	nt	NBT	NRRV	VBLn1	SBL	SBT
Capacity (veh/h)			-		1217	-
HCM Lane V/C Ratio		<u> </u>		0.037	1217	-
HCM Control Delay (s)		_	_		0	_
		<u> </u>	<u>-</u>	В	A	_
HCM Lane LOC						-
HCM Lane LOS HCM 95th %tile Q(veh	١	-	_	0.1	0	_

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>ተ</b> ኈ		ሻ	<b>•</b>	7	ሻ	<b>↑</b>	7	ሻሻ	₽	
Traffic Volume (veh/h)	5	210	5	45	185	205	5	95	60	110	35	5
Future Volume (veh/h)	5	210	5	45	185	205	5	95	60	110	35	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1870	1870	1870	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	5	221	4	47	195	134	5	100	4	116	37	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	2	2	2	4	4	4	4	4	4
Cap, veh/h	14	2383	43	70	1288	1091	175	160	133	171	318	9
Arrive On Green	0.01	0.66	0.66	0.04	0.69	0.69	0.09	0.09	0.09	0.05	0.18	0.18
Sat Flow, veh/h	1810	3628	66	1781	1870	1584	1330	1841	1538	3401	1783	48
Grp Volume(v), veh/h	5	110	115	47	195	134	5	100	4	116	0	38
Grp Sat Flow(s),veh/h/ln	1810	1805	1888	1781	1870	1584	1330	1841	1538	1700	0	1831
Q Serve(g_s), s	0.3	2.7	2.7	3.1	4.3	3.5	0.4	6.3	0.3	4.0	0.0	2.1
Cycle Q Clear(g_c), s	0.3	2.7	2.7	3.1	4.3	3.5	0.4	6.3	0.3	4.0	0.0	2.1
Prop In Lane	1.00		0.03	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	14	1186	1240	70	1288	1091	175	160	133	171	0	327
V/C Ratio(X)	0.36	0.09	0.09	0.67	0.15	0.12	0.03	0.63	0.03	0.68	0.00	0.12
Avail Cap(c_a), veh/h	151	1186	1240	193	1288	1091	404	476	397	368	0	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.2	7.5	7.5	56.8	6.5	6.4	50.2	52.9	50.2	56.0	0.0	41.3
Incr Delay (d2), s/veh	11.2	0.2	0.1	7.8	0.2	0.2	0.0	3.0	0.1	3.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.1	1.1	1.6	1.8	1.2	0.1	3.1	0.1	1.8	0.0	1.0
Unsig. Movement Delay, s/veh		77	77	04.0	0.7	0.0	FO 0	FF 0	<b>50.0</b>	F0 F	0.0	44.5
LnGrp Delay(d),s/veh	70.5	7.7	7.7	64.6	6.7	6.6	50.3	55.9	50.2	59.5	0.0	41.5
LnGrp LOS	E	A	A	E	A	A	D	E	D	E	A	<u>D</u>
Approach Vol, veh/h		230			376			109			154	
Approach Delay, s/veh		9.0			13.9			55.4			55.1	
Approach LOS		Α			В			E			Е	
Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	83.8	11.0	15.4	5.9	87.6		26.4				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	13.0	43.0	13.0	31.0	10.0	46.0		49.0				
Max Q Clear Time (g_c+l1), s	5.1	4.7	6.0	8.3	2.3	6.3		4.1				
Green Ext Time (p_c), s	0.0	1.2	0.1	0.4	0.0	1.4		0.2				
Intersection Summary												
HCM 6th Ctrl Delay			25.1									
HCM 6th LOS			С									

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Convergence, Y/N

HCM Lane V/C Ratio **HCM Control Delay** 

Service Time

HCM Lane LOS

HCM 95th-tile Q

Cap

Yes

1067

6.5

0.1

Α

1.375 2.177 0.039 0.021

Yes

862

7.3

Α

0.1

Intersection						
Intersection Delay, s/v	eh 6.7					
Intersection LOS	A					
,						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	ሻ	WDIX	4	NDIN	ODL	001
Traffic Vol, veh/h	17	0	0	40	0	0
Future Vol, veh/h	17	0	0	40	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0.93	0.95	2	0.93	0.93	0.93
Mvmt Flow	18	0	0	42	0	
	10					0
Number of Lanes	1	0	1	0	0	0
Approach	WB		NB			
Opposing Approach						
Opposing Lanes	0		0			
Conflicting Approach L	eft NB					
Conflicting Lanes Left	1		0			
Conflicting Approach F	Right		WB			
Conflicting Lanes Righ			1			
HCM Control Delay	7.3		6.5			
HCM LOS	Α		Α			
Lane	N	NBLn1V	VDI p1			
Vol Left, %			100%			
Vol Thru, %		0%	0%			
Vol Right, %		100%	0%			
Sign Control						
		Stop 40	Stop 17			
Traffic Vol by Lane LT Vol			17			
		0				
Through Vol		0	0			
RT Vol		40	0			
Lane Flow Rate		42	18			
Geometry Grp		1	1			
Degree of Util (X)		0.039				
Departure Headway (H	ld)	3.365	4.173			

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Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ሻ	ĵ.		*	1•		ች	ĵ.	
Traffic Vol, veh/h	5	36	30	70	20	35	25	105	28	16	160	10
Future Vol, veh/h	5	36	30	70	20	35	25	105	28	16	160	10
Conflicting Peds, #/hr	13	0	35	35	0	13	17	0	0	0	0	17
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	<u>'</u> -	-	None	-	_	None	-	-	None	-	-	None
Storage Length	-	-	-	39	-	-	79	-	-	75	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	8	8	8	1	1	1	2	2	2	2	2	2
Mvmt Flow	5	38	31	73	21	36	26	109	29	17	167	10
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	440	413	224	452	404	137	194	0	0	138	0	0
Stage 1	223	223		176	176	-	-	-	-	-	-	-
Stage 2	217	190	_	276	228	_	_	_	_	_	-	_
Critical Hdwy	7.18	6.58	6.28	7.11	6.51	6.21	4.12	_	_	4.12	_	-
Critical Hdwy Stg 1	6.18	5.58	-	6.11	5.51	-	-	_	_	-	-	_
Critical Hdwy Stg 2	6.18	5.58	_	6.11	5.51	_	-	_	_	_	_	-
Follow-up Hdwy	3.572	4.072	3.372		4.009	3.309	2.218	_	_	2.218	-	_
Pot Cap-1 Maneuver	517	520	801	520	537	914	1379	_	_	1446	_	-
Stage 1	766	708	-	828	755		-	_	_	-	-	-
Stage 2	772	732	-	732	717	-	_	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	456	496	762	444	512	903	1357	-	-	1446	-	-
Mov Cap-2 Maneuver	456	496	-	444	512	-	-	-	-	-	-	-
Stage 1	739	688	-	812	741	_	-	-	-	-	-	-
Stage 2	697	718	-	634	697	-	-	-	-	-	-	-
<u> </u>												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	12.1			12.9			1.2			0.6		
HCM LOS	В			В								
Minor Lane/Major Mvn	nt	NBL	NBT	NBR	EBLn1V	VBLn1V	VBLn2	SBL	SBT	SBR		
Capacity (veh/h)		1357	-	-	578	444	707	1446	-	-		
HCM Lane V/C Ratio		0.019	-	-		0.164			-	-		
HCM Control Delay (s)		7.7	-	-	12.1	14.7	10.5	7.5	-	-		
HCM Lane LOS		Α	-	-	В	В	В	A	-	-		
HCM 95th %tile Q(veh	)	0.1	-	-	0.4	0.6	0.3	0	-	-		

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Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	5	84	21	5	98	10	27	5	28	10	5	5
Future Vol, veh/h	5	84	21	5	98	10	27	5	28	10	5	5
Conflicting Peds, #/hr	42	0	26	26	0	42	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	_	_	None	_	_	None	_	_	None	-	-	None
Storage Length	_	_	_	_	_	-	_	_	_	-	-	_
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	_	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	4	4	4	0	0	0	8	8	8
Mvmt Flow	5	88	22	5	103	11	28	5	29	11	5	5
Major/Minor N	lajor1		ı	Major2		N	/linor1			Minor2		
Conflicting Flow All	156	0	0	136	0	0	261	301	125	287	307	153
Stage 1	-	-	-	-	-	-	135	135	120	161	161	-
Stage 2	_	_	_	_	_	_	126	166	_	126	146	_
Critical Hdwy	4.1	_		4.14	_	_	7.1	6.5	6.2	7.18	6.58	6.28
Critical Hdwy Stg 1	-	<u>-</u>	_	-	<u>-</u>	_	6.1	5.5	- 0.2	6.18	5.58	- 0.20
Critical Hdwy Stg 2	_	_	_	_	_	_	6.1	5.5	_	6.18	5.58	_
Follow-up Hdwy	2.2	_	_	2.236	<u>-</u>	_	3.5	4	3.3		4.072	
Pot Cap-1 Maneuver	1436	_	_	1436	_	_	696	615	931	653	597	878
Stage 1	- 150	_	_		_	_	873	789	-	827	753	-
Stage 2	-	_	_	_	-	-	883	765	_	864	765	-
Platoon blocked, %		_	_		_	_	- 555			301		
Mov Cap-1 Maneuver	1379	_	_	1400	-	-	664	571	908	599	555	841
Mov Cap-2 Maneuver	-	-	-	-	_	-	664	571	-	599	555	-
Stage 1	_	_	_	_	-	-	848	766	_	791	720	-
Stage 2	_	_	_	_	_	_	866	731	_	827	743	_
2.6.50							300			J <u>_</u> ,	0	
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.3			10.3			10.9		
HCM LOS	3.0			3.0			В			В		
Minor Lane/Major Mvmt	. 1	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1			
Capacity (veh/h)		748	1379			1400			632			
HCM Lane V/C Ratio		0.084		_		0.004	_	_	0.033			
HCM Control Delay (s)		10.3	7.6	0		7.6	0	_	10.9			
HCM Lane LOS		В	Α.	A	_	Α.	A	_	В			
HCM 95th %tile Q(veh)		0.3	0	-	_	0		_	0.1			
TOWN JOHN JUHIC Q(VCII)		0.0	J			U			J. 1			

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Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ሻ	ĵ.		ች	<b>f</b>			4	
Traffic Vol, veh/h	5	75	42	25	60	10	36	5	70	15	8	17
Future Vol, veh/h	5	75	42	25	60	10	36	5	70	15	8	17
Conflicting Peds, #/hr	9	0	31	31	0	9	13	0	8	8	0	13
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	78	-	-	-	-	-
Veh in Median Storage	e, # -	0	-	_	0	-	-	0	_	-	0	_
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	6	6	6	2	2	2	0	0	0
Mvmt Flow	5	79	44	26	63	11	38	5	74	16	8	18
Major/Minor	Major1		ı	Major2		ı	Minor1		N	/linor2		
Conflicting Flow All	83	0	0	154	0	0	289	277	140	289	294	91
Stage 1	-	-	-	-	-	-	142	142	140	130	130	-
Stage 2	_	_	_	_	_	_	147	135	<u>-</u>	159	164	_
Critical Hdwy	4.11	_	_	4.16	_	_	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	_	_	T. 10	_	_	6.12	5.52	-	6.1	5.5	- 0.2
Critical Hdwy Stg 2	_	_	_	_	_	_	6.12	5.52	-	6.1	5.5	_
Follow-up Hdwy	2.209	_	_	2.254	_	_	3.518	4.018		3.5	4	3.3
Pot Cap-1 Maneuver	1520	_	_	1402	-	-	663	631	908	667	620	972
Stage 1	-	_	_	-	_	_	861	779	-	878	792	-
Stage 2	-	-	_	_	-	_	856	785	-	848	766	-
Platoon blocked, %		_	-		_	-						
Mov Cap-1 Maneuver	1507	_	-	1361	-	-	606	593	874	586	582	952
Mov Cap-2 Maneuver	-	-	-	-	-	-	606	593	-	586	582	-
Stage 1	-	-	-	-	-	-	833	753	-	867	770	-
Stage 2	-	-	-	-	-	-	805	763	-	762	740	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			2			10.2			10.5		
HCM LOS	0.0						В			В		
TOW LOO							U			U		
Mineral and Marin Ma		NIDL - 4 1	UDL C	EDI	EDT	EDD	MA	MOT	WEE	ארום ב		
Minor Lane/Major Mvm	It	NBLn11		EBL	EBT	EBR	WBL	WBT	WBR S			
Capacity (veh/h)		606	847	1507	-		1361	-	-	699		
HCM Lane V/C Ratio			0.093		-	-	0.019	-	-	0.06		
HCM Control Delay (s)		11.3	9.7	7.4	0	-	7.7	-	-	10.5		
HCM Lane LOS	_	В	A	A	Α	<u>-</u>	A	-	<u>-</u>	В		
HCM 95th %tile Q(veh)		0.2	0.3	0	-	-	0.1	-	-	0.2		

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	۶	•	4	<b>†</b>	ţ	4
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	ሻ	7	ሻ	<b>†</b>	f)	
Traffic Volume (veh/h)	43	150	97	125	172	73
Future Volume (veh/h)	43	150	97	125	172	73
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1885	1885	1870	1870
Adj Flow Rate, veh/h	45	61	102	132	181	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	1	1	2	2
Cap, veh/h	777	691	493	835	606	188
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1753	1560	1147	1885	1368	423
Grp Volume(v), veh/h	45	61	102	132	0	237
Grp Sat Flow(s), veh/h/ln	1753	1560	1147	1885	0	1791
Q Serve(g_s), s	1.3	2.0	5.5	3.7	0.0	7.5
Cycle Q Clear(g_c), s	1.3	2.0	13.0	3.7	0.0	7.5
Prop In Lane	1.00	1.00	1.00	<b>J</b> .,	3.0	0.24
Lane Grp Cap(c), veh/h	777	691	493	835	0	794
V/C Ratio(X)	0.06	0.09	0.21	0.16	0.00	0.30
Avail Cap(c_a), veh/h	777	691	493	835	0.00	794
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.0	14.2	19.9	14.7	0.0	15.7
Incr Delay (d2), s/veh	0.1	0.3	1.0	0.4	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.4	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	1.6	1.6	0.0	3.2
Unsig. Movement Delay, s/veh		0.7	1.0	1.0	0.0	3.2
•	14.1	14.4	20.8	15.1	0.0	16.7
LnGrp Delay(d),s/veh		14.4 B	20.8 C			
LnGrp LOS	B	В	U	B	A 007	В
Approach Vol, veh/h	106			234	237	
Approach Delay, s/veh	14.3			17.6	16.7	
Approach LOS	В			В	В	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		44.0		44.0		44.0
Change Period (Y+Rc), s		5.0		5.0		5.0
Max Green Setting (Gmax), s		39.0		39.0		39.0
Max Q Clear Time (g_c+l1), s		15.0		4.0		9.5
Green Ext Time (p_c), s		0.9		0.2		1.3
" = 7		0.0		0.2		1.0
Intersection Summary						
HCM 6th Ctrl Delay			16.6			
HCM 6th LOS			В			

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Intersection						
Int Delay, s/veh	2.9					
		WDD	NDT	NDD	CDI	CDT
	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	<b>Y</b>	40	<b>↑</b>	70	<u> </u>	<b>↑</b>
Traffic Vol, veh/h	120	12	185	70	5	310
Future Vol, veh/h	120	12	185	70	5	310
Conflicting Peds, #/hr	0	1	_ 0	_ 14	_ 14	_ 0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	87	-
Veh in Median Storage,		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	126	13	195	74	5	326
N.A' /N.A' N.I	r		1.1.1		4.1.0	
	linor1		//ajor1		Major2	
Conflicting Flow All	582	247	0	0	283	0
Stage 1	246	-	-	-	-	-
Stage 2	336	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.13	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.227	-
Pot Cap-1 Maneuver	479	797	-	-	1274	-
Stage 1	800	-	-	-	-	-
Stage 2	728	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	471	786	_	_	1257	_
Mov Cap-2 Maneuver	471	-	_	_	-	_
Stage 1	790	_	_	_	_	_
Stage 2	725	_	_	_	_	
Olago Z	120	_	-		-	_
Approach	WB		NB		SB	
			0		0.1	
	15.3		U			
HCM Control Delay, s	15.3 C		U			
HCM Control Delay, s HCM LOS	С	NDT		MDL 4	CDI	CDT
HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt	С	NBT	NBRV	VBLn1	SBL	SBT
HCM Control Delay, s HCM LOS  Minor Lane/Major Mvmt Capacity (veh/h)	С	-	NBRV -	489	1257	-
HCM Control Delay, s HCM LOS  Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio	С	NBT - -	NBRW - -	489 0.284	1257 0.004	SBT - -
HCM Control Delay, s HCM LOS  Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	С	-	NBRV -	489 0.284 15.3	1257 0.004 7.9	-
HCM Control Delay, s HCM LOS  Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio	С	-	NBRW - -	489 0.284	1257 0.004	-

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	۶	<b>→</b>	•	•	<b>←</b>	4	1	<b>†</b>	~	<b>/</b>	<b>†</b>	✓
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>∱</b> ⊅		ሻ	<b>•</b>	7	ሻ	<b>↑</b>	7	ሻሻ	1>	
Traffic Volume (veh/h)	10	250	10	110	245	180	20	70	75	210	145	10
Future Volume (veh/h)	10	250	10	110	245	180	20	70	75	210	145	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.99		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1841	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	10	255	8	112	250	114	20	71	7	214	148	8
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	2	2	2	4	4	4	2	2	2
Cap, veh/h	25	2090	65	137	1221	1033	164	161	134	273	365	20
Arrive On Green	0.01	0.59	0.59	0.08	0.65	0.65	0.09	0.09	0.09	0.08	0.21	0.21
Sat Flow, veh/h	1795	3542	111	1781	1870	1581	1194	1841	1533	3456	1757	95
Grp Volume(v), veh/h	10	129	134	112	250	114	20	71	7	214	0	156
Grp Sat Flow(s),veh/h/ln	1795	1791	1862	1781	1870	1581	1194	1841	1533	1728	0	1852
Q Serve(g_s), s	0.7	3.8	3.8	7.4	6.4	3.2	1.9	4.4	0.5	7.3	0.0	8.7
Cycle Q Clear(g_c), s	0.7	3.8	3.8	7.4	6.4	3.2	1.9	4.4	0.5	7.3	0.0	8.7
Prop In Lane	1.00	40	0.06	1.00	4004	1.00	1.00	101	1.00	1.00		0.05
Lane Grp Cap(c), veh/h	25	1057	1098	137	1221	1033	164	161	134	273	0	385
V/C Ratio(X)	0.39	0.12	0.12	0.81	0.20	0.11	0.12	0.44	0.05	0.78	0.00	0.41
Avail Cap(c_a), veh/h	150	1057	1098	193	1221	1033	369	476	396	374	0	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.6	10.9	10.9	54.5	8.3	7.8	50.8	52.0	50.2	54.3	0.0	41.1
Incr Delay (d2), s/veh	7.2	0.2	0.2	14.5	0.4	0.2	0.2	1.4	0.1	6.3	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	1.7	0.0	0.0 2.7	0.0 1.2		0.0	0.0	0.0 3.4	0.0	0.0 4.1
%ile BackOfQ(50%),veh/ln		1.6	1.7	3.9	2.1	I.Z	0.6	2.1	0.2	3.4	0.0	4.1
Unsig. Movement Delay, s/veh		11.1	11.1	69.0	8.7	8.0	51.1	53.4	50.3	60.6	0.0	41.6
LnGrp Delay(d),s/veh LnGrp LOS	65.8 E	11.1 B	11.1 B	69.0 E	0. <i>1</i>	0.0 A	51.1 D	55.4 D	50.5 D	60.6 E	0.0 A	41.0 D
		273	D		476	A	U		U		370	
Approach Vol, veh/h					22.7			98 52.7			52.6	
Approach LOS		13.1						_			_	
Approach LOS		В			С			D			D	
Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	14.3	75.8	14.5	15.5	6.7	83.4		29.9				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	13.0	43.0	13.0	31.0	10.0	46.0		49.0				
Max Q Clear Time (g_c+l1), s	9.4	5.8	9.3	6.4	2.7	8.4		10.7				
Green Ext Time (p_c), s	0.1	1.4	0.2	0.3	0.0	1.6		0.8				
Intersection Summary												
HCM 6th Ctrl Delay			32.1									
HCM 6th LOS			С									

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HCM Lane LOS HCM 95th-tile Q

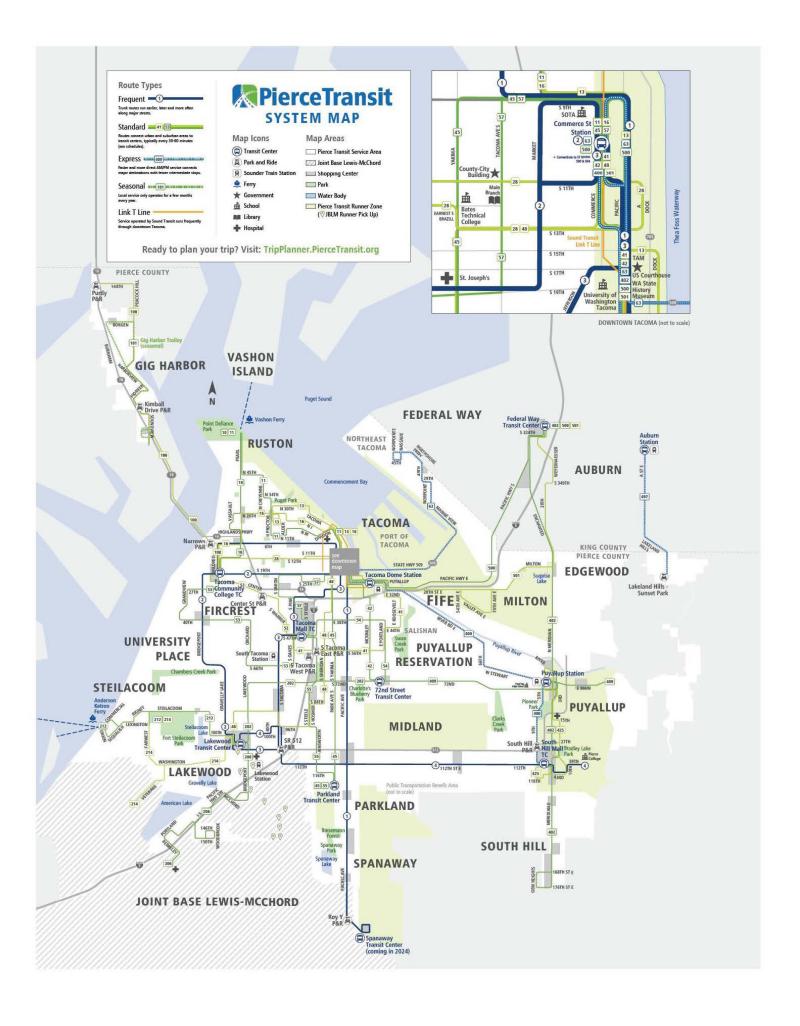
0.2

0.3

Intersection						
Intersection Delay, s/vel	h 7.3					
Intersection LOS	Α					
	•					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			₽			
Traffic Vol, veh/h	80	0	0	55	0	0
Future Vol, veh/h	80	0	0	55	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	3	3	8	8
Mvmt Flow	84	0	0	58	0	0
Number of Lanes	1	0	1	0	0	0
	MD		ND			
Approach	WB		NB			
Opposing Approach						
Opposing Lanes	0		0			
Conflicting Approach Le	ft NB					
Conflicting Lanes Left	1		0			
Conflicting Approach Ri	ght		WB			
Conflicting Lanes Right	0		1			
HCM Control Delay	7.7		6.8			
HCM LOS	Α		Α			
L		IDL AV	VDL .4			
Lane	ľ	NBLn1V				
Vol Left, %			100%			
Vol Thru, %		0%	0%			
Vol Right, %		100%	0%			
Sign Control		Stop	Stop			
Traffic Vol by Lane		55	80			
LT Vol		0	80			
Through Vol		0	0			
RT Vol		55	0			
Lane Flow Rate		58	84			
Geometry Grp		1	1			
Degree of Util (X)		0.056	0.098			
Departure Headway (Ho	d)	3.498	4.2			
Convergence, Y/N	,	Yes	Yes			
Cap		1017	856			
Service Time		1.543	2.21			
HCM Lane V/C Ratio		0.057				
HCM Control Delay		6.8	7.7			
i ioivi ooniioi belay		0.0	1.1			

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# **Appendix C – Additional References**



# **EXHIBIT C-7**

# RECEIVED JULY 3, 2025 HEARING EXAMINER

# Stevens, Troy

From: Kammerzell, Jennifer

**Sent:** Tuesday, July 1, 2025 3:43 PM

**To:** Stevens, Troy

Cc: Rogers, Susie; Kidd, Brennan; Marsten, Vicki; Himes, Gail; Huseby, Eric

Subject: RE: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT -

South 19th St.

Attachments: UWT - S19th\_Market-Jefferson Vacation - Traffic and Signal Response.pdf

UWT would be responsible for initiating and completing the work under a Work Order and/or SDEV permit with a UWT contractor. The City would not complete the work and request reimbursement, nor would we reimburse UWT for work completed, since the improvements are not City requested. The phased closure will impact travel and public right-of-way, which is what necessitates a permit for City review. Additionally, the responsibility for ongoing maintenance would be with UWT as well.

See attached exhibit for required street improvements and easements related to City infrastructure.

# Jennifer Kammerzell

Interim Transportation Division Manager City of Tacoma - Public Works Dept. jkammerzell@tacoma.gov (253) 591-5511 Pronouns: she/her

\*Traffic Plan Review is currently experiencing a staffing shortage. We appreciate your patience and apologize in advance for delays in response times.\*

From: Stevens, Troy <tstevens@cityoftacoma.org>

Sent: Tuesday, January 7, 2025 3:05 PM

To: Allen, Gary <gallen@cityoftacoma.org>; Bogart, Regan <RBogart@cityoftacoma.org>; Boudet, Brian

<BBoudet@cityoftacoma.org>; Bremer, Kandi <KBremer@cityoftacoma.org>; Avila, Britany <BAvila@cityoftacoma.org>;

Brown, Azure <ABrown2@cityoftacoma.org>; Bruner, Carleen <CBruner@cityoftacoma.org>; CenturyLink

<nre.easement@centurylink.com>; Dressler, Teresa <TDressle@cityoftacoma.org>; Erickson, Ryan

<RErickso@cityoftacoma.org>; Gust, Derek <DGust@cityoftacoma.org>; Hauenstein, Lyle

<lhauenstein@cityoftacoma.org>; Himes, Gail <ghimes@cityoftacoma.org>; Huseby, Eric <ehuseby@cityoftacoma.org>; Johnson, Christopher <cjohnso2@cityoftacoma.org>; Kammerzell, Jennifer <JKammerzell@cityoftacoma.org>; Kidd,

Brennan <br/>
<br/>
bkidd@cityoftacoma.org>; Marsten, Vicki <vmarsten@cityoftacoma.org>; Matt Cruzan

<matthew cruzan@comcast.com>; Megan Tuche <Megan.Tuche@pse.com>; Muller, Gregory

<GMuller@cityoftacoma.org>; Newton, Corey <cnewton@cityoftacoma.org>; Niehuser, Jack

<JNiehuser@cityoftacoma.org>; Beard, Patricia <PBeard@cityoftacoma.org>; Zoning <Zoning@cityoftacoma.org>;

Rob.Bair@centurylink.com; Rogers, Susie <srogers@cityoftacoma.org>; Romero, Joseph <JRomero@cityoftacoma.org>; Seaman, Chris <cseaman@cityoftacoma.org>; Site Development <SiteDevelopment@cityoftacoma.org>; Tina Vaslet

(tvaslet@piercetransit.org) <tvaslet@piercetransit.org>; Torres, Andrew <ATORRES@cityoftacoma.org>

Cc: Stevens, Troy <tstevens@cityoftacoma.org>

Subject: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT - South 19th St.

Agency Reviewer,

Please review the attached request for proposed Street Vacation Petition 124.1459 (South 19<sup>th</sup> St.), as requested by the University of Washington and provide comment for your respective utility/agency on or before January 24, 2025. Responses received later than January 24, 2025 risk NOT being incorporated into the vacation action.

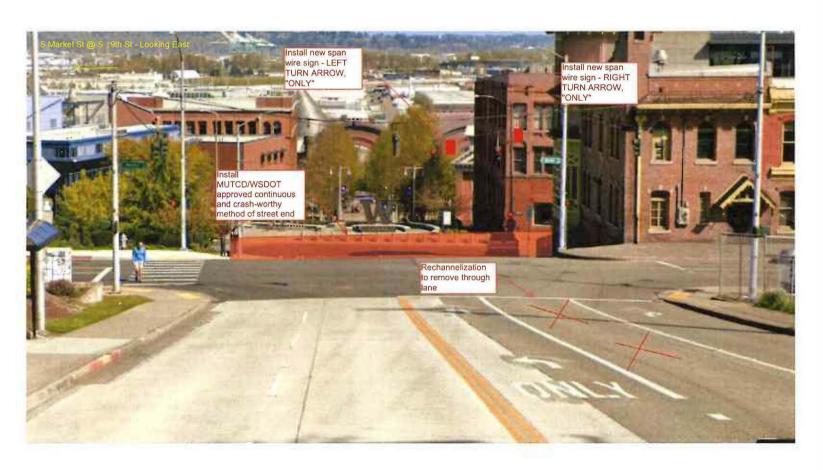
Note: the Court C vacation petition (SV124.1458) request for comment was sent out separately.

Please email me with any questions you may have.

Please note: In the event that conditions do not comport to <u>RCW 35.79.030, which limits conditions of the vacation to the bounds of the proposed vacate area, a representative from your respective utility will be required to attend the public hearing to present the perceived merits of your conditions. Failure to attend may result in the automatic dismissal of any such condition that does not comport to statute.</u>

Thank you,



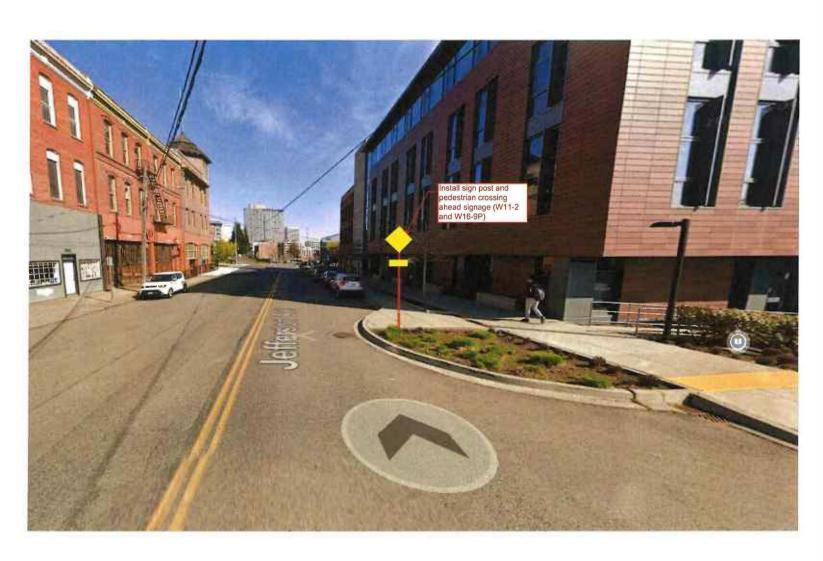


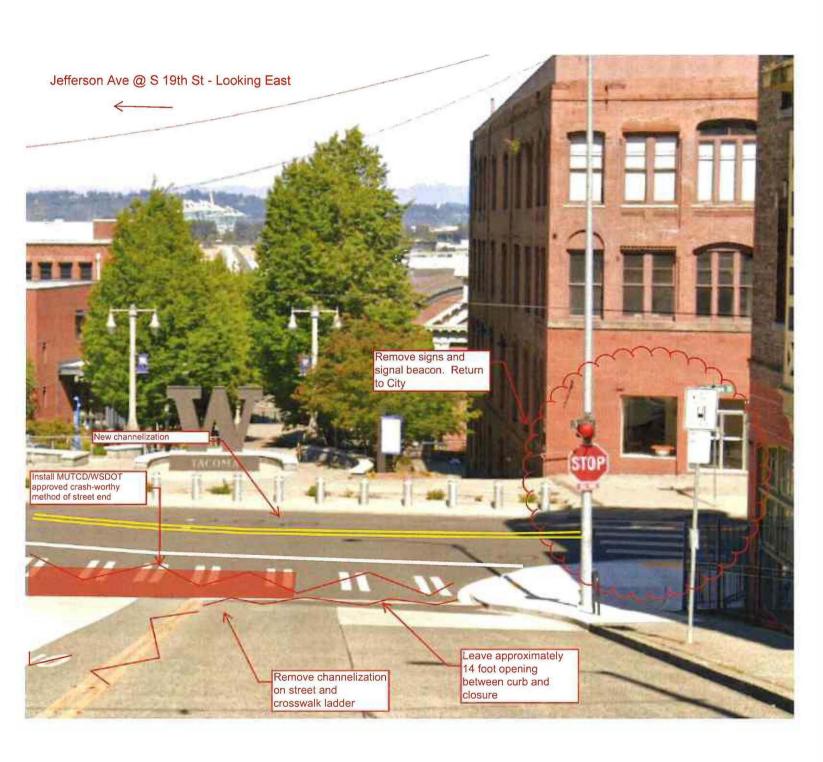


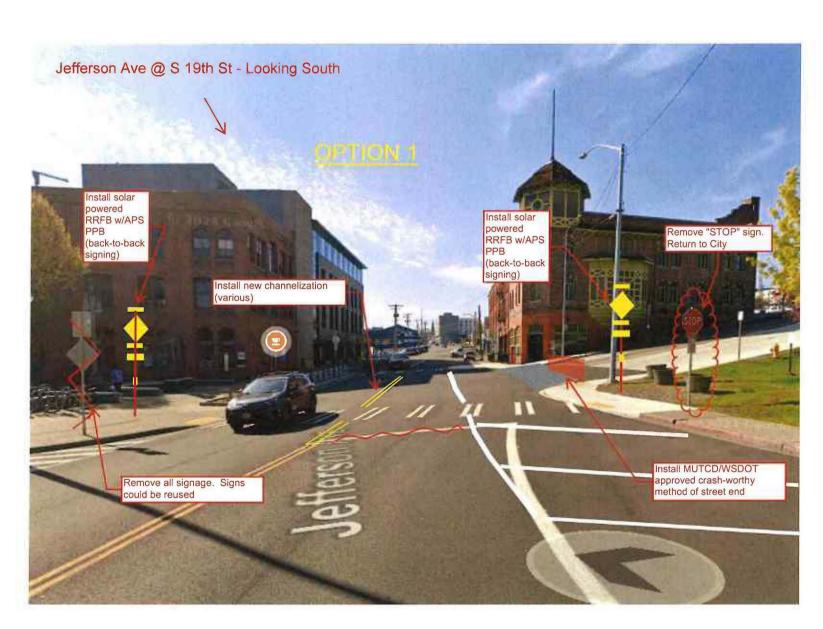




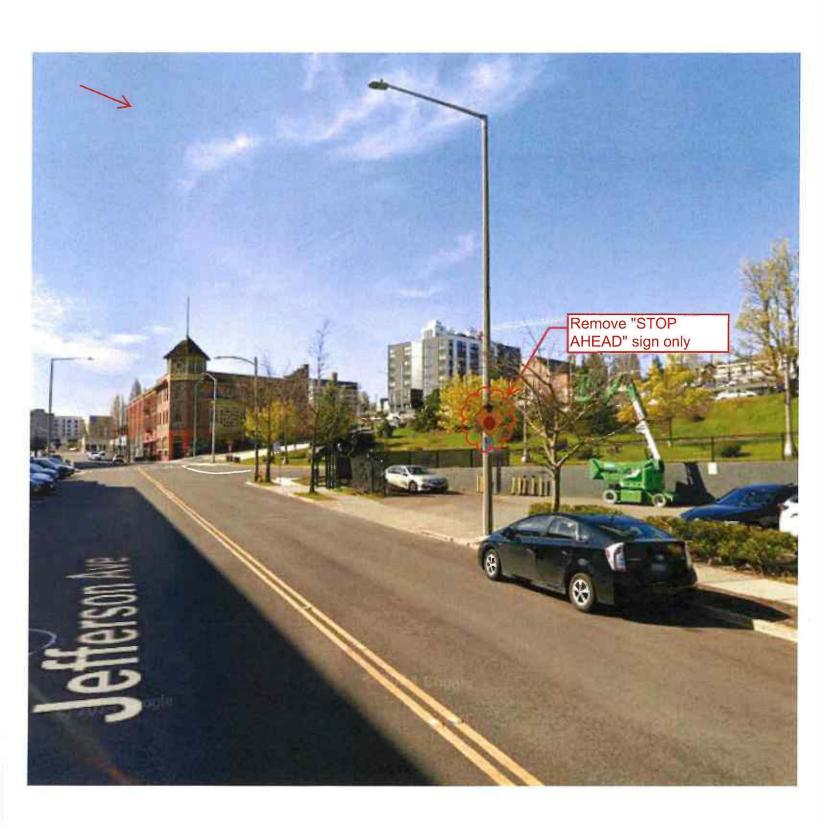


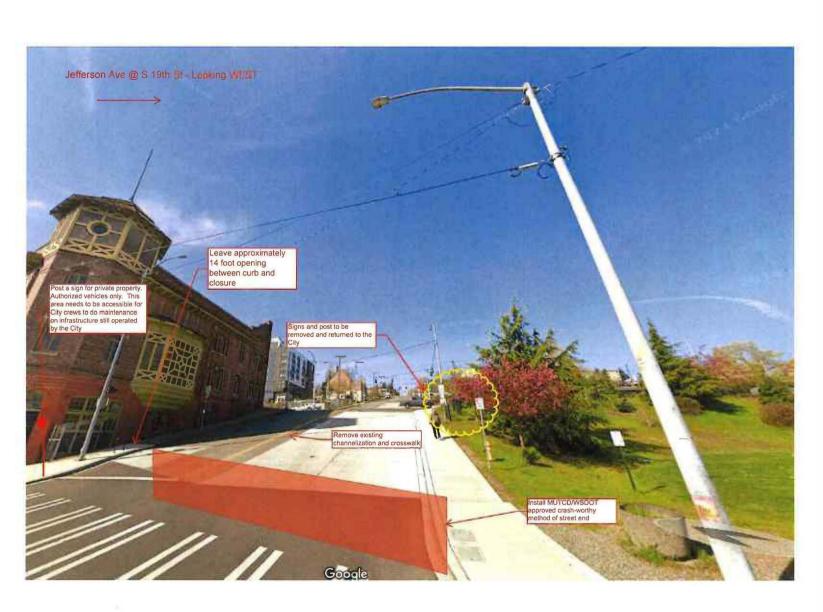


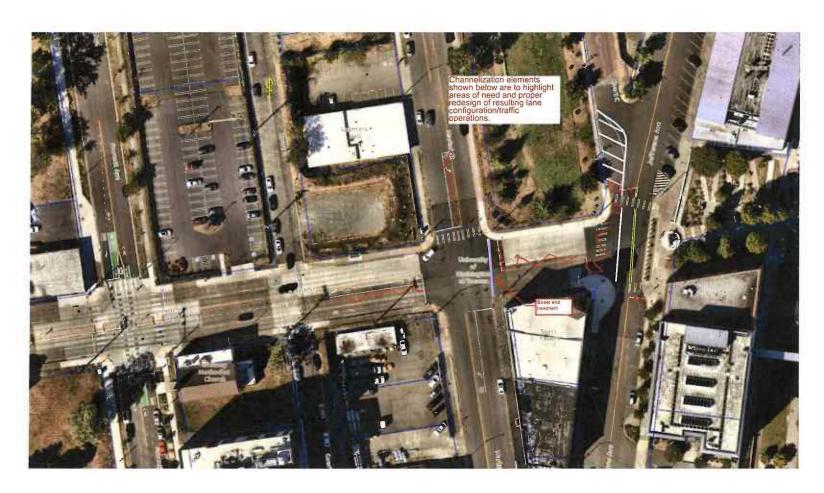












RECEIVED
JULY 3, 2025

JULY 3, 2025
OFFICE OF THE TACOMA CITY
HEARING EXAMINER

**From:** Dressler, Teresa

Sent: Wednesday, January 29, 2025 7:09 AM

**To:** Stevens, Troy

Subject: RE: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT -

South 19th St.

# Yes, ES has comments

# Stormwater:

• 40-ft easement for the 48-in storm pipe 9highlighted in yellow below) running down 19<sup>th</sup> St, easement width is based on pipe size and depth

• 20-ft easement for the catch basin lead (highlighted in red below)



No comments for wastewater

Thank you, **7**eresa Dressler

From: Stevens, Troy <tstevens@cityoftacoma.org>

Sent: Tuesday, January 28, 2025 2:30 PM

**To:** Dressler, Teresa <TDressle@cityoftacoma.org> **Cc:** Stevens, Troy <tstevens@cityoftacoma.org>

Subject: FW: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT - South 19th St.

Teresa,

If you would, please provide comment on this street vacation as soon as you can.

Thank you,

Troy Stevens, MSML
Real Property Services
City of Tacoma, Public Works
(253) 591-5535
tstevens@ci.tacoma.wa.us

From: Stevens, Troy < tstevens@cityoftacoma.org>

Sent: Tuesday, January 7, 2025 3:05 PM

To: Allen, Gary <gallen@cityoftacoma.org>; Bogart, Regan <a href="Regart@cityoftacoma.org">Regart@cityoftacoma.org>; Boudet, Brian & Regart@cityoftacoma.org>; Boudet, Brian & Regart@cityoftacoma.org>; Avila Reityoftacoma.org>; Boudet, Brian & Regart@cityoftacoma.org>; Brian & Regart@cityoftacoma.org>; Brian & Regart@cityof

< <u>BBoudet@cityoftacoma.org</u>>; Bremer, Kandi < <u>KBremer@cityoftacoma.org</u>>; Avila, Britany < <u>BAvila@cityoftacoma.org</u>>;

 $Brown, Azure < \underline{ABrown2@cityoftacoma.org} >; Bruner, Carleen < \underline{CBruner@cityoftacoma.org} >; CenturyLink \\$ 

<<u>nre.easement@centurylink.com</u>>; Dressler, Teresa <<u>TDressle@cityoftacoma.org</u>>; Erickson, Ryan

<RErickso@cityoftacoma.org>; Gust, Derek <DGust@cityoftacoma.org>; Hauenstein, Lyle

Johnson, Christopher <<u>ciohnso2@cityoftacoma.org</u>>; Kammerzell, Jennifer <<u>JKammerzell@cityoftacoma.org</u>>; Kidd,

Brennan < bkidd@cityoftacoma.org>; Marsten, Vicki < vmarsten@cityoftacoma.org>; Matt Cruzan

<matthew cruzan@comcast.com>; Megan Tuche <Megan.Tuche@pse.com>; Muller, Gregory

<<u>GMuller@cityoftacoma.org</u>>; Newton, Corey <<u>cnewton@cityoftacoma.org</u>>; Niehuser, Jack

 $< \underline{\mbox{Niehuser@cityoftacoma.org>; Beard, Patricia} < \underline{\mbox{PBeard@cityoftacoma.org>; Zoning@cityoftacoma.org>;} } \\ \underline{\mbox{Rob.Bair@centurylink.com; Rogers, Susie} < \underline{\mbox{srogers@cityoftacoma.org>; Romero, Joseph} < \underline{\mbox{JRomero@cityoftacoma.org>;}} \\ \underline{\mbox{Seaman, Chris} < \underline{\mbox{cseaman@cityoftacoma.org>; Site Development} < \underline{\mbox{SiteDevelopment@cityoftacoma.org>;}} \\ \underline{\mbox{Tina Vaslet}} \\ \end{aligned}$ 

(tvaslet@piercetransit.org) <tvaslet@piercetransit.org>; Torres, Andrew <ATORRES@cityoftacoma.org>

Cc: Stevens, Troy <tstevens@cityoftacoma.org>

Subject: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT - South 19th St.

Agency Reviewer,

Please review the attached request for proposed Street Vacation Petition 124.1459 (South 19<sup>th</sup> St.), as requested by the University of Washington and provide comment for your respective utility/agency on or before January 24, 2025. Responses received later than January 24, 2025 risk NOT being incorporated into the vacation action.

Note: the Court C vacation petition (SV124.1458) request for comment was sent out separately.

Please email me with any questions you may have.

Please note: In the event that conditions do not comport to <u>RCW 35.79.030, which limits conditions of the vacation to</u> <u>the bounds of the proposed vacate area</u>, a representative from your respective utility will be required to attend the public hearing to present the perceived merits of your conditions. Failure to attend may result in the automatic dismissal of any such condition that does not comport to statute.

Thank you,

From: Muller, Gregory

Sent: Friday, January 24, 2025 11:02 AM

To: Stevens, Troy

Subject: RE: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT -

South 19th St.

#### Good morning, Troy.

Tacoma Water requests an easement reservation over the North half of S 19th St. proposed for vacation, with the following conditions:

No permanent structures, retaining walls, fences, trees are permitted within easement. Light landscaping with grass and/or small shrubbery is permitted. Tacoma Water facilities must remain accessible at all times.

If existing water facilities need to be relocated or adjusted, they will be relocated by Tacoma Water at the developer's expense.

Any damage to Tacoma Water facilities will be repaired by Tacoma Water crews at the expense of the developer.

No other TPU Division has an objection or requests an easement reservation for this proposed street vacation.

Thank you!

Greg Muller, Senior Real Property Officer Tacoma Public Utilities 253.337.3164

From: Stevens, Troy <tstevens@cityoftacoma.org>

Sent: Tuesday, January 7, 2025 3:05 PM

To: Allen, Gary <gallen@cityoftacoma.org>; Bogart, Regan <RBogart@cityoftacoma.org>; Boudet, Brian

<BBoudet@cityoftacoma.org>; Bremer, Kandi <KBremer@cityoftacoma.org>; Avila, Britany <BAvila@cityoftacoma.org>;

Brown, Azure <ABrown2@cityoftacoma.org>; Bruner, Carleen <CBruner@cityoftacoma.org>; CenturyLink

<nre.easement@centurylink.com>; Dressler, Teresa <TDressle@cityoftacoma.org>; Erickson, Ryan

<RErickso@cityoftacoma.org>; Gust, Derek <DGust@cityoftacoma.org>; Hauenstein, Lyle

<lhauenstein@cityoftacoma.org>; Himes, Gail <ghimes@cityoftacoma.org>; Huseby, Eric <ehuseby@cityoftacoma.org>;

Johnson, Christopher <ciohnso2@cityoftacoma.org>; Kammerzell, Jennifer <JKammerzell@cityoftacoma.org>; Kidd,

Brennan <br/> <br/> bkidd@cityoftacoma.org>; Marsten, Vicki <vmarsten@cityoftacoma.org>; Matt Cruzan

<matthew cruzan@comcast.com>; Megan Tuche <Megan.Tuche@pse.com>; Muller, Gregory

<GMuller@cityoftacoma.org>; Newton, Corey <cnewton@cityoftacoma.org>; Niehuser, Jack

<JNiehuser@cityoftacoma.org>; Beard, Patricia <PBeard@cityoftacoma.org>; Zoning <Zoning@cityoftacoma.org>;

Rob.Bair@centurylink.com; Rogers, Susie <srogers@cityoftacoma.org>; Romero, Joseph <JRomero@cityoftacoma.org>; Seaman, Chris <cseaman@cityoftacoma.org>; Site Development <SiteDevelopment@cityoftacoma.org>; Tina Vaslet

(tvaslet@piercetransit.org) <tvaslet@piercetransit.org>; Torres, Andrew <ATORRES@cityoftacoma.org>

Cc: Stevens, Troy <tstevens@cityoftacoma.org>

Subject: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT - South 19th St.

Agency Reviewer,

**JULY 3, 2025** 

RECEIVED

OFFICE OF THE TACOMA CITY **HEARING EXAMINER** 

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Note: the Court C vacation petition (SV124.1458) request for comment was sent out separately.

Please email me with any questions you may have.

Please note: In the event that conditions do not comport to <u>RCW 35.79.030, which limits conditions of the vacation to</u> <u>the bounds of the proposed vacate area</u>, a representative from your respective utility will be required to attend the public hearing to present the perceived merits of your conditions. Failure to attend may result in the automatic dismissal of any such condition that does not comport to statute.

Thank you,

RECEIVED

**JULY 3, 2025** 

JULT 3, 2025

OFFICE OF THE TACOMA CITY
HEARING EXAMINER

From:

Hoopes, Tom <Tom.Hoopes@lumen.com>

Sent:

Tuesday, June 10, 2025 3:14 PM

To:

Stevens, Troy

**Subject:** 

Re: IMPORTANT - FW: Street Vacation 124.1459 - Request for Comments - DUE January

24, 2025 - UWT - South 19th St.

We will definetly need an easement - we typically secure easements 10-feet in width.

# **Tom Hoopes**

# Right of Way Agent II

Direct 407.592.1794

Faulk & Foster | www.faulkandfoster.com

1811 Auburn Ave | Monroe, LA 71201

Our mission is "MAKING A DIFFERENCE" for our customers, employees and communities.

From: Stevens, Troy <tstevens@tacoma.gov>
Sent: Tuesday, June 10, 2025 6:10:31 PM
To: Hoopes, Tom <Tom.Hoopes@lumen.com>
Cc: Stevens, Troy <tstevens@tacoma.gov>

Subject: RE: IMPORTANT - FW: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT - South

19th St.

You're welcome, and thank you!

Please confirm you'll need to negotiate an easement with UW and how wide you'd like it to be.

#### Troy Stevens, MSML

Senior Real Estate Specialist City of Tacoma, Public Works (253) 591-5535 tstevens@tacoma.gov

From: Hoopes, Tom <Tom.Hoopes@lumen.com>

**Sent:** Tuesday, June 10, 2025 2:46 PM **To:** Stevens, Troy <tstevens@tacoma.gov> **Cc:** Stevens, Troy <tstevens@tacoma.gov>

Subject: Re: IMPORTANT - FW: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT - South

19th St.

Troy – I completely missed that portion of the request. According to the engineer, we have existing buried telco lines within conduit along the southerly portion of 19<sup>th</sup> Street.

Thank you again for following up.

Tom Hoopes Right of Way Agent II Faulk & Foster, on behalf of Lumen 1811 Auburn Avenue Monroe LA 71201 (407) 592-1794 Tom.Hoopes@lumen.com



From: Stevens, Troy < <a href="mailto:tstevens@tacoma.gov">tstevens@tacoma.gov</a>

Date: Tuesday, June 10, 2025 at 2:03 PM

To: Hoopes, Tom <a href="mailto:Tom.Hoopes@lumen.com">Tom.Hoopes@lumen.com</a>

Cc: Stevens, Troy <a href="mailto:tstevens@tacoma.gov">tstevens@tacoma.gov</a>

Subject: IMPORTANT - FW: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT -

South 19th St.

Hi Tom,

Don't believe I ever heard back from you on this one – **UWT – South 19**th. (Note: this is separate from UWT's petition for Court C)

I'm writing up my report to the HEX.

Do you have anything for me?

Thank you,

Troy Stevens, MSML
Senior Real Estate Specialist
City of Tacoma, Public Works
(253) 591-5535
tstevens@tacoma.gov

From: Stevens, Troy <tstevens@cityoftacoma.org>

Sent: Tuesday, January 7, 2025 3:05 PM

To: Allen, Gary <gallen@cityoftacoma.org>; Bogart, Regan <RBogart@cityoftacoma.org>; Boudet, Brian

<BBoudet@cityoftacoma.org>; Bremer, Kandi <KBremer@cityoftacoma.org>; Avila, Britany <BAvila@cityoftacoma.org>;

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< lhauenstein@cityoftacoma.org>; Himes, Gail < ghimes@cityoftacoma.org>; Huseby, Eric < ehuseby@cityoftacoma.org>;

Johnson, Christopher <cjohnso2@cityoftacoma.org>; Kammerzell, Jennifer <JKammerzell@cityoftacoma.org>; Kidd,

Brennan < <a href="mailto:bkidd@cityoftacoma.org">bkidd@cityoftacoma.org</a>; Marsten, Vicki < <a href="mailto:vmarsten@cityoftacoma.org">vmarsten@cityoftacoma.org</a>; Matt Cruzan

<matthew cruzan@comcast.com>; Megan Tuche < Megan.Tuche@pse.com>; Muller, Gregory

<<u>GMuller@cityoftacoma.org</u>>; Newton, Corey <<u>cnewton@cityoftacoma.org</u>>; Niehuser, Jack

<JNiehuser@cityoftacoma.org>; Beard, Patricia <PBeard@cityoftacoma.org>; Zoning@cityoftacoma.org>;

Rob.Bair@centurylink.com; Rogers, Susie < srogers@cityoftacoma.org >; Romero, Joseph < JRomero@cityoftacoma.org >;

Seaman, Chris < <a href="mailto:cseaman@cityoftacoma.org">cseaman@cityoftacoma.org</a>; Site Development < <a href="mailto:SiteDevelopment@cityoftacoma.org">SiteDevelopment@cityoftacoma.org</a>; Tina Vaslet

(<u>tvaslet@piercetransit.org</u>) < <u>tvaslet@piercetransit.org</u>>; Torres, Andrew < <u>ATORRES@cityoftacoma.org</u>>

Cc: Stevens, Troy < tstevens@cityoftacoma.org>

Subject: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT - South 19th St.

Agency Reviewer,

Please review the attached request for proposed Street Vacation Petition 124.1459 (South 19<sup>th</sup> St.), as requested by the University of Washington and provide comment for your respective utility/agency on or before January 24, 2025. Responses received later than January 24, 2025 risk NOT being incorporated into the vacation action.

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Please note: In the event that conditions do not comport to *RCW 35.79.030, which limits conditions of the vacation to the bounds of the proposed vacate area,* a representative from your respective utility will be required to attend the public hearing to present the perceived merits of your conditions. Failure to attend may result in the automatic dismissal of any such condition that does not comport to statute.

Thank you,

Troy Stevens, MSML
Real Property Services
City of Tacoma, Public Works
(253) 591-5535
tstevens@ci.tacoma.wa.us

This communication is the property of Lumen Technologies and may contain confidential or privileged information. Unauthorized use of this communication is strictly prohibited and may be unlawful. If you have received this communication in error, please immediately notify the sender by reply e-mail and destroy all copies of the communication and any attachments.

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Troy Stevens, MSML Real Property Services City of Tacoma, Public Works

SUBJECT: APPROVAL TO PROCEED WITH VACATION WITH STIPULATIONS- P864504

Project Name & Location: Street Vacation Petition SV124.1456 – South 19th Street

To Whom It May Concern:

Qwest Corporation d/b/a CenturyLink has reviewed your request to proceed with the requested encroachment as shown on Exhibit "A" ("Vacation"), said Exhibit "A" attached hereto and incorporated by this reference, within the proposed area to be encroached and has objections providing, however, the following terms and conditions are agreed to, and met, by Developer:

- 1. Locates must be performed by a state recognized organization (i.e. Call Before You Dig, Blue Stake, etc.).
- 2. A minimum of three feet of cover above CenturyLink facilities is maintained at all times and the final grade provides for no less than three feet of cover.
- 3. No buildings or structures are to be placed within the Easement Tract other than those, if any, that are approved by this APPROVAL TO PROCEED.
- 4. CenturyLink currently has existing facilities on the property. If you require existing facilities to be moved, relocated, or removed, please contact me to coordinate the issuance of required Easement and/or Release Agreements to facilitate request. The issuance of this Letter does not constitute either acceptance or approval of moving, relocating or removing of facilities without first obtaining the needed Agreements and coordination with Lumen.

It is the intent and understanding of CenturyLink that this action shall not reduce our rights to any existing easements or rights we have on this site or in the area.

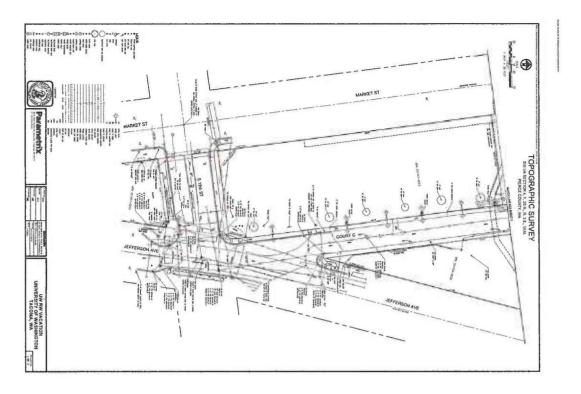
If you have any questions or would like to discuss this action further, please contact Tom Hoopes at Tom.Hoopes@lumen.com.

Sincerely yours,

/s/

CenturyLink Right of Way Team

# **EXHIBIT** A



RECEIVED

**JULY 3, 2025** 

OFFICE OF THE TACOMA CITY **HEARING EXAMINER** 

From: Zoning

Sent: Friday, January 10, 2025 11:31 AM

To: Stevens, Troy

Cc: Zoning; Kammerzell, Jennifer

FW: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT -Subject:

South 19th St.

**Attachments:** 2024, 11 19 - Street Vacation Petition - City of Tacoma (S 19th Street).pdf; 250107 -

> Agency Comments - UWT\_South 19th.doc; SV 124.1459 - Map Frame (UWT) South 19th St - Map 1.pdf; SV 124.1459 - Map Frame (UWT) South 19th St - Map 2.pdf; Traffic

Impact Analysis.pdf

Thank you for the opportunity to comment on this vacation request. Please note that the proposed vacation(s) will create a large, super block. The City will continue to review future development permit applications using the City's South Downtown Subarea Plan and the Pedestrian and Bicycle Support Standards under TMC 13.06.090.F. (or as amended) to provide safe, efficient alternative modes of travel (e.g., pedestrian, bicycles, etc.) through the UWT campus and around the Downtown Tacoma neighborhood.

Sincerely,

# Shanta Frantz, AICP

Land Use and Zoning Planning and Development Services (253) 591-5388 - Desk Line (253) 260-0769 - Work Cell sfrantz@cityoftacoma.org | www.tacomapermits.org

We work with the community to plan and permit a safe, sustainable, livable city. Please take our Customer Survey: https://www.surveymonkey.com/r/JVK8QYC

From: Stevens, Troy <tstevens@cityoftacoma.org>

Sent: Tuesday, January 7, 2025 3:05 PM

To: Allen, Gary <gallen@cityoftacoma.org>; Bogart, Regan <RBogart@cityoftacoma.org>; Boudet, Brian

<BBoudet@cityoftacoma.org>; Bremer, Kandi <KBremer@cityoftacoma.org>; Avila, Britany <BAvila@cityoftacoma.org>;

Brown, Azure <ABrown2@cityoftacoma.org>; Bruner, Carleen <CBruner@cityoftacoma.org>; CenturyLink

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<Ihauenstein@cityoftacoma.org>; Himes, Gail <ghimes@cityoftacoma.org>; Huseby, Eric <ehuseby@cityoftacoma.org>; Johnson, Christopher <cjohnso2@cityoftacoma.org>; Kammerzell, Jennifer <JKammerzell@cityoftacoma.org>; Kidd,

Brennan <br/>bkidd@cityoftacoma.org>; Marsten, Vicki <vmarsten@cityoftacoma.org>; Matt Cruzan

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<JNiehuser@cityoftacoma.org>; Beard, Patricia <PBeard@cityoftacoma.org>; Zoning <Zoning@cityoftacoma.org>;

Rob.Bair@centurylink.com; Rogers, Susie <srogers@cityoftacoma.org>; Romero, Joseph <JRomero@cityoftacoma.org>; Seaman, Chris <cseaman@cityoftacoma.org>; Site Development <SiteDevelopment@cityoftacoma.org>; Tina Vaslet

(tvaslet@piercetransit.org) <tvaslet@piercetransit.org>; Torres, Andrew <ATORRES@cityoftacoma.org>

Cc: Stevens, Troy <tstevens@cityoftacoma.org>

Subject: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT - South 19th St.

Agency Reviewer,

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Thank you,

From:

Tina Vaslet <tvaslet@piercetransit.org>

**Sent:** Tuesday, March 4, 2025 11:44 AM

**To:** Stevens, Troy

Subject: RE: IMPORTANT - FW: SV124.1459 (UWT) - Post Agency Comments - Report Out -

South 19th Street - Additional Review Request

### Good Morning Troy,

Our Training Department evaluated this proposed change. Due to the incline on S 17<sup>th</sup> & Market, as well as the sightline restrictions, they are opting for Option B, as shown below. This routing also allows us to retain bus stop 1344 at Jefferson & S 19<sup>th</sup>. Please let me know if you have any questions.





OFFICE OF THE TACOMA CITY
HEARING EXAMINER

Kind Regards,

Tina Vaslet

Planner - Bus Stops

P: 253.983.2706 | C: 253.255.8521

3701 96th St. SW, Lakewood, WA 98499





From: Stevens, Troy <tstevens@cityoftacoma.org>

Sent: Thursday, January 30, 2025 9:53 AM

To: Nicole Kerr <nlkerr@uw.edu>

Cc: Rogers, Susie <srogers@cityoftacoma.org>; Dressler, Teresa <TDressle@cityoftacoma.org>; Muller, Gregory

< GMuller@cityoftacoma.org>; Marsten, Vicki < wmarsten@cityoftacoma.org>; Matt Cruzan

<matthew cruzan@comcast.com>; Pierce Transit - Planning (Planning@PierceTransit.org)

<Planning@PierceTransit.org>; Kammerzell, Jennifer <JKammerzell@cityoftacoma.org>; Huseby, Eric

<ehuseby@cityoftacoma.org>; Stevens, Troy <tstevens@cityoftacoma.org>

Subject: SV124.1459 (UWT) - Post Agency Comments - Report Out - South 19th Street

Good morning Nicole,

We have received the following Agency Comments for SV124.1459 – UWT/South 19th Street (See attached for details):

#### Objection/Major Concerns:

Pierce Transit

#### No Objection with Comments or a Request for Easement Reservation:

ES/Engineering

Tacoma Water

PW/Transportation - Traffic Engineering & Safety (Includes both Court C & South 19<sup>th</sup> St. Comments)

PW/Transportation - Parking

Land Use/Zoning

Comcast

#### No Objection:

ES/Solid Waste

Tacoma Power

RPS/In-Lieu

Tacoma Fire

**PSE** 

#### Comment Outstanding (to follow):

Lumen/CenturyLink

Please let me know if you have any questions and if you'd like to proceed.

Thank you,

#### Troy Stevens, MSML

**Real Property Services** 

City of Tacoma, Public Works

(253) 591-5535 tstevens@ci.tacoma.wa.us

RECEIVED

JULY 3, 2025 OFFICE OF THE TACOMA CITY

**HEARING EXAMINER** 

# Stevens, Troy

From: Cruzan, Matthew <matthew\_cruzan@comcast.com>

Sent: Tuesday, January 28, 2025 2:40 PM

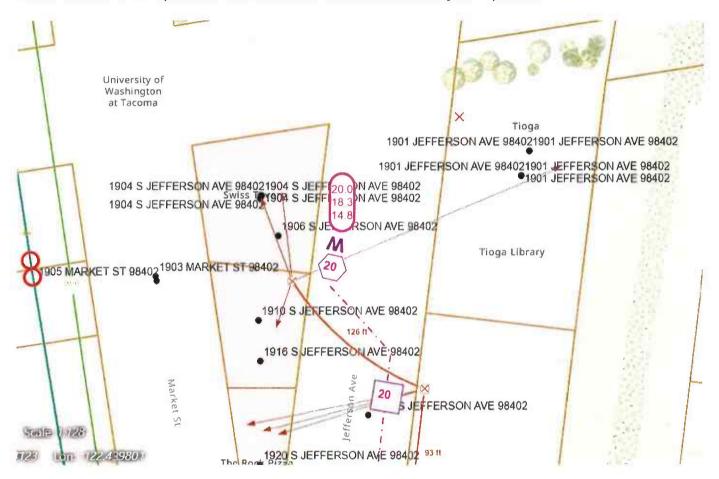
To: Stevens, Troy

Subject: RE: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT -

South 19th St.

Sir,

Aerial facilities and drops. Just a little outside of the area but still may be impacted.



From: Stevens, Troy <tstevens@cityoftacoma.org>

Sent: Tuesday, January 28, 2025 2:29 PM

To: Cruzan, Matthew <matthew\_cruzan@comcast.com>

Cc: Stevens, Troy <tstevens@cityoftacoma.org>

Subject: [EXTERNAL] FW: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT - South 19th

St.

Matt,

If you'd review this one too, that would be great.

Thank you,

Troy Stevens, MSML
Real Property Services
City of Tacoma, Public Works
(253) 591-5535
tstevens@ci.tacoma.wa.us

From: Stevens, Troy <tstevens@cityoftacoma.org>

Sent: Tuesday, January 7, 2025 3:05 PM

To: Allen, Gary <gallen@cityoftacoma.org>; Bogart, Regan <RBogart@cityoftacoma.org>; Boudet, Brian <BBoudet@cityoftacoma.org>; Bremer, Kandi <KBremer@cityoftacoma.org>; Avila, Britany <BAvila@cityoftacoma.org>; Brown, Azure <ABrown2@cityoftacoma.org>; Bruner, Carleen <CBruner@cityoftacoma.org>; CenturyLink <nre.easement@centurylink.com>; Dressler, Teresa <TDressle@cityoftacoma.org>; Erickson, Ryan <RErickso@cityoftacoma.org>; Gust, Derek <DGust@cityoftacoma.org>; Hauenstein, Lyle <hachieved the selection of the

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Thank you,

RECEIVED

JULY 3, 2025 OFFICE OF THE TACOMA CITY

**HEARING EXAMINER** 

From: Brown, Azure

**Sent:** Friday, January 10, 2025 1:22 PM

**To:** Stevens, Troy; Allen, Gary; Bogart, Regan; Boudet, Brian; Bremer, Kandi; Avila, Britany;

Bruner, Carleen; CenturyLink; Dressler, Teresa; Erickson, Ryan; Gust, Derek; Hauenstein, Lyle; Himes, Gail; Huseby, Eric; Johnson, Christopher; Kammerzell, Jennifer; Kidd, Brennan; Marsten, Vicki; Matt Cruzan; Megan Tuche; Muller, Gregory; Newton, Corey; Niehuser, Jack; Beard, Patricia; Zoning; Rob.Bair@centurylink.com; Rogers, Susie;

Romero, Joseph; Seaman, Chris; Site Development; Tina Vaslet

(tvaslet@piercetransit.org); Torres, Andrew

Cc: Brown, Azure

Subject: RE: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT -

South 19th St.

Hello,

Thank you for your email.

There is no outstanding IN-LIEU sewer assessment owed for this property.

Thank You,



# **Azure Brown**

Real Estate Specialist
Public Works| Facilities Mngmt.| Real Property Services
<u>abrown2@cityoftacoma.org</u>
(253) 591-5186

From: Stevens, Troy <tstevens@cityoftacoma.org>

Sent: Tuesday, January 7, 2025 3:05 PM

To: Allen, Gary <gallen@cityoftacoma.org>; Bogart, Regan <RBogart@cityoftacoma.org>; Boudet, Brian

<BBoudet@cityoftacoma.org>; Bremer, Kandi <KBremer@cityoftacoma.org>; Avila, Britany <BAvila@cityoftacoma.org>;

Brown, Azure <ABrown2@cityoftacoma.org>; Bruner, Carleen <CBruner@cityoftacoma.org>; CenturyLink

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Cc: Stevens, Troy <tstevens@cityoftacoma.org>

Subject: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT - South 19th St.

Agency Reviewer,

Please review the attached request for proposed Street Vacation Petition 124.1459 (South 19<sup>th</sup> St.), as requested by the University of Washington and provide comment for your respective utility/agency on or before January 24, 2025. Responses received later than January 24, 2025 risk NOT being incorporated into the vacation action.

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Thank you,

#### Stevens, Troy

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**JULY 3, 2025** 

OFFICE OF THE TACOMA CITY

**HEARING EXAMINER** 

From: Hauenstein, Lyle

Sent:

Wednesday, January 8, 2025 10:54 AM

To:

Stevens, Troy

Subject:

RE: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT -

South 19th St.

Solid Waste is ok with this vacation.

Lyle S. Hauenstein City of Tacoma Collections Supervisor Solid Waste Management (253)594-7843

City of Tacoma | Environmental Services | Solid Waste Management | 3510 South Mullen Street, Tacoma, WA 98409-2200





Please consider the environment before printing this email.

Notice of public disclosure: This e-mail account is public domain. Any correspondence from or to this e-mail account is a public record. Accordingly, this e-mail, in whole or in part, may be subject to disclosure pursuant to RCW 42.56, regardless of any claim of confidentiality or privilege asserted by an external party.

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Sent: Tuesday, January 7, 2025 3:05 PM

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Cc: Stevens, Troy <tstevens@cityoftacoma.org>

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Thank you,

#### Stevens, Troy

RECEIVED

**JULY 3, 2025** 

OFFICE OF THE TACOMA CITY
HEARING EXAMINER

ottorons, may

From: Gust, Derek

Sent: Tuesday, January 7, 2025 5:05 PM

To:Stevens, TroyCc:Erickson, Ryan

Subject: RE: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT -

South 19th St.

Hello Troy,

The Tacoma Fire Department has no objection to street vacation 124.1459.

Thanks!

#### Regards, DEREK GUST, P.E.

Engineer / Plan Review
Tacoma Fire Department | Prevention Division
901 Fawcett Avenue | Tacoma, WA 98402
253.317.0698 | dgust@cityoftacoma.org



From: Stevens, Troy <tstevens@cityoftacoma.org>

Sent: Tuesday, January 7, 2025 3:05 PM

To: Allen, Gary <gallen@cityoftacoma.org>; Bogart, Regan <RBogart@cityoftacoma.org>; Boudet, Brian <Boundet@cityoftacoma.org>; Bremer, Kandi <KBremer@cityoftacoma.org>; Avila, Britany <BAvila@cityoftacoma.org>; Brown, Azure <ABrown2@cityoftacoma.org>; Bruner, Carleen <CBruner@cityoftacoma.org>; CenturyLink <nre.easement@centurylink.com>; Dressler, Teresa <TDressle@cityoftacoma.org>; Erickson, Ryan <RErickso@cityoftacoma.org>; Gust, Derek <DGust@cityoftacoma.org>; Hauenstein, Lyle <Ihauenstein@cityoftacoma.org>; Himes, Gail <ghimes@cityoftacoma.org>; Huseby, Eric <ehuseby@cityoftacoma.org>; Johnson, Christopher <cjohnso2@cityoftacoma.org>; Kammerzell, Jennifer <JKammerzell@cityoftacoma.org>; Kidd, Brennan <br/>
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Thank you,

#### **EXHIBIT C-17**

# RECEIVED

**JULY 3. 2025** 

OFFICE OF THE TACOMA CITY

**HEARING EXAMINER** 

Stevens, Troy

From: Huseby, Eric

Sent: Tuesday, April 1, 2025 9:11 AM

To: Stevens, Trov

RE: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT -Subject:

South 19th St.

Hi Troy,

Upon further review, Parking Services has no objections regarding this/these street vacations. This vacation will impact a low performing block face with low occupancies.

Thanks.

#### **Eric Huseby**

City of Tacoma **Public Works-Transportation** 942 Pacific Avenue Tacoma WA 98402

253.591.5437 (o) 253.391.1139 (c)

www.cityoftacoma.org/parking



From: Stevens, Troy <tstevens@cityoftacoma.org>

Sent: Tuesday, January 7, 2025 3:05 PM

To: Allen, Gary <gallen@cityoftacoma.org>; Bogart, Regan <RBogart@cityoftacoma.org>; Boudet, Brian

<BBoudet@cityoftacoma.org>; Bremer, Kandi <KBremer@cityoftacoma.org>; Avila, Britany <BAvila@cityoftacoma.org>;

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Thank you,

#### Stevens, Troy

RECEIVED

**JULY 3, 2025** 

OFFICE OF THE TACOMA CITY
HEARING EXAMINER

From: Tuche, Megan < Megan.Tuche@pse.com>
Sent: Thursday, January 9, 2025 3:48 PM

To:

Stevens, Troy

Subject:

RE: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT -

South 19th St.

Hi Troy,

PSE does not maintain any gas facilities within the proposed vacate area. All PSE gas facilities are located within Jefferson Avenue.

Let me know if you have additional questions.

Thanks!

Megan Tuche SR/WA Sr. Real Estate Representative Puget Sound Energy, Inc. 253-495-1427

From: Stevens, Troy <tstevens@cityoftacoma.org>

Sent: Tuesday, January 07, 2025 3:05 PM

<matthew\_cruzan@comcast.com>; Tuche, Megan <Megan.Tuche@pse.com>; Muller, Gregory

<GMuller@cityoftacoma.org>; Newton, Corey <cnewton@cityoftacoma.org>; Niehuser, Jack

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Cc: Stevens, Troy <tstevens@cityoftacoma.org>

Subject: Street Vacation 124.1459 - Request for Comments - DUE January 24, 2025 - UWT - South 19th St.

CAUTION - EXTERNAL EMAIL

Phishing? Click the PhishAlarm "Report Phish" button.

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# **EXHIBIT C-19**

RECEIVED

**JULY 24, 2025** OFFICE OF THE TACOMA CITY **HEARING EXAMINER** 

# PRELIMINARY REPORT <u>CITY EXHIBIT C-1 – ERRATA SHEET</u> SV124.1459 (UWT – South 19<sup>th</sup> Street)

# PREPARED FOR THE HEARING EXAMINER BY REAL PROPERTY SERVICES

The Hearing was Held Thursday, July 24, 2025 at 1:30 PM

#### CORRECTION

Page	Line	Correction/Request
Exhibit C-1,	Line 10 (Item 1 of the	The vacation is a public benefit because it facilitates
Page 4	"Regarding the above Criteria" area)	the growth and development of the UWT campus, a public educational institution, and reduces maintenance costs.

# **PETITIONER WITNESS LIST**

**HEARING DATE:** Thursday, July 24, 2025 at 1:30 p.m.

**FILE NUMBER:** HEX2025-069 (SV 124.1459)

FILE NAME: Board of Regents of the University of Washington, Petitioner

WITNESS NAME	E	F	SUMMARY OF TESTIMONY
Sylvia James Vice Chancellor, UW Tacoma		X	Vacation of this section of South19th Street is anticipated to allow for the following public benefits and purposes: the growth and development of the UWT campus in a manner that enhances the pedestrian experience and ties lower and upper elevations of the campus; elimination of a dangerous condition and site of a previous fatality and near vehicular misses coming into campus pedestrian zones; and increased public benefit of aesthetic, accessibility, and safety improvements.
Joe Lawless Chief Strategy Officer, UW Tacoma			Supplemental testimony of how the vacation request complies with the 2008 and 2025 Campus Master Plans.  Provide formal request of fee waiver.
Josh Hartley Transportation Engineer Fehr and Peers		X	Verify Transportation Impact Analysis report findings of no adverse impact to street pattern or circulation of the community.

E=EXPERT WITNESS; F=FACT WITNESS

# **PETITIONER EXHIBIT LIST**

**HEARING DATE:** Thursday, July 24, 2025 at 1:30 p.m.

FILE NUMBER: HEX2025-069 (SV 124.1459)

FILE NAME: Board of Regents of the University of Washington, Petitioner

EXHIBIT NUMBER	EXHIBIT DESCRIPTION	SUBMITTED BY	A	E	W	COMMENT
EX. P-1	November 2010 - Pierce Transit Bus Overturn	Petitioner BRUW	X			Example of historic public safety concerns from vehicular traffic.
EX. P-2	August 2014 - RV Fatality	Petitioner BRUW	X			Example of historic public safety concerns from vehicular traffic.
EX. P-3	July 2015 – Safety Measures Implemented	Petitioner BRUW	X			Campus actions taken to improve safety.
EX. P-4	October 2020 - SUV Accident 1	Petitioner BRUW	X			Example of historic public safety concerns from vehicular traffic.
EX. P-5	May 14, 2025 - SUV Accident 2	Petitioner BRUW	X			Example of historic public safety concerns from vehicular traffic.
EX. P-6	2008 and 2025 Campus Master Plans	Petitioner BRUW	X			Figures from each Master Plan showing planned vacation area.
EX. P-7	Fee waiver request letter	Petitioner BRUW	X			Formal request of fee waiver.
EX. P-8		Petitioner BRUW				
EX. P-9		Petitioner BRUW				
EX. P-10		Petitioner BRUW				

KEY E = Excluded

W = Withdrawn

A = Admitted

# November 2010 - Pierce Transit Bus Overturn

Top of the campus Grand Stairs at the S 19<sup>th</sup> Street and Jefferson Avenue intersection.



# August 2014 – RV Fatality

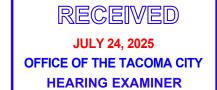
JULY 24, 2025
OFFICE OF THE TACOMA CITY
HEARING EXAMINER

Campus Grand Stairs. RV entered from S 19th Street.







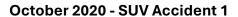


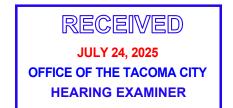
# July 2015 - Safety Measures Implemented

Installation of the "W" at the terminus of S. 19th Street.

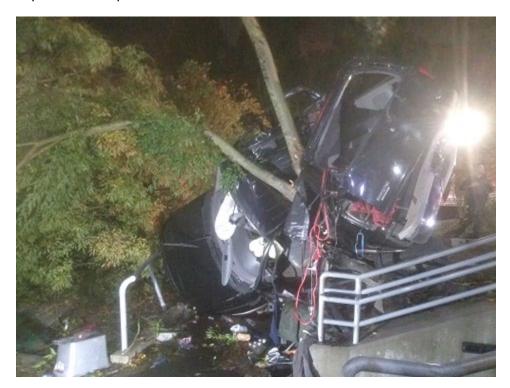
Replacement of the prior concrete bollards with steel bollards that reach 10 feet underground into large concrete footings.







Top of the campus Grand Stairs at the S 19<sup>th</sup> Street and Jefferson Avenue intersection.







# JULY 24, 2025 OFFICE OF THE TACOMA CITY HEARING EXAMINER

# Exhibit P-5

# May 14, 2025 - SUV Accident 2

Top of the campus Grand Stairs at the S 19<sup>th</sup> Street and Jefferson Avenue intersection.

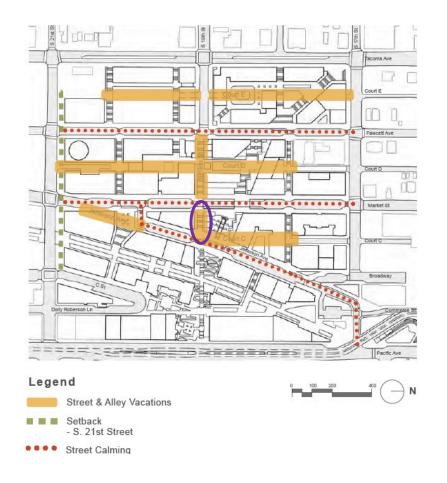






# 2008 and 2025 Campus Master Plan Vacation Figures







Street & Alley Vacations figure from 2008 UW Tacoma Campus Master Plan Illustrative Site Plan figure from the 2025 UW Tacoma Campus Master Plan

RECEIVED

**JULY 24, 2025** 

OFFICE OF THE TACOMA CITY
HEARING EXAMINER

July 16, 2025

Jeff Capell
Office of the Hearing Examiner
City of Tacoma
747 Market Street, Room 220
Tacoma, WA 98402

Subject: Request to Waive Compensation for Vacation of Portions of Court C and South 19th Street

Dear Mr. Capell,

The University of Washington Tacoma, respectfully request that the City of Tacoma waive compensation associated with the proposed vacation of portions of Court C and South 19th Street located within the UW Tacoma campus.

In light of the public benefits of the project and the direct alignment with shared City-University goals, we respectfully request that the City of Tacoma waive the standard compensation typically required for right-of-way vacations per its discretion or interests as provided in TMC 9.22.020.

This request is rooted in the substantial and long-lasting public benefits the vacation will generate—specifically, the elimination of known life and safety hazards, the creation of downtown Tacoma's largest publicly accessible green space, and the continued development of UW Tacoma as outlined in the **2025 UW Tacoma Campus Master Plan**.

The segment of **South 19th Street** poses serious and ongoing life/safety risks to the campus and community. The street runs steeply downhill, terminating in the center of campus in an area with high volumes of daily pedestrian traffic. Since the campus opening in 1995, there have been multiple vehicle incidents in which cars have left that roadway, damaging City and campus property and even entering the campus proper. We have been fortunate to date that there have been no injuries or other significant impacts on the campus community or general public (though drivers have suffered injuries and sadly one fatality in 2014), but we cannot continue to depend on good luck. The section of South 19<sup>th</sup> Street presents unacceptable risks to UW Tacoma students, faculty, staff, and visitors, as well as the broader public that regularly moves through this part of downtown.

Vacating this segment of South 19<sup>th</sup> Street and the adjacent portion of **Court C** would allow the University not only to enhance public safety, but also contribute to the transformation of the surrounding area into a **safe, inviting, and** publicly accessible "campus heart" to include new student housing and dining facilities. The area will in turn anchor a signature, publicly accessible green space stretching northwest to the intersection of S. 17<sup>th</sup> Street and Tacoma Avenue—the largest green space in downtown Tacoma. This vision is a central element of the University's

updated campus master plan and reflects longstanding City and community goals for a more walkable, livable downtown core. The resulting green space will serve not only the campus community but also downtown workers, residents, and visitors, offering environmental, health, and recreational benefits that extend well beyond the campus footprint.

As an urban serving public institution, the University of Washington Tacoma is committed to inclusive access, public safety and the creation of vibrant communities. The proposed vacation supports all of these goals and is not intended for private development or restricted use. Rather, this is an opportunity to convert outdated, dangerous infrastructure into a multi-functional, civic-oriented open space that benefits the entire Tacoma community and positions the campus to continue pursuing its mission to expand access to higher education, foster novel solutions to challenging problems, catalyze economic and social vitality, and collaborate for the public good.

We thank you for your consideration and for your continued partnership in shaping a safer, greener, and more connected downtown Tacoma.

Sincerely,

Sheila Edwards Lange Ph.D.

Shile Charles Jange

Chancellor