



Workforce Connect Project

City of Tacoma | Tacoma Public Utilities
Enterprise Technology Project

City Council Study Session
November 20, 2018



●●● Objectives



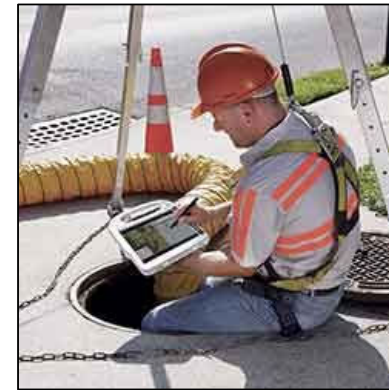
- To provide a background on the Workforce Connect enterprise project
- Review of the vendor selection process
- Describe project implementation approach
- Background of contract to be approved at Public Utility Board meeting

Workforce Connect & MWM



Enterprise Mobile Workforce Management (MWM) systems:

- **Optimize** work from within or from core utility systems such as SAP and Outage Management
- **Support** complex workflows and resources such as:
 - Maintenance and inspection orders
 - Construction orders with information about field assets
 - Work processes across multi-commodity utilities
 - A wide spectrum of scheduler, dispatcher, and field worker roles
- **Deliver** information from back-office systems such as SAP and GIS on a mobile device



Current State



- Current Mobile Workforce Management system (ABB Ventyx) was implemented over 15 years ago
- In use by a number of City of Tacoma and TPU departments and is end of life
- Opportunities to automate additional manual field work processes are hampered by our current solution
- Growing field asset data and location information needs from the users are difficult to accommodate

● ● ● Strategic & Business Drivers



- Government Performance

- Accountable, Efficient and Transparent services
- Engage Employees

- Built and Natural Environment

- Reduced city vehicle trips

- Digital Engagement Strategy

- *"As a field worker, I need mobile access to maps, data, and work management tools, so that I can effectively serve our customers"*

- Strategic Initiatives

- Performance management capability
- Do our work better
- Strengthen safety culture

●●● Industry Direction



Product advancement in the mobile workforce management market has been accelerating:

- Consumerization of mobile technology
- Improved geospatial capabilities
- Maturing cloud-based delivery models
- Emergence of commercial wearable computing products
- Development of a more digital 'smart' utility and city



*Digital worker enablement **transforms** operations...*

Workforce Connect Benefits



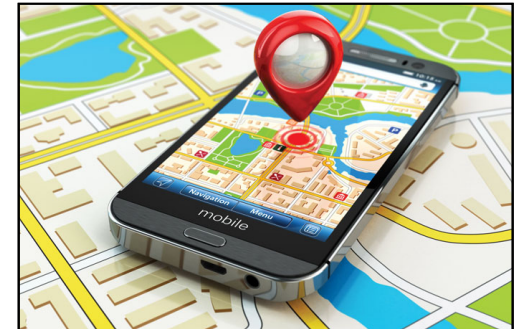
Common Industry Benefits

15-25%	↑ Field technician productivity	90%+	% of work “auto-scheduled”
< 60 sec	↓ Service order close time	60 min.	Dispatch productivity gains
5-10%	↓ Technician windshield time	12%	↓ Estimated restoration times
10-20%	↑ Customer satisfaction ratings	50%	↓ Planning & assigning work
17%	↓ Asset inspection effort/time	60%	↓ In customer complaints

Project Objectives



- Replace legacy Mobile Workforce Management solution with a modern Enterprise Solution
- Expand initial user base from 200 to 500+
- Increased business functionality to include:
 - Initiate work from the field
 - Enhanced off-line capabilities
 - Dynamic resource management
 - Electronic access to documents & photos
 - Automated time entry
 - Advanced scheduling & dispatching functionality
 - Complementary AMI functionality



••• User Stories



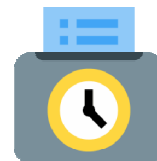
- As a mobile user...
 - I would like an automated way to populate and submit my time card to the back-office
 - I would like greater access to mobile order details with digitally downloaded work packets, photos, and GIS map overlays
 - I would like the option to work on a variety of mobile devices that best suit my working environment
- As a Supervisor or Dispatcher...
 - I would like to optimize work assignment routing to reduce drive time
 - I would like to easily monitor and dispatch work assignments and emergencies to the right crews at the right time
 - I would like the ability to remotely monitor and control work assignments so I can spend more time in the field



Optimization



Data Access



Automated
Timecards



Device Flexibility

Project Schedule



2017: Planning, Selection

Q1-Q3 Solution RFP Development

Q4 RFP & Selection

2018: Contract, Procurement, Infrastructure

Q1 Solution Contract

Q2-Q3 ISGB, PUB, CC

We are here

Q4 Infrastructure / Design

2019 – 2020: Develop and Deploy

Q1 Release 1 – Locates

Q2/19 – Q1/20 Release 2
– Other Work Types

Q1/20 Decommission ABB
Service Suite

Q2/20 Release 3 – Long
Cycle

●●● MWM Replacement Selection



- Engaged consultant to facilitate our vendor selection process
- Clevest Mobile Work Management was selected through a competitive RFP process



RFP Scoring Results



Respondent (weighting)	Technical Requirements (40%)	Price (30%)	Risk (20%)	SBE/MWBE Certification (5%)	Submittal Quality, Organization & Completeness (5%)	Score
Clevest Solutions, Inc.	1979	1484	989	0	247	4700
ABB Enterprise Software, Inc.	1845	1384	923	0	231	4382
SAP America, Inc.	1837	1378	918	0	230	4362
Smart Energy Water LLC	1799	1349	899	0	225	4272

●●● Clevest Contract Agreement



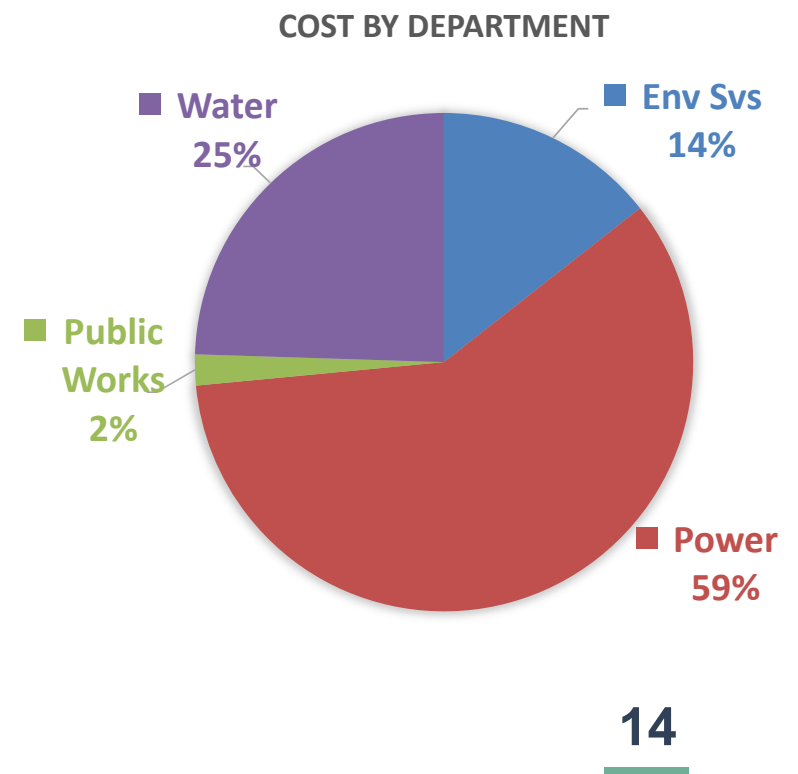
Component/Deliverable	Amount
Software	\$607,500
Maintenance Support (7 years)	\$675,500
Product implementation services & warranty	\$1,177,260
Training	\$33,196
Other	\$178,200
Total Contract Value	\$2,671,656

- Notable features of agreement:
 - Negotiated \$500/user license
 - Maintenance of 20% for agreement term
 - Not subject to yearly escalations or adjustments

Workforce Connect Budget



2018-2020 External Costs	Total Line Item Costs
Software	607,500
Hardware	33,389
Clevest Professional Svcs	1,177,260
Augmented Professional Svcs	1,170,300
Consultant Svcs	1,029,820
Travel	178,200
Training	565,546
Total External Costs	\$4,762,015
2018-2020 Internal Labor Costs	Allocated
Division Labor	2,292,763
Customer Svcs (All others)	84,675
TPU UTS Labor (Allocated)	244,197
Total Internal Labor Costs	\$2,621,635
Project Total Cost	
GRAND TOTAL (Capital and O&M)	\$7,351,424



Net Cost / Benefit Analysis



Cleverest Solution	
One-Time Project Cost	\$7.4M
Ongoing Costs	\$3.8M
Project Benefits	\$11.8M
Project Cash Flow	\$1.0M
NPV	\$288k
ROI	8.9%
Payback Years	9.6 yrs.
Lower Monthly Cost (per user)	\$219 mo.



••• Key Takeaways



- Business driven
- Better served customers/citizens
- Multiple business units participating in project & governance
- Transformational opportunity

Next Steps



- ✓ Contract approval at Public Utility Board
 - Info session with City Council
 - Continue project preparation activities
 - Project initiation scheduled for November 30th!