CUSTOMER SERVICES
2019/2020
BUDGET PRESENTATION
August 22, 2018
Steve Hatcher
Customer Services Manager
AGENDA

• Mission/Vision
• Customer Service Strategic Goals
• Services Provided
• Budget Overview
• Budget Drivers
• Expenses and Staffing
• Next Steps
MISSION/VISION

MISSION:

We engage customers through exceptional service and customer-focused solutions.

VISION:

To be known for Excellence in our Service to Customers.
CUSTOMER SERVICES STRATEGIC GOALS

• Empowering customers with easy to use self service tools that fit their individual needs

• Routing customers to the most knowledgeable employees to answer customer inquiries quickly, efficiently, and completely

• Maintain and enhance customer service by empowering staff with the required authority to accomplish 1\textsuperscript{st} call resolution with robust and modern utility tools

• Developing strategies that meet the needs and requirements of each of our customer segments – Residential, Small and Mid-size business, Key accounts and Low-Income

• Position ourselves to support/participate in Tacoma Power, Water and Environmental Services strategic initiatives
SERVICES PROVIDED

• **Administration** – Division oversight and management, strategic planning.

• **Customer Solutions** – Utility and resource assistance for seniors/disabled and low income.

• **Business Office** – Call center/lobby services, billing, payments and commercial services.

• **Performance Solutions** – Benchmarking/analytics, staff training/development and project management.
SERVICES PROVIDED (continued)

• **Support Services** – TPU switchboard services, administrative support and contract management.

• **Field Operations** – Meter reading, field investigative services and mail services operations.
BUDGET OVERVIEW

• **Enhance low-income assistance effectiveness**
  - Expanded staffing – elevates program emphasis and customer support
  - Higher participation from improved marketing, outreach, and overall program resources

• **AMI preparations prior to deployment**
  - Begin training of Contact Center staff
  - Continue transition of Field Operations staff
  - Work with Click! to train and transition some personnel into Call Center
BUDGET DRIVERS

• Staffing cost increases due to general wage and benefit assumptions.

• Increase the number of personnel assigned to support the expansion of the Low-Income Assistance Programs.

• Increase in licensing/maintenance costs associated with software and customer-facing self-service systems.

• Implement a Request for Proposal (RFP) in preparation of the Customer Interaction Center (CIC) replacement project, scheduled for the 2021/2022 biennium.

• Execute a contract with an external call center to add complementary staffing to support the operation of the CS Contact Center.
## EXPENSES AND STAFFING

### TPU Customer Services

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>SUMMARY - Operation &amp; Maintenance by Category</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries &amp; Wages</td>
<td>$ 20,917,991</td>
<td>$ 23,230,278</td>
<td>$ 2,312,287 11.1%</td>
</tr>
<tr>
<td>Employee Benefits</td>
<td>9,549,165</td>
<td>9,817,518</td>
<td>268,352 2.8%</td>
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<tr>
<td>Capital Credit &amp; Labor To/From Others</td>
<td>(530,900)</td>
<td>(327,250)</td>
<td>203,650 38.4%</td>
</tr>
<tr>
<td><strong>Total Personnel Costs</strong></td>
<td>29,936,256</td>
<td>32,720,546</td>
<td>2,784,290 9.3%</td>
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<tr>
<td>Supplies</td>
<td>1,019,565</td>
<td>1,105,913</td>
<td>86,348 8.5%</td>
</tr>
<tr>
<td>Services</td>
<td>1,779,767</td>
<td>2,373,111</td>
<td>593,344 33.3%</td>
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<tr>
<td>Other Charges</td>
<td>3,862,015</td>
<td>4,958,880</td>
<td>1,096,865 28.4%</td>
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<tr>
<td>Total Assessments</td>
<td>3,829,165</td>
<td>3,949,688</td>
<td>120,523 3.1%</td>
</tr>
<tr>
<td><strong>Total Supplies, Other Services &amp; Charges</strong></td>
<td>10,490,512</td>
<td>12,387,592</td>
<td>1,897,080 18.1%</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>40,426,768</td>
<td>45,108,138</td>
<td>4,681,370 11.6%</td>
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<tr>
<td>Capital Outlay</td>
<td>2,835,000</td>
<td>584,420</td>
<td>(2,250,580) -79.4%</td>
</tr>
<tr>
<td><strong>Total Customer Services</strong></td>
<td>$43,261,768</td>
<td>$45,692,558</td>
<td>$2,430,790 5.6%</td>
</tr>
<tr>
<td><strong>PERSONNEL - Budgeted FTEs</strong></td>
<td>147.0</td>
<td>152.9</td>
<td></td>
</tr>
</tbody>
</table>
MEETING SUMMARY

We welcome your thoughts and ideas about how we can best serve Tacoma Public Utilities and its customers.

Additional Questions?

Next Steps and Follow-up items...
Workforce Connect Project

City of Tacoma | Tacoma Public Utilities
Enterprise Technology Project

Public Utility Board Study Session
August 22, 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
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.
• 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
  • Do our work better
  • Performance management capability
  • Strengthen safety culture
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…
### Common Industry Benefits

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Improvement/Change</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-25%</td>
<td>↑</td>
<td>Field technician productivity</td>
</tr>
<tr>
<td>&lt; 60 sec</td>
<td>↓</td>
<td>Service order close time</td>
</tr>
<tr>
<td>5-10%</td>
<td>↓</td>
<td>Technician windshield time</td>
</tr>
<tr>
<td>10-20%</td>
<td>↑</td>
<td>Customer satisfaction ratings</td>
</tr>
<tr>
<td>17%</td>
<td>↓</td>
<td>Asset inspection effort / time</td>
</tr>
<tr>
<td>90%+</td>
<td></td>
<td>% of work auto-scheduled</td>
</tr>
<tr>
<td>60 min.</td>
<td></td>
<td>Dispatch productivity gains</td>
</tr>
<tr>
<td>12%</td>
<td>↓</td>
<td>Estimated restoration times</td>
</tr>
<tr>
<td>50%</td>
<td>↓</td>
<td>Planning and assigning work</td>
</tr>
<tr>
<td>60%</td>
<td>↓</td>
<td>In customer complaints</td>
</tr>
</tbody>
</table>
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
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
- Q4 Infrastructure / Design

We are here.

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
• Engaged consultant to facilitate our vendor selection process

• Clevest Mobile Work Management was selected through a competitive RFP process
<table>
<thead>
<tr>
<th>Respondent (weighting)</th>
<th>Technical Requirements (40%)</th>
<th>Price (30%)</th>
<th>Risk (20%)</th>
<th>SBE/MWBE Certification (5%)</th>
<th>Submittal Quality, Organization &amp; Completeness (5%)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clevest Solutions, Inc.</td>
<td>1979</td>
<td>1484</td>
<td>989</td>
<td>0</td>
<td>247</td>
<td>4700</td>
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<tr>
<td>ABB Enterprise Software, Inc.</td>
<td>1845</td>
<td>1384</td>
<td>923</td>
<td>0</td>
<td>231</td>
<td>4382</td>
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<tr>
<td>SAP America, Inc.</td>
<td>1837</td>
<td>1378</td>
<td>918</td>
<td>0</td>
<td>230</td>
<td>4362</td>
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<tr>
<td>Smart Energy Water LLC</td>
<td>1799</td>
<td>1349</td>
<td>899</td>
<td>0</td>
<td>225</td>
<td>4272</td>
</tr>
</tbody>
</table>
Clevest Contract Agreement

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

<table>
<thead>
<tr>
<th>Component/Deliverable</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software</td>
<td>$607,500</td>
</tr>
<tr>
<td>Maintenance Support (7 years)</td>
<td>$675,500</td>
</tr>
<tr>
<td>Product implementation services &amp; warranty</td>
<td>$1,177,260</td>
</tr>
<tr>
<td>Training</td>
<td>$33,196</td>
</tr>
<tr>
<td>Other</td>
<td>$178,200</td>
</tr>
<tr>
<td><strong>Total Contract Value</strong></td>
<td><strong>$2,671,656</strong></td>
</tr>
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</table>
## Workforce Connect Budget

<table>
<thead>
<tr>
<th><strong>2018-2020 External Costs</strong></th>
<th><strong>Total Line Item Costs</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Software</td>
<td>$607,500</td>
</tr>
<tr>
<td>Hardware</td>
<td>$33,389</td>
</tr>
<tr>
<td>Clevest Professional Svcs</td>
<td>$1,177,260</td>
</tr>
<tr>
<td>Augmented Professional Svcs</td>
<td>$1,170,300</td>
</tr>
<tr>
<td>Consultant Svcs</td>
<td>$1,029,820</td>
</tr>
<tr>
<td>Travel</td>
<td>$178,200</td>
</tr>
<tr>
<td>Training</td>
<td>$565,546</td>
</tr>
<tr>
<td><strong>Total External Costs</strong></td>
<td><strong>$4,762,015</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>2018-2020 Internal Labor Costs</strong></th>
<th><strong>Allocated</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Division Labor</td>
<td>$2,292,763</td>
</tr>
<tr>
<td>Cust Svcs (All others)</td>
<td>$84,675</td>
</tr>
<tr>
<td>TPU UTS Labor (Allocated)</td>
<td>$244,197</td>
</tr>
<tr>
<td><strong>Total Internal Labor Costs</strong></td>
<td><strong>$2,621,635</strong></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Project Total</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GRAND TOTAL (Capital and O&amp;M)</strong></td>
<td><strong>$7,351,424</strong></td>
</tr>
</tbody>
</table>

### COST BY DEPARTMENT

- **Power**: 59%
- **Public Works**: 2%
- **Env Svs**: 14%
- **Water**: 25%
## Net Cost / Benefit Analysis

<table>
<thead>
<tr>
<th>Clevest Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-Time Project Cost</td>
</tr>
<tr>
<td>Ongoing Costs</td>
</tr>
<tr>
<td>Project Benefits</td>
</tr>
<tr>
<td>Project Cash Flow</td>
</tr>
<tr>
<td>NPV</td>
</tr>
<tr>
<td>ROI</td>
</tr>
<tr>
<td>Payback Years</td>
</tr>
<tr>
<td>Lower Monthly Cost (per user)</td>
</tr>
</tbody>
</table>
Key Takeaways

• Business driven
• Better served customers/citizens
• Multiple business units participating in project & governance
• Transformational opportunity
Recommendations/Next Steps

• Contract approval at Public Utility Board
• Info session with City Council
• Continue project preparation activities
• Project initiation planned for Q4 2018
Water Resource Planning

- Water System Plan
- Integrated Resource Plan

August 22, 2018
Today’s Agenda

Water System Plan Update
Integrated Resource Plan Results/Conclusions
- Overview of Sources
- Overview of Modeling results
- Resource Performance
- Potential Solutions

Additional Considerations

Next Steps
2018 Water System Plan – collecting our planning in one place

June 13th

Watershed Management Plan

Conservation Plan and Goal

Integrated Resource Plan

Water Shortage Response Plan

March 14th and Today!

June 27th

2018 Water System Plan
September/October
The Green River is Tacoma’s primary water source. In recent years, it is the source of 95% of our water.

- Tacoma has two water rights on the Green River
- Both water rights are constrained to ensure adequate minimum instream flows
Stored water is released:
- To augment river flows for fish
- To be used as drinking water

Auburn Measurement Point; Must maintain greater than 250 cubic feet per second

HHD = Howard Hanson Dam
Overview of Existing Sources - Groundwater

- 55 MGD of installed capacity /~40 MGD currently reliably available
- Aquifer in South Tacoma is a key component
- Normally ~5% of supply
- Can provide up to 40-50% of summer demand
- Drought resilient

MGD = Millions of Gallons per Day
Overview of Modeling Results

- Performance of existing sources
- Impacts of climate change
- Resource Adequacy Standard
- Future scenarios evaluated
- Firm Yield vs demand forecast
Existing Resource Performance - Past

zero curtailments in this simulation

Simulated Water Supply by Source

- Green River (direct use)
- City Wells
- Storage
Impacts of Climate Change - 2050

Average Monthly Simulated Inflows – Eagle Gorge Reservoir

Historical Average
Predicted flows above historical average
Predicted flows below historical average

Inflows (cfs)

Jan May Aug Dec

Cfs = Cubic Feet per Second
Resource Adequacy Standard (RAS)

Presented at March 11, 2018 Public Utility Board Study Session:

Water sources and systems will be sufficient to meet demands such that mandatory curtailments will occur not more than once in 25 years, as a long term average.
Firm Yield

Peak Monthly Demands vs Sustainable Monthly Yield

- Monthly Sustainable Yield 2018
- Monthly Sustainable Climate Changed Yield in 2050
- Highest Monthly Demand in last 10 years
- Annualized Firm Yield
Scenarios Evaluated

**Least-Stressed**
- Improved technologies
- Water conservation

**Most Likely**
- Continues demands, growth trends
- Climate change is moderate but accelerates

**Most-Stressed**
- Higher demands due to increased economic activity
- Climate change is hotter and drier
Existing Resource Performance - Future

Available Supplies, as a function of Scenario – Good performance for all but Most-Stressed Scenario
Existing Resource Performance - Future

- System is robust except when in the Most-Stressed Scenario
- Only Most-Stressed Scenario does not meet RAS
- Responsibility to be prepared should Most-Stressed Scenario occur

RAS = Resource Adequacy Standard

Number of curtailments represents the long-term average, standardized to the expected frequency in any 25-year period.
Potential Solutions – Most-Stressed Scenario

• Additional Water Storage Project Phase 1 (AWSP1) – Complete phase 1 to receive up to 10,000 Acre-feet

• Aggressive Peak Shaving – Reduce summer peak demand in hot and dry years

• Develop Groundwater – Enhance pumping capacity of well fields

• Additional Water Storage Project Phase 2 (AWSP2) – Raise Eagle Gorge Reservoir an additional 10 feet

• Oasis – Aquifer Storage and Recovery (ASR)
## Potential Solutions – Most-Stressed Scenario

### Number of mandatory curtailments is improved to meet the RAS in each of the proposed solutions

- Potential for curtailments reduced
- Analyze and prioritize
- Uncertainties

<table>
<thead>
<tr>
<th></th>
<th>Current Sources</th>
<th>OASIS</th>
<th>AWSP Phase 1 (Howard Hanson Fish Passage)</th>
<th>AWSP Phase 2 (Reservoir Pool Raise)</th>
<th>Develop Full Groundwater Rights</th>
<th>Aggressive Peak Shaving</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of voluntary curtailments</strong> (out of 25 years)</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>&lt;1</td>
<td>&lt;1</td>
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<tr>
<td></td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Number of mandatory curtailments</strong> (out of 25 years)</td>
<td>3</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>4</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Is the RAS met?</strong></td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
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<td></td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Percent of groundwater rights utilized</strong></td>
<td>60%</td>
<td>60%</td>
<td>60%</td>
<td>60%</td>
<td>75%</td>
<td>55%</td>
</tr>
<tr>
<td></td>
<td>70%</td>
<td>70%</td>
<td>70%</td>
<td>70%</td>
<td>95%</td>
<td>67%</td>
</tr>
</tbody>
</table>

RAS = Resource Adequacy Standard
Additional Considerations

• Fish Passage Facility completion and funding (Additional Water Storage Projects Phase 1 and Phase 2)

• Groundwater resources in an urban environment

• Water rights – complex and changing
Green River Water Rights

First Diversion Water Right ("FDWR")
- Statement of Claim
- Tacoma filed in 1971 (based on 1906 and 1908 priority dates)
- Point of Diversion: Headworks

Second Diversion Water Right ("SDWR")
- Permit issued in 1986 (1933 priority date)
- Development schedule (next milestone: 2021)
- Point of Diversion: Headworks
Types of Water Rights

Permits & Certificates:
• Issued by Dep’t of Ecology
• Pursuant to the “Water Code” (i.e., state legislation)
• 1917 surface water / 1945 ground water
• Permit is a water allocation under development
• Certificate documents a vested property right.

Claims:
• Assertion of vested right predating Water Code
• Statements of claim required by 1967 law
• Ecology accepts for recording, but not approved or confirmed in substance.
Department of Ecology - Water Right Permit Process

- Application
- Permit
- Development Schedule
  1. Start Construction
  2. Complete Construction
  3. Put Water to Full Use → or request extension of time
- Proof of Appropriation
- Certificate
2003 Municipal Water Law ("MWL")

• Before 2003, law was not clear about how to vest (or “perfect”) a municipal purpose water right

• 2003 MWL clarified that actual “beneficial use” of water required

• Certificates now issue with quantities put to actual use
Restrictions and Factors as to “Beneficial Use” of Green River Water

- Water rights terms and conditions imposed by Dep’t of Ecology
- Agreement with Muckleshoot Indian Tribe (1995)
- Project Cooperation Agreement with US Army Corps of Engineers (2000)
- Habitat Conservation Plan (2001)
Overview of Partnership Agreement

• Tacoma is the owner and operator of the Second Supply Project (SSP)

• Tacoma has a 15/36 share; Kent, Covington and Lakehaven each have 7/36 Shares in the Second Supply Project

• Decisions are made by vote of the Project Committee

• Each Partner has paid for rights to use its share of the available Second Diversion Water Right, including water stored in the Eagle Gorge Reservoir

• Investment from the three Partners since 2005 has been $196 for capital facilities, and $20 for O&M
Next Steps

• Finalize Planning Documents

• Ongoing Public Education

• Develop strategies and outreach communication plan for Aggressive Peak Shaving

• Continued engagement with Federal Agencies & the congressional delegation to complete Additional Water Supply Project Phase I

• Further Evaluation of Supply solutions, including prioritizing groundwater improvements