



**City of Tacoma
Department of Public Utilities - Tacoma Power
Utility Technology Services**

**Mobile Workforce Management Solution Replacement
RFP Specification No. PS17F-0278F**

QUESTIONS and ANSWERS

All interested parties had the opportunity to submit questions in writing by email to Richelle Krienke by 3:00 p.m. on July 13, 2017. The answers to the questions received are provided below and posted to the City's website at www.TacomaPurchasing.org. This information is not considered an addendum. Respondents should consider this information when submitting their proposals.

Question 1: Whether companies from Outside USA can apply for this? (like, from India or Canada)

Answer 1: Tacoma will consider all proposals that meet the specified requirements per the RFP.

Question 2: 2. Whether we need to come over there for meetings?

Answer 2: During the RFP period, if you are selected for a vendor shortlist; you will be required to come onsite to provide a demonstration. Yes there will be an onsite presence expectation for meetings, design, testing, go-live., and possibly post go-live support.

Question 3: Can we perform the tasks (related to RFP) outside USA? (like, from India or Canada)

Answer 3: The performance of tasks inside or outside of the US would be defined in the contract, but there will be an onsite presence expectation.

Question 4: Can we submit the proposals via email?

Answer 4: No. Submittals must be provided as detailed in the Request for Proposals page and Section 3.04.

Question 5: Please indicate the total number of dispatch seats that should be considered in the solution to be proposed.

Answer 5: Current active dispatchers count is 14, not including supervisor overview access through current Dispatch Application. With supervisor access through Dispatch Application, we have 38. We are currently licensed for 40 dispatchers. With a new solution and users, this could increase to approximately 50. Our current solution design is that the supervisors use the Dispatch Application to view assigned crew's workload.

Question 6: Appendix D, Technical Requirements, ID 12.7. Please provide a use case scenario for operation context.

Answer 6: Record pictures from the field with geocoding, send to SharePoint and include a link to the SAP object (order, notification, object, etc.) to the SharePoint location

Question 7: Appendix D, Technical Requirements, ID 69.0. Please provide a description of what is meant by “control keys” and please provide a use case scenario for context if possible.

Answer 7: Control keys refers to job codes, standard text keys, activity codes and object, damage and cause codes

Question 8: Appendix D, Technical Requirements, ID 222.0. Please provide a use case scenario for operation context.

Answer 8: Use cases will be developed during design of the selected software. However, for context it is the ability to predict travel time based on historical data and time of day.

Question 9: Appendix D, Technical Requirements, ID AMI.15. Please provide a use case scenario for operation context.

Answer 9: Use cases will be developed during design of the selected software. However, for context it is the ability to distribute work based on specific work, for example meter reading route, premise, billing cycle, etc.

Question 10: Appendix D, Technical Requirements, ID AMI.22. Please provide a use case scenario for operation context.

Answer 10: Use cases will be developed during design of the selected software. However, for context it is the ability to manually or automatically create and dispatch AMI work for field users.

Question 11: Appendix D, Technical Requirements, ID AMI.23. Please provide a use case scenario for operation context.

Answer 11: Use cases will be developed during design of the selected software. Current solution has a code that specifies “unable to access” and refers work back to office for resolution and reassignment.

Question 12: Appendix D, Technical Requirements, ID AMI.24. Please provide a use case scenario for operation context.

Answer 12: Use cases will be developed during design of the selected software. However, for context it is the ability to dual purpose mobile hardware to allow for meter connectivity and management. This requirement is a hardware requirement and does not reflect any requirement of the mobile solution application or functionality.

Question 13: Appendix D, Technical Requirements, ID 6.7. Please provide a use case scenario for operation context.

Answer 13: Use cases will be developed during design of the selected software. However, for context it is the ability for COT and TPU management/security staff to view security audit results and review or analyze for our organizational risk.

Question 14: Appendix D, Technical Requirements, ID 12.9. Please provide a use case scenario for operation context.

Answer 14: Use cases will be developed during design of the selected software. However, for context it is the ability to link mobile request to Cherwell and create, update and complete those requests.

Question 15: Appendix D, Technical Requirements, ID 201.0. Please provide a use case scenario for operation context.

Answer 15: Use cases will be developed during design of the selected software. However, for context it is the ability to combine multiple requests within a localized area (fed off the same water main, transformer, substation, feeder, etc.) with similar issues.

Question 16: MWM RFP Functional Requirements # 91.0 – the last part of the requirement appears to be missing – “Ability to have auto-scheduler provide a visual display of orders scheduled, not scheduled, not meeting commitments; as well as:” Should there be anything after “as well as”?

Answer 16: This functional requirement should have extended through ID 92.0, 93.0 and 94.0.

Question 17: MWM RFP Functional Requirements # 1.4 d. – can you provide some additional information on what you are looking for with this requirement?

Answer 17: Please describe how you use reciprocal agreements, subcontractors or other service providers to implement your solution.

Question 18: Non-Functional Requirements #32.0 – can you indicate which “questions below” are linked to requirement #32.0?

Answer 18: There are no further items after ID 32.0 that are linked to the need to maintain a corporate calendar.

Question 19: Are your Itron meters SCM or SCM+?

Answer 19: Current Itron meters are not either SCM or SCM+ and we do not currently have an AMI network in place. There is a future multiyear plan on the horizon for an AMI implementation.

Question 20: What documents would you like to access from the mobile application and what system(s) are those documents currently stored in?

Answer 20: CAD drawings (.dgn, .dwg), ESRI ArcGIS data, TV data, SharePoint documents (.docx, .xlsx, .ppt, .jpg, .dwg, .png, etc.).

Question 21: Can you identify which RFP requirements are mandatory and which are nice to have?

Answer 21: No, we would like respondents to answer the requirements with their ability to fulfill the defined need.

Question 22: In the Specification document, Section 2 – Project Scope/Technical Provisions: Background 2.01 B. (page 8): The SAP ECC 6.07 system is in the process of having its servers refreshed and a database migration from Oracle to HANA. – (Question) Till when will this project be running and how will it influence the MWM solution project?

Answer 22: SAP HANA database migration is scheduled to be completed by the end 2017 and should not have any impact on the initialization of this project.

Question 23: In the Technical Requirements Response Form: ID 278.0 – The ability to send or receive information on a failed device with a reason code. – Please explain what is meant by a failed device.

Answer 23: This is the ability to transmit a failed state with object/damage/cause codes to SAP. An example is the object is an insulator, the damage is cracked and the cause is lightning.

Question 24: In the Technical Requirements Response Form: ID 286.0 – The MWM system shall have the ability to accept historical MWM related data from legacy MWM Operational Database (ODB) and Historical Database (HDB). – Do either of these systems have unique data and/or fields that should be accounted for? What types of data needs to be accepted? Work orders? Equipment info? User info?

Answer 24: Yes to all of the above types of data from the current mobile solution to SAP and ESRI.

Question 25: In the Technical Requirements Response Form: ID AMI.23 – The ability of the MWM system to reduce lost time due to AMI installation challenges. – Is the city of Tacoma looking for recommendations to improve processes and/or implement workflow simplifications where appropriate?

Answer 25: See Answer 11 above. We are currently unable to answer this question at this time as we do not currently have an AMI solution and the AMI project requirements have not been defined.

Question 26: In the Technical Requirements Response Form: ID AMI.24 - The ability of the MWM system to simplify AMI meter installation and meter software programming processes via the Mobile application. - Is the city of Tacoma looking for recommendations to improve processes and/or implement workflow simplifications where appropriate?

Answer 26: See Answer 12 above. We are currently unable to answer this question at this time as we do not currently have an AMI solution and the AMI project requirements have not been defined.

Question 27: In the Technical Requirements Response Form: ID 64.0 - Within the system, maintenance task lists shall be used to describe task steps that need to be performed to accomplish a maintenance (PM or CM) requirement. Planning activity start by converting maintenance (PM or CM) requirements from maintenance notifications to PM or CM

maintenance orders. - Should the MWM system convert PM/CM notifications to maintenance orders, or will SAP convert and send info back to MWM?

Answer 27: SAP will convert the notification to a work order and send it back to the MWM.

Question 28: In the Technical Requirements Response Form: ID 143.0 - The ability to send information required by SAP ERP applications to create a follow-up work request. - What information is required by SAP to create a follow-up work request?

Answer 28: Ability to create a follow-up request with the necessary information required to create that request. An example is that a meter reader goes out to read a meter and see that it's damaged. They need to send a follow-up request to a meter crew with all the appropriate data to replace the damaged meter.

Question 29: In the Technical Requirements Response Form: ID 148.0 - The ability to send a message to SAP ERP applications with the data to create a follow-up work request. - What's the difference with requirement 143.0?

Answer 29: See Answer 28 above.

Question 30: In the Technical Requirements Response Form: ID 108.0 - The ability to manage Job Orders and Tasks in terms of durations, levels of effort by resource type, and dependencies. - What is meant by "levels of effort by resource type"? And what kind of dependencies will there be that we need to take into account?

Answer 30: Levels of effort refer to an average duration for specified tasks and dependencies would be based on the predecessor/successor relationships. An example is a crew installs a service line, once completed the process triggers another crew to come in and install the meter.

Question 31: In the Specification document, Section 2 – Project Scope/Technical Provisions: 2.04 (D.) - The initial count of users for both General Government and TPU will be about 500 field users that will be working in one of these units: - How many total dispatch users do you anticipate having?

Answer 31: See Answer 5 above

Question 32: The RFP package includes two response documents (Pricing and Technical). Are there any other response documents that are required to be submitted?

Answer 32: The RFP instructs the vendor to which sections require a written response . Unanswered sections may disqualify an otherwise qualified vendor.

Question 33: It appears that COT and TPU are interested in several deployment models (on-Premise, Cloud, Hybrid). Is there a preference toward any specific option?

Answer 33: COT and TPU are not set on a preferred deployment model, we are willing to entertain any of the above deployment models, but we will only implement one.

However, if your solution is a hybrid cloud computing environment which uses a mix of on-premise, private cloud, and/or third-party public cloud services, you must provide us your explanation of the orchestration between the platforms.

Question 34: In the Desired Qualifications section on page 11 – the request states “Mobile workforce management and field service mobility solutions for multi commodity municipal utilities (power, water, and public works).” If the proposers solution is not currently installed in an instance with all three identified divisions – would that immediately disqualify them from consideration?

Answer 34: No, it would not, but we would prefer to see a proposer/vendor that has implemented in more than one type of utility.

Question 35: General - The requirements refer to integration with an Enterprise Service Bus and specific systems such as HR, SAP ERP, and OMS. Will all systems be integrated via the Enterprise Service Bus?

Answer 35: All of the systems will integrate through the Enterprise Service Bus based on mobile functionality requirements.

Question 36: General - Does Tacoma currently use a BI tool with a data warehouse that the MWM solution can pass the data to?

Answer 36: COT and TPU have an existing BI tool that is currently used for reporting mobile related data.

Question 37: General - Will the solution be rolled out to all TPU's field service departments?

Answer 37: Yes and they are listed in the RFP.

Question 38: General - Does TPU have any metrics to determine what a successful project and implementation consists of? For example, decrease travel by 10%.

Answer 38: This currently hasn't been defined and will be developed during the full project scoping.

Question 39: General - The RFP mentions a laptop and tablet PC being utilized. Are there plans to roll out iOS/Android tablets/smartphones in the future?

Answer 39: Yes there are, but have not been clarified.

Question 40: General > WO Form - Requirement 14.4(d) – Does the vehicle have a list of available parts? How are parts transferred from the warehouse to the vehicle?

Answer 40: In today's environment, no there is no stock assigned to the vehicle. Future vision would be to give the crew the ability to see what materials they have available on their vehicle and the ability to reserve and return materials to the warehouse and an automated materials trace fashion.

Question 41: General > WO Form - Requirement 15.6(f) – Please explain the time confirmation use case.

Answer 41: Current solution is configured to allow crew and individual time entry from the mobile solution to SAP (CATS). The interface populates the identified employee's time and also sends the recorded associated vehicle equipment time to the work order through an IW47 transaction.

Question 42: General > WO Form - Requirement 15.7(g) – Please provide a use case when the mobile client user would re-optimize a single work order? Is this the same as manual adjustment of their schedule or assisted scheduling on the mobile user interface?

Answer 42: Use cases will be developed during design of the selected software. However, for context this pertains to the intraday events that occur that may impact working and order in its original sequence and route. Events like brakes, lunch, meetings, shift options, unplanned delays, etc., may cause the field user to re-optimize a single order or groups of orders and their associated routes. This also includes the ability to manually call street level routing either by selected orders or all assigned.

Question 43: General > MWM Apps Gen - Requirement 28 – Will the creation of WOs occur in SAP as the system of record or within the MWM solution?

Answer 43: The desired functionality is, but not limited to the potential from both directions; but to ultimately generate a record in SAP, as it is the system of record.

Question 44: General > MWM Pendants - Requirement 51 – What is currently being used to process payments from a mobile device?

Answer 44: Current design does not have this functionality, but a future desire to apply this electronic collection method may come up and we want to know that the solution will be able to accommodate. Examples may include a Square-Reader for credit card payments or the ability of entering electronic checks. This also infers that an interface from the mobile to the CIS (customer account) would automatically sync the payment activity to the customer record.

Question 45: General > MWM Pendants - Requirement 52 – Please clarify the requirements and its use case.

Answer 45: Use cases will be developed during the design of the selected software. COT and TPU do not want a solution that requires modification of mobile solution core code. We would like is the ability for customized configuration without core code modification (SAP user exits) to allow for specific business process requirements.

Question 46: Plan / Forecast > Forecasting - Requirement 54 – How far in advance will the forecast be generated for?

Answer 46: Forecasting to support short-cycle work (e.g., customer and meter services) should be on average a two week lead time. However, would be extended over longer periods of times (i.e., weeks or months) for long-cycle work, e.g., PM's, CM's, surveys and construction type work (water mains, electric feeders,

and their points and spans) but also the replacement of aging infrastructure and their corresponding assets.

Question 47: Schedule > Schedule Management - Requirement Statement – Please describe how emergency work is created and scheduled. What is the SLA to respond to emergent work?

Answer 47: Emergency work is expected to be completed within that day. They should not be future date scheduled. There is no current SLA for response to emergent work.

Question 48: Schedule > Schedule Management - Requirement 105 – Please clarify the requirement and its use case.

Answer 48: Use cases will be developed during the design of the selected software. Problem statement is: can future unscheduled maintenance man hours and funding requirements be predicted with statistical significance and a degree of certainty within your solution for a period of one (1) to many (n) months.

Question 49: Schedule > Schedule Management - Requirement 111 – Will the tools/equipment availability be kept within the MWM solution?

Answer 49: While major equipment and materials inventory is currently maintained in SAP, does your solution support keeping accurate inventories for tools, parts, and equipment within equipment tracking module and with the ability to transfer equipment between technicians and reconcile the inventory in minutes.

Question 50: Schedule > Appointment Booking - Requirement 113 – Please clarify the requirements and its use case. Is this overlapping appointment for the same field tech?

Answer 50: Use cases will be developed during the design of the selected software. This is the ability to override or reprioritize an existing appointment with a higher priority appointment for the same technician. There could also be the situation where it may be permissible to double book or have overlapping appointments allowed for the same timeslot and except. For example, if an inspector only needs 20 minutes to work with the customer at the beginning of their 60 minute appointment, you can allow double booking for the last 40 minutes (i.e., padding the schedule somewhat).

Question 51: Dispatch > Dispatch Specific - Requirement 113 – Please clarify the requirements and its use case.

Answer 51: See Answer 50 above.

Question 52: Dispatch > Dispatch Specific - Requirement 143 – Is the follow-up work being created in the MWM solution or in SAP ERP?

Answer 52: See Answer 28, duplicate requirement as 148.

Question 53: Dispatch > W.O. Management - Requirement 201 – Is this, for example, a 5 meter swaps that occur at the same location, so the work orders should be combined/bundled and scheduled as one entity?

Answer 53: See Answer 15 above.

Question 54: Dispatch > General -General question – What Document Management solution is currently being used? How does Tacoma intend to use Document Management – mobile device, etc.?

Answer 54: COT and TPU use SharePoint with metadata management. COT and TPU would like the ability to transmit the document from the mobile device to a host site and record location within SAP.

Question 55: Dispatch > General - Requirement Statement – Where will the document management repository reside?

Answer 55: COT/TPU SharePoint at this time.

Question 56: Dispatch > Document Management - Requirement 233 – How will the mobile device connect to the printer?

Answer 56: Either USB, Bluetooth connection to a portable printer, or LAN connection to a network printer.

Question 57: MWM RFP Functional Requirements #278 – can you indicate what type of failures you would like reason codes for (e.g. hardware, software, and/ or connection failures).

Answer 57: See Answer 23 above

Question 58: Is the goal to see work orders from other systems other than SAP within the Scheduler/Dispatch tool. If so what are they, and what is the extent of the information required to see. Are any back and forth communication required other than read and present in the scheduler/dispatcher.

Answer 58: Yes, other systems besides SAP would include ESRI ArcGIS, CGI's OMS and MS Access database. Back and forth communications would be required to provide status and state update along with completion information.

Question 59: Is there an expectation of a mapping system to be used within the scheduling/dispatching tool, if so what is it or what are they?

Answer 59: Our current solution uses an ESRI/ArcGIS geo-map with an associated database that defines the multiple business layers, service territory and support area(s). However, please let us know if your solution uses APIs such as: Google Maps, MS Bing Maps, MapQuest, Open Layers, Foursquare, Open Street Map, Tom-Tom, and Garmin.

Question 60: How does historical travel times to be used, there was mention of tracking and using these times. Can this be elaborated on

Answer 60: See Answer 8 above.

Question 61: Drip feed work orders were mentioned, can this be explained on how these are to be used.

Answer 61: Drip feeding is automatically providing additional orders to a technician who has completed assigned work before shift completion. In the technical sense, drip feeding is the process within scheduling/dispatch of slowly releasing work. This process allows field technicians to concentrate on the work and tasks at hand, and only after finishing network, will the technician get the next work order sent to them. Receiving orders in the field on the technician's mobile device can either be in bulk or one-by-one, i.e., drip feeding. Also see the answer to question 109 – what is meant by “drip feed”?

Question 62: ARCOS is the time entry tool. How up to date is hour availability within it.

Answer 62: ARCOS is not a time entry tool; it is an after-hours crew callout tool. It is currently not in use, but if it's implemented in the future, an interface that could reflect crew member availability status would be required.

Question 63: Exporting of Work orders was said to be required. What systems are expected to be exportable to.

Answer 63: We want access our ESRI ArcGIS data from within the Mobile Solution.

Question 64: There was mention of integration to SAP CAT's system, what is the extent of this?

Answer 64: This is the employee time entry from the mobile solution to SAP CAT's system.

Question 65: Are there existing ETL scripts for GE Smallworld for the in-scope workflows, if so, what is the approximate scope coverage?

Answer 65: By the time this project starts ETL scripts will have been built, but the project is not far enough along to provide current scope coverage.

Question 66: As per the Technical Requirements Document - There is a need to “Send and receive text messages between dispatcher and mobile device (dispatcher and or supervisor to crew) as well as between mobile devices (crew to crew)”. Kindly elaborate the requirement with scenario to understand the need better? Can the need be met by emails or say push notifications? What if the Technician is offline / remote areas?

Answer 66: Current solution allows two way communications between dispatchers and mobile users through an instant messaging style format. This capability is only available with online technicians.

Question 67: As per the Technical Requirements Document - There is a need for - Allow the user to open multiple screen displays within a session, including multiple work order displays, and mobile map display. Explain the need with test case?

Answer 67: Current solution allows for tiling multiple screens of mobile data scenarios within the Dispatch Application (this includes unassigned orders, assigned orders, crew list, individual crew workloads, etc.). The Mobile Application only allows a single screen viewing and no tiling, would like ability to tile in all modules.

Question 68: Explain your reporting needs? (The ability to store operational data in a separate data historian and/or DataMart for archiving, reporting, and analysis purposes), what kind of database is available for the above mentioned needs.

Answer 68: We are asking each respondent to explain their solution for data archiving, reporting and analysis/business intelligence or BI. Please provide how your solution would fulfill this requirement.

Question 69: Elaborate the need - The ability to receive a follow-up work request and pass to SAP ERP applications and/or OMS (CGI PragmaLINE).

Answer 69: Current solution is interfaced with SAP, which also maintains a live interface with CGI PragmaLine. New solution would need to at least continue this capability.

Question 70: Elaborate the need - Continually provide to the dispatchers the crew location through mobile GPS/AVL capability. Update interval is to be configurable by time and/or distance traveled.

Answer 70: Current solution (CalAmp's AVL – based on Esri GIS) is connected through WIFI hotspot in the vehicle that provide GPS/AVL coordinates and transmits that data to the mobile solution for reporting on a geographic map. Trying to stream and record second by second interval GPS/AVL data would be overkill and expensive to manage. However, the notion here is to capture and report on the AVL/GPS breadcrumb trail in an agreed-upon interval periodicity.

Question 71: What are the legacy systems (non SAP Systems) at play - The ability of the MWM and legacy systems to receive order completion data from the mobile device.

Answer 71: The legacy system at play is ESRI ArcGIS

Question 72: Elaborate the need (test case) for Dashboard and KPI's - The MWM solution shall provide a Performance/KPI "Dashboard" type solution that demonstrates how effectively TPU's field operation organizations are achieving key business objectives. The application shall allow each department to use different configurable KPI types to measure success based on specific business goals and targets.

Answer 72: Solution will require configurable performance metrics and KPI types in a management dashboard type format.

Question 73: Elaborate with a test case the need - The ability of the MWM system to simplify AMI meter installation and meter software programming processes via the Mobile application.

Answer 73: See Answer 12 above. We are currently unable to answer this question at this time as we do not currently have an AMI solution and the AMI project requirements have not been defined. However, if your solution has been configured to support AMI meter deployments, e.g., AMI meter set routes and AMI meter deployments, this functionality should be explained.

Question 74: How are the different workgroups identified or segregated in SAP? In your request for Group level security, how are the different groups structured - (SAP Organizational structure)?

Answer 74: Yes, each group has a specific organizational ID in SAP.

Question 75: Please share integration requirements for the Outage Management System (OMS - currently CGI PragmaLINE) -

- a. Is it a cloud or on-premise system?
- b. Does it support integration through restful APIs? What integration options does the vendor support?
- c. What are the integration touch points that are desired to the MWM solution?

Answer 75: A. Solution is ONPREM
B. Integration will be through the enterprise service bus
C. This will be further defined during the contract and scope negotiations.

Question 76: What Document Management System does the City use today? Will photos/images be stored on this Document Management System?

Answer 76: Microsoft SharePoint is used and yes, photo/images that will be stored on this quasi DMS, i.e. it's elements: the kinds of documents and other content, templates, what metadata to provide for each kind of document, where to store the document at each stage of its lifecycle, and how to move documents within the organization.

Question 77: Are there existing mobile devices or hardware that the City would like to use for the field users? If yes, please share device specifications.

Answer 77: COT and TPU are open to various platforms that could support mobile field functions

Question 78: Does the city have existing GPS hardware in their vehicles to support AVL? If yes, please share specifications. If there is no GPS hardware today, will the city consider investing in GPS hardware?

Answer 78: Yes there is existing GPS hardware developed and maintained by CalAmp (see Answer 70 above).

Question 79: ID 53.0 - Are you looking for standalone Mobile Device Management capabilities for the MWM solution? You mentioned using IBM MaaS360 Mobile Device Management platform in question 8.0.

Answer 79: No we are not. This question should have been removed as this RFP is specifically published for a mobile application, not device management capabilities.

Question 80: 195.0 Accept orders from multiple host systems - Please provide a list of the multiple systems - SAP ERP and OMS (CGI PragmaLINE) - any others?

Answer 80: SAP, OMS, ESRI, IVR, custom web applications (Online permitting, MyAccount, , MS Access database, etc.).

- Question 81:** The business requirements are all presented as equally important. Are all business requirements mandatory at initial go-live, mandatory over some period, or are some considered nice-to-have?
- Answer 81: The requirements are written in a way to ask how your solution would satisfy the requirement. They are not listed by priority, mandatory/optional, or by initial use state.
- Question 82:** Of the 37 business units listed as in-scope in section 2.04 D is there desired order of deployment, or perhaps a grouping of business units into “Phase I”, “Phase II”.
- Answer 82: Yes there is and that deployment order would be further discussed during contract negotiations and schedule development.
- Question 83:** What is the expected project duration for project scope and are there key milestones in the timeline relative to which business units go-live first?
- Answer 83: This would be further discussed during contract negotiations and schedule development.
- Question 84:** What is the envisioned City of Tacoma project team set-up, i.e. will there be PM-type roles at the department level such as “Environmental Services” or “Power T&D”.
- Answer 84: This will be further discussed during contract negotiations and schedule development
- Question 85:** Based on experience of intra-department collaboration experiences, how do you envision your implementation partner to engage with the 37 departments during the Design & Blueprint phase?
- Answer 85: This will be further discussed during contract negotiations and schedule development
- Question 86:** How many different department or processes should we use for the User Stories? Do we consider every business unit mentioned on pages 12 and 13 as the determining factor for the number of User Stories?
- Answer 86: Yes, most all departments have their own flavor of business processes and will have their own specific user stories. In some cases the functionality will be similar, but not cross-business process capable.
- Question 87:** In the high level integration diagram shown on page 10, it shows the Ventyx as the current MWM. Is Ventyx considered a legacy solution component for replacement or is there material perceived residual value that the City would the bidders to carry-forward as a component in the to-be solution architecture.
- Answer 87: The current Ventyx “Service Suite” solution will be replaced by the incoming to-be solution architecture.
- Question 88:** From what we understand, Multi Resource Scheduling (MRS) is not implemented at the City, is this correct? Please confirm.

Answer 88: Yes, COT and TPU currently do not use MRS.

Question 89: The RFP mentioned Utility “Short cycle” and “Long cycles.” Can you please provide more details on what do you mean by Short cycle and Long cycle and give some example of attributes to differentiate these in the order types?

Answer 89: Short cycle work (e.g., customer and meter services type work) is able to be completed within a single business day. Long cycles are work (PM's, CM's, and construction work – new construction infrastructure like water mains, electric feeders, points and spans, but also replacement of aging infrastructure and their corresponding assets) that require multiple days for completion, but need to have daily, weekly, and possibly monthly updates provided without showing task as completed until completion is specified.

Question 90: AMI metering process involves wireless transmission of readings from the meters to SAP mobile device how many different types of electronic meters does the City has? Is there a standardization of make model? Please provide some information on the meter types and the technology variants in terms of legacy or electronic meters.

Answer 90: We are currently unable to answer this question at this time as we do not currently have an AMI solution and the AMI project requirements have not been defined.

Question 91: For Functional Requirement ID 2.1 please specify type of forms required.

Answer 91: Current solution has dynamic forms for both mobile and dispatch functions with order summary forms, order detail forms, completion forms and miscellaneous forms.

Question 92: For Functional Requirement ID 13.3, please provide additional detail on types of data that needs to be displayed in the mobile field forms.

Answer 92: Various information from interface host that provide the mobile user enough information to complete the task assigned.

Question 93: For Functional Requirement ID 26.0, please provide additional information on primary use case. Is it to make sure that notifications, etc. are created against the server's time?

Answer 93: Does the proposed solution store time data in GMT?

Question 94: For Functional Requirement ID 40.0, please provide additional information about the Contractor Web Portal i.e. is this a website, a specific program, does it vary?

Answer 94: Current solution does not allow for assigning contract crews/resources to work. We are looking for a solution that allows some type of communication, possibly through a web portal or something similar; that will allow differentiation of contract work and non-contract work.

Question 95: For Functional Requirement ID 42.0, please provide define specific work order codes

Answer 95: Current solution interface is based off of the notification job codes and work order standard text keys and there are approximately 1,800 codes.

Question 96: For Functional Requirement ID 78.0, do reason codes or explanations include user statuses? What transactions will the end user be required to perform on the mobile device e.g. TECO, Release, etc?

Answer 96: Current solution has this as a REFER function that sends the assigned request back to the dispatcher but requires the field user to explain why it wasn't accepted.

Question 97: For Functional Requirement ID 98.0, please further define "set of business priority".

Answer 97: Ability to define either host assignment of work to technicians or automate the work assignment based on our defined criteria (skill, work area, etc.).

Question 98: For Functional Requirement ID 112.0, please further define "appointments"

Answer 98: A period of time when work should start that is coordinated and scheduled with the requesting customer.

Question 99: For Functional Requirement ID 128.0, please further define "work codes"

Answer 99: See Answer 7 above.

Question 100: For Functional Requirement ID 143.0, to clarify, the user should have the capability to create follow-on orders from the mobile device?

Answer 100: See Answer 28 above

Question 101: For Functional Requirement ID 154.0, secure login is standard functionality but a required logout is difficult. Is logout 100% required?

Answer 101: Yes it is a requirement.

Question 102: For Functional Requirement ID 161.0, please define how new work will be acknowledged i.e. user status, text message?

Answer 102: This should be an automated process (status or state update) that informs the dispatcher that the work has been received.

Question 103: For Functional Requirement ID 172.0, please confirm if the external system is SAP.

Answer 103: SAP, ESRI ArcGIS and OMS

Question 104: For Functional Requirement ID 173.0, do you envision this notification to be a phone call or text?

Answer 104: Current solution provides an Emergency button that when triggered send out a visual and audio alarm to all logged in dispatchers.

Question 105: For Functional Requirement ID 195.0, please further define “host systems”.

Answer 105: See Answer 103 above

Question 106: For Functional Requirement ID 201.0, please define the business rules for merging work orders.

Answer 106: See Answer 15 above.

Question 107: For Functional Requirement ID 212.0, if possible, please specify the software in use or to be used for Street Level Routing. In the past, we have relied on online-based mapping services for this type of activity.

Answer 107: COT and TPU will not provide software for Street Level Routing (SLR) and are expecting respondent’s solution to provide the desired functionality to support SLR.

Question 108: For Functional Requirement ID 214.0, can a 3rd party service, i.e Google Maps be used to meet this requirement?

Answer 108: As long as service is provided within the mobile solution and is not managed as a separate application.

Question 109: For Functional Requirement ID 221.0, what is meant by “drip feed”?

Answer 109: See Answer 61 above.

Question 110: For Functional Requirement ID 223.0, what is a dispatch area? How are the bounds defined? When would one apply standard times vs calculated times?

Answer 110: Dispatch areas are currently defined as the service area assigned to a technician. Current boundaries are defined through our GIS maps. Standard times would be applied when calculated times are unavailable.

Question 111: For Functional Requirement ID 227.0, what is AVL?

Answer 111: Automated Vehicle Locating (AVL) is the ability to provide location information of a specific vehicle at any given time.

TPU uses an AVL system provided by CalAmp, it provides AVL data along with a WIFI hotspot at the vehicle.

Question 112: For Functional Requirement ID 230.0, can GPS Formats be defined and an example provided?

Answer 112: GPS coordinates are a unique identifier of a precise geographic location on the earth, usually expressed in alphanumeric characters. Coordinates, in this context, our points of intersection in a grid system. GPS coordinates are usually expressed as the combination of latitude and longitude. Latitude is a measure of degrees of distance from the equator, which is 0°. The north and

south poles are at 90° in either direction. The primary and is 0° longitude and the locations are measured according to 90° east or west of that point. GPS coordinates are expressed in two different formats.

The following are the coordinates for the Empire State building in New York City for example: Latitude N 40°, 44' (minutes), 52.9809" (seconds) and Longitude W 73°, 59' (minutes), 5.9301" (seconds).

That same information can be expressed in purely numeric format: Latitude 40.748051 and Longitude -73.984981

In the latter case, the minus sign before the second number indicates that the location is west of the prime Meridian; a minus sign in front of the first number would indicate degrees south of the equator. Furthermore, the purely numeric format (to the sixth decimal place) should be used for your proposed solution and with any integration that requires the use of GPS coordinates.

Question 113: For Functional Requirement ID 251.0, please provide additional information or a use case for this requirement.

Answer 113: Please explain how and at what ratio your solution can compress information data packets to reduce storage time and transmission time.

Question 114: For Functional Requirement ID 252.0, is this in regards to an SAP integration problem?

Answer 114: No this is in regard to the field users ability to access landbase, facilities and map data of the service territories from the field.

Question 115: For Functional Requirement ID 253.0, please provide additional information or a use case for this requirement.

Answer 115: COT and TPU desire the ability to allow the field users to view and manage multiple layers of data such as landbase, facilities and map information (i.e. ability to turn on layers to show where water equipment intersects with power equipment and/or waste water, etc.)

Question 116: For Functional Requirement ID 259.0, can the interface and tools required be further defined?

Answer 116: This is the ability to perform drawing redlining from the mobile solution (i.e., a tool where basically someone can draw a line between one point to another, draw shapes/polygons and add text/notes directly on the map. This tool can also allow supervisor to take a work order and then draw something on the map for his worker to see, or allow a worker to display something that the supervisor needs to know about.

Question 117: For Functional Requirement ID 278.0, please specify the failed device. Does it mean mobile device or a piece of equipment?

Answer 117: This refers to a piece of equipment in the field that has failed (e.g., A failed water valve, electric recloser, or switch).

Question 118: For Functional Requirement ID 283.0, please define assignment polygons.

Answer 118: COT and TPU have multiple service territories based on the type of utility and within each utility service area; we have multiple smaller areas assigned to technicians. The polygon is the area within that service territory that is assigned.

Question 119: Can the City please expand on its expectations around project approach: Under Task 1, the City indicates that the contractor will work with the GG/TPU project PM and an SI to meet with key stakeholders in various departments.

- **Has an SI been selected yet? If so, whom?**
- **What is the anticipated role of the SI, and how does this work complement the contractor role?**
- **Who will be responsible for configuring the solution modules/forms (SI or contractor)? (There is some discrepancy between 2.04C and D.)**

Answer 119: COT/TPU believes that the package MWM and its set of applications make up a large percentage of a business transformation projects. A packaged MWM application standardizes processes within an organization and streamlines data flows between different parts of the business. Most utility organizations choose a package application to leverage off-the-shelf best practices associated with the packaged software, respond faster to changing business needs, and reduced TCO (total cost of ownership). COT/TPU believes that best practices and reduced TCO are the obvious benefits associated with packaged MWM applications. However, COT/TPUs alternative focuses around realizing faster time to market, i.e. to all its identified organizations. A systems integrator (SI) acting as an implementation partner plays an important role in laying out the MWM solution-deployment roadmap for COT/TPU, and one of the most important factors taken into consideration is feature prioritization based on organizational business needs. Feature prioritization initiatives are jointly undertaken by the implementation SI, the chosen vendor, and COT/TPU subject matter experts (SMEs) and an agile-like approach to design, configuration, testing, and implementation of the selected MWM software package.

This agile -like approach lays the foundation for success or failure of the MWM project and is considered to be the most important phase of the project. Delivery of the MWM software features organizational priorities takes the front stage from here on. It is recognized that post MWM package software vendors' have their own implementation methods, which are generally aligned with Waterfall principles. Herein lays the next questions: Do we need to look at again at waterfall-based implementation methods? Should COT/TPU reengineer them to gain immediate insight into business value at a faster rate, increase flexibility and implementation, and gain a more transparent progress/status monitoring as the project moves ahead.

The answer is No to these questions. Agile is a mature software development and is built on the concepts of team play, collaboration, increase communication, and transparency. COT/TPUs agile -like approach expects that all throughout the project, discover the possibility that the MWM system, adjust demands, requirements, business processes, and business benefits instantaneously without having to wait for the end of the MWM project.

To answer your questions: 1) has an SI been selected – No. 2) Role of SI – this will be fully discussed with the selected MWM vendor during contract

negotiations. 3) Who will be responsible for configuration – it is a team approach in which all parties (the MWM team) take success and/or blame.

Question 120: Can the City please expand on its expectations around project approach. Please provide more details on the contractor’s role in Task 2 (“Implement and Configure.... Integrations”), as well as the City and SI’s respective roles?

Answer 120: The selected contractor should fully know the strengths and weaknesses of the software, how they answered CTO/TPU set of requirements, and understanding the agile approach to design, configuration, and testing of the configurations as well as integrations. As such, it is the responsibility of the selected vendor to fully document its design, configuration, and integrations of the software based on their signed scope of work. Furthermore, all MWM project roles and responsibilities will be discussed and agreed upon selection of the MWM vendor and SI.

Question 121: Can the City please expand on its expectations around project approach. Is the City asking the contractors to match the City or SI’s project approach, or propose our own? Please help clarify the City’s desired project approach, and any other related peripheral information, so that contractor responses can align.

Specifically, the City mentions the use of an Agile methodology, and a series of workshops, sprints, and implementation activities. This alludes to the City already having a specific project structure in mind. If the City desires contractors to match the City’s own project structure, please provide more details on the project structure, including expected durations, if known. Some examples:

- How long are the sprints (2-3 weeks)?
- “Initial planning is to run two Sprints in parallel until all business units have been addressed.” Should we assume that each business unit will be comprised of “Environment Services” (e.g., #4-12, as delineated in 2.04D), or each business units (#1-37) will be treated independently? Does the City have any particular breakdown of sprints in mind? Or should the contractor make assumptions, based on anticipated workload of each business unit?

Answer 121: Please reference the answer to question 119 above. The agile approach will be discussed with the selected vendor, SI, project managers and others in detail upon post-selection of the MWM vendor. A full project plan will be developed that outlines the aforementioned. The project plan will address the project structure, the durations, the resources, the predecessors and successors, as well as addressing sprints by organization, estimated sprint duration, sprints conducted in parallel, as well as the testing, bug identification and fixes, releases to production, and other project variables.

Question 122: In section 2.04 SCOPE OF WORK, the City states, “The contractor will successfully configure their product modules to implement identified integrations, train the end users, train the system administration users and the technical support staff” (emphasis added). In other sections of the RFP (2.04 H, Task 4), the City requests a “train the trainer” approach. Is it the City’s desire that the contractor directly train end-users or

propose a “train-the-trainer” approach? Please elaborate, particularly if a hybrid model is anticipated.

Answer 122: We expect training to be provided to end users at the beginning of the project to expedite understanding of solution and how to design processes and forms that work within the parameters of the solution. We are also requesting system administration training, technical support staff training and then as sprints are being completed, train the trainer scenarios specific to functionality being deployed.

Question 123: Information for both on-premise and cloud solutions has been requested in the RFP. Which is the preferred deployment model for City of Tacoma? If Cloud is desirable, does the City prefer a vendor-hosted Cloud, or the City’s private Cloud?

Answer 123: See Answer 33 above

Question 124: Section 2.01 B: Background (Page 10 – Figure 1) – Does City of Tacoma envision a similar work order flow in the new environment, whereby all orders flow through SAP, and SAP acts as the single point of integration? Or do you envision a scenario where the MWM integrates directly to other host systems?

Answer 124: Proposed solution should have capability to integrate with multiple systems.

Question 125: How many dispatch-related users do you expect will use the MWM application?

Answer 125: See Answer 5 above

Question 126: Section 2.04 – Scope of Work – D: Does the estimate of 500 users include any contractors? If not, are the inclusion of contractor’s part of this RFP, and if so, how many contractor field technicians would this include?

Answer 126: No they are not. The estimate is 500 FTE field users.

Question 127: COT states that the system will be used by 500 users. Does COT have an estimate for how many concurrent users will be using the system?

Answer 127: Potentially 500 concurrent users. System needs to be scalable to allow for future growth.

Question 128: For the purposes of responding to certain requirements, and for pricing license and services, it would be helpful to understand the make-up of users by business function. Please provide the anticipated number of users by business group, typical number of work orders per day, and desired type of mobile device (if known)? Also, which business groups are using Service Suite today, and which are “greenfield” (currently on paper or using other processes)?

Answer 128: See provided information below. Desired device types have not been defined at this time and will not be provided. The typical work orders/day is based on the current mobile solution userbase.

Business Group	Typical Work Orders/Day	Desired Mobile Device	Service Suite /Greenfield
1. Community & Economic Development Code Compliance			greenfield
2. Community & Economic Development Neighborhood & Community Services			greenfield
3. Customer Service Field Investigation			Service Suite
4. Environmental Services AMG (Asset Management Group)			greenfield
5. Environmental Services Business Operations			greenfield
6. Environmental Services Multiple Groups			greenfield
7. Environmental Services Plant Maintenance			greenfield
8. Environmental Services Plant Operations			greenfield
9. Environmental Services SE - Metering /Sampling			greenfield
10. Environmental Services Sewer Transmission			greenfield
11. Environmental Services Sewer Transmission - Locators			Service Suite
12. Environmental Services Solid Waste -Operations			greenfield
13. Power Generation Projects			greenfield
14. Power Transmission & Distribution (T&D) Locators			Service Suite
15. Power T&D Electrical Inspection			Service Suite
16. Power T&D Line Crews			greenfield
17. Power T&D Meter / Relay			Service Suite
18. Power T&D System Auditors			Service Suite
19. Power T&D Trouble & Service Crews			Service Suite
20. Power T&D Wire Crews			Service Suite
21. Power Utility Technology Services (UTS) Networking, Telecomm & Transport Svcs (Comm Shop)			greenfield
22. Power UTS Networking, Telecomm & Transport Svcs (Engineering)			greenfield
23. Public Works Street Light Locators			Service Suite
24. Water Safety			greenfield
25. Water Distribution Engineering-Inspectors/Surveyors			Service Suite
26. Water Supervisors			Some on Service Suite
27. Water Distribution - Heavy Equipment Operators (Vactor, Dump Trucks, etc.)			greenfield
28. Water Distribution Customer Care (1 and 2 Person Crews)			Service Suite

29. Water Distribution Hydrant Crews			Service Suite
30. Water Distribution Meter Shop			Service Suite
31. Water Distribution-Construction			greenfield
32. Water Locators			Service Suite
33. Water Quality Maintenance - GRFF (Headworks)			greenfield
34. Water Quality Maintenance - In Town			greenfield
34.1. Water Quality Customer Care (1 and 2 Person Crews)			Service Suite
35. Water Supply Electrical			greenfield
36. Water Supply Maintenance			greenfield
37. Water Supply Operations			greenfield

Question 129: Does the City have in mind a desired mix of mobile devices? Is there a particular device or OS that is desirable, based on the City’s existing IT landscape/roadmap? (We understand that workshops may update the response.)

Answer 129: No, we want solution that is capable of running on any OS or potential device.

Question 130: Section 3.01, D states: Page size: 8.5” x 11” (no pages larger or smaller than this size). Is the City willing to accept 8.5” x 14” (legal) for PS17-0278F_TechnicalRequirementsResponseForm and PS17-0278F_PriceProposalForm, as they are Excel sheets (and easier to read responses on a larger sheet of paper)?

Answer 130: 8.5 x 14 would be acceptable for the Requirements Response Form.

Question 131: The following questions are with respect to PS17-0278F Technical Requirements Response Form. NFR23.0 and 24.0: does ‘crews’ mean concurrent crews?

Answer 131: Yes it does.

Question 132: The following questions are with respect to PS17-0278F Technical Requirements Response Form. Does the City have an existing or desired Business Analytics platform (e.g., SAP BO, PowerBI, etc.)? How is reporting conducted today?

Answer 132: See Answer 68 above.

Question 133: The following questions are with respect to PS17-0278F Technical Requirements Response Form. Some questions require very detailed information and multi-part responses on multiple components of the solution (if applicable) and require diagrams (e.g. system architecture, functional components etc.). How would City of Tacoma prefer this information to be presented, given that the response format is in Microsoft Excel? Some of this information may best be presented in a separate/attached file (such as a technical specification). However, Section 3; 3.01 A and B appear to discourage this and indicate it may not be considered in the evaluation. Does City of Tacoma expect respondents to include all information, including diagrams, images and other pictures

in the Excel file: "PS17-0278F_TechnicalRequirementsResponseForm.xlsx"?

Answer 133: It is understood that by responding to this RFP in a Microsoft Excel format has its limitations and is the preferred methodology. It is also understood that some of the information may be best presented in a separate/attached file as part of the vendor appendix (which would be acceptable). However there is a fine line between providing copious amounts of technical attachments and the ability to decipher its contents by COT/TPU in a timely manner.

The reason that Section 3.01 A & B appears to discourage this is that reviewing this copious amounts of information is not an arduous process. However, it is also recognized that selective elements are necessary to score the vendors fairly.

It is said that a picture is worth 1000 words, but if the interpretation of attached diagrams, images, and other pictures is not correct, that any and all vendor attachments is solely the of the responding vendor with no subsequent recourse to COT and or TPU for their interpretation or misinterpretation thereof.

Question 134: The following questions are with respect to PS17-0278F Technical Requirements Response Form. Does City of Tacoma use an AVL system today? If so, can you please provide details on what it is and what it currently offers? Is this same system expected to be used with the MWM application as part of this project?

Answer 134: See Answer 111 above

Question 135: The following questions are with respect to PS17-0278F Technical Requirements Response Form. What version of ESRI does the City use today, or will use for this project?

Answer 135: Tacoma Power will be implementing data replication on ESRI for Electric Utilities version 10.2.1C. Tacoma Water is currently on 10.4 and moving to 10.5

Question 136: The following questions are with respect to PS17-0278F Technical Requirements Response Form. What version of GE SmallWorld does the City use today, or will use for this project?

Answer 136: Tacoma Power is using GE SmallWorld 4.2

Question 137: The following questions are with respect to PS17-0278F_PriceProposalForm. If deployed on-premise, does the City expect the vendor to provide all server hardware or is this something the City will source directly, based on a provided set of specifications? Quite often, MWM system hardware is sourced directly by clients in order to obtain greater discounts. How will mobile hardware be handled – will this be procured directly by the City?

Answer 137: If on-premise solution, the City would procure and provide hardware based on solution specific requirements.

Question 138: The following questions are with respect to PS17-0278F_PriceProposalForm. Does the City prefer a Time & Materials price? This is assumed, based on the format. Please confirm.

Answer 138: Yes, we would prefer a time and materials breakdown of the proposed project scope.

Question 139: In order to ensure a high quality proposal, we respectfully ask the City of Tacoma to consider an extension of the Submittal Deadline to August 25, 2017.

Answer 139: An addendum will be issued to extend the submittal deadline to August 22, 2017.

Additional questions received after the original Q&A document was posted July 20, 2017:

Question 140: The acronym “ADA” is used in the Tacoma Power Utility Technology Services RFP PS17-0278F however we do not see it defined. Can you confirm the requirement for us? Here’s the context: Technical Requirements Response Form General Security 3.1 To what level is your MWM solution ADA compliant?

Answer 140: ADA, as used in the Technical Requirements Response Form, item 3.1 in General Security, refers to the Americans with Disabilities Act.

Question 141: Is it acceptable for vendors to provide comments or proposed changes to the sample agreements provided with the RFP documentation (i.e., Appendix B Sample Contract/Insurance Requirements and Appendix C Standard Terms and Conditions)?

Answer 141: The City’s preference is to use its own insurance and contract terms; however, alternate terms may be presented. The City reserves the right to reject and/or negotiate any proposed change(s) to the terms and conditions, scope, or other provisions of this RFP.