



**City of Portland  
Public Safety Systems Revitalization Program  
Emergency Radio Replacement Project  
July – August 2014  
Independent Project Management  
Quality Assurance Report**

**September 3, 2014**

**Prepared by:**



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## Purpose and Scope

The City has retained Federal Engineering (**FE**) to offer an independent opinion on the Public Safety Systems Revitalization Program Emergency Radio Replacement Project's status and potential for success. A key objective of this effort is to identify issues and concerns the City's project managers are not aware of rather than simply restatement of issues already identified for which action is underway.

The purpose of this report is to provide an overview of the status and progress of Portland's Emergency Radio Replacement project for the period July 2, 2014, through August 29, 2014.

The report evaluates the project in the areas of scope, schedule, quality, and risk and recommends preventative and corrective actions where appropriate.

## 1. Project Dashboard

Table 1 provides a snapshot of key performance indicators for the period covered by this report along with comments to assist the reader in understanding the status reported. **FE** provides the details associated with each indicator in the report.

A green indicator signifies that performance meets or exceeds objectives; yellow identifies that one or more objectives may be impacted unless performance is improved or alternative plans are invoked. The direction of the arrow denotes if the item is stable, improving, or declining; while red indicates that immediate corrective action is required to bring the project back into conformance with the project management plan.





**Table 1 - Performance Indicators**

| Performance Indicator  | Status                                                                              | Comments                                                                                                                                                   |
|------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Scope</b>           |    | The scope of the project remained unchanged this period.                                                                                                   |
| <b>Schedule</b>        |    | The project experienced a one week delay due to the vendor's inability to support staging as originally projected. The impact to deployment is negligible. |
| <b>Cost</b>            |    | Project costs remain within budget and were unchanged during this period.                                                                                  |
| <b>Quality</b>         |   | Portland's Replacement Project management QA has improved by modifying version control and risk/issue tracking methodologies.                              |
| <b>Issues/Concerns</b> |  | The City is actively resolving issues and concerns.                                                                                                        |
| <b>Risks</b>           |  | Two site development/lease risks of medium to low severity were identified. Risk mitigation efforts are underway                                           |

## 2. Executive Steering Committee Watch List

Table 2 represents the *Executive Steering Committee (ESC) Watch List*. It comprises project-related issues, concerns, and risks for Executive Steering Committee (ESC) awareness. Some items require resolution by the City whereas others are for Committee informational purposes.

**FE** continues to work with the City's project management team to address these items and where appropriate, offers recommendations for corrective action or process improvement to the City





**Table 2 – ESC Watch List**

| Items                                        | Comments                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Walters Hill Tower</b>                    | The City conducted a required neighborhood meeting at 6pm on August 21, 2014 at the Gresham Branch of the Multnomah Public Library. Narrative submittals in support of the land use application are expected to be completed by September 8 <sup>th</sup> .                                                                                                                                        |
| <b>Lookout Point</b>                         | There is a slight possibility that building permits and land use application issues could create an installation delay for this site.                                                                                                                                                                                                                                                              |
| <b>Scope</b>                                 | The City requested that Motorola provide a scope of work and proposed cost for remote radio site power and tower structural assessments.                                                                                                                                                                                                                                                           |
| <b>Schedule</b>                              | The project experienced a one week delay due to the vendor's inability to support staging as originally projected. The impact to deployment is negligible. Site development/leasing issues may impact the vendor's deployment schedule.                                                                                                                                                            |
| <b>Cost</b>                                  | The City anticipated there would be additional costs associated with remote radio site development and allocated funding for this work within the project budget.                                                                                                                                                                                                                                  |
| <b>Radio Tower Antenna and Cabling Space</b> | The City is working with Tower owners to ensure the availability of physical space for the new antennas and cabling. Beyond the physical space requirements, <b>FE</b> recommends the City complete structural analyses for all structures prior to installation of antennas and cables. In addition, <b>FE</b> recommends the City review their tower site lease agreements for liability issues. |
| <b>PDX in-building coverage study</b>        | PDX will be given consideration if indication of degraded coverage exists in PDX primary facilities.                                                                                                                                                                                                                                                                                               |
| <b>Factory Staging</b>                       | An important milestone in the project will be reached in the next few weeks. The new system will be staged and tested at the Motorola staging facility in Schaumburg, Illinois from September 16 <sup>th</sup> through September 18 <sup>th</sup> . Representatives from the City and <b>FE</b> will attend. The system will then ship to the field for installation.                              |





### 3. Risk Management

This section addresses risk management for the project. Table 3 identifies risk or issues for consideration and recommended corrective actions noted by *FE* during this reporting period.

**Table 3 – Risk Considerations and Recommendations**

| Priority | Risk or Issue                                      | Recommended Action                                                                                                                                                                                                                           | Closed |
|----------|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| High     | Walters Hill Tower                                 | Submit narratives as required. Monitor and respond accordingly.                                                                                                                                                                              |        |
| High     | Structural analyses for antenna support structures | <i>FE</i> recommends the City complete structural analyses for all structures prior to installation of antennas and cables.<br><br>In addition, <i>FE</i> recommends the City review their tower site lease agreements for liability issues. |        |
| Low      | Lookout Point                                      | Permits and land use applications appear to be proceeding well. BTS and Motorola have discussed potential installation schedule impacts. Alternate plans are under discussion should an unanticipated delay be experienced.                  |        |

*FE* continues working with the necessary parties to implement the aforementioned actions to improve the quality of the project delivery, resolve issues and concerns, and reduce potential risks.





## 4. Quality Assurance

During this reporting period, **FE**:

- Reviewed and assessed the risks, assumptions, issues, and dependencies (RAID) with the radio project currently documented by the City. The PSSRP Project Management Team, in response to **FE's** previous recommendation developed a standalone risk and issue management register.
- Developed strategies and recommendations in collaboration with the City to prevent or mitigate RAID items in order of priority. The focus continues to be upon those items which are estimated to have the highest probability of adversely impacting the successful delivery of the radio project
- Conducted weekly project status calls with the PSSRP Project Management Team
- Reviewed City of Portland Radio Replacement Project Status Reports
- Reviewed Walters Hill meeting notes
- Analyzed Motorola documentation provided by the City
- Monitored and assessed project milestones, deliverables, and implementation of hardware and software, and related project activities.
- Advised the City regarding City-maintained project monitor and control items including
  - Scope management
  - Schedule vs. plan
  - Costs vs. plan
  - Change management
  - RAID registers
  - Action Item Register
  - Project Communications





## 5. Deliverables

*FE* prepared and provided the deliverables identified in Table 4 during this reporting period.

**Table 4 – Deliverables**

| Date Delivered | Document Control Number | Title/Subject                                                                   |
|----------------|-------------------------|---------------------------------------------------------------------------------|
| 9-3-2014       | SR: CPERRP: 20140902    | City of Portland Independent Project Management Quality Assurance Status Report |
|                |                         |                                                                                 |

