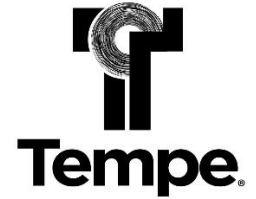


# MEMORANDUM

## Public Works Department



**Date:** December 7, 2017  
**To:** Tempe City Council  
**From:** Eric Iwersen, Transit Manager (350-8810)  
**Subject:** Streetcar Update  
December 7, 2017 Issue Review Session

### **PURPOSE**

The purpose of this memo and PowerPoint is to provide an update on the status of the Tempe Streetcar Project, including:

- Value Engineering
- Rail Storage & On-site Welding
- Rio Salado Parkway Design
- Traction Power Substations (TPSS)
- Public Art & Historic Info
- Community Outreach & Business Assistance
- Next Steps

### **BACKGROUND**

The Tempe Streetcar Project is a 3 mile urban circulator rail transportation technology with 14 stops, six vehicles and two connections to light rail. The project will connect Tempe Town Lake and the development along Rio Salado Parkway, through the downtown core, linking ASU and Tempe's oldest neighborhoods. The project is nearing 90% design level, with final design expected in early 2018. Construction began in June, with utility relocation work, and will continue through 2019.

### **Budget / Value Engineering / Cost Containment**

With completion of 60% design drawings in October, construction cost estimates were, as expected, higher than previous estimates. This reflects a trend for transportation projects throughout the country experiencing significantly higher costs for materials and construction due to competition with projects in larger markets and hurricane relief/reconstruction efforts. Valley Metro and Tempe staff have conducted extensive value engineering exercises to conserve costs. Staff evaluated several project elements, including track alignment, ticket vending, traffic signal technology, safety and security, station materials and construction work hours to identify opportunities for cost savings. Those efforts have resulted in significant progress, and project staff will continue workshopping to conserve costs. In the meantime, the Federal Transit Administration (FTA) granted a timeline extension for the project to allow those efforts to materialize.

### Rail Storage & On-site Welding

Rail for Streetcar trackway is on order with expected arrival in February 2018. The FTA issued a Letter Of No Prejudice, allowing the rail to be purchased in advance of Small Starts Grant Agreement signing, which is anticipated in fall 2018. The project has identified and arranged four sites along the route for storing and welding rail; the storage sites will be in place for the majority of 2018 and 2019.



Having these on-site welding and storage locations helps to minimize transport lengths and costs, as well as impacts to traffic and events. There will be no traffic lane closures; one block of bike lane will be temporarily closed on Ash Avenue, and two driveways along Mill Avenue at Tempe Center will be temporarily closed. On-site welding will take place for short periods (one to three weeks) at each site. The footprint and impacts during these short-period welding phases will be more extensive, with periodic turn restrictions and temporary detours. Staff is coordinating with adjacent property owners.

### Rio Salado Parkway Design

Through the design and value engineering processes, project staff vetted several design alternatives for Rio Salado Parkway. In considering constraints, including the Hayden Butte Preserve, APS 230 kv underground power line, costs and traffic, single-track operation between Hayden Ferry and Marina Heights was determined to be the best alternative (area between gold vertical bars shown on aerial below). This option allows semi-exclusive operation in median (sharing with left turns) and maintains current east-west traffic lanes, avoids conflicts with Hayden Butte and APS infrastructure and limits costs, while also preserving 12-minute headways, future east-west extensions and possible second track. A short section of span wire will be needed in this section (as depicted by diagonal yellow line below).



## Traction Power Substations (TPSS)

Design of the four Traction Power Substations is advancing toward plan review, including optimizing the system's power needs and battery performance, with the possibility of eliminating one site. Project staff continue to coordinate with stakeholders adjacent to the TPSS locations.



## Streetcar Stops

- **Public Art:** Artists continue working with the design team to advance their public art concepts along with construction documents. City staff have shared the importance of area history with the artists and designers.
- **History Panels:** Each stop will include a history panel, which will be developed in concurrence with public art and community input.
- **Shade:** Shade is a very important element of the streetcar stops. Shelters will include vertical and horizontal shade as well as trees, with a net gain in trees along the route. Streetcar stops are being designed to maximize adjacent shade.

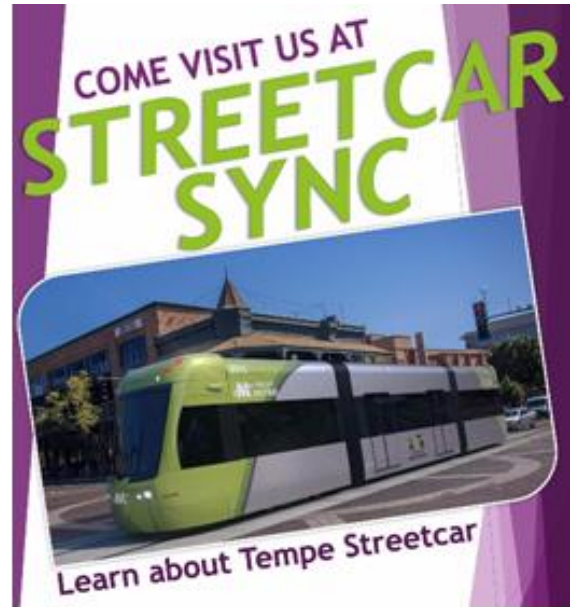




## Community Outreach & Business Assistance

As the project moves forward with design and construction, community outreach and business assistance efforts continue and expand, including:

- **Construction Updates** – distributed every two weeks via email, online and in-person delivery.
- **“Streetcar Sync”** – events held twice monthly at rotating locations (e.g., Pita Jungle, Normal Diner, Pedal Haus) on varying days/times to allow stakeholders to meet the contractor and learn about the project.
- **Community Advisory Board** – comprised of 15 to 20 stakeholders, including residents, business and property owners, who will serve throughout the duration of construction, overseeing contractor performance and determining incentives for going “above and beyond” in addressing community needs.
- **Shop On** – campaign to promote and highlight businesses along the route, encouraging the public to support them during construction; more than 20 Tempe businesses on board.
- **Dedicated Project Staff** – Valley Metro and City of Tempe have assigned staff working on stakeholder/community outreach and business support.



## Next Steps

Next steps for the project include: ongoing utility relocation and right-of-way acquisition; integrating Streetcar with the City’s Urban Core Masterplan through the Transit Oriented Development Grant; final design and arrival of rail in early 2018; final design open house and start-up of the Community Advisory Board in spring 2018; and SSGA signing in fall 2018. The next City Council Update will be March 1, 2018.

## Attachments:

PowerPoint