Tempe

PUBLIC MEETING AGENDA

Transportation Commission

MEETING DATE
Tuesday, June 2, 2015
7:30 a.m.

MEETING LOCATION
Hatton Hall
34 E. 7th Street
Tempe, Arizona

MEETING AGENDA

AGENDA ITEM	PRESENTER	ACTION or INFORMATION
1. Public Appearances The Transportation Commission welcomes public comment for items listed on this agenda. There is a *three-minute time limit* per citizen.	Pam Goronkin, Commission Chair	Information
2. Approval of Meeting Minutes The Commission will be asked to review and approve meeting minutes from the May 12, 2015 meeting.	Pam Goronkin, Commission Chair	**ACTION**
3. Bicycle/Pedestrian Signal Activation Operations Staff will provide information on the bike/ped signal activate system as requested by the Commission.	Christine Warren, Public Works	Information and Possible Action
4. RPTA/Valley Metro Southeast Valley Transit Study Staff will provide an update on the RPTA/Valley Metro Southeast Valley Transit Study.	Jason Hartong, Public Works and Marc Pearsall, MAG	Information and Possible Action
5. Bus Unification Staff will provide an update on the bus unification "scout program" and seek recommendation from the Commission on whether to continue with regionalization of bus operations.	Mike Nevarez, Public Works	**ACTION**

6. MAG Congestion and Mitigation and Air Quality Program (CMAQ, ITS) and Pedestrian Design Assistance Grants Staff will provide information on possible projects that could receive funding through MAG grant opportunities.	Eric Iwersen, Public Works	Information and Possible Action
7. Department and Regional Transportation Updates Staff will provide updates and current issues being discussed at the Maricopa Association of Governments and regional transit agencies.	Public Works Staff	Information
8. Future Agenda Items Commission may request future agenda items.	Pam Goronkin, Commission Chair	Information

According to the Arizona Open Meeting Law, the Transportation Commission may only discuss matters listed on the agenda. The City of Tempe endeavors to make all public meetings accessible to persons with disabilities. With 48 hours advance notice, special assistance is available at public meetings for sight and/or hearing-impaired persons. Please call 350-2775 (voice) or 350-8400 (TDD) to request an accommodation to participate in a public meeting.

Minutes
City of Tempe Transportation Commission
May 12, 2015

Minutes of the Tempe Transportation Commission held on Tuesday, May 12, 2015, 7:31 a.m., at the Tempe Transportation Center, Don Cassano Community Room, 200 E 5th Street, Tempe, Arizona.

(MEMBERS) Present:
Pam Goronkin (Chair)
Nikki Gusz
Jeremy Browning
Ryan Guzy
Bonnie Gerepka
Charles Huellmantel
Don Cassano
Philip Luna
Kevin Olson
Peter Schelstraete
Cyndi Streid
Jonathon Bates
Lloyd Thomas

(MEMBERS) Absent:
Charles Redman

City Staff Present:
Shelly Seyler, Deputy Public Works Director
Mike Nevarez, Transit Manager
Eric Iwersen, Principal Planner
Joe Clements, Transit Financial Analyst
Sue Taaffe, Public Works Supervisor
Amanda Nelson, Public Information Officer
Jason Hartong, Senior Planner
Julian Dresang, Traffic Engineer
Laura Kajfez, Neighborhood Services
Don Bessler, Public Works Director

Guests Present:
Alec More, HDR
Anne Kurtenbach, HDR
Noah Johnson, Tempe Police Department
James Sweig, Tempe Police Department
Jim Lamb
Krystal Bittner
Mathew Elliott
Mario Chavez
Dr. Michael Kuby, ASU
Lauren Kuby, Councilmember
Radu Nan, Kittelson and Associates

Commissioner Pam Goronkin called the meeting to order at 7:31 a.m.

Agenda Item 1 – Public Appearances
None

Agenda Item 2 – Minutes
Chair Goronkin introduced the minutes of the April 14, 2015 meeting and asked for a motion. A motion was made to approve the minutes.

Motion: Commissioner Lloyd Thomas
Second: Commissioner Charles Huellmantel
Decision: Approved

Agenda Item 3– Tempe Streetcar
Eric Iwersen introduced Dr. Michael Kuby who presented information regarding an effort to explore alternative propulsion technologies for Streetcar. The final recommendation of this study, as proposed by Dr. Kuby, is to include language in the vehicle Request For Proposals (RFP) to allow for alternative propulsion systems to be included by vehicle manufacturers. Additionally, Dr. Kuby made the recommendation to engage a third party team to review propulsion technologies, participate in the development of the RFP and provide guidance on issues related to the Streetcar technologies and funding. The Commission took no action on this item.

Eric Iwersen also introduced Alec More, HDR/Valley Metro Project Manager, who presented information regarding the configuration along Mill Avenue.
Discussion included staff providing an update of the Tempe Streetcar project that includes the results of the public process for the Mill Avenue track alignment from University Drive to Rio Salado Parkway, and the projects next steps. During the month pf April, city Staff and Valley Metro staffconducted outreach to downtown Tempe merchants regarding placing the track for Streetcar in an exclusive curb lane configuration or in the existing travel lane shared with other vehicles. Both configuration pros and cons were shared and discussed with stakeholders. On April 20, the Downtown Tempe Authority made a motion to support the shared lane configuration, based upon the results of the outreach effort. Staff and Valley Metro are seeking direction from the City Council on this item on May 14.

A motion was made and approved to issue a recommendation to Council to use caution as they consider any changes to the current route as purposed in the preliminary application (i.e., support the shared lane configuration).

Agenda Item 4 – Bike Bait Program
Noah Johnson and James Sweig with the Tempe Police Department presented information regarding the Bike Bait Program.Discussion included an update on the bike bait program and the efforts to reduce bike thefts since 2013.

Agenda Item 5- Orbit Fleet
Jason Hartong, Senior Planner, presented information on the Orbit Fleet.Discussion included an update of the ongoing exploration of using larger vehicles for Orbit service. Discussion also included ridership performance on the five Orbit routes and how, on occasion, passenger overloads and boarding denials occur due to lack of vehicle capacity. The vehicles currently used on Orbit are 24 feet long, have 17 seats and can accommodate up to six standing passengers. Staff has long recognized the need for a larger and heavier duty vehicle for Orbit. Staff concerns for neighborhood compatibility, as well as the lack of suitable vehicles on the market, have led the city to continue purchasing the current vehicle type. The community was notified of the vehicle testing program and invited to submit comments. Staff plans to move forward with purchasing these larger vehicles for some of the current orbit routes.

Agenda Item 6- Alameda Drive Bicycle/Pedestrian Design Concepts Project

Eric Iwersen, Principal Planner, presented information on the Alameda Drive Bicycle/Pedestrian Design Concepts Project.Discussion included beginning re-characterizing three miles of a very wide collector street with no current dedicated bike facilities and limited pedestrian amenities into a premier pedestrian area and bicycle boulevard, while retaining vehicular access. This project will eventually transform the street from a wide corridor and introduce landscaping, ADA and sidewalk improvements, lighting, enhanced street crossings, traffic calming, buffered or protected bike lanes and green bike lanes like other Tempe projects. A public meeting was held on May 6 and additional public meetings will occur in September and November.

Agenda Item 7 – Department and Regional Transportation Updates

None

Agenda Item 8– **Future Agenda Items**

The following future agenda items have been previously identified by the Commission or staff:

- Bicycle/Pedestrian Signal Activation Operation (June)
- Bus Unification (June)
- City Tentative Fiscal Year 2015-16 Operating Budget (June)
- MAG Congestion Mitigation & Air Quality Program (CMAQ, ITS) & Pedestrian Design Assistance Grants (June)
- Streetcar (June)
- RPTA/Valley Metro Southeast Valley Transit Study (June)
- Street Closure Procedures and notification follow-up (August)
- Highline Canal Multi-use Path (August)
- Bike Share (August)
- Orbit Saturn (August)
- Bike Boulevards (September)
- North/South Railroad Spur Multi-Use Path (September)
- Orbit Saturn (November)
- Alameda Streetscape Project (November)
- Long-Range Forecast Presentation (November)
- Introduction of CIP Requests (December)
- Bike Hero (January)
- FY 2016/17 Media Plan (February)
- Long-Range Forecast Update (Operating) & CIP follow-up (March)

The Commission's next meeting is scheduled for June 2, 2015.

The meeting was adjourned at 8:54 a.m.

Prepared by: Tammara Evans
Reviewed by: Eric Iwersen

CITY OF TEMPE
TRANSPORTATION COMMISSION

STAFF REPORT

AGENDA ITEM 3

DATE
June 2, 2015

SUBJECT
Bicycle/Pedestrian Signal Activation Operations

PURPOSE
This memo outlines the types of pedestrian and bicycle activation for the City of Tempe. Additionally, how the traffic signal processes the activations will be described and upcoming projects will be summarized.

BACKGROUND
Bicycle and pedestrian timing is based on specific standards and calculated for each specific location. Currently, separate bicycle time is not provided. Instead pedestrian time is used for both pedestrians and bicyclists. Since the pedestrians take longer to cross the intersection than bicyclists, this is a conservative approach. Due to advances in signal controller and bicycle detection technologies, bicycle timing may be implemented in the future (see the section titled "Upcoming Projects").

What types of pedestrian activation do we have in the City of Tempe?
The two types of pedestrian activation used by the City of Tempe are signal recall and pedestrian push buttons. The basic difference between these two types of control is that signal recall requires no interaction from pedestrians because the signal provides the pedestrian timing for every cycle whether a pedestrian is present or not, while the push button detection requires that a pedestrian press the button before the pedestrian crossing time is given.

What types of bicycle activation do we have in the City of Tempe?
There are three types of bicycle activation used by the City of Tempe. As with pedestrian activation, bicycle activation is also provided using signal recall or pedestrian push buttons. Additionally, bicycle detection via loop or video can also be provided based on roadway geometry.

At major-major intersections, signal recall is provided for vehicle and pedestrian movements. A bicyclist, whether in an exclusive bicycle lane or a shared use lane, will cross during the vehicle and pedestrian movement.

At major-minor intersections, signal recall is provided for the major vehicle and pedestrian movements. Typically, on minor streets, when there is an exclusive bicycle lane with an adjacent right-turn only lane, a detector is installed. When there is an exclusive bicycle lane on the shoulder

of the road, then a pedestrian push button is usually installed on a pole on the sidewalk within reaching distance of a rider in the bicycle lane.

Coordinated Traffic Signal Operation and the Permissive Window for Pedestrian/Bicycle Service
This section of the memo has been written to address the often received questions of "Why can't the walk symbol/green time come up as soon as I push the button?", "How long will I have to wait to be given the green?" and "Why didn't the walk signal come up with the green ball?"

Traffic signal control operates using a systems perspective, making signal delay equitable for all modes while emphasizing travel along corridors. Balance of the transportation system is what provides for a dependable and smooth travel experience. Coordinated operation is used to provide progressed vehicle flow through a series of controlled intersections. All intersections operating within a coordinated system must have the same cycle length. Within the coordinated cycle length, the main street (coordinated) movements are guaranteed to display green at a certain time (start of coordinated movements, in order to achieve progressed vehicle flow) and for a minimum duration within the coordinated cycle length. If the signal controller is green for the main street movements, it will remain there until the green time has been timed out and a call for service during the time that calls are allowed to be registered by the controller (permissive window) has been received on the minor street. Because all traffic movements may have to be serviced within any coordinated cycle length, it is not possible to allow the signal controller to service calls any time there is demand. Permissive windows provide specific intervals when the signal controller can respond to these calls.

A permissive window represents a period of opportunity during the cycle in which a vehicle, pedestrian or bicyclist must activate the detector/push button to receive the green indication. If a vehicle, pedestrian or bicyclist arrives after this period, they will have to wait until the next cycle to be served.

The permissive window is dependent on the amount of time necessary to serve the user and is not the same for all user groups. For example, since pedestrians are slower than a vehicle, more time will be necessary to serve a pedestrian. Therefore, the permissive window for the pedestrian will be different than the vehicle.

Figures 1 and 2 show a standard signal cycle. Both the Main Street and Side Street time is shown in green, yellow and red. For the Side Street, the minimum pedestrian time is longer than the minimum vehicle time. Therefore, each of these movements has different permissive windows that end at different times (noted in red on the figures). It is possible for the vehicle to still be served during a signal cycle, but the amount of time left is not enough to serve the pedestrian movement. Therefore, the green ball will come on and the pedestrian indications will show don't walk. If there was a pedestrian call, the pedestrian indication will show walk during the next signal cycle because there was not enough time to serve it during the current signal cycle. This is a standard signal controller function.

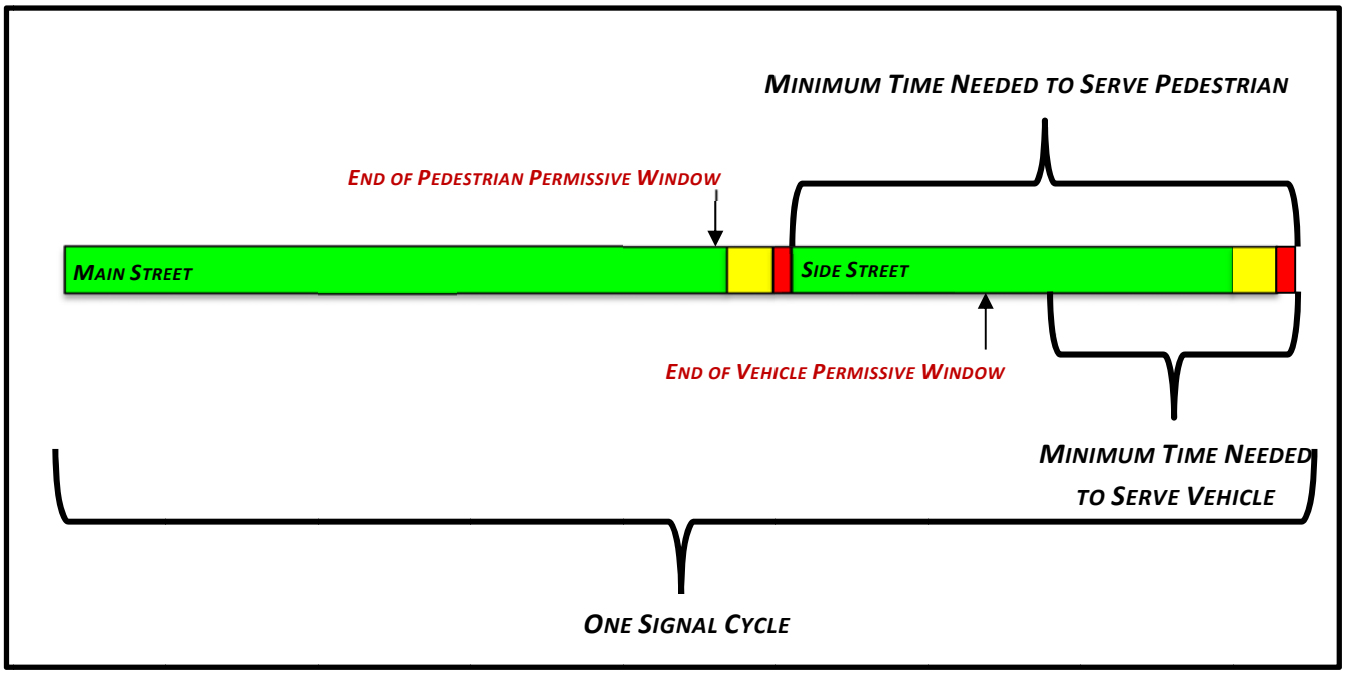


Figure 1: Traffic Signal Bar Chart with Vehicle and Pedestrian Permissive Windows

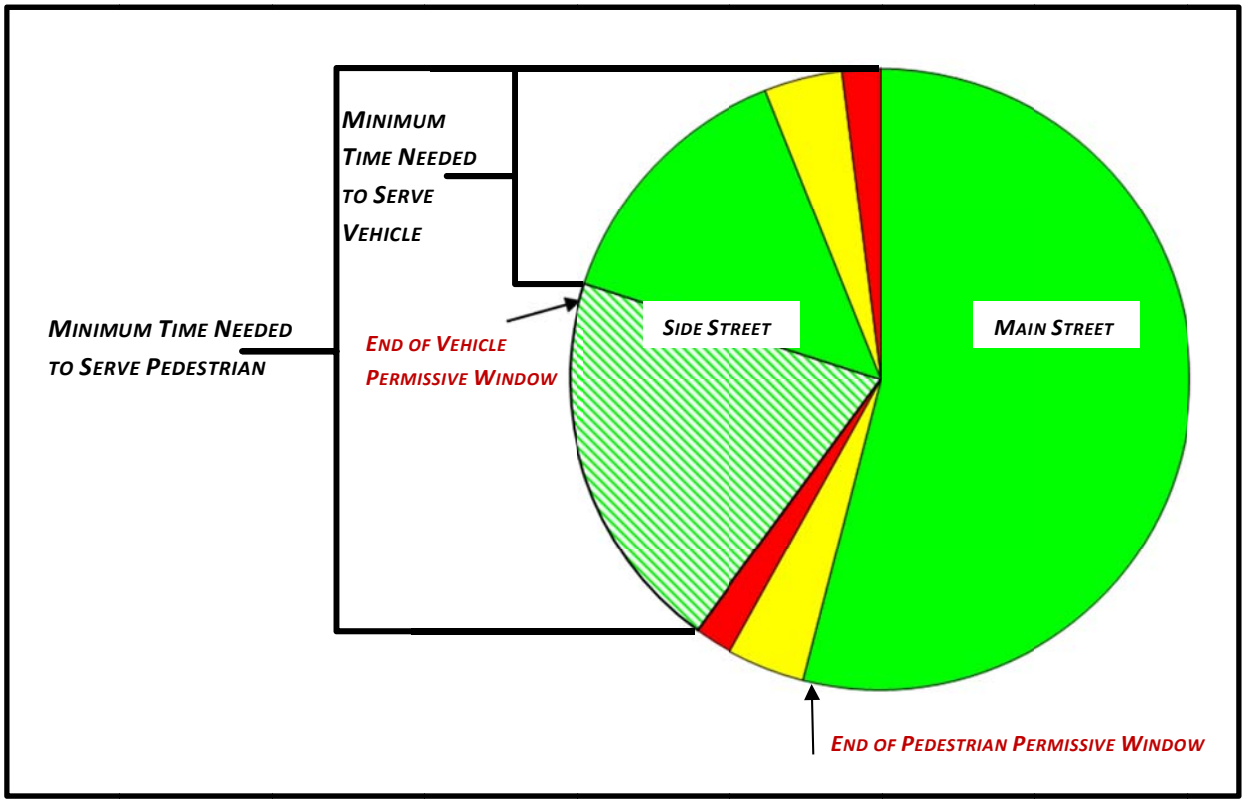


Figure 2: Traffic Signal Pie Chart with Vehicle and Pedestrian Permissive Windows

UPCOMING PROJECTS
The City of Tempe Traffic Engineering Sections plans to create bicycle detection and operations standards during the coming year to allow for more consistent application of bicycle traffic accommodations. As part of the standards development, using bicycle timing versus pedestrian timing will be evaluated. Additionally, the need for signal progression is most important during peak travel hours, which are generally in the morning from 7:00 to 8:30am and from 4:00 to 6:00pm. As part of the City's Bicycle Boulevard project, staff is looking at providing more responsive timing to the side streets (bicycle boulevards) with the understanding that this would better serve bicycle and pedestrian traffic while potentially reducing progression and increasing delay to traffic on the main streets.

Traffic Engineering is constantly assessing current and future bicycle detection technologies because more accurate technologies are becoming increasing available. For example, there is a "microradar" detector that can accurately detect bicycles versus vehicles in shared use lanes. This will allow a call for bicycle time to be placed when a bicycle is detected, allowing more time for the bicycle to cross the street versus the time provided for vehicles. It also allows for less time than a pedestrian call, enhancing the efficiency of the timing at the intersection. There are plans to test the "microradar" detector at Price/Elliot and Price/Warner during the coming year.

FISCAL IMPACT
None

RECOMMENDATION
This item is for information.

CONTACTS
Christine Warren
Senior Civil Engineer
480-858-2060
Christine_warren@tempe.gov

CITY OF TEMPE
TRANSPORTATION COMMISSION

STAFF REPORT

AGENDA ITEM 4

DATE
June 2, 2015

SUBJECT
Southeast Valley Transit System Study

PURPOSE
The purpose of this presentation is to provide the Transportation Commission with information regarding the Southeast Valley Transit System Study including:

- Identifying concepts for optimizing existing transit services;
- Improving efficiencies and align investment with demand;
- Developing recommended concepts for addressing mid-term (within 10 years) and long-term (beyond 10 years) transit needs; and
- Developing the public invovlevemnt process.

FISCAL IMPACT
None

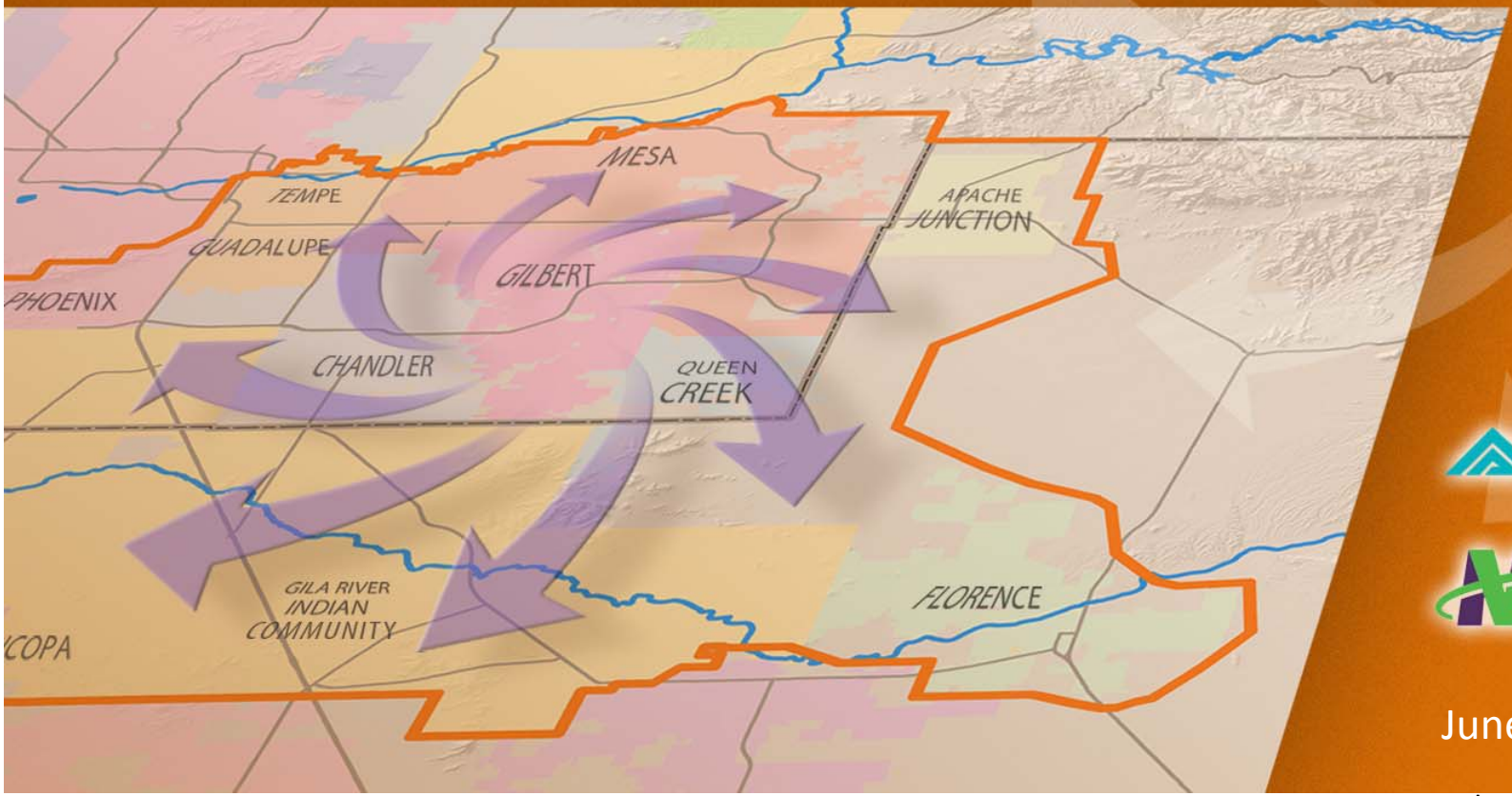
RECOMMENDATION
This item is for information.

CONTACTS
Jason Hartong
Senior Planner
480-350-2747
jason_hartong@tempe.gov

ATTACHEMENT: PowerPoint

SOUTHEAST VALLEY
TRANSIT SYSTEM STUDY

Tempe Transportation Commission



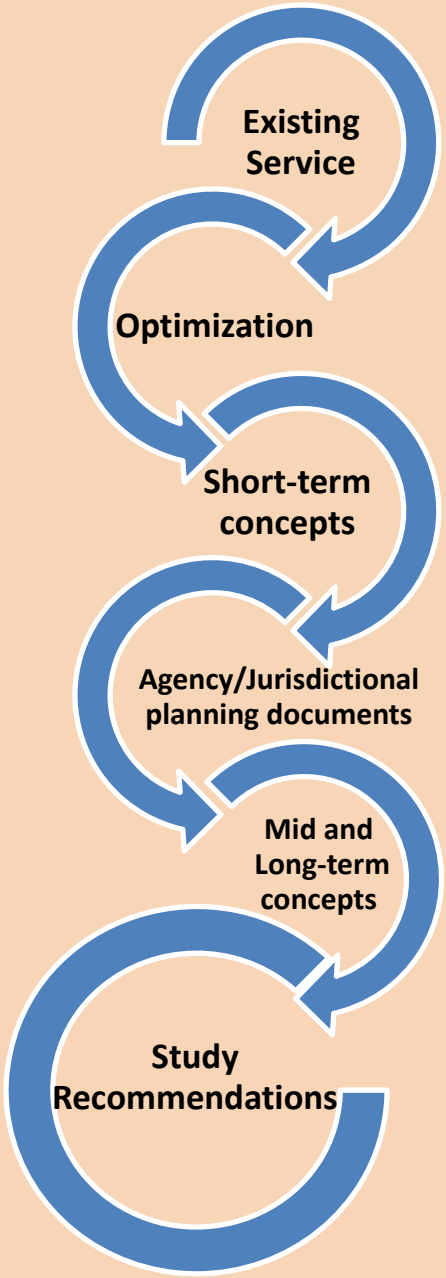
MARICOPA ASSOCIATION of GOVERNMENTS

VALLEY METRO

June 2, 2015

Purpose of this Study

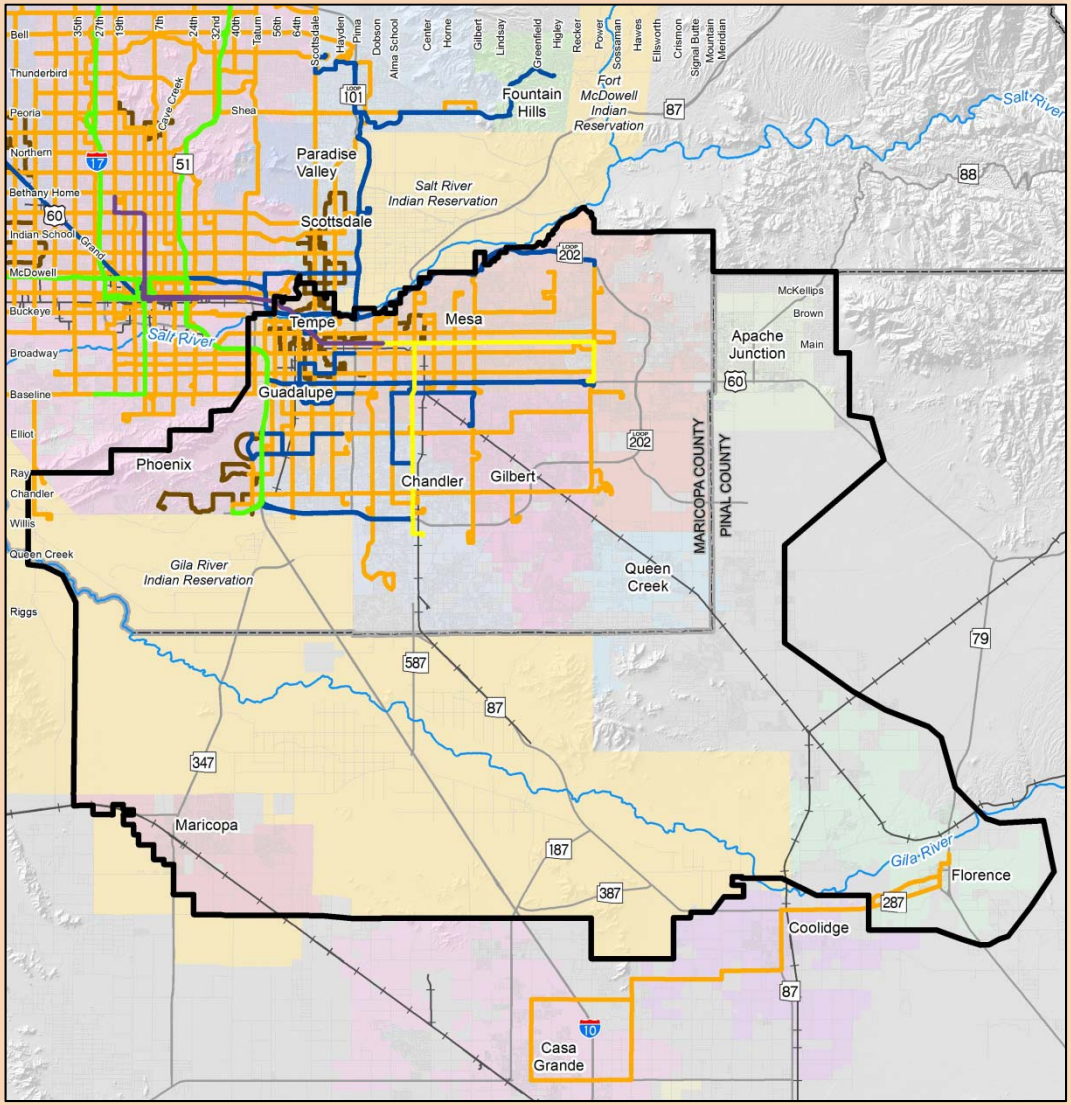
- Identify concepts for optimizing existing transit services
  - Improve efficiencies and align investment with demand
- Develop recommended concepts for addressing mid-term (within 10 years) and long-term (beyond 10 years) transit needs
  - Address unmet needs
  - Respond to growth and changing conditions
  - Develop performance-based transit system



How will results be used?

- Provide a menu of concepts to inform future programming processes and plans

Study Area & Existing Transit Network



Key Preliminary Recommendations (Relevant to Tempe)

- Increase frequencies in top performance areas to 15 minute all-day service (University Dr. to Baseline Rd.)
  - Serve highest population densities and transit-dependent households
- Strengthen grid network - more east-west connections across the SE Valley (Baseline Rd., Eliot Rd.)

Key Preliminary Recommendations (Relevant to Tempe)

- Discontinue Route 56 segment to the Zoo; explore replacing with circulator/shuttle service
- Create more direct connections between ASU Research Park and LRT
- Explore limited stop commuter services to North Tempe from South Tempe/N. Chandler
- Increase frequency on Route 72 south to Baseline (long term concept)

Public Input

- Online survey conducted Summer 2014
- Outreach at community events
- Planning for additional community events and presentations in Summer and Fall 2015

Schedule

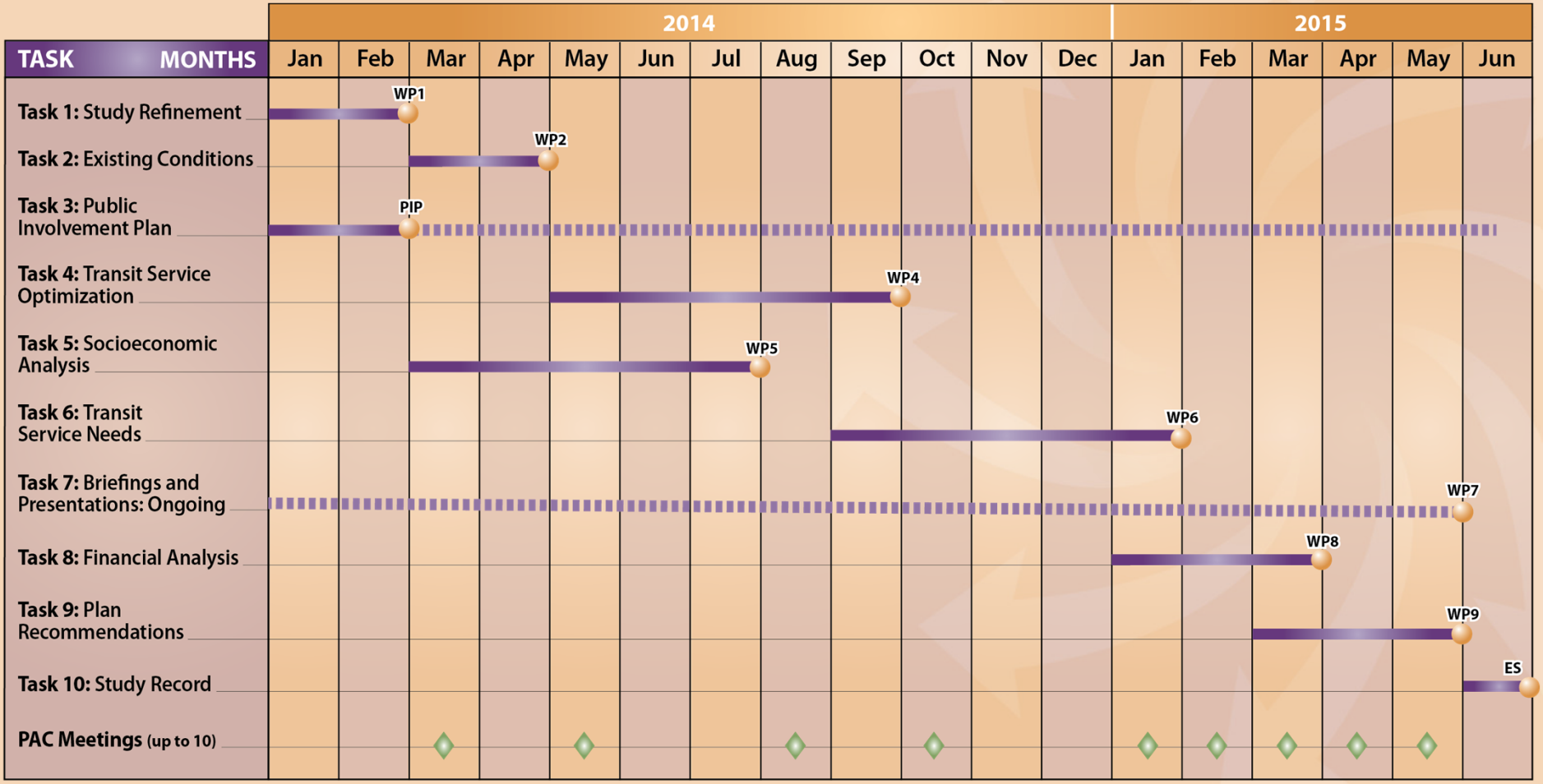
- Recommended concepts are being finalized with the Project Advisory Committee
- Finalize report by the end of June 2015
- Communicate results throughout the study area

Project Contact Information

Marc Pearsall
Maricopa Association Of Governments (MAG)
302 North 1st Avenue; Suite 200
Phoenix, AZ 85003
Main: 602 254-6300
email: mpearsall@azmag.gov

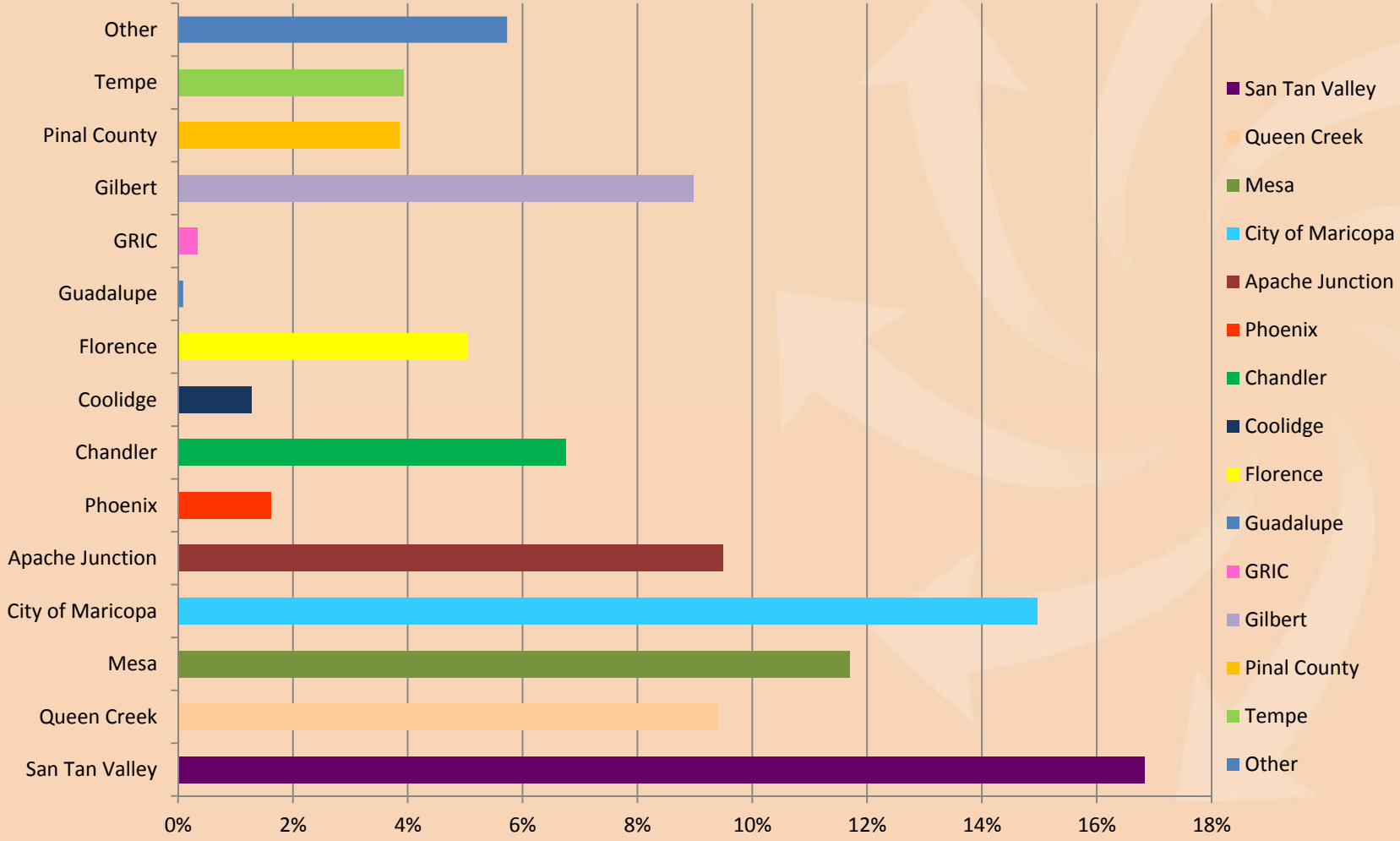
Jorge Luna
Valley Metro
101 North 1st Avenue; Suite 1300
Phoenix, AZ 85003
Direct: 602 744-5543
email: jluna@valleymetro.org

Schedule

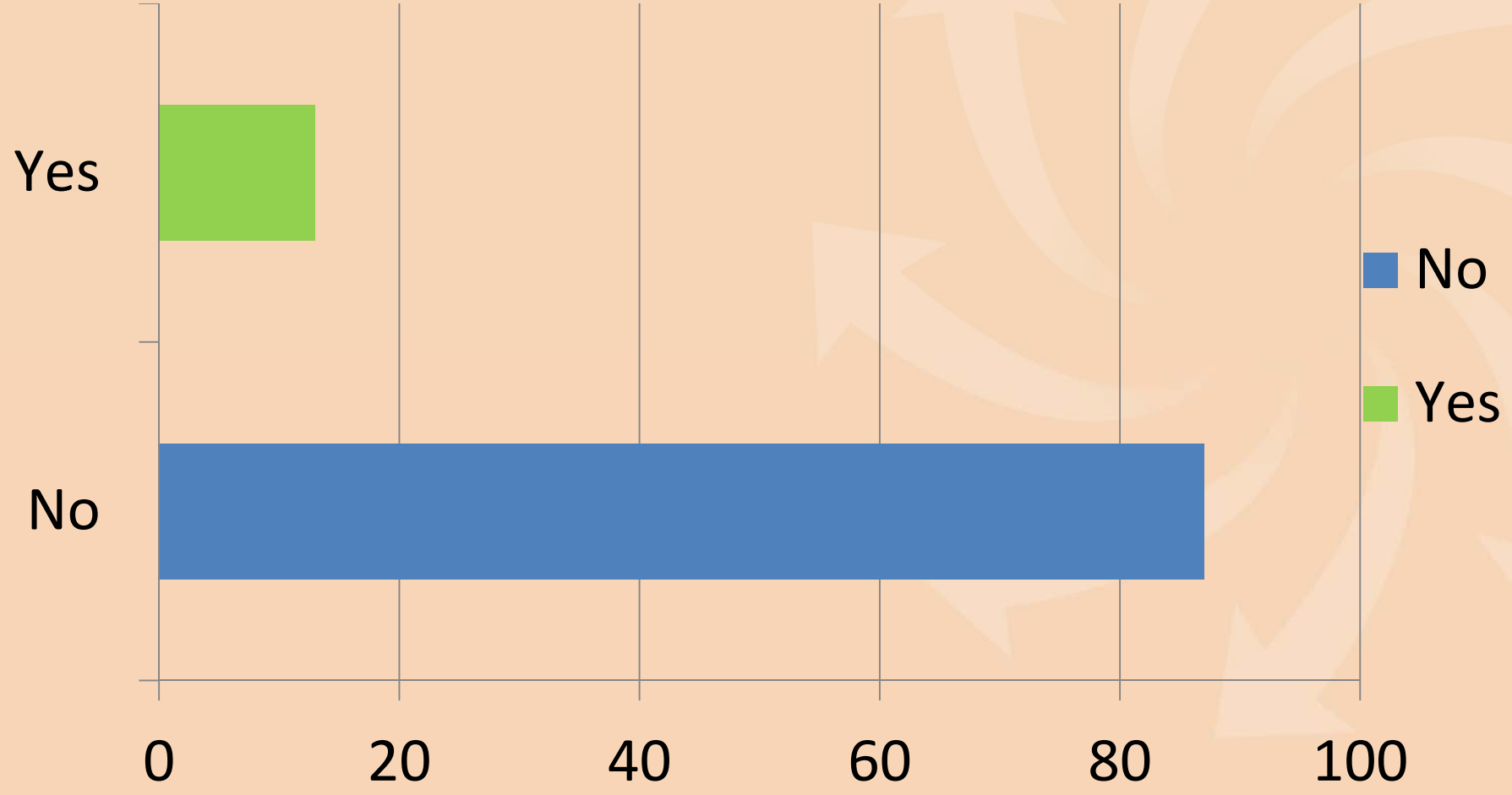


WP = Working Paper **PIP** = Public Involvement Plan **ES** = Executive Summary Deliverable

Survey Respondents



Do the public transportation options meet your needs?



- Would you support a fare (or bus pass) increase?

Yes	50%
No	11%
Not Sure	27%
Not Applicable	12%

- Would you support a tax increase to fund transit improvements?

Yes	49%
No	21%
Not Sure	27%
Not Applicable	2%

What, if anything, would encourage you to use public transit?

Extend service (geographically, days and hours)	59%
Greater frequency	27%
Lower cost/ fare	12%
Service to new areas/ destinations	51%
Nothing	12%

CITY OF TEMPE
TRANSPORTATION COMMISSION

Staff Report

AGENDA ITEM 5

DATE
June 2, 2015

SUBJECT
Bus Unification Update & Recommendation

PURPOSE
The purpose of this memo is to provide information regarding the Bus Unification Scout Program performance and recommendations concerning the provision of bus service for Tempe.

BACKGROUND
The purpose for the Bus Unification Scout Program was to take the initial step to create a regionalized transit system that would effectively serve the East Valley while allowing Tempe to maintain control of local service and programs. Unification would also value capture through increased operational efficiency for Tempe and other East Valley cities including Scottsdale, Mesa, Chandler and Gilbert, by streamlining operations and management through a centralized-regional authority.

In 2013, RPTA issued a Request for Proposals (RFP) for East Valley bus service, requesting qualified firms to submit price and service proposals. The proposals were to reflect the cost to continue to operate RPTA and Tempe bus service separately from their respective operation facilities. Another proposal was to offer a price reflecting a consolidated service operating from shared facilities under a single service contract.

Three firms submitted proposals resulting in an award of a contract to First Transit Inc. for unified services operated from both the Mesa and Tempe facilities. Through RPTA, an award was made for an initial three-year period with an option for a seven-year extension. The award to First Transit was not based solely on price. Other factors considered which were reflected in the scoring included:

- Comprehensive Integrated Operations Plan
- Management Team/Firm Experience
- Continuous Improvement
- Employee Development, Recruitment, Training, Retention
- Responsiveness to RFP

- Financial Strength

Table 1 shows the evaluation scores based on the above criteria as well as the initial three-year (Scout Program) price proposals.

Table 1: Scout Program Proposal Scores and Initial Bid Prices

Proposer	Proposal Score	Initial Bid	BAFO
First Transit	2067.3	$ 151,556,349	$ 150,885,082
Veolia	1838.4	$ 170,216,638	$ 168,768,947
National Express	1283.5	$ 177,108,753	n/a*

* Not within competitive range

Concurrent with RPTA's award to First Transit for bus service, Tempe and the RPTA entered into a three-year Intergovernmental Agreement (IGA) for the Tempe Bus Operations Scout Program. The Scout Program is in effect through June 2016. The unification premise was that upon the completion the first two years of the Scout Program, Tempe would have sufficiently evaluated the results of the Scout Program and recommend whether Tempe should enter into a seven-year IGA for the continuation of bus service through RPTA or return to Tempe directly managed bus service (Tempe only).

The effectiveness of the Scout Program was to be evaluated using performance criteria established by Tempe and the RPTA and on a financial analysis of the cost of service to Tempe and the region.

As a basis for the cost analysis, Tempe elected to evaluate the cost of service to Tempe under the unified contract, compared to the cost proposed under the Tempe only proposal. The factors anticipated to generate cost savings were the economies of scale to be gained by the contractor, streamlined contractor management team and efficient utilization of facilities allowing for a decrease in non-revenue miles. Another often referenced financial consideration is the savings generated to the larger region. In addition to cost, service quality and local control were items that the Scout Program was intended to address and will be discussed below.

PROGRAM EVALUATION

Service Quality

The Scout Program agreement with RPTA identifies five performance criteria that are used to evaluate service quality of bus service provided through the RPTA.

In previous performance updates, performance results were conveyed using a letter score (A, B, C, D, and F). Although letter scores can be indicative of certain performance levels, its

simplicity may not accurately convey the range of performance within an established benchmark standard.

During the initial two years of the Scout Program, Tempe and RPTA staff found that although the performance indicators are appropriate as industry standards for evaluation, the standards and computation methods need to be reasonably established and consistent with national and regional standards as well as local standards that were in place prior to the Scout Program. This includes on-time performance, maintenance and accident related performance indicators.

One performance category that has revealed lower ratings and is actively being addressed by RPTA is customer complaints. This performance indicator includes a broad range of categories that include on-time performance, policy issues, service standards, routing, service schedules, safety, security, passenger amenities, etc. Fortunately, most complaints can be immediately addressed. Customer complaints are investigated as thoroughly as possibly, and a response is provided as soon as possible or within 10 days. Complaints concerning any type of alleged discrimination are investigated following a federally mandated seven step process and are reported to the Federal Transit Administration.

When customers provide comments concerning existing routes or the need for new ones, their comments are reviewed and evaluated to determine if they may be consistent with other requests. Any comments or complaints concerning Tempe routes are reviewed by Tempe staff. Route changes occur based on community need, interest and on available funding. The process to change a route is a well-defined regional procedure and requires public input, public hearing(s) and analysis to ensure conformity to federal regulations. As Tempe transit service is federally funded, these specific processes are required to be followed.

Table 2 provides FY 2015 year to date contractor performance data compared to the FY 2014 performance results. It should be noted that these reflect performance throughout the East Valley, and not Tempe specifically. If unification were to continue, staff would recommend requiring data collection so that Tempe may more closely monitor service quality in Tempe as compared to the East Valley. This speaks to the issue of local control by its own virtue. Service quality for the first two Scout Program years is inconsistent. Year-one program service quality meets or exceeds performance standards established by both Tempe and the RPTA. Year-two, although similar in quantitative terms, conveys a drop in particular performance categories. Although the second year trend is disappointing, it is correctable. The table also includes standards that are utilized nationally (Best Practices) and previous Tempe performance benchmarks.

Table 2: Scout Program Year Two Results (9 Months)

Tempe Scout Program - Two Year (FY14 - FY15) Regional Performance Results						
Regional Performance Criteria	FY 14 (12 Mos.)	Benchmark	FY 15 (9 Mos.)	Benchmark	Best Practice Benchmarks	Tempe Benchmarks
On-Time Performance	93.3%	Meets	92.2%	Below	82% - 94%	90%
Preventable Accidents per 100,000 Miles	0.42	Exceptional	0.57	Above	0.75	0.75
Complaints per 100,000 Boardings	28.1	Above	41.7	Below	38-50	15
Mechanical Failures per 100,000 Miles	5.1	Exceptional	6.7	Above	15	9
On-Time Preventive Maintenance Inspections	92%	Exceptional	100%	Exceptional	80%	94%

Both RPTA and First Transit are committed to identifying causes for below standard performance and taking corrective actions to rectify performance that has such a direct impact to service quality and passenger satisfaction. A contractual element allows the RPTA to sanction First Transit for sub-par performance in a number of areas. For FY 2015, the RPTA has assessed First Transit nearly $270,000 in penalties. First Transit also has the opportunity to be awarded incentives for performance that is above the established measures. During the current fiscal year, First Transit has been awarded approximately $145,000 resulting in an estimated net performance assessment of $125,000. The current RPTA/First Transit contract does not penalize for an organized labor work stoppage (strike), although pursuing the inclusion of a service continuity requirement has been directed by the City Council as a new provision. Again, this requirement demonstrates the ability of Tempe to retain a level of local control at the policy level. Performance assessments or penalties are deducted from direct operational costs charged to Tempe and other East Valley jurisdictions; thus reducing operating costs.

Tempe staff will continue working with RPTA to address overall bus service performance and attempt to ensure all performance categories are measured accurately with meaningful and achievable standards. RPTA plans to continue with appropriate assessments, auditing complaints and conducting field checks to improve the customer experience.

Financial Status

As previously presented, the financial benefit of unification was analyzed based on contract rates proposed by First Transit. This analysis was conducted using the prevailing market conditions. First Transit submitted three proposals including Tempe's existing contract service, RPTA's existing contract service and contract rates for combined/unified service. For example, if Tempe had decided to maintain status quo and continue to operate bus service separately, that decision would have been compared to the unified scenario in terms of costs, which would be a reasonable method to analyze actual benefit of the decision. Table 3 exemplifies the difference between unified proposal costs and Tempe only proposal costs.

Table 3: Unified vs Tempe Only

Vendor	FY 14 Unified (Tempe Proportion)	FY 14 Tempe Only
First Transit	$ 23,223,188	$ 25,103,600

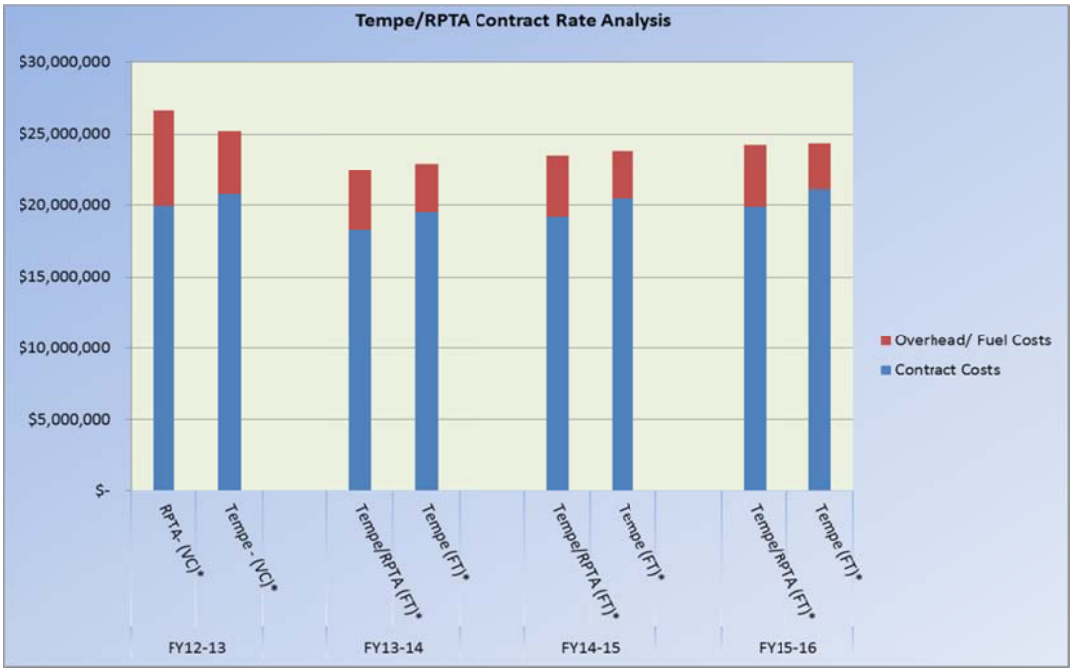
As anticipated, the proposed price and resulting cost per revenue mile (standard unit) to operate the combined (unified) East Valley service was more advantageous financially than operating the Tempe service and RPTA service as separate contracts, benefitting Tempe and other East Valley cities.

In an effort to receive the most beneficial price for the East Valley service, the RFP sought to award a contract for a total ten-year period (three-year base with a seven-year option). Practically, a long-term contract provides less risk to proposing firms allowing for long-term amortization of investment, cost efficient operations and continuity of revenue. For the

agency, a long-term contract allows for a firm fixed cost for the term of the contract, avoidance of re-procurement costs and a long-term relationship with a contracted service provider. Shorter term contracts usually result in higher costs for both the agency and service provider. Since service providers in the Valley are supported by organized labor, longer term contracts also allow for stability and the negotiation of longer term agreements.

Table 4 demonstrates the initial cost savings realized through unification. Tempe bus service costs for FY 2014 were substantially less than the previous fiscal period, and remain lower throughout the Scout Program. Overall costs increase annually as would be expected as contractual and administrative costs increase. The value of unification is the overall lower cost as compared to a smaller less efficient stand-alone program structure.

Table 4: Tempe Bus Operations Gross Contract Rate Analysis



* (VC) Veolia Contract
* (FT) First Transit Contract
* FY13-14 Tempe Transit converts Orbit fleet to CNG ($.26 rate reduction)

Capital Recovery

The realization of cost recovery for Tempe's investment in the East Valley Bus Operations and Maintenance facility (EVBOM) and the bus fleet is also a benefit of unification. As the depreciation of the facilities and fleet are charged to other cities, Tempe is credited a portion of depreciation not directly consumed by Tempe. This comes to the city in the form of a regional Public Transportation Fund (PTF) credit which can be used by Tempe to fund transit programs.

If unification were to terminate, the value of depreciation would be dependent upon Tempe operating bus service on behalf of adjacent jurisdictions.

If Tempe were to return to pre-unification circumstances, it would require other jurisdictions that were previously served by Tempe to also return to pre-unification status. If not, little of our capital investments costs could be recovered.

Additional Considerations

The unique circumstances of the Scout Program and the effort to create a regional transit system have prompted a number of questions by Council regarding alternatives and possible options regarding Tempe bus service.

The Scout Program is a three-year agreement to test the efficacy of unifying bus service previously managed separately by Tempe and RPTA. If the decision that regionalization of Tempe bus service is not in the best interest of Tempe, the Scout Program would terminate in June 2016 with Tempe attempting to operate service as it did before the Scout Program. Prior to unification, both agencies operated similar volumes of service in the East Valley. The RPTA operated service on behalf of RPTA members and Tempe operated service on its own behalf as well as some other East Valley cities. East Valley service operated by Tempe was funded with PTF funds paid to Tempe by RPTA. Tempe also operated service in Tempe funded by Tempe transit tax funds and PTF funds.

One question put forth during the evaluation of the Scout Program is can Tempe resume operating bus service as it did before the Scout Program? Although technically possible, it would not financially benefit Tempe or the East Valley. Tempe would need the cooperation of adjacent jurisdictions (Scottsdale, Mesa, Phoenix and Chandler) to resume operating service on their behalf. The effort to reselect a bus service provider for Tempe would likely result in higher contract costs for both Tempe and the region as the volume of service would be less that under the unified model. A decision not to continue with unification creates a number of uncertainties. The procurement of a new bus service provider to operate on Tempe's behalf would risk the current cost benefits of unification. It would also provide no guarantee for improved or superior performance. The procurement and contractor transition process can easily take 12 months if not more to complete. The preparation of a work scope that would include the similar volume of bus service previously operated managed by Tempe would require operating bus service for adjacent jurisdictions. This is critical because of the regional nature of routes operating in and through Tempe. Regional and local service cannot be operated either efficiently or seamlessly for riders solely within Tempe. The ability to reestablish circumstances that could allow Tempe to successfully solicit a new bus service provider have not been explored.

RECOMMENDATION

Staff recommends that Tempe City Council continue promoting regional transportation by continuing unified bus service in the East Valley by entering into a seven year unification IGA with RPTA under the following conditions:

- RPTA to strengthen oversight and better define contract performance standards and include service continuity provisions;

- Require ongoing, continual assessment of contractor;
- Include IGA termination provisions based on contractor non-performance or for convenience;
- Conduct annual IGA and performance review to ensure contract value; and
- Include reporting of performance date relative to Tempe routes.

CONTACT
Mike Nevarez
Transit Manager
480-858-2209
mike_nevarez@tempe.gov

ATTACHMENT: PowerPoint

Tempe/RPTA Bus Unification
"Scout Program"

Tempe Transportation Commission
June 2, 2015

Purpose of Scout Program

- Promote regionalized bus service by unified Tempe and RPTA bus service contracts
  - Ensure continued service quality
  - Maintain control of local service and programs
- Value capture through greater operational efficiency and cost savings both locally and regionally

Agreements

- Tempe and RPTA entered into a 3 year Scout program IGA
- RPTA awarded a 3 year plus 7 year option unified bus service contract to First Transit

Transit Provider	Proposal Score	Initial Bid	BAFO
First Transit	2067.3	$ 151,556,349	$ 150,885,082
Veolia	1838.4	$ 170,216,638	$ 168,768,947
National Express	1283.5	$ 177,108,753	n/a*
* Not within competitive range			

Price Comparison – Unified vs Tempe Only

Year One

Vendor	FY 14 Unified (Tempe Proportion)	FY 14 Tempe Only
First Transit	$ 23,223,188	$ 25,103,600

Tempe – 48% of unified service

Scout Program Performance Results

Tempe Scout Program - Two Year (FY14 - FY15) Regional Performance Results						
Regional Performance Criteria	FY 14 (12 Mos.)	Benchmark	FY 15 (9 Mos.)	Benchmark	Best Practice Benchmarks	Tempe Benchmarks
On-Time Performance	93.3%	Meets	92.2%	Below	82% - 94%	90%
Preventable Accidents per 100,000 Miles	0.42	Exceptional	0.57	Above	0.75	0.75
Complaints per 100,000 Boardings	28.1	Above	41.7	Below	38-50	15
Mechanical Failures per 100,000 Miles	5.1	Exceptional	6.7	Above	15	9
On-Time Preventive Maintenance Inspections	92%	Exceptional	100%	Exceptional	80%	94%

Options

- Maintain unified operations (execute 7 year IGA)
  - Unified operations provides the best bus service contract rate
  - Emphasize performance/service continuity
  - Semi-annual reports for performance compliance
  - Ensure Tempe's options forward
- Procure bus service separately
  - Service cost subject to market prices
  - Will require participation of other jurisdictions
  - Potential labor issues (current CBA expires 6/30/16)

Recommendation

- Promote a regionalized transit system by continuing with unified bus service in the East Valley
- Enter into a 7 year unification IGA with the RPTA under the following conditions:
  - Strengthened RPTA oversight
  - Include well defined performance standards and service continuity provisions
  - Require ongoing assessment of contractor
  - Include IGA termination provisions based on contractor non-performance or for convenience
  - Conduct annual IGA and performance review to ensure contract value
  - Include performance data relative to Tempe routes

CITY OF TEMPE
TRANSPORTATION COMMISSION

STAFF REPORT

AGENDA ITEM 6

DATE
May 26, 2015

SUBJECT
Maricopa Association of Governments 2016 Pedestrian Design Assistance Grants

PURPOSE
Provide the Commission with a review of the MAG Pedestrian Design Assistance Grant Funding and recommend a project for the 2016 submittal.

BACKGROUND – DESIGN ASSISTANCE GRANTS
The Maricopa Association of Governments Pedestrian Design Assistance Program is an annual grant source specifically targeted at funding the first phase concept work of pedestrian projects in the region. The program has existed since 1996 and it assists in getting projects started and positioning them for federal construction grants. MAG states the intent of the program is to stimulate integration of bicycle and pedestrian facilities into the regional transportation infrastructure. Tempe has successfully received design grants for seven projects since the program inception (the most of any city in the region), and all but one of the projects has gone on to receive federal funding for construction as well. The deliverable work product from a successfully funded project is a concept detailed enough to use for pursuit of federal construction funds. Additionally all environmental concerns or other project constraints and concerns would be identified in this phase.

The Tempe projects that have received past funding include:

- 1996: 5th Street Traffic Calming (Farmer – Priest)
- 1999: Mid-Block Crossing Study (which became the HAWK signals at the Western Canal Path)
- 2003: Rio Salado Pathway (Priest Drive - Phoenix border @ SR 143)
- 2011: Rio Salado Pathway (McClintock - Mesa border @ 101 & 202 ADOT Interchange)
- 2014: Highline Canal Path (Baseline – Chandler border)
- 2014: North South Rail Spur Path (Tempe Beach Park – Chandler border)
- 2015: Alameda Drive Bicycle Blvd & Streetscape (48th St – Rural Road)

Funding available for the region this year is $400,000. Typically cities can request up to a maximum of $100,000, which is sufficient for concept design of a project, however, smaller funding requests are more common. Last year Tempe was awarded the Alameda Drive project for $75,000.

Consistent with City Administration and City Council Policy, projects identified in or in concert with the Tempe Transportation Master Plan and the General Plan or projects that are included in the City's Capital Improvement Program would be considered eligible for application.

With this in mind, staff offers the following projects for consideration to apply for the 2016 grant funding:

- Upstream Dam Pedestrian Bridge over Town Lake at the Dorsey Road Alignment (Chain Route Bike Boulevard)
- Underpass/Crossing @ Western Canal and Baseline Road
- Brake Route Bike Boulevard (Kyrene Canal – Highline Canal Path Connection)
- Reflector Route Bike Boulevard / ASU Research Park Path (Elliot Road to Warner Road)

Staff will share project location photos to assist in recommending a project.

FISCAL IMPACT
No impact except staff time. Successful grant applications typically lead to city funding of projects. Eventual project construction requests and federal grant applications are anticipated.

RECOMMENDATION
Identify priority project for staff to coordinate submittal by June 29, 2015.

CONTACT
Eric Iwersen
Principal Planner
480-350-8810
eric_iwersen@tempe.gov

CITY OF TEMPE
TRANSPORTATION COMMISSION

STAFF REPORT

AGENDA ITEM 6

DATE
May 26, 2015

SUBJECT
Intelligent Transportation Systems Regional Funding Requests

PURPOSE
Provide the Commission with a review of the ITS funding requests for 2018 and 2019.

Proposed 2018-2019 Transportation Improvement Program Projects
In both 2018 and 2019, the MAG Transportation Improvement Program (TIP) will have $3.5M available for arterial Intelligent Transportation System projects. The City of Tempe Transportation System Management Group has proposed an "ITS Safety & Performance Upgrades" project in two phases, at a cost of $350,000 each. The local match for each project will be 5.7% or $19,950.

Each phase will include a bi-directional Dynamic Message Sign (DMS), 10 CCTV cameras, a high-speed wireless backbone link, 50 intersection wireless radios, bicycle detection in mixed-use lanes at four locations and Emergency Vehicle Preemption networking at 55 locations. All of these ITS components will provide safety benefits that include enhancements to, and improved monitoring and operation of, the City's emergency vehicle response system and overall traffic signal network for reduced delay, congestion and emissions for all modes of travel. These ITS upgrades will result in a communications network that is more reliable and resilient and capable of supporting additional functionality. Furthermore, these upgrades will also eliminate the City's reliance upon leased line communications provided by CenturyLink, which currently cost the City approximately $5,000/month. In comparison, the total local match of $39,900 for both project phases will be recovered in just 8 months.

The following contains specifics on the equipment and locations involved in each phase of the proposed ITS Safety & Performance Upgrades project.

<u>2018 – ITS Safety & Performance Upgrades – Phase I – $350,000</u>

1 – Dynamic Message Sign (DMS)
Bi-directional DMS located in the median of Rural Road, between Southern and Broadway, as recommended in the City of Tempe's 2012 Intelligent Transportation System (ITS) Strategic Plan. The DMS will provide information to northbound drivers about congestion and events in the

university/downtown area, as well as travel times to L202/L101. Southbound drivers will receive information about freeway conditions on US60 as well as travel times to I-10 and L101. Following up on a 2015 US60 Integrated Corridor Management (ICM) project, this DMS will provide an opportunity to detour drivers to Southern or Baseline as an alternate route for a closure on US60.

Approximate cost will be $75,000 ($50,000 for the signs/structure and $25,000 for foundation/median work).

2 – CCTV Camera Installations

- Scottsdale/McKellips
- Mill/6th
- Rural/6th
- Priest/13th
- Priest/Alameda
- Mill/Alameda
- Rural/Alameda
- McClintock/Alameda
- Broadway/Hardy
- Broadway/College

Approximate cost will be $30,000.

3 – Wireless Radios

Create a redundant path on the east leg of the City's fiber backbone using a gigabit wireless link, with radios installed at US60/Mill and US60/Rural.

Approximate cost will be $15,000.

Add 50 wireless radios at intersections along the following corridors to provide network connectivity where none currently exists:

- Curry
- Rio Salado
- Broadway
- Southern
- Baseline

Approximate cost will be $150,000.

4 – Bicycle Detection in Mixed-Use Lanes

Add sensors for bicycle detection in mixed-use lanes to provide improved signal operation for bicyclists.

- Price/University (NB/SB)
- Price/Apache (NB/SB)
- Price/Broadway (NB/SB)
- Price/Southern (NB/SB)

Approximate cost will be $60,000.

5 – Emergency Vehicle Preemption (EVP) Networking

Install new phase selector cards (5) and media converters (50) to network EVP operations at 55 intersections to enable monitoring through the City's Central Management System to improve emergency vehicle responsiveness.

Approximate cost will be $20,000.

2019 – ITS Safety & Performance Upgrades – Phase II – $350,000

1 – Dynamic Message Sign (DMS)

Bi-directional DMS located in the median of McClintock Road, between Southern and Broadway, as recommended in the City of Tempe's 2012 Intelligent Transportation System (ITS) Strategic Plan. The DMS will provide information to northbound drivers about congestion and events in the university/downtown area, as well as travel times to L202/L101. Southbound drivers will receive information about freeway conditions on US60 as well as travel times to I-10 and L101. Following up on a 2015 US60 Integrated Corridor Management (ICM) project, the DMS will provide an opportunity to detour drivers to Southern or Baseline as an alternate route for a closure on US60.

Approximate cost will be $75,000 ($50,000 for the signs/structure and $25,000 for foundation/median work).

2 – CCTV Camera Installations

- University/Hardy
- University/Dorsey

- Southern/Hardy
- Southern/Dorsey
- Southern/Country Club
- Baseline/Hardy
- Baseline/Lakeside
- Baseline/Country Club
- Elliot/Hardy
- Warner/Hardy

Approximate cost will be $30,000.

3 – Wireless Radios

Create a redundant path on the west leg of the City's fiber backbone using a gigabit wireless link, with radios installed at L202/Priest and Broadway/I-10 (Ramp K).

Approximate cost will be $15,000.

Add 50 wireless radios at intersections along the following corridors to provide network connectivity where none currently exists:

- College
- 52nd
- Priest
- Hardy
- Mill
- McClintock
- University

Approximate cost will be $150,000.

4 – Bicycle Detection in Mixed-Use Lanes

Add sensors for bicycle detection in mixed-use lanes to provide improved signal operation for bicyclists.

- Price/Baseline (NB/SB)
- Price/Guadalupe (NB/SB)
- Rio Salado/Priest (EB/WB)
- Baseline/Mill (NB/SB)

Approximate cost will be $60,000.

5 – Emergency Vehicle Preemption (EVP) Networking
Install new phase selector cards (5) and media converters (50) to network EVP operations at 55 intersections to enable monitoring through the City's Central Management System to improve emergency vehicle responsiveness.

Approximate cost will be $20,000.

RECOMMENDATION
Support staff ITS efforts for regional funds.

CONTACT
Julian Dresang
Traffic Engineer
480-350-8025
Julian_dresang@tempe.gov

CITY OF TEMPE
TRANSPORTATION COMMISSION

STAFF REPORT

AGENDA ITEM 8

DATE
June 2, 2015

SUBJECT
Future Agenda Items

PURPOSE
The Chair will request future agenda items from the commission members.

BACKGROUND
The following future agenda items have been previously identified by the Commission or staff:

- Street Closure Procedures and notification follow-up (August)
- Orbit Saturn (August)
- Streetcar (August)
- Alameda Streetscape Project (September)
- Bike Boulevards (September)
- Highline Canal Multi-use Path (September)
- North/South Railroad Spur Multi-Use Path (September)
- Orbit Saturn (November)
- Highline Canal Multi-use Path (November)
- Alameda Streetscape Project (November)
- Long-Range Forecast Presentation (November)
- Introduction of CIP Requests (December)
- Bike Hero (January)
- FY 2016/17 Media Plan (February)
- Long-Range Forecast Update (Operating) & CIP follow-up (March)

FISCAL IMPACT
None

RECOMMENDATION
This item is for information only.

CONTACT
Shelly Seyler, Deputy Public Works Director – Transportation
480-350-8854
shelly_seyler@tempe.gov

City Annual Budget Planning Process

Council/Public Input Dates	Topic	Transportation Commission Input/Info. Dates	Action Requested by Transportation Commission
August	Issue Review Session – Budget Strategy Update	**n/a**	
October	Issue Review Session – Long-Range Forecast Presentation	**November**	Commission provided a copy of the long-range forecast.
November	Committee of the Whole – Budget Discussion Follow-up	**n/a**	
Early February	Issue Review Session – Introduction of CIP Requests	**December**	Staff requests that the Commission review and provide input regarding Transportation CIP requests.
Mid-February	Public Meeting(s) – Budget (Operating and Capital Budgets)	**n/a**	
Late February	Issue Review Session – Long-Range Forecast Update (Operating) & CIP follow-up	**March**	Commission provided with an update on Operating and CIP discussion.
Mid-March	Issue Review Session- CIP Discussion	**April**	Commission provided with an update on the CIP discussion.
Late April	Issue Review Session – FY 2014-15 Operating Budget Review	**n/a**	
Late May:	Council considers adoption of Tentative Fiscal Year 2015-16 Operating Budget	**June**	Commission provided with an update on the tentative adoption.
Early June	Council considers adoption of Final Fiscal Year 2015-16 Operating Budget and Public hearing and adoption of the Fiscal Year 2015-16 Capital Improvements Program	**n/a**	

MAG Annual Grant Process

Timeline	Grant Type	Transportation Commission Input Dates	Action Requested by Transportation Commission
Annually released in Early to Mid-February and due in Early to Mid-March	FTA Section 5310 - Grant for transportation for elderly and persons with disabilities.	**November**	Staff requests that the commission review and provide input regarding proposed project.
Annually released Early March and due in late April	Transportation Investment Generating Economic Recovery (TIGER) – Federal Department of Transportation discretionary grant program. Total available funds nationwide was $600 million for 2014. Regional projects are solicited by MAG.	**November**	Staff requests that the commission review and provide input regarding proposed project.
Annually released in late May and due in late June	MAG Pedestrian Design Assistance Grants	**May & June**	Staff requests that the commission review and provide input regarding proposed project.
FY 2015 or 2016	Highway Safety Improvement Program (HSIP) – There is a state portion (ADOT) and a regional portion (MAG). ADOT accepts requests for state funds on a continual/ongoing basis. Selections are based on safety needs and data. MAG regional funds are currently programmed through FY 2017.	**Not Applicable**	Based on historical safety data, staff has already identified the intersections of Rural Road & Southern Avenue and Rural Road & University Drive as priorities for future HSIP funding.

February 2015	Urbanized Area Formula Program (5307) – Administered by Federal Transit Administration and pays for capital projects such as transit facilities and rolling stock. Most of the funding is committed to pay for transit improvements identified in the MAG Regional Transportation Plan. Unspent portion of the funds are offered by MAG every two years via competitive grants.	**November**	Staff requests that the commission review and provide input regarding proposed projects.
March 2015 with full solicitation, every 3 years	Congestion Mitigation and Air Quality Program (CMAQ) – Bike and Pedestrian Improvements; PM2.5; Transit; Street Sweepers.	**November**	Staff requests that the commission review and provide input regarding proposed project.
Mid-March 2016 and due Mid-April, every 2 years	Job Access Reverse Commute (JARC) – Projects that are eligible must demonstrate improved job access for low income population.	**November**	Staff requests that the commission review and provide input regarding proposed project.
August 2016 and due in mid-September, every 3 years:	Transportation Alternatives Program (TAP) - Bike and Pedestrian Projects	**November**	Staff requests that the commission review and provide input regarding proposed project.
ON HOLD Released in August and due in September	Congestion Mitigation and Air Quality Program (CMAQ ITS) are Federal fund for ITS projects. Projects are selected based on air quality scores and committee member scores. Programming is set through FY 2017. It is not known at this time how the arterial ITS program will proceed.	**June**	Staff requests that the commission review and provide input regarding proposed projects prior to call for projects in August.