



PUBLIC MEETING AGENDA

Transportation Commission

MEETING DATE

Tuesday, April 14, 2015
7:30 a.m.

MEETING LOCATION

Tempe Transportation Center
Don Cassano Room
200 E Fifth Street, 2nd floor
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 <i>three-minute time limit</i> 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 March 17, 2015 meeting.	Pam Goronkin, Commission Chair	ACTION
3. Streetcar Staff from Public Works and Valley Metro will provide an update on the project.	Eric Iwersen, Public Works and Alec More, Valley Metro	Information and Possible Action
4. CIP Discussion Staff will provide an update on the CIP projects within transportation.	Shelly Seyler, Public Works	Information and Possible Action
5. Orbit Saturn Staff will provide the information that will be presented to the public during the April/May public input process for possible expansion of Orbit south of US 60.	Jason Hartong, Public Works	Information and Possible Action

<p>6. Bus Unification</p> <p>Staff will provide an update on the first year of bus operations by RPTA.</p>	<p>Mike Nevarez, Public Works</p>	<p>Information and Possible Action</p>
<p>7. 8th Street Streetscape Project</p> <p>Staff will provide an update on the 8th Street Project.</p>	<p>Eric Iwersen, Public Works</p>	<p>Information and Possible Action</p>
<p>8. Bicycle/pedestrian signal activation operations</p> <p>Staff will provide information on the bike/ped signal activate system as requested by the Commission.</p>	<p>Julian Dresang, Public Works</p>	<p>Information and Possible Action</p>
<p>9. McClintock Dr mill and overlay project</p> <p>Staff will provide information on the McClintock Dr mill and overlay project and the proposed addition of bike lanes.</p>	<p>Julian Dresang, Public Works</p>	<p>Information and Possible Action</p>
<p>10. Department and Regional Transportation Updates</p> <p>Staff will provide updates and current issues being discussed at the Maricopa Association of Governments and regional transit agencies.</p>	<p>Public Works Staff</p>	<p>Information</p>
<p>11. Future Agenda Items</p> <p>Commission may request future agenda items.</p>	<p>Pam Goronkin, Commission Chair</p>	<p>Information</p>

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 March 17, 2015

Minutes of the Tempe Transportation Commission held on Tuesday, March 17, 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)
Don Cassano
Aaron Golub
Nikki Gusz
Jeremy Browning

Philip Luna
Kevin Olson
Charles Redman
Peter Schelstraete
Cyndi Streid

(MEMBERS) Absent:

Ryan Guzy
Bonnie Gerepka
Charles Huellmantel

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
Ken Jones, Chief Financial Officer
Robert Yabes, Principal Planner
Maja Aurora, Art Coordinator

Guests Present:

Alec More, HDR
Robert Forrest, Valley Metro
Scott Walters, Tempe Bicycle Action Group
Krystal Bittner

Mathew Elliott
JC Porter, ASU
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 February 10, 2015 meeting and asked for a motion. A Motion was made to approve the minutes.

Motion: Commissioner Kevin Olson

Second: Commissioner Peter Schelstraete

Abstain: Commissioner Nikki Gusz

Decision: Approved

Agenda Item 3– Tempe Streetcar

Eric Iwersen introduced Alec Moore, HDR/Valley Metro Project Manager, who presented information regarding the Tempe streetcar project.

Discussion included staff proposing median running with mixed traffic street configuration along Apache Boulevard. Staff also discussed City Council's preference for a smaller to medium-sized streetcar vehicle. In addition to the items addressed above, staff also recapped the street configurations for Mill Avenue and downtown Tempe (including Mill Avenue north of University Drive, Rio Salado, Ash Avenue, and University Drive) previously adopted by the Commission and the City Council.

Agenda Item 4 – City Budget Long-Range Financial Forecast and CIP Update

Ken Jones, Deputy City Manager-Chief Financial Officer, Presented

Staff discussed the City long-range city budget. Staff will ask City Council for initial recommendations and feedback for the 5-year CIP at their March 26 Council meeting. Prior to the March 26 meeting, staff provided the City Council with public input on proposed CIP projects. The CIP budget includes a requested re-appropriation of previously-budgeted amounts that have not been spent and are anticipated to be spent in FY 2015-16, along with the requests for new appropriations.

Agenda Item 5- Arts Master Plan

Maja Aurora, City of Tempe Art Coordinator, presented information on the City's Arts Master Plan.

Discussion included an update on the City's Arts Master Plan, current city programs (Municipal Art fund and performing arts fund), arts planning goals, and the planning process (which includes three phases: preparation, community engagement, and the plan). The draft plan is due to be released in May for public feedback.

Agenda Item 6- 2015 Tempe Bike Count

Eric Iwersen introduced Scott Walters, Tempe Bicycle Action Group Bike Count Coordinator, who presented information on the city's current Bike count program.

Discussion included the process of collecting bike count data (researchers, volunteers and neighborhood groups to recruit count volunteers). The bike counts are conducted annually and help measure progress of number of riders in Tempe and to identify problem areas and help guide the City on what is working and where improvements can be made for facilities.

Agenda Item 7 – Department and Regional Transportation Updates

There is a resolution going to Council for acceptance of a state wide bicycle route. The US Department of Transportation has developed a designated route through every state. The Arizona route connects through Tempe from Mesa along Rio Salado through to Mill Avenue north along Mill Avenue to Curry Road, Curry Road to College Avenue and then north into Scottsdale. This project could affect funding eventually with signage. There will be no physical change to roadways or pathways, and the route highlight some features in the city.

Agenda Item 9– Future Agenda Items

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

Bicycle/pedestrian signal activation operations (April)

- City Budget Long-Range Forecast Update (Operating) & CIP follow-up (April)
- Streetcar (April)
- Orbit Saturn (April)
- Bus Unification (May)
- Alameda Streetscape Project (May)
- Bike Boulevards (May)
- MAG Pedestrian Design Assistance Grants (May)
- City Tentative Fiscal Year 2015-16 Operating Budget (June)
- MAG Congestion Mitigation and Air Quality Program (CMAQ ITS) (June)
- Highline Canal Multi-use Path Project (June)
- North/South Railroad Spur Multi-Use Path (June)
- Highline Canal Multi-use Path Project (September)
- Orbit Saturn & Larger Orbit buses (November)
- Alameda Streetscape Project (November)

The Commission's next meeting is scheduled for April 14, 2015.

The meeting was adjourned at 8:53 a.m.

Prepared by: Tammara Evans

Reviewed by: Eric Iwersen



AGENDA ITEM 3

To: Tempe Transportation Commission
From: Eric Iwersen, Principal Planner, City of Tempe
Date: April 7, 2015
Re: Tempe Streetcar

At the April 14, 2015 Transportation Commission meeting staff from Metro and Tempe Transportation will provide updates on the following Tempe Streetcar item:

Mill Avenue Track Alignment (University to Rio Salado Parkway) - At the request of the Tempe City Council staff will provide an analysis of the pros and cons for two possible street and track configurations; one in the shared traffic lane and one in what is currently the on-street parking lane on the east side of Mill Avenue, in the northbound direction.

CITY OF TEMPE TRANSPORTATION COMMISSION



STAFF REPORT

AGENDA ITEM 4

DATE

April 14, 2015

SUBJECT

Transportation CIP Update

PURPOSE

Staff will discuss the Transportation Capital Improvement Program (CIP) Project requests for FY 2015-16.

BACKGROUND

This memo contains the recommended CIP projects related to Transportation, including all funding sources, and is required by charter, to be delivered to the City Council at least 90 days prior to the start of the next fiscal year. The City Council was presented with this information on March 26, 2015. On April 23, a budget review session will be held with the City Council. On May 21, the tentative adoption of the operating budget will occur, and on June 11, the final adoption of the budget by the City Council will happen.

FISCAL IMPACT

	FY 2015-19 Approved CIP	FY 2016-20 Proposed CIP
Transit	\$43.7 million	\$50.7 million
Transportation	\$40.7 million	\$51.5 million
TOTAL	\$84.4 million	\$102.2 million

RECOMMENDATION

For information only.

CONTACT

Shelly Seyler
Deputy Public Works Director - Transportation
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ATTACHMENT

Transportation Capital Improvement Program (CIP) Project Requests



Transit Program Project List and Descriptions


Page #	Project Name	Proposed Funding Source(s)	Capital Budget Re-appropriations	New 2015-16 Appropriation Request	2015-16 Total Requested Appropriation	Additional Projected Needs				Total 5-Year Program
						2016-17	2017-18	2018-19	2019-20	
26	<u>1st / Rio Salado Pkwy & Ash Ave Intersection Realignment</u>	Transit Tax	-	-	-	206,000	1,255,000	-	-	1,461,000
27	<u>Alameda Drive & I-10 Bicycle / Pedestrian Bridge</u>	Transit Tax	-	103,000	103,000	-	184,000	-	-	287,000
		Federal Grant - CMAQ	-	-	-	-	1,200,000	-	-	1,200,000
		Project Total	-	103,000	103,000	-	1,384,000	-	-	1,487,000
28	<u>Bicycle Boulevard</u>	Transit Tax	-	100,000	100,000	100,000	200,000	100,000	200,000	700,000
29	<u>Broadway Road Streetscape Project</u>	Transit Tax	1,295,191	-	1,295,191	-	-	-	-	1,295,191
		Federal Grant - CMAQ	3,857,670	-	3,857,670	-	-	-	-	3,857,670
		MAG Safety Funds	705,000	-	705,000	-	-	-	-	705,000
		Project Total	5,857,861	-	5,857,861	-	-	-	-	5,857,861
30	<u>Bus Purchases - Circulator</u>	Transit Tax	125,000	-	125,000	-	-	-	-	125,000
		Federal Grant - 5307	500,000	-	500,000	-	-	-	-	500,000
		Project Total	625,000	-	625,000	-	-	-	-	625,000
31	<u>Bus Stop Capital Maintenance</u>	Transit Tax	1,248,894	670,806	1,919,700	688,867	707,453	500,000	500,000	4,316,020
32	<u>City of Tempe Bus Pullout Project</u>	Transit Tax	630,000	500,000	1,130,000	500,000	500,000	500,000	500,000	3,130,000
		Development Impact Fees	-	TBD	TBD	TBD	TBD	TBD	TBD	TBD
		Project Total	630,000	500,000	1,130,000	500,000	500,000	500,000	500,000	3,130,000
33	<u>CNG Expansion - East Valley Bus Operations & Maintenance Facility</u>	Transit Tax	427,327	-	427,327	-	-	-	-	427,327
		Federal Grant - 5307	1,054,100	-	1,054,100	-	-	-	-	1,054,100
		Project Total	1,481,427	-	1,481,427	-	-	-	-	1,481,427
34	<u>Creamery Branch Rail Path (along 8th Street)</u>	Transit Tax	198,617	236,979	435,596	-	-	-	-	435,596
		Federal Grant - CMAQ	-	1,379,021	1,379,021	-	-	-	-	1,379,021
		Project Total	198,617	1,616,000	1,814,617	-	-	-	-	1,814,617
35	<u>El Paso Natural Gasline Easement Multi-use Path Phase III</u>	Transit Tax	56,602	-	56,602	-	-	-	-	56,602
		Federal Grant - CMAQ	1,323,000	-	1,323,000	-	-	-	-	1,323,000
		Project Total	1,379,602	-	1,379,602	-	-	-	-	1,379,602
36	<u>EVBO - Facility Asset Maintenance (East Valley Bus Ops / Maint Facility)</u>	Transit Tax	1,006,474	450,000	1,456,474	250,000	240,000	325,000	250,000	2,521,474
		Federal Grant - 5307	250,000	-	250,000	-	-	-	-	250,000
		Project Total	1,256,474	450,000	1,706,474	250,000	240,000	325,000	250,000	2,771,474



Transit Program Project List (continued)

Page #	Project Name	Proposed Funding Source(s)	Capital Budget Re-appropriations	New 2015-16 Appropriation Request	2015-16 Total Requested Appropriation	Additional Projected Needs				Total 5-Year Program
						2016-17	2017-18	2018-19	2019-20	
37	Highline Canal Path (Baseline - Knox Road)	Transit Tax	267,000	1,144,339	1,411,339	644,044	-	-	-	2,055,383
		Federal Grant - CMAQ	-	1,366,661	1,366,661	1,866,956	-	-	-	3,233,617
		Development Impact Fees	-	TBD	TBD	TBD	-	-	-	TBD
		Project Total	267,000	2,511,000	2,778,000	2,511,000	-	-	-	5,289,000
38	North South Rail Spur Path - Phase 1	Transit Tax	347,000	-	347,000	-	-	-	-	347,000
		Federal Grant - CMAQ	65,000	-	65,000	-	-	-	-	65,000
		Development Impact Fees	-	TBD	TBD	-	-	-	-	TBD
		Project Total	412,000	-	412,000	-	-	-	-	412,000
39	Pathway Capital Maintenance	Transit Tax	694,947	1,150,000	1,844,947	900,000	500,000	550,000	550,000	4,344,947
40	<u>Rio Salado S. Bank Path Underpass @ McClintock Dr.</u>	Transit Tax	-	309,000	309,000	947,000	947,000	-	-	2,203,000
		Federal Grant - CMAQ	-	-	-	750,000	750,000	-	-	1,500,000
		Project Total	-	309,000	309,000	1,697,000	1,697,000	-	-	3,703,000
40	Rio Salado Southbank Path & Underpass at 101 & 202 Freeway Interchange	Transit Tax	678,302	-	678,302	-	-	-	-	678,302
41	Rio Salado Southbank Path Tempe - Phoenix	Transit Tax	979,368	-	979,368	-	-	-	-	979,368
41	Rio Salado Southbank Path Underpass @ Priest Drive	Transit Tax	69,707	465,604	535,311	13,250	-	-	-	548,561
		Federal Grant - CMAQ	-	1,165,396	1,165,396	236,750	-	-	-	1,402,146
		Project Total	69,707	1,631,000	1,700,707	250,000	-	-	-	1,950,707
42	Tempe/Phoenix Bike Share	Transit Tax	350,000	201,300	551,300	-	-	-	-	551,300
		Federal Grant - CMAQ	-	750,000	750,000	-	-	-	-	750,000
		Project Total	350,000	951,300	1,301,300	-	-	-	-	1,301,300
43	Transit Passenger Facilities - Bus Stop Improvements	Transit Tax	474,469	190,600	665,069	202,640	227,720	234,142	240,726	1,570,297
44	TTC - Facility Asset Maintenance (Transportation Center)	Transit Tax	398,394	269,000	667,394	269,000	269,000	269,000	269,000	1,743,394
45	Unaccounted Federal Grants Contingency	Transit Tax	530,428	-	530,428	-	-	-	-	530,428
		Federal Grant - CMAQ	2,121,714	-	2,121,714	-	-	-	-	2,121,714
		Project Total	2,652,142	-	2,652,142	-	-	-	-	2,652,142
46	US Army Corps Match Money	Transit Tax	-	810,000	810,000	-	-	-	-	810,000
Transit Program Total			19,654,204	11,261,706	30,915,910	7,574,507	6,980,173	2,478,142	2,509,726	50,458,458

The table above lists the individual projects that comprise the Transit Program and the associated five-year funding requests. The detailed project descriptions and justifications are provided on the pages that follow.

Project No.	TBD	Name: 1st / Rio Salado Pkwy & Ash Ave Intersection Realignment				
Department:	Public Works	Project Location: 1st Street/Rio Salado Pkwy & Ash Avenue				
Est. Start Date:	07/01/16	Est. Completion Date: 06/30/18				
Project Description:						
<p>This project involves the reconstruction and realignment of the 1st Street/Rio Salado Parkway and Ash Avenue intersection to re-open the intersection for through traffic continuing westbound. The scope of work includes traffic signal relocations, sidewalk, bike lane, driveway and street reconstruction to align the roadway for travel in all directions, much like a traditional intersection. The work may involve some right of way purchase and would be coordinated with the Tempe Streetcar project construction. The project concept designs were completed with a study conducted in 2009. The project has been identified as a need for new development that is occurring west of the intersection, west of downtown Tempe. More detailed cost estimates are not available at this time.</p>						
Project Purpose and Need:						
<p>The purpose and need of for this project is to provide access for all directions where it is currently not provided today. With recent development of the area west of downtown Tempe there is increased pressure to provide full access through this intersection, which would alleviate some of the traffic pressure on the limited streets that do connect downtown with areas to the west. This project would provide more travel options and routes for the adjacent neighborhoods, businesses and other users.</p>						
Prior Fiscal Year Funding:						
<p>This project did not receive FY 2014-15 appropriations, and was not included in the adopted FY 2014-15 five year CIP.</p>						
		2015-16	Estimated Future Costs			
	Request	2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	-					
New Appropriation Request	-					
Total Estimated Project Costs	-	206,000	1,255,000	-	-	1,461,000
Project Funding Sources						
	Transit Tax	-	206,000	1,255,000	-	-
						1,461,000
New Operating Budget Impacts None						

Project No.	TBD	Name:	Alameda Drive & I-10 Bicycle / Pedestrian Bridge
Department:	Public Works	Project Location:	Alameda Drive & I-10
Est. Start Date:	07/01/13	Est. Completion Date:	06/30/18



Project Description:

This project is a bicycle and pedestrian bridge along the Alameda Drive alignment at the I-10 freeway. The project includes lighting, safety features and public art. The project would be an elevated crossing of the I-10 connection to a Tempe's Fountainhead Business Park (east side) to Tempe Diablo Stadium (west side). The project would link several Tempe neighborhoods and bikeways, particularly the bike route along Alameda Drive to major employment centers, the stadium and a city of Phoenix bike route on Roeser Road. The project is identified in MAG, ADOT, and local transportation plans. The project would be constructed with the I-10 Improvements Project. Currently there is \$1,200,000 in federal funding for the project and staff is working with ADOT to include the project with the I-10 Improvements Project.


Project Purpose and Need:


The project would remove a gap in the Tempe and Phoenix bikeway system. Currently Alameda Drive (Roeser St. in Phoenix) is a more than 20 mile bike route that has linkages to downtown Phoenix and Tempe, but is cut in half at the I-10 crossing. This project would facilitate a freeway crossing like the College Avenue and Country Club Way bike/ped bridges over the US60. The project is supported by MAG, Phoenix and Tempe and is identified in several plans. The project would further demonstrate Tempe's commitment to multi-modal travel, decrease traffic congestion and help improve air quality. ADOT completed a design concept and feasibility study of the project in 2005.


Prior Fiscal Year Funding:

This project did not receive FY 2014-15 appropriations; however, it was included in the adopted FY 2014-15 five year CIP in FYs 2015-16 and 17-18.

	2015-16	Estimated Future Costs				Total
	Request	2016-17	2017-18	2018-19	2019-20	
Prior Funding Re-appropriated	-					
New Appropriation Request	103,000					
Total Estimated Project Costs	103,000	-	1,384,400	-	-	1,487,400
Project Funding Sources						
Transit Tax	103,000	-	184,400	-	-	287,400
Federal Grant - CMAQ	-	-	1,200,000	-	-	1,200,000
Total Sources	103,000	-	1,384,400	-	-	1,487,400
New Operating Budget Impacts						
Supplies and Services	-	-	-	6,500	6,500	

Project No.	TBD	Name: Bicycle Boulevards					
Department:	Public Works	Project Location: City-wide					
Est. Start Date:	07/01/15	Est. Completion Date: Ongoing					
Project Description:							
<p>This project involves a variety of city-wide bicycle related improvements on nine designated bicycle corridors along paths and local and collector streets in Tempe. The specific improvements include bike lanes, protected and buffered bike lanes, signal enhancements and upgrades, bicycle parking, signage, intersection improvements and more. Materials that would be funded through this item include paint, bollards, bicycle parking devices, landscaping, concrete/asphalt and other depending on the specific improvement. Designated bike boulevards and specific improvements are included in the Transportation Master Plan and as a part of the plans public outreach process. the first phase of bicycle boulevard implementation is proposed to be the "seat" and "pedal" routes that follow the Knox/LaVieve (South Tempe) and College Ave (central Tempe) alignments/bike routes.</p>							
Project Purpose and Need:							
<p>This project is part of the City Council and Transportation Commission strategies to provide mobility options for residents and visitors. The bicycle boulevard system was adopted in the Transportation Plan in early 2015 and will contribute to achieving the goal of a higher bicycle friendly community rating for Tempe.</p>							
Prior Fiscal Year Funding:							
<p>This project did not receive FY 2014-15 appropriations; however, it was included in the adopted FY 2014-15 five year CIP in FYs 2015-16 through 18-19.</p>							
		2015-16	Estimated Future Costs				
		Request	2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated		-					
New Appropriation Request		100,000					
Total Estimated Project Costs		100,000	100,000	200,000	100,000	200,000	700,000
Project Funding Sources							
	Transit Tax	100,000	100,000	200,000	100,000	200,000	700,000
New Operating Budget Impacts	None						

Project No. 6003050 Name: Broadway Road Streetcape Project						
Department: Public Works		Project Location: Broadway Road - Mill Avenue and Rural Road				
Est. Start Date: 10/01/08		Est. Completion Date: 12/01/15				
Project Description:						
The Broadway Road Pedestrian and Bicycle Improvement Project is approximately 1 mile between Mill Ave and Rural Road. The project consists of pedestrian and bicycle facility improvements along an arterial street fronted by single family residential units. Work to be performed include striping for bike lanes, removal of one vehicle lane in the eastbound direction, the widening of sidewalks, construction of planted medians, construction of a wall, pedestrian safety, street tree plantings, provisions for a mid-block crossing between Sierra Vista and Venture and providing transit and pedestrian amenities.						
Project Purpose and Need:						
The proposed project area has a high volume of pedestrian and bicycle travel due to its proximity to ASU and downtown Tempe. Area residents are advocating to change the character of the street to reflect the residential uses on this stretch of Broadway Road, which differs significantly with the rest of corridor. The design of the Broadway Road project was a product of extensive community dialogues. The proposed project is identified in the Tempe Comprehensive Transportation Plan as one of the proposed corridors for improvement.						
Prior Fiscal Year Funding:						
This project received FY 2014-15 appropriations in the amount of \$6,384,883.						
		2015-16 Request		Estimated Future Costs		
			2016-17	2017-18	2018-19	2019-20
						Total
Prior Funding Re-appropriated	5,857,861					
New Appropriation Request	-					
Total Estimated Project Costs	5,857,861	-	-	-	-	5,857,861
Project Funding Sources						
Transit Tax	1,295,191	-	-	-	-	1,295,191
Federal Grant - CMAQ	3,857,670	-	-	-	-	3,857,670
MAG Safety Funds	705,000	-	-	-	-	705,000
Total Sources	5,857,861	-	-	-	-	5,857,861
New Operating Budget Impacts None						

Project No. 6006752 Name: Bus Purchases - Circulator						
Department: Public Works		Project Location: Circulator Route				
Est. Start Date: 07/01/14		Est. Completion Date: 06/30/16				
Project Description:						
<p>This project provides federal funding for a prototype hybrid or alternative fuel bus to determine appropriate specifications and feasibility of a long-term replacement vehicle to the Orbit fleet of 24 foot cutaway buses. The project also programs 5 Orbit replacement buses to support the existing neighborhood circulator routes. The project will purchase three (3) 30-foot buses at \$495,000 each and five (5) 24-foot cutaway buses at \$100,000 each. Procurement and funding for the 3 - 30' buses and 5 Orbit buses will be administered through the RPTA with (PTF) - Public Transportation Funds allocated to Tempe in addition to grant funding (total cost \$1,360,000)</p>						
Project Purpose and Need:						
<p>The purpose is to identify a more cost efficient vehicle that also provides greater passenger capacity, extended useful life, low or zero emissions, and which is suitable for operation in neighborhoods. There are also 5 Orbit buses that exceeded useful life and requires immediate replacement. Current Orbit fleet consists of 39, 24-foot cutaway buses. Five (5) cutaways are required as part of the proportional replacement cycle. Three (3) medium or heavy duty 30-foot alternative fuel buses are planned as fleet expansion for the anticipated implementation of Orbit Saturn in October 2017. The 30-foot buses will be used on existing heavy ridership routes.</p>						
Prior Fiscal Year Funding:						
This project received FY 2014-15 appropriations in the amount of \$625,000.						
	2015-16	Estimated Future Costs				
	Request	2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	625,000					
New Appropriation Request	-					
Total Estimated Project Costs	625,000	-	-	-	-	625,000
Project Funding Sources						
Transit Tax	125,000	-	-	-	-	125,000
Federal Grant - 5307	500,000	-	-	-	-	500,000
Total Sources	625,000	-	-	-	-	625,000
New Operating Budget Impacts	None					

Project No. 6005239 Name: Bus Stop Capital Maintenance

Department: Public Works **Project Location:** City wide
Est. Start Date: Ongoing **Est. Completion Date:** Ongoing



Project Description:

This project will repair, rehabilitate and or replace bus stop infrastructure that has or will surpass its useful life during the project year or due to excessive or adverse environmental exposures (e.g., sun, irrigation, high use). City-wide bus stops number 814 with sizes and amenities varying widely based on transit system demand. The bus stop infrastructure consists of bus shelters (297), benches (648), bike racks (969), trash receptacles (775), lighting (173), concrete pads (tbd), schedule holders (1,100), and bus stop signs (817). In general, these assets were purchased and installed between 1994 and 2008. This project will provide \$50,000 annually from FY15-20 to fund repairs and upgrades required to meet ADA for all Tempe bus stops. This project will also fund the reconstruction of failing curb and gutters at Tempe bus stops.


Project Purpose and Need:


The purpose of the project is to maintain the city's bus stop infrastructure in a state of good repair, safe for use, and instrumental in promoting transit use. The bus stop represents the "lobby" to the transit system and must provide a safe, secure, and comfortable waiting area with adequate sun and weather protection for transit passengers. All Tempe bus stops must meet or exceed federal ADA requirements.

Prior Fiscal Year Funding:

This project received FY 2014-15 appropriations in the amount of \$3,857,234.

	2015-16	Estimated Future Costs				Total
	Request	2016-17	2017-18	2018-19	2019-20	
Prior Funding Re-appropriated	1,248,894					
New Appropriation Request	670,806					
Total Estimated Project Costs	1,919,700	688,867	707,453	500,000	500,000	4,316,020
Project Funding Sources						
Transit Tax	1,919,700	688,867	707,453	500,000	500,000	4,316,020
New Operating Budget Impacts	None					

Project No. 6006764 Name: City of Tempe Bus Pullout Project						
Department: Public Works		Project Location: Citywide				
Est. Start Date: Ongoing		Est. Completion Date: Ongoing				
Project Description:						
Staff has identified 35 bus pullout priority locations in the city. The project will install 3 to 5 new bus pullouts during FY 2015-16 with passenger amenities at various bus stops in the city. The project will also replace deteriorated existing bus pullouts. The locations for the next series of pull-outs will be based on industry standards which include sufficient right of way, changes in bus service levels, ridership, traffic volumes, and intersection safety considerations across the city. The project will install 5 bus pullouts per year in subsequent years based on location priority established by the ongoing Bus Pullout Study. From 2015 to 2020, staff is estimating that 15 pullouts of the 35 identified locations will be completed. The remaining 20 will be completed between the years 2021-2025.						
Project Purpose and Need:						
Bus pull-outs provide safer layover areas, improve passenger safety and comfort by increasing distance from traffic flow, improve traffic flow along major streets, and improve intersection safety by reducing traffic back-ups behind buses.						
How the project provides necessary public services to accommodate new development (need and benefit)						
New residents, employees and customers of new developments in the city will use the City of Tempe transit system. Bus pull-outs provide safer layover areas, improve passenger safety and comfort by increasing distance from traffic flow, improve traffic flow along major streets, and improve intersection safety by reducing traffic back-ups behind buses. The benefit extends to the new developments by reducing conflicts with buses and reducing congestion making streets safer for all users, including those in single occupancy vehicles, pedestrians, bicyclists and transit riders.						
Prior Fiscal Year Funding:						
This project received FY 2014-15 appropriations in the amount of \$630,161.						
	2015-16 Request	Estimated Future Costs				
		2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	630,000					
New Appropriation Request	500,000					
Total Estimated Project Costs	1,130,000	500,000	500,000	500,000	500,000	3,130,000
Project Funding Sources						
Transit Tax	1,130,000	500,000	500,000	500,000	500,000	3,130,000
Development Impact Fees	TBD	TBD	TBD	TBD	TBD	TBD
Total Sources	1,130,000	500,000	500,000	500,000	500,000	3,130,000
New Operating Budget Impacts						

Project No. 6005800 Name: CNG Expansion - East Valley Bus Operations & Maintenance Facility						
Department: Public Works		Project Location: 2050 Rio Salado - EVBOM				
Est. Start Date: 07/01/13		Est. Completion Date: 10/01/15				
Project Description: This project will expand the East Valley Bus Operations and Maintenance Facility's Compressed Natural Gas (CNG) fuel dispensing capacity from 2 to 4 dispensers. Upgrades will include all necessary improvements, vessels, heat exchangers, etc... to maintain current fueling capacity per dispenser						
Project Purpose and Need: The project is needed to accommodate the larger bus fleet size associated with the unification of Tempe and RPTA bus operations.						
Prior Fiscal Year Funding: This project received FY 2014-15 appropriations in the amount of \$1,527,557.						
	2015-16 Request	Estimated Future Costs				
		2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	1,481,427					
New Appropriation Request	-					
Total Estimated Project Costs	1,481,427	-	-	-	-	1,481,427
Project Funding Sources						
Transit Tax	427,327	-	-	-	-	427,327
Federal Grant - 5307	1,054,100	-	-	-	-	1,054,100
Total Sources	1,481,427	-	-	-	-	1,481,427
New Operating Budget Impacts	None					

Project No. 6007130 Name: Creamery Branch Rail Path (along 8th Street)

Department: Public Works **Project Location:** 8th Street (Rural - McClintock) - rail line
Est. Start Date: 07/01/14 **Est. Completion Date:** 06/30/16



Project Description:

This project is the construction of a pathway along the Creamery Branch Rail Spur and streetscape improvements along 8th Street. The project path would include landscaping and lighting along the non-operational rail track next to 8th Street (between Rural and McClintock) adjacent to ASU and near downtown Tempe. The streetscape improvements are adjacent to and integrated in with the rail path and would include street trees, enhanced sidewalks and improved bicycle lanes. The project area includes two historic Tempe neighborhoods (Borden Homes & University Heights), a connection to a light rail station, and a strong neighborhood commercial center that includes the 4 Peaks Brewing Company. A public process and stakeholder committee was established in 2010 and completed an approved concept plan in September 2010.


Project Purpose and Need:

This project would enhance a well traveled collector street and place a pathway along a rail spur to accommodate a stronger bicycle and pedestrian environment that will promote the city's mission of increasing transit, bike and pedestrian travel. The project will add landscaping and better integration with historic structures while encouraging appropriate redevelopment on vacant lots or deteriorating structures. The project will better connect the adjacent neighborhoods, but limit cut-through traffic. The project concept has been supported by the neighbors, property owners and stakeholders in the area and would be a revitalization to an important part of Tempe.

Prior Fiscal Year Funding:

This project received FY 2014-15 appropriations in the amount of \$206,000.

	2015-16	Estimated Future Costs				Total
	Request	2016-17	2017-18	2018-19	2019-20	
Prior Funding Re-appropriated	198,617					
New Appropriation Request	1,616,000					
Total Estimated Project Costs	1,814,617	-	-	-	-	1,814,617
Project Funding Sources						
Transit Tax	435,596	-	-	-	-	435,596
Federal Grant - CMAQ	1,379,021	-	-	-	-	1,379,021
Total Sources	1,814,617	-	-	-	-	1,814,617
New Operating Budget Impacts						
Supplies and Services	-	23,000	23,000	23,460	23,929	

Project No. 6006069		Name: El Paso Natural Gasline Easement Multi-use Path Phase III				
Department: Public Works		Project Location: Rural Rd-Kiwanis Park				
Est. Start Date: 10/11/11		Est. Completion Date: 06/30/16				
Project Description:						
<p>The project is a 1/2 mile path extension of the existing El Paso Gasline Path, extending from Price Road to McClintock Drive. This project will extend from Rural Road into Kiwanis Community Park. A bike lane along Southshore Drive, between McClintock and Rural, connects these two projects. The project will include a paved path, with lighting, landscaping, public art and other amenities. The project will meet all ADA requirements and the project is funded almost entirely with \$1,323,000 in federal transportation grants.</p>						
Project Purpose and Need:						
<p>The project will complete the final 1/2 piece of an east-west path along the gasline. It will link major residential areas (The Lakes, Optimist Park etc...) with the regional Kiwanis Community Park and the neighborhood parks of Optimist, Gaiki and Scudder. Additionally the path will connect to Fuller, Fees, Rover, and Aguilar Schools. The project connects to many transit routes and the 6 mile Western Canal Pathway. The project continues Tempe's commitment to multi-modal transportation and improving upon what is already the highest percentage of bicycle commuters in the state. The project is both a recreational amenity (linear park) and a transportation corridor.</p>						
Prior Fiscal Year Funding:						
This project received FY 2014-15 appropriations in the amount of \$1,546,347.						
	2015-16	Estimated Future Costs				
	Request	2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	1,379,602					
New Appropriation Request	-					
Total Estimated Project Costs	1,379,602	-	-	-	-	1,379,602
Project Funding Sources						
Transit Tax	56,602	-	-	-	-	56,602
Federal Grant - CMAQ	1,323,000	-	-	-	-	1,323,000
Total Sources	1,379,602	-	-	-	-	1,379,602
New Operating Budget Impacts	None					

Project No.	6006089	Name:	EVBOM - Facility Asset Maintenance (East Valley Bus Ops / Maint Facility)
Department:	Public Works	Project Location:	2050 Rio Salado - EVBOM
Est. Start Date:	07/01/13	Est. Completion Date:	Ongoing



Project Description:

This project conducts major repair, refurbishment, or replacement of major equipment and sub-systems at the East Valley Bus Operations and Maintenance facility. The asset management plan for the facility and the specific projects stemming from it for FY 2015 thru FY 2019 is nearing completion.

The major deliverables for the EVBOM Maintenance Building include: code compliant air monitoring system throughout the maintenance building; code compliant HVAC system for rooms M139 and M143; HVAC repairs to the Administrative Building to correct heating and cooling deficiencies; and a complete and operational Energy Management System including all necessary hardware and computer interfacing for these improvements.

Design Study is currently under contract and will determine total cost for the upgrade. Future projects also include: Upgrading Fluid Distribution Center - \$150,000 in FY15-16; Resealing Fuel area and Maintenance Facility - \$250,000 in FY16-17; Pave additional bus and employee parking area - \$240,000 in FY 17-18; Repaint and start LED lighting upgrade at the facility - \$325,000 in FY18-19; and complete EVBOM LED lighting upgrade - \$250,000 in FY19-20.

Project Purpose and Need:

EVBOM is a 250 bus facility from which the all of Tempe's transit service is provided. It also serves as a regional operations base manage by the Regional Public Transportation Authority (RPTA). Maintaining the facility in state of good repair facilitates the provision of local and regional bus service on a daily basis by allowing for the timely and effective fleet repairs; efficient fueling, fare collection, and cleaning; efficient operations; and safe working conditions for the roughly 600 Tempe, RPTA and contractor staff based there.

Prior Fiscal Year Funding:

This project received FY 2014-15 appropriations in the amount of \$1,296,793.

	2015-16	Estimated Future Costs				Total
	Request	2016-17	2017-18	2018-19	2019-20	
Prior Funding Re-appropriated	1,256,474					
New Appropriation Request	450,000					
Total Estimated Project Costs	1,706,474	250,000	240,000	325,000	250,000	2,771,474
Project Funding Sources						
Transit Tax	1,456,474	250,000	240,000	325,000	250,000	2,521,474
Federal Grant - 5307	250,000	-	-	-	-	250,000
Total Sources	1,706,474	250,000	240,000	325,000	250,000	2,771,474
New Operating Budget Impacts	None					

Project No.	6006070	Name:	Highline Canal Path (Baseline - Knox Road)
Department:	Public Works	Project Location:	Highline Canal Path (Baseline - Knox Road)
Est. Start Date:	07/01/13	Est. Completion Date:	06/30/17



Project Description:

This project is the design and construction of a 3.5 mile pathway along the Highline Canal in west central Tempe. The Salt River Project canal runs north and south from Baseline Road on the north to Knox Road on the south and is one of the last remaining canal banks in Tempe without a dedicated path for public use. This path has been awarded federal funding in the Fall of 2013. This project would integrate with and connect to planned and funded portions of pathway along the Highline Canal in the Town of Guadalupe and the City of Phoenix. The project would have a public outreach component. The path would include street crossing treatments, fencing (where needed), landscaping, lighting and a paved path that meets all ADA and national transportation design standards.

Project Purpose and Need:

This project is part of the City's Transportation Master Plan and is in concert with the Tempe General Plan. It continues Tempe's commitment to building facilities that support increasing the numbers of people utilizing non-motorized forms of transportation to assist in reducing air pollution and traffic congestion. The project will serve many Tempe neighborhoods and link to Guadalupe and Phoenix. It will create an improved aesthetic in an area now neglected (canal banks) and enhance the quality of life for area residents.

How the project provides necessary public services to accommodate new development (need and benefit)

This project provides transportation alternatives in for non-motorized travel in a part of Tempe that does not currently have multi-use path opportunities. The project addresses transportation options for new multi-family residential developments and commercial growth happening in the area.

Prior Fiscal Year Funding:

This project received FY 2014-15 appropriations in the amount of \$267,000.

	2015-16	Estimated Future Costs				Total
	Request	2016-17	2017-18	2018-19	2019-20	
Prior Funding Re-appropriated	267,000					
New Appropriation Request	2,511,000					
Total Estimated Project Costs	2,778,000	2,511,000	-	-	-	5,289,000
Project Funding Sources						
Transit Tax	1,411,339	644,044	-	-	-	2,055,383
Federal Grant - CMAQ	1,366,661	1,866,956	-	-	-	3,233,617
Development Impact Fees	TBD	TBD	-	-	-	TBD
Total Sources	2,778,000	2,511,000	-	-	-	5,289,000
New Operating Budget Impacts						
Supplies and Services	-	-	-	40,000	40,800	

Project No. 6007080 Name: North South Rail Spur Path - Phase 1

Department: Public Works

Project Location: rail spur adjacent (knox rd. to beach park)



Est. Start Date: 07/01/14

Est. Completion Date: TBD

Project Description:

This project involves the design and construction of the first phase of up to 8 miles of a multi-use path adjacent to the existing freight rail line travelling north and south in Tempe, from Tempe Beach Park to Knox Road and the border with Chandler. This first phase involves the segment from University Drive to Broadway Road and would include both signing and marking on Farmer Ave (University to 13th) and a multi-use path from 13th to Broadway. The path involves constructing a 10 foot minimum path with lighting and landscaping, street crossing treatments and other amenities. Some public outreach has taken place and a \$65,000 MAG grant has been received for concept design of the project. Future phases of this project would be the first phase of many future phases.

Project Purpose and Need:

This project is identified in the Tempe General Plans and Transportation Plan. It is part of the expansion of transportation alternatives to decrease dependency on the private automobile. The project has been requested by several businesses and neighborhoods and has already had some portions built through agreements with private business. The project would complement existing transportation systems.

How the project provides necessary public services to accommodate new development (need and benefit)

This project connects city limit to city limit, Phoenix to Chandler, and would like all major employment, educational and many major residential developments. The project provides a multi-use path connection for users throughout Tempe. The project would be a recreational and transportation corridor for new development in the area.

Prior Fiscal Year Funding:

This project received FY 2014-15 appropriations in the amount of \$412,000.

	2015-16	Estimated Future Costs				Total
	Request	2016-17	2017-18	2018-19	2019-20	
Prior Funding Re-appropriated	412,000					
New Appropriation Request	-					
Total Estimated Project Costs	412,000	-	-	-	-	412,000
Project Funding Sources						
Transit Tax	347,000	-	-	-	-	347,000
Federal Grant - CMAQ	65,000	-	-	-	-	65,000
Development Impact Fees	TBD	-	-	-	-	TBD
Total Sources	412,000	-	-	-	-	412,000
New Operating Budget Impacts	None					

Project No. 6005240 Name: Pathway Capital Maintenance

Department: Public Works **Project Location:** City Wide



Est. Start Date: Ongoing **Est. Completion Date:** Ongoing

Project Description:

This project will repair, rehabilitate or replace multi-use pathway (MUP) infrastructure that will surpass its useful life during the project period or due to excessive or adverse environmental exposures (e.g., sun, irrigation, high use, damage, theft). There are currently 23 miles of MUPs in Tempe. This project has multiple elements such as:

- 1) Replacement of pathway lighting systems including poles and associated infrastructure (wiring, bulbs, fixtures, concrete, shields)
- 2) Replacement of fencing along Kyrene Pathway near Ken McDonald golf course that has been structurally damaged due to irrigation \$500,000 FY 15-16;
- 3) Repair/replacement of segments of concrete pathways that pose hazards to users \$50,000 annually FY 2015-20;
- 4) Mitigate Erosion and Standing Water at Curry Road Pedestrian Tunnel \$750,000 FY 15-16; 5) MUP ingress/egress modifications to for sweeper access \$350,000 FY15-16; 6) Replace El Paso Gas Line Bollard Lights \$350,000 FY 16-17; 7) Repaint College Avenue Pedestrian Bridge \$250,000 FY 16-17; 8) Repaint Country Club Way Pedestrian Bridge \$250,000 FY 16-17; 9) Replace Kyrene Canal MUP Irrigation System/El Paso Gas Line MUP Irrigation System/Grove Parkway MUP Irrigation System \$350,000 FY 17-18; 10) Initiate Replacement of MUP Lighting Fixtures - Cross Cut Canal, Indian Bend Wash, Sierra Tempe, Highline Canal, Grove Parkway, Alisanos, Kyrene Canal, and 8th Street MUP's; 11) Complete Replacement of MUP Lighting Fixtures - Cross Cut Canal, Indian Bend Wash, Sierra Tempe, Highline Canal, Grove Parkway, Alisanos, Kyrene Canal, and 8th Street MUP's.


Project Purpose and Need:


The purpose of these projects is to maintain the city's bike and pedestrian pathway system in a state of good repair, safe for use, instrumental in promoting citywide bike-pedestrian use, and leading to increases in the bike-pedestrian mode share of all trips. Replacement and maintenance campaigns will be established for each pathway segment based on the transit program's asset management program for pathway infrastructure and phased over the five (5) year CIP period.


Prior Fiscal Year Funding:


This project received FY 2014-15 appropriations in the amount of \$951,812.


	2015-16	Estimated Future Costs				Total
	Request	2016-17	2017-18	2018-19	2019-20	
Prior Funding Re-appropriated	694,947					
New Appropriation Request	1,150,000					
Total Estimated Project Costs	1,844,947	900,000	500,000	550,000	550,000	4,344,947
Project Funding Sources						
Transit Tax	1,844,947	900,000	500,000	550,000	550,000	4,344,947
New Operating Budget Impacts	None					


Project No. TBD		Name: Rio Salado S. Bank Path Underpass @ McClintock Dr.					
Department: Public Works		Project Location: Rio Salado S. Bank - McIntock					
Est. Start Date: 07/01/14		Est. Completion Date: 06/30/18					
Project Description: This project is the construction of a bicycle/pedestrian path underpass at McClintock Drive along the south bank of the Rio Salado. The project will connect to an existing path on the west side of McClintock and to another path on the east side that is currently under construction managed by ADOT (101/202 underpass). The project will be concrete and lit and meet all ADA requirements and will provide emergency vehicle access.							
Project Purpose and Need: This project provides an accessible and safe crossing under McClintock Drive for the Rio Salado Path users, where today none exists. The project will link a more than 5 mile system of paths along the Rio Salado and Town Lake area.							
Prior Fiscal Year Funding: This project did not receive FY 2014-15 appropriations, and was not included in the adopted FY 2014-15 five year CIP.							
		Estimated Future Costs					
		2015-16 Request	2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated		-					
New Appropriation Request		309,000					
Total Estimated Project Costs		309,000	1,697,000	1,697,000	-	-	3,703,000
Project Funding Sources							
Transit Tax		309,000	947,000	947,000	-	-	2,203,000
Federal Grant - CMAQ		-	750,000	750,000	-	-	1,500,000
Total Sources		309,000	1,697,000	1,697,000	-	-	3,703,000
New Operating Budget Impacts							
Supplies and Services		-	-	-	750	750	

Project No. 6004319		Name: Rio Salado Southbank Path & Underpass at 101 & 202 Freeway Interchange					
Department: Public Works		Project Location: 101 & 202 Freeway Interchange					
Est. Start Date: 07/01/11		Est. Completion Date: 06/30/16					
Project Description: The project will construct a shared use path from McClintock drive to the Mesa city limits and includes a portion of pathway underneath Loop 202 at the 202/101 Traffic Interchange. The project is the eastern-most connection of the Tempe Rio Salado and links directly to Mesa along the south bank of the Salt River. The project involves a 10-foot wide concrete path with lighting and safety railings. The project is funded through a federal transportation grant managed through the Arizona Department of Transportation. Majority of the project funding is identified in the ADOT budget and the Tempe match/local leverage is identified in this form.							
Project Purpose and Need: The project provides a non-motorized link along a regionally significant riparian corridor between 2 major centers, Tempe Marketplace and Mesa Riverview. Additionally, the project will eliminate the main obstruction connecting Tempe to Mesa and will link to the Scottsdale Indian Bend Wash, Rio Salado, Downtown Tempe, Arizona State University, and Metro Light Rail. Finally the project is located in a Tempe Enterprise Zone which supports Tempe City Council's efforts to revitalize areas that serve low income neighborhoods. This path project continues the Tempe Rio Salado pathway from McClintock to the Mesa city limits.							
Prior Fiscal Year Funding: This project received FY 2014-15 appropriations in the amount of \$996,279.							
		Estimated Future Costs					
		2015-16 Request	2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated		678,302					
New Appropriation Request		-					
Total Estimated Project Costs		678,302	-	-	-	-	678,302
Project Funding Sources							
Transit Tax		678,302	-	-	-	-	678,302
New Operating Budget Impacts		None					

Project No. 6004130 Name: Rio Salado Southbank Path Tempe - Phoenix						
Department: Public Works		Project Location: Rio Salado S. Path Priest / SR143				
Est. Start Date: 07/01/10		Est. Completion Date: 06/30/16				
Project Description: The Project provides funding for the design and construction of a continuation of the Tempe Rio Salado multi-use path system. This segment would extend from Priest Drive to State Road 143 on the western city limit of Tempe. The path would be on the south bank of the river channel. The project is part of a regional path network connecting specifically to Phoenix. This project is only for hardscape elements, including pathway, lighting, and railings. The project does not include landscaping or public art; both of which could be added later or in partnership with adjacent private development. The character of the project area is native desert. The project would require only lighting and pavement management operations costs. The project construction is funded by federal transportation grants.						
Project Purpose and Need: The project would extend the regional multi-use path system to the City of Phoenix and Tempe. This project is the final west end path piece of the Rio Salado path system and would complete the path system on the south bank of the Rio Salado from McClintock Drive to the Hohokam Freeway for a total of 4 miles. An additional \$460k is being requested for FY14-15 to complete funding for path lighting. Total estimated cost for path lighting is estimated at \$750k and current appropriation available for lighting is \$979,368k.						
Prior Fiscal Year Funding: This project received FY 2014-15 appropriations in the amount of \$2,117,041.						
	2015-16 Request	Estimated Future Costs				
		2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	979,368					
New Appropriation Request	-					
Total Estimated Project Costs	979,368	-	-	-	-	979,368
Project Funding Sources						
Transit Tax	979,368	-	-	-	-	979,368
New Operating Budget Impacts None						

Project No. 6007180 Name: Rio Salado Southbank Path Underpass @ Priest Drive						
Department: Public Works		Project Location: Rio Salado S. Bank - Priest				
Est. Start Date: 07/01/14		Est. Completion Date: 06/30/17				
Project Description: This project is the construction of a bicycle/pedestrian path underpass at Priest Drive along the south bank of the Rio Salado. The project will connect to an existing path on the east side of Priest and to another path on the west side that will be constructed in 2013. The project will be concrete and lit and meet all ADA requirements and will provide emergency vehicle access.						
Project Purpose and Need: This project provides an accessible and safe crossing under Priest Drive for the Rio Salado Path users, where today none exists. The project will link a more than 5 miles system of paths along the Rio Salado and Town Lake area.						
Prior Fiscal Year Funding: This project received FY 2014-15 appropriations in the amount of \$1,245,000.						
	2015-16 Request	Estimated Future Costs				
		2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	69,707					
New Appropriation Request	1,631,000					
Total Estimated Project Costs	1,700,707	250,000	-	-	-	1,950,707
Project Funding Sources						
Transit Tax	535,311	13,250	-	-	-	548,561
Federal Grant - CMAQ	1,165,396	236,750	-	-	-	1,402,146
Total Sources	1,700,707	250,000	-	-	-	1,950,707
New Operating Budget Impacts None						

Project No. 6007190 Name: Tempe / Phoenix Bike Share						
Department: Public Works		Project Location: city wide				
Est. Start Date: 07/01/14		Est. Completion Date: 12/01/15				
Project Description:						
<p>The Regional Bike Share program will include multiple cities and Valley Metro and will provide 20 or more locations in Tempe for rental of bicycles at automated bicycle rack kiosks. The kiosks will be in City right-of-way and in high activity areas like downtown Tempe, Tempe Town Lake, the Tempe Public Library, and the Tempe Center for the Arts. The capital funds for the project are through a federal grant and the operations will be contracted through an RFP process, with no operating impacts to the City. The project is modelled after other cities and is similar to the nationwide Zipcar program, which also operates in Tempe, where the public has ease of access to renting a car. The project will include a public process to identify best locations for racks and bikes and will be a partnership with Valley Metro and other cities.</p>						
Project Purpose and Need:						
<p>The bike share project is intended to provide additional sustainable transportation opportunities in Tempe and the region. It will provide enhanced bicycle service access that will link directly to transit options. Bike share is a successful program in other cities nationwide and is a logical extension of the Tempe system. It will enable visitors, students, residents and others to obtain a bike easily in most activity areas around Tempe and further improve Tempe's menu of alternative mode options.</p>						
Prior Fiscal Year Funding:						
This project received FY 2014-15 appropriations in the amount of \$350,000.						
	2015-16	Estimated Future Costs				
	Request	2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	350,000					
New Appropriation Request	951,300					
Total Estimated Project Costs	1,301,300	-	-	-	-	1,301,300
Project Funding Sources						
Transit Tax	551,300	-	-	-	-	551,300
Federal Grant - CMAQ	750,000	-	-	-	-	750,000
Total Sources	1,301,300	-	-	-	-	1,301,300
New Operating Budget Impacts						
Supplies and Services	100,000	100,000	100,000	100,000	100,000	

Project No. 6003570 Name: Transit Passenger Facilities - Bus Stop Improvements						
Department: Public Works		Project Location: City Wide				
Est. Start Date: Ongoing		Est. Completion Date: Ongoing				
Project Description:						
The project will install passenger shelters and related amenities (seating, bike racks, trash cans, transit schedule information) at 10 bus stops across the city in FY 2014-15 with 5 installations in each of the subsequent 4 fiscal years. Locations identified as suitable for installation of a bus stop shelter and associated amenities include stops that meet the following criteria: location is served by at least one bus route with productivity at or above 2.0 boardings per mile; and immediate physical environment offers no weather/sun protection or seating.						
Project Purpose and Need:						
The bus stop represents the "lobby" to the transit system and must provide a safe, secure, and comfortable waiting area with adequate sun and weather protection for transit passengers. Adding additional bus shelters remains a top priority for Tempe and valley transit passengers as reported in public opinion research as the valley's high sun and heat are significant barriers to more Tempe residents choosing transit as an viable alternative to auto-use.						
Prior Fiscal Year Funding:						
This project received FY 2014-15 appropriations in the amount of \$539,714.						
	2015-16 Request	Estimated Future Costs				
		2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	474,469					
New Appropriation Request	190,600					
Total Estimated Project Costs	665,069	202,640	227,720	234,142	240,726	1,570,297
Project Funding Sources						
Transit Tax	665,069	202,640	227,720	234,142	240,726	1,570,297
New Operating Budget Impacts	None					

Project No. 6006099 Name: TTC - Facility Asset Maintenance (Transportation Center)

Department: Public Works **Project Location:** 200 E 5th Street
Est. Start Date: 07/01/13 **Est. Completion Date:** Ongoing



Project Description:

This project conducts major repair, refurbishment, or replacement of major equipment, infrastructure, and sub-systems at the Tempe Transportation Center. The facility was completed in 2008 and acts as a major multi-modal transit center served by 12 bus routes which include Orbit circulators, local and express service and by METRO light rail. The transit center portion of the transit center includes passenger amenities such as benches, shelters, landscape, a transit store and public restrooms. Due to its proximity to downtown Tempe and ASU activity centers, the center experiences heavy use during City or university related special events and during moderate climate seasons.

In FY 2015-16 it is anticipated that the project will address repairs and maintenance at the transit center such as pavement repair and restoration, rest room refurbishment, plaza repairs and building systems replacement or repair which include chillers, water recycle system. In addition, funding will cover tenant improvements for the 1st floor retail space upon lease execution (3rd space available)


Project Purpose and Need:


The Tempe Transportation Center was designed as LEED Platinum (application pending) mixed-use inter-modal transit center and an office and retail building. The building is occupied by city staff and private firms and includes meeting space that is open for use by members of the community. The transit center includes a 13 bay bus plaza that is also adjacent to a major light rail station. Maintaining the building and transit center in a state of good repair maintains good working condition for staff and tenants while ensuring the site is safe and functional for transit operations and public use.

Prior Fiscal Year Funding:

This project received FY 2014-15 appropriations in the amount of \$514,000.

	2015-16	Estimated Future Costs				Total
	Request	2016-17	2017-18	2018-19	2019-20	
Prior Funding Re-appropriated	398,394					
New Appropriation Request	269,000					
Total Estimated Project Costs	667,394	269,000	269,000	269,000	269,000	1,743,394
Project Funding Sources						
Transit Tax	667,394	269,000	269,000	269,000	269,000	1,743,394
New Operating Budget Impacts	None					

Project No. 6005239 Name: Unaccounted Federal Grants Contingency						
Department: Public Works		Project Location: Undetermined				
Est. Start Date: 07/01/13		Est. Completion Date: Ongoing				
Project Description: This Project will create additional spending authority for federal grants that may be available during FY 2015-16. The City must account for potential federal grants that could be secured and that need to be spent within 2013-2014. Potential grant funded projects include: a) South Tempe Transit Center; b) University Drive Bicycle and Pedestrian Improvements; c) EVBOM CNG Fuel Capacity Expansion; d) East Valley Solar Generation Capacity Improvements; e) Passenger Facility Rehabilitation; and f) Bus Stop Improvements. The appropriation carryforward is reduced by \$500,000 to offset increase in EVBOM asset maintenance						
Project Purpose and Need: Provide contingent budget appropriation for mid-year grant awards.						
Prior Fiscal Year Funding: This project received FY 2014-15 appropriations in the amount of \$2,652,142.						
	2015-16 Request	Estimated Future Costs				
		2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	2,652,142					
New Appropriation Request	-					
Total Estimated Project Costs	2,652,142	-	-	-	-	2,652,142
Project Funding Sources						
Transit Tax	530,428	-	-	-	-	530,428
Federal Grants	2,121,714	-	-	-	-	2,121,714
Total Sources	2,652,142	-	-	-	-	2,652,142
New Operating Budget Impacts	None					

Project No. 6007209	Name: US Army Corps Match Money	
Department: Community Development	Project Location: North Bank Salt River- IBW to McClintock Dr	
Est. Start Date: 03/01/15	Est. Completion Date: 12/31/15	

Project Description:

The project is for approximately 2.5 acres of habitat restoration and three-quarters mile of path between Indian Bend Wash and McClintock Drive to support wildlife observation and recreation. Environmental enhancement of the Salt River and levees as part of the ongoing U.S. Army Corps of Engineers (USACE) and Tempe partnership. Project design costs are 50% funded by USACE and project construction is 65% funded by USACE. Project's recreational component capital costs (signs, recreation amenities) are 50% funded by USACE. Project monitoring and maintenance is 100% City of Tempe cost. Phase 3 project is along the Salt River north bank from IBW to McClintock Drive. The amount requested for CIP construction is \$801,000. Operating budget additions for landscape maintenance starting in 2015-2016 include O&M costs for the portion of the path that was completed in November 2010.

Project Purpose and Need:

This project provides the required balance of City of Tempe match and operating funds for the US Army Corps of Engineers (USACE) Habitat Restoration Project, Rio Salado Tempe Reach, Phase 3. Funding requirements include project design modification and construction, monitoring programs and maintenance. See C-95-204 (Feasibility, cost sharing agreement with USACE), C-95-205 (IGA between Tempe and Phoenix) and C2003-11 (project cooperation agreement with USACE). This request is asking for \$810,000 in additional funding from the City, which will be use to complete construction and final project close out for all three phases of a 140-acre, 15-year environmental restoration project and a missing link in the planned path system of Rio Salado. This ¼ mile path completes a 6.8 mile loop between Priest Drive and McClintock

- This loop is slightly over a 10K walking or biking distance, ideal for individual recreation pursuits and organized walking and biking events at Rio Salado.
- 2.5 acres of planted area will provide an attractive setting for this new segment of path, in addition to the nature observation opportunities already available within this segment.
- Effective leveraging City funds with federal dollars. The city share is between 35% and 50% of the total project cost.

Prior Fiscal Year Funding:

This project received FY 2014-15 appropriations in the amount of \$284,000.


	2015-16	Estimated Future Costs				Total
	Request	2016-17	2017-18	2018-19	2019-20	
Prior Funding Re-appropriated	-					
New Appropriation Request	810,000					
Total Estimated Project Costs	810,000	-	-	-	-	810,000
Project Funding Sources						
Transit Tax	810,000	-	-	-	-	810,000
New Operating Budget Impacts						
Supplies and Services	15,000	15,000	15,000	15,000	15,000	





Transportation and R.O.W. Program Project List and Descriptions


Page #	Project Name	Proposed Funding Source(s)	Capital Budget Re-appropriations	New 2015-16 Appropriation Request	2015-16 Total Requested Appropriation	Additional Projected Needs				Total 5-Year Program
						2016-17	2017-18	2018-19	2019-20	
Arterial, Collector, and Residential Street										
136	Asset Preservation	General Obligation Bonds	515,813	4,605,877	5,121,690	5,045,767	5,539,995	5,816,995	6,398,694	27,923,141
137	Bridge Maintenance	General Obligation Bonds	464,978	300,000	764,978	300,000	300,000	300,000	300,000	1,964,978
138	City Facility Parking Lots	General Obligation Bonds	-	380,000	380,000	50,000	50,000	50,000	50,000	580,000
138	Minor Concrete Improvements	General Obligation Bonds	-	209,300	209,300	215,579	222,046	228,708	235,569	1,111,202
139	Neighborhood Traffic Calming	General Obligation Bonds	-	100,000	100,000	-	-	-	-	100,000
139	Potential Federal Grants Contingency	Federal Grants	999,220	-	999,220	-	-	-	-	999,220
140	Railroad Quiet Zone	Capital Projects Fund Balance	251,000	-	251,000	-	-	-	-	251,000
		General Obligation Bonds	-	-	-	750,000	-	-	-	750,000
		Federal Railroad Safety Grant	229,000	-	229,000	350,000	-	-	-	579,000
		Project Total	480,000	-	480,000	1,100,000	-	-	-	1,580,000
ROW Landscape Replacement and Revitalization										
141		Highway User Revenue Fund	31,577	300,000	331,577	300,000	300,000	300,000	300,000	1,531,577
		General Obligation Bonds	-	300,000	300,000	-	-	-	-	300,000
		Project Total	31,577	600,000	631,577	300,000	300,000	300,000	300,000	1,831,577
Rural Rd & Southern Ave Intersection Improvements										
142		General Obligation Bonds	-	268,000	268,000	-	-	-	-	268,000
		Federal Safety Grant	-	-	-	2,750,000	-	-	-	2,750,000
		Development Impact Fees	-	TBD	TBD	TBD	-	-	-	TBD
		Project Total	-	268,000	268,000	2,750,000	-	-	-	3,018,000
Rural Rd & University Dr Intersection Improvements										
143		General Obligation Bonds	-	-	-	610,000	-	-	-	610,000
		Federal Safety Grant	-	-	-	-	5,000,000	-	-	5,000,000
		Development Impact Fees	-	-	-	TBD	TBD	-	-	TBD
		Project Total	-	-	-	610,000	5,000,000	-	-	5,610,000
Transportation and R.O.W. Program Total			2,491,588	6,463,177	8,954,765	10,371,346	11,412,041	6,695,703	7,284,263	44,718,118


The table above lists the individual projects that comprise the Transportation and R.O.W. Program and the associated five-year funding requests. The detailed project descriptions and justifications are provided on the pages that follow.


Project No. 5499741 Name: Arterial, Collector, and Residential Street Asset Preservation						
Department: Public Works		Project Location: Citywide				
Est. Start Date: Ongoing		Est. Completion Date: Ongoing				
Project Description: This project provides for the reconstruction, resurfacing, and rehabilitation of arterial, collector and residential streets that have exceeded their design life or are in need of maintenance as part of the pavement asset management program. Improvements are necessary to ensure accessibility and safety for residents and businesses on Tempe's streets and to accommodate all modes of traffic including pedestrians, bicyclists, and vehicular traffic. Depending on the condition of the pavement structure, different maintenance treatments are available which can be used to extend the life of the system. These include (in order of cost): crack seal, seal coat, slurry seal, chip seal, Mill and Overlay and the most expensive is a reconstruction.						
Project Purpose and Need: Reconstructing, resurfacing and rehabilitating arterial/collector/residential streets increases the strength and the durability of the roadway, while decreasing maintenance costs. This project is an important component of our strategic plan to maintain/preserve the 1241 lanes miles of asphalt roadways (447 Arterial Lane Miles, 107 Collector Lane Miles, 72 Industrial Lane Miles, and 615 Local Lane Miles) in good condition. To account for the unpredictable nature of oil prices an additional 10% was added to the outlying fiscal years. If funded, the street segments selected by staff with the help of Roadmatrix will be maintained according to their PQL.						
Prior Fiscal Year Funding: This project received FY 2014-15 appropriations in the amount of \$4,693,006.						
	2015-16 Request	Estimated Future Costs				
		2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	515,813					
New Appropriation Request	4,605,877					
Total Estimated Project Costs	5,121,690	5,045,767	5,539,995	5,816,995	6,398,694	27,923,140
Project Funding Sources						
General Obligation Bonds	5,121,690	5,045,767	5,539,995	5,816,995	6,398,694	27,923,141
New Operating Budget Impacts	None					

Project No. 5499891 Name: Bridge Maintenance						
Department: Public Works		Project Location: Various				
Est. Start Date: 07/01/15		Est. Completion Date: Ongoing				
Project Description:						
<p>In the report described below, ADOT identifies specific repairs and maintenance required and quantifies the estimated cost to make the repairs. The City updates these costs for construction inflation and determines current costs. The scope of work includes replacement of damaged joints, joint seals and diaphragms, cleaning debris out of the joints to allow them to function properly, posting of vertical clearance signs, repair of damaged structural members and guardrail, replacement of missing bolts and nuts from railings, correction of settlement at abutments, rehabilitation of bridge decks, and miscellaneous other items. This is done to assure that the bridges are safe and in good repair. The design plans per the most recent report has recently been designed and construction will commence when low bidder is determined.</p>						
Project Purpose and Need:						
<p>Federal law mandates the inspection of all bridges in the country every two (2) years. ADOT has been inspecting Tempe's bridges for many years and submitting a report to the City for required repairs and maintenance. Currently, ADOT inspects 32 bridges for the City in which all are at least twenty years old or older. Repairs are prioritized based upon the sufficiency rating produced by ADOT which varies from each inspection year. The City of Tempe recently received the latest inspection report. The next scheduled inspection will be conducted in the fall of 2015.</p>						
Prior Fiscal Year Funding:						
This project received FY 2014-15 appropriations in the amount of \$491,538.						
	2015-16	Estimated Future Costs				
	Request	2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	464,978					
New Appropriation Request	300,000					
Total Estimated Project Costs	764,978	300,000	300,000	300,000	300,000	1,964,978
Project Funding Sources						
General Obligation Bonds	764,978	300,000	300,000	300,000	300,000	1,964,978
New Operating Budget Impacts	None					

Project No.		Name: City Facility Parking Lots					
Department:	Public Works	Project Location:	Citywide				
Est. Start Date:	07/01/15	Est. Completion Date:	Ongoing				
							
Project Description:							
<p>Over time, the condition of the city's parking lots has continued to deteriorate. As with the street system, the deferred maintenance of this asset will continue to increase costs necessary to maintain the lots at a safe and acceptable level. Staff will work with a consultant to identify costs which will analyze the condition of the assets. Currently identified lots (assets) include 25 north of the US 60 and 16 south of the US 60 totaling approximately 4.3 million square feet. Similar to the PQI levels identified for the streets, the information on the condition of the parking lots will then be used to prioritize the maintenance over a period of time. Appropriate levels of maintenance will also be identified including sealing, resurfacing and reconstruction. The majority of the city's parking lots exist at community facilities and would fall under requests using general obligation bonds while the remaining areas would be funded by the appropriate special revenue funds. The city also has contractual agreements where we are required to maintain lots. This program would create a system to strategically address these assets on a ongoing basis.</p>							
Project Purpose and Need:							
<p>Maintain city facility parking lots to prevent costly reconstruction and repairs. This project is a component of our overall strategic plan to preserve and maintain city pavements in good condition. This years CIP will address parking lots at the following locations: Tempe Sports Complex (Estimated Cost = \$300,000) and the south Tempe police substation on Carver Rd (Estimated Costs = \$50K). Funding requests in years 2-5 will be based on the results of the consultant's evaluation.</p>							
Prior Fiscal Year Funding:							
<p>This project did not receive FY 2014-15 appropriations, and was not included in the adopted FY 2014-15 five year CIP.</p>							
		2015-16		Estimated Future Costs			
		Request	2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated		-					
New Appropriation Request		380,000					
Total Estimated Project Costs		380,000	50,000	50,000	50,000	50,000	580,000
Project Funding Sources							
General Obligation Bonds		380,000	50,000	50,000	50,000	50,000	580,000
New Operating Budget Impacts		None					

Project No.		Name: Minor Concrete Improvements					
Department:	Public Works	Project Location:	Citywide				
Est. Start Date:	Ongoing	Est. Completion Date:	Ongoing				
							
Project Description:							
<p>This project supplements the City's concrete program and the strategy of utilizing city forces (two employees) to handle smaller less complex jobs. This project will provide for peak demands and emergency replacement of broken curbs, gutters, and sidewalks throughout the city. Other uses of the project include the construction of curbs, gutters, sidewalks and ADA accessible ramps to improve the continuity of the infrastructure and to improve accessibility and mobility for pedestrians in various areas. This project is also used in emergency call out situations as needed. Funds for the project will allow for approximately 18,000 square feet of minor concrete repair per year.</p>							
Project Purpose and Need:							
<p>A cost effective way of quickly repairing concrete damages of the estimated 5.0 million lineal feet of curb, gutter an sidewalk. Funding this project is crucial to the citizens by providing safe and easily traversable pedestrian access throughout the city.</p>							
Prior Fiscal Year Funding:							
<p>This project received FY 2014-15 appropriations in the amount of \$250,501.</p>							
		2015-16		Estimated Future Costs			
		Request	2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated		-					
New Appropriation Request		209,300					
Total Estimated Project Costs		209,300	215,579	222,046	228,708	235,569	1,111,202
Project Funding Sources							
General Obligation Bonds		209,300	215,579	222,046	228,708	235,569	1,111,202
New Operating Budget Impacts		None					

Project No.	TBD	Name: Neighborhood Traffic Calming				
Department:	Public Works	Project Location: Various				
Est. Start Date:	07/01/15	Est. Completion Date: Ongoing				
Project Description:						
This project will provide the Transportation Division with resources to strengthen its ability to address neighborhood traffic concerns, such as the installation of traffic calming devices, including speed humps. Staff continue to receive requests from residents to install devices to help in addressing neighborhood quality of life issues related to speeding and cut-through.						
Project Purpose and Need:						
While the program was placed on hold, Transportation staff maintained a list of projects which had completed the process prior to removal of funding as well as a waiting list of residents interested in participating in the program. Currently, two street segments have qualified for the installation of speed humps and all necessary requirements of the program have been met. In addition, the waiting list contains 36 requests to participate in the process. Approval of funding for this project would allow staff to once again work with residents to address their safety concerns.						
Prior Fiscal Year Funding:						
This project did not receive FY 2014-15 appropriations, and was not included in the adopted FY 2014-15 five year CIP.						
	2015-16 Request	Estimated Future Costs				
		2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	-					
New Appropriation Request	100,000					
Total Estimated Project Costs	100,000	-	-	-	-	100,000
Project Funding Sources						
General Obligation Bonds	100,000	-	-	-	-	100,000
New Operating Budget Impacts	None					

Project No.	5406139	Name: Potential Federal Grants Contingency				
Department:	Public Works	Project Location: Undetermined				
Est. Start Date:	07/01/15	Est. Completion Date: 06/30/16				
Project Description:						
This Project will create additional spending authority for federal grants that may be available during FY2015-16. The City must account for potential federal grants that could be secured and that need to be spent within 2015-2016.						
Project Purpose and Need:						
Provide contingent budget appropriation for mid-year grant awards.						
Prior Fiscal Year Funding:						
This project received FY 2014-15 appropriations in the amount of \$1,000,000.						
	2015-16 Request	Estimated Future Costs				
		2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	999,220					
New Appropriation Request	-					
Total Estimated Project Costs	999,220	-	-	-	-	999,220
Project Funding Sources						
Federal Grants	999,220	-	-	-	-	999,220
New Operating Budget Impacts	None					

Project No. 5401901 Name: Railroad Quiet Zone

Department: Public Works **Project Location:** Various
Est. Start Date: Ongoing **Est. Completion Date:** 06/30/16



Project Description:

In January 2012, the City of Tempe, in conjunction with the Union Pacific Railroad and the regulatory agencies of the Federal Railroad Administration and the Arizona Corporation Commission, established a railroad quiet zone in Tempe. This established quiet zone includes the mainline portion of the Union Pacific Railroad north of Broadway Road from our city limit with Phoenix to our city limit with Mesa.

This capital project would extend the quiet zone along the six mile Union Pacific Railroad industrial spur line which begins at the 13th Street railroad crossing immediately east of Farmer Avenue, traveling south to the Warner Road crossing approximately one quarter mile west of Kyrene Road. Like the existing quiet zone, this quiet zone extension would require approvals by the Arizona Corporation Commission, Union Pacific Railroad and Federal Railroad Administration.

Project Purpose and Need:

The establishment of the industrial spur quiet zone would prohibit the sounding of train horns at all highway rail crossing except in certain safety situations determined by the judgment of the train engineer. It is the intent of the project to establish quiet zone conditions at the Broadway Road, Alameda Drive, Southern Avenue, Baseline Road, Guadalupe Road, Divot Drive, Elliot Road, Carver Lane and Warner Road rail crossings along the spur line. To note, particular attention will be given to the rail crossing through the Elliot / Kyrene intersection due to its unique conditions.

In addition to the regulatory approvals, supplemental safety measures will be required that may include traffic warning signs and striping, extended raised center medians, extended crossing gates, or wayside horns. A safety index evaluation is required by the regulatory agencies and notification to area residents and businesses is also required.

Prior Fiscal Year Funding:

This project received FY 2014-15 appropriations in the amount of \$1,042,153.

	2015-16		Estimated Future Costs				Total
	Request	2016-17	2017-18	2018-19	2019-20		
Prior Funding Re-appropriated	480,000						
New Appropriation Request	-						
Total Estimated Project Costs	480,000	1,100,000	-	-	-	-	1,580,000
Project Funding Sources							
Capital Projects Fund Balance	251,000	-	-	-	-	-	251,000
General Obligation Bonds	-	750,000	-	-	-	-	750,000
Federal Railroad Safety Grant	229,000	350,000	-	-	-	-	579,000
Total Sources	480,000	1,100,000	-	-	-	-	1,580,000
New Operating Budget Impacts	None						

Project No. 5406149 Name: ROW Landscape Replacement and Revitalization

Department: Public Works **Project Location:** Citywide
Est. Start Date: 07/01/15 **Est. Completion Date:** Ongoing



Project Description:

In 2008 the City had a landscape C.I.P. fund balance of approximately \$300,000 to invest in renovations, with a five year plan of investing \$150,000 to \$200,000 annually. In 2009, the City renovated approximately 213,756 square feet of ROW. From 2009 to 2013, no C.I.P. funding was available to continue the asset-based renovation program.

In 2013, 89,000 square feet was redeveloped with a \$300,000 budget. This included all of the medians on Scottsdale Road from Curry to Roosevelt Streets. The ROWs on McClintock from Baseline to Guadalupe and the medians on Broadway Road from Priest to 48th Street were renovated. All landscaping areas updated also had solar clocks installed to operate the irrigation timers.

The areas slated for completion in 2014 are Elliot Road from the I-10 freeway to Rural Road, McClintock Road from Guadalupe to Elliot Road, McClintock Road from Southern to the US 60 freeway, and Curry Road from Miller Road to McClintock.

For 2015, the ROWs surrounding the redevelopment areas from Priest to Price on Rio Salado Parkway are scheduled to be updated due to the new building construction projects currently underway. These building projects should be completed in 2015 and at such time, the landscaping will require enhancements due to the degradation of the areas from the construction traffic. In addition, the ROW re-vegetation program is scheduled for McClintock Road from Elliot to the Tempe border.

In order to re-vegetate and recondition significant landscape segments of arterial ROW, an average of \$300,000 to \$400,000 should be budgeted annually to include plantings and necessary maintenance. As part of this effort, recognition towards maintaining the new plants including trimming within the first 3-5 years needs to be considered. The additional funding request in 2015-16 is to begin implementation of the Urban Forest Master Plan and to support the efforts identified above.


Project Purpose and Need:

The City of Tempe's right of way and median landscape consists of an eclectic mix of trees and shrubs covering over 6.5 million square feet of landscape maintained. There is an inventory of over 7,000 City street trees valued at over \$16 million which also serves to support clean air and clean water goals. There is a mixture of public, home-owner association, and commercial development properties that blend together along with City arterials. In many areas the ROW landscaping is showing incredible signs of decline, including plant stress and decimation. Recent construction and revitalization projects for both buildings and streets have also taken their toll on the landscaping. This request would support the replacement and regeneration of the ROW landscape areas.

Prior Fiscal Year Funding:

This project received FY 2014-15 appropriations in the amount of \$400,000.

	2015-16	Estimated Future Costs				Total
	Request	2016-17	2017-18	2018-19	2019-20	
Prior Funding Re-appropriated	31,577					
New Appropriation Request	600,000					
Total Estimated Project Costs	631,577	300,000	300,000	300,000	300,000	1,831,577
Project Funding Sources						
Highway User Revenue Fund	331,577	300,000	300,000	300,000	300,000	1,531,577
General Obligation Bonds	300,000	-	-	-	-	300,000
Total Sources	631,577	300,000	300,000	300,000	300,000	1,831,577
New Operating Budget Impacts	None					

Project No.		Name: Rural Rd & Southern Ave Intersection Improvements				
Department:	Public Works	Project Location:	Rural Rd & Southern Ave			
Est. Start Date:	07/01/15	Est. Completion Date:	06/30/17			
						
Project Description:						
<p>The City of Tempe's Transportation Division is tasked with providing residents and visitors with a safe and efficient transportation system. As part of a continuing transportation safety program, Traffic Engineering staff proactively identifies potential locations within the City that could benefit from the implementation of traffic safety measures. In addition, through review of traffic counts, staff monitors traffic volumes on arterial roadways. This project will construct safety and capacity improvements at the intersection of Rural Road and Southern Avenue. Improvements will include construction of additional turn lanes (left-turn and right-turn) and improvements to the traffic signal, sidewalks (including ADA), lighting, striping, and transit stops.</p>						
Project Purpose and Need:						
<p>The intersection of Rural Rd and Southern Avenue continues to show up in our safety program as a potential location for safety improvements. Most recently it ranked #2 in the City of Tempe's "Top 100 High Crash Intersections" and ranked #1 in the Maricopa Association of Governments' (MAG) "Top 100 Intersection Crashes" in the MAG Region. Additionally, in 2011 this intersection was identified by the Arizona Department of Transportation (ADOT) in the statewide "Top 5% Intersection Safety Transparency Report." Based on the findings of a Road Safety Assessment in 2013 and a recently completed Project Assessment, staff has identified intersection improvements that will help to mitigate safety issues and improve capacity at this intersection.</p>						
How the project provides necessary public services to accommodate new development (need and benefit)						
<p>During peak traffic hours, this intersection is operating at or near capacity. Further demand on this facility resulting from new developments could potentially lead to over-capacity, significantly increased levels of delay, congestion, and additional safety related issues. Construction of intersection improvements can improve capacity and safety for all users.</p>						
Prior Fiscal Year Funding:						
This project did not receive FY 2014-15 appropriations, and was not included in the adopted FY 2014-15 five year CIP.						
	2015-16	Estimated Future Costs				
	Request	2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	-					
New Appropriation Request	268,000					
Total Estimated Project Costs	268,000	2,750,000	-	-	-	3,018,000
Project Funding Sources						
General Obligation Bonds	268,000	-	-	-	-	268,000
Federal Safety Grant	-	2,750,000	-	-	-	2,750,000
Development Impact Fees	TBD	TBD	-	-	-	TBD
Total Sources	268,000	2,750,000	-	-	-	3,018,000
New Operating Budget Impacts	None					

Project No.	TBD	Name:	Rural Rd & University Dr Intersection Improvements
Department:	Public Works	Project Location:	Rural Rd & Southern Ave
Est. Start Date:	07/01/16	Est. Completion Date:	06/30/18



Project Description:

The City of Tempe's Transportation Division is tasked with providing residents and visitors with a safe and efficient transportation system. As part of a continuing transportation safety program, Traffic Engineering staff proactively identifies potential locations within the City that could benefit from the implementation of traffic safety measures. In addition, through review of traffic counts, staff monitors traffic volumes on arterial roadways. This project will construct safety and capacity improvements at the intersection of Rural Road and University Drive. Improvements will likely include construction of additional turn lanes (left-turn and right-turn) and improvements to the traffic signal, sidewalks (including ADA), lighting, striping, and transit stops.

Project Purpose and Need:

The intersection of Rural Rd and University Dr continues to show up in our safety program as a potential location for safety improvements. Most recently it ranked #1 in the City of Tempe's "Top 100 High Crash Intersections" and ranked #70 in the Maricopa Association of Governments' (MAG) "Top 100 Intersection Crashes" in the MAG Region. Based on the findings of a Road Safety Assessment in 2013, Tempe will pursue MAG sponsored assistance to complete a Project Assessment which will assist staff with identifying intersection improvements that will help to mitigate safety issues and improve capacity at this intersection.

How the project provides necessary public services to accommodate new development (need and benefit)

During peak traffic hours, this intersection is operating at or near capacity. Further demand on this facility resulting from new developments could potentially lead to over-capacity, significantly increased levels of delay, congestion, and additional safety related issues. Construction of intersection improvements can improve capacity and safety for all users.

Prior Fiscal Year Funding:

This project did not receive FY 2014-15 appropriations, and was not included in the adopted FY 2014-15 five year CIP.

	2015-16	Estimated Future Costs				Total
	Request	2016-17	2017-18	2018-19	2019-20	
Prior Funding Re-appropriated	-					
New Appropriation Request	-					
Total Estimated Project Costs	-	610,000	5,000,000	-	-	5,610,000
Project Funding Sources						
General Obligation Bonds	-	610,000	-	-	-	610,000
Federal Safety Grant	-	-	5,000,000	-	-	5,000,000
Development Impact Fees	-	TBD	TBD	-	-	TBD
Total Sources	-	610,000	5,000,000	-	-	5,610,000
New Operating Budget Impacts	None					



Traffic Signals and Street Lighting Program Project List and Descriptions

Page #	Project Name	Proposed Funding Source(s)	Capital Budget Re-appropriations	New 2015-16 Appropriation Request	2015-16 Total Requested Appropriation	Additional Projected Needs				Total 5-Year Program
						2016-17	2017-18	2018-19	2019-20	
	East Valley Arterial Congestion									
146	Monitoring	General Obligation Bonds	50,000	49,997	99,997	-	-	-	-	99,997
		Federal Grant - CMAQ	-	165,388	165,388	-	-	-	-	165,388
		Development Impact Fees	-	TBD	TBD	-	-	-	-	TBD
		Project Total	50,000	215,385	265,385	-	-	-	-	265,385
	Fiber Optic Installation & ITS Improv:									
147	Elliot, Guadalupe and Warner	Capital Projects Fund Balance	18,179	-	18,179	-	-	-	-	18,179
		General Obligation Bonds	-	164,286	164,286	-	-	-	-	164,286
		Federal Grant - CMAQ	-	383,333	383,333	-	-	-	-	383,333
		Development Impact Fees	-	TBD	TBD	-	-	-	-	TBD
		Project Total	18,179	547,619	565,798	-	-	-	-	565,798
	Fiber Optic Installation and ITS Improv:									
148	Broadway/I-10 and Rio Salado/L101	General Obligation Bonds	-	17,394	17,394	-	-	-	-	17,394
		Federal Grant - CMAQ	28,500	287,751	316,251	-	-	-	-	316,251
		Development Impact Fees	-	TBD	TBD	-	-	-	-	TBD
		Project Total	28,500	305,145	333,645	-	-	-	-	333,645
	Fiber Optic Installation: Rural Road									
149	North	Highway User Revenue Fund	200,000	-	200,000	-	-	-	-	200,000
		General Obligation Bonds	-	-	-	59,455	-	-	-	59,455
		Federal Grant - CMAQ	-	-	-	983,626	-	-	-	983,626
		Development Impact Fees	-	TBD	TBD	TBD	-	-	-	TBD
		Project Total	200,000	-	200,000	1,043,081	-	-	-	1,243,081
	Fiber Optic Installation: Rural Road									
150	<u>South</u>	General Obligation Bonds	-	19,000	19,000	-	53,639	-	-	72,639
		Federal Grant - CMAQ	-	-	-	-	887,389	-	-	887,389
		Development Impact Fees	-	TBD	TBD	TBD	TBD	-	-	TBD
		Project Total	-	19,000	19,000	-	941,028	-	-	960,028
	Light Rail Efficiency Improvement at									
151	<u>University Dr</u>	General Obligation Bonds	-	75,000	75,000	500,000	-	-	-	575,000
		Development Impact Fees	-	TBD	TBD	TBD	-	-	-	TBD
		Project Total	-	75,000	75,000	500,000	-	-	-	575,000
	New Signals / Safety Upgrades									
152		Highway User Revenue Fund	162,621	17,379	180,000	-	-	-	-	180,000
		Developer Assistance	180,000	-	180,000	-	-	-	-	180,000
		Project Total	342,621	17,379	360,000	-	-	-	-	360,000
	Rural Rd Light Rail Intersection									
152	<u>Improvement</u>	General Obligation Bonds	-	125,000	125,000	-	-	-	-	125,000



Traffic Signals and Street Lighting Program Project List (continued)

Page #	Project Name	Proposed Funding Source(s)	Capital Budget Re-appropriations	New 2015-16 Appropriation Request	2015-16 Total Requested Appropriation	Additional Projected Needs				Total 5-Year Program
						2016-17	2017-18	2018-19	2019-20	
153	Streetlight Pole Structural Replacement	General Obligation Bonds	-	250,000	250,000	300,000	300,000	300,000	300,000	1,450,000
153	Streetlight Upgrade / New Install	General Obligation Bonds	-	250,000	250,000	300,000	300,000	300,000	300,000	1,450,000
154	Traffic Signal Foundation	General Obligation Bonds	54,534	75,000	129,534	150,000	150,000	150,000	150,000	729,534
154	Traffic Signal Green Sign Face Replacement	General Obligation Bonds	-	50,000	50,000	100,000	100,000	100,000	100,000	450,000
Traffic Signals and Street Lighting Program Total			693,834	1,929,528	2,623,362	2,393,081	1,791,028	850,000	850,000	8,507,471

The table above lists the individual projects that comprise the Traffic Signals and Street Lighting Program and the associated five-year funding requests. The detailed project descriptions and justifications are provided on the pages that follow.

Project No. 6907259 Name: East Valley Arterial Congestion Monitoring

Department: Public Works **Project Location:** Various
Est. Start Date: 07/01/14 **Est. Completion Date:** 06/30/16



Project Description:

Purchase and install 91 Anonymous Re-identification (ARID) Bluetooth devices in existing signal cabinets across the East Valley including 24 in Tempe. The project includes central control software for each partnering agency's TMC. The data from the devices will be shared via the Regional Archive Data System (RADS) and disseminated via a web map which may graphically display speed or congestion levels. Travel times to/from various destinations will also be calculated using the shared agency data as well as existing ADOT data. Travel times could be disseminated via the web or an arterial dynamic message sign.

Project Purpose and Need:

This project will provide partnering agencies to monitor congestion across jurisdictional boundaries and to provide real-time traveler information. Mesa and Chandler have previously installed ARID devices. This project expands their existing coverage and expands the coverage into Gilbert and Tempe. The devices will facilitate the calculation of travel times across city boundaries and incorporate ADOT data to provide travelers with information for trip making decisions. The information will be available to the public in the form of an on-line map on the City's web page.


How the project provides necessary public services to accommodate new development (need and benefit)


Adding vehicular capacity to the current transportation system through traditional methodologies (constructing new roads and/or additional lanes) is not currently supported by the Council adopted Tempe General Plan or the Transportation Master Plan. Also, with the City of Tempe approaching build-out, construction of these traditional roadway capacity projects becomes increasingly expensive and impractical. By using creative and cost-effective strategies such as Transportation Systems Management (TSM) and Intelligent Transportation Systems (ITS) technologies, the City can manage increased demand on the system while still providing for the safe and efficient movement of people and goods on the transportation network.

Prior Fiscal Year Funding:

This project received FY 2014-15 appropriations in the amount of \$50,000.

	2015-16	Estimated Future Costs				Total
	Request	2016-17	2017-18	2018-19	2019-20	
Prior Funding Re-appropriated	50,000					
New Appropriation Request	215,385					
Total Estimated Project Costs	265,385	-	-	-	-	265,385
Project Funding Sources						
General Obligation Bonds	99,997	-	-	-	-	99,997
Federal Grant - CMAQ	165,388	-	-	-	-	165,388
Development Impact Fees	TBD	-	-	-	-	TBD
Total Sources	265,385	-	-	-	-	265,385
New Operating Budget Impacts	None					

Project No. 6906179 Name: Fiber Optic Installation & ITS Improv: Elliot, Guadalupe and Warner						
Department: Public Works		Project Location: Elliot Road				
Est. Start Date: 07/01/13		Est. Completion Date: 06/30/16				
Project Description: Tempe currently uses leases phone lines to facilitate traffic signal operations. This project will use an existing conduit along Elliot for fiber optic communication to the signals. In addition, wireless radios will be used to provide communication to signals along Guadalupe and Warner to the fiber optic line on Elliot. CCTVs will be placed at the major intersections for traffic monitoring. Seventy percent of this project will be funded through a CMAQ grant as part of the MAG TIP.						
Project Purpose and Need: The project will be used to monitor and adjust signal timing through centralized command and control strategies to improve traffic flow and minimize congestion along the corridors of Elliot Rd, Guadalupe Rd, and Warner Rd. This project promotes multi-jurisdictional congestion relief by providing a platform to better coordinate traffic signals as well as responding to accidents/incidents in a more cooperative and efficient process.						
How the project provides necessary public services to accommodate new development (need and benefit) Adding vehicular capacity to the current transportation system through traditional methodologies (constructing new roads and/or additional lanes) is not currently supported by the Council adopted Tempe General Plan or the Transportation Master Plan. Also, with the City of Tempe approaching build-out, construction of these traditional roadway capacity projects becomes increasingly expensive and impractical. By using creative and cost-effective strategies such as Transportation Systems Management (TSM) and Intelligent Transportation Systems (ITS) technologies, the City can manage increased demand on the system while still providing for the safe and efficient movement of people and goods on the transportation network.						
Prior Fiscal Year Funding: This project received FY 2014-15 appropriations in the amount of \$60,000.						
	2015-16 Request	Estimated Future Costs				
		2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	18,179					
New Appropriation Request	547,619					
Total Estimated Project Costs	565,798	-	-	-	-	565,798
Project Funding Sources						
Capital Projects Fund Balance	18,179	-	-	-	-	18,179
General Obligation Bonds	164,286	-	-	-	-	164,286
Federal Grant - CMAQ	383,333	-	-	-	-	383,333
Development Impact Fees	TBD	-	-	-	-	TBD
Total Sources	565,798	-	-	-	-	565,798
New Operating Budget Impacts None						

Project No.	6906169	Name: Fiber Optic Installation and ITS Improv: Broadway/I-10 and Rio Salado/L101				
Department:	Public Works	Project Location: Various				
Est. Start Date:	07/01/13	Est. Completion Date: 06/30/16				
Project Description:						
<p>To provide the City with a reliable communications network to be able to view, monitor, and actively manage traffic conditions both on the arterial streets and at the freeway ramp intersections to reduce delay and improve traffic flow. The project will install new conduit and make use of existing conduit to provide fiber connection from ADOT's node 12 building to the signals at Broadway and Ramp K, Broadway and 48th St, and 48th St and Ramp C. Wireless radios will be installed at Broadway and Ramp L, 48th and Cotton Center, 48th and Alameda, and 48th and Southern. High speed DSL copper communications will be installed along Rio Salado and McClintock. Communications devices to be installed include fiber optic cable, pull boxes, splice closure, patch panels, fiber optic jumper cables, VDSL switches, and Ethernet switches. The project also includes purchasing and installing 22 CCTV cameras for each interchange intersection in Tempe.</p>						
Project Purpose and Need:						
<p>1) To provide communication links to the ramp intersections at the Broadway and I-10 interchange and at Rio Salado/ Loop 101 ramp intersections with fiber and wireless connections. This will complete the City's fiber backbone rings provided through ADOT's freeway system fiber. 2) To install wireless communication along 48th St on the City's western boundary. 48th St provides access to Diablo Stadium and communications and cameras will allow remote signal control during special events. 3) To install DSL copper communications along Rio Salado Pkwy and McClintock Dr in an area adjacent to a major freeway interchange and Tempe Marketplace 4) To provide CCTV cameras at McClintock and Rio Salado and all 22 interchanges within Tempe to provide "eyes on the road" to actively manage signal timing and traffic flows. The cameras will support Integrated Corridor Management (ICM) efforts to manage arterial signals during freeway incidents.</p>						
How the project provides necessary public services to accommodate new development (need and benefit)						
<p>Adding vehicular capacity to the current transportation system through traditional methodologies (constructing new roads and/or additional lanes) is not currently supported by the Council adopted Tempe General Plan or the Transportation Master Plan. Also, with the City of Tempe approaching build-out, construction of these traditional roadway capacity projects becomes increasingly expensive and impractical. By using creative and cost-effective strategies such as Transportation Systems Management (TSM) and Intelligent Transportation Systems (ITS) technologies, the City can manage increased demand on the system while still providing for the safe and efficient movement of people and goods on the transportation network.</p>						
Prior Fiscal Year Funding:						
This project received FY 2014-15 appropriations in the amount of \$51,000.						
	2015-16	Estimated Future Costs				
	Request	2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	28,500					
New Appropriation Request	305,145					
Total Estimated Project Costs	333,645	-	-	-	-	333,645
Project Funding Sources						
General Obligation Bonds	17,394	-	-	-	-	17,394
Federal Grant - CMAQ	316,251	-	-	-	-	316,251
Development Impact Fees	TBD	-	-	-	-	TBD
Total Sources	333,645	-	-	-	-	333,645
New Operating Budget Impacts	None					

Project No.	6907269	Name:	Fiber Optic Installation: Rural Road North
Department:	Public Works	Project Location:	Rural Rd, North of US 60 to city limits
Est. Start Date:	07/01/14	Est. Completion Date:	06/30/17



Project Description:

The project will install conduit and fiber in the Rural Rd corridor from US 60 north. Conduit location will vary along the route and could include installation under the roadway, under LRT, and on a bridge. Devices to be installed to complete the system include pull boxes, splice closures, patch panels, fiber optic jumper cables, and Ethernet switches. The installation will be based on the overall design of the Rural Rd fiber corridor which will be funded locally.

Project Purpose and Need:

To provide the City with a reliable communications network to be able to view, monitor, and actively manage traffic conditions. The ultimate goal is to have a hybrid fiber/wireless network that will increase communications bandwidth, eliminate the need for telephone lease lines, and improve system performance. To provide a fiber backbone through the middle of the City on Rural Rd, one of Tempe's major north-south arterial routes. The installation of fiber will provide a reliable and efficient communication corridor that will improve real time traffic signal operations, improve traffic flow, and decrease delay. A fiber backbone through the middle of the City will provide redundancies in the communications system and will allow additional wireless communications to be installed in the future. In addition, this project will provide the infrastructure that can be used for future transit operations, for traveler information, and for special event traffic management.

How the project provides necessary public services to accommodate new development (need and benefit)

Adding vehicular capacity to the current transportation system through traditional methodologies (constructing new roads and/or additional lanes) is not currently supported by the Council adopted Tempe General Plan or the Transportation Master Plan. Also, with the City of Tempe approaching build-out, construction of these traditional roadway capacity projects becomes increasingly expensive and impractical. By using creative and cost-effective strategies such as Transportation Systems Management (TSM) and Intelligent Transportation Systems (ITS) technologies, the City can manage increased demand on the system while still providing for the safe and efficient movement of people and goods on the transportation network.

Prior Fiscal Year Funding:

This project received FY 2014-15 appropriations in the amount of \$200,000.

	2015-16	Estimated Future Costs				Total
	Request	2016-17	2017-18	2018-19	2019-20	
Prior Funding Re-appropriated	200,000					
New Appropriation Request	-					
Total Estimated Project Costs	200,000	1,043,081	-	-	-	1,243,081
Project Funding Sources						
Highway User Revenue Fund	200,000	-	-	-	-	200,000
General Obligation Bonds	-	59,455	-	-	-	59,455
Federal Grant - CMAQ	-	983,626	-	-	-	983,626
Development Impact Fees	TBD	TBD	-	-	-	TBD
Total Sources	200,000	1,043,081	-	-	-	1,243,081
New Operating Budget Impacts	None					

Project No. TBD Name: Fiber Optic Installation: Rural Road South

Department: Public Works **Project Location:** Rural Rd, South of U.S. 60 to city limit
Est. Start Date: 07/01/15 **Est. Completion Date:** 06/30/18



Project Description:

The project will install conduit and fiber in the Rural Rd corridor from US 60 south to the City limits. Conduit location will vary along the route and could include installation under the roadway or behind sidewalk. Devices to be installed to complete the system include pull boxes, splice closures, patch panels, fiber optic jumper cables, and Ethernet switches. The installation will be based on the overall design of the Rural Rd fiber corridor which will be funded locally and completed in conjunction with the Rural Rd Fiber North project.

Project Purpose and Need:

To provide the City with a reliable communications network to be able to view, monitor, and actively manage traffic conditions. The ultimate goal is to have a hybrid fiber/wireless network that will increase communications bandwidth, eliminate the need for telephone lease lines, and improve system performance. To provide a fiber backbone through the middle of the City on Rural Rd, one of Tempe's major north-south arterial routes. The installation of fiber will provide a reliable and efficient communication corridor that will improve real time traffic signal operations, improve traffic flow, and decrease delay. A fiber backbone through the middle of the City will provide redundancies in the communications system and will allow additional wireless communications to be installed in the future. In addition, this project will provide the infrastructure that can be used for future transit operations, for traveler information, and for special event traffic management.


How the project provides necessary public services to accommodate new development (need and benefit)


Adding vehicular capacity to the current transportation system through traditional methodologies (constructing new roads and/or additional lanes) is not currently supported by the Council adopted Tempe General Plan or the Transportation Master Plan. Also, with the City of Tempe approaching build-out, construction of these traditional roadway capacity projects becomes increasingly expensive and impractical. By using creative and cost-effective strategies such as Transportation Systems Management (TSM) and Intelligent Transportation Systems (ITS) technologies, the City can manage increased demand on the system while still providing for the safe and efficient movement of people and goods on the transportation network.


Prior Fiscal Year Funding:


This project did not receive FY 2014-15 appropriations; however, it was included in the adopted FY 2014-15 five year CIP in FYs 2015-16 through 17-18.


	2015-16	Estimated Future Costs				Total
	Request	2016-17	2017-18	2018-19	2019-20	
Prior Funding Re-appropriated	-					
New Appropriation Request	19,000					
Total Estimated Project Costs	19,000	-	941,028	-	-	960,028
Project Funding Sources						
General Obligation Bonds	19,000	-	53,639	-	-	72,639
Federal Grant - CMAQ	-	-	887,389	-	-	887,389
Development Fees	TBD	TBD	TBD	-	-	TBD
Total Sources	19,000	-	941,028	-	-	960,028
New Operating Budget Impacts	None					


Project No.	TBD	Name: Light Rail Efficiency Improvement at University Dr				
Department:	Public Works	Project Location: University Drive at Light Rail Crossing				
Est. Start Date:	07/01/15	Est. Completion Date: 06/30/17				
Project Description:						
<p>The City of Tempe's Transportation Division is tasked with providing residents and visitors with a safe and efficient transportation system. Traffic Engineering staff spends a significant amount of time monitoring traffic and identifying potential solutions for improving capacity and reducing congestion on Tempe's transportation network. This project will increase capacity on Rural Rd and improve the efficiency of light rail vehicles at University Dr. Improvements will include new sensors and improved equipment that will minimize the amount of time that gate arms are activated on University Dr, causing congestion and delay to all users.</p>						
Project Purpose and Need:						
<p>The intersection of Rural Rd and University Dr is the busiest intersection in the City of Tempe. The light rail crossing of University Dr is only 600 feet west of this intersection. Based on the current train schedule, and the fact that there are both eastbound and westbound trains, it is not uncommon for the gates at University Dr to be activated every 5 minutes. The current train sensors and equipment result in premature activation of the gates which results in unnecessary delay to users along University Dr as well as Rural Rd. This operation can function much more efficiently with the installation of new sensors and improved equipment.</p>						
How the project provides necessary public services to accommodate new development (need and benefit)						
<p>During peak traffic hours, the University Dr corridor and associated intersection are operating at or near capacity. Further demand on this facility from new development could potentially lead to over-capacity, significantly increased levels of delay, congestion, and additional safety related issues. Construction of efficiency improvements can improve capacity and potentially improve safety for all users.</p>						
Prior Fiscal Year Funding:						
This project did not receive FY 2014-15 appropriations, and was not included in the adopted FY 2014-15 five year CIP.						
	2015-16 Request	Estimated Future Costs				
		2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	-					
New Appropriation Request	75,000					
Total Estimated Project Costs	75,000	500,000	-	-	-	575,000
Project Funding Sources						
General Obligation Bonds	75,000	500,000	-	-	-	575,000
Development Impact Fees	TBD	TBD	-	-	-	TBD
Total Sources	75,000	500,000	-	-	-	575,000
New Operating Budget Impacts	None					


Project No. 6906209		Name: New Signals / Safety Upgrades				
Department: Public Works		Project Location: Citywide				
Est. Start Date: Ongoing		Est. Completion Date: Ongoing				
Project Description:						
This project provides for the installation of new traffic signals and associated equipment based on traffic engineering studies and warrants. It will also allow for replacement of existing outdated signals and address all safety updates to meet state and federal regulations. A modular intersection costs an average of \$180,000 depending on the size of intersection, which takes into account two modular poles at each corner. This will allow the city to upgrade approximately one of the city's 224 signalized intersections every other year and/or add one new traffic signal based on traffic engineering warrants.						
Project Purpose and Need:						
To manage traffic safely and efficiently by installing new signals and/or modifying existing signal indications based on traffic engineering studies.						
Prior Fiscal Year Funding:						
This project received FY 2014-15 appropriations in the amount of \$360,000.						
		2015-16 Request		Estimated Future Costs		
				2016-17	2017-18	2018-19
				2019-20	Total	
Prior Funding Re-appropriated		342,621				
New Appropriation Request		17,379				
Total Estimated Project Costs		360,000	-	-	-	360,000
Project Funding Sources						
Highway User Revenue Fund		180,000	-	-	-	180,000
Developer Assistance		180,000	-	-	-	180,000
Total Sources		360,000	-	-	-	360,000
New Operating Budget Impacts None						

Project No. TBD		Name: Rural Rd Light Rail Intersection Improvement				
Department: Public Works		Project Location: Rural Rd at Tyler/Terrace Rd (Light Rail Crossing)				
Est. Start Date: 07/01/15		Est. Completion Date: 06/30/16				
Project Description:						
The City of Tempe's Transportation Division is tasked with providing residents and visitors with a safe and efficient transportation system. Traffic Engineering staff spends a significant amount of time monitoring traffic and identifying potential solutions for improving capacity and reducing congestion on Tempe's transportation network. This project will construct bicycle and pedestrian improvements at the intersection.						
Project Purpose and Need:						
The intersection of Rural Rd and Tyler/Terrace Rd is very congested. There is a significant amount of vehicular traffic as well as pedestrian and bicycle traffic. This intersection also serves a transit platform on the west side of Rural Rd that accommodates Light Rail and buses. The geometry of the intersection is skewed which has presented some unforeseen operational and safety concerns, primarily with bicyclists and pedestrians.						
Prior Fiscal Year Funding:						
This project did not receive FY 2014-15 appropriations, and was not included in the adopted FY 2014-15 five year CIP.						
		2015-16 Request		Estimated Future Costs		
				2016-17	2017-18	2018-19
				2019-20	Total	
Prior Funding Re-appropriated		-				
New Appropriation Request		125,000				
Total Estimated Project Costs		125,000	-	-	-	125,000
Project Funding Sources						
General Obligation Bonds		125,000	-	-	-	125,000
New Operating Budget Impacts None						

Project No. 6999849 Name: Streetlight Pole Structural Replacement						
Department: Public Works		Project Location: Citywide				
Est. Start Date: Ongoing		Est. Completion Date: Ongoing				
Project Description:						
The project will fund the replacement of existing rusted streetlight poles that are direct buried and provide funding to replace all direct buried street light poles to meet our current streetlight pole foundation standards. Of the 11,080 streetlight poles there are approximately 3,605 direct buried streetlight poles left in our inventory that need to be replaced at a rate of 100-150 per year, based on their corrosion factor as provided by the study completed October 2011. The study indicates corrosion factors on a 1-100% scale (100% meaning structural integrity has been compromised). The poles from 26% to 100% have been replaced and this project would allow us to continue to address the remaining direct buried poles that fall under the 26% corrosion factor rating and that currently do not pose an immediate health and safety concern.						
Project Purpose and Need:						
To be proactive by providing structurally sound streetlight poles that conform to our engineering standards and that will also enhance our long term goal of ensuring landscape irrigation does not impact the structural integrity of our infrastructure and will help manage our potential risk for existing rusted street light poles. The streetlight poles with a foundation have a life expectancy of 30+ years compared to a direct buried pole that may only have a 15-20 year life span. This project will also allow Tempe to test and replace existing poles on foundations that have reached and exceeded their life span.						
Prior Fiscal Year Funding:						
This project received FY 2014-15 appropriations in the amount of \$250,000.						
	2015-16 Request	Estimated Future Costs				
		2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	-					
New Appropriation Request	250,000					
Total Estimated Project Costs	250,000	300,000	300,000	300,000	300,000	1,450,000
Project Funding Sources						
General Obligation Bonds	250,000	300,000	300,000	300,000	300,000	1,450,000
New Operating Budget Impacts	None					

Project No. 6999869 Name: Streetlight Upgrade / New Install						
Department: Public Works		Project Location: Citywide				
Est. Start Date: Ongoing		Est. Completion Date: Ongoing				
Project Description:						
This project allows staff to strategically prioritize improvements to the street light system including the installation of arterial dual-side street lights and residential street lights per citizen requests, as well as upgrading approximately 4000 High Pressure Sodium (HPS) to Induction streetlight luminaires to environmentally friendly and energy efficient luminaires throughout the city. Salt River Project charges Tempe a flat rate energy fee based on type of fixture and will realize some energy savings as well as see significant savings in our maintenance costs.						
Project Purpose and Need:						
Currently Identified locations for upgrades include the following: North side of Guadalupe Rd between Rural and McClintock						
Prior Fiscal Year Funding:						
This project received FY 2014-15 appropriations in the amount of \$250,000.						
	2015-16 Request	Estimated Future Costs				
		2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	-					
New Appropriation Request	250,000					
Total Estimated Project Costs	250,000	300,000	300,000	300,000	300,000	1,450,000
Project Funding Sources						
General Obligation Bonds	250,000	300,000	300,000	300,000	300,000	1,450,000
New Operating Budget Impacts	None					

Project No. 6903382 Name: Traffic Signal Foundation						
Department: Public Works		Project Location: Citywide				
Est. Start Date: Ongoing		Est. Completion Date: Ongoing				
Project Description: The City's transportation system includes 224 signalized intersections and associated infrastructure to support the safe movement of all modes of travel in Tempe. This project provides for the installation of new traffic signals and installation/repair of existing equipment related to the traffic signal system and as warranted by traffic engineering studies. In addition, this project provides for the management and replacement of underground signal system assets which have been identified for repair and replacement. The program includes a proactive asset management element where components are replaced to ensure the signal system is operating safely and efficiently.						
Project Purpose and Need: This project is necessary in order to keep the signal system functioning properly by supplementing our existing traffic signal construction program (2 full time employees) with installing underground infrastructure which may include underground items such as conduit repair and replacements, new traffic signal underground j-boxes and new signal foundations. The following traffic signal assets have been identified for replacement: four traffic signal poles are structurally deficient due to corrosion factors at the base. Six traffic signal intersections are programmed to have the underground signal conductors replaced because they have reached their end of life cycle. One of the six intersections, which is located at us60 and Rural Rd will need conduit replacement/addition in order to replace signal conductors.						
Prior Fiscal Year Funding: This project received FY 2014-15 appropriations in the amount of \$95,027.						
	2015-16 Request	Estimated Future Costs				
		2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	54,534					
New Appropriation Request	75,000					
Total Estimated Project Costs	129,534	150,000	150,000	150,000	150,000	729,534
Project Funding Sources						
General Obligation Bonds	129,534	150,000	150,000	150,000	150,000	729,534
New Operating Budget Impacts None						

Project No. 6906229 Name: Traffic Signal Green Sign Face Replacement						
Department: Public Works		Project Location: Citywide				
Est. Start Date: Ongoing		Est. Completion Date: Ongoing				
Project Description: This project will allow for the replacement of the traffic signal internally illuminated green signs which have exceeded their expected life. As part of the development of the Transportation and Traffic Engineering Division Asset Management Plan, staff have identified the green signs as an asset in the system for inclusion in the plan and development of a program for the systematic replacement of the signs.						
Project Purpose and Need: Current traffic signal internally illuminated green signs have been in place for at least 15+ years and have exceeded their product life cycle. As part of a continuing transportation asset management program, this project will begin the process of replacing sign faces (8 per intersection) at a rate of 6 intersections per year with a total of 75 modular signalized intersections to complete. This project will allow Tempe to replace its aging green sign faces, which will increase visibility and improve safety for the motoring public.						
Prior Fiscal Year Funding: This project received FY 2014-15 appropriations in the amount of \$118,773.						
	2015-16 Request	Estimated Future Costs				
		2016-17	2017-18	2018-19	2019-20	Total
Prior Funding Re-appropriated	-					
New Appropriation Request	50,000					
Total Estimated Project Costs	50,000	100,000	100,000	100,000	100,000	450,000
Project Funding Sources						
General Obligation Bonds	50,000	100,000	100,000	100,000	100,000	450,000
New Operating Budget Impacts None						

CITY OF TEMPE TRANSPORTATION COMMISSION



STAFF REPORT

AGENDA ITEM 5

DATE

April 14, 2015

SUBJECT

Orbit Saturn

PURPOSE

The purpose of this memo is to provide the Commission with community feedback gathered during Phase I of the Orbit Saturn planning process and to provide a briefing of information to be presented during Phase II.

BACKGROUND

In June 2014, the Tempe City Council authorized staff to conduct a public involvement process to explore implementing Orbit neighborhood circulator service in the area between US 60 and Elliot Road from the east city border with Mesa to the west city border with Guadalupe and Phoenix.

The planning process includes a series of three phases to gather public preferences for service standards such as hours, frequency and days of service as well as desired destinations within the target planning area. The first series of meetings were held on January 21 and 24 at Marcos de Niza High School. The meetings were intended to introduce residents to Orbit service and to explain the history of the service and the characteristics of neighborhood circulators. An Orbit bus and a standard transit bus were on display during the meetings. Both meetings were well attended with Councilmembers Granville, Woods and Kuby in attendance.

To garner the best participation possible by Tempe residents, the following occurred:

- 23,500 door hangers were distributed to businesses, schools, apartment complexes, condos and single family residences within the target planning area.
- 6,000 reminder post cards were mailed to single family homes located in areas with organized neighborhood associations.
- Reminder emails to neighborhood and homeowner association contacts in the area.
- Reminder emails to participants in the Kiwanis/The Lakes character area process.

RESULTS

On Wednesday January 21, the initial meeting drew 82 attendees and created a standing room only crowd. On January 24, 36 individuals attended the Saturday meeting. The attendees actively participated and created an atmosphere of community planning. Based on survey results, both written,

on-line and via telephone, the majority of attendees and respondents were over age 40, with 38% over age 65.

Although the concept of the neighborhood circulator was initially presented as the purpose of Orbit service, the desire for the service to travel out of the service area to the Tempe Public Library immediately surfaced. Many seniors indicated the need and desire to attend activities at the Pyle Senior Center as the reason. Many other residents wanted to link with existing Orbit service to reach destinations closer to downtown. Although attendees were briefed on the ramifications of extending Orbit service beyond the planning area, many were adamant about the destination.

In order to gather information relative to the design and implementation of new Orbit service, residents were given the opportunity to provide input on a number of service parameters that define service characteristics such as destinations, hours, frequency and days of service. Resident input was gathered through a survey which was made available during the meeting and on the internet through February 9. A total of 128 surveys were completed and submitted. Complete results of the survey are included as an attachment.

Below Are the Orbit service characteristics most favored by respondents:

- Days of service – Daily
- Beginning service hour – 7 a.m.
- Ending service hour - 10 p.m.
- Service frequency – 15 minutes

As mentioned above, a desired destination identified by participants was the Tempe Library. The number of distinct destinations mentioned in the survey was 85, of which 36 were out of the planning area. The single most requested destination was the Library/Pyle Center.

Attached are the four route alternatives which attempt to meet the destination criteria received from participants while adhering to the base project budget. The four route options include short routes that would operate at the same frequency as the current Orbit routes and longer routes that would operate less frequently; a Library/Pyle Center option is included as well. These routes will be shared with residents at the next series of meeting scheduled for April 29 (at 6 p.m.) and May 2 (at 9 a.m.) at Marcos de Niza High School. Participants in the public planning process will work collaboratively to select the route that best meets the community's preference and generate the highest ridership.

In September, staff will present a single Orbit Saturn route to residents for comment and recommendation to the Transportation Commission. The final recommended route will be presented to the Commission in November and City Council in December. If approved by Council, staff will then begin the vehicle procurement process and other steps needed to properly implement service. The Orbit Saturn Route would begin service in April or October 2017.

FISCAL IMPACT

Staff estimates that it would cost \$850,000 in capital costs to purchase the required fleet and \$1.2 million annually to operate a five-mile Orbit route.

RECOMMENDATION

This item is for information and input.

CONTACTS

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ATTACHMENTS

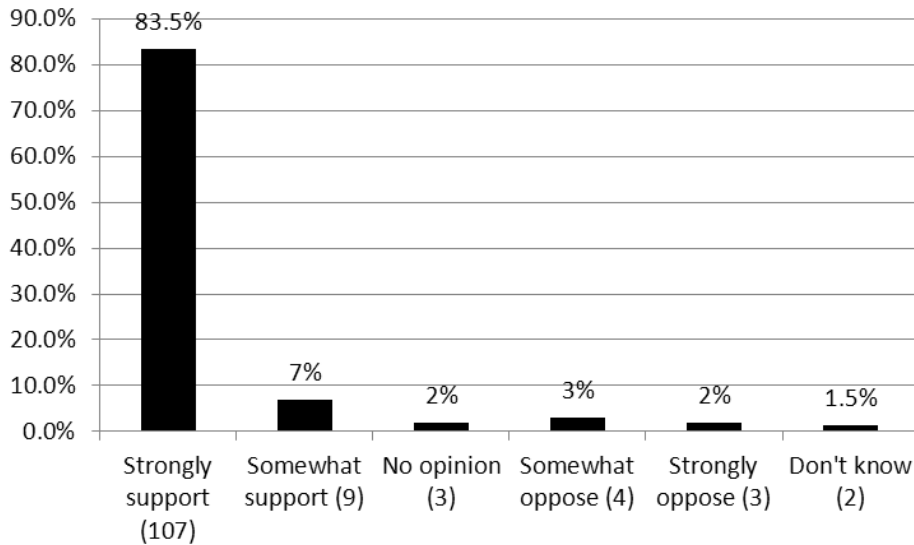
- 1) Orbit Saturn System Expansion Survey Results
- 2) PowerPoint
- 3) Maps of four route alternatives



Orbit Saturn System Expansion Survey Results

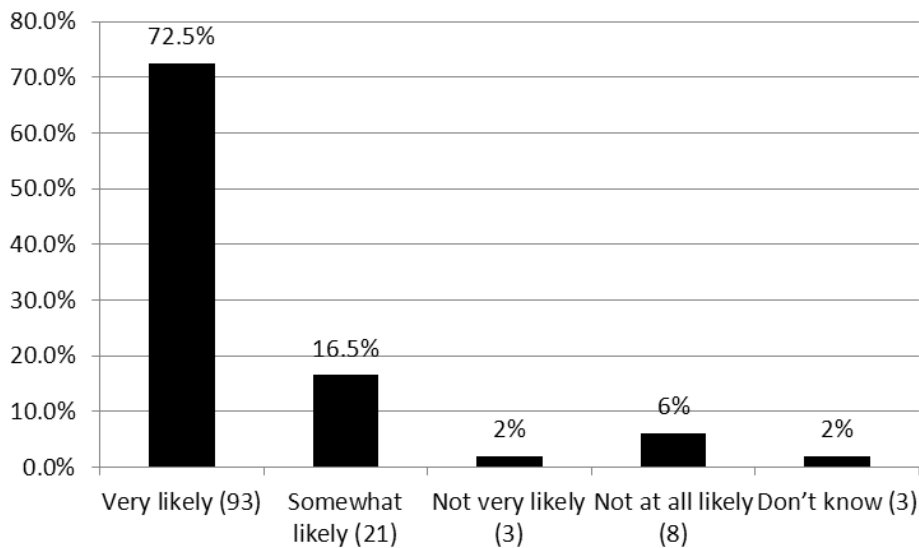


1. Do you support or oppose the expansion of Orbit service in Tempe between US 60 and Elliot Road from the border with Mesa to the border with Phoenix/Guadalupe?



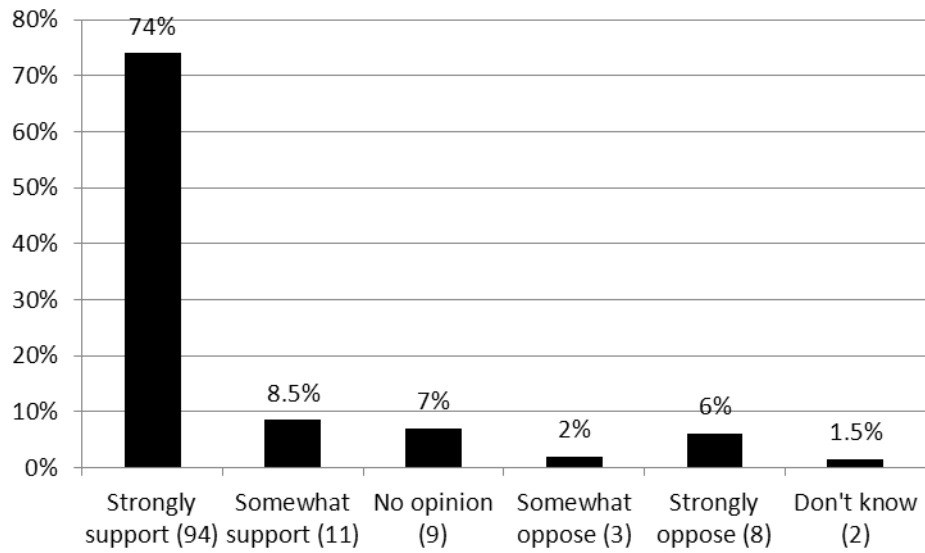
Total Submissions: 128

2. How likely would you be to use Orbit service if it traveled in your neighborhood?



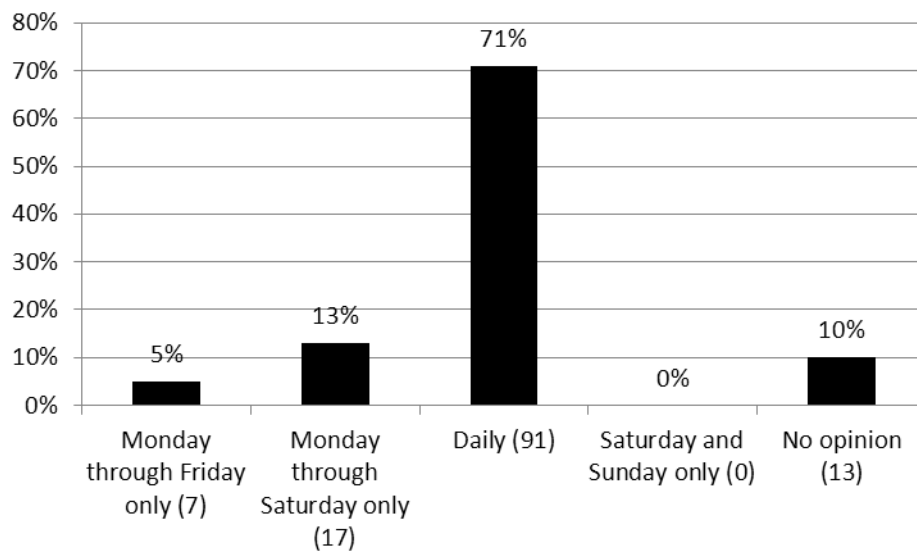
Total Submissions: 128

3. Would you support or oppose Orbit service that travels ON YOUR STREET, regardless of whether you personally used the service or not?



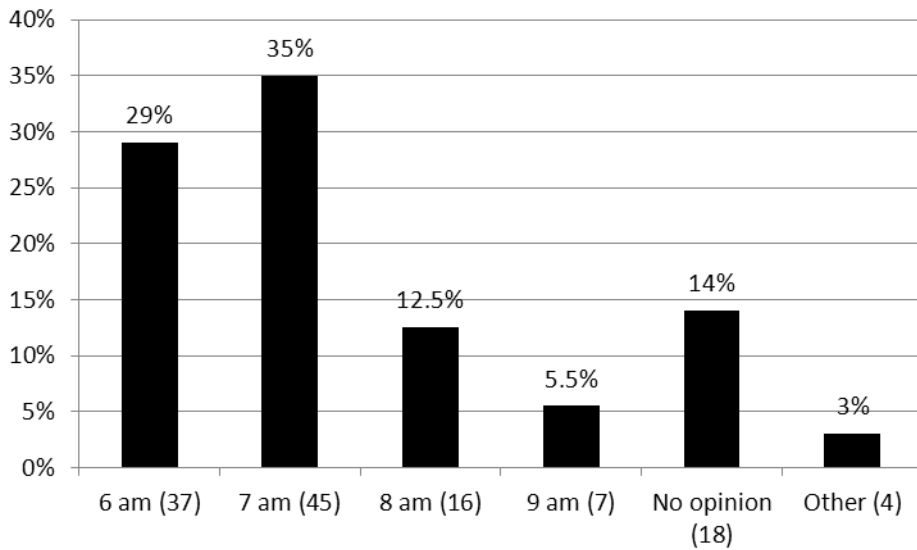
Total Submissions: 127

4. What days of the week should the Orbit service operate?



Total Submissions: 128

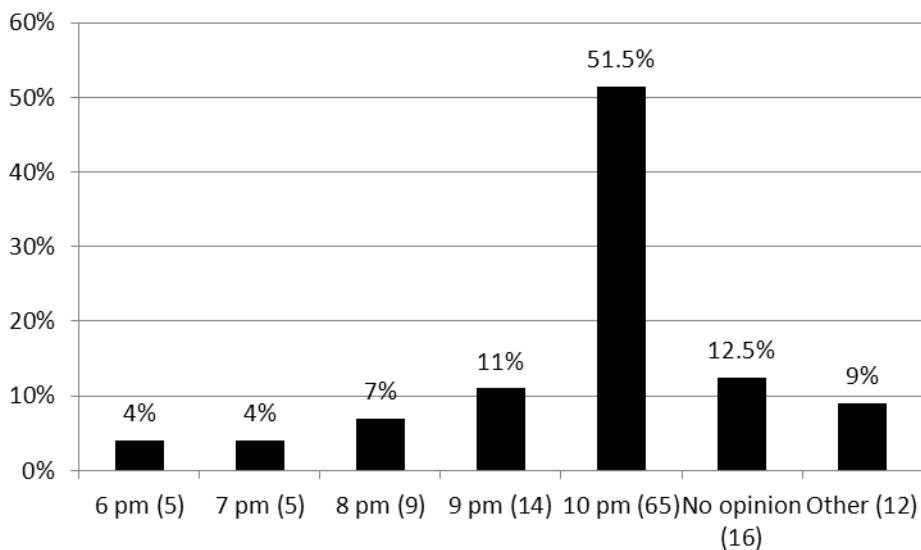
5. What hour of the day should the Orbit service start operations?



Other: current hours (2) and none (2)

Total Submissions: 127

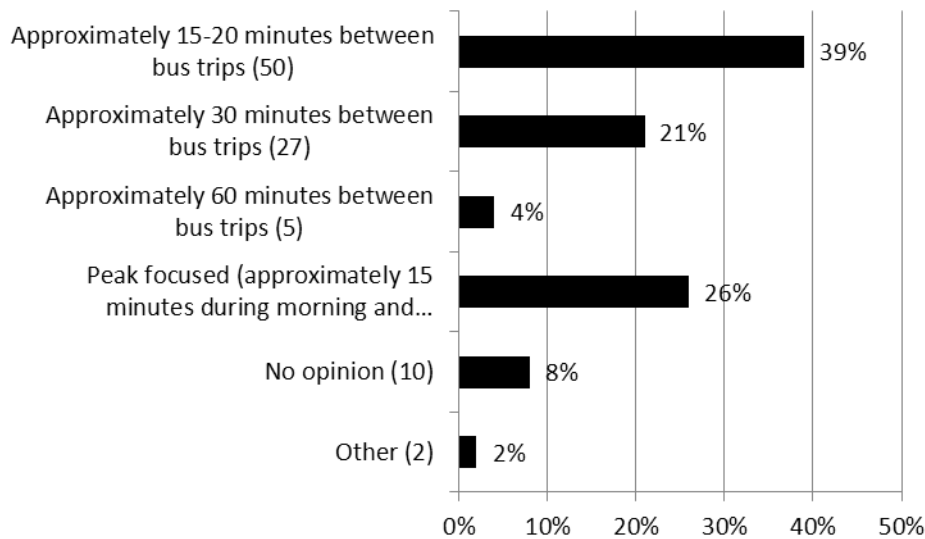
6. What hour of the day should the Orbit service end operations?



Other: midnight (3), current hours (2), 2 am (1), 11 pm (1), later on weekends/sporting events (1), 2:30 am (1), M- Th stop at 9am or 10am Fri-Sun 11pm or 12 pm (1) and 7 on weekdays, maybe later on F and Sat (1)

Total Submissions: 126

7. How often should Orbit trips operate?



Other: none (2)

Total Submissions: 127

8. What destinations in Tempe between US 60 and Elliot Road from the border with Mesa to the border with Phoenix/Guadalupe would you be likely to use Orbit service to access?

1. I would use it to access downtown Tempe on a regular basis.
2. Kiwanis, Pollack Cinema, Fry's Marketplace, Arizona Mills, Strip Malls at McClintock and Guadalupe - it would be good to connect to other orbit routes to get to downtown Tempe
3. I would like to get to Southern and Evergreen
4. The Tempe Library, Tempe Square Shopping Center for multiple local/independent business, College Park Shopping Center for Whole Foods, Pueblo Anozira Shopping Center, Kiwanis Park, Optimist Park
5. The Lakes to McClintock High and other places
6. Businesses at Baseline and Mill, Businesses at McClintock and Baseline, Movie theater at Elliot and McClintock, Fry's Grocery at 2 locations, Safeway
7. Elliot and Rural Road
8. Tempe Public Library, Trader Joe's/Changing Hands
9. I would like to be connected to north of us60 - to connect to go downtown Tempe and the library. Or get to the library to catch Jupiter to downtown. Kiwanis Park
10. Home, Fuller Elementary, Tempe Library, Links to bus routes to MCC
11. Bars and Restaurants and perhaps also make it to Mill and to Tempe Marketplace.
12. Arizona Mills, McClintock and Guadalupe, Tempe Cinema, Lowes, Whole Foods, McClintock and Baseline, Kiwanis Park, Elliot and Priest, Library
13. McClintock and Julie Dr. (Julie Drive is between Guadalupe and Baseline)
14. Kiwanis Park, Kiwanis recreation center, Albertsons at Rural Rd and Guadalupe, Redden Park, Shopping McClintock and Guadalupe, Optimist Park, Fees, The lakes at Palmer Park

15. AZ Mills, McClintock and Guadalupe, Rural and Guadalupe, Tempe Cinema (McClintock and Elliot), Kiwanis Park, Whole Foods (Rural and Baseline) and Priest and Elliot
16. Kyrene and Bell De Mar, ASU, Library
17. Kiwanis Rec Ctr, AZ Mills, Ken McDonald Golf Course
18. Arizona Mills (maybe), The Lakes (great Hub!) Lakeshore Dr, Pollack Plaza on McClintock and Elliot, Trader Joes Plaza and Fry's Plaza, Rural and Elliot Plaza, Mill and Baseline Plaza, Whole Foods, *Tempe Library/Pyle Center
19. none
20. Arizona Mills, The Lakes, Costco, Pollack Theaters, Trader Joes, Pet stores in this area, Any and All shopping strip malls in this area
21. Movies, Restaurants, Strip Malls, Medical, Library and Pyle Center (most important for connections)
22. Tempe Library, Marcos De Niza H.S. Kiwanis Park (north and south ends) YMCA, Lakes Clubhouse, McClintock and Guadalupe, Arizona Mills Mall, Benedict Sports Complex
23. Transportation Center, Walmart (Elliot) Tempe Market Place, Public Library, Price Rd Light Rail Station, Costco, Trader Joes, Changing Hands, Pollack Cinema
24. I want to be able to go from Lakeshore Dr to Downtown Tempe! Even better Arredondo School, Carson Street down Rural to Downtown Tempe
25. Pyle Center, Tempe Library, Downtown Tempe, Rio Salado Parkway, Light Rail, Kiwanis Park, Connect with other Orbit Routes
26. Tempe Library, Tempe Downtown (Mill), The Lakes, Pollack Theaters
27. Fry's Guadalupe and McClintock, Pollack Theater Elliot and McClintock, Weight Watchers Elliot and McClintock, Post Office Rural and McClintock, Lakeshore and Rural, We really need it to go to Warner for access to restaurants and Bashas. Pyle and Library, Costco-Elliot and Priest
28. Fry's - Guadalupe and McClintock, AA Barber - Elliot and McClintock, P.O. Office - Rural and Guadalupe, Rural and Lakeshore, McClintock and Warner
29. Access Destinations - Lakeshore and Watson, Southern and Rural, Southern and Dorsey, Southshore and rural, Southshore and McClintock, McClintock and Guadalupe, Light rail Stops
30. Library, Light Rail Stations, Downtown Tempe/Mill Ave area
31. YMCA, Kiwanis Park, Various Malls, Mesa Community College, Fry's *Please include the library/Pyle Adult Center area on the routes in this area
32. Kyrene/Guadalupe neighborhood by Celaya Park, Kiwanis Park Rec Center, KMS and Marcos, McClintock and Elliot Pollack Center, Library
33. LIBRARY connections to other Orbits that will get to the light rail
34. Tempe Market place. Cahill senior center.
35. Downtown, library mill avenue, Kiwanis Park, Tempe Marketplace, ASU, Light-rail stops
36. Connolly middle School, Tempe library complex
37. Downtown Tempe, Tempe Library, Rural and Guadalupe, McClintock and Guadalupe, ASU, Tempe YMCA, Elliot and McClintock
38. Tempe Union High School District, Tempe Marketplace, Light rail at Apache Blvd and McClintock, AZ Mills Mall, Shopping centers on Elliot and Priest, Libraries,
39. ASU mandy students
40. Downtown Tempe/ASU campus via Tempe Library

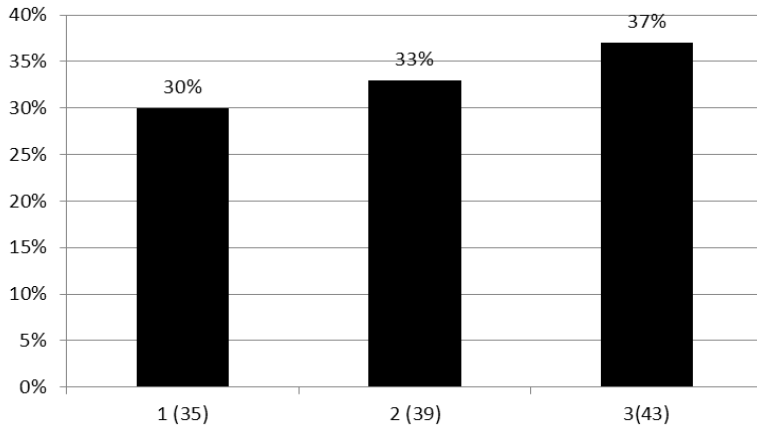
41. Library, Kiwanis Park facilities, AZ Mills, Guadalupe and McClintock shopping centers, need to have connections to other routes
42. Fry's, changing hands, Costco, Pollock theaters, target, add the library, Kiwanis park, YMCA, Big lots, AZ mills, to McClintock to catch bus to light rail ASU, Tempe Marketplace. to name a few
43. Library/Pyle, Costco, trader joes whole foods, connect to mill downtown, WMCA, other grocery park and ride locations
44. already to Tempe marketplace great, add library and Pyle center area shopping
45. lakes area
46. shopping Baseline McClintock, baseline and rural
47. Pyle Adult Center N of I-60, Library N of I-60, Trader Joes/Trading Hands, Whole Foods Market, How about route up Lakeshore to Pyle and onto Downtown
48. Pyle senior Center/Library, Shopping at Guadalupe and McClintock shopping Rural and Baseline, YMCA
49. Watson and Rita to Transit at McClintock and Baseline, Watson and Rita to Trader Joes and McClintock and Guadalupe, Watson and Rita to Pyle Center
50. would like to access to Tempe library
51. Library, AZ Mills, Costco, Fry's Marketplace (baseline), Connection to light rail
52. Kiwanis Park, Mills Mall, Tempe Library, Pyle Center
53. Harvard and Country Club Way to McClintock and baseline, Guadalupe, rural and Baseline
54. T.U.H.S Dist., Tempe Market Place, Library/Tempe Historical Museum, Mill Ave Dist., Light rail, YMCA, Costco/WalMart, AZ Mills Mall
55. Tempe, YMCA, Library, Shopping at Guadalupe/Rural or Elliot/McClintock, Guadalupe/McClintock ASU Downtown Tempe Light Rail Station, To Connect to airport or downtown phoenix
56. 77, The Bus connection at AZ Mills in West Tempe would serve a large amount population and demographics for the most needy.
57. Kiwanis Park, Tempe Union H.S District Office, AZ Mills Mall, Costco/WalMart (Elliot and Priest), Hook up to Tempe Library/History Museum, YMCA, Rural and Bell De Mar
58. Downtown and Library
59. Library complex at Southern and Rural, Benedict Sports Complex, Arizona Mills Mall (Priest and Baseline) Baseline and Rural Shops, Elliot and Kyrene shops, Auto Dr and Tempe Drive area new car/services shops, Compadre and Marcos De Niza High Schools, Guadalupe and McClintock shops, Kiwanis Park
60. Go to Tempe Community Complex to connect with those routes
61. WalMart (priest and Elliot) Albertson's (Guadalupe and rural), Baseline and Guadalupe
62. ASU, Tempe Library/Pyle, Parks, Tempe downtown, Synching connections with other orbit and public transportation (eg transit hubs), Tempe hospital, High schools, major shopping centers (Costco, Tempe marketplace)
63. McClintock to Tempe Town Lake, McClintock and Elliot, McClintock to Fiesta Mall, Guadalupe to Kiwanis Park, ASU has service and has had for years, please include MCC and Scottsdale CC so all those have fair service to colleges, Baseline to MCC, Baseline to Banner Desert Hosp., Baseline to Cardon's, Connection to Tempe Library, connection to Pyle Center, connection to Tempe History Museum, connection to Tempe St. Luke's, Guadalupe and McClintock loop, Baseline and McClintock loop, Baseline and 101 loop, connection to Arizona Mills Mall. DO NOT TAKE MORE THAN 2015 TO START!

64. Library, The Lakes, Marcos De Niza High School
65. Tempe YMCA, Shopping Center, Bashas, Fry's, Etc
66. Lakeshore to Kiwanis lake, Lakeshore and Guadalupe to Gammage, lakeshore and Guadalupe to Tempe Marketplace
67. Downtown Tempe, Center for the Arts, Kiwanis Park, Library Tempe, Tempe Sports complex
68. From Rural North of Elliot to (Stephens) e. of Rural, Trader Joe's/changing Hands, AZ Mills Mall, Library, History Museum, Fry's Marketplace, college and Broadway and n to University, Kiwanis Park, Mill and southern, post office-southern, warner and McClintock
69. Target, AZ Mills, Downtown w/ connections, Kiwanis Park, Library, Tempe Marketplace
70. Mill ave/events, Public Library
71. Tempe Marketplace, Downtown Tempe, Tempe Arts Center, AZ Mills, Kiwanis Park, Tempe Library/Pyle Center
72. Goodwill, Bustog, Trader joes, downtown Tempe, library, Escalante center, sprouts, Tempe sports complex, connections to city bus stops, benedict sports complex, TCA, Ken McDonald Golf Course Kiwanis Park
73. Library - Senior Center, Kiwanis Park, YMCA
74. Library, WalMart, light rail, AZ Mills
75. Kiwanis Rec Ctr, AZ Mills, Costco, Trader Joes, McClintock/Rural, ASU Research Pk
76. Library, Elliot/Priest-Costco, AZ Mills, McClintock/Guadalupe
77. Tempe Cinema, AZ Mall, Kiwanis Pk, Elliot/Priest area
78. Tempe Cinema, AZ Mills, Kiwanis Pk, Elliot/Priest
79. McClintock/Julie Dr
80. Destination from south Tempe to Tempe Library
81. Baseline/Hardy
82. Library, Gammage, Kiwanis, We vote and pay taxes and we should be included, we live south of Elliot, YMCA-Westchester
83. Tempe Library
84. restaurants/bars, transfers to other routes
85. library, medical offices, Costco, shopping centers, Saturn connect to NS routes
86. To travel to the public library and Tempe Marketplace.
87. Would like to connect other routes, Changing Hands Trader Joes, AZ Mills, library, Tempe Market Place, Tempe Beach Park, Downtown Tempe, Pyle Center
88. Library, Traders Joes, Pollack Theater
89. Into Guadalupe
90. Pyle center, Library, Trader Joes, Pollack theatre
91. Library, Senior center- Pyle, Holy Spirt Church, Fry's, Target, Lowes, sprouts, connect to other Orbit Routes
92. library/Pyle, movie theaters, strip malls, Costco, Connections to: Mill Ave, Sun Devil Stadium, Tempe Market Place, Medical Offices, Light rail stops
93. Guadalupe/Rural, Guadalupe/McClintock, Baseline/McClintock, Baseline/Rural, shopping
94. The Tempe Library, Pollack Tempe Cinemas, Ken McDonald, Kiwanis, Target, Costco, Marcos de Niza, 24 hour fitness, Wells Fargo in the Lakes, Jerry's Artarama, Changing hands book store, Whole Food's, Zia Records, REI, Arizona Mills, Fry's Electronics, Benedict park, The Vine, ASU Research Park

95. None
96. Want to access Tempe Transportation Center to board other Orbit buses, metro line and downtown events. Not interested in using Orbit to access fare based bus service
97. Tempe Marketplace, Downtown Tempe
98. Tempe YMCA, Changing Hands Bookstore, Trader Joe's, Fry's on McClintock and Guadalupe, Kiwanis Park, Arizona Mills Mall, closest drop off point to hike South Mountain, Ken McDonald golf course, Bustoz park, Marcos de Niza high school, ASU research park, canal paths, Target on McClintock and Baseline, The Lakes on Lakeshore
99. South Los Feliz and ASU at 10th Street
100. The only way Orbit will be successful down here is if the busses take us to Downtown Tempe. I would hop on the bus if I could go to Mill Avenue and walk around. There's no other reason I would use the Orbit. Since you call it "Orbit," establish Downtown Tempe as the center of the universe, then make all the busses orbit around Downtown Tempe.
101. Shopping, library area. restaurants
102. shopping destinations, grocery stores, Walgreens, trader joes, schools
103. I wouldn't use that service nor would I tell other to use it.
104. I would love the orbit to do a drop off near the light rail.
105. I would love the orbit to do a drop off near the light rail.
106. None.
107. Tempe Marketplace, Mill Avenue
108. Tempe Public Library, History Museum, Pyle Center, ASU, Tempe Marketplace, Tempe Center the Arts
109. Residential Areas
110. Downtown Tempe, Tempe library, marketplace
111. AZ Mills Mall, grocery stores, schools (or near schools), intersection of Priest and Elliot; high-traffic areas in the City of Guadalupe; BUT I think it would also be very helpful if there is at least one stop that allows people to connect with an Orbit route that takes people to ASU
112. Baseline/McClintock, Baseline/Rural, Baseline/Priest, Guadalupe/McClintock, Guadalupe/Rural, Guadalupe/Kyrene, Elliot/Kyrene, Elliot/Priest, Kiwanis Park, SEE Add'l Comments!
113. ASU, Baseline/McClintock, Baseline/Rural, Baseline/Priest, Guadalupe/McClintock, Guadalupe/Rural, Guadalupe/Kyrene, Elliot/Kyrene, Elliot/Priest, Kiwanis Park
114. Absolutely NONE

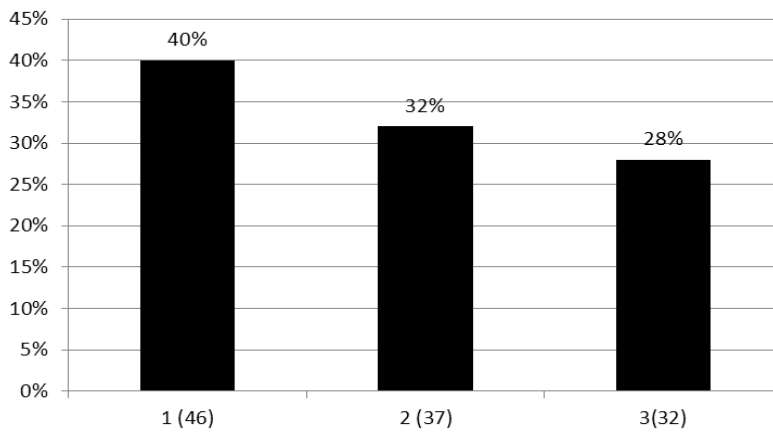
9. Please rank the importance of the following: (Mark your highest priority item with 1, second priority with 2, and lowest priority with 3)

Hours of Service



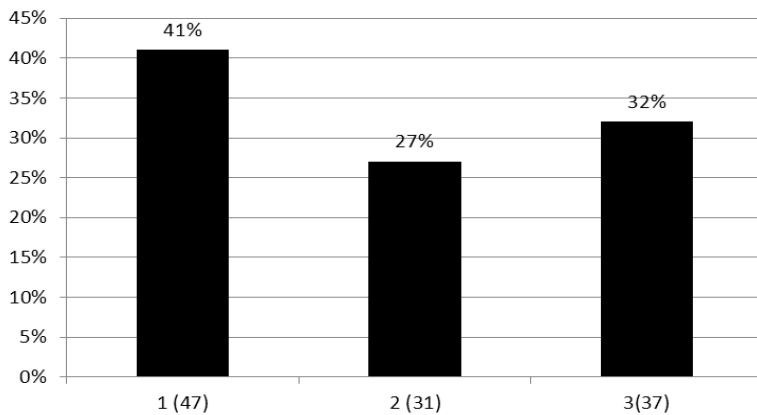
Total Submissions: 117

Frequency



Total Submissions: 115

Days of Service



Total Submissions: 115

10. Additional Comments

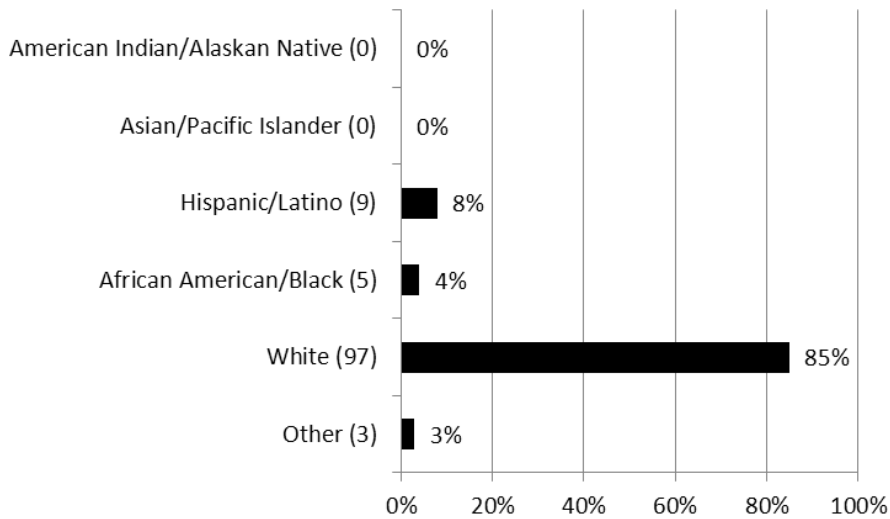
1. I am very excited about this project. Ever since they took away the stops on Price it has not been practical to take the bus. I am located between Fuller Elementary and Price so a bus that circles around country club Rd or Price would be great for me
2. I understand the Tempe Library is outside the boundary, however this is an important destination.
3. Could the Orbit bus connect with other buses to go to places north of the freeway? I would like to go to Tempe Woman's Club at Mill and 13th Street. I would also like to go to restaurants near the college
4. I'm glad there's finally going to be Orbit service here. Make sure it connects with the other Orbit busses at the library.
5. There are 5 orbits north of us 60, I hope this is just the start of our transportation. We are ignored south of 60. It seems that all buses are for the benefit of ASU students, and we pay the taxes.
6. I don't have any experience with city planning, but it seems pretty obvious to me that a new Orbit route should run from Tempe Library, past Cole Park, down Country Club, around on Watson, and then to the west before heading back to the library. Since my family with 3 children live right by Fuller Elementary, this route would be very, very useful.
7. Please look at connection to locations that are in neighborhood not connecting to the library
8. Primary destination is ASU weekdays, may bring bike.
9. Our neighborhood is adequately serviced by City Metro busses. The Orbit is unnecessary. Buses avail on Rural, Guadalupe and South Shore. The older riders seem to want to ride the Orbit based on no fee rather than transfer to City bus system, which costs very little. Perhaps a free senior or reduced fare would be a better choice.
10. Please have the route go to the Tempe Library! We need this connection so we can use Orbit to get downtown from The Lakes. The Lakes clubhouse area or across the street would be a great hub.
11. I probably won't use it much at this point but I do have seniors and college students in my neighborhood who would (mostly college students) (Route to library or Pyle) they don't pay taxes, I did hear ASU pays.
12. Please - a stop at the Tempe Library
13. Need to go to library so we can connect to downtown Tempe and the Trans. Center
14. Other Countries do it differently. Please consider leasing small bus routes to private business. They bid on it and collect revenue. Tax payers do not pay. It seems like the people of South Tempe pay all of the taxes and yet goes no Orbit service. Please make smaller buses go the 72 route but go more often. The overly large buses sometimes have only 3-4 people on them!!!
15. *Need to connect to Jupiter
16. Would use if Destinations are - Tempe Library, Tempe Downtown (mill) Pollack Plaza, the Lakes, Trader Joes. If this Orbit does not have a direct destination for the Tempe Library I may not use Orbit! Instead drive my car! The Lakes Activity Center would be a perfect stop for Orbit!
17. We have an adult daughter who has handicaps and cannot drive. Orbit would greatly increase her independence.
18. We deal with business near McClintock and Warner, go to Tempe Library, go to a Light Rail stop, go to Costco
19. It has been very disappointing to know that some of Tempe is being serviced and other parts of Tempe are not. I pay taxes, also!

20. Student
21. Park and Ride would be nice
22. many ASU Students would use the service- I am an ASU Employee and
23. I've used Orbit for events by driving to the Library. Excited for the prospect of catching Orbit in my neighborhood. Very happy to take to the Library and transfer.
24. Used to live on the Earth route and loved it. we took to downtown and beach park often
25. Have been waiting for Orbit hope it is a go!! I know that I wouldn't be driving forever so that could truly help with transportation needs. My hose is paid off not moving from this area. Add the Library
26. I've lived here for 40 yrs (came from Chicago) which has a great public transportation. It's very overdue to have something like this (the city bus, light rail I a welcomed item as well, I also drive) but prefer public transportation if available
27. If the proposed routes discussed at this meeting were to Pyle/library it would offer the opportunity to transfer to existing orbit routes thus offering expanded service to citizens
28. Would be nice if new route "connected" with other Orbit routes at a transfer point such as The Tempe Library. South - Western part of Tempe south of Southern in underserved.
29. I hope the orbit will be extended to Warner Rd in the future. Park and Ride are there options or can same area be designated
30. We need to be able to connect to the Orbit that goes to the Tempe light rail area downtown.
31. Connections to light rail (synching if need to use more than one route
32. Free for seniors and students H.S. College 1:00 for others
33. Extend existing routes instead of buying more buses, Tempe is NOT that big! This service is needed now not 2017! Goal needs to be moved to 2015! Thanks! Keep if Free or charge these on the North side of the 60 to support south side of 60 to start. Let those who have ridden for free begin to fund your effort to expand. South side has waited for years to have service. Please find a way to get started. Start small - grow big, but get started.
34. Where will this connection to the other Orbit bus routes. Want it to go to Library
35. Connection to other Orbit at Pyle
36. The library would seem to be a natural destination
37. library is key
38. Saturn Planning Area is loaded with ASU students living in single family home rentals emphasis on Saturn routing should be N-S axis, not E-W axis
39. A stop by college & 60, south of the 60 would be nice to connect to Jupiter. Why does the route need to be fully complete before ordering buses?
40. Worried about speeding of buses on neighborhood streets. When lived in another area, this was a problem. Also rode w/scooter and driver did not tie it down and it, plus I fell over when bus turned!
41. Country Club Way is a very good central route thru our neighborhood. Also, try to add more buses to route that goes up college to ASU to handle extra people from our area who connected at library.
42. NE corner of Elliot & Rural would be great area to park and ride. It would bring business to whatever business finally lands there. Small fees would be ok
43. Connect to library

44. I would like to know the approximate cost per passenger mile of existing orbit service. Need service to library. Need a timely transition to travel to ASU area. Will there be a south Tempe HUB
45. I would do a survey at the ASU Research Park to see if they would benefit from the service and reduce traffic. I think that after the orbit is in effect for 6 months a survey should be put out to see if adjustments would be necessary. This is important for residents, but also for business opportunities to become available with orbit routes passing by businesses and giving them access to more customers.
46. Expand service to State Farm buildings!
47. All other orbit neighborhood circulator lines (earth, jupiter, mars mercury and venus) have stop at the Tempe Transportation Center where users can switch orbit lines can catch the valley metro. As a Tempe tax payer and resident of "south" Tempe I deserve nothing less. As a compromise, going to the library to switch night work.
48. The only way Orbit will be successful down here is if the busses take us to Downtown Tempe. I would hop on the bus if I could go to Mill Avenue and walk around. There's no other reason I would use the Orbit. Since you call it "Orbit," establish Downtown Tempe as the center of the universe, then make all the busses orbit around Downtown Tempe.
49. It is absolutely essential that the proposed Saturn route have some connection to existing Orbit routes, such as the Jupiter and/or Mars. Ideally, the Jupiter connection should be made at the Tempe Community Complex, which is a major central destination for many Tempe residents and accommodates a US 60 bike crossing at College. Additionally, connection with the Mars route could be made at Southern/Country Club or Southern/Price, which also accommodates a US 60 bike crossing at Country Club. One of the incredibly convenient aspects of the five routes n/o the US 60 is the fact that all are connected at the Tempe Transit Center in downtown Tempe, which allows access to other transit modes and great mobility and throughout the area. The Saturn route needs to be integrated into the whole system in order for residents in our area to benefit from the system in its entirety.
50. I have a background in Civil Engineering and actually worked in Urban Planning for the Washington State Urban Arterial Board. I have lived in Arizona for 30 years and lived on Southshore Drive in the Lakes for 8 years. I find the process being used to foist the Orbit Bus Service on us to be totally lacking in substance. When the bus planners first came up with the concept of putting buses running East and West below US 60 the ONLY destination ever cited was Kiwanis Park. And yet, we residents of the Lakes have our own parks and Community Clubhouse and our neighbors to the immediate South (south of Southshore) also have a huge park and several soccer fields. Has no one ever done an East West origin and destination study. If the "planners" ever did such a study, they would find that only an extremely tiny fraction of people who live here would ever consider riding an Orbit Bus to Kiwanis Park. Go ahead and plan a North/South route to get to the Library, to ASU and to downtown Tempe, but stop lying to us that there is any demand for any East West Route. And if people want east west, give them routes on Baseline, Guadalupe and Elliot, but keep them out of residential neighborhoods like ours! Furthermore, it is time to move the huge downtown Phoenix diesel busses off Southshore. The Lakes is being used only as a park and ride for a handful of people who use this service. I will fight any plans to put Orbit buses on Southshore through all means possible, since such a plan is a sad and poorly planned joke.
51. Most people in my area are looking for public transportation that would take us to the light rail and/or downtown Tempe. The proposed area for the Orbit expansion is not useful to us.

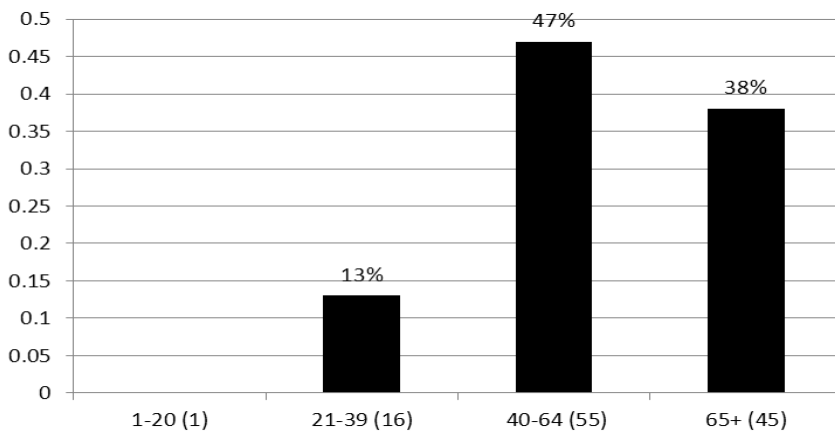
- 52. The Orbit drivers are unsafe and reckless. I do not support Orbit or similar service because of their disregard to pedestrians and cyclists and cannot endorse the extension of this service.
- 53. 1.2 million for a bus is not really what I would call "free". Just a waste of funds for minimal ridership potential.
- 54. So excited for this coming to south Tempe
- 55. Watson Drive between Lakeshore and McClintock has very heavy traffic for the schools. So I don't think it would be good for the circulator. It would be nice if the circulator would travel to the library complex, ASU and the light rail, which is out of the proposed plan.
- 56. Strongly support route that runs along Southshore and Lakeshore

11. What is your ethnicity/race? (optional)



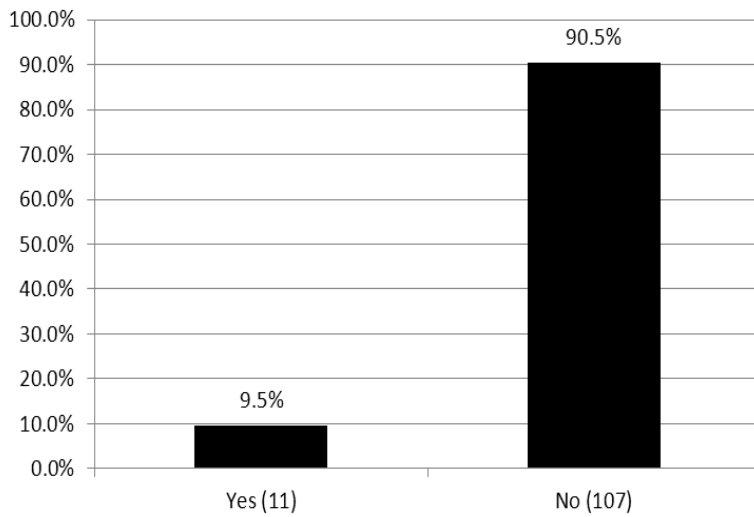
Total Submissions: 114

12. What is your age? (optional)



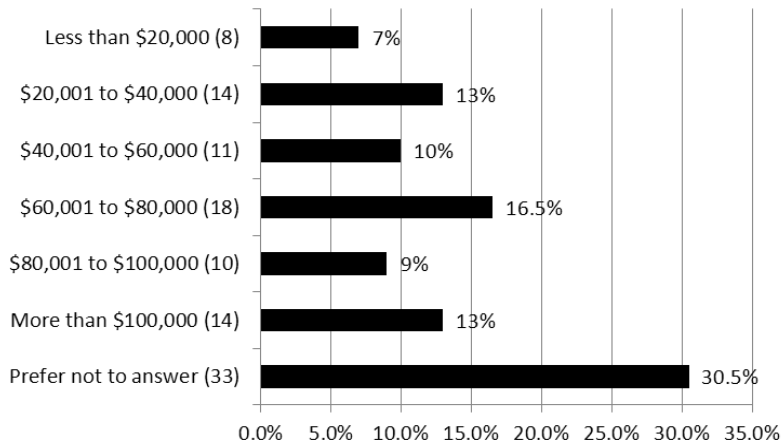
Total Submissions: 117

13. Are you a person with disabilities? (optional)



Total Submissions: 118

14. What was your total household income last year before taxes? (optional)



Total Submissions: 108



Community Involvement
Phase II – Presentation of Draft Routes

April - May 2015

WELCOME

- ▶ Staff introductions
- ▶ Ground rules
- ▶ Orbit Saturn – Tempe South development steps
- ▶ Today's meeting purpose
- ▶ Draft Orbit route options
- ▶ Approval process
- ▶ Implementation timeline
- ▶ Contact us

GROUND RULES

- ▶ Be respectful
- ▶ City staff role:
 - ▶ inform community about the program
 - ▶ solicit community input
 - ▶ provide a recommendation to City Council
- ▶ We will do our best to answer questions; if information isn't immediately available, we will follow up.
- ▶ *Please submit written comment cards to ensure that your opinion is recorded.*
- ▶ *Comment period for Phase II: April 29 – May 18*

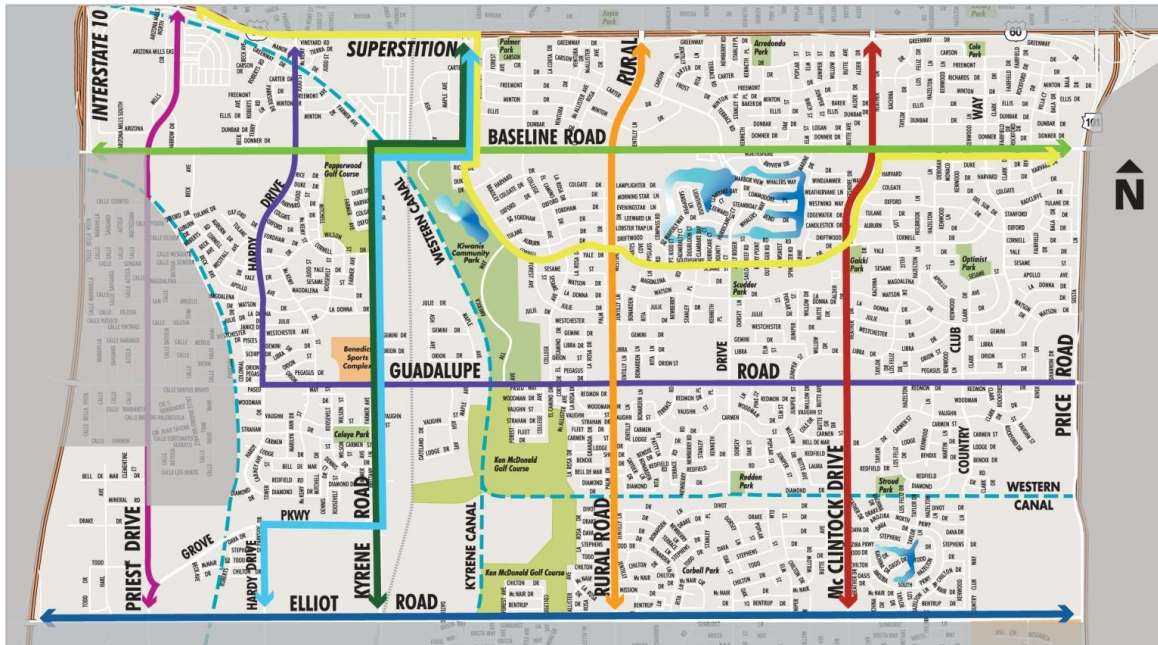
DEVELOPMENT STEPS

- ▶ Orbit Saturn – Tempe South development
 - ▶ Phase I – Develop route parameters (*January 2015*)
 - ▶ Solicit community input
 - ▶ Develop draft route(s) and service scenario based on community input
 - ▶ Phase II – Present draft route(s) for public feedback (*April/May 2015*)
 - ▶ Solicit community input
 - ▶ Develop final proposed route and service scenario
 - ▶ Phase III – Present final proposed route (*September 2015*)
 - ▶ Present final proposal for feedback
 - ▶ Refine route and service scenario as needed

PUPOSE OF TODAY'S MEETING

- ▶ Review of Phase I comments
- ▶ Introduce four draft routes
- ▶ Solicit community input regarding route options
 - ▶ What is your preferred route option?
 - ▶ Would you make any adjustments to the draft route?

ORBIT SATURN PLANNING AREA



Bus routes in this area:

- 56 - Priest
- 62 - Hardy/Guadalupe
- 65 - Mill/Kyrene
- 66 - Mill/Kyrene
- 72 - Rural
- 77 - Baseline
- 81 - McClintock
- 108 - Elliot
- 521 - Express to Phoenix

ROUTE PARAMETERS

- ▶ Annual operating budget – \$1.2 million for the first year
- ▶ Budget requires a compromise between route length, frequency, and hours of service
- ▶ Portions of the planning area that are not served by this route may be considered for future Orbit expansion (no timeline for this).

PHASE I COMMENTS

- ▶ Do you support or oppose expansion of Orbit service?
 - ▶ 90% Strongly or Somewhat Support
- ▶ How likely would you be to use the service?
 - ▶ 88% Very or Somewhat Likely
- ▶ Would you support service traveling on your street?
 - ▶ 82% Strongly or Somewhat Support
- ▶ What is your highest priority (very closely ranked):
 - ▶ Priority 1: Days of Service
 - ▶ Priority 2: Frequency of Service
 - ▶ Priority 3: Hours of Service

PHASE I COMMENTS

- ▶ What days should Orbit operate?
 - ▶ Daily: 71%
- ▶ What hour of the day should Orbit start?
 - ▶ 7 am: 35%
 - ▶ 6 am: 29%
- ▶ What hour of the day should Orbit end?
 - ▶ 10 pm: 51%
- ▶ How often should Orbit trips operate?
 - ▶ 15-20 minutes: 39%
 - ▶ 30 minutes base with 15 minutes during peak: 25%
 - ▶ 30 minutes: 21%

PHASE I COMMENTS

► Destinations with 5 or more responses:

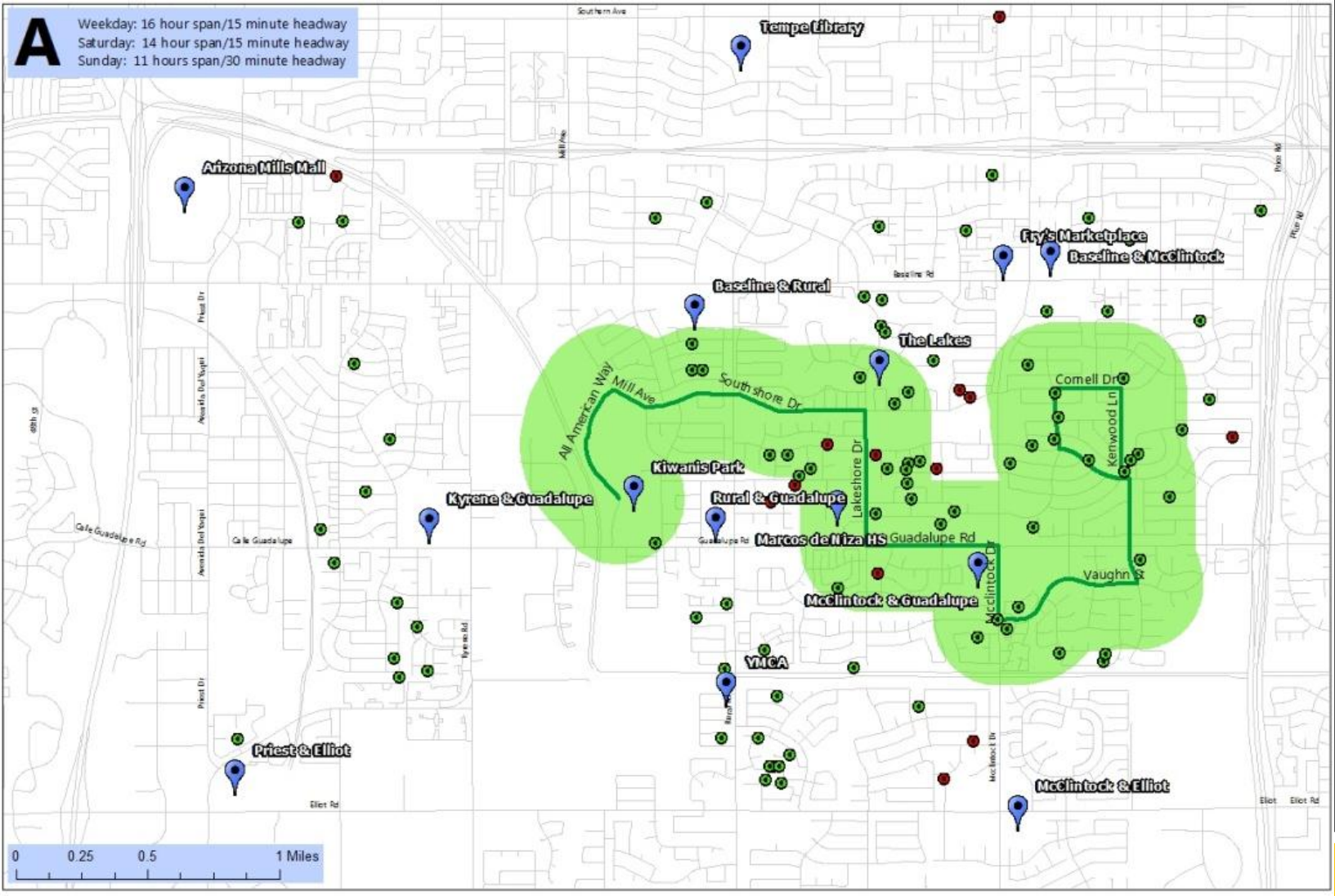
Count	Place	Includes responses	In Planning Area?
64	Tempe Library	Pyle Center, History Museum, Tempe Community Complex	No
36	McClintock & Guadalupe	Trader Joe's, Changing Hands	Yes
33	Kiwanis Park	Kiwanis Rec Center	Yes
29	Arizona Mills		Yes
28	Downtown Tempe	Mill Avenue (District)	No
25	Priest & Elliot	Costco, Walmart	Yes
22	McClintock & Elliot	Pollack Tempe Cinemas, Safeway	Yes
18	Tempe Marketplace		No
17	Baseline & Rural	Lowe's, Whole Foods, Big Lots	Yes
14	ASU	Gammage, Sun Devil Stadium	No
14	Baseline & McClintock	Target	Yes
13	Light Rail		No
12	YMCA		Yes
10	Other Orbit routes		No
10	Rural & Guadalupe	Albertson's, Goodwill	Yes
8	Fry's Marketplace	Unsure if this refers to Baseline or Guadalupe store	Yes
8	The Lakes		Yes
7	Kyrene & Guadalupe	Benedict Sports Complex	Yes
6	Marcos de Niza HS		Yes

ROUTE OPTIONS A & B

- ▶ Options A and B are short routes that cover primarily the eastern portion of the planning area
- ▶ Highest density of survey respondents and destinations
- ▶ Operate 7 days a week
- ▶ Highest frequency and service span
 - ▶ Weekdays – 16 hour span at 15-minute frequency
 - ▶ Saturdays – 14 hour span at 15-minute frequency
 - ▶ Sundays/Holidays – 11 hour span at 30-minute frequency
- ▶ Option A does not travel to Tempe Library Complex
- ▶ Option B does travel to Tempe Library Complex

DRAFT ROUTE - OPTION A

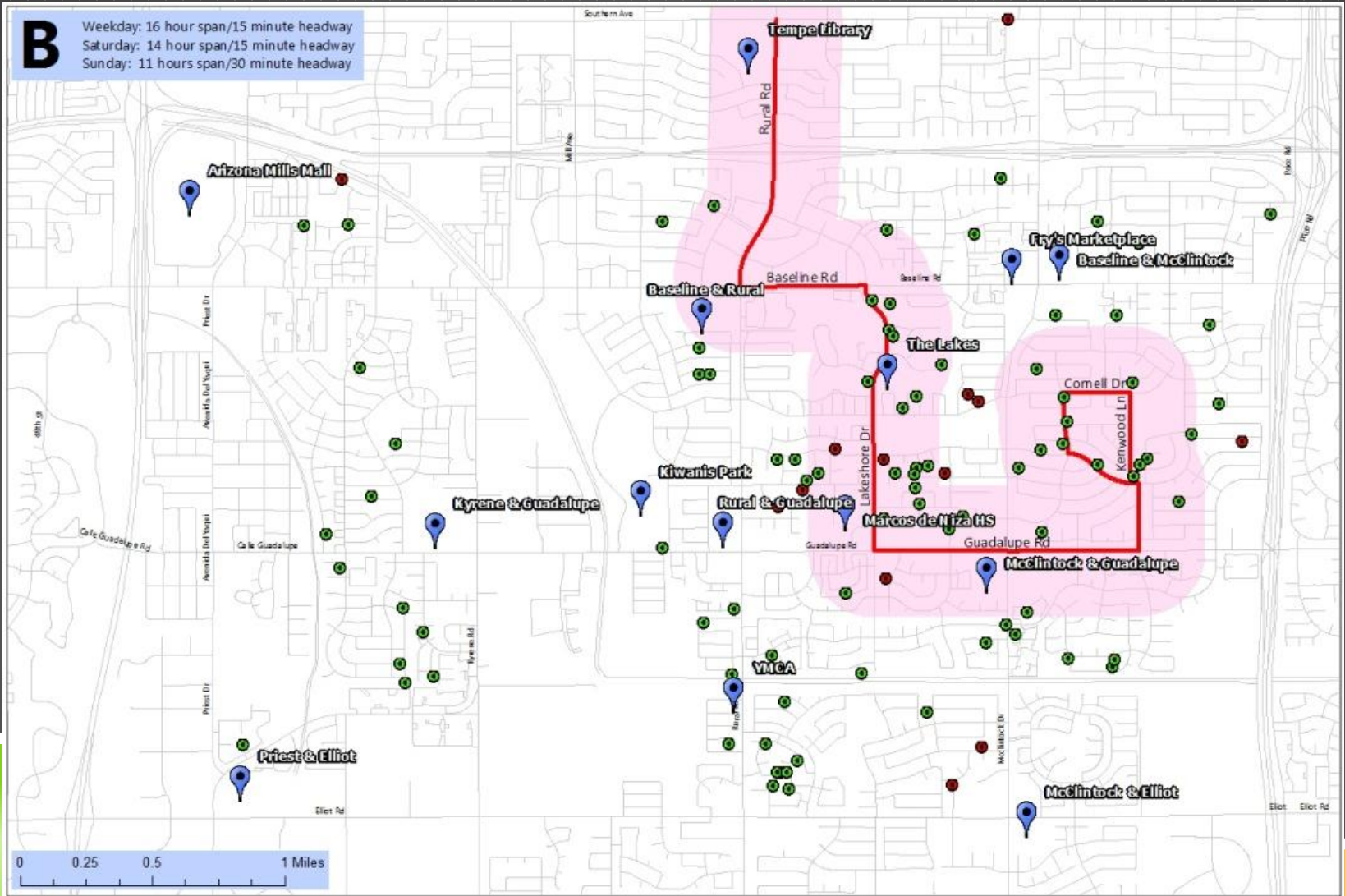
A Weekday: 16 hour span/15 minute headway
Saturday: 14 hour span/15 minute headway
Sunday: 11 hours span/30 minute headway



DRAFT ROUTE - OPTION B

B

Weekday: 16 hour span/15 minute headway
Saturday: 14 hour span/15 minute headway
Sunday: 11 hours span/30 minute headway

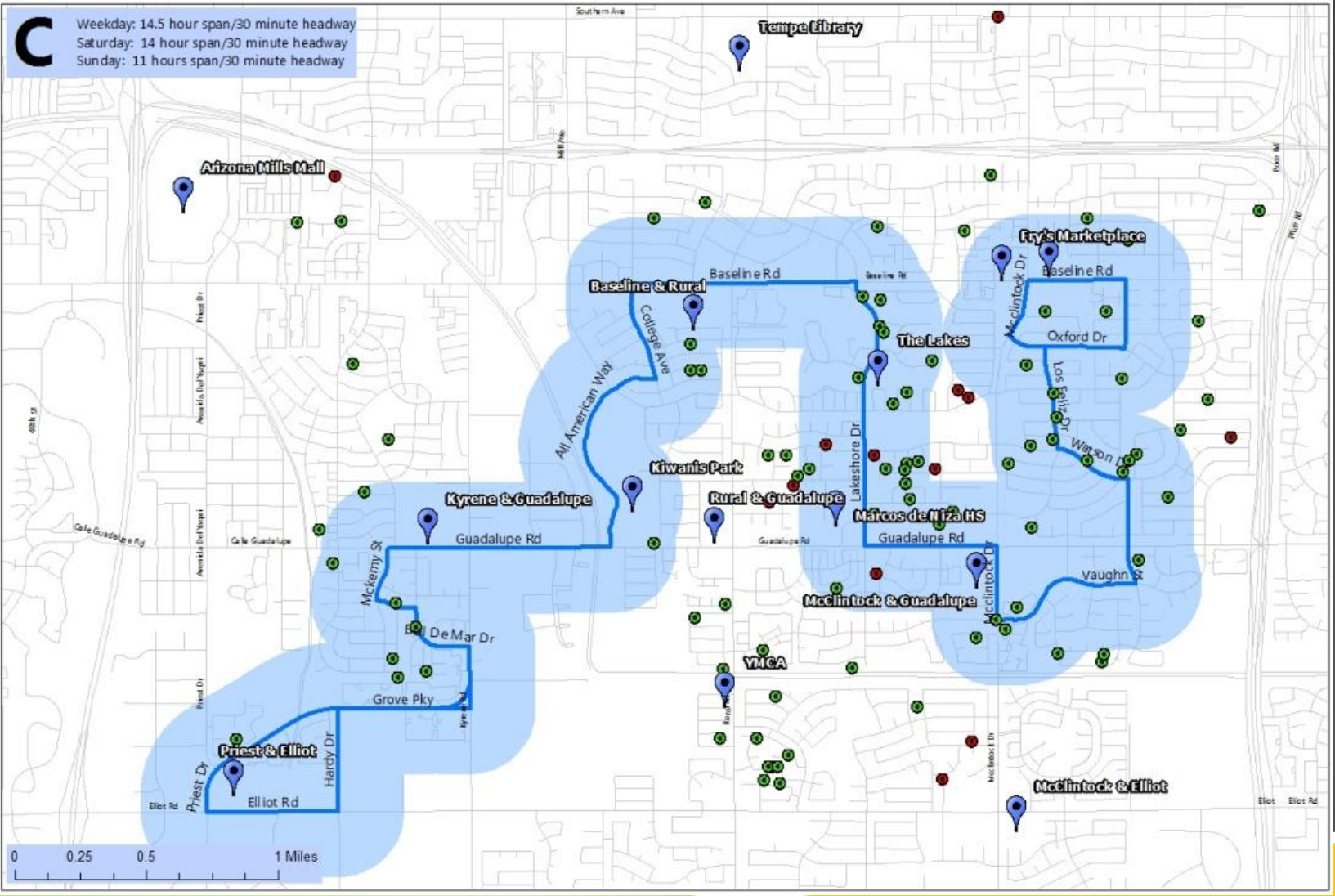


ROUTE OPTIONS C & D

- ▶ Options C and D are long routes that cover much of the planning area
- ▶ Travels to more destinations and serves more residential areas
- ▶ Operate 7 days a week
- ▶ Lower frequency and service span
 - ▶ Weekdays – 13(D) or 14.5(C) hour span at 30-minute frequency
 - ▶ Saturdays – 13(D) or 14(C) hour span at 30-minute frequency
 - ▶ Sundays/Holidays – 11 hour span at 30-minute frequency
- ▶ Option C does not travel to Tempe Library Complex
- ▶ Option D does travel to Tempe Library Complex

DRAFT ROUTE - OPTION C

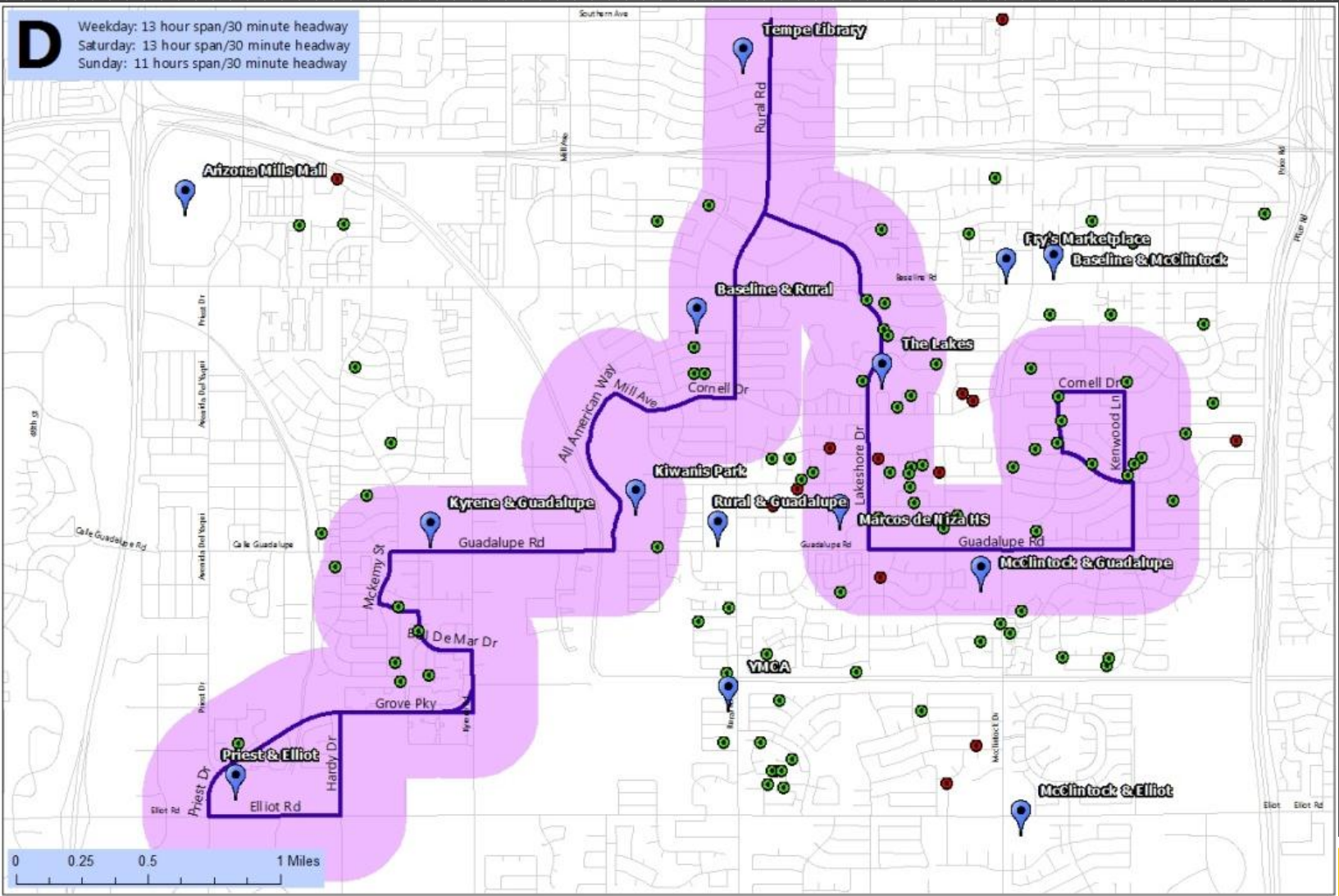
C Weekday: 14.5 hour span/30 minute headway
Saturday: 14 hour span/30 minute headway
Sunday: 11 hours span/30 minute headway



DRAFT ROUTE - OPTION D

D

Weekday: 13 hour span/30 minute headway
Saturday: 13 hour span/30 minute headway
Sunday: 11 hours span/30 minute headway



COMMUNITY FEEDBACK

- ▶ Please select one route that is best for your needs
- ▶ Please tell us if there are any changes you would like to see on your selected route
- ▶ Note that each route shown is already at the maximum budget, so major changes may not be accommodated
- ▶ Minor, cost-neutral changes will be considered
- ▶ *Please submit written comment cards to ensure that your opinion is recorded.*

APPROVAL & IMPLEMENTATION

- ▶ Jan. 6: Transportation Commission meeting – *introduction*
- ▶ Jan. 21 & 24: Community meetings – *Phase I*
- ▶ April 14: Transportation Commission meeting – *results from Phase I*
- ▶ **April 29 & May 2: Community meetings – Phase II**
- ▶ Sept. 9 & 12: Community meetings – *Phase III*
- ▶ Nov. 10: Transportation Commission meeting – *results from Phase III*
- ▶ Dec. 3 : City Council meeting – *final recommendation*
- ▶ If program is approved by City Council:
 - ▶ Jan. 2016: Procure Orbit vehicles
 - ▶ Nov. 2016: Valley Metro New Service Implementation Process Initiated
 - ▶ Feb. 2017 or Aug. 2017: Infrastructure/signs for Orbit stops
 - ▶ **April 2017 or October 2017: Implement route**

CONTACT US

- ▶ Online comment form available April 29 – May 18

- ▶ www.tempe.gov/orbit

- ▶ Transit Operations

- ▶ Mike Nevarez michael_nevarez@tempe.gov (480) 858-2209

- ▶ Jason Hartong jason_hartong@tempe.gov (480) 350-2747

- ▶ Community Involvement Liaison

- ▶ Shauna Warner shauna_warner@tempe.gov (480) 350-8883

- ▶ Mayor and City Council Members

- ▶ www.tempe.gov/city-hall/mayor-and-city-council

**CITY OF TEMPE
TRANSPORTATION COMMISSION**



STAFF REPORT

AGENDA ITEM 6

DATE

April 14, 2014

SUBJECT

Bus Unification Update

PURPOSE

The purpose of this memo is to provide an update of the Bus Unification (Scout). Staff is in the process of finalizing report information and the full report will be available on April 14th.

CONTACT

Mike Nevarez

Transit Manager

480-858-2209

michael_nevarez@tempe.gov

STAFF REPORT

AGENDA ITEM 7

DATE

April 14, 2015

SUBJECT

8th Street Streetscape & Creamery Branch Rail Spur Multi-use Path Project Update

PURPOSE

In June 2010, the design team AECOM developed a preliminary design concept for 8th Street, from Rural to McClintock, and the adjacent proposed Creamery Rail Spur Path between Rural Road and Dorsey Road and extending north to University Drive. Public input into the design included AECOM and Tempe staff working with a group of area stakeholders consisting of neighborhood chairpersons, business and property owners as well as conducting several public meetings. The project design was well received and focused on enhanced bicycle and pedestrian facilities in the street and for the proposed multi-use path, landscaping, lighting and reconfigured on-street parking that maximized opportunities in order to discourage parking in the adjacent neighborhoods. The project design concept was used by staff to pursue federal grants for construction of the project. Staff was successful in federal grant awards totaling approximately \$1.3 million.

On Aug. 14, 2014, the City Council approved a contract with the Tempe landscape architecture firm OTAK to provide consulting services related to refining the design and developing construction documents. Because the current budget is not enough to fully fund all the elements identified in the preliminary design concept, public meetings were held on Sept. 30 and Nov. 3 to refine the design, begin prioritizing project elements to fit within the budget, and develop a buildable concept.

At the last public meeting the concept of a two-way cycle track on the north side of 8th Street between McClintock Drive and Dorsey Lane was identified for that half mile segment. A cycle track is an on-street, two-way bike traffic facility that is protected from the vehicle lane with some type of vertical device. A multi-use path with landscaping and lighting along the abandoned Creamery Branch Rail Spur was identified as the designated bike facility for the other half mile of street from Dorsey to Rural. Additionally, the bike lanes on this half mile (Dorsey to Rural) are proposed to be removed in lieu of the adjacent path and the street itself would be treated with sharrows to indicate bicycles could use the street, and be narrowed through the addition of street trees and on-street parking on both sides. The entire mile of 8th Street would have new trees planted and raised pedestrian crossings at four locations along the street, and a median gateway at both ends of the street are also proposed to support calming the traffic.

Over the last several months, as staff and the design team have worked on the details of the cycle track, concerns about its effectiveness and related costs arose. Conflicts with high boarding Orbit stops, the limited distance (half mile) of the cycle track, introduction of an unfamiliar road treatment that would put bicycles against the flow of traffic, and the multiple driveway crossings required are some of the reasons for

the concern about the facility. Staff is recommending a more traditional street design along this half mile that incorporates enhanced bicycle lanes (green or buffered) rather than the cycle track component.

Staff has recently met with Tempe Bicycle Action Group and business representatives along 8th Street to discuss these concerns and the proposed design changes. The representatives concur with staff that these refinements should be pursued. A public meeting is scheduled for April 15 at 5:30 p.m. at the New School for the Arts, 1216 E. Apache Blvd. to get additional public input. Residents in the project area of Apache Blvd. to University Dr., Rural Rd. to McClintock Dr. are invited to the meeting.

Staff plans to complete the public process including presenting to Tempe Boards and Commissions, and coordination with businesses, property owners and neighbors by late spring 2015, and construction could begin as early as January 2016.

FISCAL IMPACT

To date, the city has received \$1.3 million in federal transportation funds for the project.

RECOMMENDATION

This is for information and possible action.

CONTACT

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

ATTACHMENT

None

CITY OF TEMPE TRANSPORTATION COMMISSION



STAFF REPORT

AGENDA ITEM 8

DATE

April 14, 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.

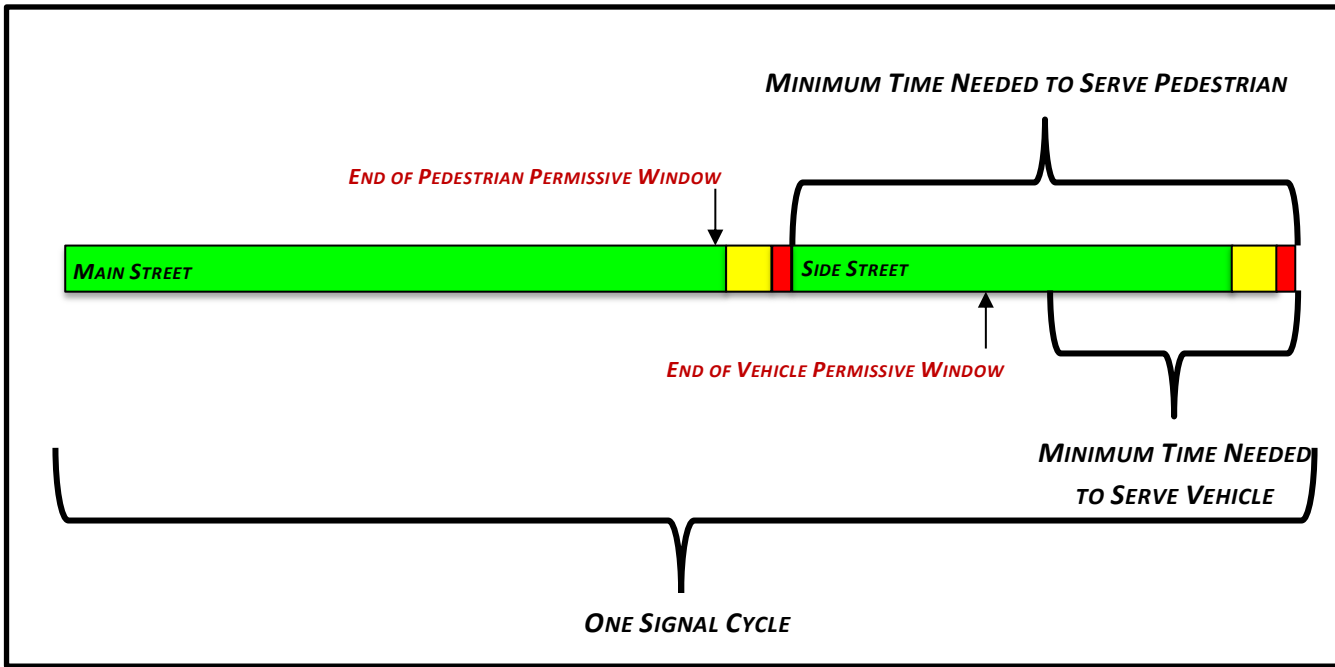


Figure 1: Traffic Signal Bar Chart with Vehicle and Pedestrian Permissive Windows

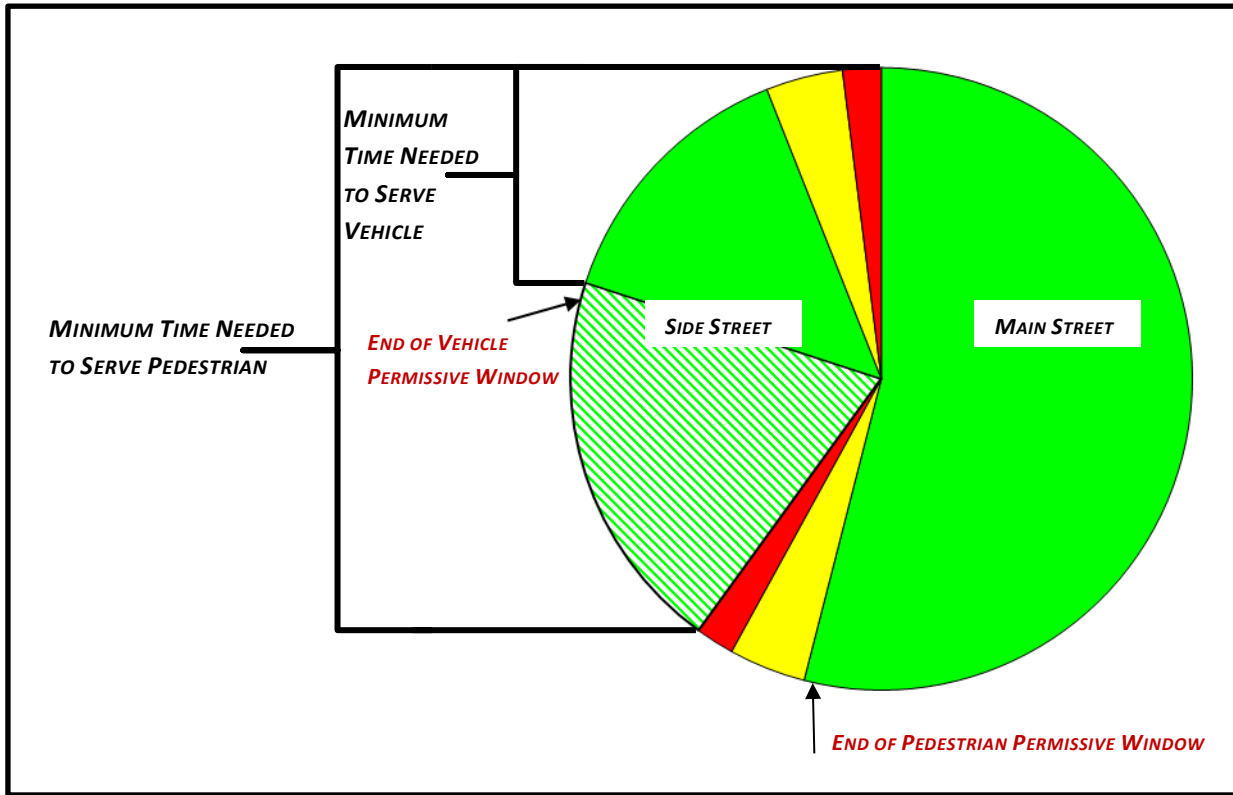


Figure 2: Traffic Signal Pie Chart with Vehicle and Pedestrian Permissive Windows

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 increasingly 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/Elliott and Price/Warner during the coming year.

FISCAL IMPACT

None

RECOMMENDATION

This item is for information.

CONTACTS

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Senior Civil Engineer
480-858-2060

Christine_warren@tempe.gov

CITY OF TEMPE TRANSPORTATION COMMISSION



STAFF REPORT

AGENDA ITEM 9

DATE

April 8, 2014

SUBJECT

McClintock Drive Mill and Overlay Project

PURPOSE

At the April 14, 2014 Commission meeting, staff will discuss the McClintock Drive Mill and Overlay Project and the proposed addition of bike lanes.

BACKGROUND

Beginning in late May/early June, McClintock Drive between Broadway and Guadalupe roads will be repaved as part of Tempe's ongoing preventive maintenance program. As part of this repaving project, McClintock Drive will be reconfigured to include bike lanes on each side of the street, which will require the removal of at least one lane on McClintock Drive. A minimum of two vehicular lanes, northbound and southbound, and a middle turn lane will be maintained.

The removal of vehicular traffic lane(s) is consistent with the Transportation Master Plan, which was approved by the City Council in January 2015, after a year-long public involvement process that identified McClintock Drive as candidate for bike lanes.

McClintock Drive between Broadway and Guadalupe roads has seen traffic volumes decrease 22 percent since 2004. The removal of vehicular traffic lane(s) continues Tempe's longstanding commitment to sustainable transportation and providing streets with accommodations for all modes of travel.

An open house to learn more about the paving project and addition of bike lanes will be held. Neighborhoods Services staff will work closely with businesses and neighborhoods adjacent to McClintock Drive to notify them of the open house. It is NOT anticipated that a full road closure would occur at any point during paving.

RECOMMENDATION

For information and input.

CONTACT

Julian Dresang

City Traffic Engineer

480-350-8025

Julian_Dresang@tempe.gov

CITY OF TEMPE TRANSPORTATION COMMISSION



STAFF REPORT

AGENDA ITEM 11

DATE

April 14, 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:

- Streetcar (May)
- Alameda Streetscape Project (May)
- MAG Pedestrian Design Assistance Grants (May)
- Bait Bike Program (May)
- Orbit fleet (May)
- Bus Unification (June)
- City Tentative Fiscal Year 2015-16 Operating Budget (June)
- MAG Congestion Mitigation and Air Quality Program (CMAQ ITS) (June)
- North/South Railroad Spur Multi-Use Path (June)
- Streetcar (June)
- University Drive and Hardy Drive Streetscape project Pre and Post Traffic Count Analysis (June)
- Bike Boulevards (August)
- Highline Canal Multi-use Path (August)
- BikeShare (August)
- Street Closure Procedures and notification follow-up (August)
- Orbit Saturn & Larger Orbit buses (November)
- Alameda Streetscape Project (November)
- Long-Range Forecast Presentation (November)
- Introduction of CIP Requests (December)
- 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 and Traffic Engineering

480-350-8854

shelly_seyler@tempe.gov

ATTACHMENTS: City Annual Budget Planning Process and MAG Annual Grant Process

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.