

**CITY OF PHOENIX
CITIZENS COMMITTEE ON THE FUTURE OF PHOENIX TRANSPORTATION**

Pursuant to Arizona Revised Statutes, A.R.S. Section 38-431.02, notice is hereby given to the members of the **CITIZENS COMMITTEE ON THE FUTURE OF PHOENIX TRANSPORTATION** and to the general public, that the **CITIZENS COMMITTEE ON THE FUTURE OF PHOENIX TRANSPORTATION** will hold a meeting open to the public on **September 18, 2014, at 6:00p.m. located in the Saguaro Room, 2nd Floor, Phoenix Public Transit Building, 302 N. 1st Avenue, Phoenix, Arizona.**

One or more Committee members may participate via teleconference. Agenda items may be taken out of order.

1.	Call to Order	Chair Peters
2.	Approval of the minutes of the August 26, 2014 meeting <i>This item is for information, discussion and possible action.</i>	Committee members
3.	Call to the Public Consideration, discussion, and concerns from the public. Those wishing to address the Committee need not request permission in advance. Action taken as a result of the public comment will be limited to directing staff to study the matter or rescheduling the matter for further consideration and decision at a later date.	Chair Peters
4.	Committee purpose and goals This item provides an overview of the committee goals and proceedings for future meetings.	Mayor Stanton Terry Gruver, HDR Meeting Facilitator
5.	Public Involvement This item provides an update of the public involvement process. <i>This item is for information and discussion.</i>	Matt Heil, Public Information Officer
6.	Public Transit operations and budget This item provides detailed information on transit system operations and the department budget. <i>This item is for information and discussion.</i>	Phoenix Public Transit and Valley Metro staff
7.	Street Transportation operations and budget This item provides detailed information on street transportation operations and the department budget. <i>This item is for information and discussion.</i>	Phoenix Street Transportation staff
8.	Request for Future Agenda Items	Chair Peters
9.	Adjournment	Chair Peters

For further information, please call Megan Neal, Management Assistant II, Public Transit Department at 602-534-6192.

Persons paid to lobby on behalf of persons or organizations other than themselves shall register with the City Clerk prior to lobbying or within five business days thereafter, and must register annually to continue lobbying. If you have any questions about registration or whether or not you must register, please contact the City Clerk's Office at 602-262-6811.

To request reasonable accommodations, call Megan Neal at Voice/602-534-6192 or TTY/602-534-5500 as early as possible to coordinate needed arrangements.

September 10, 2014

**CITY OF PHOENIX
CITIZENS COMMITTEE ON THE FUTURE OF PHOENIX TRANSPORTATION
MEETING MINUTES
August 26, 2014**

Maricopa Association of Governments
302 N. First Avenue, 2th Floor

Committee Present	Committee Present (con't)	Public Present	Staff Present	Staff Present (con't)
Peters, Mary (Chair)	Loo, Leonardo	Barker, Dianne	Angel, Robert	Hyatt, Maria
Baele, Roger	Mattox, Claude	Gruver, Terry	Bernard, Victoria	Jankowski, Brian
Baier, Maria (Vice Chair)	McCune, Frank	Gundino, Eric	Bowar, Joe	Kessler, Ken
Brossart, Diane	Miller, Roy	Harlow, John	Bresnahan, Jorie	Knudson, Kini
Brown, Kerwin	Olivas, Eva	Heckler, Eric	Bryan, Rocki	Limmer, Ben
Bunch, Ed	Pangrazio, Phil *Via Call-In	Johnston, Eric	Child, Stephanie	Lunsford, Jack
Cannon, Bob	Pastor, Sonya	Keller, Allyn	Coleman, Markus	Mariscal, Ted
Cornelius, Michael	Rees, Julie	Urban, Gene	Cummings, Julie	McLaren, Jyme Sue
Federhar, Andy	Scherer, Diane	Woodruff, Brian	Dovalina, Ray	Miller, Wendy
Ferniza, Sandra	Scrivano, Catherine		Farry, John	Morales, Gabriel
Gilroy, Len	Scutari, Shannon		Grote, Wulf	Munoz, Herb
Hoover, Mike	Shultz, Marty (Vice Chair)		Gruver, Terry	Neal, Megan
Hubbard, Richard	Tribken, Craig		Heil, Matt	Sapien, Jesus
Hunter, Yvonne	Trujillo, Gary		Hicks, Nikki	Shoop, Jennifer
James, Abraham	Vera, Feliciano		Hernandez, Monica	Sweinhagen, Melissa
Kueth, Don			Howard, Kacie	Venegas, Bernard
				Wimberly, Terrie
Committee Absent				
Danley, Ian				
Martin, David				
Simplot, Tom				

1. Call to Order
Chair Peters called the meeting to order at 7:35a.m.
2. Announcement from the Mayor and Committee Introductions
A short video from Mayor Stanton was played welcoming the committee members. After the video all present committee members introduced themselves.
3. Call to the Public
Chair Peters had two requests from the public to speak. The first speaker was Ms. Dianne Barker. Ms. Barker stated that she has read all materials and is pleased with the department overview. Ms. Barker believes that there is a great transit need, especially with the Superbowl quickly approaching. Ms. Barker also advised the committee that the need to not only be innovative, but think even bigger. Suggestions that were made were I-11, freight from Mexico, high-speed rail, South Phoenix even greater, and listen to the public even if it seems like an unlikely option. Lastly, Ms. Barker suggested that the committee members also take advantage of public transit and be multi-modal, especially since funding comes from the farebox.

The next speaker was Mr. Brian Woodruff. Mr. Woodruff inquired about funding for the light rail extension to Metrocenter and if/when that was planned. Chair Peters asked staff to follow-up with Mr. Woodruff about the proposed timing for the Metrocenter extension.

4. Charter Review
Chair Peters asked Megan Neal to review the charter with the committee members. Ms. Neal explained that the charter and bylaws are based on the City of Phoenix template and that the creation of the committee was passed on April 8, 2014 by the Mayor and Council. The charter describes charge of the committee and the committee members. There was a notary present at the meeting to assist committee members with signing the oath.
5. Ground Rules
Chair Peters introduced Ms. Terry Gruver, meeting facilitator, to review the ground rules for the committee members. Ms. Gruver explained that she will be helping to facilitate and help out with any group activities as needed. The first ground rule presented to the group was to maintain balanced input; to self-regulate and make sure everyone has a voice and chance to contribute. Second, to keep the discussion focused on the goal of the committee. Next, Ms. Gruver explained the importance of using discretion, and that the committee members should exercise discretion when acting on behalf of the committee. Also, seeking outside input will be an integral part, and as a committee member you are asked to seek outside input to bring back to the committee.
If there are any disagreements, a weight of consensus method will be used to reach an agreed upon conclusion. Also, managing research requests are to be expected, and the committee will follow the rule that these requests will be forwarded to the staff. Any request that is deemed to require more than four (4) hours of staff time will require a majority vote by the committee. Ms. Gruver

mentioned that the committee has resources available through Arizona State University (ASU) and asked Ms. Neal to brief the committee on ASU's services. Ms. Neal explained that the School of Public Affairs and School of Health Solutions will help with research and student engagement. Ms. Neal also introduced ASU staff that was present at the meeting: Director Eric Johnston, John Harlow, and Dr. Erick Heckler.

Committee Member Mr. Marty Schultz asked for clarification in regards to discretion mentioned by Ms. Gruver. Ms. Gruver explained that as a committee it is expected for members to have individual opinions, but it is hoped that a consensus can be supported by all committee members. Mr. Schultz acknowledged that there may be individuals who have a difference of opinion, but hopes that they are free to respectfully voice their opinions.

6. Transit 101

Chair Peters introduced Ms. Maria Hyatt, City of Phoenix Public Transit Director. Ms. Hyatt introduced some Public Transit staff, staff from Valley Metro, as well as Maricopa Association of Governments. Mr. Ray Dovalina, City of Phoenix Interim Streets Director, also introduced some of the Streets Department staff.

Ms. Hyatt provided some transit history to the committee and explained the changes in service that the Transit 2000 tax has helped pay for. Before the tax, there was no Sunday service provided, the Public Transit Department only had 17 staff members, limited Saturday bus service was provided, and no light rail or RAPID bus service existed. With two recessions during the first 14 years of the Transit 2000 tax, the department will be unable to fully implement the Transit 2000 Plan. The planned light rail miles included 24 miles within the first 16 years and an additional 7-10 by 2020. We have built 16 miles and have capital funds to build an additional 4-5 miles if operating funds are identified. Local bus peak frequencies were identified in the plan and 26% of routes meet peak and 86% meet off-peak frequency goals. We were also not able to provide local bus service until midnight, but we do run until 10 p.m. Phoenix's transit service has grown extensively, thanks to Transit 2000. Over the last 14 years, ridership as a whole has increased 60% while revenue miles have increased 45%. What this shows is that service is efficient. Phoenix's farebox recovery has also increased during this time period.

Ms. Hyatt also informed the committee that Phoenix has seen significant investment along the light rail line, with more than \$3.6 billion in private investments and \$1.4 billion in public investments. This includes residential, commercial and hotel growth. The Downtown Phoenix Partnership and Community and Economic Development Department indicated there are 48 new downtown restaurants since 2008. Proximity to high frequency public transit also has an impact on property values. A 2013 Urban Land Institute study noted that during the last recession, condos near transit outperformed those in the entire region by 30% and apartments by 80%.

Once the T2000 tax expires in 2020, there will be over \$130M deficit. If the tax is not extended and expires, the lost tax revenue for 2020-21 equates to 62% of our operating budget. Ms. Hyatt estimates about 15% of the operating budget is administrative costs, and the remaining 85% direct service. Therefore, 85% of the 62% decreased revenues = 53% service reduction. Additionally, we will lose some amount of fare revenues if there is reduce service, and estimated lost fare revenue would = 30% because only the most efficient service would be maintained, and the percent of reduced fare revenues would be lower than the level of service cut. Ms. Hyatt stated that the estimated reduced fare revenues to be about 7% of the operating budget, and along with the 53% service reduction resulting from the lost tax revenue, would result in a 60% service reduction.

Phoenix funds about 15.3M miles of bus service annually, and will be at 2.1M miles of rail service with the addition of NWE Phase I. Consequently, 9.3M miles of bus service would have to be eliminated and about and 1.3M miles (just 400K less than we currently fund) of rail service, assuming both services are reduced by 60%. This would put the Phoenix well below pre-T2000 service levels for bus, and really poor service for rail (probably service levels that would kill ridership, reducing fare recovery further).

Committee member Mr. Craig Tribken asked about the reduction in ridership that has been seen over the last year. Ms. Hyatt informed the committee that it is believed that the decrease in ridership is due to a recent fare increase. It is normal to see a reduction in ridership when a fare increase is implemented.

Committee member Ms. Yvonne Hunter asked if the ASU student shuttles between downtown and ASU main campus has affected ridership numbers. Ms. Hyatt stated that the City of Phoenix is working with ASU to start providing that service for them in the next few years. The ASU shuttles currently provide a complete service that the regional bus system is unable to accommodate.

Committee member Mr. Roy Miller requested the presentations be sent to the committee.

Chair Peters asked Ms. Hyatt to talk about the talktransportation.org website in further detail. Ms. Hyatt informed the committee that a new website has been developed, www.talktransportation.org which gives the community the opportunity to participate in discussions about what they want in regards to transit. Anyone can sign up and be involved in the discussion, and the ideas will be tracked and passed on to the committee. The website is just one of the many ways to encourage public involvement.

Mr. Roy Miller expressed that he believes there is a tendency for staff to assume an advocacy position in situations like this, and he would like to be able to avoid that with this new committee. Mr. Miller requested that as the committee moves forward, the information from staff be facts and figures and leave advocacy to the committee. Chair Peters agreed that this would be the direction to staff.

7. Street Transportation 101

Mr. Ray Dovalina presented an overview of the City of Phoenix Street Transportation Department to the committee. The main focus of the department is to plan and provide for the safe and convenient movement of people and vehicles on City streets, maintain existing City streets, and design and inspect the construction of new streets to insure they meet specifications. The department also maintains 4,856 miles of streets, 95,592 Street Lights, 1,104 signalized intersections, 430 miles of bike lanes, 163 miles of bike routes, 582 Bridges, uses 50,000-60,000 gallons of lane striping paint each year, fills 21,600 potholes each year, and sweeps 179,000 roadway lane miles each year.

Mr. Dovalina explains to the committee that there was a large boom of road construction in the 1970's and 1980's, which makes those roads now 30 and 40 years old. The optimum overlay cycle is 30 years, but the City is currently on a 60-65 year schedule. Due to the economic downturn over the past six years, staffing numbers have decreased significantly, but the number of streets has not, forcing the department to manage a steady and somewhat increasing inventory of roadway miles with fewer staff. While putting the department in a position to be more efficient in how to manage, maintain, and build streets, it has reached the point where it is difficult to deliver the services and roadways our citizens expect.

The Streets Transportation Department operating budget is comprised of funding from Arizona Highway Users Revenue (AHUR) (\$47M), General Funds (\$17M) Other Sources (Grants, Capital Construction Funds, City Improvement Funds, Other Restricted Funds) (\$4M). The Capital Improvement Budget is projected to maintain a steady level of funding for the next 5-6 years. The department has a greater reliance on HURF funds for its daily operating needs due to decreases in general fund support over the past 7 years. Instead of using 28% of our HURF funds for operating activities, we are now using 45% of HURF funds, and a net increase of \$10 million per year. This in turn has reduced the amount of HURF funds the department can use for capital expenditures.

Mr. Dovalina then showed the committee the evolution of the street's network and the five key initiatives: Phoenix Bikeway Plan, BikeShare Program, Complete Streets Policy, Downtown Transportation Study, and the ITS Strategic Plan. Some of the current construction projects currently underway are: 32nd Street Redevelopment, 107th Avenue Safety Enhancements, Avenida Rio Salado, Sonoran Desert Drive, and Black Mountain Boulevard.

Looking to the future, Mr. Dovalina presented the committee with the future needs of the department: Revenue projections are \$2 billion for next 20 years, there is an estimated \$6 billion in projected needs, a shortfall of approximately \$4 billion, and an estimated \$509 million in critical needs (major maintenance, special projects, bicycle mobility, pedestrian mobility, drainage and bridges, and technology enhancements).

In closing, Mr. Dovalina expressed that the department realizes the expansion of the public transit system network will rely heavily on improvements to existing street infrastructure and expansion of the existing street network system. They have prioritized potential street transportation improvements into three areas focused on bus service expansion, light rail expansion, and bolstering existing high transit use corridors. Lastly, the department will bring specific potential improvements to the committee as we proceed through this process.

Chair Peters emphasized that the Arizona Highway User Revenue Fund has been 18 cents/gallon since 1993 and the Federal Highway Trust Fund has also been 18.4 cents/gallon since 1993. Automobiles are becoming more fuel efficient and some people are driving less, which contributes to the fact that the funds are no longer sufficient sources of funding to cover the work that needs to be done. Chair Peters also directed the committee to familiarize themselves with the information on Complete Streets that is in their packets.

Mr. Craig Tribken requested the complete presentation be sent to the committee. Chair Peters requested all presentations and documents be posted to the website as well. Mr. Tribken asked Mr. Dovalina if there was any dedicated money (or fixed %) currently for the Complete Streets initiative or streets/transit improvements. Mr. Dovalina replied that there is not currently funding dedicated specifically for Complete Streets, although the CIP projects that are being funded all tie into the Complete Streets initiative. Mr. Tribken also asked about charging for Right of Way (ROW) and what the current amount is that we are charging to utility companies, etc. Mr. Dovalina explained he doesn't have exact figures and what is being charged, but there are current franchise agreements with any company, who currently use the ROW, and those agreements collect for Capital Construction Funding, but that amount is decreasing. Mr. Tribken expressed that he would like more information on this in the future.

Mr. Marty Schultz expressed that street replacement isn't a "challenge" but should be considered a "crisis" which was demonstrated by the data that Mr. Dovalina presented. Mr. Schultz also mentioned that in the committee member packets there is a wealth of demographics and other helpful information.

Mr. Andy Federhar expressed that the picture is an integrated picture and the committee is currently looking at small components. Mr. Federhar requested to see what current funding opportunities exist in order to maximize all funding resources that may be available for transit and other multi-modal transportation options. Also, Mr. Federhar requested clarification on what the purview of the committee was when it came to asking the State to raise the gas tax or if they were just supposed to look at bond issues. Chair Peters replied that the committee should look at all funding sources, and that ADOT has already been contacted and they support the efforts of the committee.

Ms. Shannon Scutari expressed her thanks to the staff and acknowledged the restrictions that the City departments have on their funding and the seamless

effort made to work together. Ms. Scutari also stated that it is currently unknown how to maximize public/private partnerships on a smaller scale, and suggested that this be looked at by the committee.

Mr. Len Gilroy also emphasized using public/private partnerships (P3) and informed the group that there are legal tools at the state level that could be of use to the committee. Mr. Loo asked Mr. Dovalina if the Sonoran Desert Drive project was a P3, and Mr. Dovalina stated that it was. Mr. Loo also asked if value capture (using property tax increase above baseline amount from properties along a corridor to finance projects) has been looked at by the department. Mr. Dovalina mentioned that there was a recent meeting about value capture and that Valley Metro is looking at data along the light rail corridor.

Mr. Gilroy asked for clarification on how much of the Streets Transportation Department's roadway maintenance projects were sent out for competitive bid versus done in-house and if these could be done in larger bundles. Mr. Dovalina stated that currently there are \$25-30 million in overlay projects per year (used to be over \$50 million) done with contractors. Project amounts are limited by state law, so maintenance does go out to contractors. Street lights used to be contracted with SRP/APS, but now being bid out through job order contracts to maintain street lights. Mr. Dovalina also mentioned that the department is currently looking at street light efficiencies since the current amount for electricity is \$10-11 million.

Mr. Feliciano Vera requested more information on franchise agreements and license agreements, with respect to financing applications and also operational and implementation in regards to Complete Streets. Mr. Vera mentioned that there seems to be ROW coordination problems which could hinder implementation of the Complete Street initiative.

Mr. Vera asked for clarification on funding sources for streets, as compared to user driven (farebox revenues) funding received. Mr. Dovalina explained that a portion of general fund (comprised of property tax, sales tax, etc.) is being used for the operating budget. Mr. Loo clarified that there is a portion of the population which may utilize public transportation but yet are still paying for street operations due to the fact that they pay taxes; Mr. Dovalina agreed this could be the case.

Mr. Claude Mattox asked for an update on the previously reduced funding received from the State for streets. Mr. Dovalina explained that the City used to receive \$135 million per year, and now around \$35 million less is received. Also, the buying power of the gas tax has reduced by 30% as well.

8. Public Involvement Process

Mr. Matt Heil, City of Phoenix Public Transit Public Information Officer, presented the public involvement goals to the committee. The goals for public involvement are: give accurate information for decision-making, the opportunity to learn about the current transit system and areas for improvement, give residents a means for

meaningful participation in decision-making, and have engagement over the entire process from development to finalization of a plan.

Mr. Heil explained the qualities of effective outreach are to meet people “where they are,” cover diverse populations (including low-income, minority and limited-English populations), geographically distributed, and addresses both public transit and street infrastructure issues. The methods of outreach will include www.talktransportation.org, community meetings, outreach at events, presentations to groups/organizations of interest, and formal public hearings or meetings.

Additionally, Mr. Heil informed the committee that there will be a partnership with Arizona State University (ASU) which will assist the City with research out outreach by providing graduate student researchers to help with student engagement, improving social media, and online outreach. Lastly, Mr. Heil asked for approval to move forward with the proposed Public Involvement Plan.

Ms. Sonya Pastor asked if the website will be translated in Spanish. Mr. Heil explained that there is a translation function on the website for Spanish, as well as many other languages. Ms. Pastor also asked if there were going to be access to computers or hard copy forms for people to use who may not have computer access. Mr. Heil expressed that there will be outreach and in-person conversation as well as computers available for people to use. Mr. Heil also explained to the committee that there will be car cards installed in the buses as well as other advertising to direct people to the website and other outreach events.

Ms. Sandra Ferniza expressed caution about using the website as a sole source because the users are a limited, targeted group, and urged that other methods are also used to broaden the audience. Ms. Ferniza also suggested putting signs by the computers at the public library to inform the public.

Mr. Abraham James expressed his hope that the outreach also be directed towards veterans and also the homeless population around the city. Mr. James also stated that he hopes the committee members consider using public transportation.

Mr. Don Keuth made a motion to approve the Public Involvement Plan. Second by Mr. Abraham James. Motion unanimously approved.

9. Request for Future Agenda Items

Due to time constraints, Chair Peters directed the Committee members to contact Megan Neal with any future agenda items. Committee member Kueth requested a committee schedule by topic.

10. Adjournment

Mr. Claude Mattox motioned to adjourn. Seconded by Mr. Mike Hoover. Chair Peters adjourned the meeting at 9:18 a.m.

CITIZENS COMMITTEE ON THE FUTURE OF PHOENIX TRANSPORTATION

Goal:

Develop a transportation plan, based on current and projected community needs, that identifies:

- Transit improvements
- Street improvements that support transit development
- Funding strategy(s) to implement a comprehensive transportation plan
- Provide a comprehensive transportation plan and funding strategy(s) by the end of the year

Objectives:

- Identify funding to maintain transportation services after the expiration of the transit tax.
- Increase available transit modes and/or services for the City of Phoenix.
- Facilitate connections among transportation modes.
- Increase transit-related street improvements and support complete streets principles.
- Increase customer service and passenger security.

Plan elements:

These basic elements have been provided for your consideration throughout the plan development process. As the Committee discusses and public input is received, these elements will be modified/adapted to generate the final plan:

1. Bus
2. Rail
3. Streetcar
4. Bus Rapid Transit
5. Dial-A-Ride/Alternative Transportation
6. Support Services and Technology
7. Facilities
8. Transit-related street improvements
9. Funding Strategy(s)

Format:

Future agendas will be organized geographically. After each meeting, staff will prepare a summary and present that as a recap at the next meeting. The recap will summarize the key items and issues identified by the committee for that geographic area, as well as public input to date. The summary recaps will be used to build the final draft transportation plan and committee recommendation to the Mayor and Council.

COMMITTEE SCHEDULE BY TOPIC

Sept 8 2014

System operations & budgeting

Public Involvement Update
Public Transit operations and budget
Street Transportation operations and budget

Sept 23 2014

West Phoenix

Staff Recap/Public Involvement Update
Existing Conditions
Needs/Issues
Goal/Objectives/Strategies
Discussion

Oct 8 2014

East Phoenix

Staff Recap/Public Involvement Update
Existing Conditions
Needs/Issues
Goal/Objectives/Strategies
Discussion

Oct 21 2014

South Phoenix/Downtown

Staff Recap/Public Involvement Update
Existing Conditions
Needs/Issues
Goal/Objectives/Strategies
Discussion

Nov 5 2014

North Phoenix

Staff Recap/Public Involvement Update
Existing Conditions
Needs/Issues
Goal/Objectives/Strategies
Discussion

Nov 18 2014

Dial-a-Ride/Alternative Transportation Services/Support Services

Staff Recap/Public Involvement Update
Existing Conditions
Needs/Issues
Goal/Objectives/Strategies
Discussion

Dec 3 2014

Initial Plan review & Funding strategies

Final staff recap/considerations and public involvement synopsis

Introduction funding options

Plan Timeline

Plan Prioritization

Discussion

Dec 16 2014

Final Plan review & Funding strategies

Funding options

Plan Timeline

Plan Prioritization

Final Discussions

Action on Final Plan with Funding

COMMITTEE GROUND RULES

- A. Maintain Balanced Input to Allow Opportunities for All to Participate
 - Self-regulate amount/type of input
- B. Keep Discussion Focused on Goals
 - Maintain focus on goals/objectives of committee
 - Important, but non-goal-specific, issues can be added to parking lot or referred to ASU for additional research
- C. Express Individual Opinions Respectfully, Committee Opinions Accurately
 - Be considerate of other's opinions and express yours with respect.
 - Represent the work of the committee as accurately as possible.
- D. Seek Outside Input
 - Seek opinions from other citizens; initiate conversations to understand perspectives that can be considered/integrated into the committee's discussions.
- E. Utilize Consensus
 - Differences of opinions affecting the committee's work product will be discussed to reach consensus (weight of majority).
- F. Manage Research Requests
 - Research requests will be directed to staff; any request deemed by staff to take more than 4 hours of staff time will require a vote of the majority in order to undertake. (ASU available for some request)

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Public Involvement

What we're hearing:

Public Transit Getting better but....

"We have a LONG WAY TO GO to be where we should be for our size city. We should be like the Bay Area, Chicago, New York or Los Angeles as far as public transit goes.

We fall so short of what is expected of a city our size!"

~Jimmy S.

talktransportation.org



Public Information staff is starting to roll out the public involvement process for the work of the Committee. As part of our initial plans we'll be scheduling visits to a variety of locations, including all of the city's major transit centers, as well as established city commissions with interests related to public transportation, starting with village planning committees, and conducting outreach to various community groups. We already have two requests for presentations, one with the Balzs Elementary School District, and a presentation to the Greater Green Gables association.

As this process continues to ramp up, staff is ready to meet with any organizations that the committee members recommend. Please feel free to share contacts for future presentation or outreach.



Talktransportation.org

Talktransportation.org is off to a great start. Since August 12, over 200 participants have signed up to share their ideas on the future of Phoenix transit. Site traffic has exceeded 1,200 visitors with more expected after the initiation of the public outreach campaign.

Refillable transit cards, protected bike lanes and paths, and alternate light rail alignments are the most popular ideas among site visitors to date.

Additionally, staff is in the process of categorizing all ideas into groups for Committee review.



Meetings/Hearings

The initial meeting for the Citizens Committee for the Future of Phoenix Transportation (CCFPT) took place August 26. On September 9, the City Council Transportation & Infrastructure Subcommittee will be briefed on the progress of the Committee and the proposed public involvement process. This information will also be provided to the City Council at the Formal Council meeting on September 17.

Upcoming Committee meetings:

- Sept. 8 @ 6:00 PM
 - Sept. 23 @ 6:00 PM
- (Meetings held at 302 N. 1st Ave. 2nd Floor, Saguaro Room)



School involvement

ASU and the Public Transit Department are partnering to develop a student-led survey that will gather citizen and student input regarding the future of Phoenix transportation. In September, Public Transit staff will provide students from the School of Public Affairs and Health Solutions with an overview of committee process and invite them to participate with committee-related research and development of the plan. Friends of Transit has offered the assistance of an intern for plan development and outreach. The recruitment process will begin soon.

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CITIZENS COMMITTEE ON THE FUTURE OF PHOENIX TRANSPORTATION

TO: Chair Peters and members of the
Committee

FROM: Public Transit Department Staff

SUBJECT: BUDGET DETAILS AND TRANSIT SYSTEM OPERATIONS

Funding Overview

The City of Phoenix Public Transit Department's (PTD) budget is complex and comprised of several funding sources, some with restrictions on how the funds may be used. These restrictions limit funds to be used for capital purposes, others limit uses to operations for both capital and operating. Many sources require local matching funds. The funding sources may be generally classified as local, regional, state, federal, and program income.

The main local funding sources are the Transit 2000 (T2000) sales tax and city General Funds. The T2000 sales tax may be used for any public transit purpose – capital or operating – including transit related street improvements, such as bike lanes and bus pullouts. This tax is currently set to expire June 2020. The sales tax is critical to the ongoing operations of transit as it funds nearly 54 percent of the operating budget and over 17 percent of the capital budget. Without the sales tax revenues the City would not have enough local matching funds to secure all of the federal grant funds currently received. There would also be insufficient operating funds to secure federal funding for major capital projects that require the City demonstrate a long term dedicated funding source to operate the capital projects constructed with federal funds.

City General Funds have no restrictions as to public transit uses, however, as a matter of policy these funds are used for operations since the City allocates a set amount of General Funds to contribute to public transit each year through the City's budget process. Other local sources include interest earnings on cash balances, rental income from the PTD-owned headquarters building at 302 North 1st Avenue, and other miscellaneous revenues.

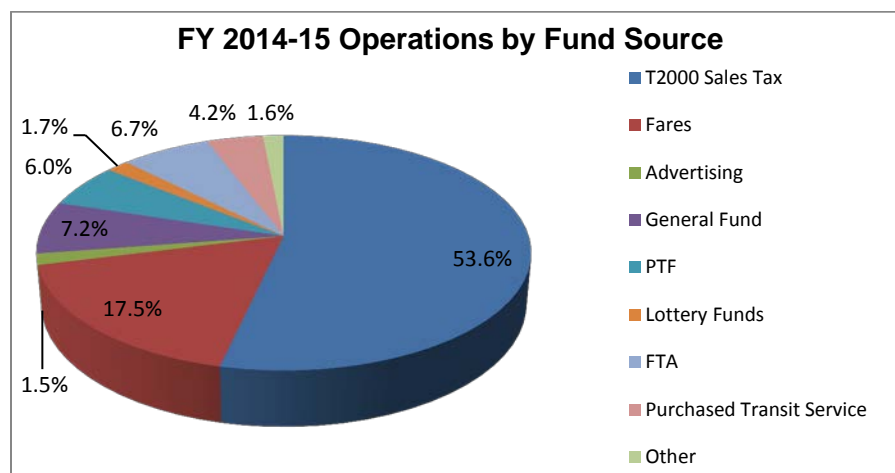
The primary regional funds in the PTD budget come from the Maricopa County Transportation Excise Tax, which is a half-cent sales tax in the County dedicated for freeway improvements, arterial street improvements, and public transit projects and services. One-third of the half-cent sales tax is allocated to public transit, including bus, paratransit and light rail, and the taxes collected flow through to public transit via the Public Transportation Fund (PTF), administered by the Regional Public Transportation Authority (RPTA). For light rail, state statute restricts the use of these funds to capital improvements only. PTF funds for bus and paratransit may be used for both operating and capital costs. This tax is currently set to expire after December 31, 2025. Other

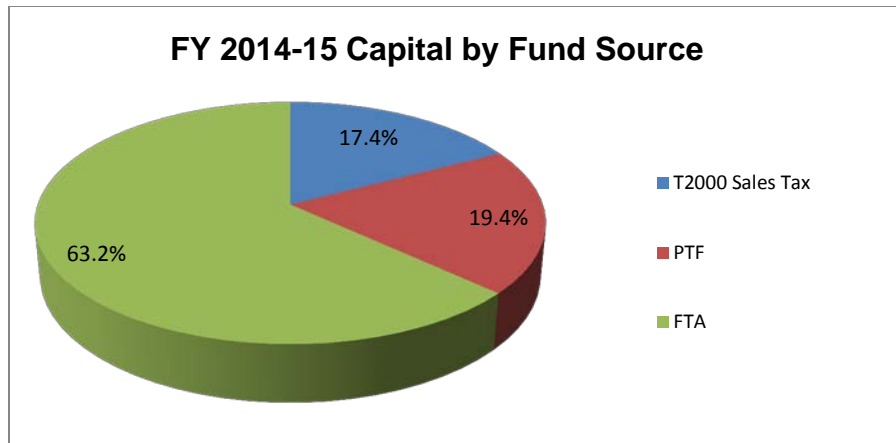
regional funds included in the budget are funds received from other jurisdictions in the region for transit service operated by Phoenix within their boundaries on their behalf.

State funds are allocated to public transit from Arizona Lottery proceeds. Maricopa County and jurisdictions within the county that receive Arizona Lottery funding are required to use the funding for public transportation. There is no local match requirement for these funds, and they may be used for capital or operating costs.

Federal funds are available for public transit purposes, primarily through the Federal Transit Administration (FTA). There are several formula and discretionary FTA funding programs, and the City of Phoenix and regional transit partners are very active in obtaining FTA funds, receiving an average of nearly \$100 million annually. FTA funds require local matching funds in most cases, ranging from 5.7 percent to 50 percent minimum local match. Most FTA grant funds are restricted for capital projects, but there are provisions in some programs that allow the funds to be spent on preventive maintenance, grant administration, as well as operating costs for certain programs targeted to serve elderly individuals and persons with disabilities. There are five specific FTA programs for which Phoenix and the regional transit partners are eligible to receive each year, plus two Federal Highways programs that make funds available to transfer to the FTA for certain transit capital projects. Currently, the federal Highway Trust Fund (HTF) – which provides the funding for FTA grants – is solvent only through May 2015. After that time the HTF will experience cash shortages without further Congressional action, leaving significant uncertainty regarding long term federal funding for both public transit and highways.

The final category of funding sources included in PTD’s budget is system-generated revenue, which is primarily transit fares and advertising revenues. PTD recovers about 25 percent of operating costs through fares, and collects about \$3.5 million annually for bus and shelter advertising. Since this revenue is generated using FTA funded assets, it is restricted by federal requirements to use for public transit activities only.





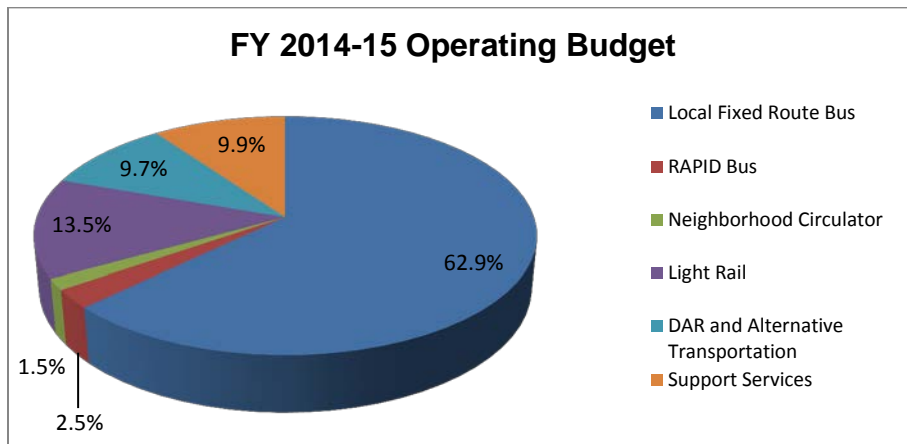
Department Budget Overview

PTD has several types of services and activities with over 85 percent of the operating budget outsourced to provide most direct services to passengers. Included in the PTD budget are local fixed route bus, RAPID bus, neighborhood circulator, light rail, and Dial-A-Ride and alternative transportation services, and the capital required to support these services. Also included are transit related street improvements and support services. The budget is broken down into two main categories – operating and capital.

Below is a breakdown of PTD’s FY 2014-15 operating budget, of which 90 percent is funded with system-generated revenues and local and regional funds:

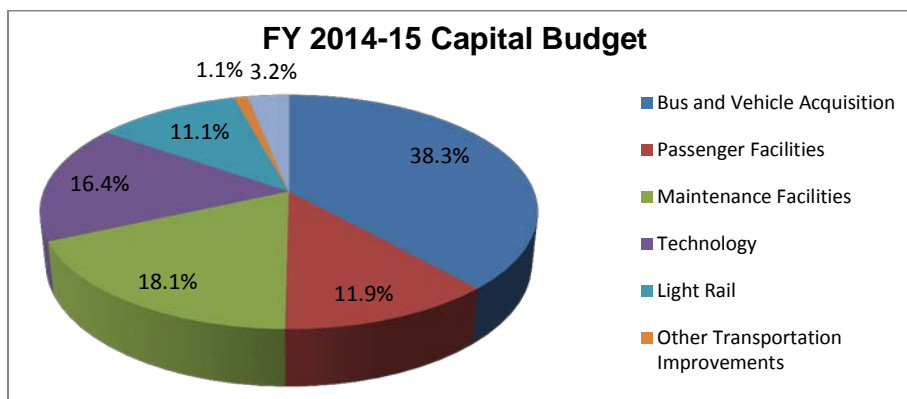
Service	Amount (millions)
Local Fixed Route Bus	\$123.6
RAPID Bus	\$5.2
Neighborhood Circulator	\$3.1
Light Rail	\$27.7
DAR and Alternative Transportation	\$19.9
Support Services*	\$25.9
Total	\$205.4

*Support Services includes passenger facility maintenance, facility development, customer service, technology systems and support, security, and administration.



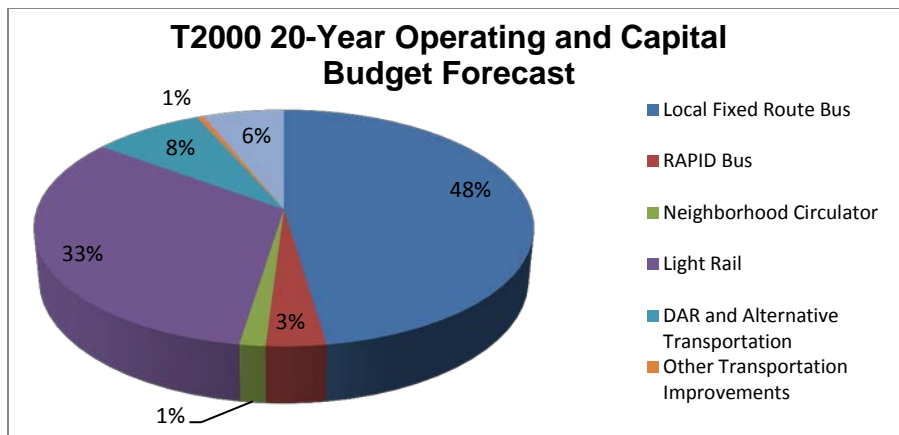
Below is a breakdown of PTD's FY 2014-15 Capital budget:

Category	Amount (millions)
Bus and Vehicle Acquisition	\$47.3
Passenger Facilities	\$14.7
Maintenance Facilities	\$22.3
Technology	\$20.3
Light Rail	\$13.7
Other Transportation Improvements	\$1.3
Other	\$3.9
Total	\$123.5



The updated 20-year total operating and capital budget projection for the Phoenix Transit 2000 (T2000) program is shown below. The table includes all sources of funds that existed in 2000.

Service	Amount (millions)
Local Fixed Route Bus	\$1,953
RAPID Bus	\$137
Neighborhood Circulator	\$59
Light Rail	\$1,339
DAR and Alternative Transportation	\$339
Other Transportation Improvements	\$21
Support Services	\$250
Total	\$4,098



Transit System Operations

Transit Services

Key elements of transit service within the city of Phoenix include:

- Bus service on all most major arterials from approximately 5 a.m. to 10 p.m.
- Weekday peak period fixed bus route service frequency of 10 minutes to 30 minutes, depending on the specific route.
- Weekend bus service operates at 30 minute frequency or 60 minute frequency depending on the route.
- Weekday morning and afternoon commute period RAPID bus service to downtown Phoenix every 8-10 minutes.
- Weekday rail service Monday thru Thursday 4:40 a.m. til midnight, arrives every 12 minutes from 7:30 a.m. to 6:30 p.m.; all other hours, every 20 minutes. Extended service hours starting Friday night.
- Weekend rail service 5a.m. til 2 a.m. respectively, arrives every 15 minutes on Saturdays between 6 a.m. and 7 p.m. All other hours, and on Sundays and holidays, trains arrive every 20 minutes.
- Free circulator buses in downtown Phoenix (government loop)(12 minute frequency), Maryvale (MARY)(60 minute frequency), Sunnyslope neighborhood (SMART)(35 minute frequency), and Ahwatukee (ALEX)(60 minute frequency). Also operating a free business connector on 19th Avenue from Montebello to the Metrocenter Mall during the Northwest Extension Light Rail construction.
- Dial-a-Ride service.
- Special transportation programs (Senior Cab, ADA cab, Senior Center Shuttle programs)

Facilities

- Facility Planning: Focused on ensuring Phoenix's multi-modal public transit system has adequate and appropriate facilities to meet current and future transit passenger needs. In order to comply with federal requirements, all federally funded facility projects must go through a structured siting and development process to meet land acquisition and National Environmental Policy Act (NEPA) guidelines.

- Service planning: Planning and scheduling of transit routes operated by Phoenix including local bus routes, commuter bus routes, and neighborhood circulator routes.
- Facility Engineering: Execution of Phoenix's public transit capital projects including the development of new facilities, the refurbishment of existing facilities, or the expansion of expansion of existing facilities.
- Facility Maintenance: On-going maintenance and repair of all existing transit facilities.
- Transit Asset Management: Assessing needs and prioritizing investments for bringing public transit systems into a state of good repair.

Support Services

- Procurements/Contracts: Creates, competes, negotiates, awards, and administers contracts for the Public Transit Department and ensures compliance with all Federal, State, and local procurement regulations.
- Technology Services: Technical support for Public Transit and regional partners including staff from various cities and contractors.
- Transit Centers/Revenue Room: Provides customer service and transit pass sales at four Phoenix transit centers, manages creation and distribution of all transit passes region-wide (bus and train), handles lost and found for Phoenix buses and Dial-A-Ride and Light Rail, and processes money from all Phoenix buses.
- Transit Oversight (Compliance): Provides guidance on Federal Transit Administration (FTA) regulations to Phoenix staff and all jurisdictions receiving FTA funds through Phoenix. The team regularly "reviews" or audits the other cities in preparation for upcoming FTA reviews.
- Department budgeting and accounting
- Coordination of the regional competitive grant processes
- Administration of various fare media programs, including regional distribution of fare revenue
- Financial management of transit service purchased by other agencies



City of Phoenix

STREET TRANSPORTATION DEPARTMENT



INFRASTRUCTURE NEEDS

Updated August 2014

Infrastructure Needs

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EXECUTIVE SUMMARY

In the past 14 years, the City of Phoenix has invested more than \$1 billion in improvements to over 736 miles of arterial streets. Improvements have included major bridges, storm drains, basins, and railroad grade separations. The next 20 years will require continued construction of new infrastructure. As the existing infrastructure ages, additional resources must also be allocated to maintenance, rehabilitation, and replacement.

The Street Transportation Department has analyzed current street infrastructure expenditures and projected future infrastructure needs for the City of Phoenix. This report outlines each area of need in detail, provides lists of projects currently identified, and estimates costs over the next 20 years. These costs have been compared with current funding levels in order to determine the city's funded and unfunded street infrastructure needs. Cost estimates are based on 2013-14 purchasing levels.

The report has been organized into four main areas: Major Regional Improvements; Major Drainage Improvements; Other Local Improvements; and Technology Enhancements. The data in this report illustrates that the greatest unfunded needs lie in the area of Major Regional Improvements. These are also the improvements that provide the greatest benefit to non-resident users of the City of Phoenix infrastructure.

The City of Phoenix street infrastructure and technology needs are \$7.6 billion summarized as follows:

	Projected Needs	Funded	Unfunded Needs
Major Regional Improvements	\$ 4,452,610,957	\$ 1,553,382,848	\$ 2,899,228,109
Major Drainage Improvements	\$ 1,198,300,000	\$ 4,444,759	\$ 1,193,855,241
Other Local Improvements	\$ 1,561,375,000	\$ 105,021,708	\$ 1,456,353,292
Technology Enhancements	\$ 18,991,146	\$ -	\$ 18,991,146
Total	\$ 7,231,277,103	\$ 1,662,849,315	\$ 5,568,427,788

Infrastructure and technology needs are continually monitored, and modifications to improvement plans are made based on changing needs, costs, and available funding. This report concludes that future infrastructure needs will be far greater than current funding will allow. Additional funding sources will be needed for the city of Phoenix to continue to provide a safe and effective transportation system.

Major Regional Improvements

PROGRAMS

Arterial Streets

Bridges (New)

Bridges (Maintenance, Rehabilitation, and Replacement)

Intersection Restoration and Improvements

Regional Transportation Plan (RTP) Projects

Major Maintenance Program



ARTERIAL STREETS

Construction of new arterial streets and improvements to the existing infrastructure provides for safe and efficient long distance traffic movement within Phoenix. Arterial streets carry about 70% of all traffic. The construction includes new pavement, storm drains, street lighting, landscaping, sidewalks, bicycle lanes, traffic signals, signs, and striping. Access is controlled through raised medians and the spacing and location of driveways and intersections. These projects are vital to maintaining an effective traffic management system.

Projects:

More than 90 arterial street projects have been identified. A list of the specific projects is in Appendix A. The cost estimate below also includes projected future needs.



Estimated Cost with Storm Drains:	\$ 1,369,515,894
Funding:	<u>\$ 925,312,204</u>
Unfunded Needs:	\$ 444,203,690

BRIDGES (New)

Bridges within the city of Phoenix transportation systems are built to span washes, canals, roads, railroads, rivers, and other physical obstacles. Future needs include the construction of new bridges and the widening of existing structures.

Projects:

The following is a partial list of identified projects:

- 35th Avenue at Skunk Creek - \$1M
- 51st Avenue Bridge at CAP Canal (widen) - \$3.2M
- 64th Street Bridge at CAP Canal - \$11.6M
- 67th Avenue at CAP Canal (Pyramid Peak Parkway) - \$4.3M
- 75th Avenue at Salt River - \$24M
- 91st Avenue at Salt River - \$47M
- Carefree Highway at Skunk Creek (widen) - \$1M
- Cave Creek Road at CAP - \$3.2M
- Dove Valley Road at Skunk Creek -\$14M
- Dove Valley Road at Dead Man Wash- \$4.8M
- Dove Valley Road at New River - \$12M
- Happy Valley Road at CAP - \$2.3M
- Jomax Road east of Cave Creek Road - \$7M
- Jomax Road: 33rd Avenue to I-17 (2 bridges) - \$24M
- North Valley Parkway Bridge at Sonoran Wash - \$7.2M
- North Valley Parkway Bridge at Skunk Creek - \$8.2M
- Pyramid Peak Parkway at Dead Man Wash - \$7.6M
- Tatum Boulevard Bridge at CAP (widen) - \$2.5M
- Anthem Way at New River - \$47M
- Sonoran Desert Drive Approximately 1000' E/O Paloma Parkway - \$8.5M



Estimated Costs:	\$ 240,400,000
Funding:	<u>\$ 0</u>
Unfunded Needs:	\$ 240,400,000

BRIDGES

(Maintenance and Rehabilitation)



Although all City bridges are currently safe, 15 bridges should be rehabilitated over the next 20 years. In 2008, an innovative rehabilitation process was tested, and it is believed that this process will allow the City to rehabilitate all 15 of the bridges identified below instead of replacing them. This will save about \$53 million over the next 20 years. There are additional bridge needs, including annual

maintenance of the 582 bridge structures in our inventory, annual inspection, and annual guardrail repair.

Projects:

- 15th Avenue at Grand Canal
- 16th Street at Arizona Canal
- 24th Street at Grand Canal
- 44th Street at Arizona Canal
- 51st Avenue at Grand Canal
- 7th Avenue at Grand Canal
- 7th Street at Arizona Canal
- 7th Street at Grand Canal
- Glendale Avenue at Arizona Canal
- 7th Street at RR Crossing, N. of Jefferson St
- 7th Ave. and RR Crossing, N. of Jefferson
- Indian School Road at Grand Canal
- McDowell Road at Grand Canal
- Northern Avenue at Arizona Canal
- Van Buren Road at Grand Canal



Estimated Costs:

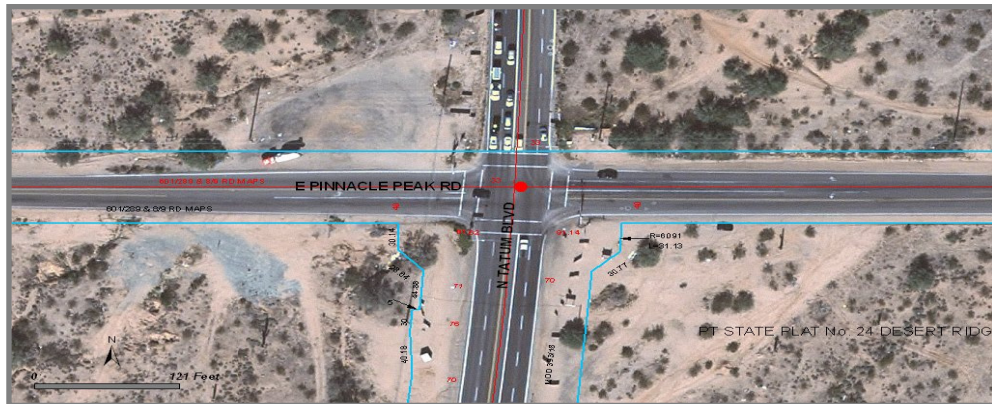
Bridge Rehabilitation	\$ 47,000,000
Bridge Maintenance	\$ 35,000,000
Bridge Inspection	\$ 7,500,000
Guardrail Repair	\$ 12,000,000
Bridge Management Software	\$ 600,000
Total:	\$ 102,100,000
Funding:	<u>\$ 16,830,108</u>
Unfunded Needs:	\$ 85,269,892

INTERSECTION RESTORATION AND IMPROVEMENTS

Intersection restoration and improvement projects allow for widening, resurfacing, and other improvements to intersections on major streets. These projects help improve traffic flow and rideability. As our infrastructure ages, a greater number of intersections will have deterioration and a need for improvements. The following is a partial list of identified projects.

Partial list of Projects:

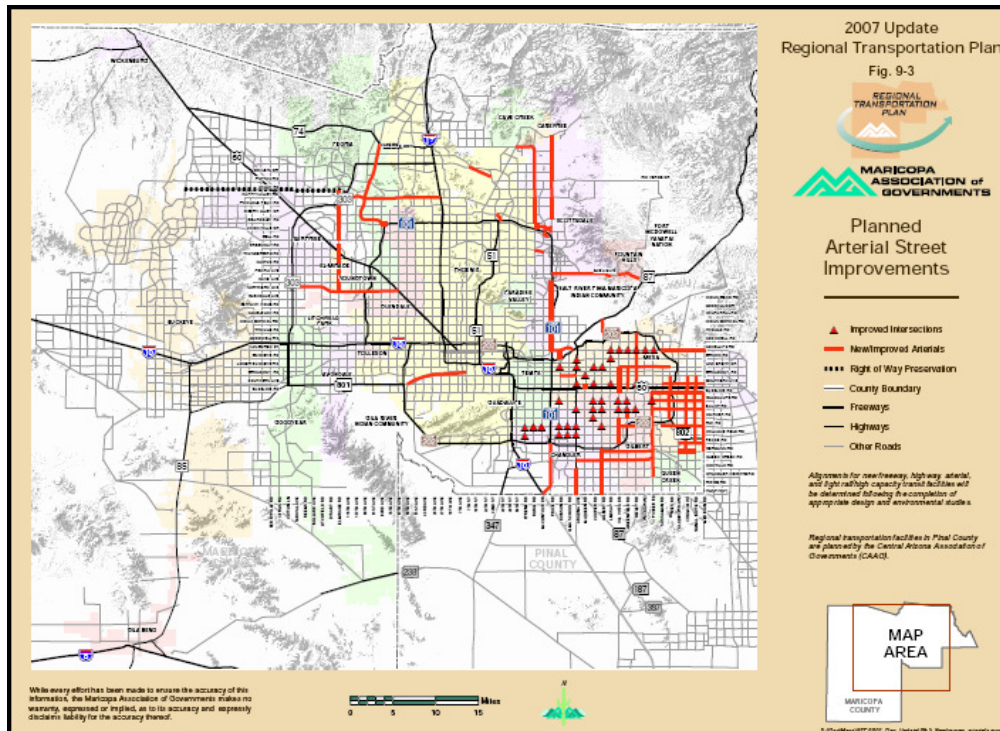
- 7th Street and Camelback Road
- 16th Street and Thomas Road
- 19th Avenue and Indian School Road
- 32nd Street and McDowell Road
- Pinnacle Peak Road and Tatum Boulevard
- Dunlap Avenue/7th Street/Cave Creek Road
- Camelback Road and 32nd Street
- Peoria Avenue and 35th Avenue
- Indian School Road and 51st Avenue



Estimated Cost:	\$	100,000,000
Funding:	\$	0
Unfunded Needs:	\$	100,000,000

REGIONAL TRANSPORTATION PLAN (RTP) PROJECTS

The Maricopa Association of Governments (MAG), working with local communities, state and regional agencies, business leaders, and the public, develops the Regional Transportation Plan (RTP) that guides regional investments for the next 20 years. Technical studies conducted across the region, along with extensive public outreach and support from the business community, have all contributed to building a transportation plan that is designed to balance various needs throughout the region while meeting performance-based standards. The City of Phoenix has already constructed one RTP project, Sonoran Boulevard, and will participate in the cost of building three more major RTP projects in the next 20 years. The projects and the future estimated cost to the city are listed below:



Projects:

- Avenida Rio Salado
- Black Mountain Boulevard (Ramps to SR 51)
- Happy Valley Road from 67th Avenue to Interstate 17

Estimated Costs of Three RTP projects:	\$ 112,595,063
Funding:	<u>\$ 79,188,000*</u>
Unfunded Needs:	\$ 33,407,063
*Includes MAG RTP Funding	

MAJOR MAINTENANCE PROGRAM

The Major Maintenance program includes Arterial/Collector Street Overlay, Residential Street Overlay, Arterial/Collector Street Microseal, Residential Street Slurry Seal, Arterial/Collector Street Fractured Aggregate Surface Treatment (F.A.S.T) and Residential Street F.A.S.T. Streets to be resurfaced are selected based on data extracted from the Pavement Management System and an engineering inspection and evaluation. Recently, an increase in asphalt prices has led to a significant reduction in the miles of streets that can be resurfaced each year. In 2001, 240 miles of City streets were resurfaced. The 2014 budget allowed only 126 miles to be resurfaced. In 1996, the interval between overlays was approximately 32 years, which was based on the total miles of streets, the cost to overlay a mile, and the budget available. With proper maintenance, this is an acceptable interval. Today we have more streets in the city, and the costs associated with the overlay program have greatly increased. The interval between overlays has climbed to approximately 55 years for residential streets and over 59 years for arterial streets.



Projects:

Projects are identified and addressed on a yearly basis.

Estimated 20-Year Costs:	
Resurfacing Program	\$1,900,000,000
Sidewalk Ramps (ADA)	<u>\$ 628,000,000</u>
Total:	\$2,528,000,000
Funding:	<u>\$ 532,052,536</u>
Unfunded Needs:	\$1,995,947,464

Major Drainage Improvements

PROGRAMS

Detention Basins and Channels
Storm Sewers and Storm Sewer Rehabilitation



DETENTION BASINS and CHANNELS

Detention basins provide a flow control structure used to contain flood water for a limited period of a time, thereby providing protection for areas downstream.

Projects:

The following is a partial list of identified projects:

LAVEEN ADMP

- 27th Avenue and South Mountain Avenue Basin
- 43rd Avenue and Dobbins Basin
- 44th Avenue and Carver Basin
- 47th Avenue Channel System
- 51st Avenue and Dobbins Basin
- 51st Avenue and Elliot Road Basin
- 67th Avenue Channel (Southern to South Mountain Avenue)
- Reservation Channel (Dobbins Road to Laveen Area Conveyance Channel)



METRO ADMP

- Durango Curve Basin
- East South Mountain Basins
- Encanto Park Golf Course Basin
- Palo Verde Golf Course Basin
- Van Buren Street Storm Drain
- Thomas Road Storm Drain (Old Cross Cut Canal to 60th Street)
- Central Avenue Storm Drain (Bethany Home Road to Arizona Canal)
- Jefferson Street/I-17 Storm Drain Project

Durango ADMP

- DRCC – Phase II
- Sunland Avenue Channel
- Western Canal Channel

South Phoenix/Laveen ADMP

- 27th Avenue/Dobbins Road Basin
- South Phoenix/Laveen Drainage Improvement Project

Hohokam ADMP

- Basin 5/Circle K Park
- 14th/15th Street Storm Drain
- Basin 1/Ardmore Road Storm Drain
- South Mountain/17th Way Storm Drain

- Basin 11 and Outfall Storm Drain
- 20th Street/Euclid Avenue Storm Drain
- 19th Street/South Mountain Avenue SD
- Basin 10/Head Scout Pueblo BSC

Other Projects

- 20th Avenue and Turney Basin
- Skunk Creek Levee at CAP
- 43rd Avenue Storm Drain Outfall Project
- Pecos Basin Outfall Project
- Salt River Channelization at 67th Avenue
- Palisene-Paradise Ridge Drainage Project
- Skunk Creek Channel at Pinnacle Peak Road

Estimated Cost:	\$ 709,000,000
Funding:	<u>\$ 0</u>
Unfunded Needs:	\$ 709,000,000

STORM SEWERS and STORM SEWER REHAB

The storm sewer system is designed to carry rainfall runoff and other drainage, excluding sewage. The runoff is carried in underground pipes or open ditches and discharges (untreated) into streams or other surface water bodies.

Projects:

The following is a partial list of identified projects:

- Deer Valley, 7th Street to 7th Avenue
- 7th Avenue: South Mountain to Baseline Road
- 15th Ave., Indian School to Thomas Road & E. Sheridan to Canal
- 12th Street: Arizona Canal to Hatcher Road
- 23rd Avenue: Salt River to Northern Avenue
- 27th Avenue: Dobbins Road to Baseline Road
- 28th Street: Red Mountain Freeway to Camelback Road
- 32nd Street: Union Hills Drive to Beardsley Road
- 35th Avenue: Broadway Road to Salt River
- 36th Street: Red Mountain Freeway to Arizona Canal
- 39th Avenue: El Camino Drive to Arizona Canal
- 43rd Ave., Indian School Rd. to Camelback
- 43rd Ave., Indian School Rd. to Camelback
- 44th Street: Arizona Canal to McDonald Drive
- 51st Avenue: Baseline Road to Elliot Road
- 52nd Street: Bell Road to Grovers Avenue
- 59th Avenue: Dobbins to Baseline Road
- 59th Avenue: Salt River to Buckeye Road
- 67th Avenue: Pinnacle Peak Road to Happy Valley Road
- 75th Avenue: Southern Avenue to Van Buren Street
- 83rd Avenue: Salt River to Van Buren Street



- 91st Avenue: Southern to Buckeye Road
- 99th Avenue: Salt River to Buckeye Road
- Arcadia Area Drainage Facilities
- Carver Hills Storm Drain
- Cave Creek Road: Bell Road to Union Hills Drive
- Cave Creek Road: Union Hills Drive to Loop 101
- Central Corridor Storm Drain Relief System
- Downtown Area Drainage Facilities
- North Black Canyon Drainage Facilities
- Northeast Phoenix Drainage Facilities

Estimated current and future costs:	\$489,300,000
Funding:	<u>\$ 4,444,759</u>
Unfunded Needs:	\$484,855,241

Other Local Improvements

PROGRAMS

ADA Compliance
Bikeways/Pedestrian Bridges/Tunnels
Dam and Levee Safety Program
Dust Control
Landscape Retrofit
Local Drainage
Local Street Modernization
Safety Projects/Traffic Calming
New Traffic Signals
Signal System Upgrade
Downtown Improvements



ADA COMPLIANCE



Since the enactment of the Americans with Disabilities Act of 1990, the Street Transportation Department has been proactive in making transportation services accessible to and usable by individuals with disabilities. The department has made accessibility requests from the community a top priority. In 2005, the Department contracted with Abilities Unlimited Incorporated (AUI) to conduct a citywide Americans with Disabilities Act compliance review in order to improve our compliance to ADA requirements.

Due to budget cutbacks, the contract with AUI was suspended and city staff has taken over day to day operations. To date, over 16,764 high priority compliance issues have been identified. A total of 2,048 have been addressed to date. In addition, over 28,630 other issues have been identified that must be addressed in the future.

Projects Include:

Accessible parking; accessible route barriers; crosswalks; curb ramps; curb roll-up; traffic controls; and detectable warning strips.



Total Estimated Costs:	\$35,700,000
Funding:	<u>\$13,360,000</u>
Unfunded Needs:	\$22,340,000

BIKEWAYS/PEDESTRIAN BRIDGES/TUNNELS



Regional bikeway planning within the MAG Region meets policies and recommendations of three existing plans. These plans include the MAG Regional Bicycle Plan; the Regional Off-Street System (ROSS) Plan; and the West Valley Multi-Modal Transportation Corridor Plan. The Regional Off-Street System (ROSS) Plan details a region wide system of off-street paths/trails for non-motorized transportation. The City of Phoenix typically installs new bikeways as development occurs and retrofits

existing streets with bikeways based on a variety of factors such as scheduled maintenance or identified barriers. Throughout the MAG Region, numerous opportunities for off-street walking and bicycling exist along canal banks, utility line easements, and flood control channels. These types of rights-of-way and easements are found throughout Maricopa County and intersect numerous arterial MAG Regional Bicycle Plan streets where local daily destinations are typically located. The goal of the ROSS plan is to help make bicycling and walking viable options for daily travel using off-street opportunities. City of Phoenix Street Transportation department expects to complete a council approved bicycle master plan that will specify dozens of bicycle corridors and hundreds of projects within those corridors.

Projects Include:

The following is a partial list of identified projects:

- 3rd Street Promenade
- Central Ave Shared Lanes
- 15th Avenue Road Diet and intersection improvements
- Encanto Blvd/Oak Street Bicycle Facility
- Osborn Road Bicycle Facility
- Bicycle Master Plan projects



Estimated Costs:	\$100,000,000
Funding:	<u>\$ 1,000,000</u>
Unfunded Needs:	\$ 99,000,000

DAM AND LEVEE SAFETY PROGRAM

The Street Transportation Department annually inspects and maintains 16 dams in the City of Phoenix. Four of the dams are jurisdictional, four are non-jurisdictional, and the remaining eight are located at the Phoenix Zoo. Inspections of jurisdictional dams in conjunction with the Arizona Department of Water Resources (ADWR) are required by State of Arizona law and FEMA regulations. A dam is considered jurisdictional if it impounds 50 acre-feet of water or if it is at least 25 feet high. The dams within the City of Phoenix provide flood protection for several hundred homes and properties.

Projects:

Annual inspections and maintenance

Estimated Costs:

Dam/Levee Maintenance & Inspection	\$ 2,000,000
Dam/Levee Studies/Analyses	\$ 6,000,000
Dam/Levee Levee Repair and Rehab	\$10,000,000

20 Year Total:	\$18,000,000
Funding:	<u>\$ 229,500</u>
Unfunded Needs:	\$17,770,500



DUST CONTROL



The dust control program was established to pave dirt roads, stabilize and pave unpaved shoulders, and dust proof alleys. "Particulate matter", also known as particle pollution or PM, is a complex mixture of extremely small particles and liquid droplets. Particles less than 10 micrometers (PM-10), which include both fine and coarse dust particles, pose the greatest health concern because they can pass through the nose and throat and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause

serious health effects. Despite implementation of some of the most stringent control measures in the country, the city of Phoenix is located within an EPA identified non-attainment area for PM-10. This means that the amount of PM-10 particulate pollution exceeds the standard. Through the implementation of the dust control program, the city strives to reduce the amount of PM-10 in the air to help bring the area into compliance with air quality standards.

Projects:

Current initiatives include:

- Paving of unpaved roads
- Asphalt treatment for alleys
- Stabilization of street shoulders



Estimated Cost:	
Dirt Road Paving	\$26,250,000
Alley Dustproofing	9,100,000
Shoulder Paving	<u>6,650,000</u>
Total:	\$42,000,000
Funding:	<u>\$12,240,000</u>
Unfunded Needs:	\$29,760,000

LANDSCAPE RETROFIT

The Landscape Retrofit program provides for streetscape enhancements that may include landscape, irrigation, sidewalk repair and bus stop improvements. These projects improve streetscapes, providing a more attractive environment for businesses and residents. The improvements may help spur economic development in areas targeted for revitalization.



Projects:

The following is a partial list of identified projects:

- 2nd Avenue: Monroe to Fillmore (landscape)
- Northern Avenue: 18th Street to SR-51 (median islands)
- 16th Street at I-17 (median islands)
- 5th Street: Fillmore to Garfield (landscape)



Estimated Cost:	
Landscape Retrofit Projects	\$20,000,000
West Phoenix Landscape Projects	<u>5,000,000</u>
Total:	\$25,000,000
Funding:	<u>\$10,000,000</u>
Unfunded Needs:	\$15,000,000

LOCAL DRAINAGE

The Local Drainage Program helps to reduce local flooding and mitigate maintenance issues where it is cost-effective to do so. The program can also extend the existing drainage system designed for the two-year storm event.

Projects:

More than 650 individual locations throughout the city have been identified as requiring drainage improvements. These improvements include construction of storm drains, catch basins, and curb/gutter. Average costs for design and construction of a local drainage project has been approximately \$750,000 on average during the recent past. This average cost includes construction management and inspection of the projects.



Estimated Costs:	\$487,500,000
Funding:	<u>\$ 8,600,000</u>
Unfunded Needs:	\$478,900,000

LOCAL STREET MODERNIZATION

The Local Street Modernization Program is used to upgrade existing local and collector streets that are lacking curb, gutter, and sidewalk. An improved street can increase property values and provide a safer, more attractive neighborhood. These improvements can develop community pride and encourage residents to make other improvements as well. Also, the fully improved streets can improve drainage by collecting the water along the curb and gutter and channeling it into the city's storm drain system.

Projects:

The following is a partial list of identified projects:

- 3rd Street: Illini Street to Riverside Street
- 5th Street: Broadway to Elwood Street
- 12th Street to 11th Place: Alice Avenue to Eleanor Court
- 13th Avenue: Southern Avenue to Sunland Avenue
- 30th Street: Washington Street to Van Buren Road
- 43rd Place: Bellview Street to McDowell Road
- Danbury Drive: 28th Street to 30th Street
- Grovers Avenue: 28th Street to 32nd Street
- Grovers Avenue: Cave Creek Road to 25th Street
- Osborn Road and 20th Street
- 11th Avenue and Glenrosa Traffic Circle (Plan Construction: FY2015: estimated cost: \$200,000)
- 17th Avenue: Roeser Rd to Broadway Rd
- Equestrian Trail: Appaloosa Dr to Oneid Rd
- 43rd to 35th Avenue: McDowell Road to Palm Lane
- 13th St: Van Buren to Moreland
- MacKenzie Drive: 51st Avenue to 49th Drive
- 46th St: Greenway Road to Beck Lane
- Contention Mine Road: Cave Creek to 26th Street
- 15th Avenue: Missouri Avenue to Bethany Home Road
- Mountain View Road to Brown Street from 8th Street to 12th Street



Estimated Costs:	\$580,000,000
Funding:	<u>\$ 13,531,096</u>
Unfunded Needs:	\$566,468,904

SAFETY PROJECTS/TRAFFIC CALMING

Safety Projects are primarily funded through grant opportunities, which usually require a city funding match. Projects include pedestrian islands, improved lighting, educational campaigns, and other projects designed to create safer environments. The Traffic Calming Program addresses neighborhood traffic mitigation issues. Projects may include speed humps, traffic circles, and other traffic calming methods.



Projects:

- **Highway Safety Improvement Program (HSIP)** – City of Phoenix match required to receive federal dollars for funding. Anticipate one project per year with \$10,000,000 total federal funding with match at 20 percent.



- **Other Grant Matching Funds** – City of Phoenix match required for other grant opportunities. Anticipate eight projects per year at \$25,000 each, with a city match at 20 percent.
- **Pedestrian Islands** – Construction of two pedestrian islands per year at \$50,000 each.
- **Safety Campaigns** – Implementation, design, and production of five safety campaigns such as Halloween

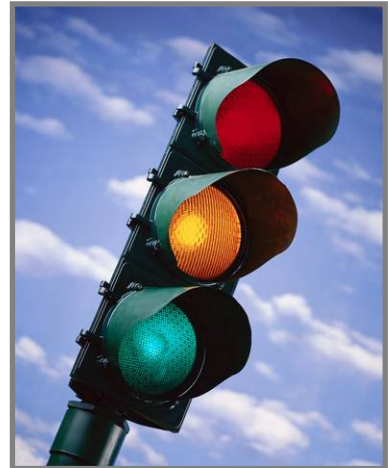
Pedestrian Campaign, METRO Pedestrian Safety Campaign, RED MEANS STOP Campaign, etc. Each project estimated at \$10,000.

- **Speed Hump Program** – Continuation of existing program.
- **Collector and Local Street Mitigation** – Anticipate multiple projects totaling \$500,000 per year.

Estimated Cost:	
HES Matching Funds	\$10,000,000
Other Grant Matching Funds	3,200,000
Pedestrian Islands	2,000,000
Safety Campaigns	1,000,000
Speed Hump Program	2,000,000
Collector and Local Street Mitigation	10,000,000
Future Needs:	<u>15,000,000</u>
Total:	\$43,200,000
Funding:	<u>\$ 9,002,836</u>
Unfunded Needs:	\$34,197,164

NEW TRAFFIC SIGNALS

The purpose of traffic signals is to improve the overall flow of traffic at busy intersections. Street Transportation analyzes more than 100 intersections each year for possible signalization and ranks them using the following factors:



- Volume of traffic and traffic conflicts
- Traffic speed
- Crash history
- Proximity to other signals
- Proximity to schools
- Number of pedestrians
- Geometrics of the intersection
- Proximity to Railroad Crossings

Based on the current slow growth in the economy, it is projected that there will be a need for 180 new traffic signals over the next 20 years. Presently, the department is funded to install approximately one new traffic signal per year. In five years, we will need to increase this number to 8 traffic signals per year due to increased growth to the city. The cost to build a traffic signal is also escalating.

There are additional traffic signal needs which include annual rehabilitation and adding left turn arrows to existing signals, when justified. Rehabilitation costs for these traffic signals will cost \$3,000,000 per year. Rehabilitation will also include traffic signal controller replacement at an annual cost of \$1,000,000. The addition of 44 left turn arrows to existing signals will cost \$1,100,000 each year.

Estimated Cost:	
Traffic Signal Construction	\$ 36,000,000
Traffic Signal Rehabilitation	60,000,000
Traffic Signal Controller Replacement	20,000,000
Installation of Left Turn Arrows	22,000,000
Future Needs	<u>12,000,000</u>
Total:	\$150,000,000
Funding:	<u>\$ 19,095,276</u>
Unfunded Needs:	\$130,904,724

SIGNAL SYSTEM UPGRADE

Street Transportation’s fiber and wireless communication network and the Traffic Management Center (TMC) will need to be expanded and upgraded over the next 20 years.

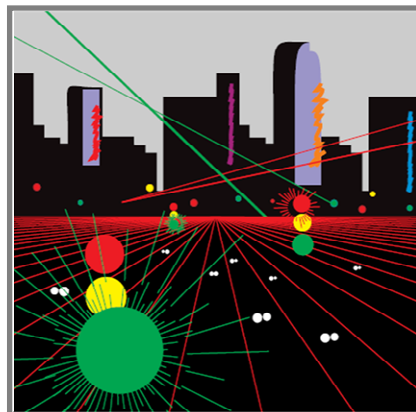


Projects:

Within the next five years, \$4,000,000 will need to be spent to add more fiber backbone to the communications infrastructure to increase the bandwidth available to add more ITS devices such as cameras to two major travel corridors. For the remaining 15 years, an additional \$12,000,000 will be needed to expand the communication network for an additional six travel corridors to fully augment the wireless mesh radio system for all anticipated ITS devices citywide.

During this time, the TMC will also require upgrading and expansion. The video wall should be replaced four times over the 20 year period. Computer equipment (computers, servers, communication switches, etc.) and software will require upgrading.

Estimated Cost:	
Install Communication Infrastructure	\$16,000,000
TMC Video Wall/Equipment Replacement	2,000,000
Future Needs	<u>60,000,000</u>
Total	\$78,000,000
Funding:	<u>\$17,963,000</u>
Unfunded Needs:	\$60,037,000



DOWNTOWN IMPROVEMENTS

The Phoenix Downtown Comprehensive Transportation Study identified and evaluated potential roadway, bicycle and pedestrian improvements in the downtown and surrounding area. A series of projects were linked to three distinct timeframes to improve downtown mobility and access to other transportation modes and economic development opportunities. Some of these improvements include: roadway overlay, bicycle infrastructure and pedestrian improvements.



Estimated Cost:	
7 th Avenue, Roosevelt to Jefferson	\$ 500,000
Central Avenue, Van Buren to UPRR	\$ 200,000
7 th Street, Roosevelt to Jefferson	\$ 575,000
3 rd Avenue, Jefferson to Grant Streets	\$ 200,000
Grant/Lincoln Streets, 7 th Ave to 7 th Street	\$ 500,000
Total	\$_1,975,000
Funding:	\$ 0
Unfunded Needs:	\$_1,975,000

TECHNOLOGY ENHANCEMENTS

Description

The Street Transportation department, as a beneficiary of federal dollars, is tasked with implementing a nationwide program known as Moving Ahead for Progress in the 21st Century Act (P.L. 112-141) or simply MAP-21. Part of the MAP-21 program requires jurisdictions create and maintain a Transportation Asset Management Program (TAMP) to compete for federal funds. The Street Transportation Department has implemented a variety of systems. Some of the systems already in use represent a considerable amount of effort and expenditure and are instrumental in existing processes. These systems include Citywide applications such as SAP, PROMIS II, and EAST. Other systems include PONTIS Bridge Management, the Pavement Management System (PMS), EZ Map, and Citizen Serve.

Study and Analysis

Through a comprehensive, competitive, and transparent Request for Proposal (RFP) process, the department would engage with a consultancy to thoroughly map the department's processes, gather the software linkages, identify data structures, investigate current systems (SAP, CitizenServe, EZ Map, PROMIS II), and present gap findings and recommendations. Any subsequent software implementations, modifications, or process enhancements would follow a competitive RFP process. The Transportation and Infrastructure Subcommittee and the Innovation and Efficiency Subcommittee would be instrumental to driving this process.

The review of the Mesa (AZ), Henderson (NV), and San Diego (CA) implementations, along with the wide range of jurisdictions featured in the AASHTO/FHWA Transportation Asset Management Guide Webinar Series, all identified staffing levels needed to manage a TAMP in addition to the implementation itself. The fund commitments from the wide range of jurisdictions who have undergone a TAMP study and implementation range from \$800,000 to well over \$3,000,000 for the study alone, to several more million for software and program implementations. The cost estimate for a study is based upon case studies from similar implementations average \$1,800,000. Increasing the scope to include other departments would increase the cost.

Standard

An Integrated TAMP and Transportation Project Management system can follow a variety of paths that would be determined by the study and analysis. Utilizing and modifying existing systems (PROMIS II, SAP, CitizenServe, EZMap) is one option. Implementing a new suite of tools is always another option. Based upon AASHTO/FHWA case studies, costs for implementing a TAMP are estimated from \$1,200,000 to \$3,000,000. The funding needed for the City of Phoenix TAMP and Project Management implementation is estimated at \$2,500,000. Off the shelf implementation may reduce initial costs, but the cost of training, modifications, and lost productivity would eliminate any savings. Ongoing licensing and maintenance costs depend upon the actual solution, however 20% of the initial total cost will be used for the estimate.

Hardware needed for the software implementation is dependant upon the Information Technology Services Department to provide virtual servers and storage and charged as standard operating costs.

Training will be provided by either the software implementer or from existing staff with a "train the trainer" philosophy. If existing systems are utilized as the final solution, existing technical staff will train key staff on new procedures and processes to then educate remaining staff. Otherwise, training costs will be part of any RFP response. Regardless, the soft costs of training and temporarily lost productivity is estimated at 20 hours per staff member at an average pay rate of \$25 an hour for 400 employees.

Staffing

Based upon AASHTO/FHWA case studies, five employees are needed to maintain the TAMP and manage the collection and organization for the hundreds of thousands of transportation assets. The most appropriate employee position for this role is the Engineering Technician. For proper coordination, an Engineering Technician Supervisor would be required. Technical support for any new or modified integrated TAMP and project management solution would require two programming/technical staff needed to maintain and enhance the software solution, and three additional GIS technicians to manage the geographic integration requirements. The GIS and technical staff would be supervised by existing Street Transportation Technical Services staff.

Estimated Cost:	
Study and Analysis	\$1,800,000
Software Implementation	\$2,250,000
Software Licensing	\$250,000
TAMP Operations Staffing	
Engineering Technicians X 5 (\$54,916)	\$274,580
Engineering Technician *Lead (\$57,834)	\$57,834
TAMP and Project Management IT staff	
GIS Technicians X 3 (\$73,222)	\$219,666
IT Programmer/Analyst I X 2 (\$93,896)	\$187,792
Total Staffing Costs	\$739,872
Training soft costs	\$200,000
First Year Estimated Costs	\$5,239,872
Annual Ongoing Software Maintenance (20% of Software Licensing/year = \$50K/year)	\$50,000
Annual Average Personnel Costs (5% annual increase up to year 9)	\$12,801,271
Total Technology Improvements for 20 years:	\$18,991,146
Funding	\$0
Unfunded Needs	\$18,991,146

Major Regional Improvements			
PROGRAM	TOTAL	FUNDED	UNFUNDED
Arterial Streets	\$ 1,369,515,894	\$ 925,312,204	\$ 444,203,690
Bridges	\$ 240,400,000	\$ -	\$ 240,400,000
Bridges (Maint/Rehab/Replacement)	\$ 102,100,000	\$ 16,830,108	\$ 85,269,892
Intersection Restoration	\$ 100,000,000	\$ -	\$ 100,000,000
Regional Transportation Plan	\$ 112,595,063	\$ 79,188,000	\$ 33,407,063
Major Maintenance Program	\$ 2,528,000,000	\$ 532,052,536	\$ 1,995,947,464
Total Major Regional Imprvmnts	\$ 4,452,610,957	\$ 1,553,382,848	\$ 2,899,228,109
Major Drainage Improvements			
PROGRAM	TOTAL	FUNDED	UNFUNDED
Detention Basins and Channels	\$ 709,000,000	\$ -	\$ 709,000,000
Storm Sewers/Storm Sewer Rehab	\$ 489,300,000	\$ 4,444,759	\$ 484,855,241
Total Major Drainage Imprvmnts	\$ 1,198,300,000	\$ 4,444,759	\$ 1,193,855,241
Other Local Improvements			
PROGRAM	TOTAL	FUNDED	UNFUNDED
ADA Compliance	\$ 35,700,000	\$ 13,360,000	\$ 22,340,000
Bikeway/Pedestrian Bridge/Tunnel	\$ 100,000,000	\$ 1,000,000	\$ 99,000,000
Dam and Levee Safety Program	\$ 18,000,000	\$ 229,500	\$ 17,770,500
Dust Control	\$ 42,000,000	\$ 12,240,000	\$ 29,760,000
Landscape Retrofit/Screen Walls	\$ 25,000,000	\$ 10,000,000	\$ 15,000,000
Local Drainage	\$ 487,500,000	\$ 8,600,000	\$ 478,900,000
Local Street Modernization	\$ 580,000,000	\$ 13,531,096	\$ 566,468,904
Safety Projects/Traffic Calming	\$ 43,200,000	\$ 9,002,836	\$ 34,197,164
Signals	\$ 150,000,000	\$ 19,095,276	\$ 130,904,724
Signal System Upgrade	\$ 78,000,000	\$ 17,963,000	\$ 60,037,000
Downtown Improvements	\$ 1,975,000	\$ -	\$ 1,975,000
Total Other Local Imprvmnts	\$ 1,561,375,000	\$ 105,021,708	\$ 1,456,353,292
Technology Enhancements			
PROGRAM	TOTAL	FUNDED	UNFUNDED
Technology	\$ 18,991,146	0	\$ 18,991,146
Total Infrastructure Needs	\$ 7,231,277,103	\$ 1,662,849,315	\$ 5,568,427,788

APPENDIX A

Arterial Street Projects

- 7th Avenue: Vogel Avenue to Cheryl Drive
- 7th Avenue: McDowell Road to Thomas Road, west side
- 7th Street: Happy Valley Road to Pinnacle Peak Road
- 7th Street: Deer Valley Road to Happy Valley Road
- 107th Avenue: Dobbins Road to DRCC (North of Broadway)
- 16th Street: Baseline Road to South Mountain Avenue
- 20th Street: Highland Avenue to Camelback Road (69KV)
- 27th Avenue: Lower Buckeye Road to Broadway Road
- 43rd Avenue: Dobbins Road to Baseline Road
- 51st Avenue: Pinnacle Peak Road to Happy Valley Road
- 59th Avenue: Olney Drive to Dobbins Road
- 59th Avenue: Dobbins Road to Baseline Road
- 59th Avenue: Broadway Road to Lower Buckeye Road
- 59th Avenue: Elliot Road to Olney Drive
- 64th Street: Pima Freeway to Deer Valley Drive
- 67th Avenue: Lower Buckeye Road to Buckeye Road
- 67th Avenue: Pinnacle Peak Road to Happy Valley Road
- 75th Avenue: Baseline Road to Southern Avenue
- 91st Avenue: Southern Avenue to Broadway Road
- 91st Avenue: Lower Buckeye Road to Buckeye Road
- 91st Avenue: Salt River to Southern Avenue
- 99th Avenue: Broadway Road to Lower Buckeye Road
- 99th Avenue Lower Buckeye Road to Buckeye Road
- 91st Avenue:
- Baseline Road: LACC to 75th Avenue
- Baseline Road: 75th Avenue to 59th Avenue
- Broadway Road: 99th Avenue to 51st Avenue
- Buckeye Road: 91st Avenue to 67th Avenue
- Camelback Road: 115th Avenue to 107th Avenue
- Camelback Road: 44th Street to 64th Street
- Carefree Highway: Black Canyon Freeway to 7th Street
- Dobbins Road: 67th Avenue to 17th Avenue
- El Mirage Road: Camelback Road to Bethany Home Road
- Happy Valley Road: 19th Avenue to Cave Creek/Pinnacle Peak Road
- I-17 Frontage Road: Dixileta Drive to Lone Mountain Road
- I-17 Frontage Road: Lone Mountain Road to Dove Valley Road
- I-17 Frontage Road: Dove Valley Road to Carefree Highway
- I-17 Frontage Road: Happy Valley Road to Pinnacle Peak Road
- Indian School Road: 48th Street to 60th Street
- Loop 202/17th Avenue Improvements
- Loop 202/24th Street Improvements
- Loop 202/25th Avenue Improvements
- Loop 202/40th Street Improvements
- Loop 202/51st Avenue Road Roadway Improvements
- Loop 202/Baseline Road Roadway Improvements
- Loop 202/Broadway Road Improvements
- Loop 202/Buckeye Road Roadway Improvements

- Loop 202/Desert Foothills Pkwy Improvements
- Loop 202/Dobbins Road Roadway Improvements
- Loop 202/Elliot Rd Improvements
- Loop 202/Lower Buckeye Road Roadway Improvements
- Loop 202/Southern Avenue Roadway Improvements
- Loop 202/Van Buren Roadway Improvements
- Loop 303/43rd Avenue Roadway Improvements
- Loop 303/51st Avenue Roadway Improvements
- Lower Buckeye Road: 107th Avenue to 51st Avenue
- Mayo Boulevard: Tatum Boulevard to 56th Street
- Scottsdale Road: Loop 101 to Bell Road (IGA)
- Scottsdale Road: Cactus Road to 200' north of Dreyfus
- Southern Avenue, 99th Avenue to 91st Avenue
- Southern Avenue: 75th Avenue to 43rd Avenue
- Van Buren Street: 83rd Avenue to 75th Avenue
- Van Buren Street: 52nd Street to 48th Street



- Loop 303/Pyramid Peak Parkway Roadway Improvements