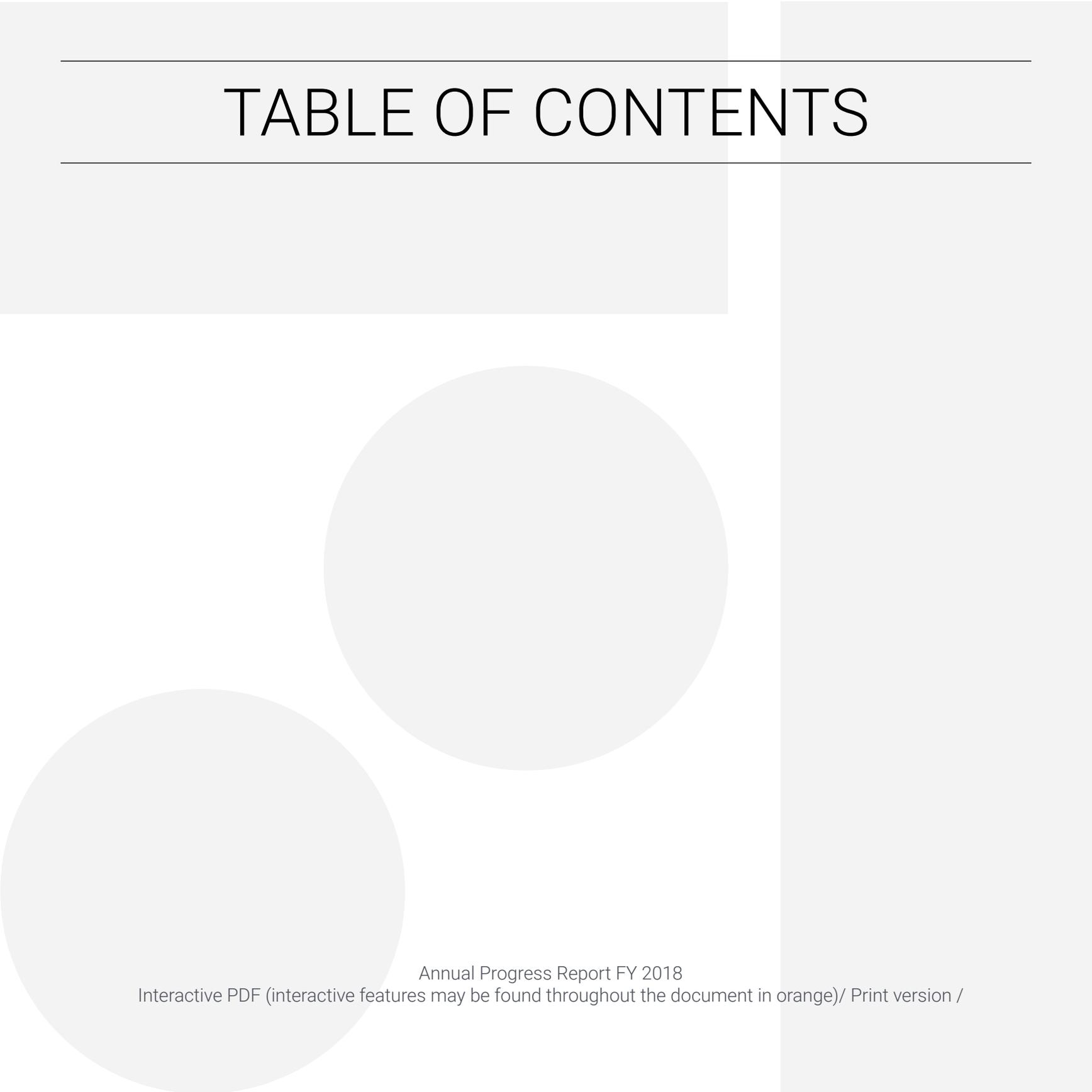




**ANNUAL
PROGRESS
REPORT
FY 2018**

JULY 1, 2017
THROUGH
JUNE 30, 2018

TABLE OF CONTENTS



Annual Progress Report FY 2018

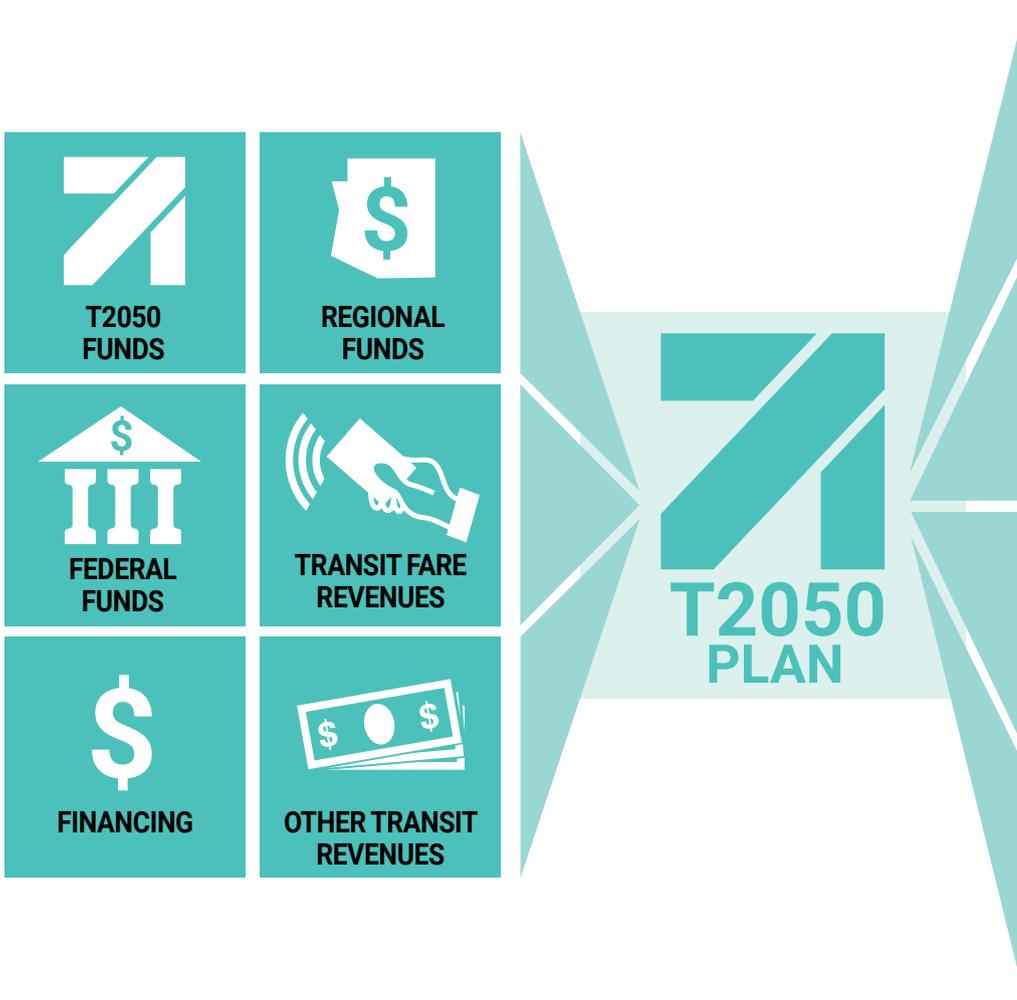
[Interactive PDF](#) (interactive features may be found throughout the document in orange)/ [Print version](#) /

1.0

Program Overview

T2050 AT A GLANCE

PROGRAM AREAS



T2050 35-YEAR GOALS

CONTINUE

bus, RAPID commuter bus, neighborhood circulator and Dial-a-Ride service for

35 YEARS



CONTINUE

17 MILES of light rail service

680 MILES of new overlays on arterial/major streets



EXTEND bus and Dial-a-Ride service hours to **MATCH LIGHT RAIL HOURS**



Provide 15-minute frequency on half of all bus routes



ADD 42 MILES of new light rail in Phoenix

1,080 MILES of new bike lanes

2,000 new street lights



EXTEND & ADD BUS SERVICE to unserved major streets



EXTEND & ADD NEW RAPID service



PROVIDE 75 MILES of new Bus Rapid Transit service

135 MILES of new sidewalks



ADD NEW circulator service

\$240 MILLION for new roads and upgraded bridges



PURCHASE NEW buses and Dial-a-Ride vehicles



BUILD NEW light rail station at 50th Street



Technology enhancements



BUILD NEW park-and-ride lots



Build additional bus bays

PROGRAM OVERVIEW

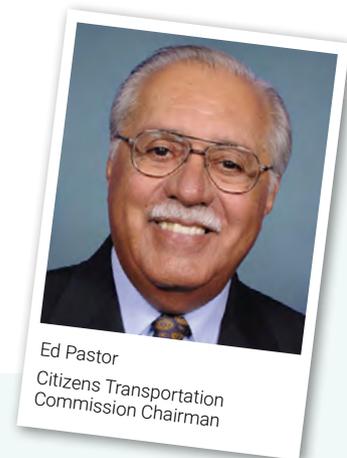


Proposition 104 was approved by Phoenix voters Aug. 25, 2015, creating a sales tax increase from 0.4 to 0.7 percent. This revenue helps fund the Phoenix Transportation 2050 (T2050) plan, which is dedicated to improving streets and transit service throughout the city.

and accountability in the expenditures of funds, as well as provide oversight during implementation of the various improvements identified in the plan.

The T2050 sales tax will generate a little more than half of the plan's overall funds. The remaining funds for the 35-year plan will be comprised of federal, regional and other local funding sources. The plan dedicates about 86 percent of T2050 to Phoenix's public transit program, with the remaining funds used to supplement existing streets funding sources.

Prior to the start of T2050, which became effective Jan. 1, 2016, the mayor and City Council appointed the 15-member Citizens Transportation Commission (CTC) to oversee the T2050 program to ensure transparency



Ed Pastor
Citizens Transportation
Commission Chairman

Program Overview (cont'd)

Public outreach is incorporated into the planning and development of new bus routes and service extensions, high capacity transit options including light rail and bus rapid transit, and street projects from building and improving roads to creating bike lanes and ADA ramps. Staff members host open houses and meet-and-greet activities, conduct public meetings, and attend community events to provide information and gather input.

The City Council's Aviation and Transportation Subcommittee provides recommendations on streets and transit issues before items move to the full council for action.

This report identifies progress through the 2017-18 fiscal year and gives a glimpse of what T2050 improvements are planned over the next five years.

More information on the regional and federal funding programs is available at www.phoenix.gov/T2050/Funding.

Aviation and Transportation Subcommittee



Councilwoman Debra Stark
Chairwoman Aviation and
Transportation Subcommittee



Mayor Thelda Williams
Member Aviation and
Transportation Subcommittee



Councilwoman Felicita Mendoza
Member Aviation and
Transportation Subcommittee

Lifecycle: Balancing Revenues and Expenditures

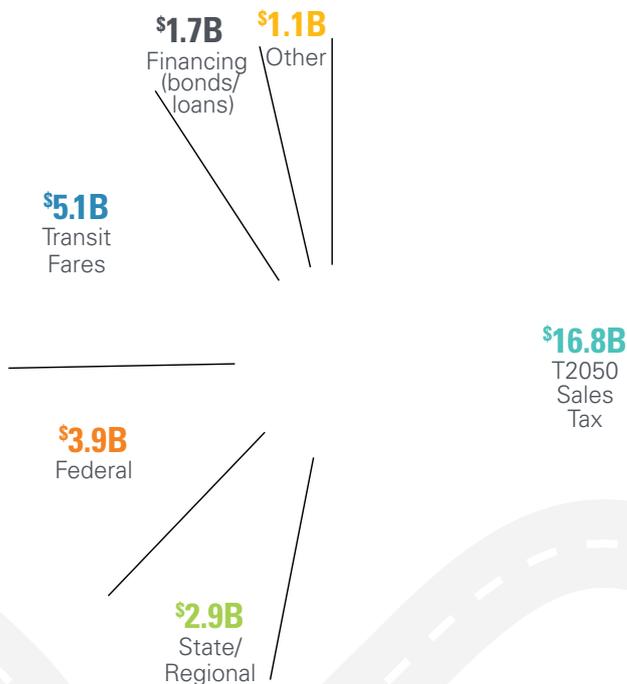
At times, T2050's projected revenue will exceed projected expenditures for a given year. This was done intentionally to ensure the plan has available funds in future years for large expenditures, such as light rail projects and park-and-ride facility construction.

In addition to the sources of funds shown in [Figure 1.1](#), the Public Transit and Street Transportation staff pursue opportunities to reduce costs through innovation, value

engineering and other project delivery and financing methods such as Public-Private Partnerships (P3). In FY 2018, awards included \$380,000 for mobility projects from MAG and \$125,000 for alternative transportation program taxi subsidies.

For more information on assumptions, please see [Table A.1](#) in the appendix.

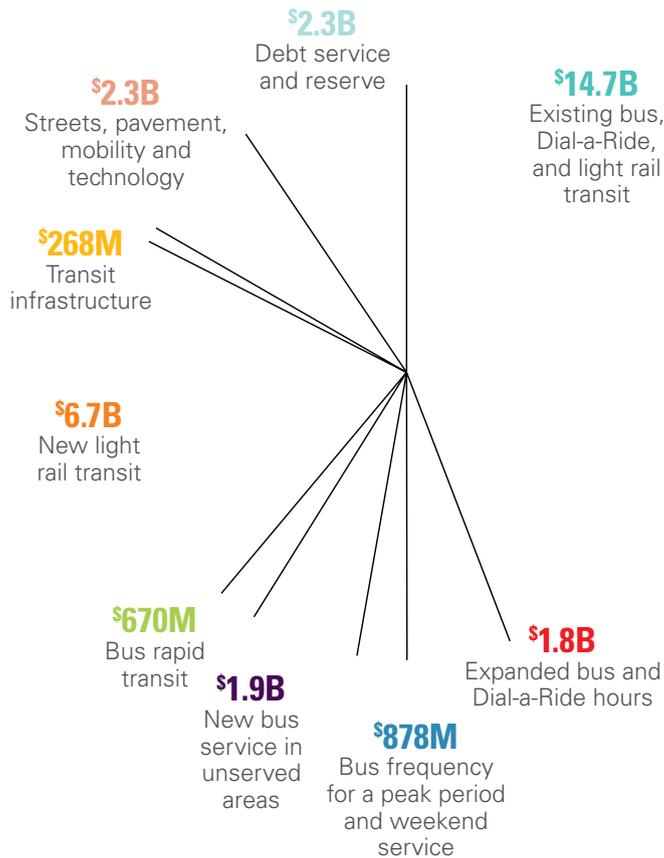
Figure 1.1 Sources of Funds



FY 2018 Financial Summary

The total budget for fiscal year (FY) 2018 was nearly \$216 million. Figure 1.2 shows planned uses of funds. Please see Table A.2 in the appendix for additional information.

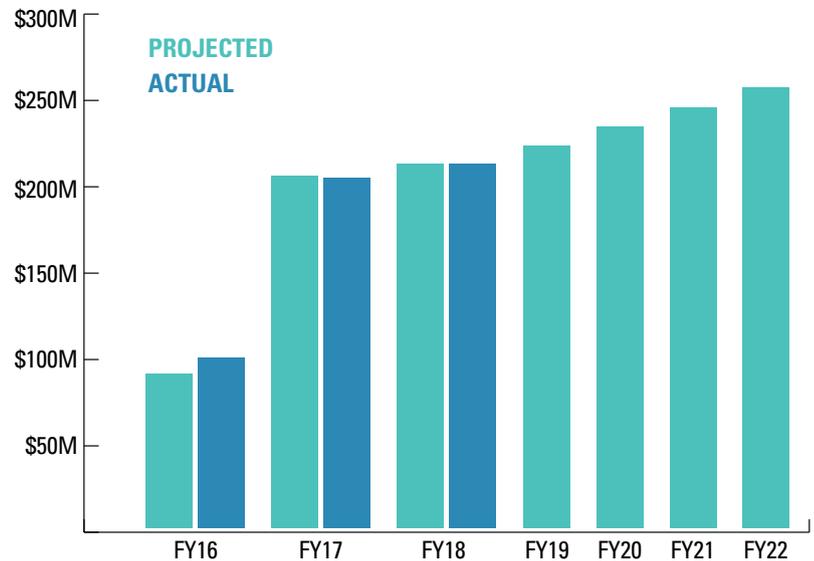
Figure 1.2 Planned Uses of Funds



FY 2019 - FY 2023 Financial Summary

A summary of the budgeted and actual sales tax revenue, as well as the five-year projected revenue figures are shown in Figure 1.3. The five-year financial plan for the FY 2019–2023 time period is shown in Table A.3 in the appendix. The balance of the fund is anticipated to increase through FY 2020, when funds will be used for the new light rail and major streets construction projects.

Figure 1.3 T2050 Sales Tax Revenue Summary





2.0

Bus and Dial-a-Ride

MAKING PROGRESS CUMULATIVE PROGRESS TO DATE JAN. 1, 2016 - JUNE 30, 2018

NEW OR IMPROVED BUS AND DIAL-A-RIDE

EXTENDED SERVICE HOURS

for bus and Dial-a-Ride to
MATCH LIGHT RAIL HOURS



INCREASED FREQUENCY



off-peak to **15 MIN** on 4 routes:

19
19th Avenue

3
Van Buren Street

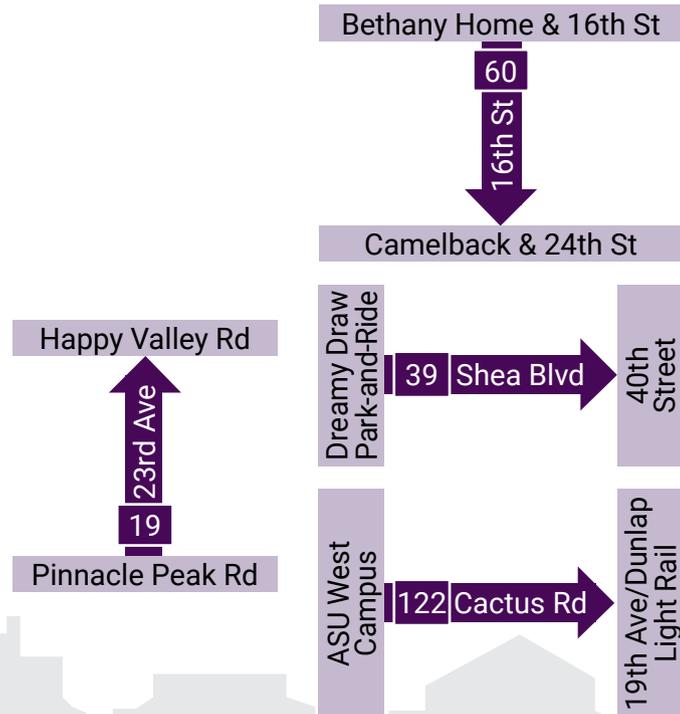
50
Camelback Road

29
Thomas Road

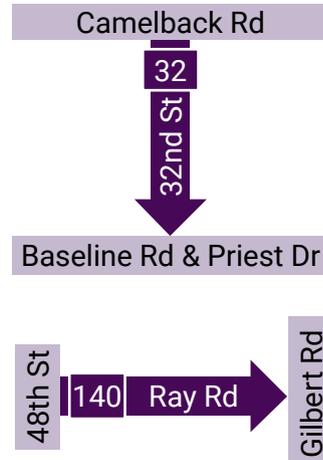
weekdays & weekends to **30 MIN**



EXTENDED BUS ROUTES



ADDED BUS ROUTES



ORDERED

 **219** LOCAL BUSES

 **12** RAPID BUSES

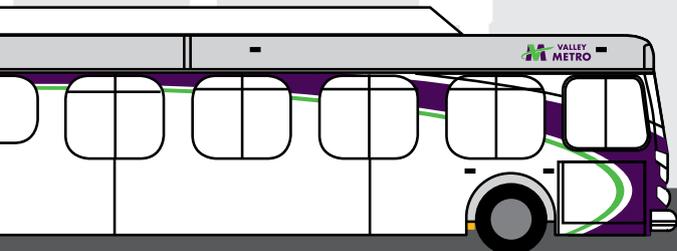
 **72** DIAL-A-RIDE VEHICLES

 **5** BUS BAYS INSTALLED

 **4** BUS BAYS IN DESIGN

 **40** BUS STOPS INSTALLED

 **97** BUS SHELTER SHADE STRUCTURES INSTALLED



MAKING PROGRESS

CUMULATIVE PROGRESS TO DATE JAN. 1, 2016 - JUNE 30, 2018



NEW OR IMPROVED BUS AND DIAL-A-RIDE

OTHER IMPROVEMENTS COMPLETED

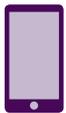
\$23 MILLION RECEIVED
in FTA formula grants
for Phoenix transit

\$2.6 MILLION RECEIVED
in grant funding
to purchase buses

\$2 MILLION SAVED with new
LIQUEFIED NATURAL GAS (LNG)
contract



Awarded contract for
WEST TRANSIT FACILITY
fixed route services



**AWARDED ALTERNATIVE
TRANSPORTATION SERVICES**
contract for technology enhancements



PARTNERED WITH LYFT
for 20% discounted first/last
mile rides



LAUNCHED TRIPSPARK
customer web portal for
Dial-a-Ride users



**DEPARTMENT OF HOMELAND
SECURITY ENDORSEMENT**
to double K-9 security



**REGIONAL DIAL-A-RIDE
IMPLEMENTED**
eliminating transfers



Continued refurbishing
SOUTH TRANSIT FACILITY



COMPUTER AIDED DISPATCH
system in progress



INTERACTIVE DIGITAL SIGNS
project in progress



AUDIO ON DIGITAL BUS SIGNS

BUS AND DIAL-A-RIDE



In FY 2017-18, Phoenix continued to invest in the improvement of its local bus service, by improving off-peak frequency of several routes that service the city's core. These improvements are the latest in a five-year

cycle that has \$1.2 billion dedicated T2050 funds for the improvement of local bus and Dial-a-Ride (DAR) services. In addition to T2050 funds, the plan utilizes federal and state grants, local funds, and the Regional Public Transportation Fund (PTF).

In FY 2018, the Public Transit Department completed grant applications and received awards of nearly \$71 million in Federal Transit Administration (FTA) formula grants for the region, of which nearly \$23 million is allocated for Phoenix transit projects. Also, Phoenix received an award of \$2.6 million in competitive grant funding from the FTA Bus and Bus Facilities Infrastructure Investment Program for the purchase of new local buses.

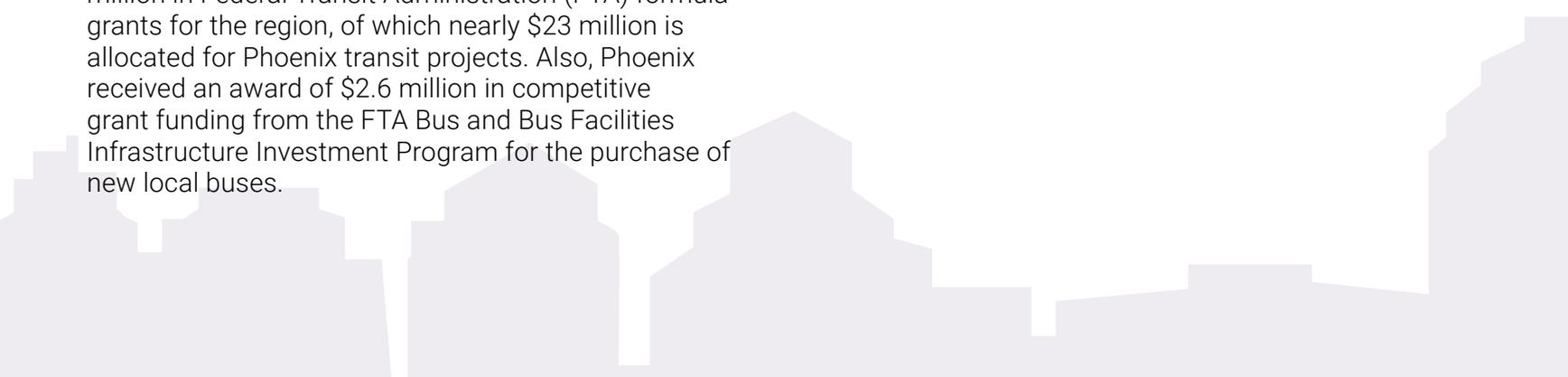


Table 2.1 T2050 Bus and Dial-a-Ride Progress

Completed July 1, 2017 to June 30, 2018

Fund existing bus, RAPID commuter bus, neighborhood circulator and Dial-a-Ride service for 35 years

- Maintained existing services, which includes 38 Phoenix-operated local routes, six RAPID routes, four circulators and Dial-a-Ride.

Improve bus frequency

- Oct. 2017: Increased weekday off-peak frequency to 15 minutes on Thomas Road (Route 29) and Camelback Road (Route 50).

Extend and add bus service to unserved major streets

- Oct. 2017: Extended Route 19 service on 23rd Avenue between Pinnacle Peak and Happy Valley roads, where it now connects riders to Route 35.
- Oct. 2017: Valley Metro added Route 140 on Ray Road. The Phoenix portion of the route is between 48th Street and I-10 in Ahwatukee, and ends at Gilbert Road in the town of Gilbert.
- Oct. 2017: Extended Route 60 service from 16th Street and Bethany Home Road to Camelback Road and 24th Street, giving riders a direct connection to Biltmore Fashion Park.
- April 2018: Extended Route 51 in April 2018 south on 51st Avenue from Lower Buckeye Road to Baseline Road. The route was also combined with Route 251 that services the Gila River Indian Community. Today, a one-seat ride is possible from the Gila River Indian Community to ASU West on Thunderbird Road.
- April 2018: Added bus service on 40th Street (Route 32) between University Drive and Baseline Road, extending the route to Arizona Mills Mall in Tempe. The extension now provides a one-seat ride from Camelback High School to Arizona Mills Mall, via Phoenix Sky Harbor International Airport.

New buses and Dial-a-Ride vehicles

- 66 new local buses
 - 46 are the standard 40-foot buses
 - 20 are the 60-foot articulated buses
- 12 new RAPID buses
 - 10 are the 40-foot buses
 - 2 are the 60-foot articulated buses
- 25 new Dial-a-Ride vehicles

Increase security

- The Department of Homeland Security delivered a positive endorsement to double the K-9 security detail from three to six teams.
- Transferred nine municipal security guard positions from Police Transit Bureau to Public Transit Department to supplement private security contract. New Public Transit MSGs will be stationed at our north, south and west operating garages.

Bus bays

- 4 bus bays in design.

Bus stops

- 40 bus stops installed along new route extensions.
- 66 new shelters installed at existing bus stops to provide shade.

Incorporate technology

- Launched TripSpark, a customer web portal for DAR users.
- Awarded the Alternative Transportation Programs contract, which allows passengers to schedule flexible transportation to meet their travel needs.

Other improvements

- Partnered with Lyft to pilot a "First Mile, Last Mile" program, offering a 20 percent discount on Lyft rides in the north and south Phoenix areas where bus service is limited.
- Awarded the liquefied natural gas (LNG) contract, resulting in anticipated annual savings of about \$2 million.
- Awarded the West Transit Facility fixed route services contract to the existing contractor, First Transit. The \$296 million contract has a five-year base and two one-year options to extend. The contract's annual revenue miles are about 6.5 million for 11 local routes and one circulator.

Table 2.2 T2050 Bus and Dial-a-Ride Goals, FY 2019

Planned for FY 2019

Fund existing bus, RAPID commuter bus, neighborhood circulator and Dial-a-Ride service for 35 years

- Continue to provide safe and reliable services.

Improve bus frequency

- Conduct a study on existing ridership patterns with the goal to improve Phoenix's high frequency transit network.

Increase security

- Continue to add security features on local bus, light rail and at transit facilities.
- Hire and train new municipal security guards to provide a stronger security presence at our north, south and west operating garages.

Bus stops

- Install new shelters at 80 bus stops to provide riders with shade.



Table 2.3 T2050 Bus and Dial-a-Ride Goals, FY 2020 – 2023

Planned for FY 2020 – 2023

Fund existing bus, RAPID commuter bus, neighborhood circulator and Dial-a-Ride service for 35 years

- Build on, and improve upon, existing transit services offered in the city of Phoenix.

Improve bus frequency

- Identify three high ridership local routes in Phoenix to increase weekday peak service frequency to 15 minutes.
- Increase weekday midday frequency to 15 minutes on two local bus routes in Phoenix.

Extend and add bus service to unserved major streets

- Add new bus route in north Phoenix on 56th Street between Shea Boulevard and Deer Valley Drive. This route would connect with five other local bus routes in the area.

Improve neighborhood circulation service

- Complete the neighborhood circulation study and pilot program(s), and potentially implement a neighborhood circulator service.

Build park-and-ride lots

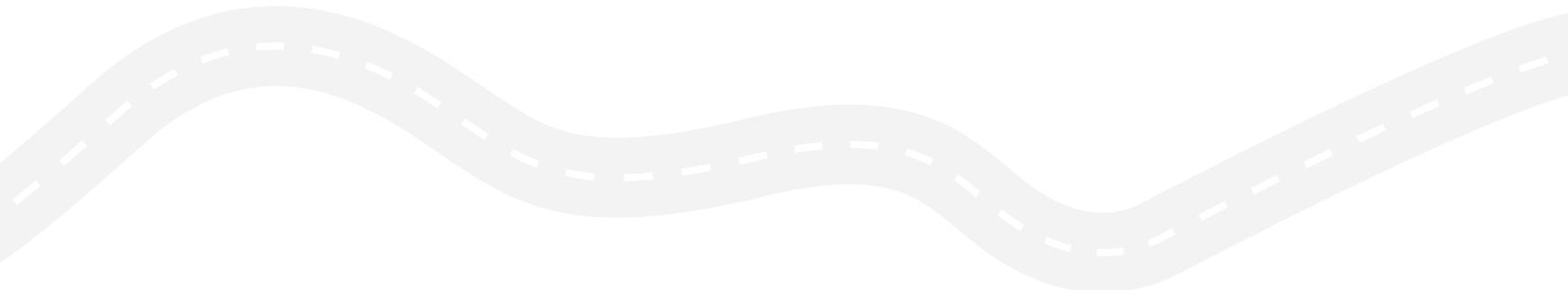
- Construct a park-and-ride to provide Laveen commuters with RAPID service to downtown Phoenix via the Loop 202 (South Mountain Freeway) and I-10.

Increase security

- Assign additional employees to the Phoenix Police Transit Enforcement Unit (TEU) to continue to increase security presence along all modes of transit in Phoenix.

Bus stops

- Shade 400 bus stops with new bus shelters.
- Install 56 new bus stops along new and expanded routes.



BUS AND DIAL-A-RIDE (FY 2018)

Local Fixed Route



Local fixed route bus service is the workhorse of Phoenix's transit system – with more than 35 million passenger boardings last fiscal year.

Local bus service in Phoenix operates on a grid system, and provides a straight-forward, easy-to-navigate way for riders to connect their homes to work, school and other key hubs throughout the city and region. In 2016 and 2017, Phoenix Transit utilized funds generated for T2050 to increase Phoenix local bus frequency to every 30 minutes, less for weekday routes with high ridership, as well as match light rail hours service hours.

In fiscal year 2017-18, Phoenix bus ridership rose over 5 percent over the previous fiscal year, which itself experienced a 6.5 percent increase. In fact, Phoenix is one of only four cities with high-transit ridership that experienced an increase in transit boardings in 2017 – Phoenix has had 18 straight months of ridership increases (January 2016 to June 2018).

In the first six months of 2018, bus ridership is up 4.6 percent overall, with a 3.64 percent increase on weekdays, 14.33 percent on Saturdays and 14.24 percent on Sundays and holidays, which operate with Sunday-level service.

RAPID Commuter



RAPID is a Phoenix-operated commuter bus services that connects residents in Phoenix's suburban areas, with downtown Phoenix. There are currently six RAPID routes that allow riders to bypass driving in favor of being a passenger and focusing on other things besides taillights and bumpers on their daily commute to and from work.

In 2023, Phoenix will add a new RAPID route in southwest Phoenix utilizing the Loop 202 (South Mountain Freeway), which is still under construction by the Arizona Department of Transportation.

Circulator Service



Phoenix has four circulator routes that connect area residents with key destinations in their neighborhoods, like libraries, grocery stores and community centers. The circulators are the ALEX (Ahwatukee Local Explorer), DASH (Downtown Area Shuttle), MARY (Maryvale Area Ride for You) and the SMART (Sunnyslope Multi-Access Residential Transit).

Dial-a-Ride and Alternative Transportation Services



Dial-a-Ride (DAR) is a federally required paratransit service that complements local transit by providing a convenient transportation option for those who are unable to ride bus or light rail. Under T2050, Phoenix has expanded hours and replaced 25 DAR vehicles this year.

In 2018, the city of Phoenix and their service provider, MV Transportation, launched TripSpark - a web portal that allows Phoenix Dial-a-Ride users to schedule and book their trips online at their convenience. The new service, along with the existing phone reservation service, provides customers flexibility when booking their DAR trips.

In addition, Phoenix continued its Alternative Transportation Services contract with MV Transportation. This contract provides for the following services: ADA Ride, Senior Ride and Senior Center Shuttle, Employment Transportation and Medical Trip.

Security



To provide for the safety and security of Phoenix's transit passengers the Phoenix Police Department's Transit Enforcement Unit (TEU) works with Phoenix Transit municipal security guards, a private security contractor, and Valley Metro's fare enforcement security.

All of these unite to provide security at the Central Station Transit Center and Phoenix's other six transit centers, nine park-and-rides, and all three operation and maintenance facilities. Also, cameras are installed on vehicles and at city-owned and operated facilities to assist police and security when needed.

Passenger Facilities



Phoenix has added 60 new shade shelters this year, with plans to add at least 20 more by the end of 2018.

Operations and Maintenance Facilities



Phoenix has three separate bus yards strategically located around the city where all bus maintenance, fueling and cleaning take place.

This fiscal year the city awarded a new liquefied natural gas (LNG) contract to Clean Energy to fuel the city's LNG and CNG fleet. The new contract gives Transit an annual fuel cost savings of nearly \$2 million compared to the previous contract.

Additionally, the West Transit Facility fixed route services contract was awarded to First Transit, the incumbent contractor. The \$296 million contract has a five-year base, with two one-year extension options. There are about 6.5 million revenue miles from the 11 local and one circulator route operated from the West Transit Facility.

Other Accomplishments

The Phoenix Public Transit Department was given the 2018 Outstanding Transit Organization/Partnership of the Year (Large Urban) award at the annual Arizona Transit Association (AzTA) conference in April.

The award recognized Phoenix's 2017 efforts in implementing T2050 improvements, including the sustained increase in local bus ridership, other route improvements that promoted an increase in ridership, and the continued advancement of light rail projects.

The city partnered with Lyft to pilot a "First Mile, Last Mile" program in the far north and south Phoenix areas where bus service is currently limited. The no-cost partnership offers riders a 20 percent discount on Lyft rides to connect from these identified areas. In exchange, the Transit Department utilized space available shelter advertising to promote the Lyft discount.

This program has provided more than 1,000 discounted rides in the first six months of the 12-month pilot program. The partnership was awarded the 2018 AzTA/ADOT Excellence Award for "Transit Innovation of the Year."



Phoenix Transit Department Staff



3.0

High Capacity Transit

MAKING PROGRESS CUMULATIVE PROGRESS TO DATE JAN. 1, 2016 - JUNE 30, 2018



NEW OR IMPROVED HIGH CAPACITY TRANSIT

SOUTH CENTRAL CORRIDOR

- Accelerated completion by more than 10 years
- \$2 M grant awarded for business assistance and Transit Oriented Development land use planning services
- Expansion approved for transfer hub in downtown Phoenix
- Extension design and pre-construction activities



NORTHWEST PHASE I EXTENSION

- Service began March 19, 2016

NORTHWEST PHASE II EXTENSION

- Advanced preliminary engineering plans to next phase
- Project designer contract awarded
- Funding, design and construction agreement finalized

CAPITOL/I-10 WEST

- Environmental Assessment underway
- Planning traffic analysis

NORTHEAST CORRIDOR

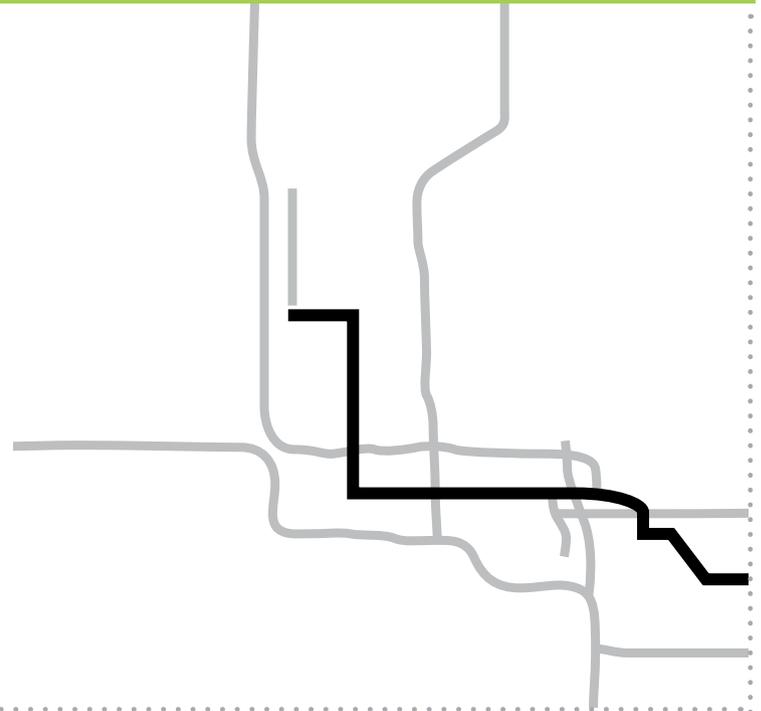
- Preliminary planning and corridor evaluation

50TH STREET STATION

- Construction underway

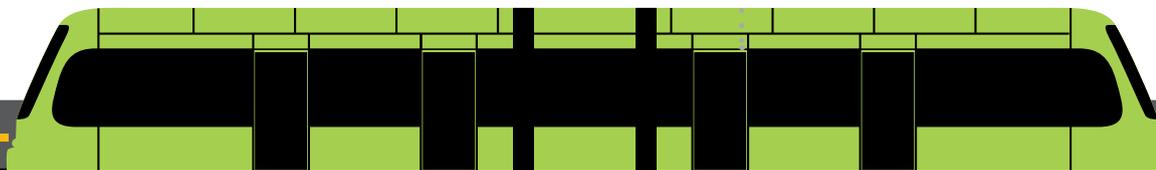
WEST PHOENIX EXTENSION

- Preliminary planning



BUS RAPID TRANSIT (BRT) SERVICE

- Launched Bus Rapid Transit Program
- Selected BRT planning and design consultants
- CTC recommended approval of BRT consultant contracts
- Submitted a federal grant for advanced signal technologies



HIGH CAPACITY TRANSIT



Phoenix's T2050 plan includes a \$1 billion investment planned for FY 2018-2023 in improving the city's high capacity transit (HCT) network, including developing bus rapid transit (BRT), and light rail

improvements and expansion. In addition to revenues generated by the city's sales tax, T2050's other funding sources includes federal and state grants, the Public Transportation Fund (PTF), fares, advertising, and other local funds.

Table 3.1 T2050 High Capacity Transit Progress

Completed July 1, 2017 to June 30, 2018

Increase light rail in Phoenix

- South Central project expansion approved by the Phoenix City Council and Valley Metro Rail Board, to include a transfer hub in downtown Phoenix.
- South Central extension design and pre-construction is ongoing, including survey work and gathering of utility data.
- Construction continued on the 50th Street station near Ability360, a destination resource center for the Valley's disabled community. The station, which is the first T2050-funded capital improvement project, is anticipated to open in early 2019.
- Northwest Phase II extension preliminary engineering plans advanced to the next phase and the Valley Metro Rail Board awarded a project designer contract.
- City of Phoenix and Valley Metro entered into a funding, design and construction agreement for Northwest Phase II.
- Capitol/I-10 West Phase I project team conducted work on the federally required Environmental Assessment (EA) documents.
- Northeast corridor preliminary planning and corridor evaluation continued.
- West Phoenix extension preliminary planning occurred.

Begin new bus rapid transit program

- Public Transit worked with the Street Transportation Department to submit a federal grant for advanced signal technologies for Baseline Road – a corridor identified as a potential BRT route.
- BRT planning and engineering consultant procurement process underway.

Table 3.2 T2050 High Capacity Transit Goals, FY 2019

Planned for FY 2019
Increase light rail in Phoenix
<ul style="list-style-type: none">• South Central extension final design.• Northwest Phase II extension final design and pre-construction.• Capitol/I-10 West Phase I extension environmental study and initial design.• Conduct feasibility study for proposed Northeast Corridor extension.• Open 50th Street station in early 2019.
Begin new Bus Rapid Transit program
<ul style="list-style-type: none">• Initiate BRT program planning and community engagement and education.

Table 3.3 T2050 High Capacity Transit Goals, FY 2020 – 2023

Planned for FY 2020 – 2023
Increase light rail in Phoenix
<ul style="list-style-type: none">• South Central extension construction, with anticipated opening in 2023.• Northwest Phase II extension construction, anticipated to open in 2023.• Capitol/I-10 West Phase I extension environmental study and initial design.
Begin Bus Rapid Transit program
<ul style="list-style-type: none">• Council approval of a BRT implementation plan.• Initiate preliminary engineering on one or more corridors.



HIGH CAPACITY TRANSIT (FY 2018)

Light Rail Service



The 26-mile Valley Metro Rail light rail system connects the downtowns of Phoenix, Tempe and Mesa, as well as many other key destinations along the route.

There are 17 miles of light rail in Phoenix, and the line begins at 19th and Dunlap avenues in Phoenix and currently ends at Main Street and Mesa Drive in Mesa.

The cities of Phoenix, Tempe and Mesa share the funding obligations for the ongoing operations and maintenance costs of the light rail system, including security and fare collection, vehicle and system maintenance, and administration of the operation.

South Central Light Rail Extension



The South Central Light Rail Extension will connect the existing light rail system to the South Phoenix, Central-City-South and Warehouse District communities.

In September 2017, the Phoenix City Council and the Valley Metro Rail Board approved adding a downtown hub near the Cityscape development. The expansion includes a transfer hub into downtown Phoenix, adding new stations, track and art elements to the project.

In January, Valley Metro opened a community office along the future corridor giving businesses and residents a direct outlet to meet with project team members without having to leave south Phoenix.

The fiscal year ended with the Phoenix City Council directing Valley Metro to further evaluate a 4-lane design at the June 20, 2018 council meeting, and to conduct a comprehensive community outreach and engagement process with the South Central community.

Northwest Phase II



The Phoenix City Council approved to fund the final design and pre-construction plans for the Northwest Phase II Extension (NWE II) in May 2018. Since that time, the Valley Metro Board approved Jacobs Engineering Inc. as the designer, who will work with Kiewit-McCarthy, the project's construction contractor.

In addition, the project's seven artists selected to design public art along the extension were introduced in March.

Construction is anticipated to begin on NWE II in 2019, and when completed in 2023 the line will extend west on Dunlap Avenue from 19th Avenue, north on 25th Avenue and across I-17 to end near Metrocenter Mall.

Capitol/I-10 West



The Environmental Assessment (EA) for the project is being drafted, which includes a detailed analysis of how light rail would operate along phase I the route – between downtown Phoenix and the Arizona State Capitol.

The project, which was approved by Phoenix City Council and the Valley Metro Rail Board in 2016, is split into two phases for design and construction. The first phase, downtown to the Capitol, is anticipated to be complete in 2023, followed by phase II of the project – from the Capitol to the 79th Avenue park-and-ride in Maryvale.

Northeast Corridor



Valley Metro is conducting a feasibility study to evaluate two proposed corridor options to connect the existing light rail system to the Paradise Valley Mall area. The study will evaluate a variety of information, including: potential ridership, costs and funding options, engineering constraints, community input and economic development potential.

50th Street Light Rail Transit Station



Construction on the 50th Street light rail station started last year and crews recently wrapped up utility relocation and now focus on roadway widening in the area of the new center-street platform station.

This is the first capital improvement project to take place under T2050, as well as the first new station to be constructed on the existing light rail line.

The station provides access to Ability360, a resource facility for the Valley's disabled community, as well as improved access to nearby businesses and transit-oriented development planned for the area.

The station is anticipated to open in spring 2019.

West Phoenix Transit Corridor Study



Late 2017, the Glendale City Council voted to no longer participate in the West Phoenix/Central Glendale Transit Corridor Study, which would evaluate extending light rail west on Camelback Road into downtown Glendale.

The city of Phoenix and Valley Metro will continue to study the West Phoenix Transit Corridor, which looks at transit needs along the Camelback Road corridor between 19th and 43rd avenues.

Bus Rapid Transit



The planning for future Phoenix bus rapid transit (BRT) is underway. BRT utilizes limited stops, signal prioritization and off-board fare collection to provide riders with a fast and comfortable transit option in high demand travel areas.

Phoenix released a request for proposal in early 2018 for submittals from firms to provide outreach and engagement strategies for the planning and preliminary engineering of the city's BRT network. The consultant is expected to be selected in late 2018 and will assist city staff to evaluate both previous corridors identified, as well as potential new ones, for BRT service in Phoenix.

In addition, the Public Transit and the Streets Transportation departments collaboratively submitted a federal grant for advanced signal technologies along Baseline Road, which is a potential BRT corridor.



4.0

**Street Maintenance
and Improvements**

MAKING PROGRESS

CUMULATIVE PROGRESS TO DATE JAN. 1, 2016 - JUNE 30, 2018

STREET MAINTENANCE AND IMPROVEMENTS

	Miles new pavement	Miles pavement treatments
ARTERIAL/MAJOR COLLECTORS	90	121
MINOR COLLECTORS/LOCAL	175	492

39 MAJOR STREET/NEIGHBORHOOD PEDESTRIAN & MOBILITY ASSESSMENT PROJECTS

IN PRE-DESIGN/PROJECT ASSESSMENT PHASE

89 NEW/EXPANDED STREETS PROJECTS PLANNED

87 ROAD AND BRIDGE PROJECTS SCHEDULED TO BE COMPLETED

15 MILES OF NEW SIDEWALKS



INSTALLED
119
MILES OF NEW BICYCLE LANES



IMPROVED/INSTALLED
5,182
ADA RAMPS



PAINTED
213 SIGNAL POLES

INSTALLED
81 LEFT-TURN ARROWS

INSTALLED
861 NEW STREET LIGHTS

REPLACED

2,001 ILLUMINATED STREET SIGNS

STREET MAINTENANCE AND IMPROVEMENTS



The Street Transportation Department has about \$183 million from T2050 dedicated to Phoenix streets construction and maintenance projects over the next five years.

In addition to T2050, the department relies on funding from the state-collected motor fuel taxes, city's general fund, federal funds and impact fees. This annual report only focuses on projects and programs that receive T2050 funds.

For more information on the Street Transportation Department's capital improvement program (CIP), which includes T2050 projects, please visit www.phoenix.gov/streets/projects.

Figure 4.1 T2050 Funds for Street Improvement

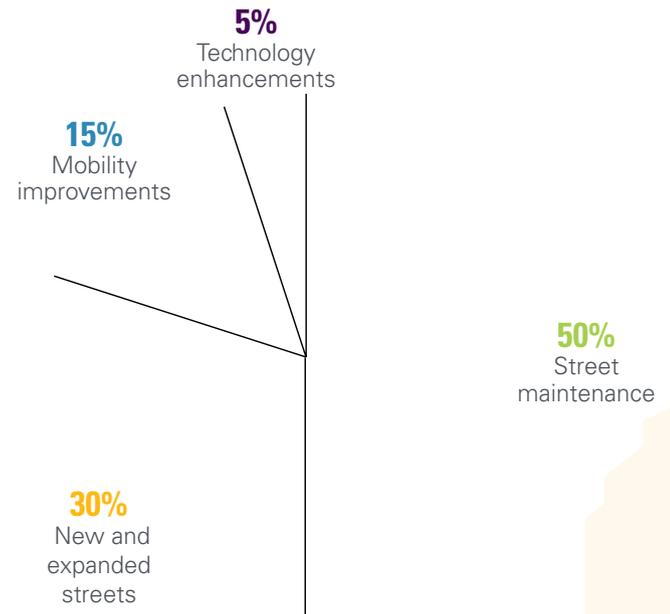


Table 4.1 T2050 Street Maintenance and Improvements Progress

Completed July 1, 2017 to June 30, 2018
<p>Street pavement and overlays</p> <ul style="list-style-type: none"> Multi-year pavement maintenance program approved through fiscal year 2022. 45 miles of new asphalt pavement on major streets. 51.5 miles of other pavement treatments, such as crack and fog sealing, on major collector streets. Nearly 59 miles of local streets were paved. 166 miles of other pavement treatments, such as crack and fog sealing, applied to local streets.
<p>Bicycle lanes</p> <ul style="list-style-type: none"> Installed 40 miles of new bicycle lanes.
<p>Street lights</p> <ul style="list-style-type: none"> Installed 430 new street lights.
<p>Sidewalks</p> <ul style="list-style-type: none"> Constructed 7.5 miles of sidewalks. Conducted planning activities for mobility projects at 28 locations. Scheduled four locations for completion.
<p>New roads and upgraded bridges</p> <ul style="list-style-type: none"> Nine projects in pre-design to study neighborhood pedestrian and mobility on major streets. 51 new or expanded street projects are currently in the design phase. 33 projects currently in the construction phase.
<p>Intersection technology enhancements</p> <ul style="list-style-type: none"> Replaced 1,361 street signs at major intersections with illuminated signs. Repainted 149 signal poles at major intersections to extend their lifecycle. Installed 27 new left-turn arrows at warranted intersections.

Table 4.2 T2050 Street Maintenance and Improvements, FY 2019

Planned for FY 2019
<p>Street pavement and overlays</p> <ul style="list-style-type: none"> Pave at least 19 miles on major streets.
<p>Bicycle lanes</p> <ul style="list-style-type: none"> Install more than 30 miles of bicycle lanes.
<p>Street lights</p> <ul style="list-style-type: none"> Install 60 new street lights.
<p>Sidewalks</p> <ul style="list-style-type: none"> Construct nearly 4 miles of new sidewalks. Complete planning activities for mobility projects at seven locations, and schedule 12 locations for completion.
<p>New roads and upgraded bridges</p> <ul style="list-style-type: none"> Complete three neighborhood pedestrian and mobility studies for major streets. Design 21 new or expanded street projects, and schedule 46 projects for completion.
<p>Intersection technology enhancements</p> <ul style="list-style-type: none"> Install 999 illuminated signs at major intersections. Repaint 110 signal poles at major intersections. Install 7 left-turn arrows.



**Table 4.3 T2050 Street Maintenance and Improvements,
FY 2020 – 2023**

Planned for FY 2020 – 2023
Street pavement and overlays
<ul style="list-style-type: none">• Pave at least 77 miles of new pavement on major streets.
Bicycle lanes
<ul style="list-style-type: none">• Install 123 miles of bicycle lanes.
Street lights
<ul style="list-style-type: none">• Install 240 new street lights.
Sidewalks
<ul style="list-style-type: none">• Construct more than 15 miles of sidewalks.
New roads and upgraded bridges
<ul style="list-style-type: none">• Begin design activities on 22 projects for new or expanded streets.• Plan construction on 22 projects that add new or improved streets to the city's system.• Complete construction of 37 ongoing improvement projects.
Intersection technology enhancements
<ul style="list-style-type: none">• Repaint 440 signal poles at major intersections.• Install 20 left-turn arrows at intersections throughout Phoenix.

STREET MAINTENANCE AND IMPROVEMENTS (FY 2018)

Street Maintenance



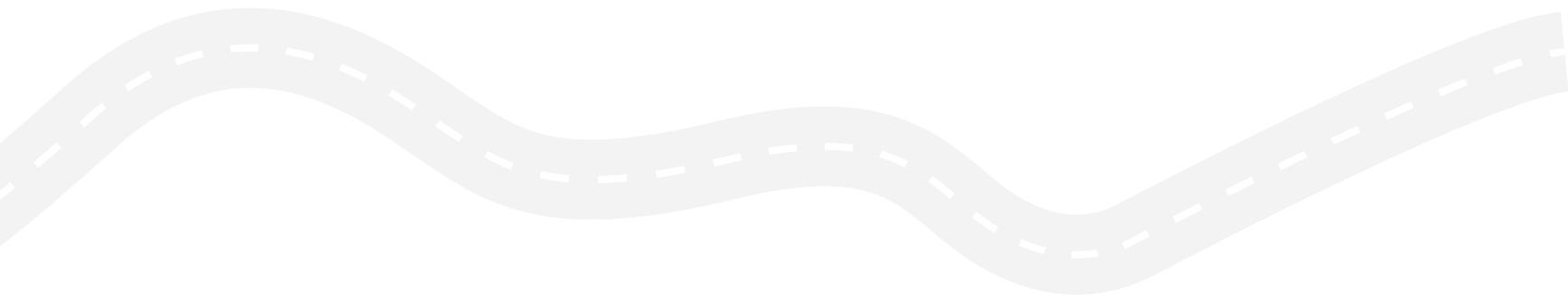
Under T2050, there is approximately \$1 billion allocated to the maintenance of major arterial streets in Phoenix. This funding leverages other funds to be used for maintenance to all other streets in the city.

T2050 also allows the department to perform routine preventative maintenance more frequently, such as repairing curbs and gutters, as well as sidewalks and ramps to provide enhanced accessibility and mobility.

New and Expanded Streets



The future of Phoenix's expansion of streets is secure under T2050, because there is an estimated \$240 million over the next five years for major street improvement projects, such as new bridges and new roads. These new roads and bridges will help connect and complete the city's roadway network and work in concert with future transit expansion plans.



Mobility Improvements



The Transportation Planning and Programming (TPP) section is conducting 11 mobility studies throughout Phoenix to be completed by May 2019. The goal of these mobility studies is to identify barriers pedestrians and bicyclists face when traveling to destinations in their neighborhoods, and recommend solutions that will improve safety, convenience and quality of life. The study areas were identified utilizing data, such as zero-car households, high transit ridership, and accidents involving vehicles and pedestrians and bicyclists.

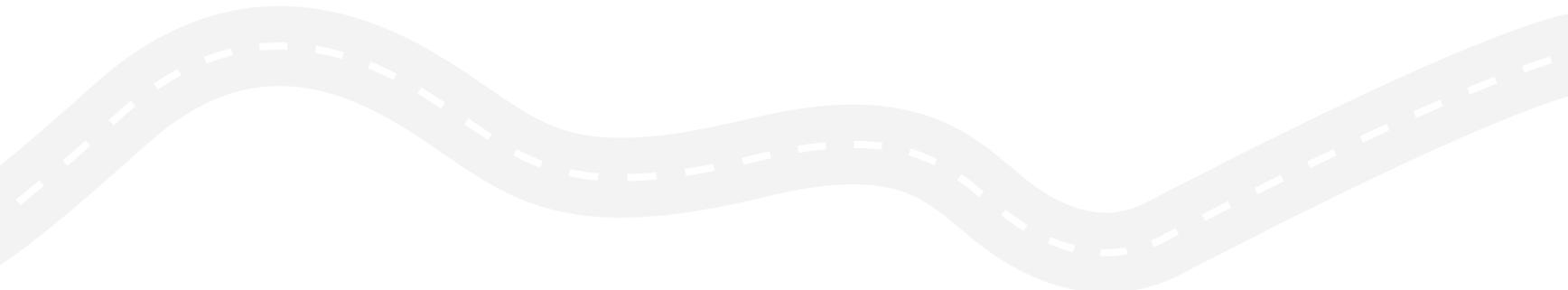
Intersection Technology Enhancements



T2050 allows the city to improve its maintenance activities of existing traffic control equipment at signalized intersections throughout the city. These investments include adding left-turn arrows, repainting traffic signal poles and replacing deteriorated intersection street name signs with retroreflective sign faces that include LED lighting. Other intersection improvements include installing new signals, signage, detection equipment, as well as traffic management and monitoring systems, to improve traffic congestion throughout the city.

Geographic Information System (GIS)

In 2018, the Streets Transportation Department began to capture T2050 assets in the city's geographic information system (GIS). GIS is a map-based system that catalogues all types of geographical data, in this case T2050 projects. GIS users can then query the system to sort and analyze the information. The T2050 GIS system has already helped the department with its mobility studies and bikeways reporting. The system will be used in the future for improved planning efforts, conducting more efficient field operations, the analysis of the needs of a community, other reporting opportunities and transparency via maps and dashboards available to city staff and the public.



Appendix



Lifecycle Programming Assumptions

As with any long-term plan, preparation of the financial model for the T2050 program required many assumptions for estimated costs, revenues, and timing of projects and new services. Key assumptions of the T2050 program include:

1. The implementation of projects and new services is projected to occur over the course of the 35-year plan as funding allows and service demand dictates.
2. Capital and operating costs are estimated to grow at average inflation rates of 3–4 percent annually over the life of the plan. These inflation rates are somewhat higher than the typical annual increases we have experienced in the large transit contracts, and provide for more conservative cost estimates.
3. T2050 sales tax revenues are estimated to grow at an average annual rate of 4.75 percent, which is approximately the same as the 4.8 percent average annual growth rate in the Arizona Department of Transportation's most recent forecast prepared in September 2017 for the Proposition 400 Maricopa County Transportation Excise Tax.
4. The existing 0.5 percent Proposition 400 regional tax, currently in place through December 31, 2025 is assumed to be extended for at least 20 years.
5. Federal transit formula funds is assumed to continue through the life of the plan, with very modest increases over time, consistent with Maricopa Association of Government's long-term Regional Transportation Plan.
6. The financial model is consistent with Valley Metro assumptions, ranging from zero to 49%, for the funding level from discretionary federal Capital Investment Grants for light rail capital costs. Discretionary federal Capital Investment Grants are funding, on average, more than 40 percent of total project costs for current rail projects across the country.
7. Transit fares are assumed to continue to be consistent with the regional fare policy goal of 25 percent recovery of direct transit operations costs.
8. As needed, some capital funding is assumed to be provided through financing, with the corresponding costs estimated using typical municipal bond offerings. Less expensive and more flexible types of financing will be explored to minimize financing costs.
9. Other revenues, such as transit advertising and interest earnings on fund balance, are forecasted using very small growth rates.
10. An operating reserve equivalent to 15 percent of annual public transit operating costs is assumed to be maintained throughout the life of the plan.

The following table includes the projected sales tax revenue for each year of the T2050 plan. Additionally, the table shows the anticipated allocation to the Public Transit and Streets Transportation departments.

Table A.1 T2050 Sales Tax Projected Revenue Stream

Fiscal Year	Overall T2050 (2015 Forecast)	Actual Overall	Forecasted Public Transit (86.2%)	Actual Public Transit	Forecasted Street Transportation 13.8%	Actual Street Transportation
2016	\$89,125,000	\$98,593,240	\$76,826,000	\$85,095,392	\$12,299,000	\$13,497,848
2017	\$204,006,000	\$203,352,480	\$175,853,000	\$175,430,201	\$28,153,000	\$27,922,279
2018	\$213,696,000	\$215,805,685	\$184,206,000	\$185,998,894	\$29,490,000	\$29,806,791
2019	\$224,401,000		\$193,434,000		\$30,967,000	
2020	\$235,642,000		\$203,123,000		\$32,519,000	
2021	\$246,835,000		\$212,772,000		\$34,063,000	
2022	\$258,559,000		\$222,878,000		\$35,681,000	
2023	\$270,841,000		\$233,465,000		\$37,376,000	
2024	\$283,706,000		\$244,555,000		\$39,151,000	
2025	\$297,182,000		\$256,171,000		\$41,011,000	
2026	\$311,298,000		\$268,339,000		\$42,959,000	
2027	\$326,085,000		\$281,085,000		\$45,000,000	
2028	\$341,574,000		\$294,437,000		\$47,137,000	
2029	\$357,799,000		\$308,423,000		\$49,377,000	
2030	\$374,794,000		\$323,072,000		\$51,722,000	
2031	\$392,597,000		\$338,419,000		\$54,178,000	
2032	\$411,245,000		\$354,493,000		\$56,752,000	
2033	\$430,779,000		\$371,331,000		\$59,448,000	
2034	\$451,241,000		\$388,970,000		\$62,271,000	
2035	\$472,675,000		\$407,446,000		\$65,229,000	
2036	\$495,127,000		\$426,799,000		\$68,328,000	
2037	\$518,646,000		\$447,073,000		\$71,573,000	
2038	\$543,281,000		\$468,308,000		\$74,973,000	
2039	\$569,087,000		\$490,553,000		\$78,534,000	
2040	\$596,119,000		\$513,855,000		\$82,264,000	
2041	\$624,435,000		\$538,263,000		\$86,172,000	
2042	\$654,095,000		\$563,830,000		\$90,265,000	
2043	\$685,165,000		\$590,612,000		\$94,553,000	
2044	\$717,710,000		\$618,666,000		\$99,044,000	
2045	\$751,801,000		\$648,052,000		\$103,749,000	
2046	\$787,512,000		\$678,835,000		\$108,677,000	
2047	\$824,919,000		\$711,080,000		\$113,839,000	
2048	\$864,102,000		\$744,856,000		\$119,246,000	
2049	\$905,147,000		\$780,237,000		\$124,910,000	
2050	\$948,142,000		\$817,299,000		\$130,844,000	
Total	\$16,679,368,000		\$14,377,615,000		\$2,301,753,000	

Table A.2 FY 2018 Financial Overview (July 1, 2017- June 30, 2018)

	Budget	Actuals	Amount Over/ (Under Budget)	Percent Over/ Under Budget	Footnotes
Source of Funds					
Dedicated Sales Tax - T2050	\$212,626,000	\$215,805,685	\$3,179,685	1.5%	
Local Transportation Assistance	4,300,000	4,366,304	66,304	1.5%	
Bus Fare Revenue	32,030,706	27,725,802	(4,304,904)	-13.4%	1
Dial-a-Ride Fare Revenue	1,082,793	1,085,744	2,951	0.3%	
Rail Fare Revenue	8,300,000	7,642,707	(657,293)	-7.9%	
Federal Transit Funds	37,572,263	10,077,618	(27,494,645)	-73.2%	2
Regional Transportation Tax	9,827,151	2,725,415	(7,101,736)	-72.3%	3
Other Revenue	12,526,690	11,128,470	(1,398,220)	-11.2%	4
Fund Balance	76,987,681	38,920,532	(38,067,149)	-49.4%	
Total Revenues	\$395,253,284	\$319,478,277	\$(75,775,007)	-19.2%	
Use of Funds					
Transit Operations					
Local Fixed Route Bus	\$125,973,959	\$117,114,340	\$(8,859,620)	-7.0%	
RAPID Commuter Bus	3,862,760	3,591,096	(271,664)	-7.0%	
Neighborhood Circulator	3,290,832	3,059,391	(231,441)	-7.0%	
Dial-a-Ride Operations	19,610,271	18,376,093	(1,234,178)	-6.3%	
Light Rail Operations	32,160,564	31,614,797	(545,767)	-1.7%	
Bus Rapid Transit	-	-	-	0.0%	
Security	9,494,931	11,025,023	1,530,092	16.1%	5
Administration & Support	21,128,249	18,519,549	(2,608,700)	-12.3%	6
Total Operations	\$215,521,566	\$203,300,288	\$(12,221,278)	-5.7%	
Debt Service	\$64,098,000	\$63,979,950	\$(118,050)	-0.2%	
Capital Projects					
Bus and DAR Vehicles	\$36,798,396	\$2,750,180	\$(34,048,216)	-92.5%	7
Bus Passenger Facilities	6,255,349	3,006,206	(3,249,143)	-51.9%	8
Bus O & M Facilities	8,283,914	1,894,044	(6,389,870)	-77.1%	9
Bus and DAR Technology	13,456,790	3,236,642	(10,220,148)	-75.9%	10
Other Bus Capital	8,509,049	823,506	(7,685,543)	-90.3%	11
South Central LRT	17,910,000	16,736,890	(1,173,110)	-6.6%	
Northwest Phase II LRT	472,000	134,688	(337,312)	-71.5%	12
Capitol/I-10 West Phase 1 LRT	75,000	85,733	10,733	14.3%	13
Northeast LRT	200,000	-	(200,000)	-100.0%	14
48th Street LRT Station	-	952,080	952,080		15
LRT Other	15,000	26,342	11,342	75.6%	16
Bus Rapid Transit	-	19,165	19,165		
Streets - Major Maintenance	14,810,000	15,281,042	471,042	3.2%	
Streets - Major Transportation Projects	1,808,220	1,539,551	(268,669)	-14.9%	17
Streets - Mobility Projects	2,795,000	1,956,764	(838,236)	-30.0%	18
Streets - Other	1,180,000	434,805	(745,195)	-63.2%	19
Streets - Technology	3,065,000	3,320,401	255,401	8.3%	
Total Capital Projects	\$115,633,718	\$52,198,039	\$(63,435,679)	-54.9%	
Total Expenditures	\$395,253,284	\$319,478,277	\$(75,775,007)	-19.2%	

Table A.2 includes the budgeted and actual revenue and expenditures during FY 2018. Footnotes are as follows:

1. Though bus ridership increased, full-fare passes decreased and reduced-fare passes increased, which resulted in lower overall bus fare revenue.
2. Decrease due to capital project delayed.
3. Decrease due to capital project delayed.
4. Alternative fuel tax credit was not reinstated.
5. Police charges for Transit Enforcement Unit were higher than expected.
6. Contractual custodial costs for facilities maintenance was lower than expected.
7. Federal funds over programmed in the budget.
8. Transit furniture maintenance and improvement contract with Talis delayed.
9. Laveen Park n Ride delayed.
10. CAD/AVL delayed.
11. Unused contingency.
12. Some budgeted staffing costs for this project later determined as not necessary in this fiscal year.
13. Land acquisition costs were not programmed in the budget.
14. Northeast extension feasibility study project was not utilized.
15. Budget was not originally programmed for this project, was later revised at preliminary.
16. Disposal of remnant parcels was originally under programmed, was revised at preliminary.
17. Unused contingency.
18. Leveraged other funding opportunities.
19. Unused capacity for contracted services.

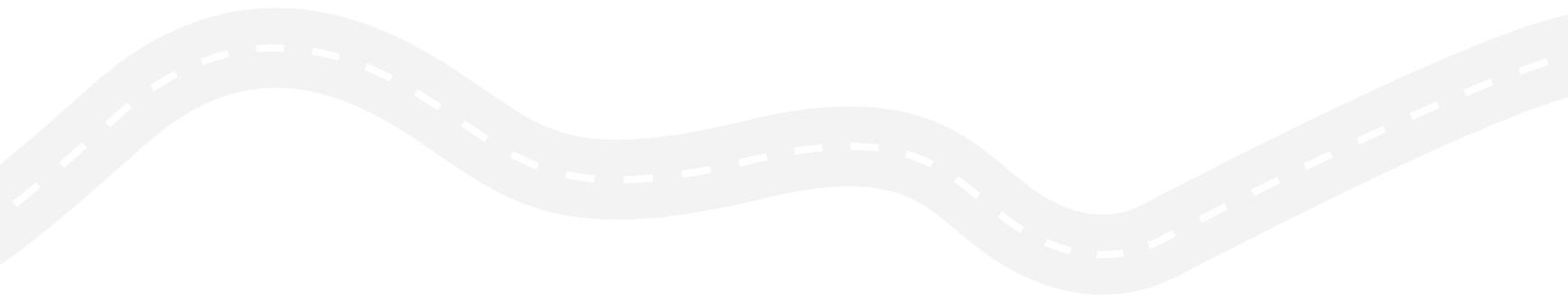


Table A.3 on page 44 includes the projected distribution of funds collected over the next five years. The table does not include actual collections. Please note: Bus Rapid Transit (BRT) capital and operations expenditures are planned to be incurred during this five-year plan; however, the amounts have not yet been programmed, pending the results of the BRT study.



Table A.3 Five-Year Implementation Plan (FY 2019–2023)

	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
Source of Funds					
Dedicated Sales Tax-T2050	\$221,264,000	\$232,607,000	\$243,535,000	\$255,189,000	\$259,016,835
Local Transportation Assistance	4,250,000	4,300,000	4,300,000	4,300,000	4,300,000
Bus Fare Revenue	28,472,964	28,900,058	29,333,559	29,773,563	30,220,166
DAR Fare Revenue	816,527	828,775	841,207	853,825	866,632
Rail Fare Revenue	8,400,000	8,526,000	8,653,890	8,783,698	8,915,454
Federal Transit Funds	119,740,440	26,052,002	11,281,083	25,566,595	29,371,862
Regional Transportation Tax	4,651,000	4,579,765	1,973,132	4,994,105	5,183,270
Bond Proceeds	-	135,855,000	147,804,000	173,184,000	135,651,000
Other Revenue	9,736,500	9,882,548	10,030,786	10,181,247	10,333,966
Fund Balance	116,324,667	56,861,383	31,787,413	3,985,392	(42,357,413)
Total Revenues	\$513,656,098	\$508,392,530	\$489,540,070	\$516,811,425	\$441,501,772
Use of Funds					
Transit Operations					
Local Fixed Route Bus	\$125,198,665	\$128,954,625	\$132,823,264	\$136,807,962	\$140,912,201
RAPID Commuter Bus	3,838,986	3,954,156	4,072,781	4,194,964	4,614,460
Neighborhood Circulator	3,270,581	3,368,698.70	3,469,759.66	3,573,852.45	3,681,068.02
DAR Operations	19,046,384	19,617,775.52	20,206,308.79	20,812,498.05	21,436,872.99
Light Rail Operations	35,689,205	36,759,881.15	37,862,677.58	38,998,557.91	40,168,514.65
Security	11,890,693	12,247,413.79	12,614,836.20	12,993,281.29	13,383,079.73
Administration & Support	21,506,731	22,151,932.93	22,816,490.92	23,500,985.65	24,206,015.21
Total Operations	\$220,441,246	\$227,054,483	\$233,866,118	\$240,882,101	\$248,402,212
Debt Service	\$67,346,000	\$70,608,000	\$8,481,000	\$17,612,000	\$27,222,000
Capital Projects					
Bus and DAR Vehicles	\$73,416,180	\$31,031,767	\$13,654,215	\$30,460,700	\$35,055,132
Bus Passenger Facilities	13,483,687	4,389,810	4,446,455	4,505,358	4,567,400
Bus O&M Facilities	1,145,000	956,098	760,000	415,000	750,000
Bus and DAR Technology	43,023,348	340,000	290,000	140,000	910,000
Other Bus Capital	10,993,005	1,570,000	6,940,000	8,570,000	500,000
South Central Light Rail	30,214,983	80,865,322	109,053,151	65,367,600	23,926,411
Northwest Phase II Light Rail	20,135,218	18,744,576	47,207,353	64,852,117	22,518,271
Capitol I-10 Light Rail	136,592	27,460,474	34,154,518	43,924,549	40,833,346
Northeast Light Rail	200,000	-	-	-	-
Other Light Rail	821,859	666,000	639,000	646,000	364,000
Total Public Transit T2050 Capital Projects	\$193,569,872	\$166,024,047	\$217,144,692	\$218,881,324	\$129,424,560
Streets - Major Maintenance	\$14,489,000	\$15,283,000	\$16,042,000	\$16,832,000	\$17,719,000
Streets - Major Transportation Projects	12,387,700	19,999,000	10,315,000	15,660,000	10,611,000
Streets - Mobility Projects	3,434,280	7,669,000	1,936,260	5,048,000	5,316,000
Streets - Other	1,004,000	1,035,000	1,035,000	1,035,000	1,035,000
Streets - Technology	984,000	720,000	720,000	861,000	1,772,000
Total Streets T2051 Capital Projects	\$32,298,980	\$44,706,000	\$30,048,260	\$39,436,000	\$36,453,000
Total Capital Projects:	\$225,868,852	\$210,730,047	\$247,192,952	\$258,317,324	\$165,877,560
Total Expenditures	\$513,656,098	\$508,392,530	\$489,540,070	\$516,811,425	\$441,501,772
Fund Balance					
- Public Transit	\$79,738,193	\$35,483,044	\$136,061	\$370,587	\$43,436,677
- Streets	18,272,832	5,666,598	9,226,168	5,006,250	4,297,573
Total Fund Balance *	\$98,011,024	\$41,149,642	\$9,362,229	\$5,376,836	\$47,734,250

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