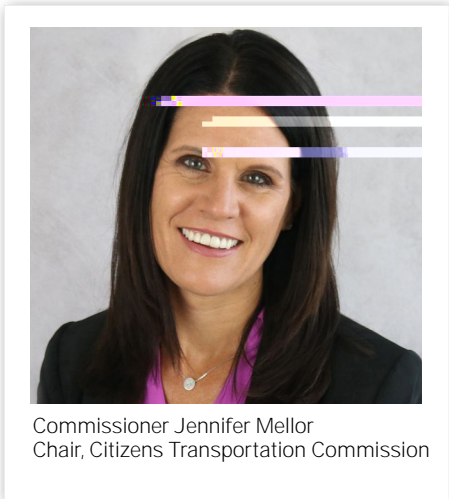
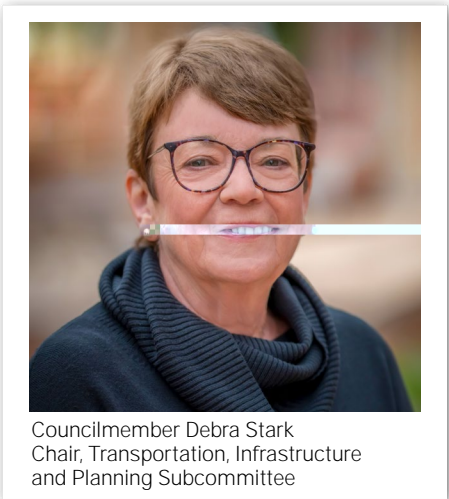
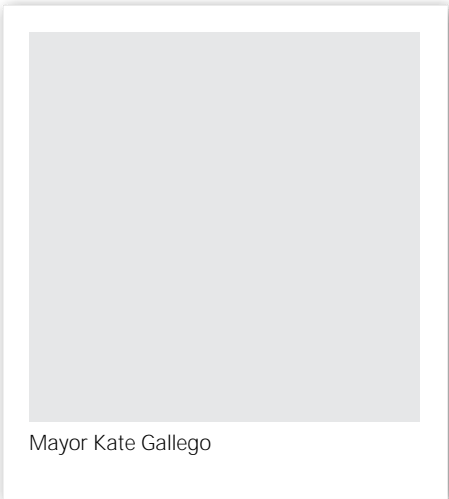


ANNUAL PROGRESS REPORT FISCAL YEAR 2023

JULY 1, 2022 THROUGH JUNE 30, 2023



A MESSAGE FROM LEADERSHIP



“When voters approved our Transportation 2050 (T2050) plan in 2015, they put a historic down payment on our economy, our community, and our future,” said Mayor Kate Gallego. “As we continue making incredible progress eight years later, we’re starting to see these investments pay off through expanded public transit options, newer roads, and safer bicycle lanes. Our T2050 plan is not only positioning Phoenix as a model for transportation and mass transit systems across the country, but also making a real-time positive impact for Phoenix families.”

“Having a long-time career in public service, I have learned that being a forward-thinking city requires strategic planning for the future,” said Councilwoman Debra Stark. “Transportation 2050 (T2050) maps out that plan and invests in city infrastructure so that current residents and future generations can make a successful life in Phoenix, and visitors can enjoy our great city. It is our job to turn that vision into action by moving T2050 forward to improve the quality of life for our residents and provide quality streets and access to public transit service.”

“T2050 continues to improve transportation for Phoenix residents and visitors alike. The progress made to the city’s street transportation and transit systems has led to continued economic growth. This multi-faceted approach has created more sustainable and affordable ways to get around the city. With street improvements, high-capacity transit studies and light rail expansions underway, we are proud of the progress and look forward to the new infrastructure ahead.”

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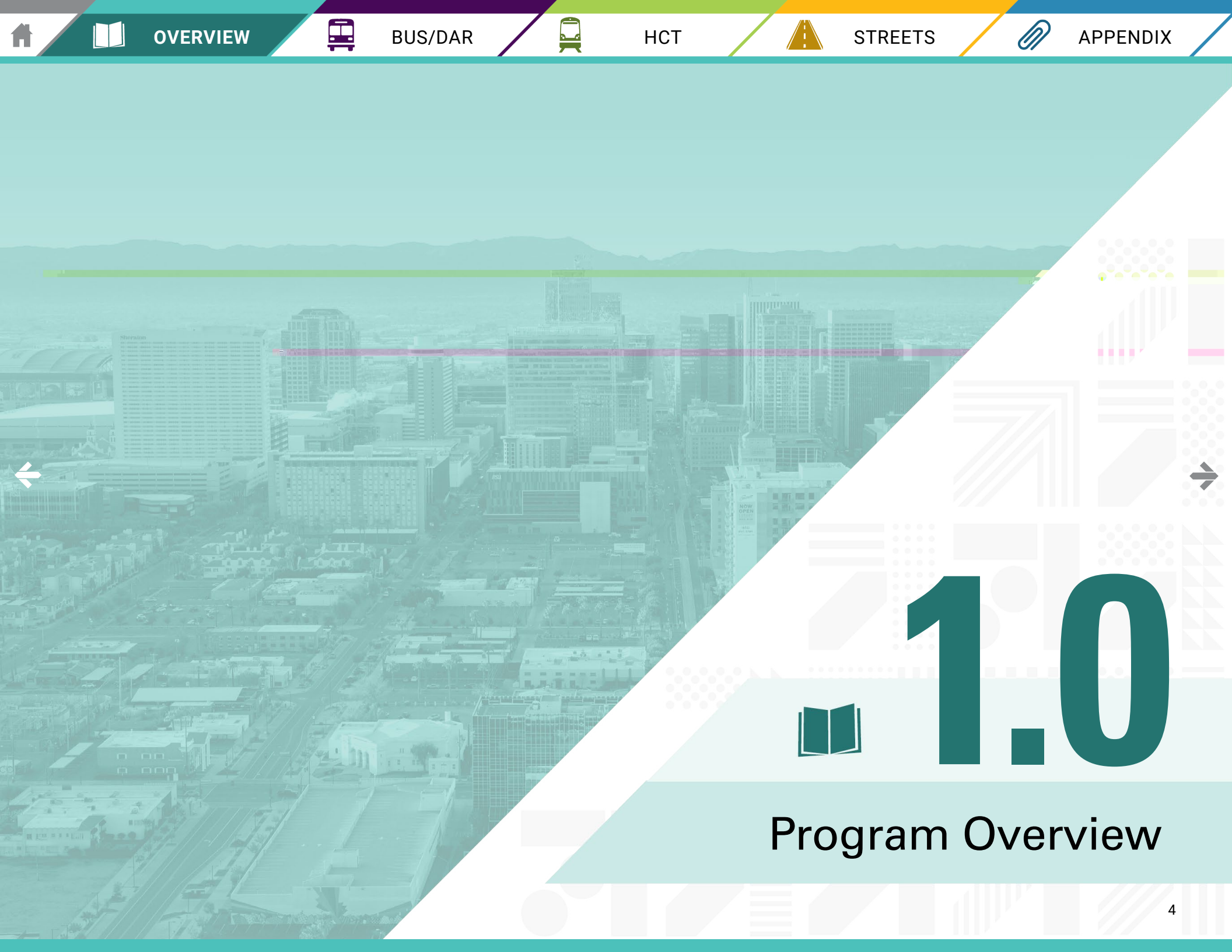
3.0 High Capacity Transit



4.0 Street Maintenance and Improvements



5.0 Appendix



1.0

Program Overview

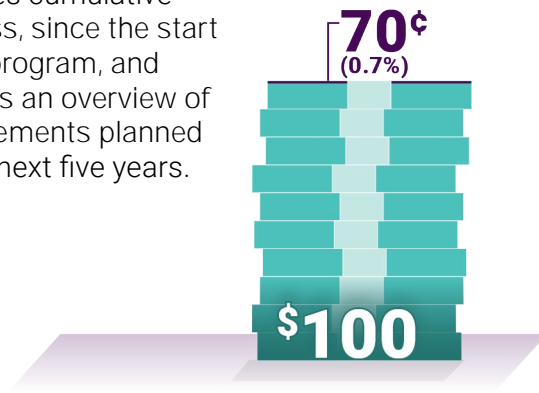


PROGRAM OVERVIEW



Transportation 2050 (T2050) is Phoenix's 35-year plan dedicated to improving multiple modes of transportation in Phoenix, including bus, light rail, Dial-a-Ride (DAR), streets, bike lanes, and active transportation. Phoenix voters made T2050 possible when they approved _____ on Aug. 25, 2015, which became effective Jan. 1, 2016, allocating 70 cents of each \$100 spent to the city's transportation needs. Approximately 86% of funds support public transit and 14% supplement street maintenance and improvement funds.

T2050 revenues supplement other sources of transportation funding, allowing the city to accomplish more. This report summarizes T2050 accomplishments for July 1, 2022, to June 30, 2023 (FY 2023). In addition, the report identifies cumulative progress, since the start of the program, and provides an overview of improvements planned for the next five years.



T2050 is dedicated to improving multiple modes of transportation in Phoenix, including bus, light rail, Dial-a-Ride (DAR), streets, bike lanes, and active transportation.

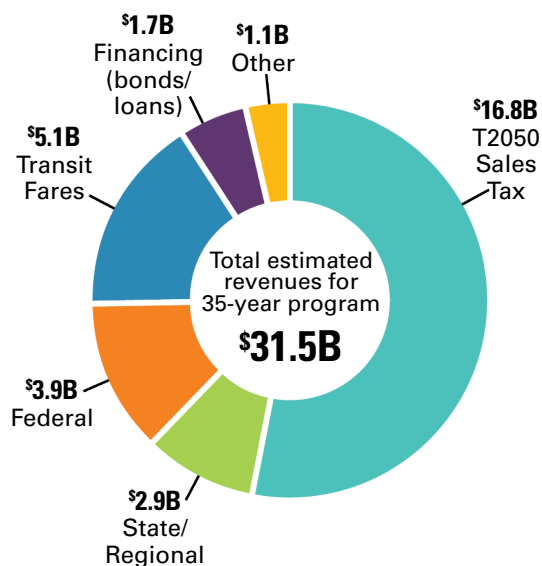
Lifecycle Revenues

Over the course of 35 years, Phoenix expects sales tax revenue to generate more than half of the estimated \$31.5 billion in overall T2050 funding. The remaining funds will be provided by federal, state, regional and local funding sources. Figure 1.1 shows funding sources as established at the start of the program.

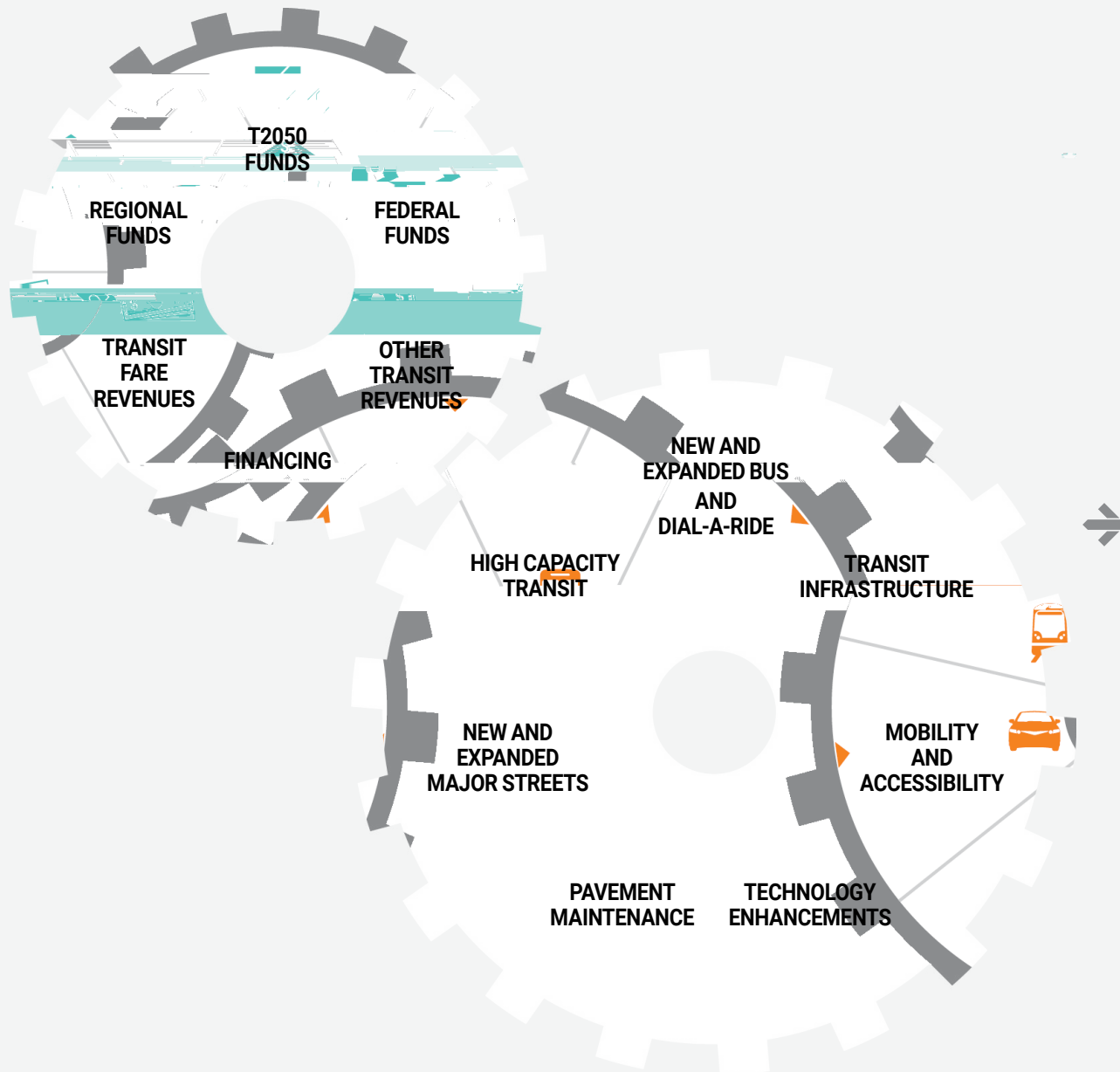
In addition to these funds, Public Transit and Street Transportation Department staff will pursue opportunities to reduce costs through innovation and efficient project delivery methods.

More information on program assumptions can be found in the appendix, with projected and actual sales tax revenue shown in [Appendix A](#). For additional information on regional and federal funding, visit the [Appendix B](#).

Figure 1.1 Sources of Funds



T2050 FUNDING



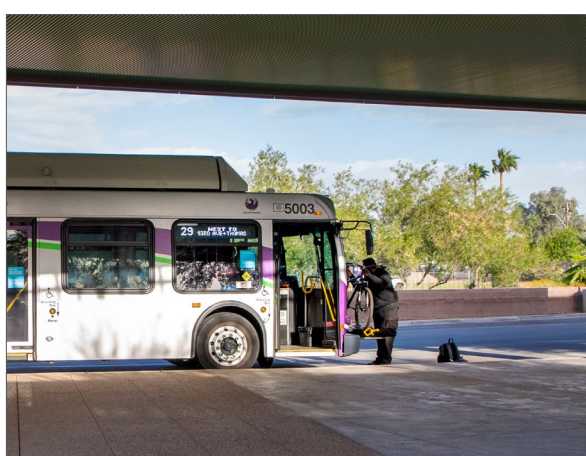
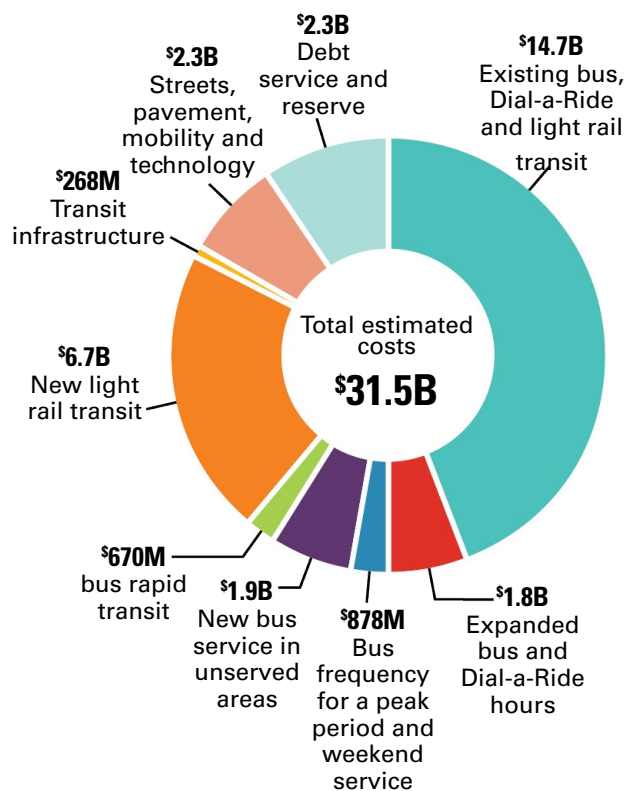
T2050 PROGRAM AREAS

Select the text links in the gear for more information about these program areas.

Lifecycle Expenditures

At times, revenue projections for T2050 will exceed projected expenditures for a given year. This helps to ensure that the plan has available funds in future years for large capital projects such as light rail construction, park-and-ride facilities and other similar investments. It also aims to maintain a fund balance whenever possible throughout the life of the plan. Figure 1.2 shows planned uses of funds as established at the launch of the program.

Figure 1.2 Planned Uses of Funds



Visit the [link](#) or download the [link](#) to stay up-to-date on rider alerts, such as route detours due to construction or local events.

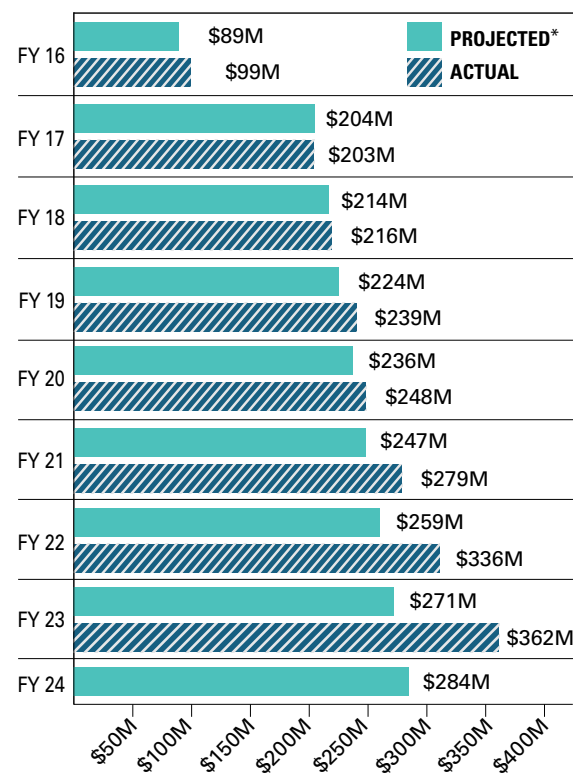
Impact of COVID-19

The COVID-19 virus resulted in a global pandemic beginning in 2020 and significantly shifted consumer demands. Ridership numbers steeply declined industry-wide due to social distancing requirements and impacts on workforces. Changes in riders' travel patterns and work practices in various industries also continue evolving.

FY 2023 Financial Summary and Projection

The total operating and capital budgets for FY 2023 is \$930,780,769 million. [link](#) in the appendix details budgeted and actual revenues and expenditures. Figure 1.3 provides projected and actual sales tax revenue, as well as short-term projected revenue figures. [link](#) in the appendix outlines the FY 2023–2028 five-year financial plan.

Figure 1.3 T2050 Sales Tax Revenue Summary



*Projected sales tax revenues reflect the initial T2050 plan.

Public Outreach

To understand residents' transportation needs, staff from both the Public Transit and Street Transportation Departments regularly engage virtually and in person with the public at open houses and public meetings. They also attend community events, providing information and gathering input on a variety of topics, including increasing transit access; planning bus routes and extensions, future light rail station locations, potential bus rapid transit routes; building and improving roads; and creating and improving bike lanes.

35-Year Goals Established at the Onset of T2050

The voter-approved 35-year sales tax became effective on Jan. 1, 2016. The following dashboard provides an overview of T2050 progress. City leaders established these goals based on the _____ ballot language, with the expectation that goals may evolve as the program progresses. Use the interactive links included throughout this report to access additional information.

**T2050 Goals
Dashboard
on next
page**

Formal Oversight

The Citizens Transportation Commission (CTC) was established in 2015 by the mayor and Phoenix City Council to provide oversight of the T2050 program. The Phoenix City Council appoints a total of 15 commission members to address street and transit needs, provide oversight on the expenditure of funds, and make recommendations on plan elements.

CTC members represent various facets of the community. As of June 30, 2023, the CTC has 14 members and one vacancy. The members include:

- Chair Jennifer Mellor
- Vice Chair Rick Naimark
- Gail Knight
- David Martin
- Phil Pangrazio
- Brookelynn Nisenbaum
- Sanjay Paul
- Christina Panaitescu
- Joan Berry
- David Moody
- Gabriel Loyola
- Shannon McBride
- Carolyn Chatman
- Jess Bristow

The Phoenix City Council's Transportation, Infrastructure and Planning Subcommittee provides policy guidance on issues related to infrastructure, transportation, transit, streets, aviation/airport, water, technology, smart cities, innovation, and sustainability. The Phoenix City Council provides additional oversight, and its meetings also provide opportunities for the public to offer additional input on the program.



Transportation, Infrastructure and Planning Subcommittee Members: (top row, left–right): Councilmember Debra Stark, Chair; Councilmember Laura Pastor; (second row, left–right): Councilmember Betty Guardado; Councilmember Ann O'Brien.



"The CTC plays an important role in the delivery of the many elements of Phoenix's T2050 plan, and it has been an honor to serve as the Commission's Vice Chair since it was formed in late 2015. Although my time on the Commission is at an end, I look forward to following the progress of T2050 as it continues to improve the lives of everyone who uses Phoenix's streets and sidewalks and benefit from the city's transit system."

—Rick Naimark

This dashboard represents progress from Jan. 1, 2016, through June 30, 2023.

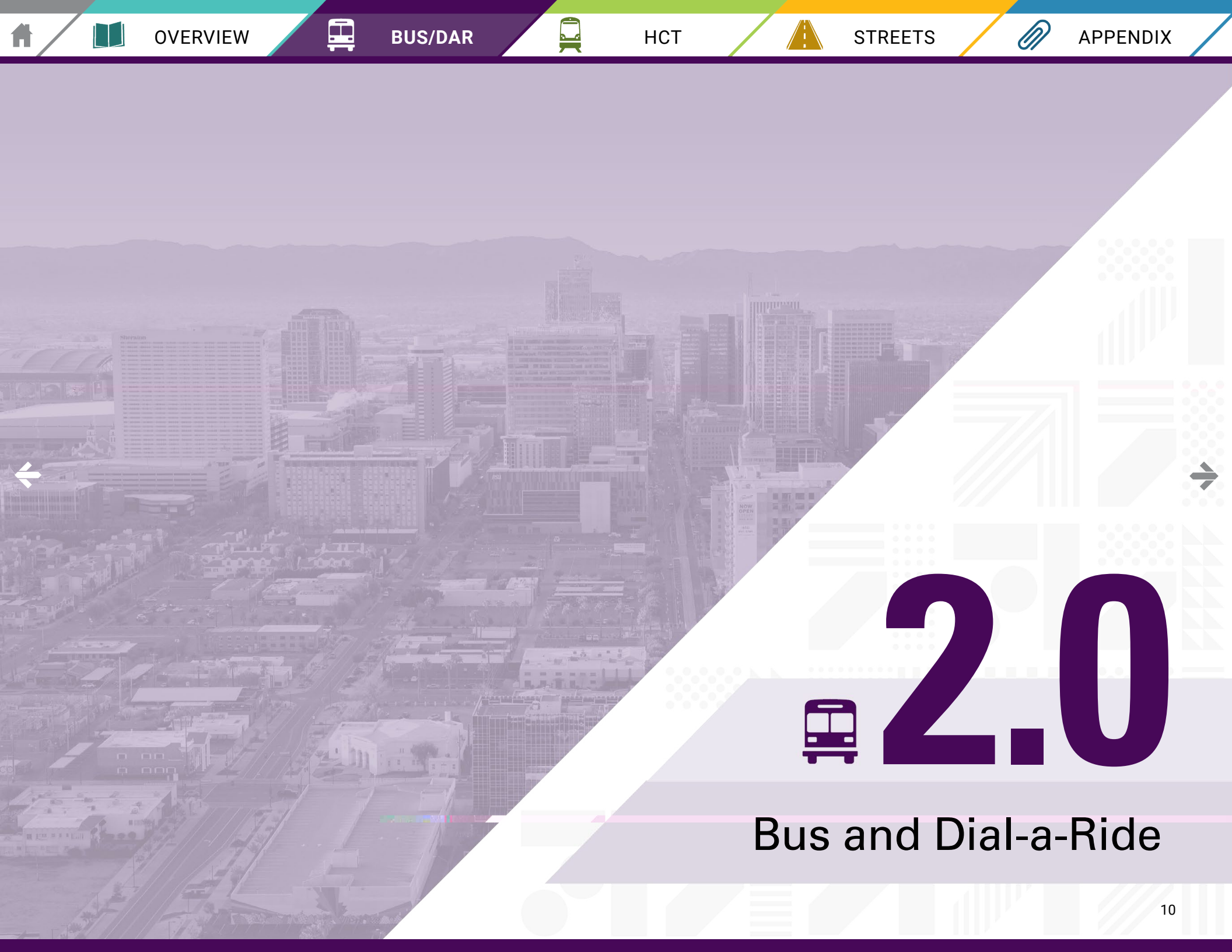
T2050 GOALS ESTABLISHED AT PROGRAM ONSET

EXPECTED PROGRESS AT 7.5 YEARS

BUS AND DIAL-A-RIDE		CONTINUE local bus, RAPID commuter bus, neighborhood circulator and Dial-a-Ride service FOR 35 YEARS		
		PROVIDE 15-MINUTE FREQUENCY on half of all bus routes		
		EXTEND & ADD new RAPID service		
		PURCHASE NEW buses and Dial-a-Ride vehicles		
		EXTEND bus and Dial-a-Ride service hours TO MATCH LIGHT RAIL HOURS		
		EXTEND & ADD BUS SERVICE to unserved major streets		
		ADD NEW circulator service		
		BUILD NEW park-and-ride lots		
		BUILD additional bus bays		
HIGH CAPACITY TRANSIT		CONTINUE EXISTING MILES of light rail service		
		PROVIDE 75 MILES of new bus rapid transit service		
		ADD 42 MILES of new light rail in Phoenix		
		BUILD NEW light rail station at 50th Street (completed April 25, 2019, and operational since then)		
STREETS		680 MILES of new overlays on arterial/major streets		
		2,000 new streetlights		
		\$240 MILLION for new roads and upgraded bridges		
		1,080 MILES of new bike lanes		
		135 MILES of new sidewalks		
		ENHANCE technology		

Below expected target
 Approaching expected target
 At or above expected target

All goals are at or above expected progress targets at 7.5 years.



2.0

Bus and Dial-a-Ride

BUS AND DIAL-A-RIDE

CUMULATIVE PROGRESS JAN. 1, 2016–JUNE 30, 2023

EXTENDED SERVICE HOURS

for bus and Dial-a-Ride to **MATCH LIGHT RAIL HOURS (FY 2017)**

EXTENDED BUS ROUTES

Route	Description	Year
51	51st Avenue Lower Buckeye Road to Baseline Road	(FY 2017)
39	Shea Boulevard (Dreamy Draw) Park-and-Ride to 40th Street	(FY 2017)
122	Cactus Road ASU West Campus to 19th Avenue/Dunlap Avenue Light Rail	(FY 2017)
60	16th Street Bethany Home Road & 16th Street to Camelback Road & 24th Street	(FY 2018)
19	23rd Avenue Happy Valley Road to Pinnacle Peak Road	(FY 2018)
MARY	MARY Neighborhood Circulator Extended on 59th Avenue to service neighborhoods near Sunridge Park	(FY 2022)
43	43rd Avenue Extended from Buckeye Road to Lower Buckeye Road	(FY 2022)
28	Lower Buckeye Road from 75th Avenue to 99th Avenue	(FY 2023)
61	Southern Avenue Extend from 43rd Avenue to 51st Avenue	(FY 2023)

ADDED BUS ROUTES

Route	Description	Year
32	32nd Street Camelback Road to Baseline Road & Priest Drive	(FY 2017)
140	Ray Road 48th Street to Gilbert Road	(FY 2018)

INCREASED FREQUENCY

Improve frequency to **15 Minutes or better** on eight routes:

Route	Description	Off-peak	Peak
19	19th Avenue	(FY 2018)	
3	Van Buren Street	(FY 2018)	
50	Camelback Road	(FY 2018)	
29	Thomas Road	(FY 2018)	
41	Indian School Road	(FY 2019)	
0A	South Central Shuttle	(FY 2022)	(FY 2022)
7	7th Street	(FY 2022)	(FY 2022)
156	48th Street to Gilbert Road		(FY 2022)

Weekday service levels on five holidays reinstated
(previously on a Sunday schedule)

RAPID service frequency increases

Weekdays and weekends **to 30 MINUTES or better**

ORDERED

Quantity	Description
493	Local Buses
44	Rapid Buses
150	Dial-a-Ride Vehicles
9	Circulator Buses

INSTALLED

Quantity	Description
7	Bus Bays
91	Bus Stops
545	Bus Shelter Shade Structures

BUS AND DIAL-A-RIDE

CUMULATIVE PROGRESS

JAN. 1, 2016–JUNE 30, 2023

OTHER IMPROVEMENTS COMPLETED

\$491 MILLION RECEIVED
in Federal Transit Administration (FTA) formula grants for Phoenix transit (7.5-year total)

\$41 MILLION RECEIVED in competitive grant funding to purchase buses (7.5-year total)

LIQUEFIED NATURAL GAS
contract saves \$2 million in fuel costs each year (FY 2018)

WEST TRANSIT FACILITY
awarded contract (FY 2019)

NORTH AND SOUTH FACILITIES
awarded contract (FY 2020)

ALTERNATIVE TRANSPORTATION SERVICES
technology enhancements included: ADA Ride, Senior Ride and Senior Center Shuttle, Employment Transportation and Medical Trip (FY 2019)

PTD IT implemented passenger notifications for passengers who use Dial-a-Ride (FY 2022)



TRIPSPARK
customer web portal for Dial-a-Ride reservations (FY 2018)

SECURITY
K-9 Security Unit Grant (FY 2017)

REGIONAL DIAL-A-RIDE IMPLEMENTED
eliminating transfers (FY 2017)

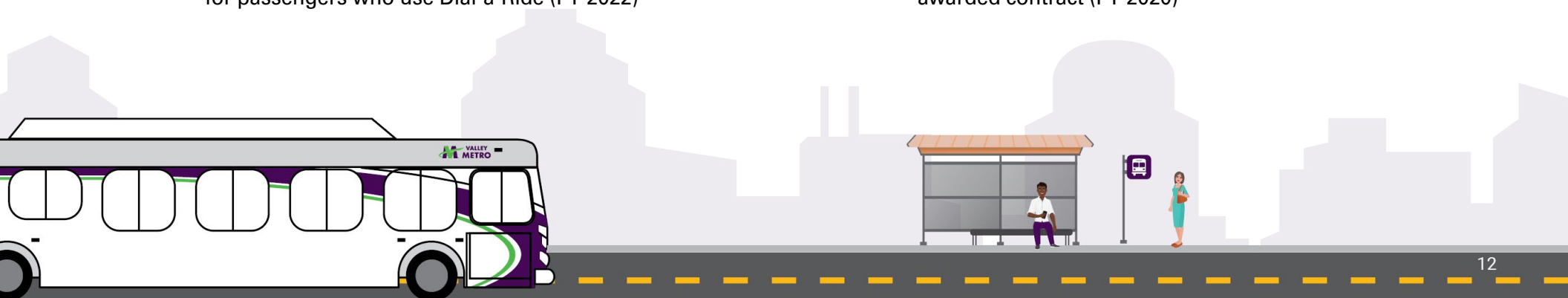
SOUTH TRANSIT FACILITY
refurbished (FY 2019)

COMPUTER-AIDED DISPATCH/AUTOMATED VEHICLE LOCATION upgrades installed (FY 2020)

AUDIO ON DIGITAL BUS SIGNS (FY 2018)

FARE COLLECTION SYSTEM awarded contract (FY 2020)

OPERATIONS CONTROL CENTER
awarded contract (FY 2020)





BUS AND DIAL-A-RIDE

The Phoenix Public Transit Department (PTD) focuses on operating transportation services that not only provide riders with a safe ride but also recognize the immense value in physically connecting our communities. With the available services, riders can access schools, health facilities, jobs, grocery stores, pharmacies and many other critical connections. The department works in partnership with Valley Metro, the regional public transportation agency that provides coordinated transit services to riders in the metro area.

Phoenix residents have access to a wide range of public transportation options, including fixed route bus service, neighborhood circulators and express commuter buses. Alternative transportation services such as Dial-a-Ride (DAR) serve people who are unable to use local routes due to a disability. For additional transit information, visit the [PTD website](#).

Funding and Budget

Bus and Dial-a-Ride receive T2050 sales tax revenues and funding from federal grants. Funding is also generated from fares, transit advertising and the Regional Public Transportation Fund.

Employing all these resources, PTD used \$217.5 million in FY 2023 to support ongoing operations and system improvements, which included greater bus frequency, additional and extended bus routes, new vehicles, shaded bus stops and security and technology enhancements. Phoenix plans to use \$2.4 billion in the next five years to continue bus and Dial-a-Ride operations, make capital investments to ensure that the system remains in a state of good repair and further expand and enhance the system.



Dial-a-Ride buses provide people with disabilities a safe and convenient means of transportation.

Service Restoration

Although COVID-19 and its effects are largely behind us, ridership has not returned to pre-pandemic levels. PTD has continued to monitor, modify and increase service where we see improvement in ridership. Since the initial service reduction in early 2021, PTD has steadily restored previously suspended service, which includes restoring school trips, adding more RAPID trips, and increasing the reach of bus service.



In FY 2023, a total of 21,505,271 transit boardings occurred in Phoenix, which is about half the pre-pandemic level.

Local Fixed Route

The foundation of the public transportation network is local fixed route bus service. Riders can easily make their way to desired locations across the Valley using the grid system on which buses operate. Bus services were available nearly 24 hours per day prior to reductions in service due to the pandemic.

Dial-a-Ride and Alternative Transportation Services

Phoenix provides a variety of alternative transportation options including Dial-a-Ride, ADA Cab, Senior Cab and Senior Center Shuttle, Employment Trips and Medical Trips. Dial-a-Ride provides federally required paratransit service to individuals unable to ride the bus or light rail. This service complements fixed route bus service by operating during the same service hours. Dial-a-Ride passengers can schedule a ride by phone or the online reservation tool, TripSpark.

We have continued to extend bus and Dial-a-Ride service hours to match light rail hours. However, the pandemic's impact on ridership and the labor force has so far prevented PTD from fully resuming the pre-pandemic service span. Last trips during evening hours begin around 11 p.m. and travel thereafter through the end of each route.



DASH (Downtown Area Shuttle) is one of four circulator bus routes connecting key neighborhood destinations like libraries and grocery stores.

Circulator Service

Four circulator routes – ALEX (Ahwatukee Local Explorer), DASH (Downtown Area Shuttle), MARY (Maryvale Area Ride for You), and SMART (Sunnyslope Multi-Access Residential Transit) – connect area residents with key neighborhood destinations such as libraries, grocery stores, and community centers.

The Neighborhood Transit Study (NTS) is an important component of the T2050 program, aimed at continuing to expand and improve Phoenix's neighborhood circulator routes. The NTS began in 2019 with a comprehensive research project on neighborhood transit service offerings, titled Neighborhood Transit Study. This research included a review of other cities like Phoenix (called peer cities).



The research also points out innovative service solutions that peer cities have implemented, their pros and cons, and how feasible such solutions would be in a city like Phoenix.

In 2020, the _____ was developed to provide an inventory of recent and upcoming developments, street improvements, planned transit services, and transit service changes occurring in downtown Phoenix. An analysis of all known upcoming and planned projects was conducted to determine the challenges the transit network may face due to the changing landscape of the downtown area. In response to these challenges, potential impacts within the downtown area were identified and are being monitored by PTD to understand the changing demand for transit. In addition, high-level solutions were recommended to alleviate future challenges related to continued downtown growth.

In 2022, the **Downtown** NTS was commenced with a focus area currently serviced by the DASH circulator. To ensure community involvement, a _____ (CEEP) was developed outlining community participation in three phases. Existing socio-economic and demographic conditions and current DASH operations were documented and reviewed, followed by the Phase 1 Community Outreach (September 2022) to understand current and future needs. The technical findings and public outreach responses were used to develop four DASH route alternatives that expanded the current DASH alignment and service hours. Phase 2 Community Outreach (January 2023) focused on understanding

the preferred alternative. Per the public response, an alternative was selected, and additional outreach was conducted with internal (departments within the City of Phoenix) and external stakeholders along the preferred alternative. In April 2023, Phase 3 Community Outreach was conducted via the Valley Metro Service Change process. As downtown continues to evolve and the city's central station site is slated to reopen in 2025, discussions about the proposed DASH route changes in the downtown area will continue.



RAPID routes include I-10 EAST RAPID, I-10 WEST RAPID, I-17 RAPID, South Mountain East RAPID, South Mountain West RAPID and SR 51 RAPID.

RAPID Commuter

Six RAPID routes provide residents in suburban areas with an alternative to driving to downtown Phoenix.

In October 2021, select RAPID trips that had been reduced as a result of the pandemic were restored. In January 2023, more RAPID commuter trips were restored as more transit riders returned to the system.

Park-and-Ride

PTD maintains and operates nine park-and-ride facilities, including the Sunnyslope, Metrocenter and Desert Sky transit centers, which provide free parking for transit users. In addition, Valley Metro manages five light rail park-and-ride locations along the Phoenix portion of the light rail alignment.

Technology

The fare collection improvement project has now entered the formal implementation phase. During this period the bus validators and light rail platform validators were installed, and field verified for functionality. In December 2022, the pilot mobile ticketing application was being tested by the agency and the public. Limited fare types were available and over 300 pilot testers were involved.

The launch of the mobile ticketing application began on Feb. 1, 2023, coinciding when the Super Bowl came to the Valley. A new public-facing website will be launched in the fall of 2023 for eligible riders to register and obtain certification for reduced fares while using the transit system. Phase 2 will launch in early 2024 and provide a new fare account option using reloadable smartcards that are individualized (account based) plus more fare ticketing options for the mobile ticketing application.



The mobile ticketing application allows riders to purchase fares using their mobile devices.

Table 2.1 T2050 Bus and Dial-a-Ride

Completed FY 2023 (July 1, 2022–June 30, 2023)	
Fund existing bus, RAPID commuter bus, neighborhood circulator and Dial-a-Ride service for 35 years	<ul style="list-style-type: none">to 51st Avenue. Route 35 and 36 proposals were rejected by public opinion.In May 2023, PTD conducted outreach on extending DASH service in downtown Phoenix as well as adding weekend service on the route.
Improve bus frequency	<ul style="list-style-type: none">Continued to provide safe and reliable services.Maintained bus and Dial-a-Ride service hours to match light rail hours.
New buses and Dial-a-Ride vehicles	<ul style="list-style-type: none">One bus bay was constructed at the intersection of 75th Ave and Van Buren. The improvements at this intersection also included upgrading the adjacent signal with Americans with Disabilities Act-compliant ramps and Accessible Pedestrian Signals (APS) push buttons to help facilitate the safe movement of vehicles and pedestrians through the intersection.
Extend and add bus service to unserved major streets	<ul style="list-style-type: none">Installed 100 new shade structures at existing bus stops. Also, installed 39 new bus stops.
Improve bus frequency	<ul style="list-style-type: none">In January 2023, PTD Planning restored select trips on six RAPID routes in Phoenix. These trips were previously removed during the pandemic.In May 2023, PTD conducted outreach to improve bus frequency on Routes 3, 7, 16, 19, 27, 35, and 70. With the implementation of proposed service changes, Phoenix’s frequent service network would increase from 8 routes to 11 routes, covering 47% of Phoenix residents within its service. More than 217,000 residents as well as 133,000 more jobs would be covered within the frequent service network service area.
Incorporate technology	<ul style="list-style-type: none">The regional fare collection system modernization project continues in its 3rd year.Features launched to date:<ul style="list-style-type: none">A limited feature trip planner and real-time bus/light rail information app was launched in July 2021.A limited fare purchase mobile app ticketing solution was tested in December 2022 and launched before the Super Bowl in February 2023.
Security:	<ul style="list-style-type: none">Continued efforts to work with Police Transit Unit on security issues at transit centers, park-and-rides, and bus stops. Increased cleaning frequency at select bus stops in response to trash issues.

Operations and Maintenance

Phoenix operates three facilities for bus maintenance, fueling and cleaning: the West, North and South Transit Facilities. First Transit began providing transit services from the West Facility under a new agreement beginning July 1, 2018. Transdev began providing transit services from the North and South facilities under a new agreement beginning July 1, 2020. Transdev also began providing services at the Operations Control Center on July 1, 2020, adding three new controllers to provide increased system support and oversight.

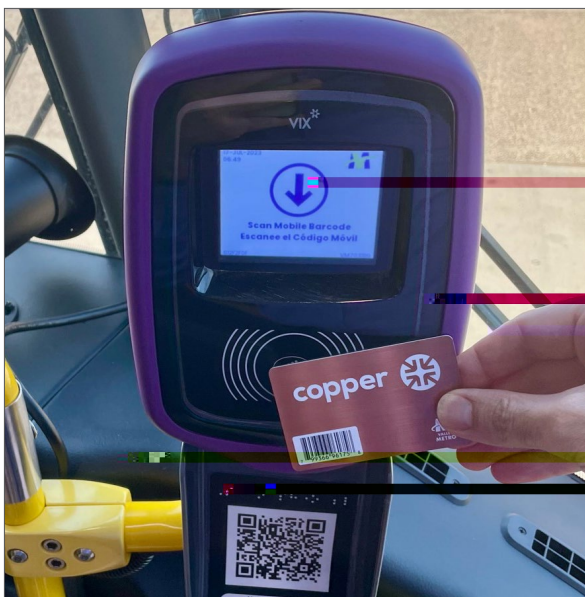
Transdev completed the acquisition of First Transit in March 2023. However, First Transit continues to operate under the First Transit name with a name change expected to take effect in late September 2023. The First Transit contract will continue to operate as a separate contract.



With service restored to 97% of pre-COVID levels in April 2023, Phoenix operated around 403,500 miles of bus service weekly.

Table 2.2 T2050 Bus and Dial-a-Ride

Planned for FY 2024	
Fund existing bus, RAPID commuter bus, neighborhood circulator and Dial-a-Ride service for 35 years <ul style="list-style-type: none"> Continue to provide safe and reliable services. Maintain bus and Dial-a-Ride service hours to match light rail hours. 	Bus stops <ul style="list-style-type: none"> Install 100 new shade structures at existing bus stops. Funding allocated for 20 additional new shade structures beyond the goal of 80 new shade structures in fiscal years 2023 and 2024.
Improve bus frequency <ul style="list-style-type: none"> Continue restoration of transit services that had been cut due to the COVID-19 pandemic. Expand Frequent Service Network (service running every 15 minutes or faster from at least 6 a.m. to 6 p.m. on weekdays) by adding more frequency on routes 3, 7, 16, 19, 35 and 70. Add peak hour frequency on Route 27. 	Incorporate technology <ul style="list-style-type: none"> New regional fare collection system modernization project features coming in late 2023 and 2024. Reduced fare registration website will be launched in the fall of 2023. Those eligible for reduced fare will be able to go online to complete the application and have reduced fare options available on the mobile ticketing app. In early 2024, reloadable smartcards will be available for riders under platinum card programs (corporate, state, city, county). Design new zero-emissions fueling infrastructure at the West and North Operation and Maintenance Garages. The heavy-duty fleet transition plan, as approved by the Phoenix City Council, to zero-emission buses will include the purchase of battery-electric buses and fuel-cell-electric (hydrogen) buses.
New buses and Dial-a-Ride vehicles <ul style="list-style-type: none"> Order 54 buses (17 CNG and 25 hybrid-electric, 6 battery-electric, 6 fuel-cell-electric [hydrogen]), 2 circulator buses and 25 Dial-a-Ride vehicles. RFP issued for heavy duty zero-emission buses. 	
Extend and add bus service to unserved major streets <ul style="list-style-type: none"> Continue researching service change that would extend DASH service in downtown Phoenix and add weekend service on the route. 	
Bus bays <ul style="list-style-type: none"> Coordinate bus bay design and construction with Phoenix Streets Department as street projects allow the opportunity to include bus bays at arterial street intersections. 	Security <ul style="list-style-type: none"> Continue efforts to work with Police Transit Unit on security issues at transit centers, park-and-rides, and bus stops. Increase cleaning frequency at select bus stops.



Phase 2 of the mobile ticketing application, will provide riders with more fare options using reloadable smartcards.

Table 2.3 T2050 Bus and Dial-a-Ride

Planned for FY 2025–2028	
Fund existing bus, RAPID commuter bus, neighborhood circulator and Dial-a-Ride service for 35 years <ul style="list-style-type: none"> Continue to provide safe and reliable services. Maintain bus and Dial-a-Ride service hours to match light rail hours. 	Bus stops <ul style="list-style-type: none"> Install at least 80 new shade structures at existing bus stops with no shade in each of the next five fiscal years.
Improve bus frequency <ul style="list-style-type: none"> Maintain existing frequent service network in Phoenix, monitor ridership trends and evaluate feasibility to modify route line frequency to expand the frequent service network in the next five fiscal years. 	Incorporate technology <ul style="list-style-type: none"> Regional fare collection system modernization project. In the third quarter of 2024, reloadable smartcards will be available to the general public, fare capping will be introduced, and a retail network to purchase reloadable cards will be implemented. New ticket vending machines will be installed in the light rail alignment. All fareboxes on buses will be replaced with new, cash-only fareboxes. Design and construction of new zero-emissions fueling infrastructure at the West and North Operation and Maintenance Garages. The heavy-duty fleet transition plan, as approved by the Phoenix City Council, to zero-emission buses will include the purchase of battery-electric buses and fuel-cell-electric (hydrogen) buses. Design will be completed and the construction of new fueling infrastructure will be initiated with a completion date of mid-2025.
New buses and Dial-a-Ride vehicles <ul style="list-style-type: none"> Order buses: 28 (FY 2025), 28 (FY 2026), 40 (FY 2027), 40 (FY 2028). Order circulator buses: 0 (FY 2025), 3 (FY 2026), 3 (FY 2027), 3 (FY 2028). Order 25 Dial-a-Ride vehicles each fiscal year. Order 20 BRT buses by FY 2028. 	
Extend and add bus service to unserved major streets <ul style="list-style-type: none"> Evaluate current transit service coverage in Phoenix and add or expand a least two bus routes in the next five fiscal years. 	
Bus Bays <ul style="list-style-type: none"> Coordinate bus bay design and construction with Phoenix Streets Department as street projects allow the opportunity to include bus bays at arterial street intersections. 	Security <ul style="list-style-type: none"> Continue efforts to work with Police Transit Unit on security issues at transit centers, park-and-rides, and bus stops. Increase cleaning frequency at select bus stops.



3.0

High Capacity Transit

HIGH CAPACITY TRANSIT

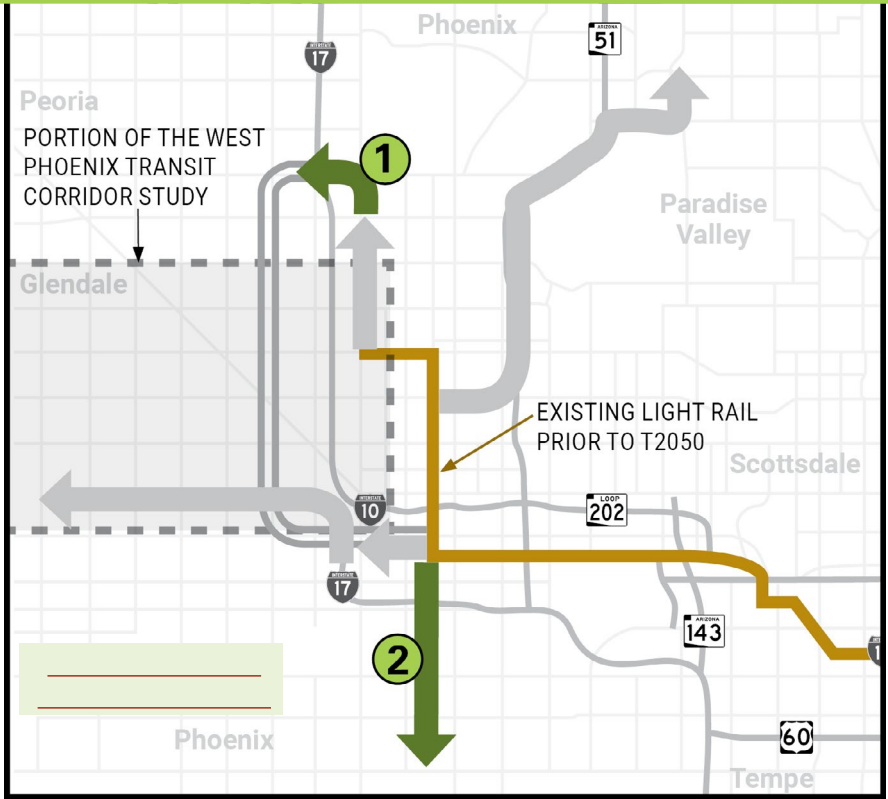
CUMULATIVE PROGRESS
 JAN. 1, 2016–JUNE 30, 2023

LRT Ongoing Projects – Construction

1

NORTHWEST EXTENSION PHASE II

- Began construction in August 2020.
- Awarded three allocations from the FTA’s Capital Investment Grants (CIG) program (\$50.6 million in August 2020, \$49.4 million in December 2020 and \$58 million in May 2021).
- In November 2021, awarded \$1 million for FTA Transit Oriented Development (TOD) Planning Pilot Grant.
- In June 2023, the Small Business Financial Assistance Program reached a milestone of over \$130,000 in funds distributed to small businesses and microbusinesses along the corridor.
- In June 2023, attained 90% overall construction completion.



2

SOUTH CENTRAL EXTENSION/DOWNTOWN HUB

- Construction began in October 2019.
 - In January 2021, awarded \$638 million Full Funding Grant Agreement from the U.S. Department of Transportation.
 - Awarded two allocations from the FTA’s CIG program (\$232.1 million in May 2022 and \$21.1 million in December 2022) and \$81.3 million in American Rescue Plan Act (ARPA) funds in May 2022.
- In November 2022, received \$1 million FTA TOD Planning Projects grant for the implementation of the TOD Community Plan.
 - In June 2023, the Small Business Financial Assistance Program reached a milestone of \$750,000 in funds distributed to small businesses and microbusinesses along the corridor.
 - In June 2023, attained over 65% overall construction completion.

HIGH CAPACITY TRANSIT

CUMULATIVE PROGRESS
 JAN. 1, 2016–JUNE 30, 2023

LRT Ongoing Projects – Planning

CAPITOL EXTENSION

- In June 2021, awarded \$2.4 million grant to perform TOD planning along Capitol and I-10 West Extensions from the FTA.
- In September 2022, achieved 15% preliminary engineering design and began to advance design toward 30% completion.
- In March-May 2023, conducted public meetings to gather input into 15% preliminary design.
- In May 2023, granted Entry into Project Development Phase from FTA.
- In May 2023, procurement for the final design contractor underway.
- In June 2023, procurement for construction contractor underway.

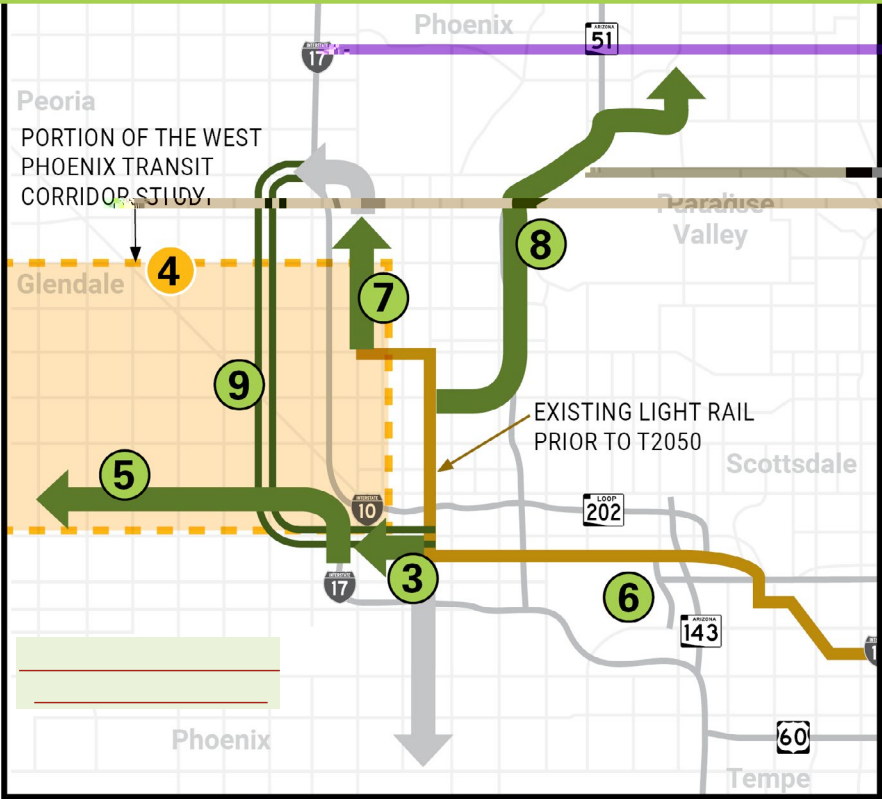
WEST PHOENIX TRANSIT CORRIDOR STUDY

- In June 2022, FTA awarded \$514,045 American Rescue Plan

- Route Planning Restoration Program grant to conduct a West Phoenix high-capacity transit (HCT) study.
- In February 2023, completed existing conditions report as well as the purpose and need statement.
 - In March and April 2023, conducted first phase of public meetings to gather input regarding ten proposed alignments.
 - In June 2023, conducted second phase of public meetings to gather input regarding two proposed alignments.

I-10 WEST EXTENSION

- In 2021, preliminary planning and corridor evaluation began.
- In June 2021, awarded \$2 million grant to perform TOD planning along Capitol and I-10 West Extensions from the FTA.



Light Rail Transit (LRT) Completed Projects

50TH STREET STATION

- Opened April 25, 2019.
- Received Sustainable Infrastructure Award from Arizona State University's Metis Center.

NORTHWEST EXTENSION PHASE I

- Service began March 19, 2016.

LRT Deferred Projects

NORTHEAST EXTENSION

- Deferred to end of T2050 program by the Phoenix City Council (2018).

Bus Rapid Transit (BRT) Ongoing Project – Planning

35TH AVENUE/VAN BUREN STREET CORRIDOR

- On October 6, 2021, the Phoenix City Council approved the initial BRT corridor of 35th Avenue/Van Buren Street.
- On April 20, 2022, the Phoenix City Council approved an amendment for AECOM to provide 15% design plans for the initial BRT corridor of 35th Avenue/Van Buren Street.
- On May 31, 2023, the Phoenix City Council approved \$5.5 million contract with HDR engineering to provide professional services for BRT Program Planning and Support Services.



HIGH CAPACITY TRANSIT



High-capacity transit (HCT) is able to serve more customers than traditional bus service because it uses larger-capacity vehicles. HCT also offers faster travel because it bypasses vehicular traffic.

For example, Phoenix's light rail service can operate at faster travel speeds because it runs in an exclusive guideway with prioritized traffic signaling. The 16.3 miles of light rail service within the city of Phoenix is a substantial portion of the existing 28.2-mile Valley Metro Rail light rail system. Residents use the system to connect between the downtown areas of Phoenix, Tempe and Mesa, as well as Sky Harbor Airport and many other key destinations in between.

In addition to light rail, bus rapid transit (BRT) is a key component of continuing to expand the city's HCT network. BRT focuses on improved speed, reliability, convenience and the overall transit experience. Common elements of successful BRT systems include enhanced stations, advanced fare collection, custom buses, unique branding, dedicated lanes and transit spot improvements such as transit signal priority and queue jump lanes.



PLAN AHEAD
WITH THE
VALLEY METRO APP

In February 2023, approximately 250,000 riders used light rail to attend Super Bowl LVII events in downtown Phoenix.

Funding and Budget

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

Phoenix allocated \$260 million in FY 2023 to support current year operations as well as the system's ongoing expansion. T2050 includes an investment of more than \$2.4 billion to expand and improve the city's HCT network over the next five years. The plan includes light rail improvements and expansion and development of BRT. In addition to revenues generated by the city's T2050 sales tax, other funding sources include federal grants, the Regional Public Transportation Fund, fares and advertising.

Restoring Ridership

In FY 2020, Valley Metro modified light rail hours in response to the COVID-19 pandemic. Because ridership continues to lag behind pre-pandemic levels, light rail begins at approximately 4:45 a.m. with the last trip starting at 11 p.m.

Transit-Oriented Development (TOD)

The FTA's Pilot Program for TOD Planning [transit.dot.gov] provides funding to communities to integrate land use and transportation through planning studies. The FTA funds studies through this program to examine ways to develop housing strategies near transit, improve economic development and ridership potential, foster multimodal connectivity and accessibility, improve transit access for pedestrian and bicycle traffic, engage the private sector, identify infrastructure needs and enable mixed-use development near transit stations. The Pilot Program for TOD Planning is a competitive grant. The following are three active projects that received FTA grant funding:

- The Northwest Extension Phase II received a \$1 million grant. HCT will use the grant to develop a TOD Policy Plan and multimodal active transportation plan that will provide strategies that enhance economic development and ridership, facilitate multimodal connectivity, increase access to transit hubs, and identify and enable mixed-use development and infrastructure needs.
- The Capitol/West Extension received a \$2 million grant, which will be used to develop TOD Policy Plans and Equitable Housing Strategies for the Capitol and I-10 West project corridors. These plans and strategies will be developed through an assessment of the existing conditions, development of community profiles, public and stakeholder engagement, and the creation of a community vision.

- The South Central Extension/Downtown Hub received a \$1 million grant in November 2022, which will be used to implement the recently adopted South Central TOD Community Plan's shared community vision for environmentally equitable, compact and connected communities, and to help make significant progress towards more equitable land use, transportation and infrastructure investments.



August 2023: Northwest Extension Phase II, Thelda Williams Transit Center.

Light Rail Service

Northwest Extension Phase II

Phase II of the Northwest Extension will bring light rail to west of I-17. The 1.6-mile extension will run west on Dunlap Avenue from 19th Avenue, north on 25th Avenue and west on Mountain View Road across I-17, terminating at the Thelda Williams Transit Center.

Construction began in August 2020 and reached 90% completion in June 2023. The extension is currently scheduled to open in 2024, which is three years earlier than originally anticipated.

South Central Extension/Downtown Hub

This extension adds 5.5 miles to the light rail system while connecting South Phoenix residents to downtown Phoenix and the light rail network. The project includes a transit hub in downtown Phoenix, one park-and-ride and public art.

Construction began on the South Central Extension in October 2019 and reached 65% project completion in June 2023. The new line is expected to be operational by 2025.

Capitol Extension

The 1.4-mile Capitol Extension, originally known as Capitol/I-10 West Phase I, will connect the existing light rail system in downtown Phoenix to the Arizona state capitol.

The project's Environmental Assessment (EA) and preliminary design began in 2020. The EA evaluates the environmental aspects of the project and provides a detailed analysis of how light rail would operate along the route.

I-10 West Extension

The I-10 West light rail extension will connect downtown Phoenix to the Desert Sky Transit Center. The project is expected to be completed in 2030.

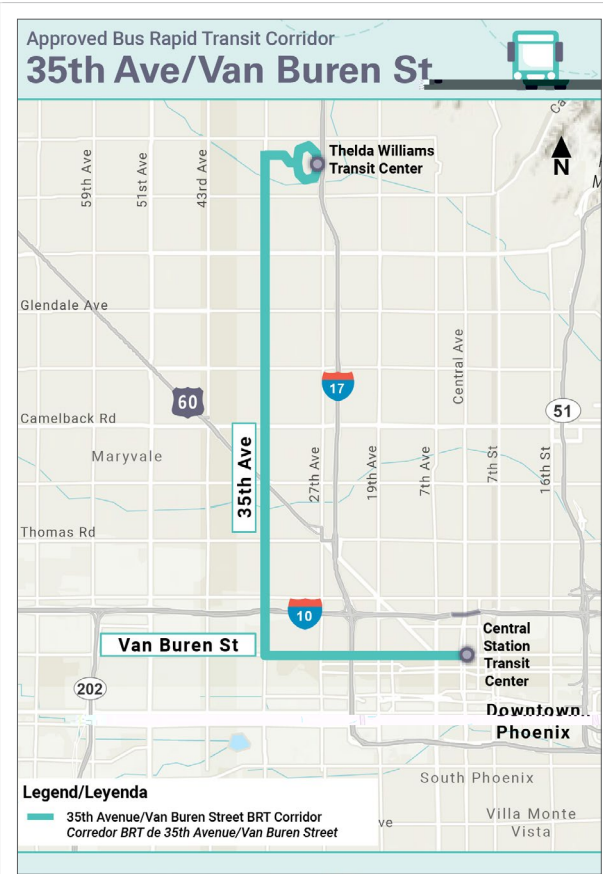
Preliminary planning and corridor evaluation began in 2020. Next steps include finalizing the project analysis and continuing community outreach.

Table 3.1 T2050 High Capacity Transit

Completed FY 2023 (July 1, 2022–June 30, 2023)	
Increase light rail in Phoenix	
Northwest Extension Phase II	
<ul style="list-style-type: none"> Continued Metro Parkway Center elevated station platform and park-and-ride construction. In April 2023, awarded contract for consultant services to assist with the development of the Northwest Extension Phase II Light Rail Transit-Oriented Development (TOD) Policy Plan. In May 2023, the Phoenix City Council approved the renaming of Metrocenter Transit Center to Thelda Williams Transit Center. In June 2023, the Small Business Financial Assistance Program reached a milestone of over \$130,000 in funds distributed to small businesses and microbusinesses along the corridor. In June 2023, attained 90% overall construction completion. 	<ul style="list-style-type: none"> Continue implementation effort for equitable land use, transportation, and infrastructure investments towards achieving the South Central TOD Community Plan.
South Central Extension/Downtown Hub	
<ul style="list-style-type: none"> In November 2022, received \$1 million FTA TOD Planning Projects grant for the implementation of the South Central TOD Community Plan. In December 2022, completed the final course of paving in Downtown Hub to meet the Mobility Matters requirements. In December 2022, received a \$21.1 million allocation from the FTA CIG program. In June 2023,the Small Business Financial Assistance Program reached a milestone of \$750,000 in funds distributed to small businesses and microbusinesses along the corridor. In June 2023, attained over 65% overall construction completion. Continue all civil (subsurface utilities and roadway) work along South Central area of the alignment. 	<ul style="list-style-type: none"> In September 2022, achieved 15% preliminary engineering design and began to advance design toward 30% completion. In October 2022, determined Construction Manager at Risk (CMAR) as the project's delivery method. Begin implementing CMAR into the project schedule. In March-May 2023, conducted public meetings to gather input regarding 15% preliminary engineering design. In May 2023, granted Entry into Project Development Phase from FTA. In May 2023, procurement for final design contractor underway. In June 2023, procurement for construction contractor underway. In June 2023, the Capitol Extension and I-10 West Extension TOD Land Use Planning and Equitable Housing Project consultant procurement process moved to the proposal evaluation phase. Surveying the alignment to identify the location of underground utilities. Continue preparatory work to support the drafting of the Environmental Assessment.
I-10 West Extension	
	<ul style="list-style-type: none"> Preliminary planning and corridor evaluation continued. In June 2023, the Capitol Extension and I-10 West Extension TOD Land Use Planning and Equitable Housing Project consultant procurement process moved to the proposal evaluation phase.

Bus Rapid Transit

In 2021, the Phoenix City Council approved the initial BRT corridor of 35th Avenue/Van Buren Street. Since then, the Phoenix BRT Program has worked on its alternatives analysis process and community engagement, which will support future preliminary engineering efforts.



The _____ and the _____ provide information about the program, including answers to frequently asked questions.

Table 3.2 T2050 High Capacity Transit

Completed FY 2023 (July 1, 2022–June 30, 2023)	
Increase Bus Rapid Transit	
<ul style="list-style-type: none">In July 2022, the Phoenix BRT Program began its preliminary design contract with AECOM to conduct an alternatives analysis and develop design concepts and 15% design plans for the initial BRT corridor of 35th Avenue/Van Buren Street.In August 2022, the Phoenix BRT Program established a Technical Advisory Committee (TAC) and the Executive Leadership Committee (ELC) to gather technical insight and perspective on key decisions for the development of the 35th Avenue and Van Buren Street BRT Corridor. The TAC and ELC include representatives from the BRT Program team, City of Phoenix departments, regional/state government agencies and council districts.In fall of 2022, the Phoenix BRT program began Phase I of the Alternatives Analysis for the 35th Avenue/ Van Buren Street Corridor. During this phase, the team evaluated existing conditions and collected input from the community on their needs for the BRT corridor.In October 2022, the Phoenix BRT Program facilitated a Goals Workshop with the TAC and ELC to establish priorities that are the foundation for the development of the 35th Avenue and Van Buren Street BRT corridor.On October 3, 2022, the Phoenix BRT Program launched the BRT Corridor Survey and the _____. The BRT Program engaged with over 1,200 community members through the survey and website. Through these efforts, 340 survey responses were received. The responses helped guide the development of BRT along the 35th Avenue and Van Buren Street Corridor. Summary results can be found here: _____.Between October 21 and December 23, 2022, the Phoenix BRT program launched the 35th Avenue and Van Buren Street Corridor Community Outreach as part of Phase I Alternatives Analysis to seek input on preferences for BRT along the approved corridor, and to continue to educate the community on BRT.On December 9, 2022, the Phoenix BRT Program coordinated a tour of the Houston METRO Silver Line BRT System. Phoenix Mayor Kate Gallego and Phoenix	<p>City Councilmembers Laura Pastor, Ann O'Brien and Yassamin Ansari were invited to experience and ride the Houston METRO Silver Line BRT System; meet and learn from the leadership of Houston METRO and Uptown Houston about planning for and implementing BRT; and participated in a BRT workshop.</p> <ul style="list-style-type: none">In February 2023, the Community Engagement Summary – Phase I Alternatives Analysis was completed. This summary documented and highlighted the input received on the preferences for BRT along the approved corridor. Summary results can be found here: _____.In March 2023, the Phoenix BRT Program began conducting Phase II Alternatives Analysis and a comprehensive Community and Business Engagement Campaign for the approved 35th Avenue/ Van Buren Street BRT Corridor. During this phase, the BRT team evaluated existing conditions, developed conceptual BRT cross sections, and coordinated with correlating infrastructure projects on 35th Avenue and Van Buren Street.In March 2023, the BRT Program launched the BRT Online Meeting web page and the Preliminary BRT Cross-Section Survey on the _____. The BRT Online Meeting provided an overview of program milestones, the Alternatives Analysis process, and opportunities to engage with the project team at virtual and in-person public events and meetings.From March 21, 2023 to June 16, 2023, the Preliminary BRT Cross-Section Survey received 502 public responses on preferences of BRT cross sections for the 35th Avenue/Van Buren Street BRT Corridor.The Phoenix City Council approved an amendment, in the amount of \$5.5 million, to the Phoenix BRT Program Transportation Planning Support Services Contract with HDR Engineering, which will provide further project management, community and business engagement, transit planning and engineering oversight for the approved BRT corridor of 35th Avenue/Van Buren Street.

Table 3.3 T2050 High Capacity Transit

Planned for FY 2024
<div>Increase light rail in Phoenix</div> <div>Northwest Extension Phase II</div> <ul style="list-style-type: none"> Continue to provide business assistance programs for business located along the alignment. Complete construction, with anticipated opening in 2024. <div>South Central Extension/Downtown Hub</div> <ul style="list-style-type: none"> Continue utility relocation and rail construction. Continue to provide business assistance programs for business located along the alignment. Begin the procurement process for implementation of the South Central TOD Community Plan. <div>Capitol Extension</div> <ul style="list-style-type: none"> Based on SB 1102, enabling legislation that will put Proposition 400 Extension, the regional half-cent transportation sales tax, out to voters, the city will continue to work with our transit partners, the FTA, and the neighboring community to assess route alternatives and develop a locally preferred alternative that serves community goals and connects with the future I-10 West Light Rail Extension Project. Perform technical evaluation of alternative alignments; then, present alternative routes to the community for public comment. Award contract for TOD Land Use Planning and Equitable Housing Project consultant to assist with the creation of a TOD plan that focuses on land use and housing strategies. <div>I-10 West Extension</div> <ul style="list-style-type: none"> Based on SB 1102, the city will continue to work with our transit partners, the FTA, and the neighboring community to assess route alternatives and develop a locally preferred alternative that serves community goals. Evaluate connection point to Capitol Extension project dependent on revised alignment. Award contract for TOD Land Use Planning and Equitable Housing Project consultant to assist with the creation of a TOD plan that focuses on land use and housing strategies. <div>Implement Initial Bus Rapid Transit Corridor</div> <ul style="list-style-type: none"> Complete the Alternatives Analysis and begin 15% Preliminary Engineering efforts for the BRT Corridor of 35th Avenue and Van Buren Street.

Table 3.4 T2050 High Capacity Transit

Planned for FY 2025–28
<div>Increase light rail in Phoenix</div> <div>Northwest Extension Phase II</div> <ul style="list-style-type: none"> Complete the TOD Policy Plan. <div>South Central Extension/Downtown Hub</div> <ul style="list-style-type: none"> Complete construction, with anticipated opening in 2025. Implement TOD Community Plan. <div>Capitol Extension</div> <ul style="list-style-type: none"> Recommend a Locally Preferred Alternative for the alignment, and receive city council and Valley Metro Rail board approval. Select an initial design contractor and advance to initial design. Select a construction contractor and begin utility relocation and rail construction. Complete the TOD Policy Plan and Equitable Housing Strategy for the alignment. <div>I-10 West Extension</div> <ul style="list-style-type: none"> Revise the Locally Preferred Alternative for this alignment if needed (dependent on Capitol Extension connection), and receive city council and VMR board approval. Select a final design contractor and advance to final design. Select a construction contractor and begin utility relocation and rail construction. Complete the TOD Policy Plan and Equitable Housing Strategy for the alignment. <div>Implement Initial Bus Rapid Transit Corridor</div> <ul style="list-style-type: none"> Planning, design and construction of one or more BRT corridors. Timing and schedule to be determined by the CTC and the Phoenix City Council.



4.0

Street Maintenance and Improvements

STREET MAINTENANCE AND IMPROVEMENTS

CUMULATIVE PROGRESS
JAN. 1, 2016–JUNE 30, 2023

Street Type	Miles of new pavement	Miles of pavement treatments
ARTERIAL/MAJOR COLLECTORS	303*	1,056*
MINOR COLLECTORS/ LOCAL	661*	3,177*

IMPROVED/INSTALLED
22,896
ADA RAMPS



PAINTED SIGNAL POLES at
638* INTERSECTIONS



INSTALLED
253.5*
MILES OF NEW BICYCLE LANES



INSTALLED
298* LEFT-TURN ARROWS



92* MILES OF NEW SIDEWALKS

SELECTED
12 MOBILITY STUDY LOCATIONS from
39 POTENTIAL STUDY AREAS

COMPLETED **12** STUDIES

TOTAL INSTALLED
86*
HAWKS
(High-intensity Activated crossWalks)



STOP ON RED

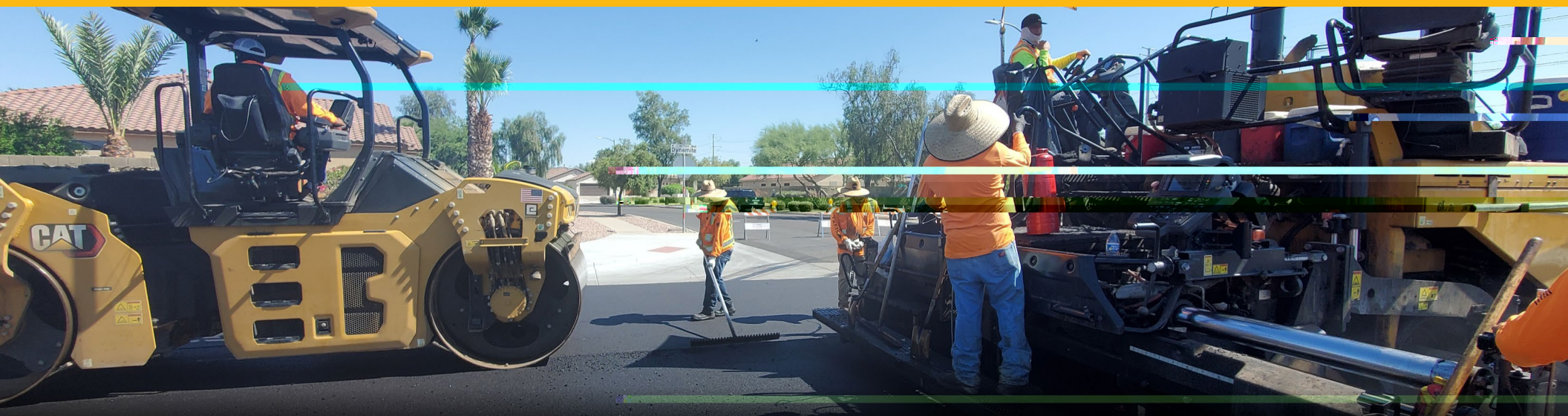


INSTALLED
3,496 NEW STREETLIGHTS



REPLACED
3,633 ILLUMINATED STREET SIGNS

* Cumulative numbers updated due to previous administrative errors.



STREET MAINTENANCE AND IMPROVEMENTS



The Street Transportation Department works to provide a safe and sustainable transportation network for everyone, including pedestrians, bicyclists and motorists. To ensure that people and goods move efficiently through the transportation network, the department's work includes the pavement preservation program, asphalt and pothole repair and installation of street signs, traffic signals, streetlights, bikeways and Americans with Disabilities Act (ADA)-compliant ramps and sidewalks.

Due to a well-defined scope, the Street Maintenance Division plans and executes many street improvement projects such as resurfacing and striping changes. However, larger-scale, more complex projects require a project assessment phase prior to design and construction. Examples of these more complex projects include turn lane improvements, lane additions and drainage studies.

The Street Transportation Department also conducts plan reviews for private development projects, construction inspections, materials testing and implementation of technology enhancements such as Geographic Information Systems (GIS). Visit the

for additional information.



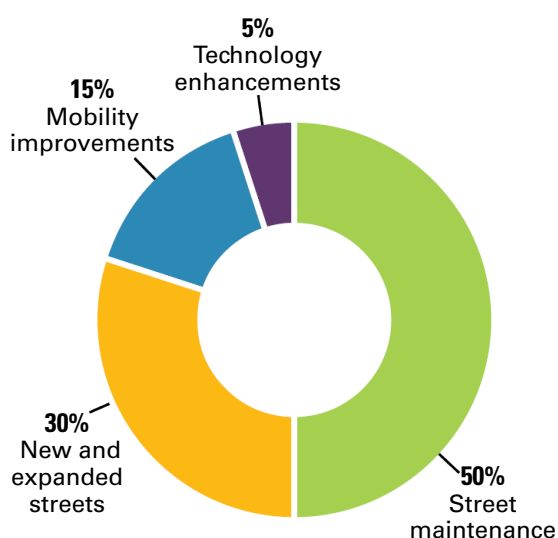
Asphalt paving at 43rd Avenue and Thomas Road

Funding and Budget

Phoenix streets receive funding from a variety of sources, including 13.8% of T2050 sales tax, the state-collected motor fuel tax, city's general fund, regional/Maricopa Association of Governments (MAG) funds, federal funds, grants and impact fees. Figure 4.1 shows the overall distribution of T2050 funds within the Street Transportation Department.

In FY 2023, Phoenix budgeted approximately \$54.7 million in T2050 funding for street construction and maintenance projects. The T2050 plan includes nearly \$282 million over the next five years. to improve transportation system infrastructure, make ADA improvements, assess and address mobility needs and continue maintenance of city streets.

Figure 4.1 Overall T2050 Program Distribution for Street Improvements



Community Engagement

During the COVID-19 pandemic, the Street Transportation Department developed a process to use virtual platforms for community engagement. The shift to virtual outreach resulted in higher levels of resident participation and an increased amount of valuable feedback for the project teams. With COVID-19 restrictions largely lifted during FY 2023, the project teams used a hybrid approach of virtual and in-person options for community engagement. During that time, the department facilitated 16 community engagement processes for either major or active transportation projects made possible through T2050.

Accelerated Pavement Maintenance Program

In 2018, the Phoenix City Council created the Accelerated Pavement Maintenance Program (APMP) and allocated \$200 million of additional funding over five years.

In June 2022, APMP had already reached its goal of 630 miles of mill and overlay treatments in just four years, a year sooner than its original goal. In FY 2023, under the APMP program, the department performed mill and overlay treatment on 97 miles of streets, pavement preservation on 298 miles and crack seal on 259 miles in preparation for future work. Additionally, 3,000 ADA sidewalk ramps were installed. The 2024 paving season currently has 74 miles of overlay planned.

The annual Pavement Condition Report details the paving assessment process, pavement treatments and current conditions. The reports are available on the [Pavement Condition Report](#).

Street Pavement and Overlays

In FY 2023, the T2050 program financed a substantial amount of pavement maintenance and replacement across the city. A total of 21.6 miles of new asphalt pavement was placed on major city streets, totaling 303 miles of new paving since the program began. Another 131 miles of crack and fog sealing (pavement preservation that maintains the roadway until it requires replacement) was performed on major streets, with a cumulative total of 1,056 miles.

Local (residential) streets saw 75 miles of new paving in FY 2023, for a total of 661 miles from the start of the program. Local streets also saw significant crack and fog sealing, with 425 miles included, totaling 3,177 miles completed since the program began.

Dates of new pavement and pavement treatment projects are corrected retroactively due to data lags. For that reason and rounding errors in some metrics getting compounded over the years, some annual accomplishments do not add up to the cumulative totals.

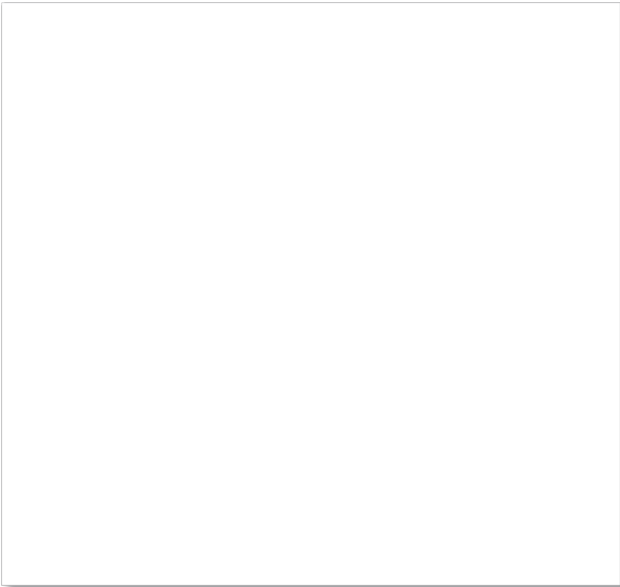


Active Transportation Program

The Active Transportation Program (ATP) strives to connect, improve and expand the city's pedestrian and bicycle network. Active transportation and transit are highly interconnected because users depend on active transportation to access light rail, BRT and bus routes.

As the Street Transportation Department repaves streets, the ATP identifies opportunities to update striping plans to add or widen bike lanes, add buffers to existing bike lanes and add markings in the intersections on major bikeways. Buffered bike lanes and protected bike lanes create more space between sidewalks and vehicle travel lanes, improving the walking experience.

← The ATP also coordinates with other teams to support multi-use paths and street crossings.



Mobility Studies

The Street Transportation Department conducts mobility studies to identify barriers for pedestrians and bicyclists as they travel to neighborhood destinations. Phoenix identified 39 locations for study at the inception of T2050 and has completed 12 studies so far.

To improve safety, convenience and quality of life, the studies' recommendations have included opportunities for constructing new sidewalks, installing or improving ADA curb ramps and installing streetlights, bicycle facilities, traffic signals, shade trees and connections to transit stops.

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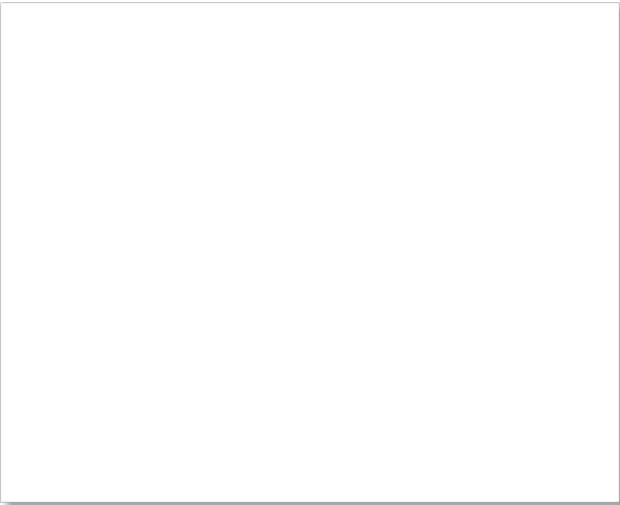




Table 4.1
T2050 Street Maintenance and Improvements

Completed FY 2023 (July 1, 2022–June 30, 2023)

Street projects

- One major street project in design.
- Three major street projects in construction.

Street pavement and overlays

- Completed the APMP, for which the Phoenix City Council authorized an additional \$200 million to fast-track pavement maintenance through FY 2023.
- 21.5 miles of new asphalt pavement on major streets.
- 131.3 miles of other pavement treatments, such as crack and fog sealing, on major streets.
- 74.7 miles of local street paving.
- 425.2 miles of other pavement treatments on local streets.

Bicycle lanes

- Installed 30.3 miles of new bike lanes.
- Added 0.9 miles of protection to new bike lanes.
- Upgraded 17.6 miles of existing bike lanes to buffered bike lanes.
- Added 21.1 miles of buffering to new bike lanes.

Streetlights

- Installed 127 new streetlights.

Sidewalks

- Constructed 10 miles of new sidewalks.

Mobility studies

- Installed 305 ADA ramps based on mobility studies.

Intersection technology enhancements

- Replaced 66 street signs at major intersections with illuminated signs.
- Repainted all signal poles at 59 major intersections to extend their lifecycles.
- Installed 74 new left-turn arrows at warranted intersections.
- Installed 11 pedestrian High-intensity Activated crossWalks (HAWKs).

Intersection and Technology Enhancements

Phoenix uses a variety of technology enhancements, ranging from rapid flashing beacons and enhanced illumination to installing High-intensity Activated crossWalks (HAWKs). Other T2050 technology enhancements include improving and maintaining traffic control equipment, adding left-turn arrows at warranted intersections, replacing street name signs with retroreflective signs that feature light-emitting diode (LED) lighting and installing updated signals, signage, detection equipment and traffic management and monitoring systems.

Administrative errors in compiling data for last year's report have been rectified. Therefore, some annual accomplishments do not add up to the cumulative totals.

The City, as part of a continuing transportation management program, is expanding the communication fiber backbone system to allow for remote monitoring, control and traffic signal optimization. In FY 2023, 13 miles of fiber optic infrastructure and cable were installed along Baseline Road from South Mountain Freeway (Loop 202) to Interstate 10. This project provided connections between the Arizona Department of Transportation, the City of Tempe and the City of Phoenix for remote monitoring, control and traffic signal optimization along the corridor. There are two projects in design that will add fiber optic infrastructure in FY 2025. The 7th Street project will connect fiber optic infrastructure

at Deer Valley Airport to a new fiber hub at 7th Street and Deer Valley Road. The fiber optic cable will extend southward down to the fire station at 7th Street and Paradise Lane. Future projects will extend the fiber optic infrastructure and connect it to the existing infrastructure at 7th Street and Camelback Road. The second project will connect to the existing fiber optic infrastructure at 83rd Avenue and McDowell Road. The project will extend along McDowell Road to 91st Avenue and extend south on 91st Avenue to Lower Buckeye Road. This will provide connections to MCDOT fiber on MC85 as well as a connection to Tolleson.

These projects augment the city's fiber backbone and benefit the traveling public by enabling the Traffic Management Center (TMC) to better monitor traffic with cameras that send full streaming video back to the TMC. In addition, intelligent devices installed at intersections transmit traffic performance metrics to the TMC, allowing the TMC to adjust traffic signal timing to improve traffic flow and better serve the public. Similarly, the expanded fiber backbone provides for improved, integrated connections between stations for emergency responders such as fire and police.

Information Technology and GIS

The Street Transportation Department digitizes, validates and reports on assets. The department uses GIS technology to catalog location data and maintenance records on bikeways, pavement, lighted street signs and ADA curb ramps. Ultimately, the data allow for more efficient planning, analysis and reporting.

Recent improvements in these processes have included:

- Creating field staff applications for reporting condition and improvement needs related to assets such as traffic signals, pavement, curb ramps, sidewalks and streetlights.
- Improving the accuracy, usefulness and availability of existing traffic signal data for the entire department.
- Leveraging pavement condition data, with underlying soil condition data, to provide engineers with a broader understanding of problematic areas.

- Using data sources from the city, county and Arizona State University to identify and map tree and shade prioritization areas.
- Updating bikeways, Key Corridors Master Plan and Mobility Studies data to give the ATP team accurate information for planning and implementing improvements.
- Researching and editing thousands of ADA ramp records to build and update the database.
- Internal and external applications allow staff and, in many cases, residents to access map services and applications with this GIS information. Some of these include a live active [HAWK Traffic Signal Web Map](#), the _____ and _____.

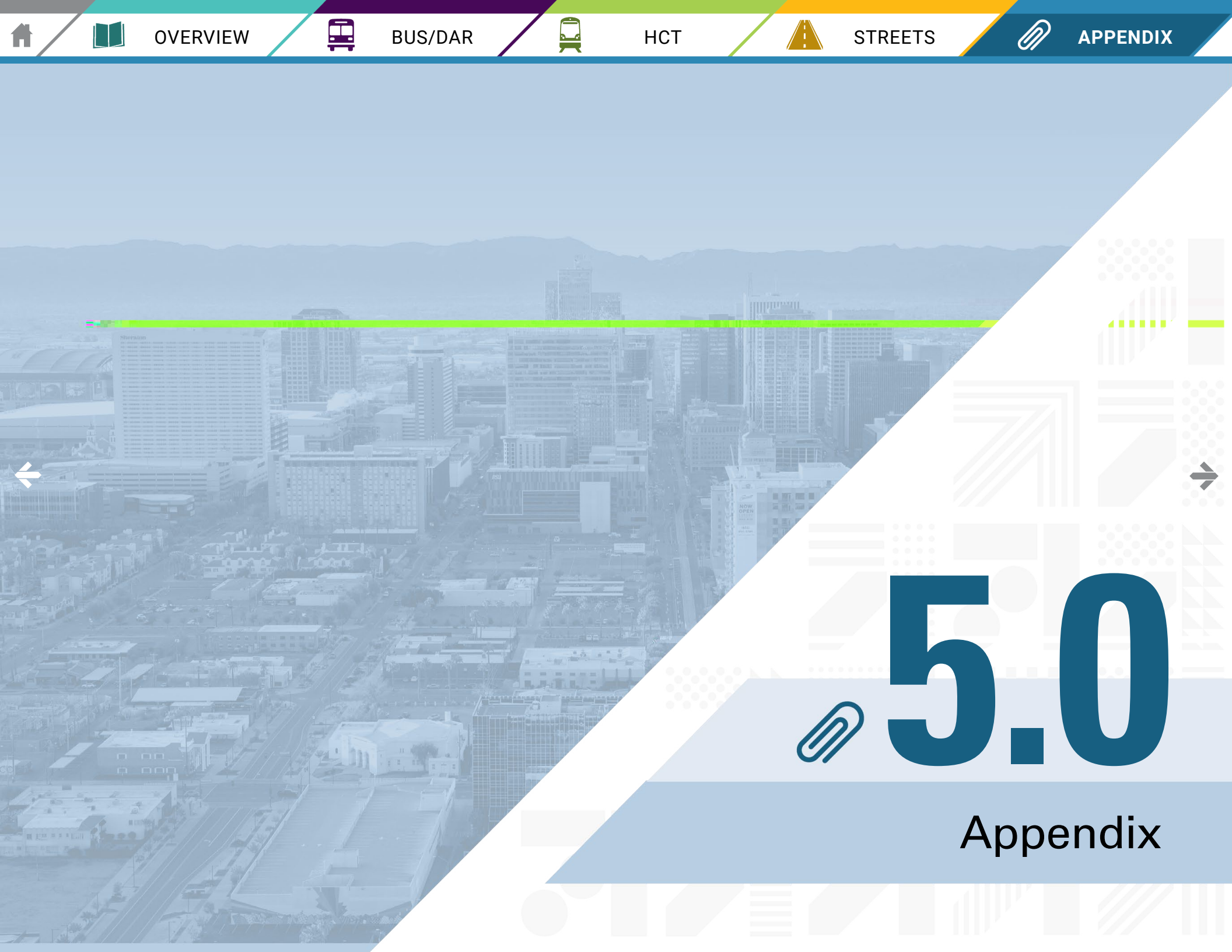
As staff members in the field make live updates, the accumulated data and analysis tools provide for a more efficient workflow and near-real-time analysis and reporting.

Table 4.2
T2050 Street Maintenance and Improvements

Planned for FY 2024	
Street projects	Sidewalks
<ul style="list-style-type: none">• Design 10 major street projects.• Continue construction on 24 major street projects.	<ul style="list-style-type: none">• Construct 4 miles of new sidewalks.
Street pavement and overlays	Mobility studies
<ul style="list-style-type: none">• Pave 19 miles on major streets.	<ul style="list-style-type: none">• Install 8 ADA ramps based on mobility studies.
Bicycle lanes	Intersection technology enhancements
<ul style="list-style-type: none">• Install 31 miles of bike lanes and low-stress bikeways.	<ul style="list-style-type: none">• Replace 240 street signs at major intersections with illuminated signs.• Repaint all signal poles at 80 major intersections to extend their lifecycles.• Install 15 pedestrian HAWKs.
Streetlights	
<ul style="list-style-type: none">• Install 100 new streetlights.	

Table 4.3
T2050 Street Maintenance and Improvements

Planned for FY 2025–2028
Street projects
<ul style="list-style-type: none">• Conduct one major street project assessment.• Design 11 major street projects.• Continue construction on 20 major street projects.
Street pavement and overlays
<ul style="list-style-type: none">• Pave at least 80 miles of new pavement on major streets.
Bicycle lanes
<ul style="list-style-type: none">• Install 124 miles of bike lanes and low-stress bikeways.
Streetlights
<ul style="list-style-type: none">• Install 400 new streetlights.
Sidewalks
<ul style="list-style-type: none">• Construct 15 miles of new sidewalks.
Mobility studies
<ul style="list-style-type: none">• Install 32 ADA ramps based on mobility studies.
Intersection technology enhancements
<ul style="list-style-type: none">• Replace 960 street signs at major intersections with illuminated signs.• Repaint all signal poles at 320 major intersections to extend their lifecycles.• Install 25 pedestrian HAWKs.



5.0

Appendix

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:

- 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.
- Capital and operating costs are estimated to grow at average inflation rates of 3–4% annually over the life of the plan.
- T2050 sales tax revenues are estimated to grow at an average annual rate of 4.75%, which is slightly lower than the 5.2% average annual growth rate in the Arizona Department of Transportation's most recent forecast prepared in September 2020 for the Proposition 400 Maricopa County Transportation Excise Tax.
- The existing 0.5% Proposition 400 regional tax, currently in place through Dec. 31, 2025, is assumed to be extended for at least 20 years.
- Federal transit formula funds are assumed to continue through the life of the plan, with very modest increases over time, and are consistent with MAG's long-term Regional Transportation Plan.
- The financial model is consistent with Valley Metro assumptions, ranging from 0% to 39%, for the funding level from discretionary federal Capital Investment Grants for light rail capital costs. Discretionary federal Capital Investment Grants, on average, fund more than 40% of total project costs for current rail projects across the country.
- Transit fares are assumed to continue to be lower than the regional fare policy goal of 25% recovery of direct transit operations costs, reflecting the current fare recovery rate. Decreased fare revenues due to the COVID-19 pandemic are assumed to recover very slowly over 20 years.
- Some capital funding is assumed to be provided through financing, as needed, 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.
- Other revenues, such as transit advertising and interest earnings on fund balance, are forecasted using very low growth rates.
- An operating reserve equivalent to 15% of annual public transit operating costs is assumed to be maintained throughout the life of the plan.



As rates of COVID-19 infections declined fare revenues began to recover, though are still below 2019 levels.

Impact of COVID-19

Phoenix had expected that the global pandemic, which began in 2020 as a result of the contagious COVID-19 virus, would reduce revenue projections for the coming years because ridership numbers fell significantly in 2020. However, there were some economic drivers that had a positive impact on revenue projection, which city leaders continue to monitor.

This report notes the impacts experienced due to the pandemic within each program area.

T2050 Sales Tax Projected Revenue Stream

Table A.1 summarizes the projected sales tax revenue for each year of the T2050 plan and the anticipated allocation to the Public Transit and Street 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	\$239,179,006	\$193,434,000	\$206,200,341	\$30,967,000	\$32,978,665
2020	\$235,642,000	\$247,592,555	\$203,123,000	\$213,437,765	\$32,519,000	\$34,154,790
2021	\$246,835,000	\$279,348,428	\$212,772,000	\$240,800,097	\$34,063,000	\$38,548,331
2022	\$258,559,000	\$335,608,608	\$222,878,000	\$289,313,016	\$35,681,000	\$46,295,592
2023	\$270,841,000	\$362,473,105	\$233,465,000	\$312,478,016	\$37,376,000	\$49,995,090
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	

FY 2023 Financial Overview

Table A.2 summarizes budgeted and actual revenue and expenditures during FY 2023.

Table A.2 FY 2023 Financial Overview (July 1, 2022 - June 30, 2023)

Source of Funds	Budget	Actuals	Amount Over/(Under Budget)	Percent Over/Under Budget	Footnotes
Dedicated Sales Tax - T2050	326,455,000	362,473,105	36,018,105	11.0%	1
Local Transportation Assistance (LTAF)	4,100,000	4,067,212	(32,788)	-0.8%	
Bus Fare Revenue	18,018,129	17,097,449	(920,680)	-5.1%	2
Dial-a-Ride Fare Revenue	711,790	803,902	92,112	12.9%	3
Rail Fare Revenue	3,852,674	4,214,956	362,282	9.4%	
Federal Transit Funds	496,434,040	152,222,419	(344,211,621)	-69.3%	4
Regional Transportation Tax	86,721,200	88,984,100	2,262,900	2.6%	
Debt Proceeds	-	-	-	-	5
Other Revenue*	9,554,946	17,217,689	7,662,743	80.2%	6
Fund Balance	(12,982,411)	(105,510,419)	(92,528,008)	712.7%	7
Total Revenues	\$932,865,368	\$541,570,414	\$(391,294,954)	-41.9%	
Use of Funds					
Transit Operations					
Local Fixed Route Bus	\$159,711,621	\$132,692,345	\$(27,019,276)	-16.9%	
RAPID Commuter Bus	3,851,573	2,682,001	(1,169,572)	-30.4%	8
Neighborhood Circulator	3,911,960	3,524,663	(387,297)	-9.9%	
Bus Rapid Transit	-	-	-	-	
Dial-a-Ride Operations	22,182,792	22,106,587	(76,205)	-0.3%	
Light Rail Operations	44,979,980	28,633,812	(16,346,168)	-36.6%	9
Security	13,468,302	13,024,369	(443,933)	-3.3%	10
Administration & Support	27,995,400	26,034,782	(1,960,618)	-7.0%	11
Total Operations	\$276,101,628	\$228,698,559	\$(47,403,069)	-17.2%	
Debt Service	\$2,501,000	\$6,085,440	\$3,584,440	-143.3%	12
Capital Projects					
Bus and Dial-a-Ride Vehicles	53,557,503	14,750,573	\$(38,806,930)	-72.5%	13
Bus Passenger Facilities	24,082,534	4,919,566	(19,162,968)	-79.6%	14
Bus O&M Facilities	24,268,036	1,348,260	(22,919,776)	-94.4%	15
Bus and Dial-a-Ride Technology	26,054,178	2,428,874	(23,625,304)	-90.7%	16
Other Bus Capital	17,812,366	1,794,259	(16,018,107)	-89.9%	17
South Central LRT	251,334,000	148,735,989	(102,598,011)	-40.8%	18
Northwest Phase II LRT	136,161,000	69,132,078	(67,028,922)	-49.2%	19
Capitol/I-10 West Phase 1 LRT	23,318,000	3,628,187	(19,689,813)	-84.4%	20
LRT Other	2,225,599	2,045,497	(180,102)	-8.1%	
Bus Rapid Transit	40,790,000	4,201,708	(36,588,292)	-89.7%	21
Streets – Major Maintenance	45,209,578	42,525,589	(2,683,989)	-5.9%	
Streets – Major Transportation Projects	577,737	1,822,214	1,244,477	215.4%	
Streets – Mobility Projects	3,219,510	5,042,890	1,823,380	56.6%	
Streets – Other	912,780	307,138	(605,642)	-66.4%	
Streets – Technology	4,739,919	4,103,592	(636,327)	-13.4%	
Total Capital Projects	\$654,262,740	\$306,786,415	\$(347,476,325)	-53.1%	
Total Expenditures	\$932,865,368	\$541,570,414	\$(391,294,954)	-41.9%	

* Includes Expense Recovery from Fund Balance Report

Footnotes detailing the FY 2023 Financial Overview (Table A.2) found on the preceding page include:

1.

Better than expected local economic activity resulted in higher sales tax revenues.
2.

Front door boarding and use of fareboxes resumed 10/11/21.
3.

Front door boarding and use of fareboxes resumed 10/11/21.
4.

Decrease due to Capital Project timing.
5.

Transit did not need to finance due to federal pandemic relief funds received from FTA and higher than expected sales tax revenues.
6.

\$129K Streets CIP Expense Recovery, \$1.4M PTD Expense Recovery, \$4.7M CMAQ (FHWA).
7.

Fund balance increased due to federal pandemic relief funds received from FTA and higher than expected sales tax revenues.
8.

Increase in scheduled revenue miles over prior estimate.
9.

Reduction in payments to Valley Metro Rail due to lower service levels and federal pandemic relief funds received from FTA.
10.

Security Contract less than initially budgeted.
11.

Personal services and technology less than budgeted.
12.

\$5.9M Streets and \$204K Public Transit (Phone Upgrades, Badging, Regional Wireless Coop).
13.

Fleet manufacturers' production delays.
14.

19th Avenue Park-and-Ride, bus shelters and bus pullouts delayed.
15.

Projects delayed.
16.

Projects delayed.
17.

Unused contingency and disparity study moved to FY23-24.
18.

Deferral of funding needed from Phoenix for the project.
19.

Deferral of funding needed from Phoenix for the project.
20.

Project delays.
21.

Additional expenditures required for more extensive public/stakeholder involvement process.

Five-Year Implementation Plan

Table A.3 summarizes the projected distribution of funds collected over the next five years. The table does not include actual collections.

Table A.3 Five-Year Implementation Plan (FY 2024–2028)

	FY 2023-2024	FY 2024-2025	FY 2025-2026	FY 2026-2027	FY 2027-2028
Source of Funds					
Dedicated Sales Tax – T2050	\$364,773,000	\$382,809,000	\$402,675,000	\$424,426,000	\$446,548,000
Local Transportation Assistance	4,050,000	4,050,000	4,050,000	4,050,000	4,050,000
Bus Fare Revenue	15,173,000	16,276,693	16,439,460	17,648,336	19,646,522
Dial-a-Ride Fare Revenue	831,941	847,512	941,680	941,680	1,045,960
Rail Fare Revenue	6,485,335	9,953,069	10,052,600	12,010,726	13,407,322
Federal Transit Funds	341,573,299	208,429,291	181,117,288	487,470,415	450,011,912
Regional Transportation Tax	165,624,212	148,630,481	159,766,419	192,706,228	192,070,881
Bond Proceeds/Commercial Paper	-	-	30,570,000	99,655,000	-
Other Revenue	13,121,937	13,318,766	13,518,548	13,721,326	13,927,146
Fund Balance	198,059,536	72,574,011	134,894,763	(21,939,394)	(44,713,415)
Total Revenues	\$1,109,692,261	\$856,888,822	\$954,025,757	\$1,230,690,316	\$1,095,994,327
Transit Operations					
Local Fixed Route Bus	\$182,817,061	\$172,266,949	\$196,588,393	\$210,788,015	\$219,115,841
RAPID Commuter Bus	4,727,347	4,437,703	4,569,156	4,707,294	5,983,575
Neighborhood Circulator	7,981,344	8,315,551	8,603,092	8,897,826	9,250,030
Bus Rapid Transit	2,331,296	7,897,656	8,172,944	8,464,560	8,798,400
Dial-a-Ride Operations	24,452,880	25,186,466	25,942,060	26,720,322	27,521,932
Light Rail Operations	52,506,000	67,626,168	70,331,214	76,652,642	79,718,747
Security	15,199,000	15,655,000	16,124,000	16,608,000	17,106,000
Administration & Support	32,093,000	33,057,000	34,049,000	35,060,000	36,122,000
Total Operations	\$322,107,928	\$334,442,493	\$364,379,860	\$387,898,659	\$403,616,525
Debt Service	\$10,000,000	\$10,000,000	\$21,300,000	\$21,300,000	\$21,300,000
Capital Projects					
Bus and Dial-a-Ride Vehicles	\$101,767,617	\$77,158,181	\$58,681,425	\$75,756,378	\$76,523,670
Bus Passenger Facilities	6,256,898	8,030,000	5,630,000	5,630,000	6,250,000
Bus O&M Facilities	31,921,036	3,451,000	2,200,000	2,200,000	2,550,000
Bus and Dial-a-Ride Technology	20,261,534	1,200,000	520,000	3,220,000	200,000
Other Bus Capital	16,380,511	3,623,906	3,179,120	2,619,120	3,070,120
South Central Light Rail	304,124,826	123,609,165	27,191,253	-	-
Northwest Phase II Light Rail Extension	87,958,000	6,901,000	-	-	-
Capitol Light Rail Extension	40,082,900	57,275,503	97,109,394	135,434,909	118,757,515
I-10 West Light Rail Extension	12,298,739	25,335,402	274,002,369	403,174,914	415,270,161
Other Light Rail	136,713	-	-	-	-
Bus Rapid Transit	86,588,459	160,000,000	55,000,000	160,000,000	15,000,000
Total Public Transit T2050 Capital Projects	\$707,777,233	\$466,584,157	\$523,513,561	\$788,035,321	\$637,621,466
Streets – Major Maintenance	\$26,601,000	\$36,790,000	\$25,790,000	\$26,790,000	\$26,790,000
Streets – Major Transportation Projects	\$527,000	\$1,420,000	\$10,947,337	\$1,977,337	\$1,977,337
Streets – Mobility Projects	\$31,440,100	\$3,313,828	\$4,472,000	\$1,066,000	\$1,066,000
Streets – Other	\$488,000	\$463,000	\$463,000	\$463,000	\$463,000
Streets – Technology	\$10,751,000	\$3,875,345	\$3,160,000	\$3,160,000	\$3,160,000
Total Streets T2050 Capital Projects	\$69,807,100	\$45,862,173	\$44,832,337	\$33,456,337	\$33,456,337
Total Capital Projects	\$777,584,333	\$512,446,330	\$568,345,898	\$821,491,658	\$671,077,803
Total Expenditures	\$1,109,692,261	\$856,888,822	\$954,025,757	\$1,230,690,316	\$1,095,994,327
Year End Fund Balance: Public Transit	\$192,595,464	\$130,859,734	\$3,033,033	\$19,163,101	\$59,871,103
Year End Fund Balance: Streets	43,232,295	32,394,014	25,325,952	31,135,278	35,140,690
Total Fund Balance	\$235,827,759	\$163,253,748	\$28,358,985	\$50,298,379	\$95,011,793

