

FISCAL YEARS
2020
through
2024

TIP

5-Year Regional Transportation Improvement Program

Approved May 23, 2019



Pima Association of Governments

**TRANSPORTATION
IMPROVEMENT
PROGRAM**

FY 2020 - 2024

Pima Association of Governments

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TRANSPORTATION IMPROVEMENT PROGRAM

FY 2020 - 2024

A PACKAGE DEAL

FY 2020-24 Transportation Improvement Program

Pima Association of Governments bi-annually prepares a 5-year Transportation Improvement Program (TIP) that identifies how federal, state, regional and local transportation dollars will be invested in the region to improve the transportation system. Projects identified in the TIP must match the dollars available during the 5-year period.

BENEFITS OF REGIONAL TRANSPORTATION INVESTMENTS*



85 miles

Centerline miles of **ROADWAY** improvements



26 miles

Improved roadways for **FREIGHT** movement

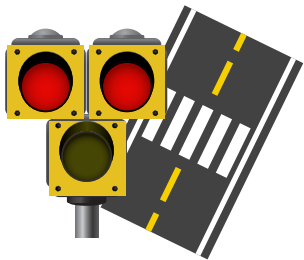
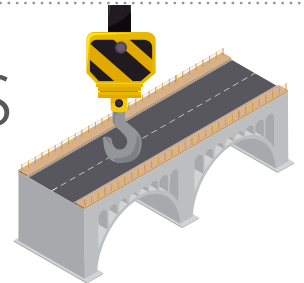
44 miles

New **PAVEMENT** on roads in poor or fair condition



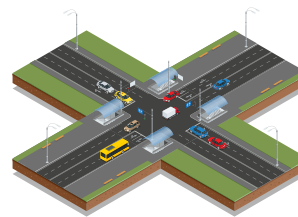
6 projects

Rehabilitate **BRIDGES** that are currently rated in poor condition



43 miles

Roadway **SAFETY** enhancements on roads with poor safety ratings

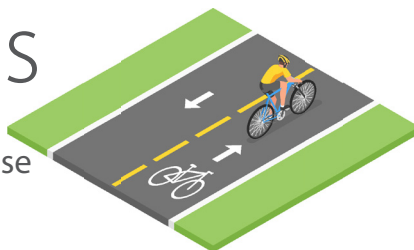


15 projects

Improvements on **INTERSECTIONS** with fair or poor safety ratings

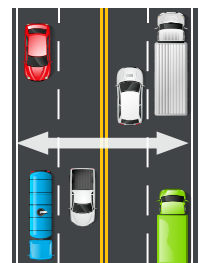
56 miles

New or upgraded **SIDEWALKS**, shared-use paths and pedestrian facilities



10 miles

Added **CAPACITY** to severely congested roadways



**Highlights of the \$1.2 billion FY 2020-24 TIP. The improvements are part of PAG's federally mandated capital improvement program. The TIP includes projects funded through the Regional Transportation Authority. Projects in the TIP and RTA plan must be identified in PAG's long-range transportation plan, the Regional Mobility and Accessibility Plan and match available dollars.*

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CHAPTER 1: INTRODUCTION

OVERVIEW

The Transportation Improvement Program (TIP), prepared by Pima Association of Governments (PAG), is a five-year schedule of proposed transportation capital improvements within the Pima County region.

The TIP is typically updated bi-annually through a multi-step process in association with PAG's member jurisdictions or other implementing agencies. Amendments to the TIP respond to changing circumstances necessitating changes to the adopted TIP that occur between biennial update periods. The TIP addresses improvements to diverse elements of the regional transportation system including national, state and regional roadways, transit, aviation, ride sharing, bikeways and pedestrian facilities. The TIP also responds to various state and federal regulatory requirements for development of a transportation improvement program and TIP conformance with air quality implementation plans, including recent transportation legislation such as the Fixing America's Surface Transportation (FAST) Act.

The projects listed in Appendix 1 have an identified source of funding and are presently in some stage of project development. Every project that is federally funded, whether highway or transit, must be included in the TIP. The TIP also includes all regionally significant projects funded from non-federal sources.

The current five-year Transportation Improvement Program encompasses fiscal years 2020 to 2024. The complete project listing by jurisdiction is contained in Appendix 1.

THE FAST ACT

On December 4, 2015, the President signed the FAST Act. The act authorizes expenditures from the Highway Trust Fund for five years (2016-2020), defines how federal funds are to be distributed to the states and MPOs, and outlines the funding programs and categories for which federal funding is available. The FAST Act, like its predecessors, contains programs to address transportation needs relating to highway, safety, transit, and other alternative modes. The Act provides \$305 billion over five years, of which \$3.5 billion is expected to be apportioned to Arizona for transportation projects in our state.

The four previous authorization bills since 1991 have shaped the highway program to meet the nation's changing transportation needs. The FAST Act builds on and refines many of the highway, transit, bike, and pedestrian programs and policies established, expanded, or refined by its predecessors.

The FAST Act creates a streamlined, performance-based, and multimodal program to address the many challenges facing the U.S. transportation system. These challenges include improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery.

The performance-based component of the FAST Act requires MPOs and state DOTs to work cooperatively to establish performance targets in key areas to help advance national goals. The performance provisions are focused on the areas of: highway safety, highway conditions, system performance/congestion and transit performance. This process involves the development of performance measures to periodically assess progress toward the performance targets. The performance measures were developed by FHWA and FTA, and the corresponding targets were developed by ADOT. Performance targets are established by ADOT in cooperation with PAG and are updated yearly or every 2 or 4 years, depending on the

measure. Beginning in 2018, PAG has annually adopted ADOT safety performance targets. In 2018, PAG adopted the initial ADOT 2- and 4-year performance targets for pavement and bridge condition and travel time reliability measures. Data obtained from FHWA and ADOT for FAST Act measures enable PAG to monitor regional performance, track to target and use performance outcomes in its transportation planning processes.

As the designated metropolitan planning organization for the Pima County region, Pima Association of Governments has the responsibility to develop a transportation improvement program in cooperation with the state and any affected public transit operator. In developing the program, citizens, affected public agencies, representatives of transportation agency employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transit, and other interested parties are provided an opportunity to comment on the proposed program.

The transportation planning process provides for consideration of projects and strategies that will:

- (1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency
- (2) Increase the safety of the transportation system for motorized and non-motorized users
- (3) Increase the security of the transportation system for motorized and non-motorized users
- (4) Increase accessibility and mobility of people and freight
- (5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns
- (6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- (7) Promote efficient system management and operation
- (8) Emphasize the preservation of the existing transportation system
- (9) Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation
- (10) Enhance travel and tourism.

The FAST Act will expire on September 30, 2020. For programming purposes, this document assumes that the funding levels and programs established for the final year of the FAST Act will be renewed or continued by Congress beyond that date.

CHAPTER 2: TRANSPORTATION PLANNING AND PROGRAMMING

PAG is the federally designated metropolitan planning organization (MPO) for Pima County with program areas that include regional transportation planning, including the long-range transportation plan and the five-year Transportation Improvement Program (TIP). In addition to these two planning products, PAG is committed to the delivery of the projects in the voter-approved Regional Transportation Authority (RTA) plan. Throughout the entire planning process, PAG works closely with all member agencies, including ADOT, to ensure that regional transportation efforts are consistent with both local and statewide plans and programs.

REGIONAL MOBILITY AND ACCESSIBILITY PLAN (RMAP)

Pima Association of Governments' 2045 Regional Mobility and Accessibility Plan (RMAP) is a blueprint for transportation solutions in the Tucson region over the next 25-plus years. PAG, as the MPO for the Tucson transportation management area, updates its long-range transportation plan every four years to maintain a minimum of a 20-year outlook of the region's transportation needs. We look ahead to identify efficient and affordable improvements to our transportation system so that we can build economically viable communities for ourselves and future generations. The 2045 RMAP provides a vision for our future transportation network and includes goals to help reach the vision. The plan contains a list of roadway, transit, bicycle, and pedestrian projects along with programs and projects to improve mobility, safety, transportation for persons with disabilities and other services. The plan also includes information on the projected growth in the region, areas of development, environmental considerations, financial projections, tools to address projected congestion and implementation strategies.

Purpose of the 2045 RMAP

The 2045 RMAP serves as a guiding document that identifies the priority transportation projects of PAG member jurisdictions and anticipated funding for those projects. Regional projects must be identified in the RMAP and conform to the federal performance management program for jurisdictions to access any federal dollars to implement them. Projects also must be identified in PAG's short-range transportation plan, the Transportation Improvement Program, or TIP, to be eligible for federal funding. The five-year TIP is updated bi-annually by PAG member jurisdictions and verifies the RMAP projects that will be implemented in the short-term.

Development of the 2045 RMAP

Development of the 2045 RMAP included a public involvement process to engage members of the public, jurisdiction staff and elected officials. PAG established the 2045 RMAP Task Force, made up of public and private sector representatives, to help provide input into the development of the plan. Information considered included public feedback obtained through open houses, stakeholders' sessions and online engagement tools. The Task Force, which met regularly, included jurisdiction, environmental, freight and economic development interests, among others. In total, more than 3,000 people participated in the development of the plan.

TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

Projects in the TIP are first included in, or are consistent with, the region's long-range transportation plan, the Regional Mobility and Accessibility Plan (RMAP). From the projects and programs included in the RMAP, individual jurisdictions develop candidate projects for proposed inclusion in the TIP. Before project selection even begins as part of the TIP process,

the region and the individual jurisdictions have identified their transportation needs and developed a program for addressing those needs.

Pima Association of Governments' Transportation Planning Committee (TPC) provides advice on PAG's overall transportation programming and the products produced. The TPC is composed of the department heads of the local planning and transportation implementing agencies, as well as representatives from ADOT, the Tucson Airport Authority (TAA), Davis-Monthan Air Force Base, the Federal Highway Administration, the University of Arizona, Pima County Department of Environmental Quality, the Arizona Department of Environmental Quality, and the local public transit system.

The TPC reviews the TIP within the framework of the regional transportation planning and air quality conformity process, regional priorities, and federal and state regulations. Public open houses are held to acquire input concerning the proposed TIP and any potential adjustments. The final draft TIP is then prepared by PAG staff and forwarded through the TPC and Management Committee for approval by the Regional Council. An official public comment period is scheduled prior to final review and adoption by the Regional Council.

REGIONAL TRANSPORTATION AUTHORITY PLAN

The Regional Transportation Authority (RTA), an independent regional governmental entity established in August 2004, developed a 20-year regional transportation plan approved by Pima County voters on May 16, 2006. The \$2.1 billion plan will be implemented over a 20-year period, ending in fiscal year 2026.

The RTA will remain the fiscal agent and manager of the RTA plan. As part of the federal transportation requirements, the projects in the RTA plan must be incorporated into the long-range RMAP. Likewise, projects of the RTA must be incorporated into the TIP. The RTA funding source is, by the enabling legislation, restricted to those projects identified in the RTA plan approved by the voters. RTA projects are paid with funds generated from a ½-cent excise tax from the RTA's special taxing district over the 20-year life of the plan, as well as other regional funding sources.

ADOT FIVE-YEAR PROGRAM

The Arizona State Transportation Board determines state priorities through recommendations from the Arizona Department of Transportation (ADOT) Priority Planning Advisory Committee (PPAC) (mandated by A.R.S. 28-6951). The PPAC is comprised of key ADOT personnel and the Chairman of the Citizen's Transportation Oversight Committee, as a non-voting member.

ADOT uses a planning-to-programming priority rating system to select projects for the Five-Year Transportation Facilities Construction Program. The intent is to identify projects with the highest scores and develop a program that meets approved funding levels for the investment categories of preservation, modernization and expansion. Priorities are determined through evaluation of technical, safety, and policy evaluation criteria. However, such factors as continuity of improvement, environmental/utility clearances, right-of-way acquisition, and/or funding constraints may cause changes in the priorities.

The purpose of the Five-Year Transportation Facilities Construction Program is to comply with A.R.S. 28-304 and set forth the plan for developing projects and account for the spending of funds for the next five years. ADOT is mandated by state law to be responsible for constructing and maintaining all interstate and state highways in Arizona. Fulfilling this responsibility includes extensive public participation and sophisticated technical evaluation.

The program is developed annually, and it is in effect on July 1, marking the beginning of the state fiscal year.

When the Five-Year Transportation Facilities Construction Program is adopted by the State Transportation Board, it is filed with the Director of the Department of Transportation and the Governor.

CHAPTER 3: TRANSPORTATION IMPROVEMENT PROGRAMMING OVERVIEW

OVERVIEW

The Transportation Improvement Program (TIP), prepared by Pima Association of Governments (PAG), is a five-year schedule and budget of proposed transportation improvements within Pima County.

PAG is the region's federally designated metropolitan planning organization (MPO) serving the federally designated Transportation Management Area (TMA). The Regional Transportation Authority (RTA) is an independent special taxing district that provides funding for 35 regional corridor projects and numerous other projects that are eligible for one of the categorical funds as outlined in the RTA plan. The RTA plan was adopted by the voters in May 2006 and is funded through an accompanying ½-cent excise tax that runs until FY 2026, unless extended by the voters.

The RTA enabling state statutes also require the TIP document to include all the RTA-funded projects and to specifically identify all federal, state and local funding needed for the implementation of the voter-approved RTA plan.

As such, PAG staff has been delegated the authority to facilitate a regional process to comply with all the funding regulations outlined by the above agencies.

PAG/RTA committees providing input on the development of the TIP were consolidated several years ago to provide a more efficient and seamless process. Therefore, for all intents and purposes, the TIP development process and the TIP document are considered a joint PAG/RTA effort while the final approval on a bi-annual basis is the sole responsibility of the PAG Regional Council.

The TIP development process follows a series of policies and procedures that have been developed by PAG staff and is based on policies outlined by the Regional Council and the RTA Board. PAG/RTA staff is authorized to develop an annual "Notice of Funding Availability" that outlines funding availability and guidance on programming procedures and criteria for meeting regional objectives.

PAG/RTA staff is authorized to use any reasonable interpretation of the language used by the Regional Council or RTA Board to ensure all the practices, activities, methods and ways of conducting business, circumstances of operating or any other feature of work or process to accomplish assigned tasks adhere to the established policies.

PAG/RTA governing bodies rely on staff and the committee(s) established, managed and subject to change by staff, to comply with board/council policies to achieve regional objectives. This responsibility requires ongoing awareness of the policies and procedures while conducting committee functions. An efficient operating process is critical for all committees, specifically for the Transportation Planning Committee (TPC) and its Subcommittees, since the TIP document is a critical tool for implementation of the regional goals and objectives. The development of the TIP encompasses a large number of requirements and standards, from local, state and national regulatory bodies. A well-managed and maintained set of policies is the backbone of successful TIP development.

The goal of the transportation improvement programming process is to develop a TIP in a transparent and accountable manner, that makes optimum use of available funds and resources, and that serves the transportation needs of the region, as defined in the long-range Regional Mobility and Accessibility Plan (RMAP).

Federal legislation specifically defines certain aspects of this programming process, including the following:

- The FAST act requires that MPOs (like PAG) consider performance-based criteria and a congestion management process in the project selection and the development of the TIP. (See Chapter 4).
- Federal law requires that the TIP document includes a financial plan which documents the financial resources available to implement the program. (See Chapter 5).
- Federal laws regarding air quality [42 U.S.C. 7409 and 40 CFR 52.138(d)] require that the regional TIP be analyzed and conform to the air quality implementation plan(s). (See Chapter 6).
- Transit is an essential element of a multimodal transportation planning process. As such, an overview of the region's transit services is included in the PAG TIP. (See Chapter 7).
- Finally, federal laws also require that various transportation stakeholders have a reasonable opportunity to comment on the proposed program. (See Chapter 8).

The primary resource used for formulating the TIP is the RMAP. However, with the passage of the Regional Transportation Authority (RTA) plan by the voters in May of 2006, the projects and programs outlined in that plan are also included in the TIP. The RMAP documents transportation facilities and services required to meet future travel needs. Additional roadway facilities and expanded public transportation services, combined with greater opportunities for ride sharing, bicycling, intermodalism, and alternate modes, are incorporated into the RMAP to improve air quality and support the efficiency of the regional transportation network.

PAG'S TIP PROCESS

PAG's TIP covers a 5-year period and describes planned regional transportation projects and improvements, which lead toward implementation of the RMAP. The TIP is the mechanism through which the RMAP is implemented in a manner consistent with regional needs and priorities. It is also the mechanism through which the air quality impacts of regionally significant transportation projects can be evaluated and addressed.

The TIP is financially constrained and includes only those projects for which funding has been determined to be available. In addition to available federal funding sources, information is also included on projects using state, regional and RTA funding. The TIP includes regionally significant projects whether or not they are Federal Aid Projects. Information on other projects, which are locally funded, is included as available.

Contributing Agencies: Information on programmed projects is provided by the following agencies:

- The cities of Tucson and South Tucson; Pima County; the towns of Oro Valley, Marana and Sahuarita; the Pascua Yaqui Tribe and the Tohono O'odham Nation;
- Arizona Department of Transportation (ADOT);
- Regional Transportation Authority (RTA);
- Tucson Airport Authority (TAA);
- Sun Tran;
- Pima County Department of Environmental Quality (PDEQ);
- Arizona Department of Environmental Quality (ADEQ);

- The University of Arizona; and
- Other agencies or transportation interests.

Transportation Planning Committee

The Transportation Planning Committee (TPC) is a standing technical advisory committee of PAG. The TPC meets approximately five times a year, with additional meetings on an as-needed basis, to address technical issues and other matters related to TIP development. TPC meetings are open to the public and meeting notices are provided to committee members and, when requested, to a list of interested parties which includes citizens, neighborhood groups, non-profit organizations and various special interest groups. Key aspects of the cooperative TIP process include maintenance of funding flexibility, recognition of diverse needs, and the ability to respond to changes in the community. Thus, the ability to request and take timely action upon TIP amendments is an important component of the process. Other than for RTA ballot projects, amendments to the TIP document may be processed, where necessary, to reflect changing needs, priorities, or funding scenarios.

Schedule

PAG's TIP development process typically starts in the summer. The first step in the process consists of reviewing the existing TIP to reflect the actual obligation or expenditure of funds during the previous year. The TPC (or a subcommittee thereof) will then meet in the summer to review past revenues and revise future revenue projections. From these revenue projections, a Notice of Funding Availability (NOFA) is developed, outlining the available funding from each funding source and the specific requirements for those funding sources.

A jurisdiction's representative on the TPC works with her or his agency's staff to develop project applications, which are submitted for review and programming by PAG staff in the fall. That review results in a fiscally-constrained draft project list which is modeled for Title VI compliance and air quality conformity. It is then presented to the public in a series of open houses in the spring.

Following receipt of public comment and any subsequent revision, this draft TIP is re-analyzed for air quality conformity, if necessary. It is then presented for review at the PAG TPC and the PAG Management Committee, and for approval by the PAG Regional Council.

Revenue Sources

The TIP specifies how the projects and programs will use available federal, state, and regional funding. In addition, any project that adds roadway capacity is also included in the TIP, regardless of the type of funding used. No project is eligible to receive federal funding unless it has been included in the TIP with a finding that the TIP is in compliance with the requirements of the Clean Air Act. While revenues available through the TIP are limited, competition for those funds is great. Thus, cooperation between local jurisdictions and other agencies is required.

Federal sources of funding include the Surface Transportation Block Grant Program (STBG) and the Regional Transportation Alternatives Grant (RTAG). Federal grants through the Federal Transit Administration (FTA) are also a major source of funding for transit projects. Prior to 2016, the STBG program was known as the Surface Transportation Program (STP) and that acronym is still widely used in some applications.

State funding sources include HURF 12.6 and HURF 2.6. HURF 12.6 can be used on any arterial road included in the RMAP, but HURF 2.6 funds are limited to use on state routes.

Regional funding sources include funds from the RTA half-cent sales tax. Since 2006, when the RTA was approved by voters, RTA funding has consistently been the largest source of funding in the PAG TIP.

For more information about any of these funding sources, please see glossary in Appendix 6.

Inflation in the TIP

The Federal Highway Administration (FHWA) has provided guidance to planning organizations across the country to ensure that future years of the Transportation Improvement Program (TIP) document account for inflation. Sponsoring jurisdictions have been advised to account for the future costs of a project so that expenditures in the TIP reflect costs in the fiscal year of the expenditure. This accounting for inflation is called “Year of Expenditure” (YOE).

For the FY 2020-2024 TIP development process, all fiscal years were to be programmed in 2018 dollars. As such, jurisdictional funding requests needed to adjust current construction costs for inflation, using the project annual inflation rate from the World Economic Outlook Database. The table below provides the adjustment factor that was recommended to inflate current estimates to the program year.

Table 3-1: Inflation Adjustment Factors

Calendar Year	Inflation Rate	Fiscal Year (Converted)	FY Total
2018	n/a	n/a	1.0000
2019	2.44%	2.49%	1.0249
2020	2.13%	2.29%	1.0483
2021	2.04%	2.09%	1.0702
2022	2.07%	2.06%	1.0922
2023	2.12%	2.10%	1.1150
2024	2.20%	2.16%	1.1391

Source: Projected Annual Inflation Rate in the United States from 2010 to 2024, Statista.com

Example – if a jurisdiction had two projects – one in FY 2020 and the other in FY 2024, both with a 2018 construction cost of \$1 million, it would be appropriate for the jurisdiction to inflate the FY 2020 project cost to \$1,048,300 and the FY 2024 project cost to \$1,139,100.

Notice of Funding Availability

The Notice of Funding Availability (NOFA) is a document that defines the parameters within which the draft TIP will be crafted. It highlights regional policies and priorities that will be relevant to the project selection process and summarizes the revenue projections recommended by the TIP Subcommittee earlier that year. It specifically identifies how much funding, from each funding source, will be available each year of the TIP. Finally, it outlines the process by which jurisdictional TIP representatives can apply for the available funding. Depending on available resources, policy direction, and other factors, projects in the NOFA may include roadway improvements, bridge improvements, transit improvements,

transportation planning studies, bicycle and pedestrian improvements, RideShare, Travel Reduction, and airport improvements.

Performance Reports and Project Prioritization

Per the TIP development schedule in the NOFA, jurisdictional requests for funding are made through a web portal which provides applicants with data on system performance in the proposed project area. When requests are received, PAG staff generate a performance report for the project. These reports are included with the project applications that are reviewed by TPC.

PAG staff evaluate project funding applications with consideration of factors that had been developed previously by the Regional Council. The factors considered in this evaluation include regional priorities, safety, system preservation, the number of users to benefit from the project, congestion relief, environmental impacts, accessibility, system continuity, and regional significance.

Following this evaluation, additional consideration is given to a variety of other factors, such as previous public comments and project readiness. Final project selections are based on the melding of these considerations while project schedules are based on readiness and resource availability.

Although performance reports are generated for RTA projects, projects that are specifically identified in the voter-approved RTA plan are not subjected to this prioritization criteria during the TIP process. The RTA funding source is fixed by the RTA plan approved by the voters and cannot be overridden by the TIP process.

A number of subcommittees may be involved in the selection of projects for inclusion in the TIP. For example, a selection committee was established for the purpose of evaluating project applications for the competitive Regional Transportation Alternatives Grant, and a technical subcommittee was convened to review the raw data in the performance reports.

Finally, only projects that comply with the NOFA and Regional Council policies are advanced for programming.

Title VI and Environmental Justice

PAG is committed to planning, developing and implementing programs that are in compliance with Environmental Justice regulations and Title VI of the Civil Rights Act of 1964. Title VI states that “no person in the United States shall, on the grounds of race, color, or national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity.” PAG addresses Title VI requirements both quantitatively and qualitatively with extensive public involvement and data analysis techniques. Federal regulations define specific groups as “protected populations.” In the PAG region, the following groups are considered protected populations: African American, Asian, Hispanic, Native American, disabled, elderly, and low income.

Outreach

PAG’s Public Involvement Policy is designed to inform and solicit input from the region’s “protected populations” and engage them in meaningful participation in the transportation planning process.

PAG conducted three open houses for public comment on the TIP. They were conducted at central and handicapped accessible locations throughout the community. One open house was conducted at Reid Park which is located on a bus

line. At all the open houses, Spanish translators were available and upon request Spanish translations of the TIP materials were available.

Analysis Overview

This TIP analysis is part of a tiered approach that the region employs for Title VI and Environmental Justice compliance. On the broadest level, projects are drawn from the Regional Mobility and Accessibility Plan (RMAP) for which an overall analysis is conducted. The RMAP analysis assesses the impact of all of the projects proposed in the region over the next 20-25 years. On the next level, another regional analysis is performed on the five years of projects included in the TIP. In addition, a more focused assessment is done during project development. Each project sponsor is responsible for Environmental Justice and Title VI compliance as part of the planning and construction of its individual projects.

Specific projects are expected to have appropriate public involvement and mitigation techniques applied during their design and development process. For example, a variety of state and federal rules and regulations govern “just” compensation and relocation assistance for properties that qualify due to the impacts of individual projects. These requirements are administered by the sponsoring agency at an appropriate time during project development and right-of-way acquisition.

All of the projects contained in the TIP must be consistent with PAG’s long-range transportation plan, the RMAP. The RMAP has been analyzed and developed to provide an appropriately balanced program of transportation improvements with significant investment in transit, bicycle and pedestrian projects that benefit low income individuals and others who may not own or operate a motor vehicle. Projects within the roadway component of the RMAP are distributed throughout the region so as to not place disproportionate impacts on any one area or population group.

Methodology

PAG has developed maps showing the concentration distribution of “protected” classes (as defined by federal regulation) within the region. These maps, along with official population statistics, current estimates and projections, and other household data in the PAG region, assist in analyzing the potential impacts of the TIP on these groups.

For this analysis, a “concentration” of a protected group has been defined as those geographic areas where the percentage of a protected population within the area exceeds the average percentage of that same population living within the County as a whole. For example, if the county average for a protected population is 5 percent, an area with a population greater than 5 percent would be considered to have a concentration of that protected population. Also, for this analysis, Transportation Analysis Zones (TAZ) were used as the geographic area to identify concentrations of the protected groups.

The method used for this analysis was a computer model computation for the average travel time in the region with and without the projects identified for construction in the TIP. Additional computer runs were performed for each protected class by areas of geographic concentration (Table 3.2) and at the regional level. An analysis of model results then compared average travel times for protected populations.

The maps included at the end of this chapter are provided as a graphic representation of the location of the projects in comparison to the location of various concentrations of protected populations.

Because the impacts of projects are very subjective, the analysis assumes projects are equal in their benefits and burdens. The goal of this analysis is to attempt to determine if comparable numbers of people are being impacted by the project in

the protected population as are being impacted in the general population. The TIP strives to provide a balance so that all groups are affected at approximately the same ratio.

It should be noted that there are several programs in the TIP that do not lend themselves to being mapped such as RideShare, Job Access Reverse Commute (JARC), purchase of transit vehicles, etc. These, therefore, are not included in this analysis. For the most part, these activities are targeted toward one or more of the protected classes or they are distributed uniformly throughout the region. It is assumed then that these activities are either neutral or would improve the observed benefits of the program for each of the protected populations.

Analysis

The following table provides the average travel time for the whole region (labeled “all”) and each protected population. Table 3.2 provides the travel times for the protected populations in concentrations (labeled “protected”) and for the region as a whole.

Please note that some individuals may belong to more than one protected population. For example, someone could belong to a protected ethnic population and be elderly, disabled and/or low income as well.

Table 3.2: Title VI Analysis – Modeling Results for Concentrations of Protected Populations

Group	Travel Period	Average Travel Time 2019 (Minutes/Vehicle)	Average Travel Time 2024 No Build (Minutes/Vehicle)	Average Travel Time 2024 with projects (Minutes/Vehicle)	Comparison with and without TIP Projects (Minutes/Vehicle). Negative numbers indicate travel time savings with projects
All	Peak	14.8	15.1	14.9	-0.2
	Off-Peak	12.6	12.8	12.7	-0.1
African American	Peak	12.6	12.8	12.6	-0.2
	Off-Peak	10.7	10.8	10.7	-0.1
Asian	Peak	13.5	14.0	13.8	-0.2
	Off-Peak	11.4	11.7	11.6	-0.1
Hispanic	Peak	13.3	13.5	13.2	-0.3
	Off-Peak	11.3	11.3	11.3	0.0
Native American	Peak	13.8	14.0	13.7	-0.3
	Off-Peak	11.6	11.6	11.6	0.0
Disabled	Peak	14.5	14.9	14.7	-0.2
	Off-Peak	12.4	12.6	12.5	-0.1
Elderly (+65)	Peak	15.9	16.4	16.2	-0.2
	Off-Peak	13.5	13.8	13.8	0.0
Low Income	Peak	11.6	11.9	11.7	-0.2
	Off-Peak	9.9	10.0	10.0	0.0

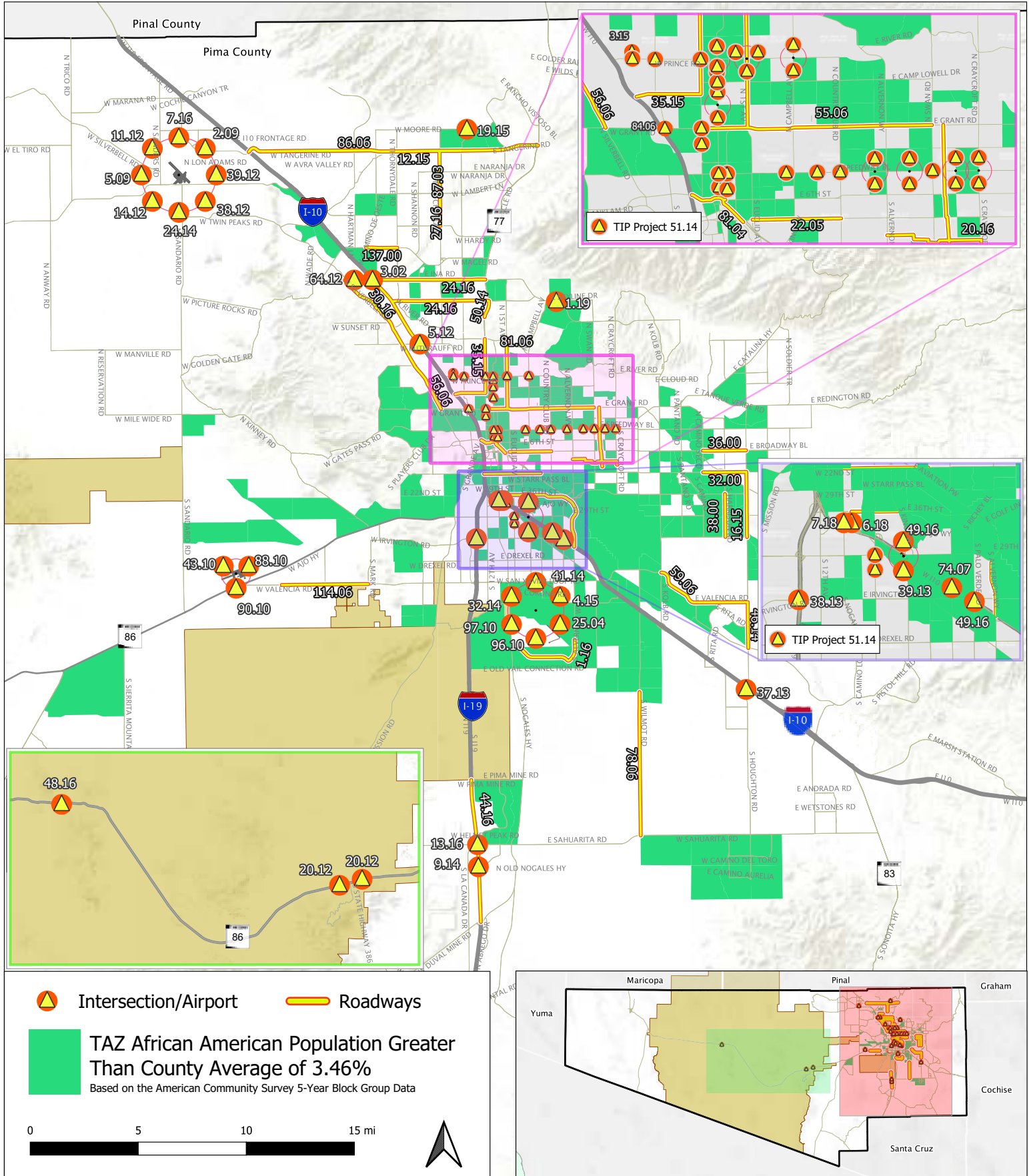
Conclusion

The analysis shows that, when compared to a baseline travel time of all residents in the urban portion of the county (labeled as “all”) the protected populations are expected to experience the same travel time benefits. In both analyses, the average travel time improvement with the TIP projects compared to without was 0.2 of a minute (12 seconds). A similar result was found for all protected populations and classes.

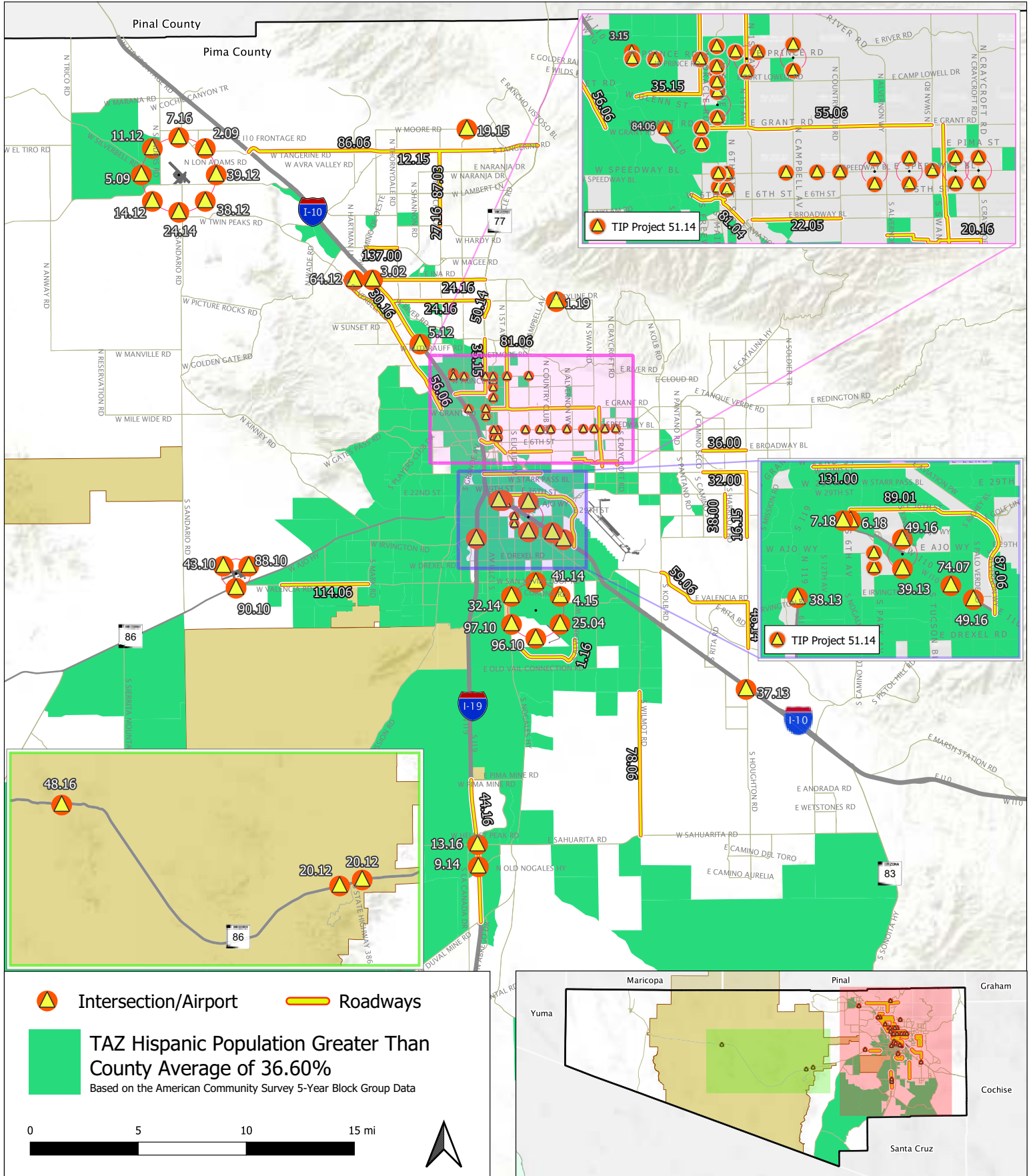
Title VI Maps

The maps provided at the end of this chapter are provided as a graphic representation of the location of the projects in comparison to the location of various concentrations of protected populations.

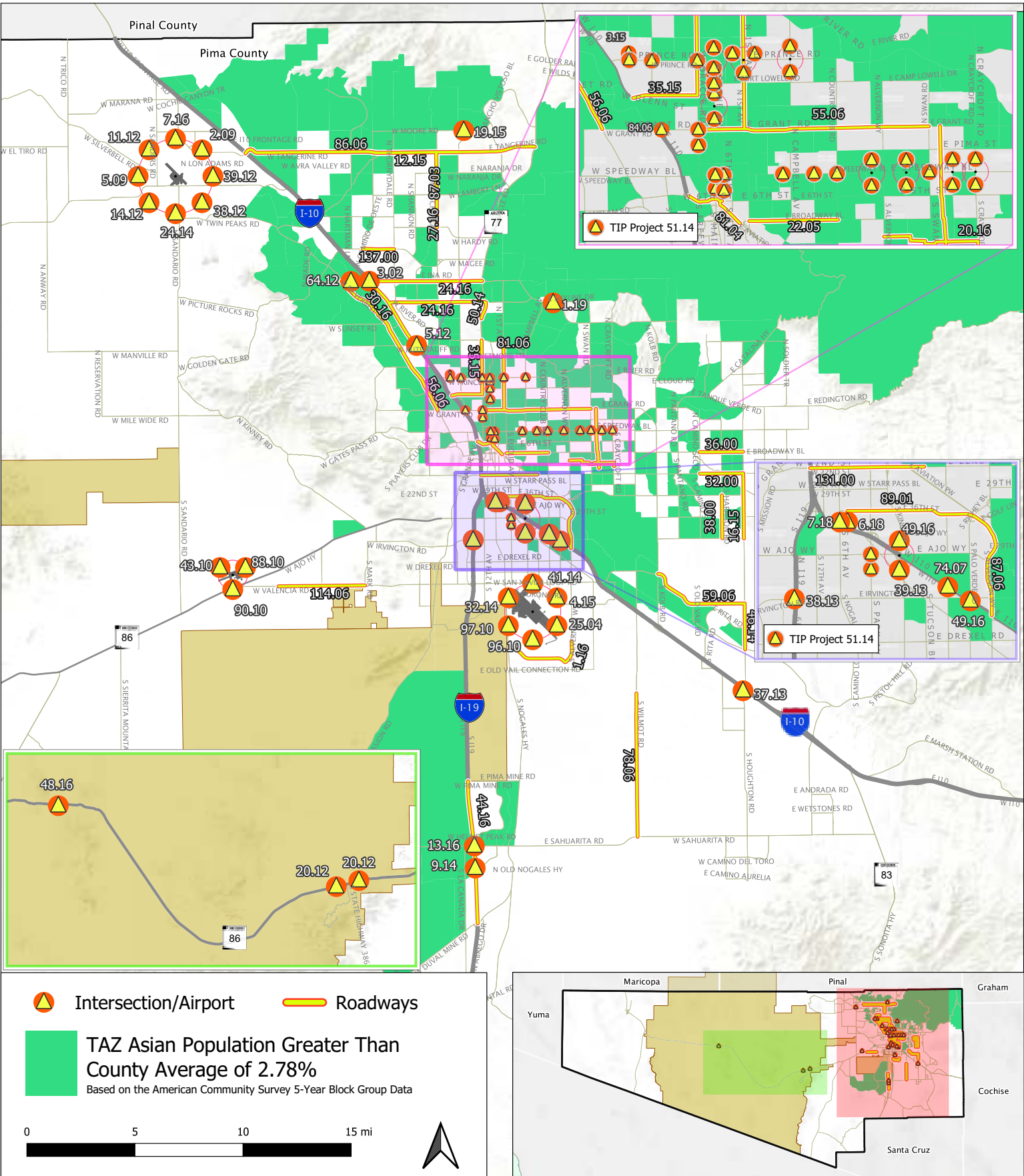
Title VI Analysis - African American Population -



Title VI Analysis - Hispanic Population -

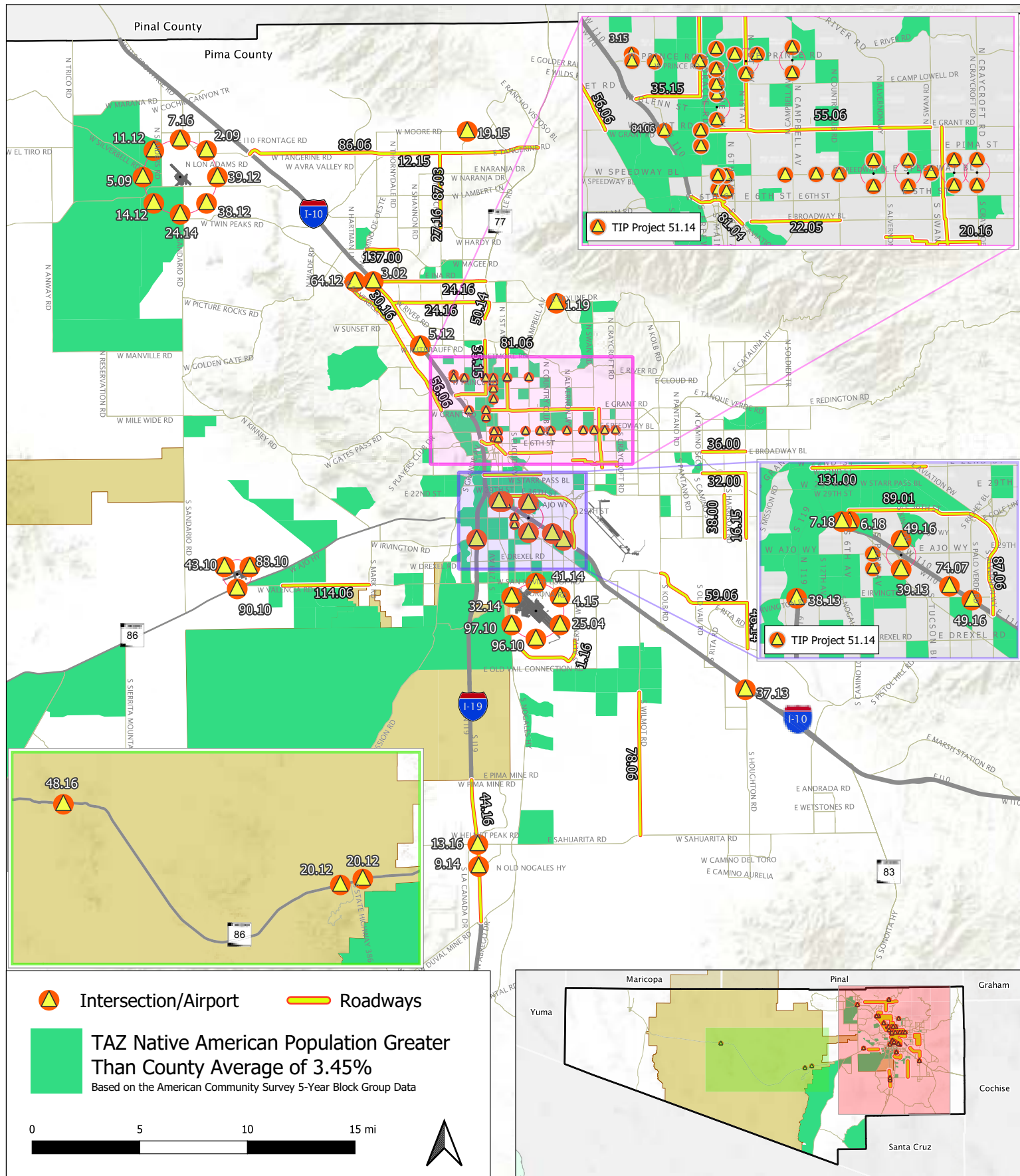


**Title VI Analysis
- Asian Population -**

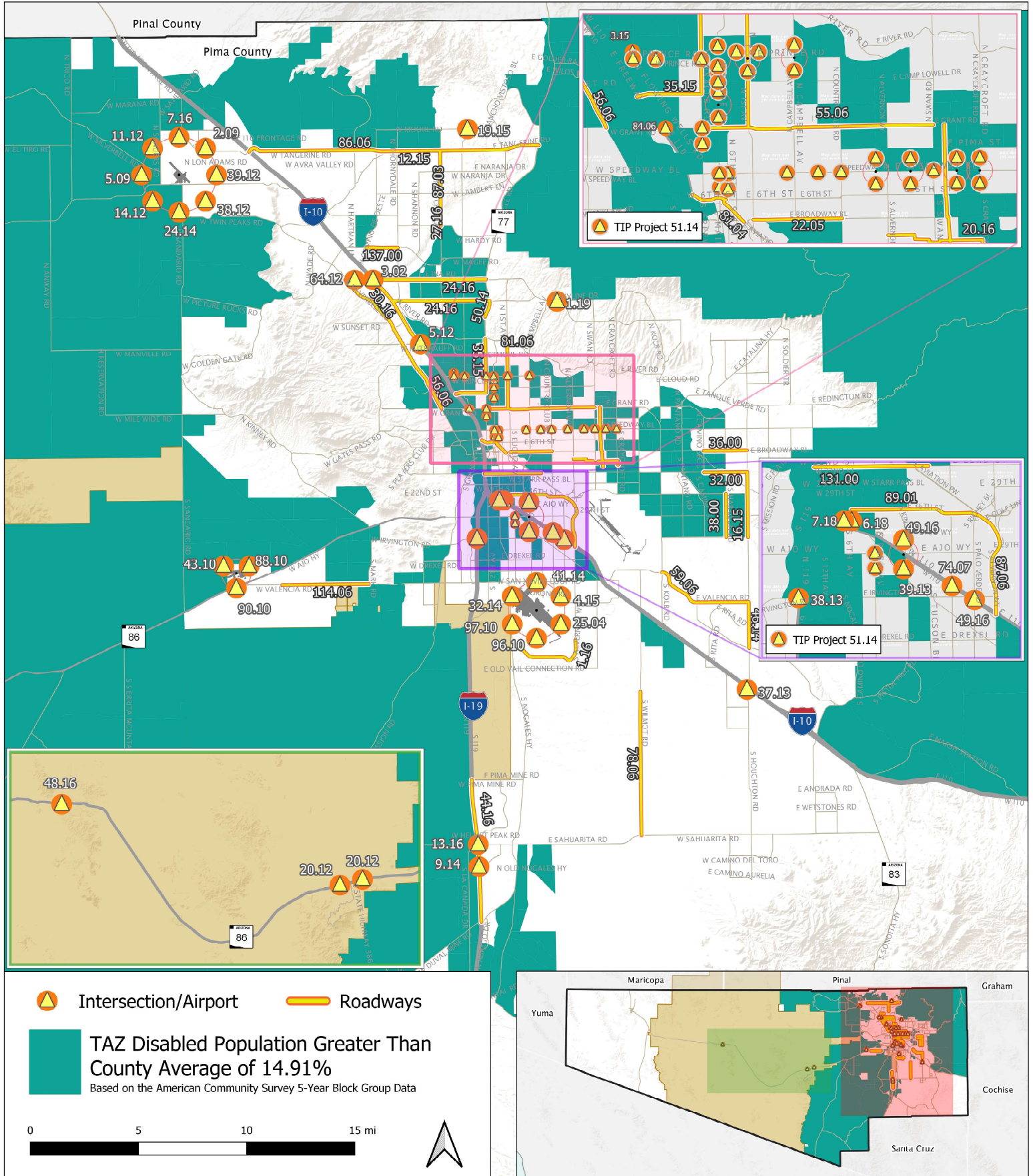


Title VI Analysis

- Native American Population -



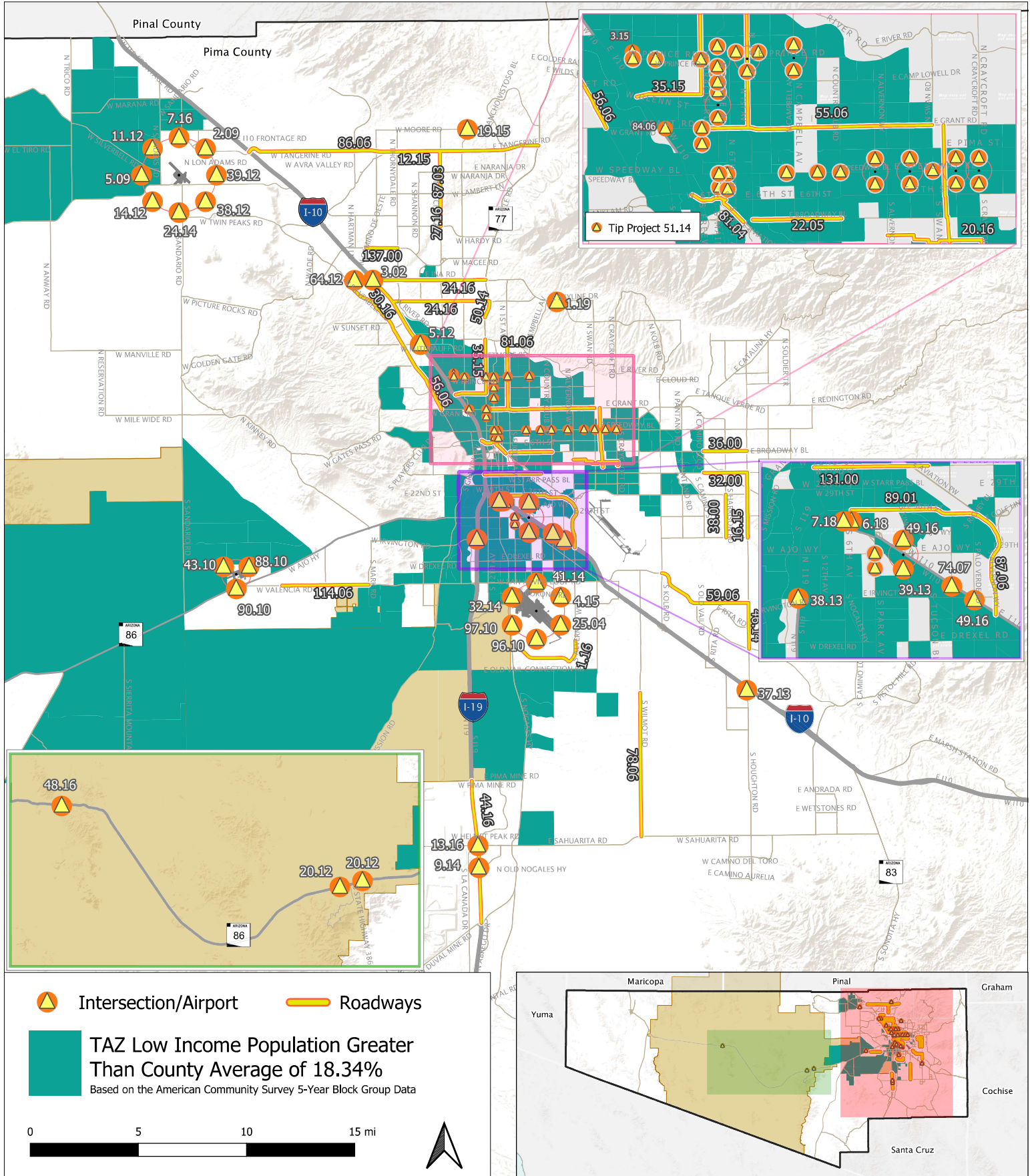
Title VI Analysis - Disabled Population -



**Title VI Analysis
- Elderly Population -**



Title VI Analysis - Low Income Population -



CHAPTER 4: REGIONAL TRAFFIC SIGNALS, CONGESTION MANAGEMENT PROCESS, AND PERFORMANCE MEASURES

REGIONAL TRAFFIC SIGNAL SYSTEMS

All PAG member agencies collaborate to provide "seamless" traffic signal operations across jurisdictional boundaries. This has resulted in the interconnection of traffic signals into a centrally coordinated operation. This system has been expanded to encompass all the traffic signals in the Greater Tucson Metropolitan Area, making PAG one of the few, if not only, MPO of its size with the majority of its signals from multiple jurisdictions controlled from a single center. Currently over 500 traffic signals from throughout the region are actively monitored and controlled from a single control center on behalf of the region. In a multi-jurisdictional coordinated effort, the region's signals use multiple signal timing patterns in order to maximize the efficiency of the network as a whole. This type of signal coordination being implemented in the Tucson area is providing for improved traffic flow. Such improvements tend to be most effective in locally congested areas, where progressive flows can reduce stops and signal delay.

The PAG member agencies have established a formal regional traffic signal program to enhance equipment purchase of necessary signal equipment and to provide evaluation and adjustments of the region's traffic signal operations on a regular basis. Continuous improvement to equipment and performance of traffic signals improves the ability of the transportation network to move traffic safely and efficiently throughout the region. Additionally, improved signal operations can be completed for lower costs and in shorter time frames than most other capital-intensive transportation improvement options.

The regional program has resulted in the establishment of a municipally owned telecommunications network to support traffic signal and transportation operations throughout the region. The network, known as the Regional Transportation Data Network (RTDN) is an outgrowth of PAG's Intelligent Transportation Systems (ITS) planning which identified the need to migrate traffic signals and operations off leased line communications and onto a municipally owned telecommunications network. This work has resulted in significant cost savings resulting from the absence of fee-based communications and has vastly improved communications quality throughout the region for transportation operations and emergency services.

All traffic signals from the City of Tucson and Pima County DOT are currently in the network and RTA funding has been programmed as part of the 5-year TIP to connect other jurisdictions throughout the region into the network. The municipally owned network enables agencies to share real-time data and information, expand the network to include additional stakeholder agencies, enhances the region's ability to provide accurate, timely and comprehensive travel information to the public, and vastly improves data transfer rates and quality.

The regional traffic signal program has resulted in the updating of over 1,000 traffic signal time plans throughout the region including I-10 frontage road signals, stand-alone signalized intersections, special event time plans, pedestrian beacon signals and adjustments to accommodate the pedestrian walk speed in the national Manual for Uniform Traffic Control Devices (MUTCD). These efforts are allowing the jurisdictions of the region to move from a reactive signal timing approach to a proactive one, where signal time plans are reviewed and adjusted regularly.

This program has seen tremendous cooperation from jurisdictions throughout the region allowing for benefits such as reduced delay and congestion for the public, reduced fuel consumption and emissions, improved safety for drivers, pedestrians and cyclists, reduced costs for jurisdictions and the public through grouped procurement opportunities, shared resources and training opportunities, and "seamless" traffic signal operations throughout the region.

Recent retiming efforts of 133 traffic signals throughout the region focusing on extensive timing plan modifications, extra vehicle throughput capacity and smoother traffic flow without negatively impacting pedestrian mobility have resulted in just under 10 percent in reduced vehicle delay and 3 percent in fuel consumption reduction. Reductions in various vehicle emissions from the updated signal timing plans range from 2 percent to 16 percent less output.

Insights from the regional traffic signal program are being used to help identify and address areas where excessive traffic congestion is taking place. Information from the program is being used in the identification and selection of projects for potential TIP funding, which helps PAG and its member agencies more effectively manage congestion throughout the region through signal timing improvements and capital projects.

THE PAG CONGESTION MANAGEMENT PROCESS (CMP)

PAG's current practice of performance based planning and programming has taken the federally mandated Congestion Management Process (CMP) and integrated it into PAG's normal operating procedures. As a result there is significant overlap between the CMP and the following section on performance management. A key distinction of PAG's CMP from the other performance management components is its more granular focus at the corridor level and project evaluation.

The CMP serves as an effective tool to address traffic congestion throughout the region by enabling PAG and its partners to define, identify and measure congestion and, develop and select appropriate strategies to reduce it. The PAG CMP provides periodic assessment of the effectiveness of implemented strategies and progress toward regionally adopted targets through a series of performance measures. This process assists in identification of system deficiencies, and analysis and selection of alternative strategies to address congestion for inclusion in the Regional Accessibility and Mobility Plan (RMAP), the region's long-range transportation plan, and the short-range transportation improvement program (TIP).

In recognition of the federal requirements for the CMP, particularly as they relate to Transportation Management Areas that are in nonattainment for either carbon monoxide or ozone, a procedure has been developed to link the TIP project development process to the CMP. In that the PAG planning area is not currently classified as nonattainment, PAG is taking a proactive approach to ensuring that all "significant" single-occupant vehicle (SOV) capacity projects are developed as part of a CMP. The procedure, as described below was developed in close cooperation with the TIP Subcommittee.

The CMP procedure requires that new "significant" capacity increasing projects, adding at least one travel lane for a mile or more, provide CMP related information as part of the TIP project application. Local jurisdictional project sponsors fill out a one-page CMP strategies toolbox worksheet to identify those CMP-related strategies that will be delivered as part of the project. Project applications that do not meet this capacity threshold are highly encouraged to review and incorporate CMP strategies that are appropriate for the project.

The procedure developed to review all "significant" SOV projects is designed to help:

- ensure that significant SOV projects consider, and when applicable include congestion management strategies as part of the project development process.
- document the congestion management strategies to be included with the significant SOV project.

The PAG Congestion Management Strategies Toolbox Worksheet is a checklist of congestion management strategies that are considered appropriate and applicable to the region. This checklist is designed to easily facilitate the documentation of strategies to be included with the significant SOV project, but it is not necessarily all inclusive of the strategies that may be used. Local agencies have complete flexibility and latitude to include any additional congestion management strategies

into their project, and this is encouraged by PAG. Agencies are also encouraged to consider congestion management strategies as part of non-capacity increasing projects.

PERFORMANCE MEASURES

The 2045 RMAP provides a policy framework for the investment of anticipated federal, state and local funds based on anticipated needs and regional goals and objectives. This framework closely follows the National Performance Goals established by FHWA. PAG has developed a series of performance measures to monitor trends and track progress toward the desired outcomes defined in RMAP performance areas: System Maintenance, Safety, Multimodal Choices, System Performance, Land Use and Transportation, Environmental Stewardship, and Freight and Economic Growth. Each of these goal areas consists of objectives, performance measures and targets.

Beyond the 2045 RMAP performance areas, regional planning and programming is also informed by performance components from the CMP and Federally required measures introduced in MAP-21 and continued in the FAST Act. FHWA and FTA have jointly released final rules on performance management measures in the categories of transportation safety, infrastructure condition and system performance. PAG works with its federal and state partners to establish targets for federal performance measures.

There are fifty performance measures currently being tracked by PAG. Forty-four are 2045 RMAP measures and twenty-one are FAST Act measures. Nearly half of the measures are utilized in the CMP. Table 4-1 shows a list of all performance components.

Each of the performance components have a common aim of further improving the region's transportation system for all modes and are brought together for periodic performance reviews. PAG routinely collects data for analysis and tracking performance against established targets for each measure. A web-based performance dashboard has been created by PAG to display and monitor historical data, trends, and targets. Using performance measures, PAG informs the transportation project selection process through analysis of current conditions and the expected outcomes of the project.

PERFORMANCE-BASED PROGRAMMING

The planning performance framework is further supported by performance-based programming. PAG has developed a process for better evaluation of transportation projects based on the performance of the existing conditions of the proposed project area. This process is facilitated by PAG's Transportation Network Data Portal (TNDP). TNDP is a web-based map viewer that displays regional data in key performance areas. Jurisdictional partners can perform visual network screening of the existing performance of their facilities and can delineate a proposed project extent. Delineating the project extent generates a performance report for the facilities indicated and adjacent areas. Additionally, supplemental questions clarify which performance areas are anticipated to be affected by the proposed project. This process allows region-wide comparison of similar project types to better evaluate their respective benefits to the region. The existing conditions performance report data are organized into the six categories of the 2045 RMAP goal areas. The CMP criteria protocol is brought in to assign relative scores to project applications to facilitate the regional discussion on programming.

See Appendix 9 for more details about how the FY 2020-2024 TIP will impact these performance measures.

Table 4-1: PAG Performance Measure Components

	PERFORMANCE MEASURE	GOAL AREA	RMAP	FAST ACT	CMP
1	Condition of federal-aid pavement	System maintenance	X		
2	Condition of Interstate pavement	System maintenance		X	
3	Condition of NHS pavement	System maintenance		X	
4	Condition of bridges (all)	System maintenance	X		
5	Condition of NHS bridges	System maintenance		X	
6	Condition of transit fleet	System maintenance	X		
7	Total fatalities	Safety	X	X	X
8	Total fatality rate	Safety	X	X	X
9	Fatalities – bicyclists	Safety	X	X	
10	Fatality rate – bicyclists	Safety	X	X	
11	Fatalities – pedestrians	Safety	X	X	
12	Fatality rate – pedestrians	Safety	X	X	
13	Total Serious injuries	Safety	X	X	X
14	Total serious injury rate	Safety	X	X	X
15	Serious injuries – bicyclists	Safety	X	X	X
16	Serious injury rate – bicyclists	Safety	X	X	X
17	Serious injuries – pedestrians	Safety	X	X	X
18	Serious injury rate – pedestrians	Safety	X	X	X
19	Vulnerable user injuries and fatalities	Safety	X	X	X
20	Transit crash rate	Safety	X	X	
21	Mode choice – all trips	Multimodal choices	X		X
22	Mode choice – work commutes	Multimodal choices	X		X
23	Commute miles by active modes	Multimodal choices	X		
24	Average transit speed	Multimodal choices	X		
25	Average transit travel time	Multimodal choices	X		
26	Bicycle accessibility ratio	Multimodal choices	X		
27	Bicycle accessibility miles	Multimodal choices	X		
28	Pedestrian accessibility ratio	Multimodal choices	X		
29	Pedestrian accessibility miles	Multimodal choices	X		
30	Total transit trips	Multimodal choices	X		
31	Transit to auto differential travel times	Multimodal choices	X		
32	Percent of VMT in severe congestion	System performance	X		X
33	Hours of vehicle travel per capita	System performance	X		X
34	Daily VMT per capita	System performance	X		X
35	Planning time index	System performance	X		X
36	Travel time index	System performance	X		X
37	Travel time reliability on Interstate	System performance		X	
38	Commute time by mode	System performance	X		X
39	Travel time reliability on NHS	System performance		X	
40	Job accessibility by auto	Land use and transportation	X		X
41	Job accessibility by transit	Land use and transportation	X		X
42	Population near transit stops	Land use and transportation	X		X
43	Jobs near transit stops	Land use and transportation	X		X
44	Job accessibility index	Land use and transportation	X		X
45	On-road greenhouse gas emissions	Environmental stewardship	X		
46	Air quality weekly concentrations	Environmental stewardship	X	X	
47	Total freight delay	Freight and economic growth	X		
48	Total freight share	Freight and economic growth	X		
49	Total freight tonnage	Freight and economic growth	X		
50	Freight travel time reliability index	Freight and economic growth		X	

CHAPTER 5: FINANCIAL PLAN

As mentioned in the previous chapters, PAG is required by federal regulation to include a financial plan in the TIP document that demonstrates how the projects listed can be implemented using current revenue sources. The TIP must be fiscally constrained, which means that the region can only list projects in the TIP document for which funding is reasonably expected to be available. This constraint is determined by adding up total costs, by fund type each year, and comparing those costs to the estimate of anticipated revenues by fund type each year. Fiscal constraint is required for each of the first four years of the plan by fund type.

What projects/programs does the region want to do and how much do they cost? Appendix 1 of this document provides a fiscally constrained listing of the projects for which funding is deemed to be available. The projects listed in the first two years of the TIP will have funding available to complete that distinct phase of the project. A “phase” of a project can be further defined as:

- Design, denoted with a “D” in the TIP document, indicates that the sponsoring jurisdiction is developing the plans necessary to complete the project.
- Right-of-Way Acquisition, denoted with an “R” in the TIP document, indicates that the sponsoring jurisdiction is using the funding listed to acquire property on which to construct the project.
- Construction, denoted with a “C” in the TIP document, indicates that the sponsoring jurisdiction is constructing the project.

Project phases that are not fully funded could appear in years three (3) through five (5) of the TIP document. In addition to the notations noted above for specific project phases, the TIP document also contains funding programmed for the repayment of loans and operations of programs and systems such as transit.

- Repayment of loans, denoted with a “PMT” in the TIP document, indicates that the sponsoring jurisdiction is repaying loans necessary to have completed the project.
- Operations, denoted with an “O” in the TIP document, indicate that the sponsoring jurisdiction is using the funding identified to operate the program or service listed in the TIP document.

How much funding do we expect to have? Appendix 3 of the TIP document provides information on historical revenues for both state and federal sources, with the last matrix of that appendix providing a constraint analysis by year, for each fund source. Estimates of funding availability are based upon past funding received by type. PAG has four (4) main types of funding available for programming within the TIP.

- Federal funding – Federal funding available for transportation is set through authorization of federal legislation from Congress. Once a bill has been passed, the federal funding outlined in that bill is used as an estimate for future years of the TIP until a new bill is passed.
- State funding – State-based funding comes from the Arizona Highway User Revenue Fund (HURF). Unlike federal dollars, there is no guaranteed amount of HURF available to the region. HURF is distributed based on fuel sales, vehicle license taxes (VLT) collected and a few other smaller funding sources. Distribution is based on a formula in the Arizona Revised Statutes related to population and county of origin of fuel sales. HURF distributions fluctuate on a monthly basis and are directly tied to the health of the state’s economy. Estimates of future HURF revenues are based on past receipts. A growth factor is applied to future revenues, as necessary, depending on the current economic conditions and trends.

- Regional funding – The RTA taxing district has a ½-cent excise tax in place that funds projects outlined in the Regional Transportation Authority (RTA) plan. RTA revenues are based on collections and anticipated bonding schedules. The RTA was passed in 2006 with a 20-year plan.
- Other funding – In addition to the funding available to the region to program, the TIP contains projects/programs that have other identified fund sources. These fund sources include, but are not limited to: jurisdictional, private developer, federal earmarks such as High Priority Projects (HPP), and other federal/state competitive funding programs, such as BUILD grants.

See Appendix 6 for a glossary of terms and funding sources.

Putting it all together for fiscal constraint. Chapter 3 describes the TIP programming process and how projects are identified for regional funding and priorities while also ensuring fiscal constraint.

More information about fiscal constraint can be found at the following links:

<https://www.fhwa.dot.gov/planning/index.cfm>

OPERATIONS AND MAINTENANCE COSTS

The region and its jurisdictional partners are aware of the value of maintaining and operating the existing transportation infrastructure in the region. With limited transportation dollars available now and into the foreseeable future, emphasis should be placed on infrastructure maintenance. It is more cost effective to do so than to replace facilities that have failed due to lack of maintenance.

Typical maintenance and operations types of activities include but are not limited to: adjustments due to inclement weather (closing flooded roads, de-icing bridges and snow plows at higher elevations), clearing sight-distances, traffic signal maintenance, signing and striping, and warrant studies and pavement management, from filling pot holes to full pavement overlays.

The chart below outlines what jurisdictions pay in operations and maintenance in current and future fiscal years. Jurisdictions were asked to provide budget numbers as available for their transportation operations and maintenance activities system wide, so numbers would reflect both local roads as well as roads of regional significance.

Table 5-1: Operations and Maintenance Costs

Jurisdiction	FY 2019	FY 2020	FY 2021
City of Tucson	\$41,454,730	\$47,572,730	\$48,065,785
Tucson Transit*	\$73,054,020	\$78,804,170	\$84,976,010
Pima County	\$14,381,600	\$15,381,600	\$15,381,600
City of South Tucson	\$676,000	\$676,00	\$676,000
Town of Oro Valley	\$1,139,197	\$1,737,957	\$1,700,000
Town of Sahuarita	\$1,144,420	\$1,462,220	\$1,462,220
Town of Marana	\$3,200,000	\$3,200,000	\$3,200,000
Pascua Yaqui Tribe	\$500,000	\$500,000	\$500,000
Tohono O'odham Nation	\$500,000	\$500,000	\$500,000

** The City of Tucson runs the Sun Tran transit service, which includes the para-transit service known as Van Tran. Operating numbers shown cover the entire O&M budget for Sun Tran, and other transit services.*

Note that the arterial roadways within the Tohono O'odham Nation are either Bureau of Indian Affairs (BIA) roads, state routes (maintained by ADOT) or county roadways (maintained by Pima County).

Not all jurisdictions had numbers available for all fiscal years outlined in the chart. If no estimates were provided to PAG, sustained funding amounts were assumed.

CHAPTER 6: AIR QUALITY EVALUATION

AIR QUALITY OVERVIEW

To assist local jurisdictions in measuring and improving air quality, the U.S. Environmental Protection Agency (EPA) establishes maximum acceptable levels for six common air pollutants known as the National Ambient Air Quality Standards (NAAQS). These federal standards apply to outdoor or ambient air and are set to protect public health and the environment.

Motor vehicle emissions are a significant contributor to air pollution across the nation and in the Tucson urban area, with carbon monoxide (CO) being the largest component of these emissions. In 1978, the EPA designated part of the Tucson urban area a CO nonattainment area (Figure 6-1). This designation meant that this area's ambient CO concentration exceeded the NAAQS¹ frequently enough to violate the federal health standard. When an area receives this designation, a plan must be developed and adopted to reduce emissions of that pollutant. This nonattainment area plan then is incorporated into the State Implementation Plan (SIP) as a SIP amendment. The plan must contain effective strategies for curtailing air pollution and allocate financial and resource commitments for carrying out the plan.

PAG adopted a SIP revision under the Limited Maintenance Plan (LMP) option² which met EPA's requirements for CO nonattainment areas. The Tucson Air Planning Area (TAPA) was designated CO attainment status, effective July 10, 2000. Continuation of this status relies on data obtained from monitoring and modeling procedures.

In 2008, the PAG Regional Council adopted a 10-year CO LMP for the TAPA. This LMP was sent as a SIP revision to the Arizona Department of Environmental Quality (ADEQ) and submitted to the EPA for review. The EPA approved the SIP revision in 2009, and, in accordance with the Clean Air Act (CAA) §107(d.), ensured the maintenance of the NAAQS in the TAPA. The CO LMP is in effect from Jan. 20, 2010, through 2020. This plan maintains existing controls and contingency provisions and replaces the previous plan approved by the EPA in 2000. The Tucson area has not violated the CO NAAQS since 1984, and CO levels are expected to remain well below the NAAQS for a second 10-year period ending in 2020.

MAJOR DEVELOPMENTS

The conformity determination for the 2045 Regional Mobility and Accessibility Plan (RMAP) and the FY 2018-2022 Transportation Improvement Program (TIP) were approved by the FHWA and FTA in May 2016, and May 2017, respectively. PAG continues to comply with all legal requirements for transportation conformity determinations in effect at the time of this TIP report.

SIP CONTROL MEASURES

The EPA has not imposed any federal control measures for Pima County but has included the State's Vehicle Emissions Inspection Program (VEIP) and Oxygenated Fuels Program, the PAG Travel Reduction Program (TRP) and the Pima County Department of Environmental Quality's (PDEQ) Voluntary No Drive Days Program as federally enforceable air quality control measures.

¹ NAAQS for CO is 9 parts per million for an 8-hour average.

² A less rigorous plan authorized by the EPA since CO concentrations were below 85 percent of the NAAQS

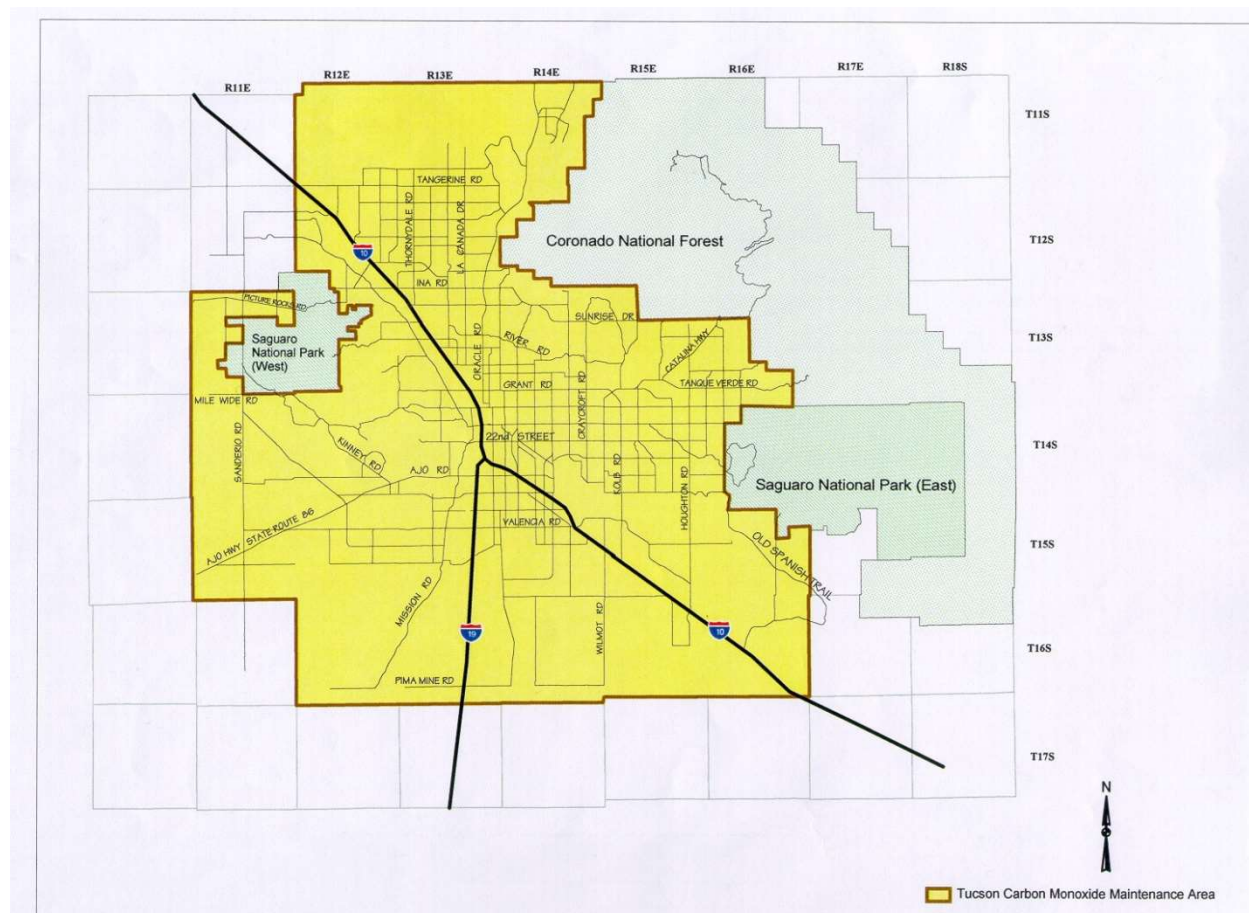
These programs represent the permanent and enforceable commitments, as required under § 107(d) (3) (E) (iii) of the CAA and assist the region in achieving and maintaining attainment status. Since these control measures are included in the Arizona SIP, they must continue to be implemented. All legally enforceable commitments to other control measures outlined in the 1987 SIP revision have been completed. A summary of these enforceable control measures follows.

Federal Motor Vehicle Control Program

Emissions Regulations

Federal regulations for reducing motor vehicle tailpipe emissions have been in place since 1968. Initial standards required major reductions in vehicle tailpipe hydrocarbon and CO emissions and eliminated crankcase hydrocarbons, relative to 1963 vehicle model emissions. Subsequent federal regulations continued to lower vehicle emission standards throughout the 1970s and 1980s. More recent regulations requiring more stringent pollutant reductions are detailed below.

Figure 6-1: Tucson Carbon Monoxide Limited Maintenance Area



Tier 1 Emission Standards

Two sets of tailpipe emissions standards were defined for light-duty vehicles in the Clean Air Act Amendments (CAAA) of 1990: Tier 1 and Tier 2. The Tier 1 standards were published in 1991 and were phased in progressively between 1994 and 1997. These standards apply to tailpipe emissions for all new light-duty vehicles up to 8,500 lbs. Gross Vehicle Weight Rating (GVWR) (e.g. passenger cars, light-duty trucks, sport utility vehicles, minivans and pick-up trucks).

National Low Emission Vehicle Program (NLEV)

In 1997, EPA finalized the regulations for the NLEV program, a voluntary agreement between the EPA and auto manufacturers. This program applied to cars and light-duty trucks nationwide starting with the model year 2001. It provided more stringent tailpipe emission standards for the transition period before the introduction of Tier 2 regulations. The program was phased in from 2001 through 2003 and required light-duty car manufacturers to certify that a certain percentage of their vehicle fleets complied with cleaner emission standards.

Tier 2 Emission Standards

Tier 2 tailpipe emission standards were adopted by the EPA in 1999 and were implemented incrementally from 2004 to 2009. They applied stricter standards to all vehicles covered in the Tier 1 standards in addition to more rigorous restrictions for larger vehicles (over 8,500 lbs. GVWR). Unlike the Tier 1 standards, the Tier 2 regulations applied the same emission standards to all vehicle weight categories and for all fuel types.

Increased Vehicle Fuel Efficiency and Greenhouse Gas Emission Standards

In 2010, the EPA and the National Highway Traffic Safety Administration (NHTSA) developed regulations to limit greenhouse gas emissions and improve fuel economy of light-duty vehicles. This regulation established standards for the 2012-2016 model year vehicles and became effective in April 2010. In 2012, the EPA and NHTSA established additional standards to extend the fuel efficiency and greenhouse gas emission standards to the 2017 to 2025 model year (MY) light-duty vehicles. This rule went into effect in December 2012.

As part of the 2012 rulemaking, the EPA made a regulatory commitment to conduct a midterm evaluation of the standards for MY 2022 to 2025. As a part of this process, EPA examined a wide range of factors and in April 2018, the EPA Administrator signed the Midterm Evaluation Final Determination. In its evaluation, the EPA determined that the MY 2022-2025 greenhouse gas standards are not appropriate in light of the record presented and therefore, should be revised. In August 2018, the EPA proposed an alternative ruling, *The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks* which is currently under review.

Tier 3 Emission Standards

In 2014, the EPA adopted the Tier 3 standards which reduces tailpipe emissions from new light and medium-duty passenger vehicles, light-duty trucks and some heavy-duty vehicles starting with the model year 2017; the new standard also requires a lowering of the sulfur content of gasoline. The tailpipe standards will include phase-in schedules that vary by vehicle class but generally start in model year 2017 and will be phased in through 2025. These new tailpipe emission standards coupled with the lower gas sulfur content will reduce CO, oxides of nitrogen (NO_x) and volatile organic compound (VOC) emissions from on-road vehicles.

Improvements in Vehicle Equipment

In addition to complying with federal tailpipe emission standards, automobile manufacturers were required to install certain equipment to limit emissions. Starting in the early 1970s, new cars were equipped with charcoal canisters and exhaust gas recirculation valves to meet emission standards.

One of the more significant innovations was the introduction of the catalytic converter in the mid-1970s. Catalytic converters significantly reduce CO, NO_x and hydrocarbon emissions by converting harmful fuel combustion products into less harmful emissions from the vehicle's exhaust system.

Beginning with the 1996 models, the EPA required manufacturers of light-duty vehicles and light-duty trucks to install on-board diagnostic (OBD) systems. These systems monitor vehicle control components for malfunctions that cause exceedance of emission levels. When a failure occurs, the diagnostic information is stored in the vehicle's computer to assist technicians with diagnosis and repair. Since that time, the EPA has extended OBD requirements to all medium and heavy-duty highway vehicles.

Arizona Vehicle Emissions Inspection Program (VEIP)

The Arizona VEIP began in 1977 and includes both the Tucson and Phoenix metropolitan areas. Vehicle models from 1967 through 2014 are subject to emissions testing; exemptions exist in Pima County for motorcycles and collectible vehicles. New cars are not required to be tested until they have been registered for five years. Older vehicles (Model years 1967 through 1995) undergo annual tailpipe emission inspections while newer vehicles (post 1995) undergo OBD testing. The OBD system detects malfunctions in the early stages, often identifying failing components before tailpipe emissions testing would detect them. This OBD detection system helps protect the environment and allows for repair at a much lower cost. Since January 2009, a vehicle OBD emission testing in Pima County is valid for two years.

Vehicles may receive a one-time only repair waiver that is valid for the current year's registration. Once a waiver is granted, the vehicle is ineligible for additional waivers. Failing vehicles that received a waiver must be repaired and pass inspection for subsequent registration in the Tucson metro area.

Arizona Oxyfuel Program

The Oxyfuel Program began in 1990 and has been in effect for 29 full seasons in eastern Pima County. This program decreases CO tailpipe emissions in the winter months by adding ethanol to all grades of motor fuel. The current oxygen content of winter motor fuels is 1.8 percent by weight. Legislation passed in 1996 (SB1002) granted PAG the ability to increase oxyfuels under specified conditions.³ Before making the determination to increase oxyfuel content, a cost-benefit analysis of all reasonable alternative emission reduction measures must be conducted.

PAG's Travel Reduction Program (TRP)

The Travel Reduction Ordinances (TROs), which created the regional Travel Reduction Program (TRP), are in place for Pima County, the cities of Tucson and South Tucson and the towns of Oro Valley, Marana and Sahuarita. The TROs specify that employers with 100 or more full-time equivalent employees at a single or contiguous worksite must participate in the TRP.

³ Up to 60 days before Sept. 30 of each year PAG, with concurrence of the Director of the ADEQ, may notify the Director of the Arizona Department of Weights and Measures to increase the oxyfuel content not less than 0.3 percent by weight of oxygen and not more than the maximum EPA allowance.

Employers with fewer than 100 employees can participate voluntarily. The goals of the ordinances are to reduce traffic congestion, reduce fuel consumption and improve air quality. Table 6-1 shows estimates of the program's CO emission and travel reduction benefits over the last four years. Vehicle miles saved in 2018 decreased by 0.9 percent as compared to 2017.

All TRP employers are required to complete an annual employee survey which gathers information on how people commute to work. Each employer has one month to collect surveys from their work force. The recommended minimum response rate is 50 percent. PAG reports to ADEQ the TRP emission savings and alternative mode usage based on the findings from the employee survey. The data collected from over 60,000 commuters also provides valuable information for transportation and transit planners and PAG transportation modelers on how, when, and where people commute in Pima County.

Tables 6-2 and 6-3 show the employee survey results for the last four years. The results show an almost two point drop in alternative mode usage from 2015 to 2018 (19.6 percent vs. 17.8 percent). Vehicle miles traveled increased by 2 percent in the same time period. All the modes showed a decrease, with the exceptions of compressed work week and telework.

After a significant increase in the survey response rate in 2016, the response rate has dropped in the last two years and has fallen below the recommended response rate of 50 percent. In 2016 TRP staff implemented recommendations from the Six Sigma study that led to improved results on the Employee Survey.

Table 6-1: Air Quality ⁴ and Travel Reduction benefits of the TRP Program

	2015	2016	2017	2018
Carbon monoxide reduced (metric tons per year)	344.8	305.1	285.3	269.2
Vehicle travel reductions (miles per year)	55,382,594	55,653,884	55,299,140	54,820,272

Table 6-2: Overview of employee survey results for 2015 to 2018

	2015	2016	2017	2018
Average one-way weekly travel per employee (miles)	59	60	60.5	60.5
Number of Employers	219	215	215	213
Number of Employees	132,550	120,132	130,316	130,021
Alternative mode participation (percent)	19.6	18.4	17.6	17.8
Employee survey response rate (percent)	43.1	50.9	47.1	46.4

In 2018, all TRP employers participated in an online survey of their Travel Demand Management activities called the Activity Inventory Report (AIR). The AIR collects data on each employer's planned and implemented travel reduction activities for the calendar year. The results are used by the TRP staff to assist employers in planning activities, identifying

⁴ CO emissions were calculated using EPA's MOVES2014b

deficiencies and in designing new programs that promote alternative transportation use. Figure 6-2 shows the key results from 2015 to 2018. All the measures shown below increased when compared to 2017, with the exceptions of offering incentives for alternative mode usage, selling bus passes, and communicating rideshare information, which is one of the most important measures.

Figure 6-2. Survey results of regional employers' Travel Demand Management activities 2015 to 2018

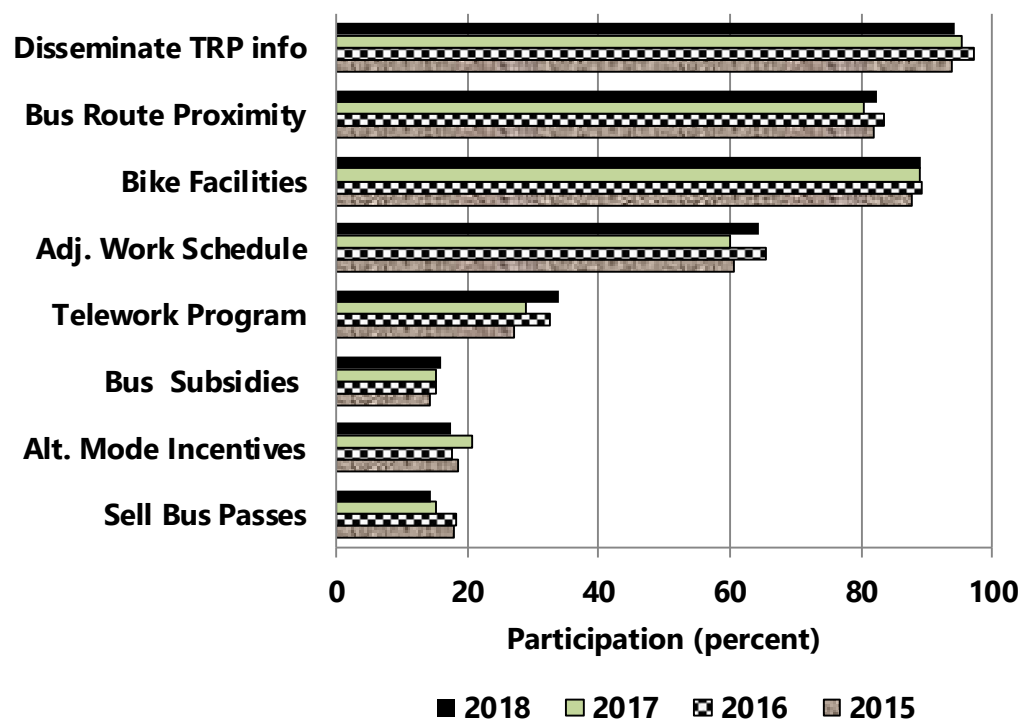


Table 6-3: Survey results for worker travel modes 2015 to 2018

	Trips by mode (percent)*			
	2015	2016	2017	2018
Drive alone	80.4	81.6	82.4	82.3
Carpool/vanpool	7.8	7.3	7.1	6.8
Compressed work week	2.9	2.6	2.2	2.1
Bus	2.7	2.2	2.0	1.8
Bike	1.5	1.4	1.3	1.2
Walk	1.7	1.5	1.8	2.3
Telework	2.6	3.1	3.0	3.2
Streetcar	0.4	0.3	0.3	0.3

* Yearly totals may not equal 100 percent due to rounding

Sun Rideshare and Vanpool Programs

The Rideshare program was established in 1974 and has been administered by PAG since that time. In 2009, the program was renamed Sun Rideshare, reflecting its assimilation into the regional transit system. Sun Rideshare continues to promote alternative transportation to area employers and residents of Pima County.

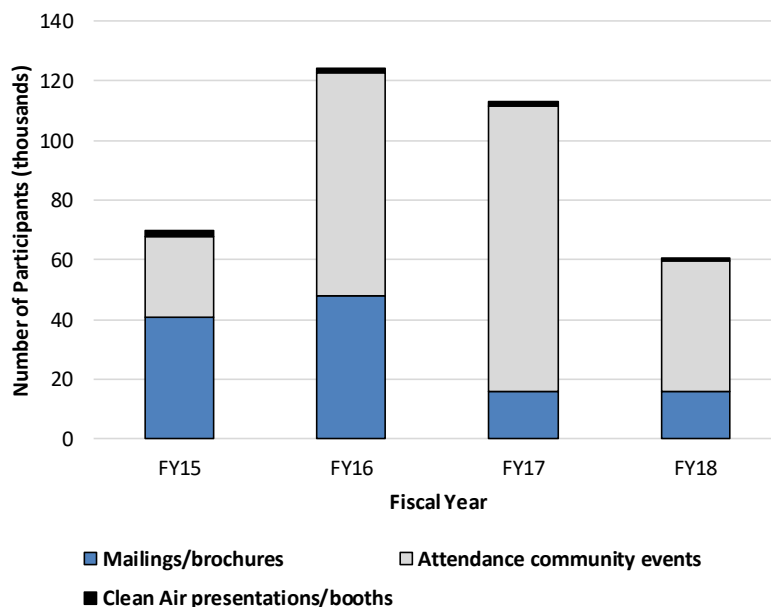
In spring 2017, a new Sun Rideshare commercial was produced focusing on carpooling. The 90- and 30-second videos were posted on YouTube, Facebook, and the Sun Rideshare website, as well as broadcasted through paid media in the summers of 2017 and 2018. The Sun Rideshare website was updated and modernized in 2018. A new resource page was added that provides marketing materials for area employers.

At the end of 2018 there were 24 operational vanpools, down from a high of 31 vanpools in June 2017. PAG continues to submit vanpool ridership data to the National Transit Database each year, which brings about \$350,000 to the region for transit capital expenditures.

PDEQ's Voluntary No-Drive Days Program

PDEQ's national award-winning program seeks to increase awareness of air quality issues and encourage actions to reduce air pollution including eliminating vehicular trips. PDEQ's Clean Air Program (referred to as the Voluntary No-Drive Day Program in the SIP) is a state-mandated program started in 1988, to address CO violations in Pima County. With the region violating the new EPA ozone standard in 2018, it is even more critical to educate the community about actions that can be taken to reduce air pollution. Severe cuts in state funding starting in 2009, have forced the PDEQ Clean Air Program to reduce staff and eliminate program elements. However, this program continues to use several methods to achieve its goals when funding is available (Figure 6-3).

Figure 6-3. PDEQ's air quality program's outreach accomplishments from FY 2015 through FY 2018



VOLUNTARY CONTROL MEASURES

In addition to the federally mandated commitments, PAG's voluntary Clean Cities Program also contributes to air pollution reductions through the use of alternative fuels.

PAG Clean Cities Program

In partnership with the U.S. Department of Energy's (US DOE) Vehicle Technologies Office (VTO), Clean Cities' coalitions foster the nation's economic, environmental, and energy security by working locally to advance affordable, domestic transportation fuels and technologies. The program maintains a fuel-neutral position with respect to the support and use of all clean fuels. The Tucson Clean Cities Coalition (TCCC) has nearly 100 members consisting of major utilities, fuel providers, vehicle dealers, fleet owners/operators, academia, and diverse government entities.

Although consumers are enthusiastic about electric vehicles, fleet managers are opting for compressed natural gas (CNG) and propane for mid-size and large fleet vehicles. A strong focus is being placed on school districts and school buses, with a preference for CNG and propane use by school fleet managers.

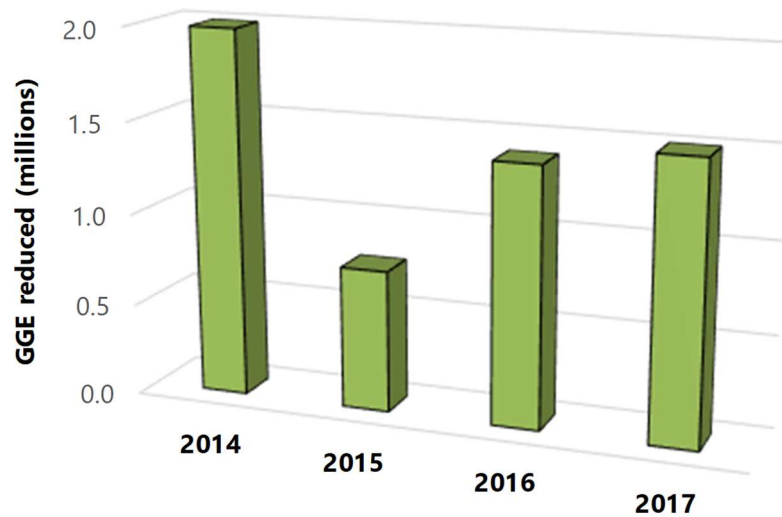
Infrastructure demand has continued to grow although station growth has remained steady. However, alternative fuel stations can be found throughout the Tucson metropolitan area. Propane refueling stations are widely available in the region; but publicly available CNG refueling stations are still limited. Electric vehicle infrastructure was established through the EV Project and the TCCC has seen growth in DC fast charging. Two Tucson sites are available, and two sites are accessible between Tucson and Phoenix. A map of alternative fuel stations for the Tucson area and the U.S. can be found at the US DOE site Alternative Fueling Station Locator: <http://www.afdc.energy.gov/locator/stations/>.

Clean fuel vehicles and fuels are gaining acceptance and popularity as fleet managers and the public become aware of their environmental and economic benefits.

Locally, the number of Pima County private and public clean fuel vehicles continue to increase. With the Tucson and Pima County fleets steadily making the transition to cleaner, alternative fuels, and the rise in electric vehicle offerings for consumers, the electric vehicle options continue to rise at a rapid pace.

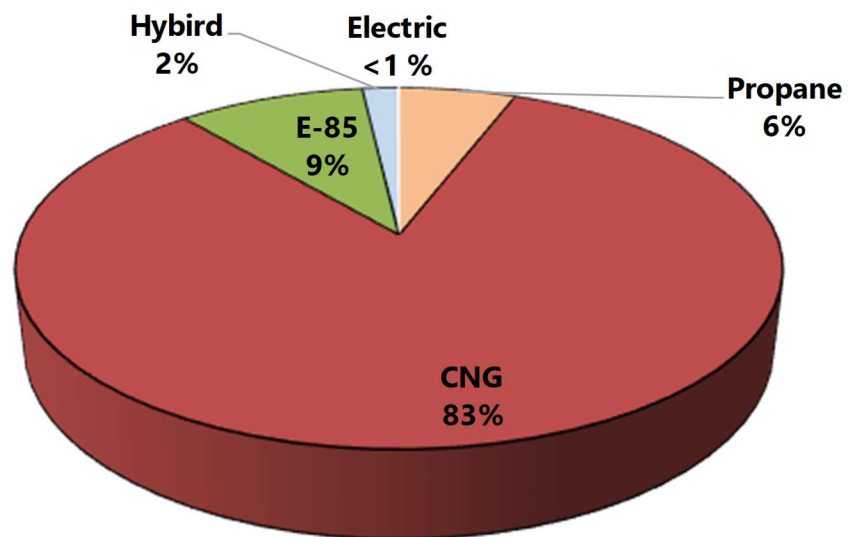
The use of CNG, propane, and EVs have assisted the TCCC in expanding interest, and reducing dependence on petroleum. In 2017 the TCCC displaced approximately 1.5 million gallons of petroleum (Figure 6-4), primarily through the use of CNG (Figure 6-5).

Figure 6-4. Annual Gasoline Gallon Equivalents (GGE) Reduced, 2014-2017



Data Source: Tucson Clean Cities' 2017 Annual Report

Figure 6-5. 2017 Gallons of Gasoline Equivalent Reduced, by Fuel Type



* Total may not equal 100 percent due to rounding

Data Source: Tucson Clean Cities 2017 Annual Report

SIP CONTROL MEASURES OUTLOOK

The long-range strategy is to continue programs that control mobile emissions and reduce per capita vehicle miles traveled (VMT). Federal vehicle emission control measures and the Arizona VEIP are primarily responsible for the County’s consistently low CO levels. The continued implementation of PDEQ’s Clean Air Program and PAG’s Sun Rideshare and Travel Reduction Programs are the most significant local CO reduction strategies, targeting direct VMT reduction, with an added benefit of congestion management.

EMISSIONS ANALYSES

By reducing air pollutant emissions, the Tucson region will continue to be a healthy environment for the region’s citizens. Additionally, by conforming to a federally approved air quality plan, the Tucson urban area will remain eligible for federally funded transportation projects.

To assure compliance with federal clean air standards, an annual program of monitoring and analysis was established in Pima County. The principal measure of compliance is the CO monitoring program, operated by PDEQ. Each year stationary CO monitors are activated at various locations throughout the TAPA for the CO season (October through March). In addition, PDEQ can employ mobile monitors at hotspot intersections during the CO season if levels approach the health standard. Current CO levels in the TAPA are about 14 percent of the federal health standard largely due to stricter federal tailpipe standards and control equipment.

PAG staff estimated CO mobile source emissions using the EPA’s Motor Vehicle Emission Simulator (MOVES) model for planning purposes. As with the prior years’ modeling analyses, local data were used and included seasonal averages for temperature, humidity, traffic counts, gasoline and diesel chemical properties, vehicle inspection and maintenance programs, and County ADOT vehicle registration data. PAG staff uses current socioeconomic information, transportation and traffic data to generate VMT, vehicle hours traveled (VHT) and congestion levels. PAG’s air quality analysis of the TIP estimates CO emissions (Table 6-4) show that the CO emissions generated if all the planned projects are completed (2024 Build scenario) are less than the 2020 start year emissions. Therefore, the 2024 build activities will not increase CO emissions relative to the start year emissions.

Table 6-4: Summary of Carbon Monoxide Modeling Results FY 2020-2024

Year	Total Average Weekday VMT	Regional CO Emissions (metric tons/average weekday)
2020 (Start year)	23,720,400	116.9
2024 (Build)	25,189,200	81.8
2024 (No build)	25,146,900	81.9

CONFORMITY OF THE PLAN

PAG is the designated air quality planning agency and the metropolitan planning organization (MPO) for the region. As such, PAG maintains cooperative relationships with the U.S. EPA, ADEQ, ADOT and PDEQ. Coordination of regional transportation planning with air quality planning has been carried out for many years. In April 1993, the procedures, methods and responsibilities for air quality planning were incorporated in a Memorandum of Agreement (MOA) between PAG, ADEQ, ADOT and PDEQ. The MOA was last updated in 2000.

The CAAA of 1990 requires that the TIP conform to the SIP's purpose of eliminating or reducing the severity and number of NAAQS violations and that it serves to achieve attainment of these standards. Additionally, the CAAA stipulate that TIP activities will not cause or contribute to any new NAAQS violations, increase the frequency or severity of any existing NAAQS violation, or delay timely attainment of any standard in an area. As demonstrated by the CO emission modeling results in Table 6-4, completing the TIP projects as stipulated in the TIP 2020-2024 will not increase CO emissions as compared to the start year.

In the TAPA, the federal standard for CO was attained in 1990. Therefore, the TIP projects are not expected to contribute to any new violation of the CO NAAQS or delay any required emission reductions.

The PAG Regional Council and the U.S. Department of Transportation made a conformity determination for the 2045 RMAP in 2016. It was found to be in conformity with the SIP following procedures outlined in the federal transportation conformity rule (40 CFR Part 93) and the State of Arizona conformity rule (R18-2-1401 et seq.). Under the CO LMP, regional emissions analysis for CO is not required in determining conformity of transportation plans and programs in the TAPA but serves as a guide to the region for future air quality planning. Monitored CO levels continue to remain well below the EPA health standards and, as outlined in the CO LMP, transportation control measures continue to be implemented. In summary, approval of this document by PAG's Regional Council finds that the TIP and all projects contained within are in conformity with the applicable implementation plan, the Arizona SIP.

CHAPTER 7: TRANSIT

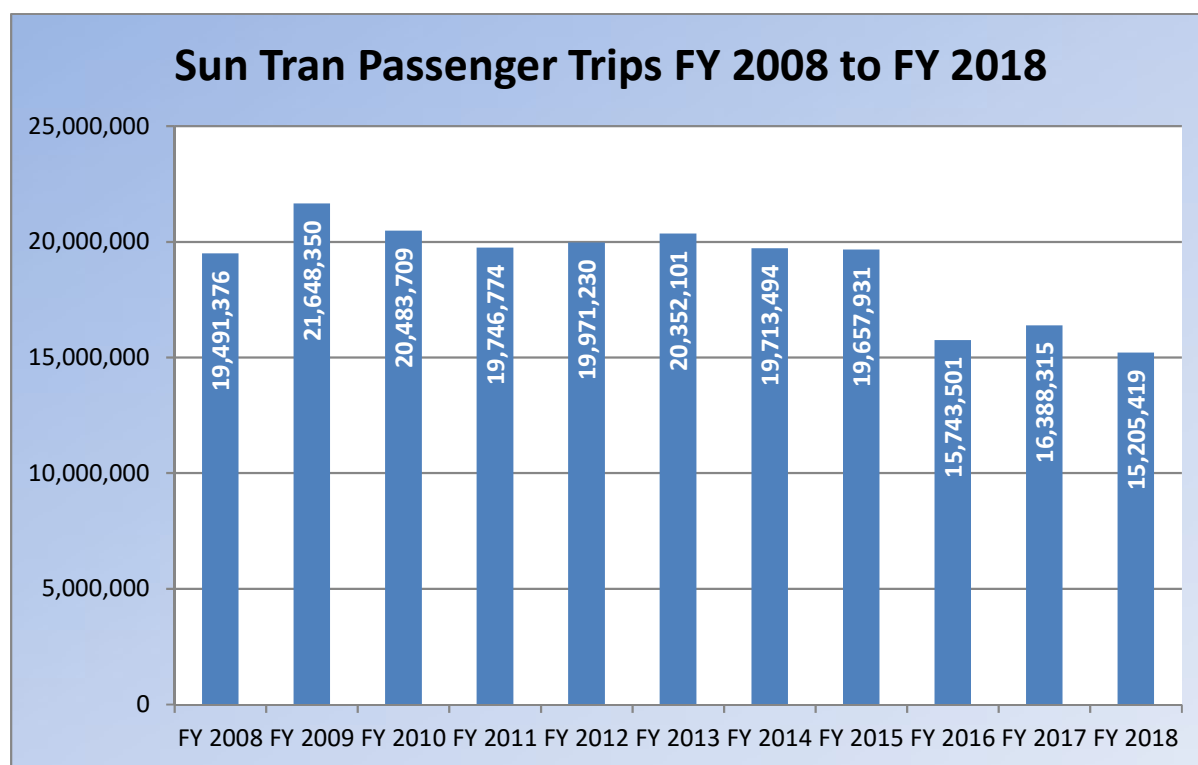
SUN TRAN

Overview

Sun Tran, with a fleet of 238 buses, provides fixed-route transit service within the City of Tucson, and through intergovernmental agreements, delivers service into Pima County, the City of South Tucson, the Town of Marana, the Town of Oro Valley, the Tohono O'odham Nation, and the Pascua Yaqui Tribe. The system's 41 fixed routes cover a 296-square-mile area.

In FY 2018, the Sun Tran system provided 15,205,419 passenger trips, a 7.2% decrease from FY 2017 (16,388,315 passenger trips).

Figure 7-1: Sun Tran Passenger Trips by Fiscal Year



Use of RTA Funds to Improve Transit Services

It is a challenge for transit service providers to fund major service improvements with a fixed budget. Transit service expansion in the Tucson region became a reality in 2006, when Pima County voters elected to enact a half-cent sales tax to fund transportation improvements. Through FY 2026, the Regional Transportation Authority (RTA) plan earmarks nearly \$533 million for transit enhancements, including expanded hours of service, new service areas, greater weekday frequencies, more express service, fleet expansion, and the launch of the Sun Link streetcar.

Sun Tran implemented the first fixed-route improvements funded by the RTA in the fall of 2006, when additional buses were deployed on key routes to relieve overcrowding and extended weeknight service to as late as midnight on 21 routes and implemented expanded weekend service hours on 23 routes.

To offer commuters an alternative during construction on I-10, the Arizona Department of Transportation (ADOT) provided funding for Sun Tran to implement an express route from the Town of Marana to downtown Tucson in May 2007. Originally identified as a project in the RTA Plan's Transit Element, ADOT's resources enabled Sun Tran to accelerate implementation of the service. Additionally, Sun Tran worked with the Town of Marana to secure a Park and Ride lot for commuters.

In 2009, the RTA-funded fleet expansion enabled Sun Tran to launch three express routes serving the Town of Oro Valley and Rita Ranch to downtown Tucson (Routes 107X and 110X, respectively), and from the Town of Oro Valley to the Aero Park area where Raytheon and Bombardier are located (Route 203X). Several new Park-and-Ride lots were established and additional trips were added to existing express routes serving Northwest Tucson (103X) and the Foothills area (105X) to better meet passenger needs. Construction was completed on Phases I and II for the Northwest Bus Storage and Maintenance facility designed to accommodate an additional 150 buses.

In 2010, RTA funding provided additional trips for express routes 109X and 110X, which run from the Catalina Highway to downtown and Rita Ranch to downtown, as previously noted.

In 2011, Sun Tran completed construction on Phase III of the Northwest Bus Storage and Maintenance facility, expanding it to include an administration building, bus storage for up to 250 buses and the expansion of the maintenance building to accommodate the entire fleet. Currently, Sun Tran deploys half of its fleet out of this facility and the other half of the fleet is deployed out of the Park Avenue location.

In 2013, bus frequency was improved on Routes 7 and 16, making wait times shorter for passengers.

In 2015, the Broadway/Houghton Park and Ride opened, providing a transit hub on the eastside and serving Routes 4, 8, and 108X. To further evaluate potential transit improvements, a Comprehensive Operational Analysis (COA) was completed in 2013 to evaluate all transit routes within the region. The COA was an in-depth study designed to identify strengths and weaknesses of the transit system. The COA included specific recommendations toward the continual improvement of the Sun Tran, Sun Express, and Sun Shuttle transit services.

In 2015, the Frequent Transit Network (FTN) was expanded and improvements were made to bus stops. The FTN is composed of routes that offer service every 15 minutes or less on weekdays from 6 a.m. to 6 p.m. Sun Tran added two routes to the FTN, Route 7 and Route 34, and extended Route 9 to Pima Community College West Campus.

In 2018, Route 2 was redirected to travel on Cherrybell Stravenue to serve the El Rio Health Center. In 2019, Route 15 was extended along Kino Parkway to the Tucson Marketplace.

Environmental Commitment

Sun Tran demonstrates its commitment to environmental stewardship in many ways, including use of clean-fuel technologies and effective operational management of environmental impacts. A significant achievement was reached in 2007 when Sun Tran converted its remaining diesel vehicles to use biodiesel fuel, creating an entire fleet of buses that run on cleaner-burning fuel technologies.

Sun Tran placed its first hybrid electric bus into service in 2010 to further demonstrate a strong commitment to the importance

of our environment. Ten more hybrid-electric buses were purchased in 2015.

Currently, 167 buses run on biodiesel, which emit significantly fewer particulates than traditional diesel-fueled vehicles. Another 68 buses are fueled by compressed natural gas, and 11 utilize hybrid-electric technology.

Focus on the Customer

One of the goals of the RTA was realized in January 2009 with the introduction of a regional seamless transit system. Components of the regional system were phased in, like creating the “Sun” family of names and corresponding brand for all regional transit vehicles.

As part of this process, consolidated customer information for the seamless system was developed. Elements included a website featuring trip planning, schedules, maps and fare information, plus a single customer service center with one phone number. To further enhance the ease of riding the regional system, the RTA made Sun Shuttle neighborhood circulator fares mirror those of Sun Tran.

New bus stop signage was installed in July 2017 to provide improved information about the integrated system and service connection information. All existing Sun Tran bus stop signs (approx. 2,200 stops) were replaced with new updated signs that included the updated Sun Tran logo, route numbers providing service to each location, and the bus stop number which allows passengers to use online trip planning.

Advanced Technology

Sun Tran is committed to utilizing technologies that boost customer satisfaction, improve efficiency, and increase safety. Sun Tran’s website features navigation, online trip-planning and accessibility for users with visual disabilities. Sun Tran updated the live bus tracking system to enable passengers to receive up-to-the-minute information about their bus. Also available online is the ability for developers to access General Transit Feed Specification (GTFS) data to create additional web applications to benefit passengers. To date, there are four known mobile apps, such as Google Transit, developed by outside organizations and available for use in addition to the official Sun Tran app.

The SunGO fare payment system, funded by the RTA, introduced the “smart card” fare payment system in 2013. The SunGO system, used on Sun Tran, Sun Express, select Sun Shuttle routes, and the Sun Link streetcar, has simplified the process of transferring from one transit vehicle to another.

In 2015, Sun Tran launched the GoTucson mobile app, which allows individuals to pay their transit fare from their smart phone. This app is accepted on Sun Tran, Sun Express, Sun Link, and select Sun Shuttle routes. Passengers board their transit vehicle and show the bus operator or fare enforcement officer their active pass on their phone. In 2017, Sun Tran updated and renamed the mobile app to GoTucson Transit. The updates improved usability and the user experience by splitting the app into a single functionality for a streamlined system, simpler interface, and quicker response time.

In 2017, Sun Tran improved its transfer policy by providing two hours of travel time in any direction with a valid transfer. Sun Tran also introduced two promotional programs to allow riders to save when they use a SunGO Card: The \$25 for \$20 program and the free SunGO Card with registration. Passengers who load \$20 in value on their registered SunGO Card will receive an additional \$5 value added. And riders who register a SunGO Card will recoup their \$2 purchase cost for the SunGO Card.

In 2017, Sun Tran also brought back the Annual SunGO Pass which provides unlimited rides on Sun Tran, Sun Link, and select Sun Shuttle routes for 365 days once activated on a transit vehicle.

In 2018, the SummerGO Youth Pass program continued for its fourth year, in which the pass provides unlimited rides on public transit throughout the summer for kids ages 6 to 18.

A new 3-Day Pass was approved by Mayor and Council in 2018 in order to offer additional fare payment options to passengers. The 3-Day Pass provides passengers unlimited rides on Sun Tran, Sun Link, and select Sun Shuttle routes for 72 consecutive hours once activated on a transit vehicle.

Sun Tran also utilizes high-visibility LED signs which display an individual route's scheduled departure times in each bus bay at transit centers. Airport-style plasma signage is mounted in information booths indicating departure times for all routes. Sun Tran's entire fleet is equipped with Computer Aided Dispatching/Automatic Vehicle Locator systems (CAD/AVL). This technology facilitates management of transit operations, providing up-to-date information on vehicle locations and schedule adherence. Each bus contains an automated fare collection system, allowing Sun Tran to maximize passenger revenue and ensure accurate rider counts. Other software systems implemented by Sun Tran maximize efficiency by assisting with scheduling, maintenance, customer information, and operations functions.

Customer service representatives utilize the Trapeze COM Module to log customer feedback. With streamlined management of feedback, customers benefit by receiving improved response time in complaint resolution.

Operator and passenger security have also been a priority for Sun Tran. All vehicles contain digital video recorders, and each transit center is equipped with multiple cameras to monitor activity. On the buses, CAD/AVL technology enables operators to trigger a silent alarm system, alerting dispatch if an emergency arises on board.

Sun Tran currently has 71 driver safety partitions installed on buses, and 23 buses have on-board video screens. As additional funds become available, more buses will be equipped with partitions and video screens. It is anticipated that most of the Sun Tran fleet will be equipped with driver safety partitions and video screens by FY 2022.

Enhanced Amenities

In 2014, improvements were made at the Tohono Tadaí Transit Center, upgrading kiosks to display trip information. In 2015, upgrades were made at the Ronstadt Transit Center, including brick pavers, fencing, additional security cameras for added safety, as well as new bay signage, benches and trash cans. In 2018, Sun Tran installed new information kiosks at Laos Transit Center.

In 2018, Sun Tran partnered with Tucson area attractions such as the Reid Park Zoo, the UA, and the Tucson Botanical Gardens to create posters for the Transit Centers that feature each attraction. The posters also show which Sun Tran routes passengers can use to get to these attractions. New bus bay maps and transit center decals, located in the information kiosk, were posted to help passengers find transit information more easily. Upgraded decals were also installed on the ticket vending machines to assist passengers with ticket and pass purchases.

Smoking is now prohibited at all three Tucson transit centers and information booths were re-opened at the Ronstadt and Laos transit centers to assist passengers.

Several other transit amenities have been added to attract riders to the system. Sun Tran developed Park and Ride lots at Broadway/Houghton, Rita Ranch, Oro Valley, and Casino del Sol, all designed to encourage more transit ridership from the outlying communities.

Through a contract with AdVision Outdoor, the City of Tucson oversees maintenance of approximately 2,200 bus stops, and

hundreds of bus shelters, benches, and trash cans throughout greater Tucson. To date, a total of 1,020 shelters and 770 benches have been installed in the City of Tucson, the City of South Tucson, Town of Marana, and unincorporated Pima County. Approximately half of those shelters and benches generate advertising revenue which covers the cost for routine bus stop maintenance.

The City of Tucson also purchases and installs new bus shelters using a combination of local and federal funds from the Federal Transit Administration (FTA) and United States Department of Housing and Urban Development (HUD) programs as well as Tohono O'odham gaming grants when they become available. Each year, approximately \$150,000 a year of FTA Associated Transit Improvement funds are used to implement the basic Americans with Disabilities Act (ADA) bus stop improvements and repairs.

In 2017, 123 Sun Tran bus shelters were refurbished, and five new shelters were installed at bus stop locations throughout Tucson. The shelter refurbishments included new metal screens, benches, and new paint. The improvements made each shelter fully accessible to wheelchair users in compliance with the ADA.

The RTA also provided several bus shelters as part of the RTA bus pullout program. To date, the RTA has completed 128 bus pullout projects throughout the region, meeting ADA standards with basic amenities and connections to adjacent sidewalks.

In September 2018, Sun Tran introduced a 60-foot articulated bus to its service fleet. This is the first articulated bus utilized by Sun Tran. The articulated bus serves Route 18, a route with high ridership.

The RTA, in partnership with the City of Tucson, has conducted an on-board passenger survey in 2015 and 2019 on all Sun Tran, Sun Express, Sun Shuttle, and Sun Link routes in the region. The onboard survey collected passenger trip information to understand how people use transit when traveling throughout the Tucson region. Sun Tran, the City of Tucson, and the RTA will use the survey data to make improvements to the transit service.

Commuters can take their bicycles on Sun Tran vehicles at no additional charge. Each vehicle is equipped with a bike rack, and folding bicycles are accommodated on board. Rental bike lockers are available for five dollars per month at three of the Park and Ride lots and other select bus stop locations. In 2018, Sun Tran began replacing two-position bike racks with three-position racks to improve the rider experience.

Keeping Community Ties

Sun Tran is an integral and necessary part of the Tucson community. The organization continues its long-standing associations with businesses, social service organizations, schools, and other governmental bodies.

Promoting the system through a variety of events continues to strengthen Sun Tran's image in the region. Most notably, the name "Sun Tran" is synonymous with the "Stuff-the-Bus" donation drives. A highly visible community-relations effort, these campaigns generate tremendous media exposure, foster partnerships, and enhance Sun Tran's public image in the community. Since the first event in 2001, Sun Tran has helped to collect 230,000 pounds of food, \$150,000 in cash donations, and 176,000 toys and household items to benefit various organizations.

The UA offers subsidized transit passes to students, faculty and staff through the U-Pass program. Sun Tran and the UA have encouraged the use of alternate modes through a successful partnership. In 2015, a promotional campaign was launched to promote the use of the GoTucson mobile app as a way to purchase the discounted passes.

Through Sun Tran's commuter pass program, Get on Board, 50 Tucson employers including most governmental employers offer reduced-cost transit passes as an employee benefit.

Sun Tran has implemented new programs designed to encourage ridership. The Bulk Sales incentive program allows organizations or groups to purchase SunGO tickets at a discount for special events. Sun Tran is currently looking for schools, employers, and multi-housing communities to participate in the Universal Access pilot program. In the Universal Access pilot program, the organization pays a deeply-discounted fixed amount in order to provide their entire populations full-ridership access to the transit system. Universal Access consists of an employer or other entity paying a predetermined annual contribution in exchange for all participants to ride transit at no fare. This concept has been successful with universities and employers in other parts of the country. The lack of cost to the rider and ease of access results in a far greater percent of the participant group using transit.

Sun Tran also strives to build strong partnerships with persons with disabilities. All of Sun Tran's fleet is low-floor and wheelchair accessible, which eliminates the need for wheelchair lifts, using instead a ramp to facilitate the movement of persons with disabilities onto or off the bus. To enhance service for persons with visual disabilities, all of Sun Tran's buses provide automatic interior and exterior announcements.

With ongoing outreach and education efforts, Sun Tran's long-term relationship with its passengers with disabilities has continued to develop. Free mobility training is offered through the Sun Tran Accessible Rider Training (START) program. Designed to help individuals with disabilities and seniors, these training sessions assist persons with special needs to utilize fixed route services with greater ease and confidence.

SUN VAN

Overview

With approximately 250 employees, Sun Van provides paratransit service to the Tucson metropolitan area, portions of Pima County, and the City of South Tucson. Sun Van has a fleet of 137 vehicles, which includes 118 cut-a-way vans, as well as 9 accessible minivans and 10 sedans to transport ambulatory passengers.

Sun Van meets the standards set by the ADA by providing demand-responsive public paratransit service for those individuals who, because of their disability, are unable to ride Sun Tran.

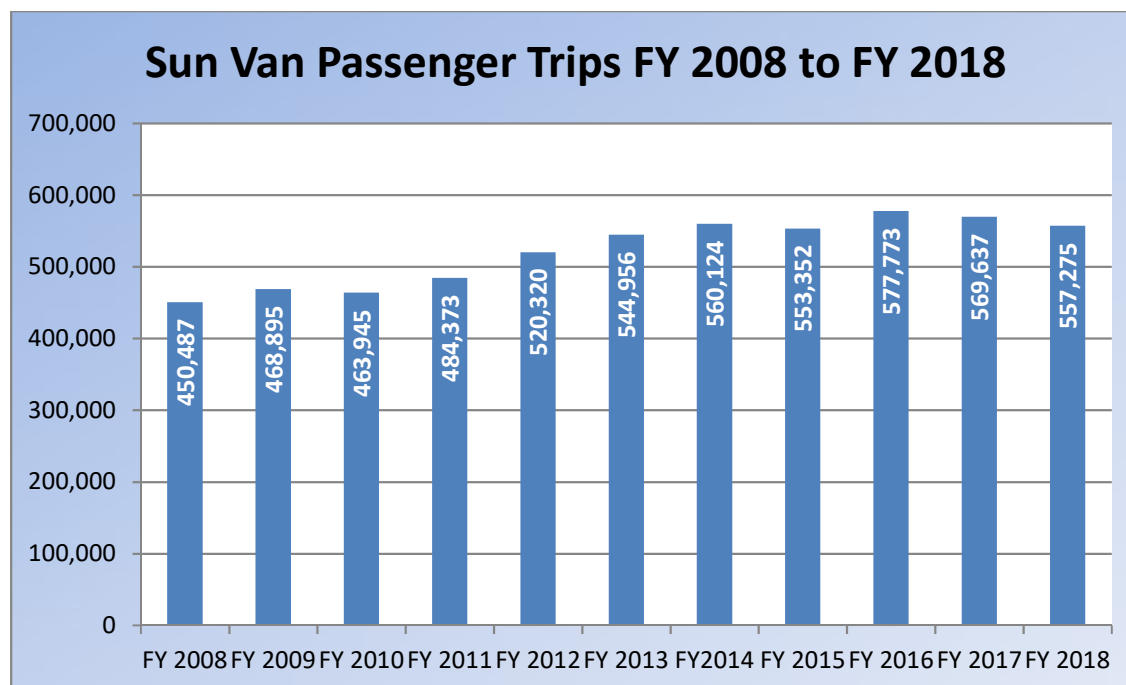
Sun Van's service area includes points within three-quarters of a mile along each Sun Tran fixed route, excluding express routes, during the days and times that Sun Tran routes operate.

Sun Van also provides Optional ADA Service for trips beyond the three-quarters of a mile service area or beyond the hours of operation for nearby fixed route service for Sun Tran, Sun Link and Sun Shuttle Route 450.

Ridership Trends

Sun Van's ridership has seen a slight decrease, demonstrating a 2.2 percent decrease from FY 2017 to FY 2018. Sun Van revenues have increased 17.1 percent from FY 2017 to FY 2018.

Figure 7-2: Sun Van Passenger Trips by Fiscal Year



Sun Van's greatest challenge will be funding service to meet changing demand. In FY 2018, the cost per trip was \$30.45, which is an increase of \$3.64 per trip from the previous year, and increased demand can cost the system significantly.

Environmental Commitment & Technology

The use of minivans and sedans has been implemented to improve system efficiency when full-sized Sun Van vehicles are not necessary. Sun Van is also widely recognized as an industry leader in paratransit technology. Like Sun Tran, Sun Van's entire fleet is equipped with global positioning systems. Other software systems that maximize system efficiency include Trapeze, Transit Master, and Crystal Reports.

Sun Van received recognition for a partnership with Trapeze Software Inc. Sun Van helped develop software that provides trip alternatives that fit within the ADA guidelines, and ensures complete and accurate measurement against the comparable fixed route system without added personnel time or cost to perform the comparison. Sun Van is viewed as a leader with the project, with other paratransit systems now utilizing this module as well. Sun Van utilizes a voucherless fare payment system, which allows for automatic deduction from the passenger's account when a trip is scheduled.

SUN LINK STREETCAR

Overview

The Sun Link streetcar service launched in 2014 and provides service seven days a week to five of Tucson's key entertainment districts, including the Mercado District, Downtown Tucson, Fourth Avenue, Main Gate Square, and the University of Arizona.

The \$196 million project was part of the 20-year RTA plan and was funded by multiple sources, with the RTA being the single largest contributor. Funding partners included: RTA (\$75 million), FTA through a Transportation and Infrastructure Generating Economic Recovery (TIGER) grant (\$63 million), New Starts federal grant (\$6 million) and other regional and local funding (\$9 million).

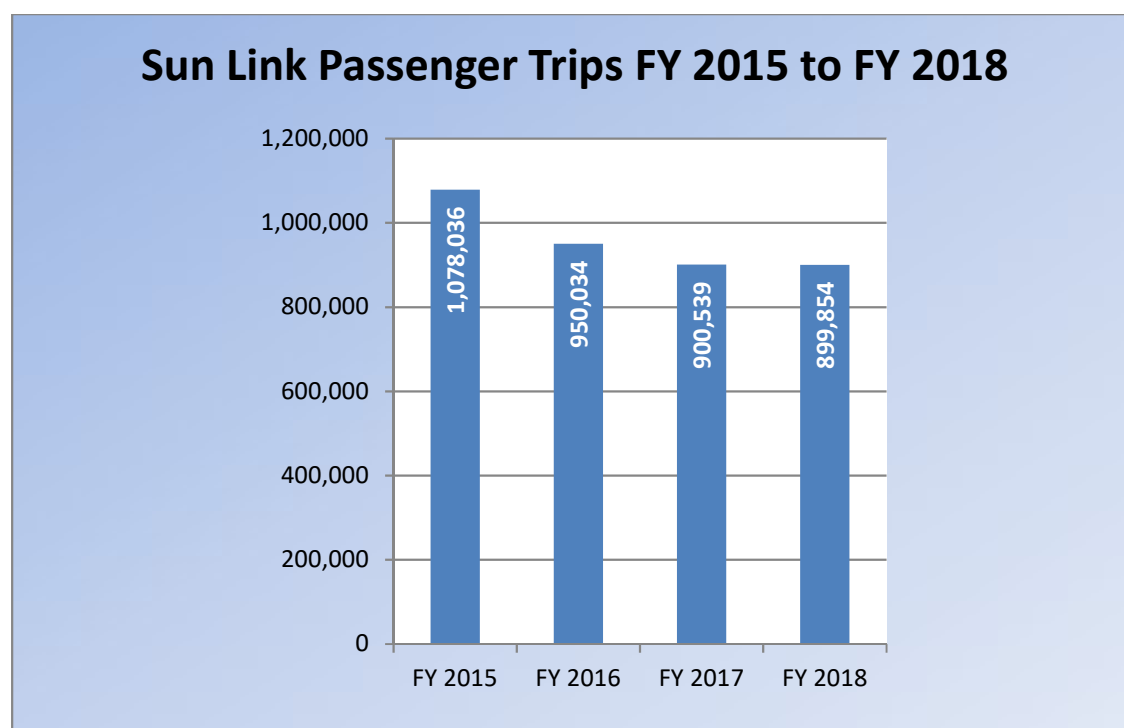
Sun Link operates along a 4-mile route, has a fleet size of eight streetcars, and has 35 employees.

Ridership Trends

Since launching in 2014, ridership has exceeded pre-launch projections with an average daily ridership of approximately 4,000 passenger trips provided. In the first year of service, Sun Link provided 1.1 million passenger trips, with that number at 950,034 passenger trips in FY 2016. This change is attributed to the 42-day Sun Tran strike.

In FY 2018, Sun Link ridership recorded 899,854 passenger trips, a .01% decrease from FY 2017 (900,539 passenger trips).

Figure 7-3: Sun Link Passenger Trips by Fiscal Year



Focus on the Customer

Since Sun Link passengers are not able to pay on board with cash and must have a SunGO Card or ticket loaded with a pass or cash value to ride, or an active pass on their smart phone using the GoTucson Transit mobile app. Ticket vending machines are located at each streetcar stop for easy access to a 1-Day SunGO Ticket. Additional sales outlets along the streetcar line are available and are continuing to be pursued to provide additional locations to purchase SunGO products other than the 1-Day Ticket.

Passenger promotions and information have been developed, with a special focus on events in the five entertainment districts to promote the use of transit in general, but with a larger focus on encouraging the use of the streetcar. Marketing efforts to encourage ridership for the Tucson Gem & Mineral Show, Festival of Books, 4th Avenue Street Fair, University of Arizona sporting events, and numerous events along the route are done to enhance ridership. In addition, Sun Link has collaborated with organizations including the Tucson Roadrunners, DUSK Music Festival and Downtown Tucson Partnership to provide Free Ride events on the streetcar. Multiple live concerts have been performed on board the streetcar in partnership with special community events, such as the Tucson Jazz Festival.

In partnership with the City of Tucson, Sun Link, Sun Tran, and PAG/RTA, other events have been implemented at times when ridership would be expected to decrease during the holidays or summer months. For example, Sun Link's 'Pueblo Express to Santa' was developed and implemented in partnership with KXCI Radio in 2014 to have Santa and carolers on board a streetcar to encourage ridership. Also, a shop local event was promoted to encourage travel on the streetcar on the Saturday after Thanksgiving.

With increased student activity while the UA is in session, Sun Link offers late-night weekend service until 2:00 a.m. on Thursday, Friday, and Saturday nights to help meet demand.

SUN SHUTTLE

Overview

In 2009, with funding provided by the RTA, Sun Shuttle launched neighborhood fixed-route transit services in the Town of Marana, the Town of Oro Valley, Catalina, the Town of Sahuarita and Green Valley. In 2009, the RTA assumed operations of Pima County Rural Transit (PCRT) routes in San Xavier, Tucson Estates and the Town of Marana. In 2012, a new Sun Shuttle route was launched serving Southeast Tucson and Rita Ranch. Sun Shuttle routes offer transportation to passengers within their own community and connections to Sun Tran and Sun Link services, providing an important link to the Tucson metropolitan area from the rural and suburban communities.

Additional services offered by the RTA include the Ajo-Tucson connector, operating as Sun Shuttle Route 486, and the Ajo/Why dial-a-ride services, both formerly operated by PCRT. The RTA, through a local contractor, also provides ADA transit services under the Sun Shuttle Dial-a-Ride brand. Dial-a-Ride transit services are available to ADA certified customers located inside the Dial-a-Ride service area, but outside of the Sun Van service area.

Historically, the RTA Transit Working Group and RTA Board have favored aligning Sun Shuttle fare rates with rates adopted by Sun Tran and Sun Van in order to create a seamless regional transit system.

Dial-a-Ride Services

The Sun Shuttle General Public Dial-a-Ride service areas function as a demand response service more appropriate to the needs of customers in the Town of Oro Valley and Green Valley/Sahuarita. In 2011, the Town of Oro Valley's Coyote Run service merged with the regional transit system as part of Sun Shuttle Dial-a-Ride. This merger was cost neutral for the RTA as it removed duplicate optional ADA trips, which were formally being provided by an outside contractor. The merger also provided greater operational efficiencies for the Town of Oro Valley, which helped the Town sustain its senior transit services. In 2015, the Green Valley/Sahuarita Dial-a-Ride service area was expanded to include the Green Valley Hospital. In 2016, an additional stop was added to Route 486 to allow customers to make connections at the Greyhound Terminal in downtown Tucson.

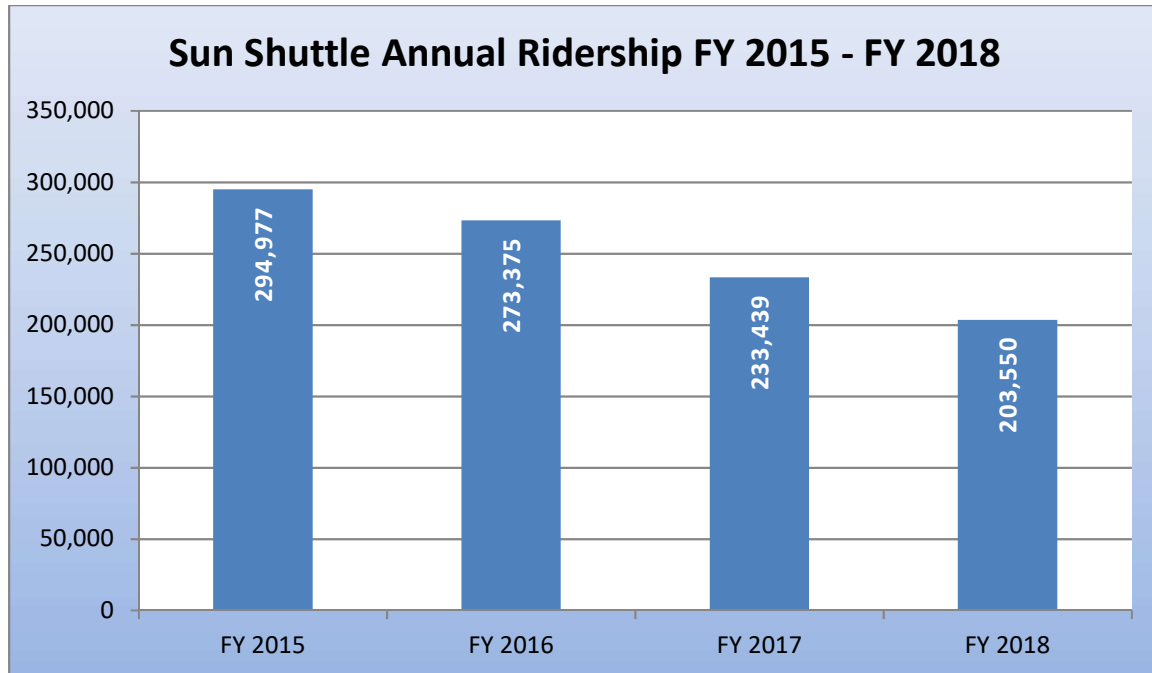
Ridership

Ridership on Sun Shuttle has experienced a decrease since FY 2015 even though service continues to mature on several routes. Total ridership on fixed-routes and general public dial-a-ride services for FY 2018 was 203,550 trips, a 12.3 percent decrease from 233,439 trips in FY 2017.

Though most routes continue to perform to expectations, the RTA will continue to respond to underperforming services and make changes accordingly. Routes that provide direct connection from outlying areas to one of the three main transit centers, routes that represent the only public transit available in an area, and routes that serve areas with higher transit dependent populations tend to have higher ridership overall. Regional branding, marketing and a focus on customer service have helped increase awareness and boost ridership. Schedules and routing are analyzed and adjusted to improve passenger convenience and productivity.

In 2018, the RTA Board approved changes to Sun Shuttle routes to improve service. Route 411 (Continental Ranch) was discontinued due to low ridership, and Route 412 (Thornydale/River) and Route 413 (Marana/I-10) expanded service to serve the Tucson Premium Outlets.

Figure 7-4: Sun Shuttle Passenger Trips by Fiscal Year



CHAPTER 8: PUBLIC INVOLVEMENT

OVERVIEW

Federal legislation [23 U.S.C. 134(i)(6)(A)] sets forth the parameters for the development of the TIP. This law specifies that:

Each metropolitan planning organization shall provide

- *Citizens;*
- *Affected public agencies;*
- *Representatives of transportation agency employees;*
- *Public Ports*
- *Freight shippers;*
- *Providers of freight transportation services;*
- *Private providers of transportation;*
- *Representatives of users of public transit;*
- *Representatives of users of pedestrian walkways and bicycle transportation facilities*
- *Representatives of the disabled; and*
- *Other interested parties*

with a reasonable opportunity to comment on the proposed program.

The primary PAG-sponsored events for regional public involvement in the development of the FY 2020–2024 TIP were three open houses and the 30-day public comment period. The open houses provided the public with an opportunity to review the candidate list of projects for the proposed TIP, speak with jurisdiction representatives about the projects, and submit written comments; and the 30-day public comment period extended the opportunity to the public to thoroughly review the program on their own and to provide comments. Other opportunities for public involvement were provided through PAG's web site (www.PAGregion.com) and TPC meetings, which are open to the public.

The public notice of public involvement activities and time established for public review and comments on the TIP will satisfy the Federal Transit Administration–required Program of Projects (POP).

Three open houses were held to solicit public comment. The first open house was held on March 26 at the Randolph Golf Club House in central Tucson. The second open house was held on March 27 at the Wheeler Taft Abbett Library in Marana. The third open house was March 29 at the Joyner Green Valley Library in Green Valley. Two of the facilities were accessible by public transportation (Wheeler Taft Abbett Library and Randolph Clubhouse) and all had ample parking. Approximately 27 people attended the open houses with 9 of these indicating they work in the transportation field. A total of two TIP comment sheets were submitted. The comment sheets solicited input on the proposed TIP, project impacts and priorities for selecting projects. Verbatim comments on the proposed TIP and the tabulated results of the rating scale survey questions are included in a separate public involvement report.

The TIP display at the open houses featured large boarded maps of TIP projects and Title VI analysis, along with boarded displays on regional transportation funding sources, how to read the TIP projects document, and common acronyms and funding sources in

order to interpret the TIP projects document. PAG also provided the public with candidate project listings by jurisdiction or agency; background information about the TIP, and other related information, as well as the TIP public comment form. Transportation professionals from PAG member jurisdictions and the Regional Transportation Authority (RTA) were available to talk one-on-one with members of the public in attendance regarding TIP projects.

The TIP open houses were widely publicized in print and electronic media (see Appendix 5). The open houses were advertised through the Arizona Daily Star's website, in both the Star's English and Spanish print editions on Sunday, March 24, 2019. In addition, the open houses were promoted on PAG's website. A 2020-2024 TIP Web page featured the candidate project list, an online public comment form and information about the TIP planning process.

Following the open houses, TIP survey results were compiled and analyzed. This documentation was transmitted to the TPC for consideration in the development of final recommendations for project selection. Jurisdictions also had the opportunity to develop written response to the comments received. These responses were displayed on PAG's website.

A 30-day final notice for public comment was published in the Arizona Daily Star on April 18, 2019, with the comment period starting on April 18, 2019, and ending May 22, 2019, in preparation for the May 23, 2019, Regional Council meeting considering the final TIP for adoption.

In addition to the PAG regional public participation process, the individual PAG jurisdictions also conduct public involvement activities which feed into the development of the regional TIP. Most jurisdictions conduct public participation efforts in conjunction with the development of their Capital Improvement Programs (CIP) prior to beginning the regional TIP development process. Jurisdictional recommendations for projects to be included in the candidate TIP project list are typically based on these CIP processes.

Pima Association of Governments
1 E. Broadway, Suite 401, Tucson, AZ 85701
Regional Transportation Programming Open House
March 2019

Proposed FY 2020-2024 Transportation Improvement Program (TIP)

The region's leaders want to know what you think about proposed transportation projects for the FY 2020-2024 Transportation Improvement Program (TIP). Please take a moment to review the maps and/or lists of proposed TIP projects, or talk to a transportation professional, and then, please answer the questions below.

1. What specific comments do you have about the projects selected for the proposed FY 2020-2024 Transportation Improvement Program?

2. In what way do you feel the proposed FY 2020-2024 TIP project(s) might affect you or your immediate neighborhood either positively or negatively?

3. Federal regulations require that the TIP be fiscally constrained. In other words, the cost of the projects cannot exceed the available funding. Appendix 3 contains the fiscal constraint analysis for the TIP. Please provide any comments or questions you have regarding this analysis.

4. Please provide any other comments or questions you may have regarding the proposed FY 2020-2024 TIP or TIP planning process.

5. Given the region's limited funding for transportation, please rate the relative importance of the following factors if you were making decisions about which transportation projects to fund in the next five years:

Factors for project selection	Please select one for each Factor: 1= Most Important 5=Least Important		Factors for project selection	Please select one for each Factor: 1= Most Important 5=Least Important
Improve safety	1 2 3 4 5		Provide air quality benefits	1 2 3 4 5
Maintain and preserve the existing transportation infrastructure	1 2 3 4 5		Widen roads to gain more capacity from the existing system	1 2 3 4 5
Support economic development efforts by improving movement of goods/services and access to jobs, businesses and/or commercial areas	1 2 3 4 5		Provide opportunities for alternative modes of transportation such as transit, bicycling, walking or ridesharing	1 2 3 4 5
Relieve congestion	1 2 3 4 5		Provide improvements that benefit the greatest number of people	1 2 3 4 5
Use new technology to gain more capacity from the existing system	1 2 3 4 5		Solve major problems on a regional level	1 2 3 4 5

ADDITIONAL INFORMATION		
Please provide your five-digit ZIP code (home):		
Do you work in transportation planning?	Yes	No
Did you find the information you expected at this Open House?	Yes	No
Did you receive adequate answers to your questions?	Yes	No
Can you suggest ways we might improve the Open House next year?		

Completed Comment Forms can be mailed or e-mailed to:
Pima Association of Governments
Attn: Nathan Barrett (nbarrett@pagregion.com)
1 E. Broadway, Suite 401, Tucson, AZ 85701



Thank you for your comments!

APPENDIX 1

FY 2020-2024

Project Listing

APPENDIX 1 - FY 2020 - 2024 TIP TABLES

The tables on the following pages present PAG's Regional TIP for the five-year period beginning in FY 2020 and ending with FY 2024. Project priorities are indicated by the year during which the project is programmed to utilize the designated funds. For federally funded projects, the year programmed refers to the federal fiscal year ending Sept. 30. For state and locally funded projects from sources other than federal, the year programmed refers to the fiscal year ending June 30.

The TIP includes federally funded transportation system improvements (highways, transit, airports, etc.) and any non-federally funded transportation system improvements that are of regional significance. The project sponsor is the agency responsible for implementation and is identified with each project. The tables present information in columns that cover the following:

1. TIP ID: Each project has a project ID number that is used to identify the projects in the text and on any reference maps.
2. Project Name: Each project is identified by its location and beginning and ending points, where applicable.
3. Project Description: The general scope of each project is described.
4. Length: The length of the project in miles, where applicable.
5. Total Cost: The total cost of the project including studies, design and construction in thousands of dollars.
6. Yearly Costs: Costs associated with the project in the years one to five as applicable in thousands of dollars.
7. Phase: Phase indicates whether the funds are programmed for Study, (D) Design, (R) Right of Way, or (C) Construction
8. Funding Source: The funding source or sources. Funding source acronyms are listed in Appendix 3.

* Unless otherwise designated, the funding ratio for federal projects is assumed to be 94.3 percent federal and 5.7 percent local match. Transit projects are 80 percent federal and 20 percent local match unless otherwise shown. These ratios conform to historical ratios.

The project costs in this section are expressed in thousands of dollars. So, for example, a listing of 1,200, actually means a project cost of \$1,200,000. When project cost amounts are rolled from one fiscal year to the next, as happens when a project programmed for the current fiscal year does not expend all the funds programmed for it during that year, then listed TIP amounts are rounded to the nearest thousand.

Pima Association of Governments FY 2020-2024 TIP Projects

Approved

Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
87.06	20__ 2.8 0 0	Barraza Aviation Pkwy Extension Palo Verde to I-10 Extend parkway to I-10 - RW only AQ STATUS = Exempt Total Cost = 177936				5335 STP D 320 STMatch D	14265 STP R 856 STMatch R
The sponsor of this project is: ADOT							
49.16		I-10: Ajo, Irvington / Palo Verde Bridge Rehab I-10: various bridges bridge rehab AQ STATUS = Total Cost = 300 Undetermined	1200 ADOT-SUBC				
The sponsor of this project is: ADOT							
74.07	0.0 0 0	I-10: Country Club TI Construct TI AQ STATUS = Analyzed Total Cost = 50000			8000 ASTP D 484 STMatch D		
The sponsor of this project is: ADOT							
753.00 29302	0.0 0 0	I-10: East Corridor DCR I-19 East to Kolb Road Corridor DCR AQ STATUS = Exempt Total Cost = 5000	142 HURF26 D				
The sponsor of this project is: ADOT							
37.13 H8887		I-10: Houghton TI I-10 interchange at Houghton Rd. Traffic Interchange at Houghton Rd. AQ STATUS = Analyzed Total Cost = 35000	2114 ASTP C 128 STMatch C	37245 ASTP C 2251 STMatch C			
The sponsor of this project is: ADOT							
3.02 H8479 NH-010-D (216)S	06__ 1.5 0 0	I-10: Ina Rd TI Ina Rd TI @ I-10 Reconstruct TI and construct RR overpass AQ STATUS = Analyzed Total Cost = 128730	4365 STP PM T -14765 RTA RE V 10400 ASTP PM T 323 HURF26 C	4584 STP PM T -4584 RTAX RE V			
The sponsor of this project is: ADOT							

Pima Association of Governments FY 2020-2024 TIP Projects

Approved

Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
30.16	09_b	I-10: Ina Rd to Ruthrauff Rd I-10: Ina Rd to Ruthrauff Rd Widen I-10 AQ STATUS = Analyzed Total Cost = 144125	3704 ASTP D 224 STMatch D	10245 ASTP D 9681 STP D 15000 ASTP U 620 STMatch D 586 STMatch D 907 STMatch U	14765 STP C 60978 ASTP C 893 STMatch C 3686 STMatch C		
The sponsor of this project is: ADOT							
39.13		I-10: Kino TI I-10 at Kino Rd. Traffic Interchange at Kino Rd. AQ STATUS = Analyzed Total Cost = 35000		1914 ASTP U 4000 HURF26 D	2086 ASTP D		
The sponsor of this project is: ADOT							
94.02	1.8 6 8	I-10: Prince to Ruthrauff Prince to Ruthrauff Widen to 8 lanes AQ STATUS = Analyzed Total Cost = 127000	700 HURF26 C				
The sponsor of this project is: ADOT							
5.12	09_a 0.0 H8480 NH-010-D (213)A	I-10: Ruthrauff Rd TI I-10 and Ruthrauff TI Improve Traffic Interchange at I-10 and Ruthrauff AQ STATUS = Analyzed Total Cost = 196914	86 RTA C 10996 HURF26 C 55946 ASTP C 10400 ASTP C -10400 ASTP PM T	14950 ASTP C			
The sponsor of this project is: ADOT							
52.14		I-10: Wilmot, Kolb, Rita, TI Signalization TIs on I-10 at Wilmot, Kolb, and Rita Signalization of TIs AQ STATUS = Exempt Total Cost = 3567	64 HURF26 C				
The sponsor of this project is: ADOT							
41.01	11207,2780 H8467 STP-019-A (220)S	I-19: Ajo TI Ajo Way New TI on Ajo Way AQ STATUS = Analyzed Total Cost = 92212	4181 HURF26 C				
The sponsor of this project is: ADOT							

Pima Association of Governments FY 2020-2024 TIP Projects

Approved

Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
44.16		I-19: Duval Mine to Pima Mine Pavement Pres I-19, from Duval Mine to Pima Mine Pavement Preservation AQ STATUS = Undetermined Total Cost = 16353	18000 ADOT-SUBC				
The sponsor of this project is: ADOT							
13.16		I-19: Helmet Peak Rd Bridge Rehab I-19: Near Helmet Peak Underpass Bridge Rehab AQ STATUS = Exempt Total Cost = 500	3100 ADOT-SUBC				
The sponsor of this project is: ADOT							
38.13	22_a	I-19: Irvington TI I-19 at Irvington Road Traffic Interchange at Irvington Rd. AQ STATUS = Analyzed Total Cost = 35000			6000 ASTP U 4000 ASTP D 363 STMatch U 242 STMatch D	9430 STP C 33600 ASTP C 570 STMatch C 2031 STMatch C	10000 ASTP C 605 STMatch C
The sponsor of this project is: ADOT							
65.09	0.0	Regional Traffic Operations Center Region wide Operation of RTOC AQ STATUS = Exempt Total Cost = 3060	179 HURF26 O				
SZ084 TUC-0(254)D	0						
The sponsor of this project is: ADOT							
1.16		SR 410: Sonoran Corridor Tier 1 EIS Sonoran Corridor Tier 1 EIS AQ STATUS = Exempt Total Cost = 3500	2052 HURF26 S				
The sponsor of this project is: ADOT							
35.15		SR 77: I-10 to River SR 77, from I-10 to River Road Pavement Pres, Sidewalks AQ STATUS = Exempt Total Cost = 12515	1000 HURF26 D				
The sponsor of this project is: ADOT							
50.14	41bd	SR 77: River to Calle Concordia Oracle Road: River Road to Calle Concordia Pavement preservation and sidewalk construction AQ STATUS = Exempt Total Cost = 26517	12432 ASTP C 11446 ADOT-SUBC 752 STMatch C 2532 HSIP C				
The sponsor of this project is: ADOT							

Tip ID SponsorID StateID FedID	RTAID Length ExistingLanes AfterLanes	STREET/PROJECT NAME LOCATION PROJECT DESCRIPTION AQ STATUS	PROPOSED FUNDING (IN THOUSANDS OF DOLLARS)				
			FISCAL YEAR				
			2020	2021	2022	2023	2024
11.02 H6694 STP-077-A (204)T	5.8 4 6	SR 77: Tangerine Rd to Pinal County Line Tangerine Rd to Pinal County Line Widen to 6 lanes AQ STATUS = Analyzed Total Cost = 36500	615 HURF26 C				
The sponsor of this project is: ADOT							
86.09 H6694-01-C	42_j 5.4 0 0	SR 77: Wildlife Crossing Structures Tangerine Rd to Pima County Line Construct Wildlife Crossings AQ STATUS = Exempt Total Cost = 11236	2391 RTA C				
The sponsor of this project is: ADOT							
47.06 H8469 STP-086-A (217)T	4.3 2 2	SR 86: Fresno Segment Widen to 40' AQ STATUS = Exempt Total Cost = 15145	12839 HURF26 C				
The sponsor of this project is: ADOT							
105.03 H8010 086-A-NFA	42_o 5.7 2 2	SR 86: Kitt Peak Rd Segment MP 132.8 to MP 137.1 Reconstruct & widen to 40' AQ STATUS = Exempt Total Cost = 11400	1360 HURF26 C				
The sponsor of this project is: ADOT							
48.16		SR 86: MP 88.25 to Quijota SR 86, milepost 88 replace 8 guardrails AQ STATUS = Total Cost = 448 Undetermined	900 ADOT-SUBC				
The sponsor of this project is: ADOT							
45.01 H8468 086-A(216)T	4.0 2 2	SR 86: San Isidro Rd. Segment MP 123.9 to MP 128.8 Reconstruct & widen to 40 ft. AQ STATUS = Exempt Total Cost = 11500	2315 HURF26 C				
The sponsor of this project is: ADOT							
2.02 H6806 STP-086-A (210)T	6.6 2 6	SR 86: Valencia Rd to Kinney Rd MP 159.5 to MP 166.1 Widen to 6 lanes AQ STATUS = Analyzed Total Cost = 78999	272 HURF26 C				
The sponsor of this project is: ADOT							

Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
64.12	42_n 0.0 0 0	Ina Rd Bridge Bat Boxes Ina Rd Bridge over the Santa Cruz Bat Condos for bats displaced by bridge rehabilitation AQ STATUS = Exempt Total Cost = 31	40 RTA S				
The sponsor of this project is: AZ Game & Fish							

Pima Association of Governments FY 2020-2024 TIP Projects

Approved

Tip ID SponsorID StateID FedID	RTAID Length ExistingLanes AfterLanes	STREET/PROJECT NAME LOCATION PROJECT DESCRIPTION AQ STATUS	PROPOSED FUNDING (IN THOUSANDS OF DOLLARS)				
			FISCAL YEAR				
			2020	2021	2022	2023	2024
22.16		Adonis Rd Extension Adonis Rd : Patton Rd to Tangerine Farms Rd Construction of new 2-lane roadway AQ STATUS = Exempt Total Cost = 2230	50 HURF126 S				
The sponsor of this project is: Marana							
51.12	0.0 0 0	Coachline: Silverbell North to Silverbell South Pvmnt Pres Coachline, from Silverbell North to Silverbell South Pavement reconstruction and drainage repair AQ STATUS = Exempt Total Cost = 3000	46 HURF126 C				
The sponsor of this project is: Marana							
5.09	0.0 0 0	Marana Airport Fire Protection Marana Regional Airport Fire Protection AQ STATUS = Exempt Total Cost = 1500		67 LOCAL C 67 SAF C 1365 FAA C			
The sponsor of this project is: Marana							
2.09	0.0 0 0	Marana Airport Land Acquisition for RPZ's Marana Airport Improvements AQ STATUS = Exempt Total Cost = 5250		228 LOCAL R 228 SAF R 4644 FAA R			
The sponsor of this project is: Marana							
38.12	0.0 0 0	Marana Airport Noise Study Marana Regional Airport Update part of Airport Noise Study AQ STATUS = Exempt Total Cost = 300		13 LOCAL S 13 SAF S 274 FAA S			
The sponsor of this project is: Marana							
39.12	0.0 0 0	Marana Airport Runway Extension Marana Regional Airport Runway extension AQ STATUS = Exempt Total Cost = 6200	15 LOCAL D 15 SAF D 320 FAA D	250 LOCAL C 250 SAF C 5000 FAA C			
The sponsor of this project is: Marana							
7.16		Marana Airport RWY 3121 & TWY B Extension Marana Airport Extension of runway and taxiway AQ STATUS = Exempt Total Cost = 300	13 LOCAL D 13 SAF D 274 FAA D				
The sponsor of this project is: Marana							

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Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
11.12	0.0 0 0	Marana Airport Taxiway C Reconstruction Marana Regional Airport Rehab Taxiway C and install MITLs AQ STATUS = Exempt Total Cost = 1525	50 LOCAL C 50 SAF C 1025 FAA C				
The sponsor of this project is: Marana							
14.12	0.0 0 0	Marana Airport Terminal Building Marana Regional Airport Construct a public use terminal building AQ STATUS = Exempt Total Cost = 8000	30 LOCAL D 30 SAF D 640 FAA D	300 LOCAL C 300 SAF C 6400 FAA C			
The sponsor of this project is: Marana							
106.06	51_c 0.0 0 0	Marana Park-and-Ride Silverbell District Park @ northbound Silverbell Concrete path:West parking lot to bus stop @ NB Silverbell AQ STATUS = Exempt Total Cost = 35	35 RTA C				
The sponsor of this project is: Marana							
562.00	0.0 0 0	Pavement Preservation Program Various Locations Reconstruct & Overlay AQ STATUS = Exempt Total Cost = 2500	1000 LOCAL C	1000 LOCAL C	1000 LOCAL C		
The sponsor of this project is: Marana							
12.15 ST021	42_s	Tangerine Rd Corridor: Wildlife Linkages Wildlife Linkages along Tangerine Corridor: Twin Peaks Rd to La Cañada Drive AQ STATUS = Exempt Total Cost = 3603	983 RTA C				
The sponsor of this project is: Marana							
86.06 ST021	01_a 10.0 2 4	Tangerine Rd: I-10 to La Canada Dr Twin Peaks Rd to La Canada Dr Widen to 4 lanes with sidewalks & multi-use lanes AQ STATUS = Exempt Total Cost = 113600	772 RTA C				
The sponsor of this project is: Marana							

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Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
19.15		La Cañada Dr and Moore Rd Intersection Study La Cañada Dr and Moore Rd Intersection Study AQ STATUS = Exempt Total Cost = 50	8 HURF126 S 1000 LOCAL C				
The sponsor of this project is: Oro Valley							
87.03	04_b 3.5 2 4	La Cholla Blvd. - Tangerine to Overton Overton to Tangerine Widen to 4 lanes AQ STATUS = Analyzed Total Cost = 25050	10760 RTA C 3180 PCDIFO C 1700 LOCAL C 1544 HURF12R C				
The sponsor of this project is: Oro Valley							
27.16	42_t	La Cholla Blvd: Overton Rd to Tangerine Rd Wildlife Linkages La Cholla Blvd: from Overton Rd to Tangerine Rd Wildlife linkages La Cholla Blvd, from Overton to Tangerine AQ STATUS = Exempt Total Cost = 1740	450 RTA C 7 RTA D		100 RTA S		
The sponsor of this project is: Oro Valley							
107.06	51_d 0.0 0 0	Oro Valley Park-and-Ride Park & Ride Lot at Rancho Vistoso Rancho Vistoso Lot AQ STATUS = Exempt Total Cost = 1582	70 RTA O	70 RTA O	70 RTA O	70 RTA O	70 RTA O
The sponsor of this project is: Oro Valley							
29.16		Vehicle Maintenance Facility Maintenance facility for transit vehicles AQ STATUS = Exempt Total Cost = 1000		800 FTA5307 C 200 LOCAL C			
The sponsor of this project is: Oro Valley							

Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
833.00		Local Technical Assistance Program (LTAP)	50 STP S	50 STP S	50 STP S	50 STP S	50 STP S
OWP #3210	0.0						
RLTAP 06P	0	Training funding for Tucson, Pima County, et.al.					
	0	AQ STATUS = Exempt Total Cost = 250					
The sponsor of this project is: OWP-ADOT							

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Tip ID SponsorID StateID FedID	RTAID Length ExistingLanes AfterLanes	STREET/PROJECT NAME LOCATION PROJECT DESCRIPTION AQ STATUS TOTAL COST	PROPOSED FUNDING (IN THOUSANDS OF DOLLARS)				
			FISCAL YEAR				
			2020	2021	2022	2023	2024
769.00	0.0 0 0	Transportation Art by Youth - Marana AQ STATUS = Exempt Total Cost = 325	25 HURF126 C	25 HURF126 C	25 HURF126 C	25 HURF126 C	25 HURF126 C
The sponsor of this project is: OWP-LOCAL							
766.00	0.0 0 0	Transportation Art by Youth - Oro Valley AQ STATUS = Exempt Total Cost = 325	25 HURF126 C	25 HURF126 C	25 HURF126 C	25 HURF126 C	25 HURF126 C
The sponsor of this project is: OWP-LOCAL							
765.00	0.0 0 0	Transportation Art by Youth - Pima Co. AQ STATUS = Exempt Total Cost = 325	25 HURF126 C	25 HURF126 C	25 HURF126 C	25 HURF126 C	25 HURF126 C
The sponsor of this project is: OWP-LOCAL							
764.00	0.0 0 0	Transportation Art by Youth - Sahuarita AQ STATUS = Exempt Total Cost = 325	25 HURF126 C	25 HURF126 C	25 HURF126 C	25 HURF126 C	25 HURF126 C
The sponsor of this project is: OWP-LOCAL							
767.00	0.0 0 0	Transportation Art by Youth - South Tucson AQ STATUS = Exempt Total Cost = 325	25 HURF126 C	25 HURF126 C	25 HURF126 C	25 HURF126 C	25 HURF126 C
The sponsor of this project is: OWP-LOCAL							
768.00	0.0 0 0	Transportation Art by Youth - Tucson AQ STATUS = Exempt Total Cost = 325	25 HURF126 C	25 HURF126 C	25 HURF126 C	25 HURF126 C	25 HURF126 C
The sponsor of this project is: OWP-LOCAL							

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Tip ID SponsorID StateID FedID	RTAID Length ExistingLanes AfterLanes	STREET/PROJECT NAME LOCATION PROJECT DESCRIPTION AQ STATUS TOTAL COST	PROPOSED FUNDING (IN THOUSANDS OF DOLLARS)				
			FISCAL YEAR				
			2020	2021	2022	2023	2024
84.10	0.0 0 0	PAG - Alternative Modes Program Regionwide Outreach & Promotion AQ STATUS = Exempt Total Cost = 530	100 STP S	100 STP S	100 STP S	100 STP S	100 STP S
		The sponsor of this project is: OWP-PAG					
85.01	0.0 0 0	PAG Consultant Services Misc studies & consultant activities AQ STATUS = Exempt Total Cost = 2575	200 STP S 100 HURF126 S	200 STP S 100 HURF126 S	200 STP S 100 HURF126 S	200 STP S 100 HURF126 S	200 STP S 100 HURF126 S
		The sponsor of this project is: OWP-PAG					
122.00	0.0 0 0	Purchase/Operations: Vehicles for elderly and disabled purchsae of vehicles AQ STATUS = Exempt Total Cost = 3865	936 FTA5310 C	936 FTA5310 C	936 FTA5310 C	936 FTA5310 C	936 FTA5310 C
		The sponsor of this project is: OWP-PAG					
96.03	0.0 0 0	Regional Orthophotos Update imagery & terrain data for the metro area AQ STATUS = Exempt Total Cost = 1644		500 STP S			500 STP S
		The sponsor of this project is: OWP-PAG					
851.00	0.0 0 0	Regional Traffic Congestion Info System Transview updates and mapping AQ STATUS = Exempt Total Cost = 778	100 STP S 6 LOCAL S	100 STP S 6 LOCAL S	100 STP S 6 LOCAL S	100 STP S 6 LOCAL S	100 STP S 6 LOCAL S
		The sponsor of this project is: OWP-PAG					
3.18		Regional Traffic Signal Communications Blueprint Regionwide Traffic signal communications blueprint AQ STATUS = Total Cost = 30 Undetermined	30 HURF126 S				
		The sponsor of this project is: OWP-PAG					

Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
659.00		Transportation Planning Program	2350 STP S	2350 STP S	2350 STP S	2350 STP S	2350 STP S
	0.0	Operations and Contingency	100 HURF126 S	100 HURF126 S	100 HURF126 S	100 HURF126 S	100 HURF126 S
	0	AQ STATUS = Exempt Total Cost = 9408					
The sponsor of this project is: OWP-PAG							
635.00		Travel Demand Management Programs	985 STP O	267 ADEQ O	267 ADEQ O	985 STP O	985 STP O
	0.0		267 ADEQ O	985 STP O	985 STP O	267 ADEQ O	267 ADEQ O
	0	AQ STATUS = Exempt Total Cost = 16308					
The sponsor of this project is: OWP-PAG							

Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
466.00		Tucson - Pavement Management System	28 LOCAL S	28 LOCAL S	28 LOCAL S	450 STP S	450 STP S
H4115 01X	0.0	City portion of PMS Project funded thru PAG	450 STP S	450 STP S	450 STP S	28 LOCAL S	28 LOCAL S
	0	AQ STATUS = Exempt Total Cost = 2662					
	0						
The sponsor of this project is: OWP-TDOT							

Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
75.06	47_d 0.0 0 0	Volunteer Transit Volunteer service coordinated w/Council on Aging AQ STATUS = Exempt Total Cost = 4900	250 RTA O	250 RTA O	250 RTA O	250 RTA O	250 RTA O
The sponsor of this project is: PCOA							

Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
91.01	0.0 0 0	No Drive Days Program AQ STATUS = Exempt Total Cost = 3510	194 ADEQ O				
The sponsor of this project is: PDEQ							

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			FISCAL YEAR				
			2020	2021	2022	2023	2024
98.12		ADA Transit Enhancements	100 FTA5307 C	100 FTA5307 C	100 FTA5307 C	100 FTA5307 C	100 FTA5307 C
	0.0	Various	25 LOCAL C	25 LOCAL C	25 LOCAL C	25 LOCAL C	25 LOCAL C
	0	Bus Stop enhancements (sidewalks, ramps, pads, etc)					
	0	AQ STATUS = Exempt Total Cost = 480					
The sponsor of this project is: Pima County							
44.12 4AERO2		Aerospace Parkway Expansion	2293 HURF126 C				
	0.0	Nogales Highway to Alvernon					
	0	Design and Construction					
	0	AQ STATUS = Analyzed Total Cost = 22700					
The sponsor of this project is: Pima County							
34.16 4KINBO		Bopp Rd: Sarasota Blvd to Kinney Rd	2855 STP C				
		Bopp Rd from Sarasota Blvd to Kinney Rd	1704 LOCAL C				
		Safety Improvements					
		AQ STATUS = Undetermined Total Cost = 4559					
The sponsor of this project is: Pima County							
137.00 4CFCOT		Cortaro Farms Rd: Camino de Oeste to Thornydale Rd	2380 LOCAL C				
	1.5	Camino de Oeste to Thornydale Rd	1459 HURF126 C				
	2	Widen to 4 lanes					
	4	AQ STATUS = Analyzed Total Cost = 18800					
The sponsor of this project is: Pima County							
82.12 4REPSW	41cn	El Paso Southwestern Greenway: 11th Ave to South 6th Ave	285 RTA C				
	0.0	11th Avenue to South 6th Avenue					
	0	ROW Acquisition, Design & Construction					
	0	AQ STATUS = Exempt Total Cost = 971					
The sponsor of this project is: Pima County							
13.15		Elemental Level Bridge Inspection	289 HURF126 O				
		Bridge Inspection					
		AQ STATUS = Exempt Total Cost = 371					
The sponsor of this project is: Pima County							

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Tip ID SponsorID StateID FedID	RTAID Length ExistingLanes AfterLanes	STREET/PROJECT NAME LOCATION PROJECT DESCRIPTION AQ STATUS TOTAL COST	PROPOSED FUNDING (IN THOUSANDS OF DOLLARS)				
			FISCAL YEAR				
			2020	2021	2022	2023	2024
14.15		Elemental Level Culvert Inspection Program & Load Ratings Regionwide Culvert Inspection AQ STATUS = Exempt Total Cost = 530	242 HURF126 O				
The sponsor of this project is: Pima County							
4.14		Gates Pass Rd Crash DCR Gates Pass Rd DCR for crash mitigation AQ STATUS = Exempt Total Cost = 50	12 HURF126 S				
The sponsor of this project is: Pima County							
23.16		Guardrail Selection Tool Upgrade for RSAP Countywide Software upgrade to support and identify guardrail selection AQ STATUS = Exempt Total Cost = 50	36 HURF126 S				
The sponsor of this project is: Pima County							
24.16		Ina Rd and Orange Grove Rd Corridors Signal Timing Study Ina Rd: I-10 to Oracle Rd; Orange Grove: I-10 to Oracle Rd Signal timing study AQ STATUS = Exempt Total Cost = 125	50 HURF126 S				
The sponsor of this project is: Pima County							
787.00 DOT-32 4KSCSD	2.1 2 3	Kolb Rd. - Sabino Canyon to Sunrise Dr. Sabino Canyon to Sunrise Dr. Widen to 3 lanes AQ STATUS = Analyzed Total Cost = 16027	1561 PCBonds C 10400 STP C				
The sponsor of this project is: Pima County							
63.14 4SSWPI	37bk	Pima County School Safety-White Elementary/Pistor Middle Sch Canada St: Hildreth Ave to Forrest Ave sidewalks and traffic calming AQ STATUS = Exempt Total Cost = 1419	57 RTA C 88 LOCAL C				
The sponsor of this project is: Pima County							

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Tip ID SponsorID StateID FedID	RTAID Length ExistingLanes AfterLanes	STREET/PROJECT NAME LOCATION PROJECT DESCRIPTION AQ STATUS TOTAL COST	PROPOSED FUNDING (IN THOUSANDS OF DOLLARS)				
			FISCAL YEAR				
			2020	2021	2022	2023	2024
26.15	41dc	School Safety Infrastructure Improvements (Pima County) County Wide Infrastructure improvements near schools AQ STATUS = Exempt Total Cost = 362		200 RTA C			
The sponsor of this project is: Pima County							
1.19 7/11/2018		Skyline and Sunrise Intersection Skyline and Sunrise Intersection improvements AQ STATUS = Total Cost = 582 Undetermined	318 A-HSIP C 100 LOCAL C				
The sponsor of this project is: Pima County							
48.14 4HSBSP		Speedway Blvd: Painted Hills to Camino de Oeste Speedway Blvd: Painted Hills to Camino de Oeste Paved Shoulders AQ STATUS = Exempt Total Cost = 2405	1579 STP C 592 LOCAL C				
The sponsor of this project is: Pima County							
4.18		Summerhaven Congestion Management Summerhave Congestion Management AQ STATUS = Total Cost = 50 Undetermined	5 HURF126 S				
The sponsor of this project is: Pima County							
10.18 4srriv	08_b 0 3	Sunset: I-10 to River Sunset Rd, from I-10 to River Rd Extend roadway AQ STATUS = Total Cost = 17757 Undetermined	1529 RTA D				
The sponsor of this project is: Pima County							
114.06 4RTVWE	21_b 3.5 2 4	Valencia Rd: Ajo to Wade Ajo to Wade Widen to 4 lanes AQ STATUS = Analyzed Total Cost = 26200	4349 RTA C 5463 DIFO C 1477 HURF12R C				
The sponsor of this project is: Pima County							

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SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
791.00	2.9	Valencia Road Extension	16000 PCDIFO C				
	0	Houghton Rd. to Old Spanish Trail					
	2	Construct new 2 lane divided roadway & bridge					
		AQ STATUS = Analyzed Total Cost = 16000					
The sponsor of this project is: Pima County							
78.06	33__	Wilmot North of Sahuarita Rd	500 RTA C	2360 RTA C			
4RTWNS	6.0	Sahuarita Rd to 6 miles north	150 RTA D				
	2	Pave existing dirt road					
	2	AQ STATUS = Analyzed Total Cost = 10290					
The sponsor of this project is: Pima County							
1.18		Wilmot Rd: Valencia Rd to DMAFB Entrance	1231 HURF126 C				
		Wilmot Rd: Valencia Rd to DMAFB Wilmot Rd Gate					
		Roadway improvements					
		AQ STATUS = Analyzed Total Cost = 1406					
The sponsor of this project is: Pima County							

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			FISCAL YEAR				
			2020	2021	2022	2023	2024
79.09	38_j 0.0 0 0	Bus Pullout Packages #6 - #15 Region wide Construct 40 bus pullouts regionwide AQ STATUS = Exempt Total Cost = 7030	11 RTA C				
The sponsor of this project is: RTA							
51.14	38_l	Bus Pullouts: Packages 16 - 19 Regionwide Bus Pullouts throughout the region AQ STATUS = Exempt Total Cost = 4890	1560 RTA C	800 RTA C	800 RTA C		
The sponsor of this project is: RTA							
57.16		FTA 5311 Administration Administration of FTA 5311 Grant AQ STATUS = Total Cost = 1000 Undetermined	200 FTA5311 O	200 FTA5311 O	200 FTA5311 O	200 FTA5311 O	200 FTA5311 O
The sponsor of this project is: RTA							
59.16		FTA 5311 Intercity Transit Intercity Transit AQ STATUS = Total Cost = 715 Undetermined	143 FTA5311 O	143 FTA5311 O	143 FTA5311 O	143 FTA5311 O	143 FTA5311 O
The sponsor of this project is: RTA							
60.16		FTA 5311 Operating Grant Transit Operations AQ STATUS = Total Cost = 2320 Undetermined	464 FTA5311 O	464 FTA5311 O	464 FTA5311 O	464 FTA5311 O	464 FTA5311 O
The sponsor of this project is: RTA							
11.18	37bl	Houghton Rd and Civano: Ped Crossing Houghton Rd: TFD Station #17 Upgrade Fire Signal to Hybrid Ped-Fire Signal AQ STATUS = Total Cost = 56 Undetermined	56 RTA C				
The sponsor of this project is: RTA							

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			FISCAL YEAR				
			2020	2021	2022	2023	2024
9.18	46zx	Mobility on Demand Rita Ranch area FTA MoD program AQ STATUS = Undetermined Total Cost = 177	100 RTA O -169 RTA RE 169 FTA PM T				
The sponsor of this project is: RTA							
33.12	48_g 0.0 0 0	Purchase of Sun Shuttle Vehicles Regionwide Transit Purchase Sun Shuttle Vehicles AQ STATUS = Exempt Total Cost = 2326	359 FTA5307 PM T 449 RTA P -359 RTA RE V	265 FTA5311 PM T 332 RTA P -265 RTA RE V	548 RTA P 210 FTA5311 PM T -439 RTA RE V 229 FTA5307 PM T	314 FTA5307 PM T 392 RTA P -314 RTA RE V	614 FTA5307 PM T 767 RTA P -614 RTA RE V
The sponsor of this project is: RTA							
24.15	40ar	Regional Traffic Signal Program: Equipment Regionwide Equipment for traffic signal program AQ STATUS = Exempt Total Cost = 1220	250 RTA C	250 RTA C	200 RTA C	250 RTA C	250 RTA C
The sponsor of this project is: RTA							
97.06	47_i 0.0 0 0	RTA Special Needs Transit Expansion Expand to include new areas AQ STATUS = Exempt Total Cost = 22259	4193 RTA O	4318 RTA O	4448 RTA O	4581 RTA O	4719 RTA O
The sponsor of this project is: RTA							
69.06	43__ 0.0 0 0	Small Business Assistance Small Business Assistance AQ STATUS = Exempt Total Cost = 10000	475 RTA C	475 RTA C	475 RTA C	475 RTA C	475 RTA C
The sponsor of this project is: RTA							
1.14 H6694 01C	42_r	SR 77: Wildlife Crossing off highway fencing SR 77 Wildlife fencing out of the ADOT ROW AQ STATUS = Exempt Total Cost = 1005	62 RTA C				
The sponsor of this project is: RTA							
72.06	4870 0.0 0 0	Sun Shuttle Base Transit Services Base services: 410, 413, 430, 440, Ajo-Dar AQ STATUS = Exempt Total Cost = 5576	1174 RTA O 379 FTA5311 PM T -379 RTA RE V	1209 RTA O 379 FTA5311 PM T -379 RTA RE V	1245 RTA O 379 FTA5311 PM T -379 RTA RE V	1282 RTA O 379 FTA5311 PM T -379 RTA RE V	1321 RTA O 379 FTA5311 PM T -379 RTA RE V
The sponsor of this project is: RTA							

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SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)											
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR											
FedID	AfterLanes	AQ STATUS	TOTAL COST	2020		2021		2022		2023		2024		
42.10	487e	Sun Shuttle Expanded Transit Services		1793 RTA	O	1846 RTA	O	1902 RTA	O	1959 RTA	O	2018 RTA	O	
	0.0	Regionwide		342 FTA5311	PM	342 FTA5311	PM	342 FTA5311	PM	342 FTA5311	PM	342 FTA5311	PM	
	0	Exp. Svcs: 401, 411, 412, GV, OVDAR, Ajo-Tuc		-342 RTA	RE	-342 RTA	RE	-342 RTA	RE	-342 RTA	RE	-342 RTA	RE	
	0	AQ STATUS = Exempt	Total Cost = 10800											
	The sponsor of this project is: RTA													
93.06	4671	Sun Tran - Frequency and Area Expansion		2478 RTA	O	2552 RTA	O	2628 RTA	O	2707 RTA	O	2788 RTA	O	
	0.0	Improve frequencies along major routes, extend some routes												
	0	AQ STATUS = Analyzed	Total Cost = 177480											
	0													
	The sponsor of this project is: RTA													
13.11	473a	Transferred Special Needs Transit Service Area		4395 MOE	PM	4439 MOE	PM	4484 MOE	PM	5117 RTA	O	5271 RTA	O	
	0.0			4683 RTA	O	4823 RTA	O	-4484 RTA	RE	4529 MOE	PM	4574 MOE	PM	
	0	Operating funds for Expanded Transit Services		-4395 RTA	RE	-4439 RTA	RE		V	-4529 RTA	RE	-4574 RTA	RE	
	11.80.00	AQ STATUS = Exempt	Total Cost = 21459					4968 RTA	O		V		V	
	The sponsor of this project is: RTA													

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SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
41.07	1.0 0 2	Quail Creek Connection, Phase 1 Old Nogales Hwy to Santa Cruz River Construct new roadway AQ STATUS = Analyzed Total Cost = 2000	161 HURF126 C				
The sponsor of this project is: Sahuarita							
21.15		Roadway and Intersection Safety Enhancements Identified intersections townwide DCRs for intersection improvements AQ STATUS = Exempt Total Cost = 50	34 HURF126 D				
The sponsor of this project is: Sahuarita							
25.16		Roadway Lane and Shoulder Width Study El Toro Rd, Twin Buttes, La Villita: La Canada to Rancho Sah Study of lane and shoulder widths AQ STATUS = Exempt Total Cost = 50	50 HURF126 S				
The sponsor of this project is: Sahuarita							
95.09	40_o 0.0 0 0	Wireless signal & controller/equipment upgrades Various intersections Provide upgrades to traffic operations AQ STATUS = Exempt Total Cost = 75	9 RTA C				
The sponsor of this project is: Sahuarita							

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SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
16.10	37ao 0.0 0 0	10th Ave and EPSW HAWK Crossing @ Intersection Construct HAWK signal AQ STATUS = Exempt Total Cost = 140	140 RTA C				
The sponsor of this project is: South Tucson							
89.01	41bj 0.5 0 0	36th St Bikelane/Pathway EPSW Greenway to UPRR Town Limit along 36th St from EPSW Greenway east to City Limits at UPRR Design & Construct amenities to enhance bikelanes/pathway AQ STATUS = Exempt Total Cost = 150	150 RTA C				
The sponsor of this project is: South Tucson							
7.18	36bv	Intersection Improvement: 6th Av and 40th St Intersection of 6th Av and 40th St Intersection improvements AQ STATUS = Total Cost = 1000 Undetermined	150 RTA D	850 RTA C			
The sponsor of this project is: South Tucson							
6.18	36bu	Intersection Improvement: 4th Av and 40th St Intersection of 4th Av and 40th St Construct Intersection to improve capacity and safety AQ STATUS = Total Cost = 1000 Undetermined	150 RTA D	850 RTA C			
The sponsor of this project is: South Tucson							
113.07	40_g 0.0 0 0	Speed Alert Monitor Signs Electronic speed alert signs AQ STATUS = Exempt Total Cost = 60	60 RTA C				
The sponsor of this project is: South Tucson							

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Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
4.15		ASE Program	1786 LOCAL C	1711 LOCAL C	2420 LOCAL C	2420 LOCAL C	1157 LOCAL C
10119102		TIA	3611 FAA C	1711 SAF C	49501 FAA C	49301 FAA C	21532 FAA C
		Relocate Runway 11R/29 L and assoc. taxiways	1897 SAF C	34864 FAA C	2420 SAF C	2420 SAF C	1957 SAF C
		AQ STATUS = Exempt Total Cost = 65200					
The sponsor of this project is: TAA							
89.10		Ryan Airfield Access Roadway and Parking Lot					12 LOCAL D
20112202	0.0						240 FAA D
	0	Rehabilitate Access Roadway and Parking Lot					12 SAF D
	0	AQ STATUS = Exempt Total Cost = 260					
The sponsor of this project is: TAA							
88.10		Ryan Airfield Airside Auto Road					216 LOCAL C
20109017	0.0						11 SAF C
	0	Construct Airside Auto Road					11 FAA C
	0	AQ STATUS = Exempt Total Cost = 238					
The sponsor of this project is: TAA							
43.10		Ryan Airfield Apron Construction			183 LOCAL C		
20109018	0.0				3731 FAA C		
	0	Apron construction - Phase 1 & 2			183 SAF C		
	0	AQ STATUS = Exempt Total Cost = 4097					
The sponsor of this project is: TAA							
8.16		Ryan Airfield AWOS Replacement	14 LOCAL C				
20114631		Ryan Airfield	282 FAA C				
		Replace All Weather Operation System	14 SAF C				
		AQ STATUS = Exempt Total Cost = 310					
The sponsor of this project is: TAA							
27.14		Ryan Airfield CCTV Cameras			83 LOCAL C		
20112225		Ryan Airfield					
		Install CCTV Cameras					
		AQ STATUS = Exempt Total Cost = 83					
The sponsor of this project is: TAA							
1.20		Ryan Airfield PAPI Install		25 LOCAL C			
20117961		Ryan Airfield		517 FAA C			
		Installation on Rwy 6L, 6R, 24R		25 SAF C			
		AQ STATUS = Exempt Total Cost = 567					
The sponsor of this project is: TAA							

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Tip ID SponsorID StateID FedID	RTAID Length ExistingLanes AfterLanes	STREET/PROJECT NAME LOCATION PROJECT DESCRIPTION AQ STATUS TOTAL COST	PROPOSED FUNDING (IN THOUSANDS OF DOLLARS)				
			FISCAL YEAR				
			2020	2021	2022	2023	2024
24.14 20112197		Ryan Airfield Pavement Management System Ryan Airfield Pavement Management System AQ STATUS = Exempt Total Cost = 884	15 LOCAL C 138 SAF C				
The sponsor of this project is: TAA							
26.14 20112203		Ryan Airfield Reconstruct Roads Ryan Airfield Reconstruct Connetor and Maintenance Roads AQ STATUS = Exempt Total Cost = 310	553 LOCAL C				
The sponsor of this project is: TAA							
2.20 20119088		Ryan Airfield Tower Equipment Ryan Airfield Replace tower equipment AQ STATUS = Undetermined Total Cost = 526			16 LOCAL C 330 FAA C 16 SAF C	7 LOCAL C 150 FAA C 7 SAF C	
The sponsor of this project is: TAA							
97.10 10110096	0.0 0 0	TIA Airside Service Road Reconstruction Reconstruct Service Road AQ STATUS = Exempt Total Cost = 476					119 LOCAL C 358 SAF C
The sponsor of this project is: TAA							
29.14 10113361		TIA Customs Apron TIA Mill and overlay apron at Customs AQ STATUS = Exempt Total Cost = 326		326 LOCAL C			
The sponsor of this project is: TAA							
25.04 10100-362	0.0 0 0	TIA Economy Overflow Lot Upgrade Paving on economy overflow lot Buildout north portion of Economy lot AQ STATUS = Exempt Total Cost = 3521					3521 LOCAL C
The sponsor of this project is: TAA							
3.20 10113364		TIA Reconstruct Pavement TIA Mill and overlay pavement AQ STATUS = Undetermined Total Cost = 597	597 LOCAL C				
The sponsor of this project is: TAA							

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Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
94.10		TIA Security Master Plan Update				150 LOCAL S	
10106676	0.0	Update Security Master Plan					
	0	AQ STATUS = Exempt Total Cost = 150					
	0						
The sponsor of this project is: TAA							
32.14		TIA Taxiway A					265 LOCAL C
10113366		TIA					5395 FAA C
		Reconstruct Taxiway A and shoulders					265 SAF C
		AQ STATUS = Exempt Total Cost = 5925					
The sponsor of this project is: TAA							
96.10		TIA Taxiway G - Phase 3					103 LOCAL C
10106575	0.0	Construct Taxiway G					103 SAF C
	0	AQ STATUS = Exempt Total Cost = 2305					2099 FAA C
	0						
The sponsor of this project is: TAA							

Tip ID SponsorID StateID FedID	RTAID Length ExistingLanes AfterLanes	STREET/PROJECT NAME LOCATION PROJECT DESCRIPTION AQ STATUS	PROPOSED FUNDING (IN THOUSANDS OF DOLLARS)				
			FISCAL YEAR				
			2020	2021	2022	2023	2024
79.10	41ci 0.6 0 0	San Xavier Rd: Little Nogales to I-19	9 LOCAL C				
		San Xavier Rd: Little Nogales to I-19	66 RTA C				
		Construct pedestrian path					
		AQ STATUS = Exempt Total Cost = 611					
The sponsor of this project is: Tohono O'odham							
20.12	42_m 7.0 2 2	SR 86: Kitt Peak Linkage Wildlife Crossing	500 RTA D	166 RTA D	1768 RTA C	20 RTA C	
		Retrofit Phase 2		3000 RTA C			
		State Route 86 - Mile posts 127-134					
		Construct 2 over-crossings					
		AQ STATUS = Exempt Total Cost = 6654					
The sponsor of this project is: Tohono O'odham							
19.18		TON Safety Improvements Phase 4			752 HSIP- C		
		TO Nation, IR 34 and IR 42			HRRR		
		Pavement markings, signage, and other safety improvements					
		AQ STATUS = Total Cost = 952					
		Undetermined					
The sponsor of this project is: Tohono O'odham							

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			FISCAL YEAR				
			2020	2021	2022	2023	2024
81.06 SR11	14__ 3.1 4 6	1st Ave: Grant to River Grant Rd. to River Rd. Widen to 6 lanes AQ STATUS = Analyzed Total Cost = 74398	4000 RTA D	7000 RTA C 2900 LOCAL C	5350 HURF12R C 2150 RTA C	13000 RTA C 7000 HURF12R C	4250 RTA C 13750 HURF12R C
	The sponsor of this project is: Tucson						
	32.00 30__ 2.0 4 4	22nd St: Camino Seco to Houghton Rd Camino Seco to Houghton Rd Improve 3 and 4 lane roadway AQ STATUS = Analyzed Total Cost = 9066					700 RTA D
The sponsor of this project is: Tucson							
131.00 SR5A	19_a 3.7 5 6	22nd Street: I-10 to Tucson Blvd. I-10 to Tucson Blvd Widen to 6 lanes AQ STATUS = Analyzed Total Cost = 116952	12900 RTA C 4606 PCBonds C 323 HURF126 C	11900 RTA C 2500 HURF12R C 4606 PCBonds C	14397 RTA C		2000 RTA C
	The sponsor of this project is: Tucson						
	83.12 41cp 0.0 0 0	5th St. Bike Boulevard: 7th Avenue to University 5th Street, from 9th Avenue to Highland Design and construct a bike boulevard AQ STATUS = Exempt Total Cost = 375	32 RTA C				
The sponsor of this project is: Tucson							
20.16 SA12	41dd	Arcadia Ave and Timrod St Bike Boulevards Timrod St: Alvernon to Sahuara; Arcadia: Grant to Eastland Bike Boulevards AQ STATUS = Exempt Total Cost = 1396	1120 RTAG C 4 LOCAL C 139 RTA C				
	The sponsor of this project is: Tucson						
	76.12 41cr 0.0 0 0	Arroyo Chico Greenway: Country Club to Treat Winsett Blvd between Country Club and Treat signalized crossing, greenway segment AQ STATUS = Exempt Total Cost = 600	459 RTA C				
The sponsor of this project is: Tucson							
32.15 49b1	41cz	Bike Boulevard Package I Citywide Bike Boulevards AQ STATUS = Exempt Total Cost = 1000		1000 RTA C			
	The sponsor of this project is: Tucson						

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SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
19.10 49B3	41bl 0.0 0 0	Bike Lane Package III Various Locations TBD Design and Construction of bike lane package III AQ STATUS = Exempt Total Cost = 400	211 RTA C				
The sponsor of this project is: Tucson							
36.00 SR10	29__ 2.0 5 4	Broadway Blvd: Camino Seco to Houghton Rd Camino Seco Blvd to Houghton Rd Widen to 4 lanes divided AQ STATUS = Analyzed Total Cost = 18218	5132 RTA C 6655 HURF126 C				
The sponsor of this project is: Tucson							
22.05 SR3A	17__ 1.5 5 6	Broadway Blvd: Euclid Ave to Country Club Rd Euclid Ave to Country Club Rd widen to 6 lanes, bus pullouts, sidewalks, bike lanes AQ STATUS = Analyzed Total Cost = 74761	6958 RTA C 6101 HURF12R C 1222 HURF126 C	4637 RTA C 3652 PCBonds C			
The sponsor of this project is: Tucson							
77.12 SP10	41co 0.0 0 0	Copper St: Oracle to Swan Bike Boulevard Copper Street, from Oracle to Swan Design/Construct bike blvd improvements AQ STATUS = Exempt Total Cost = 500	362 RTA C				
The sponsor of this project is: Tucson							
81.04 S30N	16_a 0.5 0 4	Downtown Links: Broadway to I-10 Broadway to I-10 Construct new 4 lane roadway AQ STATUS = Analyzed Total Cost = 100537	2300 HURF26 C 23053 RTA C 6000 HURF12R C 7946 HURF126 C	4145 RTA C			
The sponsor of this project is: Tucson							
72.07 SP01	41df 0.7 0 0	El Paso & Southwestern Greenway: 22nd to Simpson 22nd to Simpson Construct new bike path AQ STATUS = Exempt Total Cost = 904	16 RTA C				
The sponsor of this project is: Tucson							

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SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
83.07 SP18	41_i 6.0 0 0	El Paso & Southwestern Greenway: Kino to University 22nd to 25th Shared use path & trail AQ STATUS = Exempt Total Cost = 1775	499 RTA C				
The sponsor of this project is: Tucson							
55.06 SR2A	18__ 5.0 4 6	Grant Rd: Oracle Rd to Swan Rd Oracle Rd to Swan Rd Widen to 6 lanes w/bike lanes & sidewalks AQ STATUS = Analyzed Total Cost = 171850	9000 HURF12R R 10235 RTA R	20000 HURF12R C	20000 HURF12R C	10000 HURF12R C	1000 HURF12R C 9696 RTA C
The sponsor of this project is: Tucson							
84.06 SR16	15__ 0.0 4 6	Grant Rd: RR Underpass Reconstruction Grant Rd near I-10 Reconstruct existing RR underpass AQ STATUS = Analyzed Total Cost = 37382	2100 RTA D	1000 RTA D		10871 RTA C	9529 RTA C
The sponsor of this project is: Tucson							
38.00	31__ 3.0 2 6	Harrison Rd. - Irvington to Golf Links Irvington Rd. to Golf Links Rd. Widen to 6 lanes divided AQ STATUS = Analyzed Total Cost = 22619					158 RTA D
The sponsor of this project is: Tucson							
29.15 SH31-33	37bf	HAWKS Speedway+Ritchie Grant+Arcadia 22nd+Belvedere Speedway/Ritchie, Grant/Arcadia, 22nd/Belvedere Design and construction of 3 HAWK crossings AQ STATUS = Exempt Total Cost = 700	412 RTA C				
The sponsor of this project is: Tucson							
46.14 SR1H	32_i 2 6	Houghton Rd : Valencia Rd to Mary Ann Cleveland Way Houghton:Valencia to Mary Ann Cleveland Way Widen Road from 2 lanes to 6 lanes AQ STATUS = Analyzed Total Cost = 10364	2500 RTA D 3000 RTA R 1447 RTA C	1350 RTA C 1650 HURF12R C 5650 DIFO C	3000 RTA C		
The sponsor of this project is: Tucson							

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Tip ID SponsorID StateID FedID	RTAID Length ExistingLanes AfterLanes	STREET/PROJECT NAME LOCATION PROJECT DESCRIPTION AQ STATUS TOTAL COST	PROPOSED FUNDING (IN THOUSANDS OF DOLLARS)				
			FISCAL YEAR				
			2020	2021	2022	2023	2024
19.13 SR1W	42_q	Houghton Rd UPRR Bridge Bat Roost Mitigation Houghton Rd UPRR bridge Bat condos for new Houghton UPRR bridge AQ STATUS = Exempt Total Cost = 123	38 RTA C				
The sponsor of this project is: Tucson							
16.15 SR1J	32_j	Houghton Rd: 22nd St to Irvington Rd Houghton Rd from 22nd St to Irvington Rd Widen Houghton Road AQ STATUS = Analyzed Total Cost = 32715	343 RTA C 2325 RTA D	1000 RTA C	15000 RTA C	5958 RTA C	
The sponsor of this project is: Tucson							
18.12 SR1F	32_h 0.0 0 0	Houghton Rd: Broadway to 22nd, Intersection Improv @Broadway Houghton Rd: Broadway to 22nd, Intersection @ Broadway Widen to 6 lanes divided AQ STATUS = Exempt Total Cost = 8500	15 RTA C				
The sponsor of this project is: Tucson							
108.09 SR1G	32_e 2.0 2 6	Houghton Rd: UPRR Bridge to I-10 UPRR Bridge to I-10 Widen Houghton Rd. to six-lane divided cross section AQ STATUS = Analyzed Total Cost = 10000	1000 PCBonds C 1400 PCDIFO C				
The sponsor of this project is: Tucson							
76.06 SR8A	26__ 0.7 0 4	Kolb Rd.: Connection to Sabino Canyon Extend Sabino Canyon south Rd to Kolb Rd New 4 lane roadway AQ STATUS = Analyzed Total Cost = 25693	50 RTA C				
The sponsor of this project is: Tucson							
83.10 SP04	41cv 4.8 0 0	Liberty Ave Bicycle Blvd and Safe Routes to School 44th St to Los Reales Rd Safe Crossing Signals, Traffic Calming, Signage and Markings AQ STATUS = Exempt Total Cost = 1212	23 RTA C				
The sponsor of this project is: Tucson							

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SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
3.19 SH35-37-40 H8391		Pedestrian HAWK Crossings--Package 1 Various locations 22nd/longfellow, campbell/wyoming, 6th/ohio AQ STATUS = Total Cost = 100 Undetermined		837 HSIP C			
The sponsor of this project is: Tucson							
4.19 sh36-38-39 H8391		Pedestrian HAWK Crossings--Package 2 Various locations alvernon/bellvue, pima/mt view, prince/crescent manor AQ STATUS = Total Cost = 100 Undetermined		804 HSIP C			
The sponsor of this project is: Tucson							
39.08 490L	40am 0.0 0 0	Regional Transportation Data Network Various locations SmartWave AQ STATUS = Exempt Total Cost = 1800	150 RTA O	150 RTA O	150 RTA O	150 RTA O	150 RTA O
The sponsor of this project is: Tucson							
19.11 SP06	37bj 1.0 2 2	Rio Vista Safe Routes to School Project Campbell Ave to 200 feet short of First Ave Construct a shared-use path on Limberlost AQ STATUS = Exempt Total Cost = 400	15 RTA C				
The sponsor of this project is: Tucson							
40.12 SP08	37bi 0.0 0 0	Robison Elementary School Healthy Street Near Robison Elementary (Treat Ave and 18th Street) New HAWK, filling sidewalk gaps, ADA ramps, other imprvmnts AQ STATUS = Exempt Total Cost = 400	18 RTA C				
The sponsor of this project is: Tucson							
56.06 SR6A	05__ 7.6 2 4	Silverbell Rd: Grant to Ina Grant to Ina Widen to 4 lanes w/ bike lanes AQ STATUS = Analyzed Total Cost = 69283	1800 RTA C 8442 HURF126 D 55 RTA D			7500 HURF12R C	10000 HURF12R C
The sponsor of this project is: Tucson							

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			FISCAL YEAR				
			2020	2021	2022	2023	2024
30.00 S14W	36bn 0.2 5 5	Stone Avenue Gateway: Drachman St to 5th St Stone Ave: Drachman St to 5th St Redesign of Speedway/Drachman Intersection AQ STATUS = Exempt Total Cost = 3923	2 RTA C				
The sponsor of this project is: Tucson							
78.12 SP12	41cq 5.5 0 0	Treat Ave: Rillito River to Barraza-Aviation Bike Boulevard Treat Ave from Rillito River to Barraza-Aviation Design and Construct Bike Blvd improvements AQ STATUS = Exempt Total Cost = 500	257 RTA C				
The sponsor of this project is: Tucson							
5.18		Tucson Traffic Signal Policies Citywide drafting of traffic signal policies AQ STATUS = Total Cost = 20 Undetermined	20 HURF126 S				
The sponsor of this project is: Tucson							
90.12 SP14	41di 0.0 0 0	UA 2nd Street Bike and Pedestrian Improvements 2nd Street, from Park to Highland Bike and pedestrian safety improvements AQ STATUS = Exempt Total Cost = 106	70 STP D 6 RTA D				
The sponsor of this project is: Tucson							
96.09 SP05	41cc 7.0 0 0	University/3rd Street Bike Boulevard University and 3rd Street Construct bike boulevard AQ STATUS = Exempt Total Cost = 90	32 RTA D				
The sponsor of this project is: Tucson							
32.16 SR13-2	25_a	Valencia and Kolb Intersection East Valencia Rd and Kolb Rd intersection Eastside approach to intersection AQ STATUS = Analyzed Total Cost = 8780	8780 RTA C				
The sponsor of this project is: Tucson							

Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2020	2021	2022	2023	2024
158.07	36_z	Valencia and Kolb Intersection reconstruction	4 RTA C				
SR13	0.0	Kolb Rd and Valencia Rd, .4 mile in all directions					
4RTKVI	0	Additional through and turning lanes					
	0	AQ STATUS = Exempt Total Cost = 6900					
The sponsor of this project is: Tucson							
31.16	24_a	Valencia Kolb Intersection West side of SE Ramp	4870 RTA C				
SR13-2		North of Centennial Drive					
4RTKVI		Westside approach to intersection					
		AQ STATUS = Analyzed Total Cost = 10000					
The sponsor of this project is: Tucson							
59.06	25__	Valencia Rd: Kolb Rd to Houghton Rd	1000 RTA DR C	2000 RTA DR C		7200 RTA C 4500 DIFO C	6902 RTA C 4500 DIFO C
SR14	4.7	Kolb Rd to Houghton Rd					
	4	Widen to 6 lanes					
	6	AQ STATUS = Analyzed Total Cost = 34882					
The sponsor of this project is: Tucson							

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			FISCAL YEAR				
			2020	2021	2022	2023	2024
72.03 MRC2 ALI 11.43.03	46_f 0.0 0 0	Administrative & Maintenance Facility near Prince Rd & Romero Rd Design & build new facility AQ STATUS = Exempt Total Cost = 55000	29 RTA O	29 RTA O	29 RTA O	29 RTA O	29 RTA O
The sponsor of this project is: Tucson Transit							
471.00 ALI 11.12.01	46_b 0.0 0 0	Bus Replacements Citywide Replacement buses AQ STATUS = Exempt Total Cost = 72118	1926 LOCAL P 4968 FTA5307 P 2034 FTA5339 P 701 FLEX P	3821 FTA5307 P 2034 FTA5339 P 701 FLEX P 1639 LOCAL P	5593 FTA5307 P 2034 FTA5339 P 701 FLEX P 2082 LOCAL P	5723 FTA5307 P 2034 FTA5339 P 2115 LOCAL P 701 FLEX P	5723 FTA5307 P 2034 FTA5339 P 2115 LOCAL P 701 FLEX P
The sponsor of this project is: Tucson Transit							
3.15		CNG Fueling System NW SunTran NW Facility CNG Fueling System AQ STATUS = Exempt Total Cost = 8900	360 FTA5307 C 90 LOCAL C	640 FTA5307 C 160 LOCAL C			
The sponsor of this project is: Tucson Transit							
6.19 5/24/2018		Electric Bus Charging Infrastructure System Wide Charging infrastructure for EV AQ STATUS = Undetermined Total Cost = 188	150 FTA5307 C 38 LOCAL C				
The sponsor of this project is: Tucson Transit							
108.06 MRC1	51_e 0.0 0 0	Houghton / Broadway Park-and-Ride Park and Ride O&M AQ STATUS = Exempt Total Cost = 3260	52 RTA O	52 RTA O	52 RTA O	52 RTA O	52 RTA O
The sponsor of this project is: Tucson Transit							
2.13	4675 0.0 0 0	Marana Transit Services Marana, various locations Transit in services in Marana AQ STATUS = Exempt Total Cost = 150	101 RTA O 98 MOE PM -98 RTA RE V	104 RTA O 99 MOE PM -99 RTA RE V	107 RTA O 100 MOE PM -100 RTA RE V	110 RTA O 101 MOE PM -101 RTA RE V	113 RTA O 102 MOE PM -102 RTA RE V
The sponsor of this project is: Tucson Transit							
42.12	4672 0.0 0 0	Pima County Transit Services Various locations Replace service formally provided by Pima County AQ STATUS = Exempt Total Cost = 16164	2842 RTA O 1974 MOE PM -1974 RTA RE V	2927 RTA O 1994 MOE PM -1994 RTA RE V	3015 RTA O 2014 MOE PM -2014 RTA RE V	3105 RTA O 2034 MOE PM -2034 RTA RE V	3198 RTA O 2054 MOE PM -2054 RTA RE V
The sponsor of this project is: Tucson Transit							

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			FISCAL YEAR				
			2020	2021	2022	2023	2024
68.03	0.0	Preventative Maintenance SunTran & VanTran Provide capital maintenance AQ STATUS = Exempt Total Cost = 36322	6400 FTA5307 C 1600 LOCAL C	6395 FTA5307 C 1599 LOCAL C	6153 FTA5307 O 1539 LOCAL O	6000 FTA5307 O 1500 LOCAL O	6000 FTA5307 O 1500 FTA5307 O
11.7A.00	0						
The sponsor of this project is: Tucson Transit							
16.18		Preventative Maintenance (Real Property) Regionwide Preventative maintenance on real property AQ STATUS = Total Cost = 814 Undetermined	250 FTA5307 C 63 LOCAL C	150 FTA5307 C 38 LOCAL C			250 FTA5307 C 63 LOCAL C
The sponsor of this project is: Tucson Transit							
64.03	0.0	Security for Transit 1% of FTA Apportionment Required Install AQ STATUS = Exempt Total Cost = 782	39 LOCAL O 153 FTA5307 O	153 FTA5307 O 39 LOCAL O	153 FTA5307 O 39 LOCAL O	153 FTA5307 O 39 LOCAL O	153 FTA5307 O 39 LOCAL O
The sponsor of this project is: Tucson Transit							
43.12	4674 0.0 0 0	South Tucson Transit Services Providing transit services in South Tucson AQ STATUS = Exempt Total Cost = 2897	521 RTA O	537 RTA O	533 RTA O	570 RTA O	587 RTA O
The sponsor of this project is: Tucson Transit							
40.13	50_b	Streetcar Operations Streetcar Route Operations of Modern Streetcar AQ STATUS = Exempt Total Cost = 6800	1200 RTA O	1200 RTA O	1127 RTA O		
The sponsor of this project is: Tucson Transit							
42.13		Sun Shuttle OV DAR Bus Replacements Region wide Replace sun shuttles on OV DAR routes AQ STATUS = Exempt Total Cost = 758		60 FTA5307 P 15 LOCAL P	340 FTA5307 P 85 LOCAL P		152 FTA5307 P 38 LOCAL P
The sponsor of this project is: Tucson Transit							
95.06	4976 0.0 0 0	Sun Tran - Express Service Expansion Expand existing express routes and add new routes AQ STATUS = Exempt Total Cost = 11058	1794 RTA O 255 FTA5311 PM T -255 RTA RE V	1847 RTA O 255 FTA5311 PM T -255 RTA RE V	1903 RTA O 255 FTA5311 PM T -255 RTA RE V	1960 RTA O 255 FTA5311 PM T -255 RTA RE V	2019 RTA O 255 FTA5311 PM T -255 RTA RE V
The sponsor of this project is: Tucson Transit							

Pima Association of Governments FY 2020-2024 TIP Projects

Approved

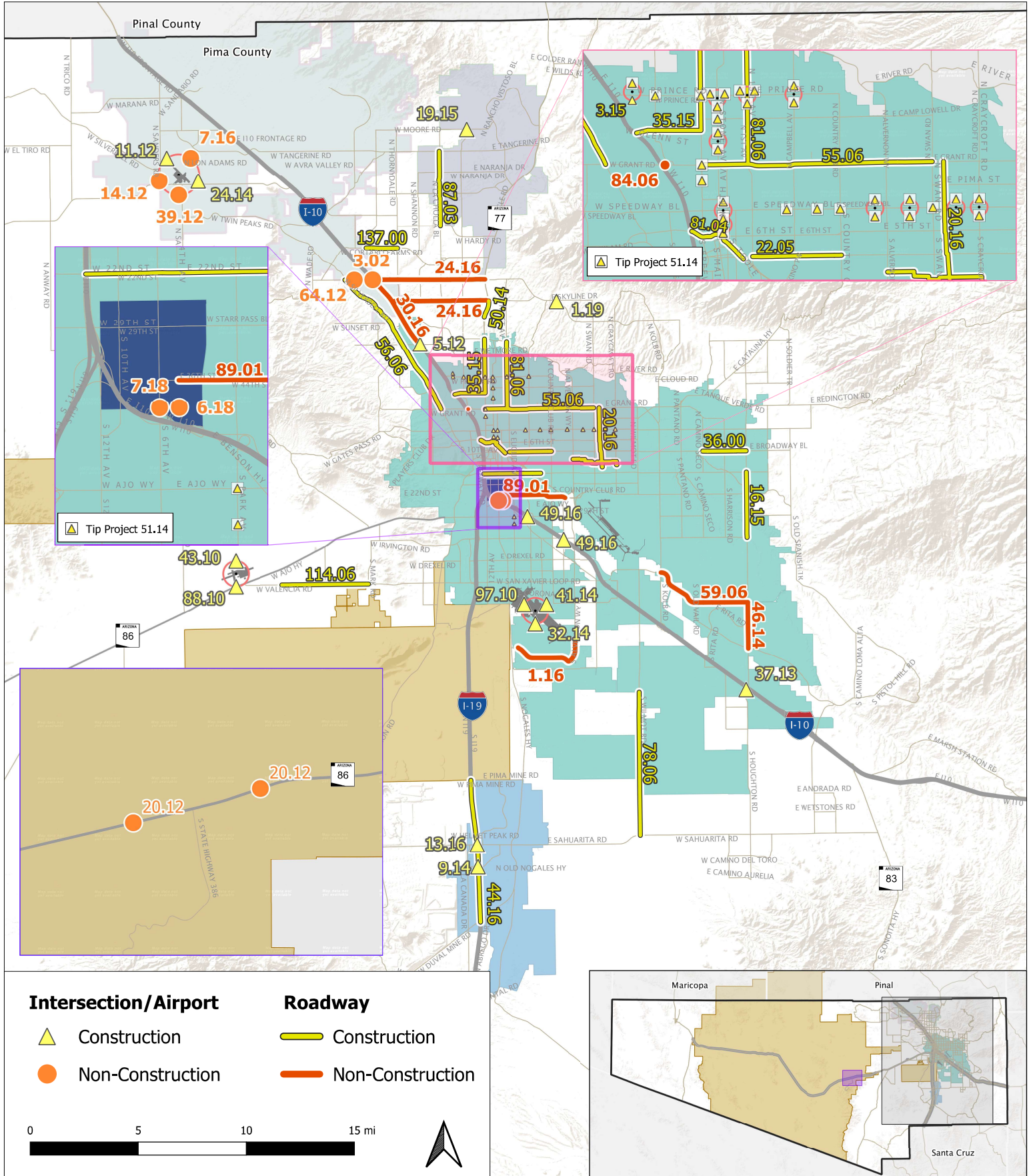
Tip ID SponsorID StateID FedID	RTAID Length ExistingLanes AfterLanes	STREET/PROJECT NAME LOCATION PROJECT DESCRIPTION AQ STATUS TOTAL COST	PROPOSED FUNDING (IN THOUSANDS OF DOLLARS)				
			FISCAL YEAR				
			2020	2021	2022	2023	2024
70.06	44__ 0.0 0 0	Sun Tran - Weekday Evening Service Expansion Expand weekday evening service along major routes AQ STATUS = Exempt Total Cost = 37717	2257 RTA O	2325 RTA O	2395 RTA O	2467 RTA O	2541 RTA O
The sponsor of this project is: Tucson Transit							
94.06	45__ 0.0 0 0	Sun Tran - Weekend Service Expansion Expand weekend service along major routes AQ STATUS = Exempt Total Cost = 19168	1189 RTA O	1225 RTA O	1262 RTA O	1300 RTA O	1339 RTA O
The sponsor of this project is: Tucson Transit							
27.03 ALI 11.12.15	0.0 0 0	Sun Van Replacement Vans Citywide Purchase replacement paratransit vehicles AQ STATUS = Exempt Total Cost = 18720	1843 FTA5307 P 461 LOCAL P	3180 FTA5307 P 795 LOCAL P	2380 FTA5307 P 595 LOCAL P	1900 FTA5307 P 475 LOCAL P	2480 FTA5307 P 620 LOCAL P
The sponsor of this project is: Tucson Transit							
71.06	473b 0.0 0 0	Sun Van/Paratransit Expansion Expand ADA paratransit services regionwide AQ STATUS = Exempt Total Cost = 4456	1537 RTA O	1583 RTA O	1631 RTA O	1680 RTA O	1730 RTA O
The sponsor of this project is: Tucson Transit							
7.19 5/24/2018		SunLink Wheel Truiling Equipment Regionwide Wheel truiling infrastructure for SunLink AQ STATUS = Total Cost = 950 Undetermined				760 FTA5307 C 190 LOCAL C	
The sponsor of this project is: Tucson Transit							
77.08	0.0 0 0	Support Vehicles - Sun Tran Support vehicles for Sun Tran operations Support vehicles for Sun Tran operations AQ STATUS = Exempt Total Cost = 941	80 FTA5307 P 20 LOCAL P	80 FTA5307 P 20 LOCAL P			160 FTA5307 P 40 LOCAL P
The sponsor of this project is: Tucson Transit							
8.19 5/24/2018		Transit Employee Training System Wide Employee Training AQ STATUS = Total Cost = 128 Undetermined	25 FTA5307 O 7 LOCAL O	25 FTA5307 O 7 LOCAL O		25 FTA5307 O 7 LOCAL O	25 FTA5307 O 7 LOCAL O
The sponsor of this project is: Tucson Transit							

Pima Association of Governments FY 2020-2024 TIP Projects

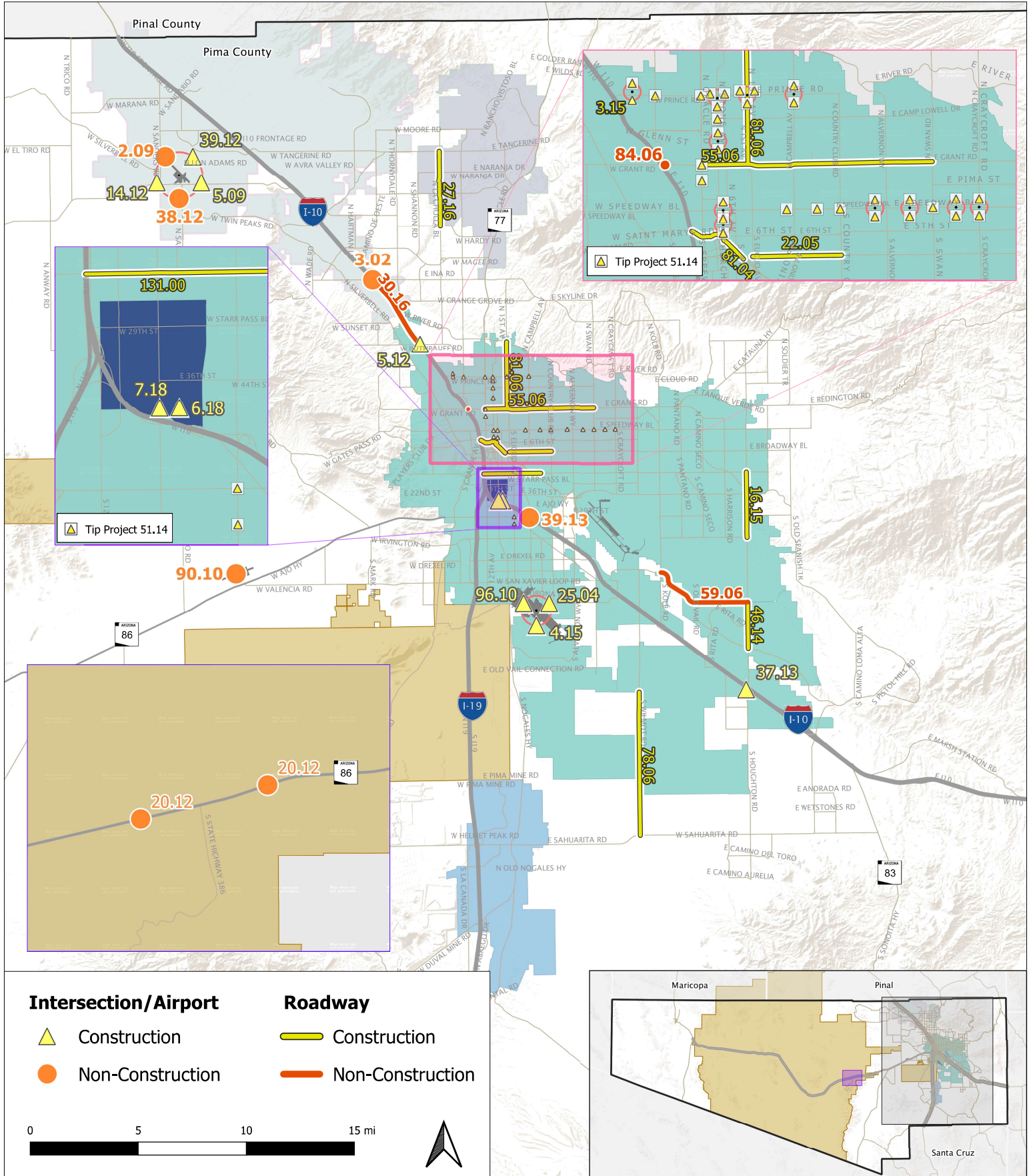
Approved

Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING					
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)					
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR					
FedID	AfterLanes	AQ STATUS	TOTAL COST	2020	2021	2022	2023	2024
32.03		Transit Enhancements/ADA						
	0.0	Citywide	39 LOCAL C	153 FTA5307 C	153 FTA5307 C	153 FTA5307 C	153 FTA5307 C	153 FTA5307 C
	0	1% of FTA Apportionment	153 FTA5307 C	39 LOCAL C	39 LOCAL C	39 LOCAL C	39 LOCAL C	39 FTA5307 C
	0	AQ STATUS = Exempt Total Cost = 759						
The sponsor of this project is: Tucson Transit								
66.03	46_j	Transit Grant Administration	160 FTA5307 O	160 FTA5307 O	160 FTA5307 O	160 FTA5307 O	160 FTA5307 O	160 FTA5307 O
	0.0		40 LOCAL O	40 LOCAL O	40 LOCAL O	40 LOCAL O	40 LOCAL O	40 LOCAL O
	0	Transit Grant Administration						
ALI 11.79.00	0	AQ STATUS = Exempt Total Cost = 2714						
The sponsor of this project is: Tucson Transit								
5.19		Transit Technology Upgrades	675 FTA5307 O	400 FTA5307 O	285 FTA5307 O			100 FTA5307 O
		Sytem Wide	169 LOCAL O	100 LOCAL O	72 LOCAL O			25 LOCAL O
		Technology upgrades for transit						
5/24/2018		AQ STATUS = Total Cost = 1826						
		Undetermined						
The sponsor of this project is: Tucson Transit								

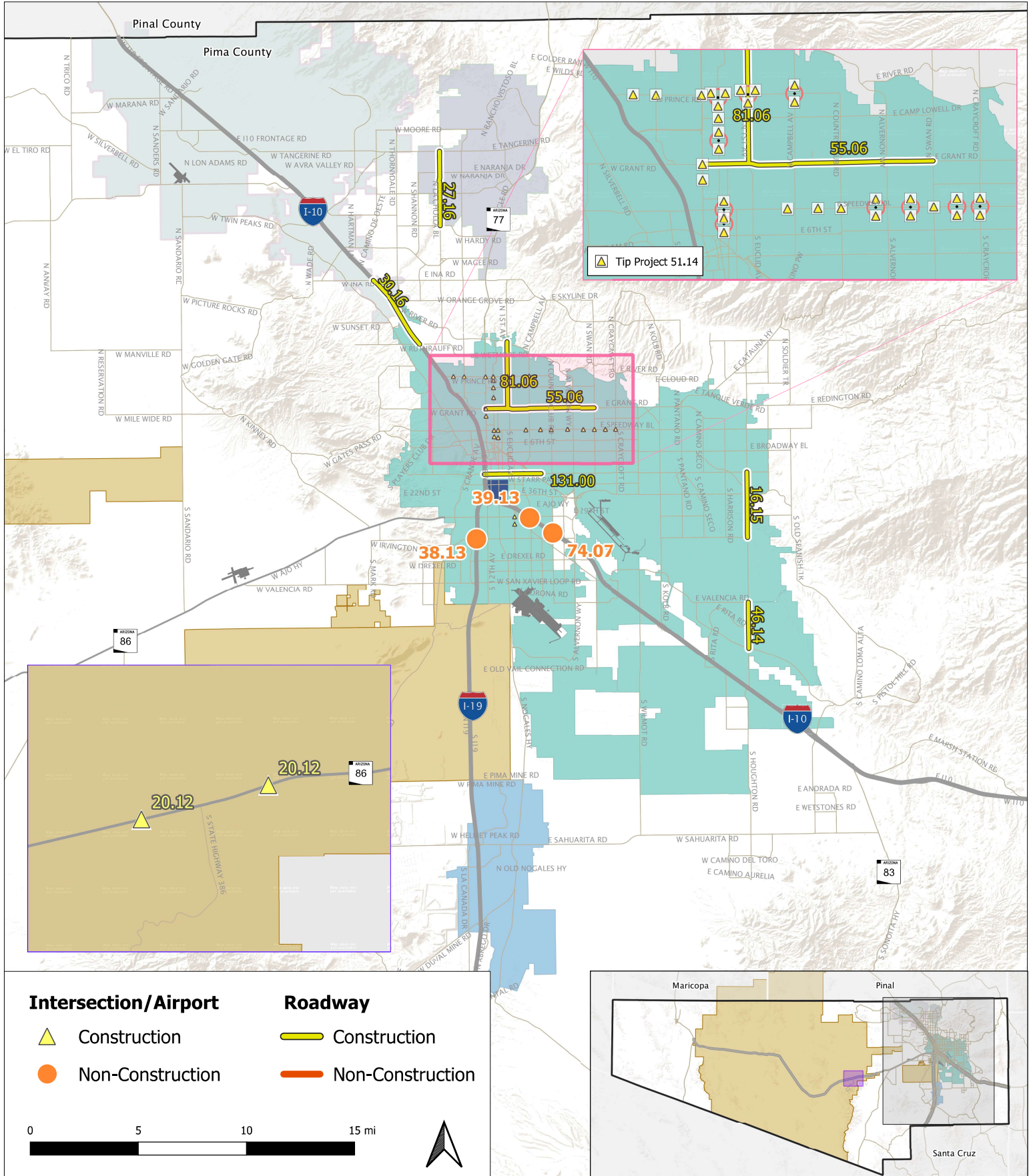
- 2020 TIP Projects -



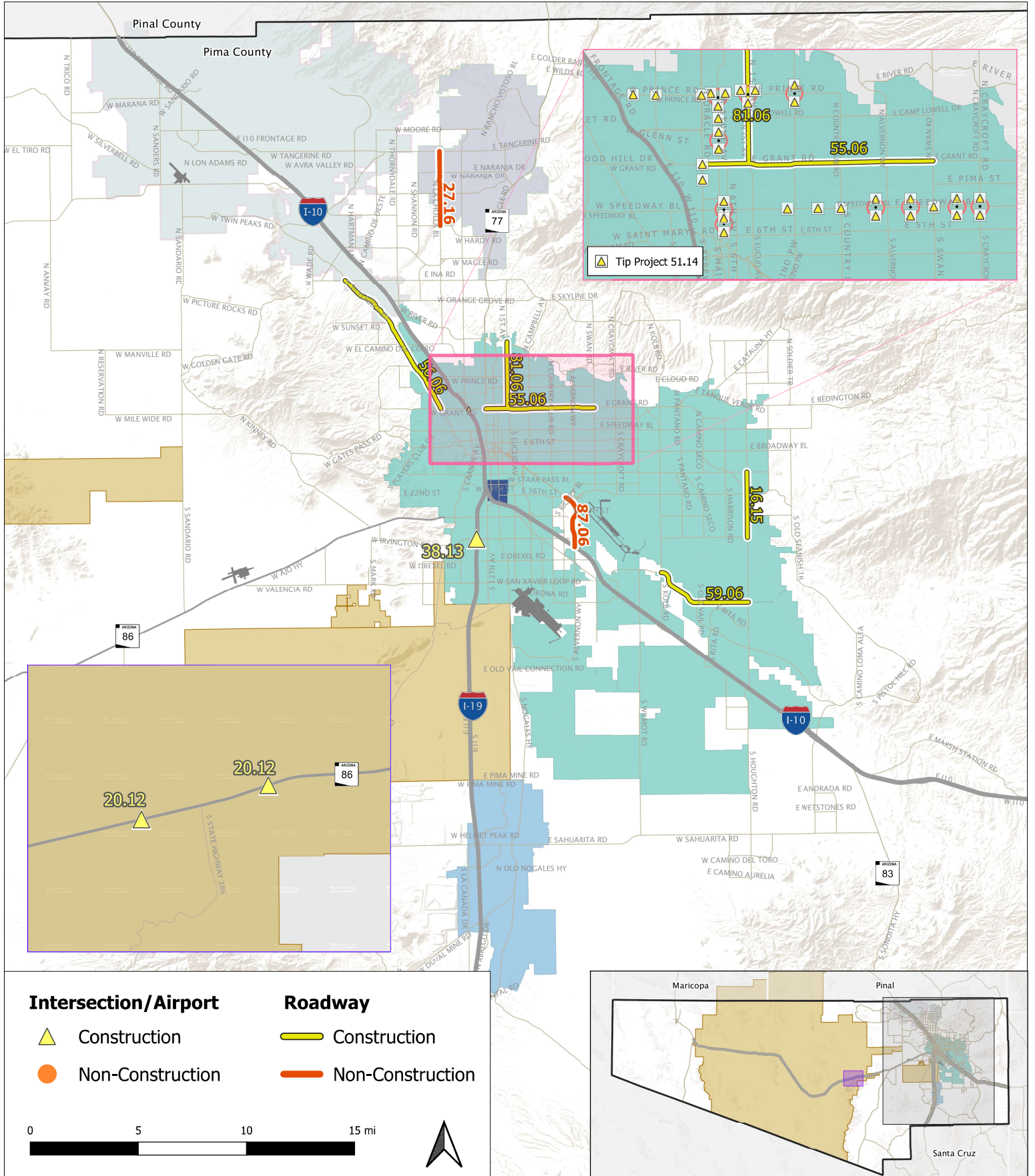
- 2021 TIP Projects -



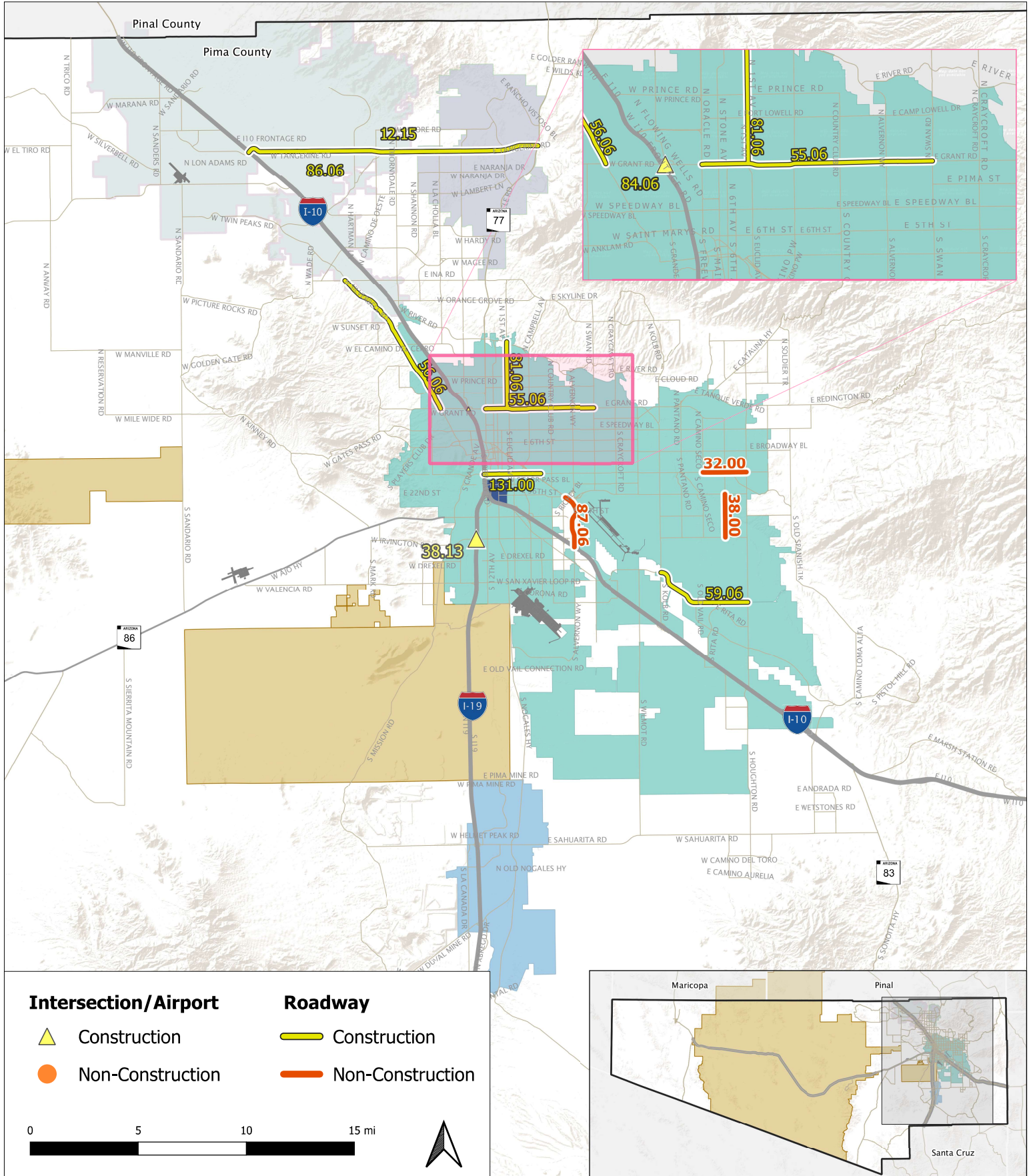
- 2022 TIP Projects -



- 2023 TIP Projects -



- 2024 TIP Projects -



APPENDIX 2

Development Program FY 2025-2029

APPENDIX 2 – TIP DEVELOPMENT PROGRAM FY 2025 - 2029

The tables on the following pages present PAG's Development Program for the five-year period beginning in FY 2025 and ending with FY 2029. The Development Program allows project sponsors to plan out future projects and prepare for their possible entry into the next 5-year TIP. The list is fiscally constrained, but projects in the Development Program are not guaranteed a spot in a future TIP nor have they been reviewed for consideration.

The format of the project listings in the Development TIP is identical to the adopted TIP. Please see Appendix 1 for more information on how to read the Development Program.

Pima Association of Governments FY 2025-2029 TIP Projects

Proposed

Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2025	2026	2027	2028	2029
5.12	09_a 0.0	I-10: Ruthrauff Rd TI I-10 and Ruthrauff TI Improve Traffic Interchange at I-10 and Ruthrauff AQ STATUS = Analyzed Total Cost = 196914	12500 STP C	0 RTA C	0 RTA C		
H8480 NH-010-D (213)A	0 0						
The sponsor of this project is: ADOT							
38.13	22_a	I-19: Irvington TI I-19 at Irvington Road Traffic Interchange at Irvington Rd. AQ STATUS = Analyzed Total Cost = 35000	370 STP C				
The sponsor of this project is: ADOT							
69.06	43__ 0.0	Small Business Assistance Small Business Assistance AQ STATUS = Exempt Total Cost = 10000	475 RTA C	475 RTA C			
	0 0						
The sponsor of this project is: Mainstreet							
12.15 ST021	42_s	Tangerine Rd Corridor: Wildlife Linkages Wildlife Linkages along Tangerine Corridor: Twin Peaks Rd to La Cañada Drive AQ STATUS = Exempt Total Cost = 3603	400 RTA C	200 RTA C			
The sponsor of this project is: Marana							
86.06 ST021	01_a 10.0	Tangerine Rd: I-10 to La Canada Dr Twin Peaks Rd to La Canada Dr Widen to 4 lanes with sidewalks & multi-use lanes AQ STATUS = Exempt Total Cost = 113600	4692 RTA C	2340 RTA C	0 RTA C		
	2 4						
The sponsor of this project is: Marana							
107.06	51_d 0.0	Oro Valley Park-and-Ride Park & Ride Lot at Rancho Vistoso Rancho Vistoso Lot AQ STATUS = Exempt Total Cost = 1582	70 RTA O	70 RTA O			
	0 0						
The sponsor of this project is: Oro Valley							

Pima Association of Governments FY 2025-2029 TIP Projects

Proposed

Tip ID SponsorID StateID FedID	RTAID Length ExistingLanes AfterLanes	STREET/PROJECT NAME LOCATION PROJECT DESCRIPTION AQ STATUS TOTAL COST	PROPOSED FUNDING (IN THOUSANDS OF DOLLARS)				
			FISCAL YEAR				
			2025	2026	2027	2028	2029
833.00 OWP #3210 RLTAP 06P	0.0 0 0	Local Technical Assistance Program (LTAP) Training funding for Tucson, Pima County, et.al. AQ STATUS = Exempt Total Cost = 250	50 STP S	50 STP S			
The sponsor of this project is: OWP-ADOT							
764.00	0.0 0 0	Transportation Art by Youth - Sahuarita AQ STATUS = Exempt Total Cost = 325	25 HURF126 C	25 HURF126 C			
The sponsor of this project is: OWP-LOCAL							
765.00	0.0 0 0	Transportation Art by Youth - Pima Co. AQ STATUS = Exempt Total Cost = 325	25 HURF126 C	25 HURF126 C			
The sponsor of this project is: OWP-LOCAL							
766.00	0.0 0 0	Transportation Art by Youth - Oro Valley AQ STATUS = Exempt Total Cost = 325	25 HURF126 C	25 HURF126 C			
The sponsor of this project is: OWP-LOCAL							
767.00	0.0 0 0	Transportation Art by Youth - South Tucson AQ STATUS = Exempt Total Cost = 325	25 HURF126 C	25 HURF126 C			
The sponsor of this project is: OWP-LOCAL							
768.00	0.0 0 0	Transportation Art by Youth - Tucson AQ STATUS = Exempt Total Cost = 325	25 HURF126 C	25 HURF126 C			
The sponsor of this project is: OWP-LOCAL							
769.00	0.0 0 0	Transportation Art by Youth - Marana AQ STATUS = Exempt Total Cost = 325	25 HURF126 C	25 HURF126 C			
The sponsor of this project is: OWP-LOCAL							

Pima Association of Governments FY 2025-2029 TIP Projects

Proposed

Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2025	2026	2027	2028	2029
84.10	0.0 0 0	PAG - Alternative Modes Program Regionwide Outreach & Promotion AQ STATUS = Exempt Total Cost = 530	100 STP S	100 STP S			
The sponsor of this project is: OWP-PAG							
85.01	0.0 0 0	PAG Consultant Services Misc studies & consultant activities AQ STATUS = Exempt Total Cost = 2575	100 HURF126 S 200 STP S	100 HURF126 S 200 STP S			
The sponsor of this project is: OWP-PAG							
635.00 H5224 03X	0.0 0 0	Travel Demand Management Programs AQ STATUS = Exempt Total Cost = 16308	985 STP O	985 STP O			
The sponsor of this project is: OWP-PAG							
659.00	0.0 0 0	Transportation Planning Program Operations and Contingency AQ STATUS = Exempt Total Cost = 9408	100 HURF126 S 2350 STP S	100 HURF126 S 2350 STP S			
The sponsor of this project is: OWP-PAG							
851.00	0.0 0 0	Regional Traffic Congestion Info System Transview updates and mapping AQ STATUS = Exempt Total Cost = 778	100 STP S	2026 STP S			
The sponsor of this project is: OWP-PAG							
466.00 H4115 01X	0.0 0 0	Tucson - Pavement Management System City portion of PMS Project funded thru PAG AQ STATUS = Exempt Total Cost = 2662	450 STP S	450 STP S			
The sponsor of this project is: OWP-TDOT							
75.06	47_d 0.0 0 0	Volunteer Transit Volunteer service coordinated w/Council on Aging AQ STATUS = Exempt Total Cost = 4900	250 RTA O	250 RTA O			
The sponsor of this project is: PCOA							

Pima Association of Governments FY 2025-2029 TIP Projects

Proposed

Tip ID SponsorID StateID FedID	RTAID Length ExistingLanes AfterLanes	STREET/PROJECT NAME LOCATION PROJECT DESCRIPTION AQ STATUS TOTAL COST	PROPOSED FUNDING (IN THOUSANDS OF DOLLARS)				
			FISCAL YEAR				
			2025	2026	2027	2028	2029
10.18	08_b 0 3	Sunset: I-10 to River Sunset Rd, from I-10 to River Rd Extend roadway AQ STATUS = Undetermined Total Cost = 17757		5714 RTA C			
The sponsor of this project is: Pima County							
13.11 11.80.00	473a 0.0 0 0	Transferred Special Needs Transit Service Area Operating funds for Expanded Transit Services AQ STATUS = Exempt Total Cost = 21459	5156 RTA O 5028 MOE PM -5028 RTA RE V	5311 RTA O 5179 MOE PM -5179 RTA RE V			
The sponsor of this project is: RTA							
24.15	40ar	Regional Traffic Signal Program: Equipment Regionwide Equipment for traffic signal program AQ STATUS = Exempt Total Cost = 1220	200 RTA O	200 RTA O			
The sponsor of this project is: RTA							
42.10	487e 0.0 0 0	Sun Shuttle Expanded Transit Services Regionwide Exp. Svcs: 401, 411, 412, GV, OVDAR, Ajo-Tuc AQ STATUS = Exempt Total Cost = 10800	2298 RTA O -481 RTA RE V 481 FTA5311 PM T	2367 RTA O 495 FTA5311 PM T -495 RTA RE V			
The sponsor of this project is: RTA							
72.06	4870 0.0 0 0	Sun Shuttle Base Transit Services Base services: 410, 413, 430, 440, Ajo-Dar AQ STATUS = Exempt Total Cost = 5576	1289 RTA O -480 RTA RE V 480 FTA5311 PM T	1327 RTA O -494 RTA RE V 494 FTA5311 PM T			
The sponsor of this project is: RTA							
93.06	4671 0.0 0 0	Sun Tran - Frequency and Area Expansion Improve frequencies along major routes, extend some routes AQ STATUS = Analyzed Total Cost = 177480	3637 RTA O	3746 RTA O	376 RTA O		
The sponsor of this project is: RTA							

Pima Association of Governments FY 2025-2029 TIP Projects

Proposed

Tip ID SponsorID StateID FedID	RTAID Length ExistingLanes AfterLanes	STREET/PROJECT NAME LOCATION PROJECT DESCRIPTION AQ STATUS TOTAL COST	PROPOSED FUNDING (IN THOUSANDS OF DOLLARS)				
			FISCAL YEAR				
			2025	2026	2027	2028	2029
97.06	47_i 0.0 0 0	RTA Special Needs Transit Expansion Expand to include new areas AQ STATUS = Exempt Total Cost = 12750	4861 RTA O	5007 RTA O			
The sponsor of this project is: RTA							
20.12	42_m 7.0 2 2	SR 86: Kitt Peak Linkage Wildlife Crossing Retrofit Phase 2 State Route 86 - Mile posts 127-134 Construct 2 over-crossings AQ STATUS = Exempt Total Cost = 6654	5055 RTA C				
The sponsor of this project is: Tohono O'odham							
32.00	30__ 2.0 4 4	22nd St: Camino Seco to Houghton Rd Camino Seco to Houghton Rd Improve 3 and 4 lane roadway AQ STATUS = Analyzed Total Cost = 9066	3250 RTA C	2116 RTA C			
The sponsor of this project is: Tucson							
38.00	31__ 3.0 2 6	Harrison Rd. - Irvington to Golf Links Irvington Rd. to Golf Links Rd. Widen to 6 lanes divided AQ STATUS = Analyzed Total Cost = 22619	1000 RTA C	4000 HURF126 C	1000 RTA C		
The sponsor of this project is: Tucson							
39.08 490L	40am 0.0 0 0	Regional Transportation Data Network Various locations Expand WiFi mesh AQ STATUS = Exempt Total Cost = 1800	150 RTA O	150 RTA O			
The sponsor of this project is: Tucson							
55.06 SR2A	18__ 5.0 4 6	Grant Rd: Oracle Rd to Swan Rd Oracle Rd to Swan Rd Widen to 6 lanes w/bike lanes & sidewalks AQ STATUS = Analyzed Total Cost = 171850	4097 HURF126 C				
The sponsor of this project is: Tucson							
56.06 SR6A	05__ 7.6 2 4	Silverbell Rd: Grant to Ina Grant to Ina Widen to 4 lanes w/ bike lanes AQ STATUS = Analyzed Total Cost = 69283	3500 HURF126 C	4500 HURF126 C 690 RTA C	1136 RTA C		
The sponsor of this project is: Tucson							

Pima Association of Governments FY 2025-2029 TIP Projects

Proposed

Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2025	2026	2027	2028	2029
81.06 SR11	14____ 3.1 4 6	1st Ave: Grant to River Grant Rd. to River Rd. Widen to 6 lanes AQ STATUS = Analyzed Total Cost = 74398	1096 RTA C 12804 HURF126 C	998 RTA C			
The sponsor of this project is: Tucson							
84.06 SR16	15____ 0.0 4 6	Grant Rd: RR Underpass Reconstruction Grant Rd near I-10 Reconstruct existing RR underpass AQ STATUS = Analyzed Total Cost = 37382	13532 RTA C	0 RTA C			
The sponsor of this project is: Tucson							
131.00 SR5A	19_a____ 3.7 5 6	22nd Street: I-10 to Tucson Blvd. I-10 to Tucson Blvd Widen to 6 lanes AQ STATUS = Analyzed Total Cost = 116952	9000 RTA C	1541 RTA C 5432 HURF126 C			
The sponsor of this project is: Tucson							
2.13	4675 0.0 0 0	Marana Transit Services Marana, various locations Transit in services in Marana AQ STATUS = Exempt Total Cost = 150	110 RTA O 110 MOE PM T -110 RTA RE V	113 RTA O 113 MOE PM T -113 RTA RE V			
The sponsor of this project is: Tucson Transit							
42.12	4672 0.0 0 0	Pima County Transit Services Various locations Replace service formally provided by Pima County AQ STATUS = Exempt Total Cost = 16164	4398 RTA O 2074 MOE PM T -274 RTA RE V	4530 RTA O 2094 MOE PM T -2094 RTA RE V			
The sponsor of this project is: Tucson Transit							
43.12	4674 0.0 0 0	South Tucson Transit Services Providing transit services in South Tucson AQ STATUS = Exempt Total Cost = 2897	584 RTA O	602 RTA O			
The sponsor of this project is: Tucson Transit							
70.06	44____ 0.0 0 0	Sun Tran - Weekday Evening Service Expansion Expand weekday evening service along major routes AQ STATUS = Exempt Total Cost = 37717	2833 RTA O	2918 RTA O	250 RTA O		
The sponsor of this project is: Tucson Transit							

Pima Association of Governments FY 2025-2029 TIP Projects

Proposed

Tip ID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING				
SponsorID	Length	LOCATION	(IN THOUSANDS OF DOLLARS)				
StateID	ExistingLanes	PROJECT DESCRIPTION	FISCAL YEAR				
FedID	AfterLanes	AQ STATUS TOTAL COST	2025	2026	2027	2028	2029
71.06	473b 0.0 0 0	Sun Van/Paratransit Expansion Expand ADA paratransit services regionwide AQ STATUS = Exempt Total Cost = 4456	1782 RTA O	1835 RTA O			
The sponsor of this project is: Tucson Transit							
72.03 MRC2 ALI 11.43.03	46_f 0.0 0 0	Administrative & Maintenance Facility near Prince Rd & Romero Rd Design & build new facility AQ STATUS = Exempt Total Cost = 55000	32 RTA O	33 RTA O			
The sponsor of this project is: Tucson Transit							
94.06	45__ 0.0 0 0	Sun Tran - Weekend Service Expansion Expand weekend service along major routes AQ STATUS = Exempt Total Cost = 19168	1431 RTA O	1474 RTA O	126 RTA O		
The sponsor of this project is: Tucson Transit							
95.06	4976 0.0 0 0	Sun Tran - Express Service Expansion Expand existing express routes and add new routes AQ STATUS = Exempt Total Cost = 11058	2009 RTA O 255 FTA5311 PM -255 RTA T RE V	2069 RTA O			
The sponsor of this project is: Tucson Transit							
108.06 MRC1	51_e 0.0 0 0	Houghton / Broadway Park-and-Ride Park and Ride O&M AQ STATUS = Exempt Total Cost = 3260	52 RTA C	52 RTA O			
The sponsor of this project is: Tucson Transit							

APPENDIX 3

Fiscal Constraint Analysis

HISTORICAL TIP REVENUES

State HURF Revenues Distributed to PAG		
Fiscal Year	2.6% Funds	12.6% Funds
1997	3,774,982	15,012,824
1998	3,660,930	14,026,680
1999	4,568,095	16,519,676
2000	4,879,583	17,845,269
2001	4,833,927	18,597,617
2002	4,844,033	17,544,352
2003	4,441,679	17,542,369
2004	3,977,717	19,128,680
2005	3,708,764	15,904,727
2006	4,866,177	20,765,239
2007	6,786,329	22,308,091
2008	*8,534,172	23,413,319
2009	4,320,453	19,770,000
2010	4,104,000	17,497,000
2011	3,771,875	16,572,282
2012	3,086,898	13,421,071
2013	3,836,069	16,848,465
2014	3,959,536	17,622,725
2015	4,046,123	19,468,263
2016	4,241,596	20,379,729
2017	4,441,305	22,186,379
2018	4,739,959	23,079,799
Estimated Revenues		
2019	4,900,000	23,500,000
2020	5,000,000	23,800,000
2021	5,150,000	24,150,000
2022	5,250,000	24,350,000
2023	5,450,000	24,500,000
2024	5,600,000	24,750,000

*Includes \$2,317,653 of one-time legislative appropriation

Federal STP Funds Distributed to PAG			
Fiscal Year	STP / STBG Apportionment	Obligation Ceiling Factor	Spendable Resources
1997	12,256,829	0.9459	11,593,794
1998	10,022,603	0.8959	8,979,380
1999	15,153,824	0.8788	13,316,934
2000	16,017,885	0.8595	13,766,873
2001	17,047,777	0.8877	15,132,633
2002	17,693,918	0.9103	16,107,440
2003	14,960,317	1.0420	15,589,006
2004	16,610,897	1.0711	17,792,528
2005	17,828,832	1.0320	18,399,941
2006*	16,152,088	0.9331	15,071,182
2007	18,373,621	0.9178	16,862,672
2008	18,749,220	0.9529	17,865,608
2009	20,286,245	1.0000	20,286,245
2010	21,035,867	1.0000	21,035,867
2011	16,444,138	1.0000	16,444,138
2012	16,444,138	1.0000	16,444,138
2013	17,392,131	0.9550	16,609,485
2014	17,398,021	0.9488	16,506,420
2015	17,398,021	0.9388	16,333,695
2016	17,860,885	0.9493	16,955,896
2017	18,314,740	0.9490	17,380,688
2018	18,871,741	0.9490	17,909,282
Estimated Revenues			
2019	18,500,000	1.0	18,500,000
2020	19,000,000	1.0	19,000,000
2021	19,000,000	1.0	19,000,000
2022	19,000,000	1.0	19,000,000
2023	19,000,000	1.0	19,000,000
2024	19,000,000	1.0	19,000,000
* Totals prior to 2006 includes PL and SPR funds			

State Discretionary Funds (a combination of state and federal funding, the amounts shown are the amounts provided for programming.)	
Fiscal Year	Amount provided to PAG area
2006	57,940,000
2007	57,275,000
2008	*96,422,000
2009	50,005,000
2010	67,310,000
2011	64,400,000
2012	71,800,000
2013	64,501,000
2014	57,835,000
2015	60,100,000
2016	37,250,000
2017	50,900,000
2018	42,941,000
2019	62,194,000
2020	84,596,000
2021	79,354,000
2022	81,064,000
2023	33,600,000
2024	33,915,000
* includes \$4,600,000 and \$4,320,000 in supplemental state discretionary and Revenue Aligned Budget Authority (RABA)	

Total ADOT funding in the PAG region consists of the ADOT Subprogram and State Discretionary Funds (which are shown in the table above). Projects in the ADOT Subprogram are determined by technical analysis (bridge deficiencies, pavement condition, etc), while discretionary funds are jointly programmed by ADOT and PAG based on mutually determined priorities. Together, these sources consist of 13% of all funding that ADOT has available for projects throughout the state. Years in which the subprogram for the PAG region is particularly large will result in less funding for discretionary projects (as seen in 2023 and 2024 in the above table).

FY 2020 – 2024 TIP Fiscal Constraint Analysis						
All numbers in 000s						
	HURF 2.6%	HURF 12.6%	STP / STBG	FTA 5307	FTA 5310	RTA*
FY2019 Balance/Carryover	496	2,946	0	0	0	27,852
FY2020 Revenues	5,000	23,800	19,000	15,747	936	108,947
FY2020 Expenses	3,020	24,200	19,000	15,747	936	125,176
FY2020 Balance/Carryover	2,476	2,546	0	0	0	11,623
FY2021 Revenues	5,150	24,150	19,000	16,188	936	101,763
FY2021 Expenses	5,000	24,500	19,000	16,188	936	103,788
FY2021 Balance/Carryover	2,626	2,196	0	0	0	9,598
FY2022 Revenues	5,250	24,350	19,000	15,277	936	100,361
FY2022 Expenses	2,626	25,700	19,000	15,277	936	100,643
FY2022 Balance/Carryover	7,876	846	0	0	0	9,316
FY2023 Revenues	5,450	24,500	19,000	15,328	936	103,518
FY2023 Expenses	0	24,850	19,000	15,328	936	102,752
FY2023 Balance/Carryover	13,326	496	0	0	0	10,082
FY2024 Revenues	5,600	24,750	19,000	17,489	936	107,703
FY2024 Expenses	0	25,100	19,000	17,489	936	104,535
FY2024 Balance/Carryover	18,926	146	0	0	0	13,250

*RTA revenues include sales tax revenues, transit revenues, miscellaneous revenues, and repayments.

APPENDIX 4

TIP Policies and Procedures



Transportation Improvement Program (TIP) Policies and Procedures

Introduction: These policies and procedures govern the programming of available regional funds through Pima Association of Governments' Transportation Improvement Program (TIP). Proposed projects that are regionally significant¹, regardless of fund source, are required to be included in the TIP document and, as such, portions of the TIP Policies and Procedures apply to those projects as indicated below. Additionally, funds associated with the Regional Transportation Authority (RTA) are governed by the RTA Memorandums of Policy and the RTA Policy, Objectives and Procedures documents.

Goal: To provide consistency in the development of the TIP, which creates a common ground from which everyone can plan and to establish consistent and efficient use of the regional funds to comply with all applicable state, federal and other guidelines.

Nothing in the TIP Policies and Procedures is intended to contradict or supersede federal rules, the Arizona Constitution or statutes and/or the RTA Memorandum of Policies (MOPs) or RTA Policies, Objectives and Procedures (POPs).

Process: It must be stressed that while the PAG regional funds programming process strives for consistency, there are fundamental differences in the role, and associated authority, that PAG has in the programming of federal, state and regional funding. The process tries to balance federal requirements for a performance-based planning and programming approach overall.

Federal regulations state that metropolitan planning organizations (MPOs) shall develop long-range transportation plans and transportation improvement programs through a performance-driven, outcome-based approach to planning for metropolitan areas of the state. At the same time, the enabling legislation for the Regional Transportation Authority (RTA) calls for expenditures to be consistent with the RTA plan approved by the voters in 2006.

¹ As defined by 40 CFR 93.101, regionally significant project means a transportation project (other than an exempt project) that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel.

Concepts and Definitions:

Policies – for the purposes of this document, refers to the consistent rules to be followed by PAG staff and the jurisdictional sponsors in developing and implementing the TIP.

Procedure – for the purposes of this document, refers to the set processes that are followed by PAG to develop and update the TIP and manage the regional program.

OWP – Overall Work Program. The OWP describes the amount of local, state and federal funds programmed for PAG’s operations including how they are used for personnel and outside professional services.

HURF – Highway User Revenue Fund.

TPC – Transportation Planning Committee. TPC is the PAG committee responsible for development of the TIP document.

PAG HURF 12.6% Funds – Regional funds that come from the state Highway User Revenue Fund set aside for roadway projects.

PAG HURF 2.6% Funds – Regional funds that come from the state Highway User Revenue Fund set aside for roadway projects on the state system. This fund source is cooperatively programmed with ADOT.

RTA - The Regional Transportation Authority is the government entity that manages the \$2.1 billion, 20-year RTA plan, which was approved by Pima County voters on May 16, 2006.

RMAP - Regional Mobility and Accessibility Plan is the region’s long-range transportation plan.

STBGP Funds – Federal Surface Transportation Block Grant Program funds. Sometimes abbreviated as STP.

RTAG - Regional Transportation Alternatives Grant. The portion of statewide-apportionments of Transportation Alternatives funds that are suballocated to the PAG region for programming through a competitive selection process.

PDAF – Project Development Activity Fund. A set-aside of PAG HURF 12.6% funds used to jumpstart projects by doing the necessary study or preliminary design that prepares projects for construction.

Advanced Construction Agreement – An agreement between PAG, ADOT, and a project sponsor that allows a project to begin even in the absence of sufficient Federal-

aid obligation authority in the current fiscal year. The agreement identifies a future date when the obligation authority will be available.

Severability – Any parts of these policies and procedures that do not apply for any reason, including but not limited to federal rules, Arizona Revised Statutes, or RTA policies, to a given set of circumstances, do not void their application where possible.

Compatibility with Existing Legislation - The Arizona State Constitution and Arizona Revised Statutes are already in place for HURF funds; use and reimbursement requirements remain in place and are not impacted by these policies and procedures.

Existing federal rules for federal funds' use, match and obligation requirements remain in place and are not impacted by these policies and procedures. These policies and procedures will be administratively updated to reflect changes necessitated by changes in federal regulations.

Continuation - The TIP Policies and Procedures are to remain in effect unless modified by action of the PAG Regional Council. Additional guidelines and procedures may be modified, added or deleted by the PAG Executive Director acting upon the Regional Council's policies in lieu of Regional Council action. Change in FHWA or FTA policy or regulation may also necessitate revision of these policies and procedures.

Policies:

TIP Development

PO1.0 – The TIP shall be fiscally constrained in each individual fund source in each of the first four years of the TIP. The region shall establish a fifth year of the TIP; however, it does not need to be fiscally constrained.

PO1.1 – Only projects that are consistent with the region's long-range transportation plan, the Regional Mobility and Accessibility Plan (RMAP), are eligible to be in the TIP.

PO2.0 – The TIP document shall contain an appendix that provides programming for years six through 10 for planning purposes. This appendix will be called the "Development Program" and will allow the jurisdictions to plan and evenly space projects in the program. Additionally, FHWA may require certain studies or design projects to demonstrate the need for future construction funds prior to obligation, or a portion/phase thereof.

PO2.1 – While fiscal constraint is not required for the Development Program, the utility of the planning exercise would be diminished if some level of constraint is not used. Years six through 10 of the Development Program shall be constrained within 10 percent of the funding estimates for the fourth year of the TIP.

PO2.2 – The region is not required to advance projects in the Development Program into the fifth year of the TIP as part of the TIP development process.

However, if the sponsoring jurisdiction has been developing the project, advancing these projects should be strongly considered.

PO3.0 – No individual jurisdiction may request more funding in any given year from any individual funding source, than the total amount available to the region.

PO3.1 – Privately funded projects must provide evidence of funding to be included in the TIP. The sponsoring jurisdiction shall confirm in writing to PAG that the private funding is reasonably expected in the year of expenditure programmed in the TIP.

PO3.2 - Jurisdictions shall confirm in writing that their local match and any other funds necessary to complete the project will be made available within the specified timeframe.

PO4.0 – Construction projects may not appear in the first two years of the TIP unless the phase shown within those years is fully funded.

PO4.1 – Construction (“C”) projects may not be shown in the first two years of the TIP document unless the project is fully funded. Construction funds should not be shown in year three of the TIP unless the jurisdiction has an “Advanced Construction” plan. The funding set-aside (FS) designation shall be used when a jurisdiction is compiling the necessary funding for a phase. The phase of the project shall be included in the FS designation, e.g. design set-aside funds will be labeled as DFS and construction set-aside as CFS.

PO4.2 – Advanced Construction (AC) funds must be sufficient to complete the construction project and are provided at the sponsor’s risk. Reimbursement of AC funds in later years of the TIP are to be viewed as tentative commitments and are subject to adjustments based on funding availability and other project priorities.

PO5.0 – Non-infrastructure programs should be regional in nature and be included in both the TIP and the OWP.

PO5.1 – Requests to be included in the OWP shall be made to PAG, in writing, by November of the year prior to the funding request.

PO5.2 – Programmatic funding is not guaranteed; no long-term commitments should be made by the jurisdiction beyond the first year of the TIP.

PO6.0 – Should HURF funds not be available for a reimbursement request, reimbursements will be done on a first-come, first-serve basis.

PO7.0 – For STBG and PAG HURF 12.6% projects in excess of \$3 million, jurisdictions over 100,000 in population may request up to three new projects, and jurisdictions under 100,000 in population may request one new project annually for consideration.

PO8.0 – Jurisdictions can request additional funds for projects already in the TIP if those funds are going toward project elements. Such additions should not be more than 10 percent of the budget beyond the original scope, or \$200,000, whichever is less. Increases in scope or budget beyond that amount requires a review and approval of the project MOU.

PO9.0 – Jurisdictions shall not enter into STPX exchanges or loan agreements if other regional resources are available to take their place.

PO10.0 – PAG HURF 2.6% funds are available to the region to cooperatively program with ADOT for projects or studies on the state system. The policies below are unique to this fund source.

PO10.1– PAG 2.6% funds shall be programmed using the existing TIP process. The steps shall include:

- Jurisdictions requesting 2.6% funding should submit that request during the normal TIP process using the TIP application by the established deadline.
- PAG will cooperatively review the requests with ADOT and jointly develop the ADOT program recommendation for review at the TPC TIP development meeting.

PO10.2 – PAG HURF 2.6% funding should not be programmed more than two years in advance.

PO10.3 – Priority for 2.6% funding shall be given to projects that:

1. Fund RTA projects that are on a state facility.
2. Supplement funding for a jurisdictional project that is located on an ADOT route or highway.
3. Cover a local share contribution to an ADOT project.
4. Fund additional elements in a state project as requested by the region but that were not part of the original ADOT project. The additional elements must be HURF eligible. For example: rubberized asphalt.
5. Augment the funding of a state project.
6. Fund a study of a state facility.

PO10.4 – PAG HURF 2.6% funds shall be prioritized to keep the RTA-related time periods on schedule.

Project Charters

PO11.0 – A Project Charter document is required for all RTA roadway element projects while in the project planning phase and must be on file before the project moves to final design.

Project MOUs

PO12.0 - The purpose of the Transportation Improvement Program Memorandum of Understanding is to ensure that all stakeholders have the same understanding of the project that will be delivered. The jurisdictions will commit to delivering the project as scoped in the MOU.

PO12.1 - In the case of federal funding, the jurisdiction will affirm its understanding that federal funds must be authorized in the year for which they are programmed and will commit to deliver federally funded projects in the years indicated in the MOU.

PO12.2 - A project will be required to have an MOU in place before funds can be programmed in years one or two of the TIP. A project sponsor may, at its option, enact an MOU for phases in years three, four or five.

PO12.3 - Projects that already have an RTA IGA in place are not required to also establish an MOU. The RTA IGA is sufficient in these cases.

PO12.3.1 – Items outside of the scope of the RTA IGA that are funded with regional funds will require an MOU.

PO12.4 - An MOU covering the phase in question will be required prior to any project programming regional funding sources for design, construction, right of way or operations. Regional funding sources include: HURF 12.6%, HURF 2.6%, STBG, RTAG, and HSIP funds.

PO12.5 - A single project can have separate MOUs for each project phase, or, at the discretion of PAG and the sponsoring jurisdiction, a single MOU can be amended each time a new project phase would otherwise require a new MOU.

PO12.6 - Programmatic or non-infrastructure projects will require an amended MOU for each fiscal year in which regional funding has been programmed.

PO13.0 - An MOU amendment may be required when the scope of work or programmed amounts change as described herein. An MOU amendment may also be used, at the discretion of PAG and the sponsoring jurisdiction, to add a new phase to an existing MOU. A formal TIP amendment may also be required and will be processed concurrently.

PO13.1 - Substantive changes to the scope that would require an MOU amendment include:

- Change in project end points resulting in a change to the project length of a quarter mile or more.
- Change in outcomes, deliverables, or affected jurisdictions or organizations.
- Addition or elimination of key project features.

PO13.2 - A significant change in funding amount is one that changes the total amount programmed of regional funding sources in the TIP by more than 10 percent of its original programmed amount, or \$200,000, whichever is less.

PO13.3 - An MOU amendment also will be required if a change requests that all funding be removed from the current fiscal year, or if the project will be removed from the program entirely.

PO13.4 - An MOU amendment is not required to shift funds between phases, as long as the total amount of programmed funding of that source does not change. Likewise, an MOU amendment is not required for end of year roll-overs.

PO13.5 - The MOU amendment will be reviewed by the PAG Regional Council prior to PAG Regional Council approval. The sponsoring jurisdiction can advance the MOU amendment through its own approval process concurrently, if so desired.

TIP Amendments

PO14.0 – PAG has multiple methods by which the TIP may be amended. See the matrix at the end of this document for details.

PO15.0 –A jurisdiction can request an expedited approval of an amendment. Expedited approval involves scheduling the item at either TPC or Management and placing the item on the agenda for Regional Council.

PO16.0 – Amendments, as required of all TIP projects, may not add projects that are not consistent with the adopted RMAP.

PO17.0 – Amendments shall not include project funding beyond the current fiscal year unless needed to maintain fiscal constraint and regional balance.

PO17.1 – Changes for future fiscal years should only be included as part of the TIP development process.

PO18.0 – Amendments may not add capacity-changing projects unless applicable requirements of the CMP are met and an air quality conformity analysis is run for the region that includes the proposed project.

PO18.1 – Amendments that impact the conformity analysis (capacity projects that must be modeled) require the same public notice and opportunity for comment as the original TIP document.

PO18.2 – Due to the nature of the modeling process, an amendment that requests a new capacity-changing project will not have the ability to be expedited. Jurisdictions are asked to plan accordingly.

PO18.3 – For the purposes of these policies and procedures, a capacity-changing project is defined as one that adds or removes a vehicular travel lane one mile or more per the CMP. Turn lanes, road widening (without adding additional travel lanes), bicycle, pedestrian and transit projects that do not remove travel lanes are not, for the purposes of this policy, considered capacity changing.

PO19.0 – Amendments must maintain fiscal constraint by fund type and by year.

PO20.0 – The programming of available regional funds will follow a regional programming process. This includes funds that are returned to the region at the conclusion of a project or funds that are identified as no longer needed to complete a project.

PO20.1 – Reprogramming of available funds shall go through the regular TIP process.

PO20.2 – Once a jurisdiction becomes aware of excess funding on a project, it should contact PAG, in writing, with the approximate time frame of the return and funding amount.

PO20.3 – PAG staff will notify all jurisdictions of the available funds in an email that will serve as a “supplemental Notice of Funding Availability.” The email shall include:

- the type and amount of funding
- the approximate time frame the funding will become available
- any deadlines associated with the spending or obligation of the funding
- deadline for applications requesting the funding
- the day/time of the PAG meeting where the programming of those funds will occur

PO20.4 – Any jurisdiction returning the funds shall be required to follow the same process as all the other jurisdictions requesting the returned funds.

Regional Priorities

PO21.0 – Regional planning and programming are dependent on responding to a variety of different factors (e.g. land use, populations, environment and economic) that require an understanding of current priorities. The PAG programming process should be consistent with established Regional Council or RTA Board priorities.

PO21.1 – Current established priorities include:

- 1 - Payments for work already completed.
- 2 - RTA corridor projects already under construction to complete work included in the scope of work described in the voter-approved RTA ballot.
- 3 - RTA corridor projects within two (2) years of the “period” deadline by which construction was mandated to be started per the RTA ballot language, provided that the funds needed are for work described in the voter-approved RTA ballot.
- 4 - Non-RTA projects that are already under construction in need of additional funds to complete the original scope of work.
- 5 - Payments for jurisdictionally bonded projects that are payments for work already completed.
- 6 - RTA corridor projects already in the adopted TIP.
- 7 - Non-RTA projects already in the adopted TIP.
- 8 - Major RTA categorical projects, intersections for example, that are in need of additional funding.
- 9 - New regional projects.

Procedures:

TIP Development

PR1.0 – During the month of August, in the year prior to the adoption of a new TIP, PAG staff shall work to develop the fund estimate for the upcoming TIP document. Development of these estimates shall be done in conjunction with the FHWA and State of Arizona. These estimates shall reconcile previous estimates vs. actual revenues, if available for previous years, as well as determine estimates for the “out” year of the upcoming TIP.

PR2.0 – PAG staff shall present the fund estimate outlined in PR1.0 to TPC for their concurrence. PAG staff shall adjust the estimates based on the recommendations of the TPC as appropriate for the development of the Notice of Funding Availability. The fund estimates should be consistent with ADOT’s estimates. TPC may use a limited duration task force or subcommittee to hold a special meeting to review the funding estimates in detail.

PR2.1 – PAG shall reserve up to 10 percent of the estimated HURF 12.6% funds available for the first fiscal year and 5 percent in future years as a contingency. Contingency funds will allow the region to assist jurisdictions with projects in construction to cover any cost overruns or unforeseen circumstances. It should be stressed that the intent of the contingency fund is for jurisdictions to provide estimates for projects they are developing that are not overly conservative.

PR2.2 – The contingency is not intended to increase the scope of a project beyond what is outlined and agreed upon in the Memorandum of Understanding (MOU) or IGA for the project.

PR2.3 – The programming of contingency funds will follow the procedures outlined for the reprogramming of available funding, as set forth in PO20, including a supplemental NOFA. If a jurisdiction makes a request for the programming of contingency funds for an eligible project, then all other jurisdictions will be notified of the request and will be permitted to submit eligible projects to be considered for the programming of contingency funds.

PR 2.4 – Staff will review requests for the use of contingency funds for eligibility and compliance with TIP policies prior to the TPC meeting in which the requests are reviewed.

PR2.5 – Projects selected for the programming of contingency funds will be included in the next available TIP amendment request.

PR3.0 – On or about Sept. 1 of each year, PAG shall make available the Notice of Funding Availability, which outlines the funds available over the next five years that cover the upcoming TIP period, by fund source.

PR3.1 - The fund sources included in the Notice of Funding Availability may include: STBG, RTA Categorical funds, HURF 12.6%, HURF 2.6%, HURF PDAF, and any other regional funds determined to be specifically available to the region.

Specific fund sources that require a competitive selection process may be included in the Notice of Funding Availability. However, that competitive process will follow separate grant selection requirements (see PR6.1).

PR3.2 – The Notice of Funding Availability will include the “Year of Expenditure” (YOE) factor to be used in the calculation of expenditures anticipated in future years of the TIP.

PR3.3 – The Notice of Funding Availability shall include the due date to receive funding requests from the project sponsors.

PR3.3.1 – No funds can be programmed until after the submittal deadline, when all project requests can be considered together.

PR3.4 – PAG shall make available, as attachments or Web postings, all of the necessary forms associated with the Notice of Funding Availability.

PR3.5 – The Notice of Funding Availability will provide direction on current regional priorities as set by the PAG Regional Council/RTA Board.

PR4.0 – Annually, each project sponsor shall submit a status update of all current, programmed, and requested projects (if requests are in response to a Notice of Funding Availability). The update shall include a report on progress toward RMAP performance targets. PAG shall distribute a spreadsheet to each jurisdiction with its TIP projects and

programs listed by TIP ID number. Information requested shall include: project cost estimate, source, and date of that estimate, project status, and an estimate (month/year) of project start and completion. The request shall contain the date the completed status report is due back to PAG.

PR4.1 – At this time, projects requiring an MOU will be identified.

PR4.2 – Each project sponsor will submit its funding requests with its own prioritized ranking by fund source based on its own priority system for new projects. Project applications may only be submitted to PAG by the jurisdiction's TPC representative. Applications submitted by other jurisdictional personnel will not be considered during the programming process.

PR4.3 – Because of the implementation of performance measures in federal legislation, it should be noted that regional performance measure requirements may take precedence over jurisdictional priorities.

PR5.0 - Prior to TIP development, PAG shall review the status of RTA projects in the current and next period with the project sponsors and identify any opportunities to supplement RTA funding. Outcomes of that review should be reflected in the project sponsor's funding requests.

PR5.1 - Non-federalized RTA projects should remain non-federalized to maximize regional funding. For example, HURF funds should be considered to supplement non-federalized RTA projects.

PR5.2 - Federalized RTA projects should maximize the use of STBG, RTAG and HSIP funding as opportunities arise, provided obligation deadlines can be accommodated. Consideration should be given to entering into Advance Construction Agreements, in order to efficiently use the region's entire federal obligation authority.

PR5.3 - Should STBG funding be in jeopardy of not meeting obligation deadlines, the TPC shall investigate flexing those STBG funds to transit projects, provided that a like amount of RTA funds that would otherwise be committed to RTA transit projects are returned to the RTA to be used where it is needed most to keep the RTA plan on schedule or for corridor or categorical projects.

PR6.0 – After project applications have been submitted in response to the Notice of Funding Availability, PAG will develop a matrix of project applications and their corresponding impacts on the congestion management process and performance measures.

PR6.1 – Federal grants that have been identified to be programmed “competitively” will have a few additional steps to ensure, to the extent practicable, that there is separation between agencies/individuals that are

developing the selection criteria, applying for the grant, and making grant award recommendations.

PR6.1.1 – The competitive selection criteria shall be developed by PAG staff based on federal guidance, applicable performance measures and regional priorities as defined by the PAG Regional Council/RTA Board. Projects not consistent with these priorities will be returned to the sponsoring agency for revision and will not be considered in the programming process.

PR6.1.2 – A competitive selection panel may be formed by PAG staff from the existing membership of appropriate PAG committees or subcommittees.

PR6.1.2.1 – Members of the competitive selection panel must not have a conflict of interest, defined for these purposes as:

- Employed by a jurisdiction that is sponsoring an application.
- Employed by a public/private entity that has worked on the project application.
- Employed by, or has an interest in, a public/private entity that is a sub-contractor or sub-recipient of the requested grant funds.
- Directly or indirectly benefit as a recipient or subrecipient of the project/program.

PR6.1.3 – The final recommendation(s) of the selection panel will be forwarded to the TPC for inclusion in the draft project list. While TPC can alter the recommendation of the panel, it should do so only after giving great weight to the findings of the panel.

PR6.1.4 – While great weight is given to the recommendation(s) of the panel, it is ultimately the PAG Regional Council that makes funding/programming decisions for the region.

PR6.2 – At the discretion of the PAG Executive Director, additional fund sources or types of projects may also follow a compatible competitive process to gather additional input from subject matter experts.

PR6.3 – Technical-related projects may be assigned by PAG to the appropriate subcommittee to work through the recommendation process.

PR7.0 – The Transportation Planning Committee is tasked with development of a draft project list. The TPC may need to hold three special meetings during the TIP development if they do not address these issues during the normally scheduled TPC meetings: a meeting to review/develop fund estimates (PR2.0), another meeting to provide technical review of the performance data matrix, and a meeting to develop the

draft project list. TPC may use a limited duration task force or subcommittee to conduct these special meetings.

PR7.1 – TPC will review the Performance Measure matrix prior to the TIP Development meeting. Based on the technical knowledge and expertise of those reviewing the matrix, the performance measure scores may be adjusted, if necessary.

PR8.0 –The TPC shall meet after project applications have been submitted and performance data has been generated to develop a draft TIP. The time, day and duration of the meeting(s) is at their discretion, but should be within the final quarter of the calendar year.

PR8.1 – TPC shall review the performance data matrix populated with each project application and its impact on regional performance measures.

PR8.2 – New projects submitted for consideration in the draft TIP shall include a TIP Criteria Sheet. These forms are used to objectively compare competing projects for the limited available funding.

PR8.2.1 – The Congestion Management Process (CMP), which is required by federal regulation, shall be incorporated into the project selection process. Consideration of congestion mitigation strategies shall be included as part of the TIP application process for capacity-increasing projects. However, congestion mitigation strategies also will be considered for inclusion as part of non-capacity increasing TIP projects when appropriate.

PR8.3 – After reviewing the funding available, by fiscal year and fund source, TPC shall review the funding requests made by fiscal year.

PR8.4 – Fiscal constraint must be achieved in the first four years of the TIP by fund source.

PR8.4.1 – Projects that are not programmed in the first five years of the TIP may be placed in years six through 10 of the Development Program. The Development Program must be constrained within 10 percent of the revenue estimate of year five of the draft TIP.

PR8.4.2 – Additional adjustments may need to be made to the Development Program to maintain the appropriate fiscal constraint.

PR8.4.3 – Projects and programs included in the Development Program do not automatically move forward each year; status of the project development and jurisdictional priorities will dictate its location in the Development Program.

PR9.0 – December 15 is the deadline for finalizing the proposed project list.

PR9.1 – The proposed project list will be reviewed by the Management Committee and Regional Council at their January meetings.

PR10.0 – Once a proposed project list has been drafted, it will be modeled for air quality conformity and Title VI compliance.

PR11.0 - Development of draft TIP materials shall be scheduled so that TIP public open house(s) to review the proposed project list and the results of the TIP modeling process can occur in March.

PR12.0 – After development of a draft TIP, PAG is required to hold at least one open house to solicit public comment. After review of the public comments, the TPC shall finalize the draft TIP which shall be noticed for a 30-day public comment period while it concurrently moves through the PAG committee process. Both the public comment period and the PAG committee process shall culminate in a PAG Regional Council meeting where the TIP is properly noticed for adoption. The Regional Council meeting should take place in May or June, prior to the end of the fiscal year, June 30.

PR13.0 – Funding resources that are designed to accelerate projects, such as HELP loans, shall not be programmed in the TIP, just the re-payment of these resources, to avoid “double counting” of regional funds.

Memorandums of Understanding

PR14.0 – In April of each year, PAG will identify projects that will require an MOU prior to adoption of the next TIP. In general, projects identified will be those that will be in year two of the next TIP and are beginning a new project phase or have not yet been programmed with regional funds.

PR14.1 - At the discretion of PAG, a project that is beginning a new project phase can amend its existing MOU, instead of drafting a separate MOU.

PR15.0 – As part of the annual TIP rollover meetings, the sponsors of the identified projects will submit a detailed scope of work, as outlined in the MOU template. At this time, programmed amounts will be estimated based on current revenue estimates. These amounts may be adjusted later at the TIP development meeting.

PR16.0 – Using the submitted scopes of work, PAG will draft MOUs for all identified projects. Draft MOUs will be sent to the project sponsors at the same time as the Notice of Funding Availability.

PR17.0 - The sponsors of the identified projects will submit comments on the draft MOUs, along with their new project applications. The due date for these comments will be the same due date as the new project applications.

PR17.1 – If a jurisdiction submits a project application for a project to be inserted directly into years one or two of the TIP, the project application will include a Scope of Work. PAG will use the SOW to draft an MOU for the project but will not submit the MOU to the jurisdiction for review and approval until and unless the project is selected for inclusion in the TIP at the TIP development meeting.

PR18.0 - The TIP development meeting will refine revenue projections and adjust programmed project amounts as needed, including those projects in years one or two of the draft TIP and/or those otherwise requiring an MOU. These adjustments will be made to the draft MOUs.

PR18.1 – The TIP Development Meeting may result in projects being added directly to years one or two of the TIP. Jurisdictions will have already submitted scopes of work for these projects, and once they are selected for inclusion in the TIP, PAG will submit the previously prepared draft MOU for jurisdictional review and approval.

PR19.0 - Based on comments and corrections from the jurisdictions, PAG will prepare a final MOU for a jurisdiction's final approval. The signed MOUs must be in place 10 days prior to the day of the February TPC meeting. If there are outstanding MOUs at that time, the TPC may, at its discretion, remove a project from the draft TIP. If funds are removed from a project, those funds will be re-programmed as part of the February TPC meeting. At the discretion of the committee, the reprogramming of HURF 12.6% funds and HURF 2.6% funds may be delayed until the TIP development meeting the following year. However, any deprogrammed federal funds (STBG, RTAG, HSIP) must be reprogrammed at this time.

PR19.1 – If projects of regional significance are removed from the proposed project list, PAG will re-model the new proposed project list as soon as possible.

PR20.0 - The PAG Regional Council will approve the MOUs prior to the start of the TIP public comment period. If there are outstanding MOUs at that time, the Regional Council may, at its discretion, remove the project(s) that do not have MOUs in place.

TIP Amendments

PR21.0 – When a TIP amendment is requested by a jurisdiction, PAG staff will first determine if the request follows PAG policies that govern TIP amendments. If so, the request will be presented at the next TPC meeting for a vote. If the nature of a TIP amendment request is such that time is of the essence, a jurisdiction can request an expedited approval.

PR21.1 – If the nature of the request falls within the parameters of an Administrative Amendment, the PAG Executive Director may, at his/her discretion, administratively approve the amendment.

PR21.2 – If an expedited amendment is appropriate, the proposed amendment can be scheduled on the agenda for the next TPC or Management Committee meeting. If no meetings are scheduled and there is an urgent need, a special TPC meeting can be called prior to Regional Council to discuss the amendment, provided that the TPC special meeting is properly noticed and a quorum is present.

PR22.0 - Ensuring that the policies are complied with is the responsibility of PAG staff and all committee members. However, individual jurisdiction requests may at times require an exception be made to one or more policies. Having a robust and well-managed set of policies on how to deal with requested exceptions allows the committee(s) to be proactive, rather than reactive, when it comes to compliance management.

PR22.1 - Following any proposed new TIP funding request(s) or amendment(s) to an already approved TIP, PAG staff shall conduct a compliance review in advance of any TPC meeting scheduled to consider the request(s) and to present compliance management considerations for the committee's discussion.

PR22.2 – Upon completion of compliance management review, any individual funding request that requires an exception to established policy, procedures or manner for inclusion in the TIP shall require a waiver request by the jurisdiction's Management Committee representative. PAG staff will seek Management Committee's review and recommendation prior to the request being considered by other committees or the Regional Council. The TPC is a standing technical committee of the RTA Technical Management Committee (TMC) and PAG Management Committee. The RTA Technical Management Committee or the PAG Management Committee may wish to seek input from TPC prior to making a recommendation.

Special TPC Meetings

PR23.0 – Deadlines associated with different fund sources necessitate special TPC meetings to be held from time to time. Special meetings can be called by PAG staff or the TPC Chair.

PR23.1 – If the nature of the special meeting is to develop a draft work product, neither notice nor quorum is required. No action may be taken at these working meetings.

PR23.2 – If action is anticipated to be taken by the committee, the meeting shall be properly noticed with the posting of an agenda within the time period specified by the Open Meeting Law.

Payments and Obligations

PR24.0 – Regional HURF funds are provided on a reimbursement basis. Thus, if funds appear in the current year of the TIP, a jurisdiction may proceed with the project and

submit billings for reimbursement. Federal funds also are provided on a reimbursement basis and projects must first comply with all federal requirements prior to funding.

PR24.1 – HURF 12.6% funds are reimbursed by submitting a completed “drawdown” request to PAG, including documentation of work performed. After PAG review/concurrence, the request can either be sent back to the jurisdiction for further explanation/documentation, adjusted by PAG to reflect eligible cost items only, or forwarded to ADOT for payment.

PR24.2 – Federal STBG reimbursements work differently. A jurisdiction must obligate federal funds before the work starts for design, right-of-way, and construction activities. “Obligate” means PAG and FHWA authorizes the federal funds and moves them from a general PAG account into a project specific account. The jurisdictions then receive reimbursement from that project specific account. Construction obligation cannot occur until the project plans are completed and the Plan, Specification and Estimate (PS&E) submittal has been approved. This requires all necessary clearances for Right-of-Way, Environmental, Utilities, Railroad, etc.

PR24.2.1 – Due to the cost and scope of some large infrastructure projects, there will be occasions when a project sponsor needs to obligate more federal funding for a project than is available in the current fiscal year. A jurisdiction may obligate the available funds in the current fiscal year and then obligate the remaining amount(s) in subsequent fiscal year(s). Before the project begins, the sponsoring jurisdiction shall enter into an Advance Construction Agreement with ADOT or FHWA, which outlines the estimated total cost of the project and the schedule for subsequent obligations. Within the agreement, the sponsor acknowledges that they are starting the project at “their own risk” as future federal fund availability cannot be guaranteed.

PR24.3 – For HURF projects, drawdown requests will not be processed if the request does not agree with the scope or budget provided in the MOU.

PR24.4 – For STBG projects, obligations and/or additional obligations will not be supported if the obligation request does not agree with the scope or budget provided in the MOU.

PR24.5 - For federally funded projects, project closeout follows federal procedure. For RTA and regionally funded HURF projects, jurisdictions should inform the RTA and PAG when a project is substantially completed and develop a schedule for when the final invoice from the contractor will be processed and the project closed. Additional billings associated with utility bills, staff time, and warranty inspections are considered to be the responsibility of the sponsor and are ineligible for reimbursement. See RTA Policies, Objectives and Procedures (POPs) for specific RTA policies related to the project closeout process.

PR25.0 – Federal funds typically become available on an annual basis. The region will work cooperatively to make sure that obligations for the coming year are identified early so that no federal funds are lost because they were not obligated in a timely fashion.

PR26.0 - If a project using federal funds in the current fiscal year is not ready to obligate, the sponsoring jurisdiction shall notify PAG immediately so that other plans to obligate those funds can be made.

PR26.1 – If a jurisdiction fails to notify PAG by March 31, and if the federal obligation authority is lost, the jurisdiction in question may be required to “make the region whole” by providing an amount equal to those lost funds for that project with jurisdictional funds.

PR26.2 – Excess obligation of federal funds also may require repayment to “make the region whole.” Jurisdictions should only obligate the amount of federal funds that will be needed for the project, as excess funds must be de-obligated later. De-obligated funds must be re-obligated within the same federal fiscal year in which they were de-obligated or they will be lost. In addition, they will count against the current year’s Obligation Authority (OA), meaning the OA from the original year is lost.

PR27.0 – Projects showing no progress or activity for five (5) years may be removed from the TIP and the funds reprogrammed. Federal funds in the first two years of the TIP must demonstrate progress toward obligation (completed clearances, approved construction drawings, etc.) in order to avoid losing the funding to the region (see PR26).

PR27.1 – For obligated funds, federal rules will dictate if previously expended funds would need to be repaid to the region if a project is removed from the TIP or canceled.

PR27.2 – For regional HURF, the expectation is that a jurisdiction may be required to repay any already expended funds if a project is removed from the TIP or not completed per the MOU.

PR28.0 – A jurisdiction may appeal to the Management Committee to have regional HURF repayments waived. The Management Committee may recommend canceling the regional HURF project because of extenuating circumstances beyond the control of the jurisdiction. Repayment of federal STBG funds previously received for a canceled project cannot be waived.

PR29.0 – When a jurisdiction no longer needs funding for a project, it needs to notify PAG that the funds are available for reprogramming.

PR29.1 - The TIP is a financial document and even if a project has not yet received its certificate of completion if the billing activities have significantly ceased, the jurisdiction is expected to notify PAG and return any unused funding. It is acceptable for a jurisdiction to maintain an appropriate amount of funding for landscape establishment remembering that this amount needs to continue in the TIP as it is the mechanism for which the funds can be drawn.

PR29.1.2 – Within 30 days of bid acceptance, the jurisdiction shall notify PAG and return bid savings funds to the region. Jurisdictions are encouraged to maintain within the project contract an appropriate contingency fund not to exceed 10 percent.

PR29.2 - Once regional STBG funds are obligated to a project, the region has no way of tracking closeout or landscape establishment. When unused STBG funds are returned to the region after project closeout, the OA must be used in the year it was returned, or it is lost to the region.

APPENDIX 5

Public Notices

The following notices were published in print and electronic media during the TIP development process.

Press Release
March 15, 2019

Public invited to provide input on regional 5-year transportation program at March open houses

Pima Association of Governments will hold three transportation open houses in March where the public can learn about regional transportation investments, comment on project selection and criteria, and share insights on transportation needs in the region.

The public is invited to provide feedback on PAG's short-range transportation improvement program (TIP), which includes projects to be scheduled for construction or design during fiscal years 2020-2024 across the greater Tucson region. The value of programmed improvements identified within the TIP is approximately \$1.2 billion.

The open houses are scheduled as follows:

Tuesday, March 26, 4 to 6 p.m.
Randolph Golf Complex
Copper Room
600 S. Alvernon Way, Tucson

Wednesday, March 27, 4 to 6 p.m.
Wheeler Taft Abbett Library
7800 N. Schisler Drive, Tucson

Friday, March 29, 10 a.m. to noon
Joyner Green Valley Library
601 N. La Cañada Drive, Green Valley

Representatives of PAG member jurisdictions, Sun Tran and the Regional Transportation Authority will be available to answer questions.

The proposed improvements are part of PAG's federally mandated capital improvement program.

The TIP identifies priorities for federal, state and local roadways, transit or bus services, aviation projects, and programs such as ride sharing, vanpooling, or bicycle and pedestrian safety programs and projects.

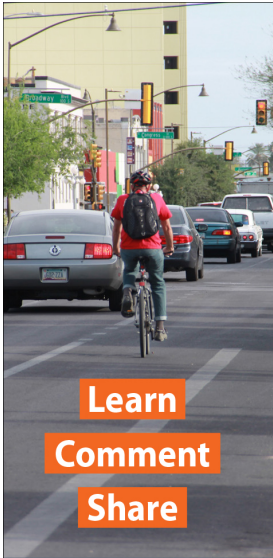
Among the many proposed improvements included in the draft FY 2020-2024 TIP, notable projects include:

- Completion of a new traffic interchange at I-10 and Ruthrauff Road and the widening of I-10 between Ina and Ruthrauff roads
- Construction of the final phase of the Downtown Links project
- Widening of Grant Road, from Oracle Road to Swan Road

The TIP also includes projects that are funded through the Regional Transportation Authority plan, which Pima County voters approved on May 16, 2006. The RTA plan will be implemented through June 2026.

The draft TIP document also will be available for review online at www.PAGregion.com or www.PAGregion.com/TIP starting March 26, 2019.

The draft TIP is scheduled to be presented to PAG's Regional Council for final approval at its May 23, 2019, meeting.




Learn
Comment
Share

Public Input

Transportation Meetings

Pima Association of Governments invites you to review and comment on the region's Transportation Improvement Program (TIP) for FY 2020-2024. This meeting will cover regional funding for the next 5 years on roadways, transit, safety, interstate interchanges, and bicycle and pedestrian facilities.

Pima Association of Governments
PAGregion.com | 792-1093



Tuesday, March 26, 2019 4:00 – 6:00 p.m. Randolph Golf Complex <i>Copper Room</i> 600 S. Alvernon Way, Tucson	Wednesday, March 27, 2019 4:00 – 6:00 p.m. Wheeler Taft Abbett Library 7800 N. Schisler Drive, Tucson	Friday, March 29, 2019 10:00 a.m. – 12:00 p.m. Joyner-Green Valley Library <i>Large Activity Room</i> 601 N. La Cañada Drive, Green Valley
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Entérese

Comenta

Comparte

Reuniones

Publicas de Transportes



La Asociación de Gobiernos de Pima (PAG) le invita a revisar y comentar sobre el Programa de Mejora de Transportes (TIP) de 2020-2024 para nuestra región. Aprende cómo fondos regionales de transporte podrían invertirse en los próximos 5 años para la construcción de proyectos para bicicletas y peatones, infraestructura para carreteras, y mejoras de intercambios de trafica.

Pima Association of Governments
PAGregion.com | 792-1093



Martes, Marzo 26, 2019

4:00 – 6:00 p.m.

Randolph Golf Complex
Copper Room
600 S. Alvernon Way, Tucson

Miércoles, Marzo 27, 2019

4:00 – 6:00 p.m.

Biblioteca Wheeler Taft Abbett
7800 N. Schisler Drive, Tucson

Viernes, Marzo 29, 2019

10:00 a.m. – 12:00 p.m.

Biblioteca Joyner-Green Valley
601 N. La Cañada Drive, Green Valley

Bus Posters on Sun Tran Buses

March 2019

Public Input

Transportation Meetings



Learn about transportation spending.

Comment on project selection and criteria.

Share your insights.

Pima Association of Governments invites you to review and comment on the Transportation Improvement Program (TIP) for FY 2020-2024. This meeting will cover transportation funding for the next 5 years on roadways, transit, safety, interstate interchanges, and bicycle and pedestrian facilities.

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Green Valley



Pima Association of Governments

PUBLIC NOTICE

Pima Association of Governments (PAG), the metropolitan planning organization in Pima County, is accepting public comments on the proposed FY 2020-2024 Transportation Improvement Program, or TIP.

The program is a federally mandated capital improvement program of regional transportation projects. It identifies priorities for national, state and regional roadways; transit or bus services; aviation, bike and pedestrian facilities; as well as programs such as Sun Rideshare.

The TIP is updated every other year to identify new projects proposed by local and state governments and regional transportation providers. The program also provides a general description of the projects, their funding sources, the agency implementing each project and a general project schedule.

The goal of the TIP is to use available resources effectively to serve the region's transportation needs through the cooperation of all PAG's member jurisdictions. The TIP differs from the Regional Transportation Authority (RTA) plan. The RTA is a state-established political subdivision within Pima County that collects a half-cent excise tax from the RTA's special taxing district. The tax funds the RTA's 20-year regional transportation plan, which voters in the district approved in May 2006 along with the excise tax. The TIP includes all RTA-funded projects scheduled for design or construction in the next five years.

The draft of the TIP is available for review at the following locations:

- Pima Association of Governments
- City engineers' offices for the cities of Tucson and South Tucson, and for the Towns of Marana, Oro Valley and Sahuarita
- Pima County Department of Transportation Administrative Offices
- Tribal offices of the Pascua Yaqui Tribe, the Tohono O'odham Nation and the San Xavier District.

- The PAG website at: <http://www.pagregion.com/TIP>

The TIP also may be viewed online at all branches of the Pima County library system that have computers available for public use and at the PAG website listed above.

This public comment period begins Thursday, April 18, 2019, and all written public comments on the proposed plan must be received by 5 p.m. on Wednesday, May 22, 2019, which concludes the comment period.

Comments may be submitted via the above website address, downloaded and faxed to (520) 620-6961, or submitted by mail. Mailed comments should be sent to: Pima Association of Governments, 1 E. Broadway Blvd., Suite 401, Tucson, AZ 85701.

In addition to the public comment period, a public hearing at the Regional Council meeting currently scheduled for noon on May 23, 2019, will allow an additional comment opportunity. Interested members of the public should call PAG at 792-1093 to confirm the Regional Council meeting date and time.

This public meeting will be held in the PAG Santa Rita Conference Room, 1 E. Broadway Blvd., Suite 401, Tucson.

This notice of public involvement activities and time established for public review and comments on the transit elements of the TIP will satisfy the Federal Transit Administration Program of Projects (POP) requirements. For more information, call

Nathan Barrett, Senior Transportation Planner, at (520) 792-1093. Si necesita ayuda con traducción, llame por favor al 792-1093 y comuníquese con Nathan Barrett.

Publish April 16, 2019
Arizona Daily Star

The Arizona Daily Star

April 16, 2019

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Social Media – Facebook Post

March 25, 2019

**Pima Association of Governments**

March 25 at 10:55 AM · 🌐

Join us tomorrow for one of three open houses presenting our draft short-range transportation improvement program (TIP). The TIP includes projects to be scheduled for construction or design during FY 2020-24 across the greater Tucson region. Representatives of PAG member jurisdictions, [Sun Tran](#) and [Regional Transportation Authority - RTA](#) will be available to answer questions. Tomorrow's open house takes place from 4 to 6 p.m. at the Randolph Golf Complex, 600 S. Randolph Way, Tucson. Learn more about the TIP here: <http://bit.ly/OpenHouseTIP>

Public
OPEN HOUSE
Transportation Meetings

Learn about transportation spending.
Comment on project selection and criteria.
Share your insights.

556
People Reached

29
Engagements

Boost Post

2 Shares

👍 Like


💬 Comment

➦ Share


☀️ ▼

Social Media – Facebook Post

March 28, 2019


Pima Association of Governments
March 28 at 10:19 AM · 🌐

The last of our open houses presenting our draft short-range transportation improvement program (TIP) will take place tomorrow from 10 a.m. to noon at the Joyner-Green Valley Library in Green Valley, 601 N. La Cañada Drive, Green Valley. The TIP includes projects to be scheduled for construction or design during FY 2020-24 across the greater Tucson region. Representatives of PAG member jurisdictions, [Sun Tran](#) and the [Regional Transportation Authority](#) - RTA will be available to answer questions. Learn more here: <http://bit.ly/OpenHouseTIP>




Public Input
Transportation Meetings

Pima Association of Governments invites you to review and comment on the region's Transportation Improvement Program (TIP) for FY 2020-2024. This meeting will cover regional funding for the next 5 years on roadways, transit, safety, interstate interchanges, and bicycle and pedestrian facilities.

[Learn](#)
[Comment](#)
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Pima Association of Governments
PAGregion.com | 792-1093







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4:00 – 6:00 p.m.	4:00 – 6:00 p.m.	10:00 a.m. – 12:00 p.m.
Randolph Golf Complex Copper Room 600 S. Alvernon Way, Tucson	Wheeler Taft Abbott Library 7800 N. Schisler Drive, Tucson	Joyner-Green Valley Library Large Activity Room 601 N. La Cañada Drive, Green Valley

167
People Reached

2
Engagements

[Boost Post](#)

1 Share

 Like
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APPENDIX 6

Glossary of Terms

ADA: The Americans with Disabilities Act, which was passed by Congress in 1990 and requires certain accessibility requirements on public facilities.

ADEQ: Arizona Department of Environmental Quality

ADT: Average Daily Traffic, a measure used in transportation planning. Traditionally, it is the total volume of vehicle traffic on a highway or road for a year, divided by 365 days.

ADOT: The Arizona Department of Transportation is the transportation planning agency responsible for planning, building, and operating state highways and routes in Arizona.

AHSIP: The state's apportioned share of the federal Highway Safety Improvement Program.

ANG: Air National Guard

ASTP: ADOT discretionary funds. These funds can originate from a variety of state and federal funding sources.

BIA: Bureau of Indian Affairs

Bond: Project funding from local jurisdictional bonds

CAA: Clean Air Act, passed by Congress in 1963, and amended in 1967, 1970, 1977, and 1990. The U.S. law designed to control air pollution on a national level, in coordination with state, local, and tribal governments.

CFR: The Code of Federal Regulations, which is the codification of the general and permanent rules and regulations published by the executive departments of the federal government. The CFR is divided into 50 titles that represent broad areas subject to federal regulation.

CIP: Capital Improvement Plan, a short-range plan, usually four to ten years, which identifies capital projects and equipment purchases, provides a planning schedule, and identifies options for financing the plan.

CMP: Congestion Management Program. The use of analytic tools to define and identify congestion within a region, corridor, or project area, and the development and selection of appropriate strategies to reduce congestion or mitigate its impacts.

Drawdown Request: A request to ADOT to reimburse the jurisdiction for expenses incurred.

DIFO: Development Impact Fees. Fees collected by some local jurisdictions from new or proposed development projects to pay for all or a portion of the costs of providing public services to the new development.

DOT: Department of Transportation. Often the acronym includes the jurisdiction. For example USDOT (United States Department of Transportation), ADOT (Arizona Department of Transportation), TDDOT (Tucson Department of Transportation) or PCDOT (Pima County Department of Transportation)

EPA: Environmental Protection Agency, the agency of the federal government tasked with the protection of human health and the environment.

FAA: The Federal Aviation Administration is the division of the U.S. Department of Transportation that specializes in and oversees aviation.

FAST Act: The Fixing America's Surface Transportation Act, passed by Congress in December 2015. The current Highway Trust Fund authorization bills, which outlines the programs and criteria under which funds deposited in the trust fund may be used, provides a maximum cap to the amounts in the Highway Trust Fund that can be appropriated by Congress each year, and outlines the way in which those funds are distributed to the states. Expires September 30, 2020.

FLEX: STP funds that have been designated for transit purposes.

FHWA: The Federal Highway Administration is the division of the U.S. Department of Transportation that specializes in and oversees highway transportation.

FTA: The Federal Transit Administration is the division of the U.S. Department of Transportation that specializes in and oversees transit. Grants from the FTA are named after specific sections of legislation that authorizes that grant, and each type of grant is for a specific transit purpose or program.

FTA 5307: A formula grant program for urbanized areas providing capital, operating, and planning assistance for mass transportation.

FTA 5310: FTA grant program that provides formula funding to states for the purpose of assisting private nonprofit groups in meeting the transportation needs of the elderly and persons with disabilities.

FTA 5339: FTA Grant program that provides capital funding to replace, rehabilitate, and purchase buses and related equipment, and to construct bus-related facilities.

Fiscal Constraint: Fiscal Constraint is a demonstration that sufficient funds are available or likely to be available for the proposed transportation improvements by comparing estimated revenues with total project costs.

Fiscal Year, Federal: The Federal Fiscal Year begins on October 1 of the previous calendar year, and ends on September 30 of the year with which it is numbered.

Fiscal Year, PAG: The PAG Fiscal Year begins on July 1 of the previous calendar year, and ends on June 30 of the year with which it is numbered.

HSIP: Highway Safety Improvement Funds. HSIP provides funding for roadway and systematic projects that can demonstrate a positive and significant safety benefit.

HURF: Highway User Revenue Funds are revenues from the state gas tax and the vehicle license tax that are distributed to the State Highway Fund and directly to the cities, towns, and counties in Arizona for transportation purposes.

HURF 2.6%: HURF funds that are distributed to PAG, to be used for projects on state facilities.

HURF 12.6%: HURF funds that are distributed to PAG, to be used on any arterial project in the RMAP.

IGA: Intergovernmental Agreement, a contract between two jurisdictions.

LOCAL: Funds provided by the sponsoring jurisdiction.

MOU: Memorandum of Understanding, an agreement between two or more parties. Projects programmed with funding in the first two years of the TIP must generally have either an MOU with PAG or an IGA with the RTA.

MPO: Metropolitan Planning Organization, a federally mandated transportation policy-making organization that is made up of representatives from local government and governmental transportation authorities. PAG is the MPO for Pima County.

NHS: National Highway System, the network of highways within the United States, including the Interstate Highway System and other roads serving major airports, ports, rail or truck terminals, railway stations, pipeline terminals, and other strategic transport facilities.

Obligate: A federal designation indicating funds are available for reimbursement.

OA: Obligation Authority, the amount of a state or region's federal allocation of transportation dollars that can be obligated to specific projects. Obligation Authority is usually expressed as a percent.

OWP: Overall Work Program, the planning document prepared by PAG on an annual basis which identifies the transportation and other work to be undertaken within the metropolitan planning area.

PAG: Pima Association of Governments is the metropolitan planning organization for the Pima County Region.

PCBonds: Pima County bonds

PCDIFO: Pima County Development Impact Fees. This designation is used when Pima County provides DIFO funds for a project sponsored by another jurisdiction, to distinguish PCDIFO from any DIFO that the sponsoring jurisdiction may be contributing to the project.

PCLocal: Pima County funds that are provided to a project sponsored by another jurisdiction, to distinguish PCLocal from Local funds that the sponsoring jurisdiction may be contributing to the project.

Regionally Significant Project: a transportation project that is on a facility which serves regional transportation needs and would normally be included in the modeling of the metropolitan area's transportation network. At a minimum, that includes all principal arterial highways and all fixed guideway transit facilities that offer a significant alternative to regional highway travel.

RTA: The Regional Transportation Authority is the government entity that manages the \$2.1 billion, 20-year RTA plan, which was approved by Pima County voters on May 16, 2006.

RTAG: Regional Transportation Alternatives Grant. A federally funded program generally used for alternate mode projects such as bicycle and pedestrian projects, or for Safe Routes to School projects.

RMAP: The Regional Mobility and Accessibility Plan. The region's long-range plan for transportation.

SAF: State Aviation Fund

SPR: State Planning and Research Funds. These are federal funds and require a 20% match from a non-federal funding source.

STBG: See STP.

STP: Surface Transportation Program. These funds are flexible federal transportation funds that are allocated to the state, a portion of which are sub-allocated to urban areas like Tucson. Renamed the Surface Transportation Block Grant Program (STBGP) in recent federal transportation legislation.

STIP: State Transportation Improvement Program. The State's TIP, which includes the TIPs of all other COGs and MPOs as well as the ADOT Five Year Program.

TAP: See RTAG

TIP: The Transportation Improvement Program is a 5-year schedule and budget of proposed transportation improvements within eastern Pima County.

TIP Amendment: An amendment to the TIP alters the approved TIP in some way. A TIP amendment must be approved by the Regional Council.

TPC: Transportation Planning Committee, consisting of the transportation directors of each jurisdiction in Pima County, including Pima County itself, including other regional stakeholders such as ADOT, the Tucson Airport Authority, the University of Arizona, and Pima County Department of Environmental Quality. TPC reports to the PAG Executive Director.

Travel Demand Model: Model that approximates trip generation and trip destinations, which can be used to estimate how the projects in the TIP will impact congestion and travel times in the future.

TUC: City of Tucson funds that are provided to a project sponsored by another jurisdiction, to distinguish them from Local funds that the sponsoring jurisdiction may be contributing to the project.

USC: United States Code, the official compilation of the general and permanent federal statutes of the United States.

VLT: Vehicle License Tax, a tax paid to the state of Arizona upon registration of a motor vehicle. A portion of the VLT collected is deposited in the HURF, while another portion is distributed directly to individual counties for transportation uses. Other portions of the VLT are distributed to the general fund of cities, towns, and counties.

VMT: Vehicle Miles Traveled, a measurement of miles traveled by vehicles within a specified region for a specific time period (e.g., Daily VMT or Annual VMT).

Phase Codes Used in the PAG TIP

- S = Study
- D = Design
- R = Right-of-way acquisition
- U = Utilities relocation
- C = Construction
- O = Operations
- P = Procurement
- PMT = Payment, the repayment of funds previously expended by the project sponsor
- DRC = Design, Right-of-Way, and Construction. Used only with RTA-funded phases.

APPENDIX 7

Reserve Projects

APPENDIX 7 - RESERVE PROJECTS

This Appendix contains a listing of projects that were submitted for funding during this TIP cycle but were not funded due to inadequate financial resources. These projects may be carried forward for consideration during the next TIP cycle.

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve
Tip ID	Project Name						
Sponsor ID	Location						
State ID	Description		Total Cost	BMP		Lanes Before	
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor
87.06	Barraza Aviation Pkwy Extension		\$177,936	0.0	2.8	0	ADOT
	Palo Verde to I-10			0.0		0	
	Extend parkway to I-10 - RW only						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
5.02	I-10 Frontage Roads: Ina Rd to Marana Rd		\$40,000	246.3	3.0	2	ADOT
	Ina Rd to Marana Rd			249.3		2	
	Reconstruct & widen frontage rds. to 40'						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
56.12	I-10: Cortaro Road TI		\$14,200	0.0	0.0	0	ADOT
	I-10 and Cortaro Rd			0.0		0	
	Purchase ROW for Cortaro Road TI						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
7.00	I-10: Ina Rd to Sunset Rd		\$1,844	0.0	2.5	0	ADOT
	Ina Rd to Sunset Rd			0.0		0	
H3038 03C	Landscape EB & WB Frontage Roads						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
123.08	I-10: Ina to County Line Landscaping		\$3,000	0.0	0.0	0	ADOT
	Ina to County Line			0.0		0	
	Landscaping						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve
Tip ID	Project Name						
Sponsor ID	Location						
State ID	Description		Total Cost	BMP		Lanes Before	
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor
96.02	I-10: Orange Grove to Ina		\$28,000	250.0	1.3	6	ADOT
	Orange Grove Rd to Ina Rd			248.7		8	
	Widen to 8 lanes						
	Reserve						
64.14	I-10: Park Ave TI		\$8,000				ADOT
	Park Ave and I-10						
	Traffic Interchange						
	Reserve						
130.08	I-10: Tangerine Rd TI - Relocation		\$70,000	0.0	1.5	2	ADOT
	Tangerine Farms Rd. to Tangerine Rd. @ Trico			0.0		6	
SR 989	Replacement interchange, grade separation with UPRR						
	Reserve						
36.03	I-19: Ajo Way TI		\$100	0.0	0.0	0	ADOT
				0.0		0	
	Reconstruct TI w/SPUI						
	Reserve						
1.05	I-19: Continental Rd TI		\$0	0.0	0.0	0	ADOT
				0.0		0	
H6113 01C	Culvert outlet protection						
	Reserve						

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve
Tip ID	Project Name						
Sponsor ID	Location						
State ID	Description		Total Cost	BMP		Lanes Before	
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor
124.08	Right-of Way and control of access purchase		\$5,000	0.0	0.0	0	ADOT
	Regionwide			0.0		0	
	Purchase of Right-of-Way /Access						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
50.05	SE Bypass Alignment Study		\$3,000	0.0	0.0	0	ADOT
	I-19 to I-10			0.0		0	
	Identify new alignment for SE Corridor						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
63.12	SR 286: Sasabe to Robles Ranch Repair		\$100	0.0	0.0	0	ADOT
	SR 286 from Sasabe to Robles Ranch			0.0		0	
	Pavement preservation						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
7.02	SR 77: Ina Rd GSI		\$35,000	74.3	0.5	0	ADOT
	@ Intersection			74.8		0	
	Construct a GSI interchange						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
6.02	SR 77: Orange Grove Rd GSI		\$35,000	0.0	0.5	0	ADOT
	@ Intersection			0.0		0	
	Construct a GSI interchange (DCR only)						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve
Tip ID	Project Name						
Sponsor ID	Location						
State ID	Description		Total Cost	BMP		Lanes Before	
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor
8.02	SR 85: Border to Why		\$1,000	53.0	27.8	0	ADOT
	International border to Why			80.8		0	
	Corridor Study						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
9.02	SR 85: Why to I-8		\$300	0.0	53.0	0	ADOT
	Why to Jct. w/ I-8			53.0		0	
	Corridor profile for future widening						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
65.14	SR 86: Kinney to Santa Cruz River		\$5,000				ADOT
	SR 86, from Kinney Road to Santa Cruz River						
	Pavement preservation						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
4.03	SR 86: Robles Jct. to Valencia Rd		\$16,500	150.1	9.4	2	ADOT
	SR 286 to Valencia Rd			159.5		4	
	Widen to 4 lanes						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
45.00	Ina Rd.		\$18,000	0.0	1.2	2	Marana
4INSIL	Silverbell Road to I-10			0.0		4	
	Widen to 4 lanes						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve
Tip ID	Project Name						
Sponsor ID	Location						
State ID	Description		Total Cost	BMP		Lanes Before	
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor
1.00	Ina Rd: I-10 to CDO		\$18,000	0.0	1.7	4	Marana
	I-10 to CDO Wash			0.0		6	
	Widen to 6 lanes, add sidewalks, landscaping, multiuse lanes						
		Reserve					
52.12	Naranja Drive Pedestrian Improvements		\$2,000	0.0	0.0	0	Oro Valley
	Naranja, from La Canada to First			0.0		0	
	Construct a 12 foot multi-use path						
		Reserve					
23.01	OV Transit Program		\$574	0.0	0.0	0	Oro Valley
				0.0		0	
	Purchase paratransit/vanpool vehicles						
ALI 11.12.15		Reserve					
16.03	Rancho Vistoso Blvd #2		\$2,100	0.0	2.5	4	Oro Valley
	Tangerine Rd to Honey Bee Bridge			0.0		4	
	Resurface existing pavement						
		Reserve					
46.12	Camino de Oeste / Los Reales		\$7,500	0.0	0.0	0	Pascua Yaqui
	Los Reales and Ignacio to Camino de Oeste and Torim			0.0		0	
	Pavement Preservation						
		Reserve					

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve
Tip ID	Project Name						
Sponsor ID	Location						
State ID	Description		Total Cost	BMP		Lanes Before	
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor
82.06	1st Ave: Orange Grove Rd to Ina Rd		\$7,256	0.0	1.0	2	Pima County
4RTFIR	Orange Grove Rd to Ina Rd			0.0		4	
	Widen to 4 lanes w/bike lanes						
	Reserve						
							Project Funding
							Amount (000's) Fundtype Fiscal Year Phase
19.16	Benson Hwy / Columbus Blvd Intersection Improvements		\$1,246				Pima County
4CLBUS	Benson Hwy and Columbus Blvd						
	Intersection improvements						
	Reserve						
							Project Funding
							Amount (000's) Fundtype Fiscal Year Phase
70.02	Broadway Blvd.		\$25,000	0.0	1.0	5	Pima County
4BBECC	Euclid to Campbell			0.0		8	
	Widen to 6/8 lanes						
	Reserve						
							Project Funding
							Amount (000's) Fundtype Fiscal Year Phase
135.00	Camino del Sol		\$6,816	0.0	1.7	2	Pima County
4CSCRO	Continental Rd. to Ocotillo Wash			0.0		2	
	New 2 lane road						
	Reserve						
							Project Funding
							Amount (000's) Fundtype Fiscal Year Phase
794.00	Greaterville Road Bridge		\$1,605	0.0	0.0	2	Pima County
	West of Hwy 83			0.0		2	
	Replace bridge						
	Reserve						
							Project Funding
							Amount (000's) Fundtype Fiscal Year Phase

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve
Tip ID	Project Name						
Sponsor ID	Location						
State ID	Description		Total Cost	BMP		Lanes Before	
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor
148.00	Kinney Rd: Ajo to Bopp		\$20,408	0.0	0.9	2	Pima County
4KRAWB	Ajo Way to Bopp			0.0		4	
	Widen to 4 lanes						
		Reserve					
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
867.00	Madera Canyon Rd. @Florida Canyon Wash (8302)		\$4,121	0.0	0.0	2	Pima County
SB406 01C				0.0		2	
	Replace bridge structure						
BR-PPM-0		Reserve					
(150)P							
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
151.00	Madera Canyon Rd. @Medium Wash (8301)		\$2,502	0.0	0.0	2	Pima County
SB405 01C				0.0		2	
	Replace bridge structure						
BR-PPM-0		Reserve					
(149)P							
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
592.00	Magee Rd. - La Canada to Oracle		\$17,498	0.0	1.2	2	Pima County
4MRLCO	La Canada Dr. to Oracle Rd.			0.0		4	
	Widen to 4 lanes						
		Reserve					
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
89.04	Orange Grove Rd		\$1,200	0.0	0.0	2	Pima County
40GAFW	@ Geronimo Wash			0.0		2	
	Reconstruct box culvert						
		Reserve					
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve
Tip ID	Project Name						
Sponsor ID	Location						
State ID	Description		Total Cost	BMP		Lanes Before	
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor
61.01	Orange Grove Rd. - Phase 1		\$18,048	0.0	2.0	2	Pima County
DOT-44a	Corona to Oracle			0.0		4	
	Widen to 4 lanes -part A intersection work only						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
154.00	Orange Grove Rd. - Phase 2		\$19,114	0.0	2.2	2	Pima County
DOT-44b	Thornsdale to Corona			0.0		6	
	Widen to 6 lanes divided hwy.						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
81.12	Pantano Pathway: Broadway to Kenyon		\$1,956	0.0	0.0	0	Pima County
PPBDWY	Broadway to Kenyon			0.0		0	
	12 foot shared use path and 8 foot dg path						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
157.00	River Rd. Bridge		\$5,419	0.0	0.0	2	Pima County
DOT-27	@ Ventana Wash			0.0		2	
SS501 01C	Replace Bridge Structure						
PPM-0(152)P	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
52.03	Safe School Route Bike/Ped Education Program		\$247	0.0	0.0	0	Pima County
				0.0		0	
SL525 01D	safe routes to school						
TEA PPM-0	Reserve						
(158)							
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve
Tip ID	Project Name						
Sponsor ID	Location						
State ID	Description		Total Cost	BMP		Lanes Before	
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor
10.18	Sunset: I-10 to River		\$17,757			0	Pima County
	Sunset Rd, from I-10 to River Rd					3	
	Extend roadway						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
602.00	Thornydale Rd: Cortaro to Linda Vista		\$20,663	0.0	1.5	2	Pima County
DOT-23	Cortaro to Linda Vista			0.0		4	
4TTCLV	Widen to 4 lanes						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
785.00	La Villita Rd Extn.		\$2,347	0.0	2.7	0	Sahuarita
	Sahuarita Rd to Nogales Hwy			0.0		2	
	Construct roadway extension						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
40.16	Quail Creek Connection, Phase 2		\$25,000		1.0	0	Sahuarita
	Old Nogales Hwy to Nogales Hwy					2	
	Construct new roadway						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
41.16	Quail Creek Connection, Phase 3		\$25,000		1.0	0	Sahuarita
	Old Nogales Hwy to Nogales Hwy					2	
	Construct new roadway						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve
Tip ID	Project Name						
Sponsor ID	Location						
State ID	Description		Total Cost	BMP		Lanes Before	
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor
17.10	ADA Upgrades		\$300	0.0	0.0	0	South Tucson
	Various locations			0.0		0	
	Ensure current curb ramps meet ADA specs						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
88.01	East 40th Street		\$700	0.0	0.2	2	South Tucson
	4th to 6th			0.0		3	
	Improve unimproved street						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
56.10	Pavement Preservation		\$100	0.0	0.0	0	South Tucson
	Arterial and Collector Streets			0.0		0	
	Maintenance and Rehabilitation						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
87.01	West 40th Street		\$1,000	0.0	0.2	2	South Tucson
	6th to 4th			0.0		3	
	Widen from 2 to 3 lanes						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
75.00	Ryan Airfield Runway Extension		\$8,244	0.0	0.0	0	TAA
10190056				0.0		0	
	Extend runway 6R/24L to 6300' incl box culverts						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve		
Tip ID	Project Name								
Sponsor ID	Location								
State ID	Description			Total Cost	BMP	Lanes Before			
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor		
69.08	Ryan Airfield Runway Extension		\$500	0.0	0.0	0	TAA		
20106424	Runway Extension			0.0	0				
Reserve				Project Funding					
				Amount (000's)	Fundtype	Fiscal Year	Phase		
19.09	Ryan Airfield Taxiway Extension		\$100	0.0	0.0	0	TAA		
20108953	Runway 6L and Taxiway A Extension			0.0	0				
Runway 6L and Taxiway A Extension				Project Funding					
Reserve				Amount (000's) Fundtype Fiscal Year Phase					
77.04	TIA demo exitsitng fuel facility		\$2,087	0.0	0.0	0	TAA		
10106554	Demo existing fuel facility			0.0	0				
Reserve				Project Funding					
				Amount (000's)	Fundtype	Fiscal Year	Phase		
95.10	TIA Drainage Detention Basin		\$375	0.0	0.0	0	TAA		
10195206	Construct Drainage Detention Basin			0.0	0				
Reserve				Project Funding					
				Amount (000's)	Fundtype	Fiscal Year	Phase		
68.04	TIA Fuel Storage Facility		\$30,255	0.0	0.0	0	TAA		
10102-510	Fuel storage facility			0.0	0				
Reserve				Project Funding					
				Amount (000's)	Fundtype	Fiscal Year	Phase		

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve
Tip ID	Project Name						
Sponsor ID	Location						
State ID	Description		Total Cost	BMP		Lanes Before	
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor
52.04	TIA Ground Cargo Infrastructure		\$4,255	0.0	0.0	0	TAA
10102-499				0.0		0	
	Ground cargo infrastructure					Project Funding	
	Reserve					Amount (000's)	Fundtype Fiscal Year Phase
12.06	TIA Land Acquisition		\$1,027	0.0	0.0	0	TAA
10106565				0.0		0	
	Land acquisition (RPZ-Noise)					Project Funding	
	Reserve					Amount (000's)	Fundtype Fiscal Year Phase
32.02	TIA Park Ave Improvements		\$512	0.0	0.0	0	TAA
PD02-465				0.0		0	
	Reconstruct with landscaping, signs, lighting, guardrails,dr					Project Funding	
	Reserve					Amount (000's)	Fundtype Fiscal Year Phase
76.04	TIA Park-and-Save Lot		\$669	0.0	0.0	0	TAA
10102-470				0.0		0	
	Upgrade paving at Park-N-Save overflow lot					Project Funding	
	Reserve					Amount (000's)	Fundtype Fiscal Year Phase
57.07	TIA Runway Tenant Relocation		\$3,691	0.0	0.0	0	TAA
10199-330				0.0		0	
	Maintenance Area					Project Funding	
	Runway 11R-24L Tenant Relocation Area 1					Amount (000's)	Fundtype Fiscal Year Phase
	Reserve						

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve	
Tip ID	Project Name							
Sponsor ID	Location							
State ID	Description		Total Cost	BMP		Lanes Before		
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor	
37.14	TIA Sustainability Management Plan		\$105				TAA	
10113283	TIA							
	Sustainability Management Plan							
	Reserve							
					Project Funding			
					Amount (000's)	Fundtype	Fiscal Year	Phase
53.04	TIA Taxiway C		\$6,226	0.0	0.0	0	TAA	
10102-516				0.0		0		
	Taxiway C (A5 to A8)							
	Reserve							
					Project Funding			
					Amount (000's)	Fundtype	Fiscal Year	Phase
54.04	TIA Taxiway C		\$7,123	0.0	0.0	0	TAA	
10102-517				0.0		0		
	Taxiway C (A8 to A11)							
	Reserve							
					Project Funding			
					Amount (000's)	Fundtype	Fiscal Year	Phase
55.04	TIA Taxiway D Extension		\$2,675	0.0	0.0	0	TAA	
				0.0		0		
	Taxiway D-3 Extension							
	Reserve							
					Project Funding			
					Amount (000's)	Fundtype	Fiscal Year	Phase
75.04	TIA West Apron Replacement		\$1,744	0.0	0.0	0	TAA	
10102-490				0.0		0		
	Slab replacement for west apron							
	Reserve							
					Project Funding			
					Amount (000's)	Fundtype	Fiscal Year	Phase

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve
Tip ID	Project Name						
Sponsor ID	Location						
State ID	Description		Total Cost	BMP		Lanes Before	
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor
58.14	Little Nogales Drive Roadway Drainage		\$300				Tohono O'odham
	Little Nogales Drive, between SX Road segments						
	Improvements to ensure proper drainage of roadway						
	Reserve						
91.09	San Xavier: Little Nogales Mission Gateway Path		\$918	0.0	0.5	0	Tohono O'odham
	Little Nogales Rd.			0.0		0	
	Construct pathway						
	Reserve						
32.00	22nd St: Camino Seco to Houghton Rd		\$9,066	0.0	2.0	4	Tucson
	Camino Seco to Houghton Rd			0.0		4	
	Improve 3 and 4 lane roadway						
	Reserve						
33.00	36th St		\$1,500	0.0	0.0	4	Tucson
	Forgeus Ave to Country Club Rd			0.0		3	
	Add curbs, bike lanes and sidewalk.						
	Reserve						
34.15	36th St: Park Ave to Country Club Rd sidewalks		\$450				Tucson
	Park Ave to Country Club Rd						
	ADA Sidewalks						
	Reserve						

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve
Tip ID	Project Name						
Sponsor ID	Location						
State ID	Description		Total Cost	BMP		Lanes Before	
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor
65.02	5th Street: Wilmot to Craycroft		\$400	0.0	1.0	0	Tucson
	Craycroft to Wilmot			0.0		0	
	Sidewalks, crosswalks & spot safety improvements						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
80.04	Ajo Way: I-19 to 6th		\$4,513	0.0	1.0	5	Tucson
	I-19 to 6th			0.0		6	
	Widen to 6 lanes, w/curb, sidewalk, drainage						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
65.12	Campbell/Ninth HAWK		\$150	0.0	0.0	0	Tucson
SH27	Campbell Avenue at Ninth Street			0.0		0	
	Install HAWK signall						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
37.00	Country Club Rd: Glenn St to Grant Rd		\$8,456	0.0	0.5	4	Tucson
	Glenn St to Grant Rd			0.0		5	
	Widen to 5 lanes						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
38.16	Grant Road: Palo Verde to Venice		\$100				Tucson
	Grant Road, from Palo Verde to Venice						
	Phases 3&4 of RTA Project 18						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve
Tip ID	Project Name						
Sponsor ID	Location						
State ID	Description		Total Cost	BMP		Lanes Before	
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor
39.16	Grant Road: Park to Palo Verde		\$100				Tucson
	Grant Road, from Park to Palo Verde						
	Phases 5&6 of RTA Project 18						
	Reserve						
37.16	Grant Road: Stone to Park		\$100				Tucson
	Grant Road, from Stone to Park						
	Phase 2 of RTA Project 18						
	Reserve						
38.00	Harrison Rd. - Irvington to Golf Links		\$22,619	0.0	3.0	2	Tucson
	Irvington Rd. to Golf Links Rd.			0.0		6	
	Widen to 6 lanes divided						
	Reserve						
40.00	Irvington Rd.		\$1,377	0.0	2.0	2	Tucson
	Kolb Rd to Houghton			0.0		3	
	Widen to 3 lanes						
	Reserve						
77.06	Irvington Rd: West of I-19		\$9,800	0.0	0.9	0	Tucson
	Santa Cruz River to east of I-19			0.0		0	
	Improve intersections, access mgmt, bike lanes and sidewalks						
	Reserve						

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve
Tip ID	Project Name						
Sponsor ID	Location						
State ID	Description		Total Cost	BMP		Lanes Before	
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor
83.04	Kolb: Escalante to Valencia		\$12,000	0.0	1.5	4	Tucson
	Escalante Rd to Valencia Rd			0.0		6	
	Widen to 6 lanes						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
54.12	La Cholla Blvd Urban Upgrades		\$15,000	0.0	0.0	0	Tucson
	La Cholla, from Star Pass to Ajo			0.0		0	
	Add curb, sidewalk, street lighting						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
3.19	Pedestrian HAWK Crossings--Package 1		\$100				Tucson
	Various locations						
	Pedestrian HAWK Crossings in Tucson						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
4.19	Pedestrian HAWK Crossings--Package 2		\$100				Tucson
	Various locations						
	Pedestrian HAWK Crossings in Tucson						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
53.12	Rita Road Urban Upgrades		\$3,000	0.0	0.0	0	Tucson
	Rita Road, from UPRR to I-10			0.0		0	
	Add curb, sidewalk, and street lighting						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve
Tip ID	Project Name						
Sponsor ID	Location						
State ID	Description		Total Cost	BMP		Lanes Before	
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor
44.06	RR Grade Xing		\$1	0.0	0.0	0	Tucson
	Toole Ave and Euclid Ave			0.0		0	
SR195 01C	Install concrete surface						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
91.12	Safe Routes to School Program (Tucson)		\$159	0.0	0.0	0	Tucson
SP13	City of Tucson			0.0		0	
	Non-infrastructure education and outreach K-8 schools						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
58.02	Stone Ave. Corridor: Ft. Lowell to Wetmore		\$750	0.0	1.5	5	Tucson
	Ft. Lowell to Wetmore			0.0		5	
	Drainage, lighting, bike lanes, shelters etc.						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
56.02	Stone Ave. Corridor: Speedway to Ft. Lowell		\$1,400	0.0	2.0	5	Tucson
S216	Speedway to Ft. Lowell			0.0		5	
	Drainage, lighting, bike lanes, shelters etc.						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
60.06	Valencia Rd: I-19 to Alvernon		\$10,000	0.0	4.4	6	Tucson
	I-19 to Alvernon			0.0		6	
	Construct controlled access improvements						
	Reserve						
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve
Tip ID	Project Name						
Sponsor ID	Location						
State ID	Description		Total Cost	BMP		Lanes Before	
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor
21.11	Bus Expansion		\$8,520	0.0	0.0	0	Tucson Transit
	City wide			0.0		0	
	Procure new buses						
ALI 11.13.01		Reserve					
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
6.19	Electric Bus Charging Infrastructure		\$188				Tucson Transit
	System Wide						
5/24/2018	Charging infrastructure for EV						
		Reserve					
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
41.13	Sun Shuttle Preventative Maintenance		\$861				Tucson Transit
	Region wide						
	Preventative Maintenance						
		Reserve					
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
29.03	Sun Van Expansion Vans		\$3,249	0.0	0.0	0	Tucson Transit
	Citywide			0.0		0	
	Expand Sun Van fleet						
ALI 11.13.15		Reserve					
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase
7.19	SunLink Wheel Truiing Equipment		\$950				Tucson Transit
	Regionwide						
5/24/2018	Wheel truiing infrastructure for SunLink						
		Reserve					
					Project Funding		
					Amount (000's)	Fundtype	Fiscal Year Phase

Pima Association of Governments FY 2020-2024 TIP Projects							Reserve	
Tip ID	Project Name							
Sponsor ID	Location							
State ID	Description		Total Cost	BMP		Lanes Before		
Fed ID	Air Quality Status	TIP Status	(000's)	EMP	Length	Lanes After	Sponsor	
8.19	Transit Employee Training		\$128				Tucson Transit	
	System Wide							
5/24/2018	Employee Training							
	Reserve							
					Project Funding			
					Amount (000's)	Fundtype	Fiscal Year	Phase
8.18	Transit Refueling Station		\$150				Tucson Transit	
	Oro Valley Mobility Operations Center							
	Refueling station for OV Dial-a-ride							
	Reserve							
					Project Funding			
					Amount (000's)	Fundtype	Fiscal Year	Phase
5.19	Transit Technology Upgrades		\$1,826				Tucson Transit	
	Sytem Wide							
5/24/2018	Technology upgrades for transit							
	Reserve							
					Project Funding			
					Amount (000's)	Fundtype	Fiscal Year	Phase

APPENDIX 8

Previous TIP Projects Obligations and Drawdowns

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StatelD	Project Name	Drawdowns and Obligations		Sponsor
79.09		Bus Pullout Packages #6 - #15		\$0.00	RTA
79.09		Bus Pullout Packages #6 - #15	Total for FY 2009	\$43,433.00	RTA
79.09		Bus Pullout Packages #6 - #15	Total for FY 2010	\$895,012.00	RTA
79.09		Bus Pullout Packages #6 - #15	Total for FY 2011	\$1,228,670.00	RTA
79.09		Bus Pullout Packages #6 - #15	Total for FY 2012	\$1,064,261.00	RTA
79.09		Bus Pullout Packages #6 - #15	Total for FY 2013	\$1,092,820.00	RTA
79.09		Bus Pullout Packages #6 - #15	Total for FY 2014	\$786,782.00	RTA
79.09		Bus Pullout Packages #6 - #15	Total for FY 2015	\$221,689.00	RTA
79.09		Bus Pullout Packages #6 - #15	Total for FY 2016	\$18,132.00	RTA
79.09		Bus Pullout Packages #6 - #15	Total for FY 2017	\$540,725.00	RTA
79.09		Bus Pullout Packages #6 - #15	Total for FY 2018	\$620,312.00	RTA
79.09		Bus Pullout Packages #6 - #15	Total for FY 2019	\$419,644.00	RTA
		Grand Total		\$6,931,480.00	
131.00		22nd Street: I-10 to Tucson Blvd.		\$0.00	Tucson
131.00		22nd Street: I-10 to Tucson Blvd.	Total for FY 2000	\$325,000.00	Tucson
131.00		22nd Street: I-10 to Tucson Blvd.	Total for FY 2007	\$1,761.00	Tucson
131.00		22nd Street: I-10 to Tucson Blvd.	Total for FY 2008	\$590,909.00	Tucson
131.00		22nd Street: I-10 to Tucson Blvd.	Total for FY 2009	\$1,529,068.00	Tucson
131.00		22nd Street: I-10 to Tucson Blvd.	Total for FY 2010	\$2,858,767.00	Tucson
131.00		22nd Street: I-10 to Tucson Blvd.	Total for FY 2011	\$6,697,755.00	Tucson
131.00		22nd Street: I-10 to Tucson Blvd.	Total for FY 2012	\$1,490,334.00	Tucson
131.00		22nd Street: I-10 to Tucson Blvd.	Total for FY 2013	\$6,869,347.00	Tucson
131.00		22nd Street: I-10 to Tucson Blvd.	Total for FY 2014	\$7,773,580.00	Tucson
131.00		22nd Street: I-10 to Tucson Blvd.	Total for FY 2015	\$5,125,388.00	Tucson
131.00		22nd Street: I-10 to Tucson Blvd.	Total for FY 2016	\$8,950,089.00	Tucson
131.00		22nd Street: I-10 to Tucson Blvd.	Total for FY 2017	\$229,074.00	Tucson
131.00		22nd Street: I-10 to Tucson Blvd.	Total for FY 2019	\$119,254.00	Tucson
		Grand Total		\$42,560,327.00	
83.12		5th St. Bike Boulevard: 7th Avenue to University		\$0.00	Tucson
83.12		5th St. Bike Boulevard: 7th Avenue to University	Total for FY 2014	\$21,649.00	Tucson
83.12		5th St. Bike Boulevard: 7th Avenue to University	Total for FY 2015	\$41,369.00	Tucson
83.12		5th St. Bike Boulevard: 7th Avenue to University	Total for FY 2016	\$275,513.00	Tucson
83.12		5th St. Bike Boulevard: 7th Avenue to University	Total for FY 2017	\$141.00	Tucson
83.12		5th St. Bike Boulevard: 7th Avenue to University	Total for FY 2018	\$3,637.00	Tucson
		Grand Total		\$342,310.00	
44.12		Aerospace Parkway Expansion	Total for FY 2012	\$5,237.00	Pima County
44.12		Aerospace Parkway Expansion	Total for FY 2013	\$12,665.00	Pima County
44.12		Aerospace Parkway Expansion	Total for FY 2014	\$1,398,118.00	Pima County
44.12		Aerospace Parkway Expansion	Total for FY 2015	\$1,680,921.00	Pima County
44.12		Aerospace Parkway Expansion	Total for FY 2016	\$6,895,914.00	Pima County
44.12		Aerospace Parkway Expansion	Total for FY 2017	\$2,502,278.00	Pima County
44.12		Aerospace Parkway Expansion	Total for FY 2018	\$2,569,819.00	Pima County
44.12		Aerospace Parkway Expansion	Total for FY 2019	\$3,840,878.00	Pima County

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StatelD	Project Name	Drawdowns and Obligations		Sponsor
Grand Total				\$18,905,831.00	
76.12		Arroyo Chico Greenway: Country Club to Treat	Total for FY 2015	\$66,917.00	Tucson
76.12		Arroyo Chico Greenway: Country Club to Treat	Total for FY 2016	\$23,267.00	Tucson
76.12		Arroyo Chico Greenway: Country Club to Treat	Total for FY 2017	\$9,353.00	Tucson
76.12		Arroyo Chico Greenway: Country Club to Treat	Total for FY 2018	\$49.00	Tucson
Grand Total				\$99,586.00	
19.16		Benson Hwy / Columbus Blvd Intersection Improvements	Total for FY 2018	\$50,000.00	Pima County
Grand Total				\$50,000.00	
18.16		Benson Hwy / Drexel Rd Intersection Improvements	Total for FY 2018	\$50,000.00	Pima County
Grand Total				\$50,000.00	
19.10		Bike Lane Package III	Total for FY 2011	\$251.00	Tucson
19.10		Bike Lane Package III	Total for FY 2012	\$59,286.00	Tucson
19.10		Bike Lane Package III	Total for FY 2013	\$62,614.00	Tucson
19.10		Bike Lane Package III	Total for FY 2014	\$11,306.00	Tucson
19.10		Bike Lane Package III	Total for FY 2015	\$7,067.00	Tucson
19.10		Bike Lane Package III	Total for FY 2016	\$45,692.00	Tucson
19.10		Bike Lane Package III	Total for FY 2017	\$1,496.00	Tucson
19.10		Bike Lane Package III	Total for FY 2018	\$1,554.00	Tucson
Grand Total				\$189,267.00	
36.00		Broadway Blvd: Camino Seco to Houghton Rd	Total for FY 2016	\$383,891.00	Tucson
36.00		Broadway Blvd: Camino Seco to Houghton Rd	Total for FY 2017	\$930,695.00	Tucson
36.00		Broadway Blvd: Camino Seco to Houghton Rd	Total for FY 2018	\$369,540.00	Tucson
36.00		Broadway Blvd: Camino Seco to Houghton Rd	Total for FY 2019	\$243,986.00	Tucson
Grand Total				\$1,928,112.00	
22.05		Broadway Blvd: Euclid Ave to Country Club Rd	Total for FY 2007	\$760.00	Tucson
22.05		Broadway Blvd: Euclid Ave to Country Club Rd	Total for FY 2008	\$77,146.00	Tucson
22.05		Broadway Blvd: Euclid Ave to Country Club Rd	Total for FY 2009	\$149,659.00	Tucson
22.05		Broadway Blvd: Euclid Ave to Country Club Rd	Total for FY 2010	\$1,331,069.00	Tucson
22.05		Broadway Blvd: Euclid Ave to Country Club Rd	Total for FY 2011	\$1,580,185.00	Tucson
22.05		Broadway Blvd: Euclid Ave to Country Club Rd	Total for FY 2012	\$236,810.00	Tucson
22.05		Broadway Blvd: Euclid Ave to Country Club Rd	Total for FY 2013	\$684,059.00	Tucson
22.05		Broadway Blvd: Euclid Ave to Country Club Rd	Total for FY 2014	\$967,588.00	Tucson
22.05		Broadway Blvd: Euclid Ave to Country Club Rd	Total for FY 2015	\$840,112.00	Tucson
22.05		Broadway Blvd: Euclid Ave to Country Club Rd	Total for FY 2016	\$1,936,525.00	Tucson
22.05		Broadway Blvd: Euclid Ave to Country Club Rd	Total for FY 2017	\$4,148,745.00	Tucson
22.05		Broadway Blvd: Euclid Ave to Country Club Rd	Total for FY 2018	\$6,431,549.00	Tucson
22.05		Broadway Blvd: Euclid Ave to Country Club Rd	Total for FY 2019	\$11,768.00	Tucson
Grand Total				\$18,395,975.00	
51.14		Bus Pullouts: Packages 16 - 19	Total for FY 2015	\$240,717.00	RTA
51.14		Bus Pullouts: Packages 16 - 19	Total for FY 2016	\$18,745.00	RTA

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StatelD	Project Name	Drawdowns and Obligations		Sponsor
51.14		Bus Pullouts: Packages 16 - 19	Total for FY 2018	\$224,332.00	RTA
			Grand Total	\$483,794.00	
32.06	SS632 03D	Campbell Ave Revitalization	Total for FY 2006	\$28,428.00	Tucson
32.06	SS632 03D	Campbell Ave Revitalization	Total for FY 2008	\$75,250.00	Tucson
32.06	SS632 03D	Campbell Ave Revitalization	Total for FY 2009	\$95,887.00	Tucson
32.06	SS632 03D	Campbell Ave Revitalization	Total for FY 2014	\$200,000.00	Tucson
32.06	SS632 03D	Campbell Ave Revitalization	Total for FY 2016	\$2,436.00	Tucson
32.06	SS632 03D	Campbell Ave Revitalization	Total for FY 2017	\$647.00	Tucson
32.06	SS632 03D	Campbell Ave Revitalization	Total for FY 2018	\$271.00	Tucson
			Grand Total	\$402,919.00	
51.12		Coachline: Silverbell North to Silverbell South Pvmnt Pres	Total for FY 2018	\$8,925.00	Marana
			Grand Total	\$8,925.00	
105.08		Columbus: 22nd to Timrod Pedestrian Path	Total for FY 2016	\$60,051.00	Tucson
105.08		Columbus: 22nd to Timrod Pedestrian Path	Total for FY 2017	\$79,909.00	Tucson
105.08		Columbus: 22nd to Timrod Pedestrian Path	Total for FY 2018	\$1,609.00	Tucson
			Grand Total	\$141,569.00	
77.12		Copper St: Oracle to Swan Bike Boulevard	Total for FY 2014	\$13,376.00	Tucson
77.12		Copper St: Oracle to Swan Bike Boulevard	Total for FY 2015	\$54,455.00	Tucson
77.12		Copper St: Oracle to Swan Bike Boulevard	Total for FY 2016	\$13,227.00	Tucson
77.12		Copper St: Oracle to Swan Bike Boulevard	Total for FY 2017	\$9,974.00	Tucson
77.12		Copper St: Oracle to Swan Bike Boulevard	Total for FY 2018	\$22,604.00	Tucson
			Grand Total	\$113,636.00	
137.00		Cortaro Farms Rd: Camino de Oeste to Thornydale Rd	Total for FY 2008	\$552,854.00	Pima County
137.00		Cortaro Farms Rd: Camino de Oeste to Thornydale Rd	Total for FY 2009	\$267,258.00	Pima County
137.00		Cortaro Farms Rd: Camino de Oeste to Thornydale Rd	Total for FY 2015	\$71,049.00	Pima County
137.00		Cortaro Farms Rd: Camino de Oeste to Thornydale Rd	Total for FY 2016	\$646,342.00	Pima County
137.00		Cortaro Farms Rd: Camino de Oeste to Thornydale Rd	Total for FY 2017	\$718,936.00	Pima County
137.00		Cortaro Farms Rd: Camino de Oeste to Thornydale Rd	Total for FY 2018	\$2,952,544.00	Pima County
137.00		Cortaro Farms Rd: Camino de Oeste to Thornydale Rd	Total for FY 2019	\$6,583,235.00	Pima County
			Grand Total	\$11,792,219.00	
81.04		Downtown Links: Broadway to I-10	Total for FY 2005	\$105,003.00	Tucson
81.04		Downtown Links: Broadway to I-10	Total for FY 2006	\$219,356.00	Tucson
81.04		Downtown Links: Broadway to I-10	Total for FY 2007	\$808,543.00	Tucson
81.04		Downtown Links: Broadway to I-10	Total for FY 2008	\$725,076.00	Tucson
81.04		Downtown Links: Broadway to I-10	Total for FY 2009	\$1,594,504.00	Tucson
81.04		Downtown Links: Broadway to I-10	Total for FY 2010	\$4,170,794.00	Tucson
81.04		Downtown Links: Broadway to I-10	Total for FY 2011	\$1,998,561.00	Tucson
81.04		Downtown Links: Broadway to I-10	Total for FY 2012	\$8,970,910.00	Tucson
81.04		Downtown Links: Broadway to I-10	Total for FY 2013	\$2,872,813.00	Tucson
81.04		Downtown Links: Broadway to I-10	Total for FY 2014	\$7,390,583.00	Tucson
81.04		Downtown Links: Broadway to I-10	Total for FY 2015	\$3,432,732.00	Tucson

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StateID	Project Name	Drawdowns and Obligations		Sponsor
81.04		Downtown Links: Broadway to I-10	Total for FY 2016	\$7,449,233.00	Tucson
81.04		Downtown Links: Broadway to I-10	Total for FY 2017	\$4,248,220.00	Tucson
81.04		Downtown Links: Broadway to I-10	Total for FY 2018	\$2,949,033.00	Tucson
81.04		Downtown Links: Broadway to I-10	Total for FY 2019	\$608,769.00	Tucson
		Grand Total		\$47,544,129.00	
50.12		Duval Mine Road Sidewalk and Bicycle Lane	Total for FY 2015	\$15,700.00	Sahuarita
50.12		Duval Mine Road Sidewalk and Bicycle Lane	Total for FY 2016	\$6,482.00	Sahuarita
50.12		Duval Mine Road Sidewalk and Bicycle Lane	Total for FY 2017	\$15,333.00	Sahuarita
50.12		Duval Mine Road Sidewalk and Bicycle Lane	Total for FY 2018	\$11,027.00	Sahuarita
		Grand Total		\$48,543.00	
72.07		El Paso & Southwestern Greenway: 22nd to Simpson	Total for FY 2019	\$784.00	Tucson
		Grand Total		\$784.00	
83.07		El Paso & Southwestern Greenway: Kino to University	Total for FY 2008	\$77,415.00	Tucson
83.07		El Paso & Southwestern Greenway: Kino to University	Total for FY 2009	\$267,106.00	Tucson
83.07		El Paso & Southwestern Greenway: Kino to University	Total for FY 2010	\$547,425.00	Tucson
83.07		El Paso & Southwestern Greenway: Kino to University	Total for FY 2011	\$372,864.00	Tucson
83.07		El Paso & Southwestern Greenway: Kino to University	Total for FY 2012	\$90,887.00	Tucson
83.07		El Paso & Southwestern Greenway: Kino to University	Total for FY 2013	\$142,084.00	Tucson
83.07		El Paso & Southwestern Greenway: Kino to University	Total for FY 2014	\$78,363.00	Tucson
83.07		El Paso & Southwestern Greenway: Kino to University	Total for FY 2015	\$53,246.00	Tucson
83.07		El Paso & Southwestern Greenway: Kino to University	Total for FY 2016	\$198,419.00	Tucson
83.07		El Paso & Southwestern Greenway: Kino to University	Total for FY 2017	\$32,765.00	Tucson
83.07		El Paso & Southwestern Greenway: Kino to University	Total for FY 2018	\$29,004.00	Tucson
		Grand Total		\$1,889,577.00	
82.12		El Paso Southwestern Greenway: 11th Ave to South 6th Ave	Total for FY 2014	\$4,500.00	Pima County
82.12		El Paso Southwestern Greenway: 11th Ave to South 6th Ave	Total for FY 2015	\$56,480.00	Pima County
82.12		El Paso Southwestern Greenway: 11th Ave to South 6th Ave	Total for FY 2016	\$9,000.00	Pima County
82.12		El Paso Southwestern Greenway: 11th Ave to South 6th Ave	Total for FY 2017	\$113,042.00	Pima County
82.12		El Paso Southwestern Greenway: 11th Ave to South 6th Ave	Total for FY 2018	\$303,843.00	Pima County
82.12		El Paso Southwestern Greenway: 11th Ave to South 6th Ave	Total for FY 2019	\$173,899.00	Pima County
		Grand Total		\$660,764.00	
73.12		El Rio Park to Avra Valley Road Shared Use Path	Total for FY 2016	\$74,235.00	Marana
73.12		El Rio Park to Avra Valley Road Shared Use Path	Total for FY 2017	\$579,801.00	Marana
73.12		El Rio Park to Avra Valley Road Shared Use Path	Total for FY 2018	\$20,964.00	Marana
		Grand Total		\$675,000.00	
13.15		Elemental Level Bridge Inspection	Total for FY 2016	\$1,341.00	Pima County
13.15		Elemental Level Bridge Inspection	Total for FY 2017	\$1,096.00	Pima County
13.15		Elemental Level Bridge Inspection	Total for FY 2018	\$890.00	Pima County
13.15		Elemental Level Bridge Inspection	Total for FY 2019	\$1,571.00	Pima County

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StatelD	Project Name	Drawdowns and Obligations		Sponsor
Grand Total				\$4,898.00	
14.15		Elemental Level Culvert Inspection Program & Load Ratings	Total for FY 2016	\$142,933.00	Pima County
14.15		Elemental Level Culvert Inspection Program & Load Ratings	Total for FY 2017	\$114,377.00	Pima County
14.15		Elemental Level Culvert Inspection Program & Load Ratings	Total for FY 2018	\$2,576.00	Pima County
14.15		Elemental Level Culvert Inspection Program & Load Ratings	Total for FY 2019	\$581.00	Pima County
Grand Total				\$260,467.00	
4.14		Gates Pass Rd Crash DCR	Total for FY 2018	\$28,191.00	Pima County
4.14		Gates Pass Rd Crash DCR	Total for FY 2019	\$10,887.00	Pima County
Grand Total				\$39,079.00	
87.09		Glenn St: Columbus to Country Club Pedestrian Path	Total for FY 2011	\$17,859.00	Tucson
87.09		Glenn St: Columbus to Country Club Pedestrian Path	Total for FY 2012	\$15,769.00	Tucson
87.09		Glenn St: Columbus to Country Club Pedestrian Path	Total for FY 2013	\$10,965.00	Tucson
87.09		Glenn St: Columbus to Country Club Pedestrian Path	Total for FY 2014	\$13,953.00	Tucson
87.09		Glenn St: Columbus to Country Club Pedestrian Path	Total for FY 2015	\$9,399.00	Tucson
87.09		Glenn St: Columbus to Country Club Pedestrian Path	Total for FY 2016	\$6,416.00	Tucson
87.09		Glenn St: Columbus to Country Club Pedestrian Path	Total for FY 2018	\$11,391.00	Tucson
87.09		Glenn St: Columbus to Country Club Pedestrian Path	Total for FY 2019	\$548.00	Tucson
Grand Total				\$86,300.00	
55.06		Grant Rd: Oracle Rd to Swan Rd	Total for FY 2008	\$1,786,209.00	Tucson
55.06		Grant Rd: Oracle Rd to Swan Rd	Total for FY 2009	\$1,541,463.00	Tucson
55.06		Grant Rd: Oracle Rd to Swan Rd	Total for FY 2010	\$4,492,325.00	Tucson
55.06		Grant Rd: Oracle Rd to Swan Rd	Total for FY 2011	\$6,309,351.00	Tucson
55.06		Grant Rd: Oracle Rd to Swan Rd	Total for FY 2012	\$5,073,188.00	Tucson
55.06		Grant Rd: Oracle Rd to Swan Rd	Total for FY 2013	\$3,622,785.00	Tucson
55.06		Grant Rd: Oracle Rd to Swan Rd	Total for FY 2014	\$7,395,377.00	Tucson
55.06		Grant Rd: Oracle Rd to Swan Rd	Total for FY 2015	\$6,029,280.00	Tucson
55.06		Grant Rd: Oracle Rd to Swan Rd	Total for FY 2016	\$12,817,445.00	Tucson
55.06		Grant Rd: Oracle Rd to Swan Rd	Total for FY 2017	\$8,563,213.00	Tucson
55.06		Grant Rd: Oracle Rd to Swan Rd	Total for FY 2018	\$5,146,352.00	Tucson
55.06		Grant Rd: Oracle Rd to Swan Rd	Total for FY 2019	\$6,592,556.00	Tucson
Grand Total				\$69,369,544.00	
23.16		Guardrail Selection Tool Upgrade for RSAP	Total for FY 2019	\$14,164.00	Pima County
Grand Total				\$14,164.00	
29.15		HAWKS Speedway+Ritchie Grant+Arcadia 22nd+Belvedere	Total for FY 2017	\$0.00	Tucson
29.15		HAWKS Speedway+Ritchie Grant+Arcadia 22nd+Belvedere	Total for FY 2018	\$48,285.00	Tucson
Grand Total				\$48,285.00	
108.06		Houghton / Broadway Park-and-Ride		\$0.00	Tucson Transit
108.06		Houghton / Broadway Park-and-Ride	Total for FY 2009	\$1,790,534.00	Tucson Transit
108.06		Houghton / Broadway Park-and-Ride	Total for FY 2010	\$79,346.00	Tucson Transit

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StatelD	Project Name	Drawdowns and Obligations		Sponsor
108.06		Houghton / Broadway Park-and-Ride	Total for FY 2011	\$146,705.00	Tucson Transit
108.06		Houghton / Broadway Park-and-Ride	Total for FY 2012	\$11,446.00	Tucson Transit
108.06		Houghton / Broadway Park-and-Ride	Total for FY 2013	\$25,737.00	Tucson Transit
108.06		Houghton / Broadway Park-and-Ride	Total for FY 2014	\$23,320.00	Tucson Transit
108.06		Houghton / Broadway Park-and-Ride	Total for FY 2015	\$55,024.00	Tucson Transit
108.06		Houghton / Broadway Park-and-Ride	Total for FY 2016	\$1,352,576.00	Tucson Transit
108.06		Houghton / Broadway Park-and-Ride	Total for FY 2017	\$104,474.00	Tucson Transit
108.06		Houghton / Broadway Park-and-Ride	Total for FY 2018	\$5,092.00	Tucson Transit
		Grand Total		\$3,594,254.00	
46.14		Houghton Rd : Valencia Rd to Mary Ann Cleveland Way	Total for FY 2018	\$635,207.00	Tucson
46.14		Houghton Rd : Valencia Rd to Mary Ann Cleveland Way	Total for FY 2019	\$448,923.00	Tucson
		Grand Total		\$1,084,130.00	
19.13		Houghton Rd UPRR Bridge Bat Roost Mitigation	Total for FY 2017	\$72,295.00	Tucson
19.13		Houghton Rd UPRR Bridge Bat Roost Mitigation	Total for FY 2018	\$13,204.00	Tucson
		Grand Total		\$85,499.00	
16.15		Houghton Rd: 22nd St to Irvington Rd	Total for FY 2016	\$591.00	Tucson
16.15		Houghton Rd: 22nd St to Irvington Rd	Total for FY 2017	\$668,355.00	Tucson
16.15		Houghton Rd: 22nd St to Irvington Rd	Total for FY 2018	\$951,553.00	Tucson
		Grand Total		\$1,620,498.00	
18.12		Houghton Rd: Broadway to 22nd, Intersection Improv @Broadway	Total for FY 2012	\$31,312.00	Tucson
18.12		Houghton Rd: Broadway to 22nd, Intersection Improv @Broadway	Total for FY 2013	\$339,844.00	Tucson
18.12		Houghton Rd: Broadway to 22nd, Intersection Improv @Broadway	Total for FY 2014	\$3,002,231.00	Tucson
18.12		Houghton Rd: Broadway to 22nd, Intersection Improv @Broadway	Total for FY 2015	\$7,391,451.00	Tucson
18.12		Houghton Rd: Broadway to 22nd, Intersection Improv @Broadway	Total for FY 2016	\$10,567,913.00	Tucson
18.12		Houghton Rd: Broadway to 22nd, Intersection Improv @Broadway	Total for FY 2017	\$5,987,186.00	Tucson
18.12		Houghton Rd: Broadway to 22nd, Intersection Improv @Broadway	Total for FY 2018	\$84,813.00	Tucson
		Grand Total		\$27,404,750.00	
108.09		Houghton Rd: UPRR Bridge to I-10	Total for FY 2012	\$2,373.00	Tucson
108.09		Houghton Rd: UPRR Bridge to I-10	Total for FY 2013	\$48,528.00	Tucson
108.09		Houghton Rd: UPRR Bridge to I-10	Total for FY 2014	\$51,565.00	Tucson
108.09		Houghton Rd: UPRR Bridge to I-10	Total for FY 2015	\$61,929.00	Tucson
108.09		Houghton Rd: UPRR Bridge to I-10	Total for FY 2016	\$194,950.00	Tucson
108.09		Houghton Rd: UPRR Bridge to I-10	Total for FY 2017	\$504,012.00	Tucson
108.09		Houghton Rd: UPRR Bridge to I-10	Total for FY 2019	\$7,127.00	Tucson
		Grand Total		\$870,485.00	
753.00		I-10: East Corridor Study	Total for FY 2009	\$2,771.00	ADOT
753.00		I-10: East Corridor Study	Total for FY 2011	\$404,272.00	ADOT
753.00		I-10: East Corridor Study	Total for FY 2012	\$426,909.00	ADOT

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StatelD	Project Name	Drawdowns and Obligations		Sponsor
753.00		I-10: East Corridor Study	Total for FY 2013	\$23,683.00	ADOT
753.00		I-10: East Corridor Study	Total for FY 2014	\$245,605.00	ADOT
753.00		I-10: East Corridor Study	Total for FY 2015	\$767,658.00	ADOT
753.00		I-10: East Corridor Study	Total for FY 2016	\$1,104.00	ADOT
753.00		I-10: East Corridor Study	Total for FY 2017	\$559,504.00	ADOT
753.00		I-10: East Corridor Study	Total for FY 2018	\$1,045,547.00	ADOT
753.00		I-10: East Corridor Study	Total for FY 2019	\$43,732.00	ADOT
		Grand Total		\$3,520,784.00	
57.14	H8897	I-10: Houghton TI Signalization	Total for FY 2016	\$1,757.00	ADOT
57.14	H8897	I-10: Houghton TI Signalization	Total for FY 2017	\$134,515.00	ADOT
57.14	H8897	I-10: Houghton TI Signalization	Total for FY 2018	\$361,229.00	ADOT
57.14	H8897	I-10: Houghton TI Signalization	Total for FY 2019	\$233.00	ADOT
		Grand Total		\$497,734.00	
52.14	H8896	I-10: Wilmot, Kolb, Rita, TI Signalization	Total for FY 2016	\$6,018.00	ADOT
52.14	H8896	I-10: Wilmot, Kolb, Rita, TI Signalization	Total for FY 2017	\$178,237.00	ADOT
52.14	H8896	I-10: Wilmot, Kolb, Rita, TI Signalization	Total for FY 2018	\$261,764.00	ADOT
		Grand Total		\$446,019.00	
41.01	H8467	I-19: Ajo TI	Total for FY 2004	\$1,100.00	ADOT
41.01	H8467	I-19: Ajo TI	Total for FY 2012	\$53.00	ADOT
41.01	H8467	I-19: Ajo TI	Total for FY 2014	\$164,373.00	ADOT
41.01	H8467	I-19: Ajo TI	Total for FY 2015	\$12,516,455.00	ADOT
41.01	H8467	I-19: Ajo TI	Total for FY 2016	\$427,784.00	ADOT
41.01	H8467	I-19: Ajo TI	Total for FY 2017	\$1,888,063.00	ADOT
41.01	H8467	I-19: Ajo TI	Total for FY 2018	\$2,267,629.00	ADOT
41.01	H8467	I-19: Ajo TI	Total for FY 2019	\$452,231.00	ADOT
		Grand Total		\$17,717,688.00	
4.12	H8493	I-19: Valencia Rd SB Off-Ramp Expansion	Total for FY 2012	\$548.00	ADOT
4.12	H8493	I-19: Valencia Rd SB Off-Ramp Expansion	Total for FY 2013	\$54,144.00	ADOT
4.12	H8493	I-19: Valencia Rd SB Off-Ramp Expansion	Total for FY 2014	\$181,760.00	ADOT
4.12	H8493	I-19: Valencia Rd SB Off-Ramp Expansion	Total for FY 2015	\$510,798.00	ADOT
4.12	H8493	I-19: Valencia Rd SB Off-Ramp Expansion	Total for FY 2016	\$17,413.00	ADOT
4.12	H8493	I-19: Valencia Rd SB Off-Ramp Expansion	Total for FY 2017	\$18,892.00	ADOT
4.12	H8493	I-19: Valencia Rd SB Off-Ramp Expansion	Total for FY 2018	\$0.00	ADOT
		Grand Total		\$783,554.00	
64.12		Ina Rd Bridge Bat Boxes	Total for FY 2013	\$4,957.00	AZ Game & Fish
64.12		Ina Rd Bridge Bat Boxes	Total for FY 2014	\$539.00	AZ Game & Fish
64.12		Ina Rd Bridge Bat Boxes	Total for FY 2018	\$20,700.00	AZ Game & Fish
		Grand Total		\$26,196.00	
76.06		Kolb Rd.: Connection to Sabino Canyon		\$0.00	Tucson
76.06		Kolb Rd.: Connection to Sabino Canyon	Total for FY 2009	\$15,790.00	Tucson
76.06		Kolb Rd.: Connection to Sabino Canyon	Total for FY 2010	\$744,760.00	Tucson

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StateID	Project Name	Drawdowns and Obligations		Sponsor
76.06		Kolb Rd.: Connection to Sabino Canyon	Total for FY 2011	\$1,377,150.00	Tucson
76.06		Kolb Rd.: Connection to Sabino Canyon	Total for FY 2012	\$2,655,888.00	Tucson
76.06		Kolb Rd.: Connection to Sabino Canyon	Total for FY 2013	\$2,208,230.00	Tucson
76.06		Kolb Rd.: Connection to Sabino Canyon	Total for FY 2014	\$330,301.00	Tucson
76.06		Kolb Rd.: Connection to Sabino Canyon	Total for FY 2015	\$166,113.00	Tucson
76.06		Kolb Rd.: Connection to Sabino Canyon	Total for FY 2016	\$1,765,819.00	Tucson
76.06		Kolb Rd.: Connection to Sabino Canyon	Total for FY 2017	\$10,171,560.00	Tucson
76.06		Kolb Rd.: Connection to Sabino Canyon	Total for FY 2018	\$1,857,028.00	Tucson
		Grand Total		\$21,292,640.00	
28.15		La Canada Dr and El Conquistador HAWK crossing	Total for FY 2018	\$366,307.00	Oro Valley
		Grand Total		\$366,307.00	
19.15		La Cañada Dr and Moore Rd Intersection Study	Total for FY 2018	\$31,202.00	Oro Valley
19.15		La Cañada Dr and Moore Rd Intersection Study	Total for FY 2019	\$11,818.00	Oro Valley
		Grand Total		\$43,020.00	
87.03		La Cholla Blvd. - Tangerine to Overton	Total for FY 2016	\$344,801.00	Oro Valley
87.03		La Cholla Blvd. - Tangerine to Overton	Total for FY 2017	\$1,538,378.00	Oro Valley
87.03		La Cholla Blvd. - Tangerine to Overton	Total for FY 2018	\$1,329,016.00	Oro Valley
87.03		La Cholla Blvd. - Tangerine to Overton	Total for FY 2019	\$360,648.00	Oro Valley
		Grand Total		\$3,572,843.00	
27.16		La Cholla Blvd: Overton Rd to Tangerine Rd Wildlife Linkages	Total for FY 2018	\$78,121.00	Oro Valley
		Grand Total		\$78,121.00	
116.08		Lambert Lane: La Cholla to La Canada Phase 2	Total for FY 2015	\$272,072.00	Oro Valley
116.08		Lambert Lane: La Cholla to La Canada Phase 2	Total for FY 2016	\$461,288.00	Oro Valley
116.08		Lambert Lane: La Cholla to La Canada Phase 2	Total for FY 2017	\$2,736,419.00	Oro Valley
116.08		Lambert Lane: La Cholla to La Canada Phase 2	Total for FY 2018	\$3,064,000.00	Oro Valley
		Grand Total		\$6,533,778.00	
87.12		Mary Ann Cleveland at Kush HAWK	Total for FY 2013	\$25,461.00	Pima County
87.12		Mary Ann Cleveland at Kush HAWK	Total for FY 2016	\$185,000.00	Pima County
87.12		Mary Ann Cleveland at Kush HAWK	Total for FY 2017	\$11,821.00	Pima County
87.12		Mary Ann Cleveland at Kush HAWK	Total for FY 2018	\$15,179.00	Pima County
		Grand Total		\$237,461.00	
20.15		McCain Loop Study	Total for FY 2017	\$8,913.00	Pima County
20.15		McCain Loop Study	Total for FY 2018	\$26,739.00	Pima County
20.15		McCain Loop Study	Total for FY 2019	\$8,913.00	Pima County
		Grand Total		\$44,565.00	
9.18		Mobility on Demand	Total for FY 2018	\$137,575.00	RTA
		Grand Total		\$137,575.00	
2.18		Naranja Dr: Park Entrance	Total for FY 2019	\$250,000.00	Oro Valley
		Grand Total		\$250,000.00	

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StatelD	Project Name	Drawdowns and Obligations		Sponsor
41.12		Old Vail Middle School SRTS Project	Total for FY 2016	\$200,000.00	Pima County
41.12		Old Vail Middle School SRTS Project	Total for FY 2017	\$5,391.00	Pima County
41.12		Old Vail Middle School SRTS Project	Total for FY 2018	\$15,917.00	Pima County
		Grand Total		\$221,308.00	
85.01		PAG Consultant Services	Total for FY 2002	\$572,101.00	OWP-PAG
85.01		PAG Consultant Services	Total for FY 2003	\$728,000.00	OWP-PAG
85.01		PAG Consultant Services	Total for FY 2004	\$520,000.00	OWP-PAG
85.01		PAG Consultant Services	Total for FY 2005	\$527,436.00	OWP-PAG
85.01		PAG Consultant Services	Total for FY 2006	\$575,000.00	OWP-PAG
85.01		PAG Consultant Services	Total for FY 2007	\$500,000.00	OWP-PAG
85.01		PAG Consultant Services	Total for FY 2008	\$500,000.00	OWP-PAG
85.01		PAG Consultant Services	Total for FY 2009	\$500,000.00	OWP-PAG
85.01		PAG Consultant Services	Total for FY 2010	\$499,270.00	OWP-PAG
85.01		PAG Consultant Services	Total for FY 2011	\$200,000.00	OWP-PAG
85.01		PAG Consultant Services	Total for FY 2012	\$1,190,327.00	OWP-PAG
85.01		PAG Consultant Services	Total for FY 2013	\$100,000.00	OWP-PAG
85.01		PAG Consultant Services	Total for FY 2014	\$150,000.00	OWP-PAG
85.01		PAG Consultant Services	Total for FY 2015	\$300,000.00	OWP-PAG
85.01		PAG Consultant Services	Total for FY 2016	\$300,000.00	OWP-PAG
85.01		PAG Consultant Services	Total for FY 2017	\$100,000.00	OWP-PAG
85.01		PAG Consultant Services	Total for FY 2018	\$100,000.00	OWP-PAG
85.01		PAG Consultant Services	Total for FY 2019	\$100,000.00	OWP-PAG
		Grand Total		\$7,462,134.00	
107.08		Park Ave: Ft Lowell to Speedway Transportation Enhancement	Total for FY 2016	\$802.00	Tucson
107.08		Park Ave: Ft Lowell to Speedway Transportation Enhancement	Total for FY 2017	\$858.00	Tucson
107.08		Park Ave: Ft Lowell to Speedway Transportation Enhancement	Total for FY 2018	\$88,000.00	Tucson
		Grand Total		\$89,660.00	
55.10		Pavement Preservation	Total for FY 2011	\$39,000.00	Sahuarita
55.10		Pavement Preservation	Total for FY 2013	\$42,000.00	Sahuarita
55.10		Pavement Preservation	Total for FY 2018	\$2,288.00	Sahuarita
		Grand Total		\$83,288.00	
63.14		Pima County School Safety-White Elementary/Pistor Middle Sch	Total for FY 2017	\$341,000.00	Pima County
63.14		Pima County School Safety-White Elementary/Pistor Middle Sch	Total for FY 2018	\$10,000.00	Pima County
		Grand Total		\$351,000.00	
87.08		Pima Mine Rd. Bridge Replacement		\$0.00	Sahuarita
87.08		Pima Mine Rd. Bridge Replacement	Total for FY 2011	\$198,209.00	Sahuarita
87.08		Pima Mine Rd. Bridge Replacement	Total for FY 2012	\$52,869.00	Sahuarita
87.08		Pima Mine Rd. Bridge Replacement	Total for FY 2014	\$214,950.00	Sahuarita
87.08		Pima Mine Rd. Bridge Replacement	Total for FY 2015	\$203,783.00	Sahuarita
87.08		Pima Mine Rd. Bridge Replacement	Total for FY 2016	\$1,437,501.00	Sahuarita

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StatelD	Project Name	Drawdowns and Obligations		Sponsor
87.08		Pima Mine Rd. Bridge Replacement	Total for FY 2017	\$1,956,189.00	Sahuarita
87.08		Pima Mine Rd. Bridge Replacement	Total for FY 2018	\$1,030.00	Sahuarita
			Grand Total	\$4,064,530.00	
26.16		Providing Accessibility and Safety Across I-19 (PASA)	Total for FY 2018	\$38,158.00	Sahuarita
26.16		Providing Accessibility and Safety Across I-19 (PASA)	Total for FY 2019	\$9,347.00	Sahuarita
			Grand Total	\$47,505.00	
33.12		Purchase of Sun Shuttle Vehicles	Total for FY 2017	\$265,839.00	RTA
33.12		Purchase of Sun Shuttle Vehicles	Total for FY 2018	\$810,341.00	RTA
			Grand Total	\$1,076,180.00	
41.07		Quail Creek Connection, Phase 1	Total for FY 2018	\$214,164.00	Sahuarita
41.07		Quail Creek Connection, Phase 1	Total for FY 2019	\$839,138.00	Sahuarita
			Grand Total	\$1,053,302.00	
39.08		Regional Transportation Data Network	Total for FY 2010	\$230,000.00	Tucson
39.08		Regional Transportation Data Network	Total for FY 2011	\$226,575.00	Tucson
39.08		Regional Transportation Data Network	Total for FY 2012	\$282,083.00	Tucson
39.08		Regional Transportation Data Network	Total for FY 2013	\$210,000.00	Tucson
39.08		Regional Transportation Data Network	Total for FY 2014	\$80,000.00	Tucson
39.08		Regional Transportation Data Network	Total for FY 2015	\$180,707.00	Tucson
39.08		Regional Transportation Data Network	Total for FY 2016	\$243.00	Tucson
39.08		Regional Transportation Data Network	Total for FY 2017	\$320,829.00	Tucson
39.08		Regional Transportation Data Network	Total for FY 2018	\$191,500.00	Tucson
			Grand Total	\$1,721,937.00	
21.15		Roadway and Intersection Safety Enhancements	Total for FY 2019	\$16,562.00	Sahuarita
			Grand Total	\$16,562.00	
61.14		Rural Road Intersection Safety Study	Total for FY 2018	\$49,263.00	Pima County
61.14		Rural Road Intersection Safety Study	Total for FY 2019	\$711.00	Pima County
			Grand Total	\$49,974.00	
6.04		Sahuarita Rd: I-19 to Country Club	Total for FY 2008	\$1,291,822.00	Sahuarita
6.04		Sahuarita Rd: I-19 to Country Club	Total for FY 2009	\$193,147.00	Sahuarita
6.04		Sahuarita Rd: I-19 to Country Club	Total for FY 2010	\$4,639,235.00	Sahuarita
6.04		Sahuarita Rd: I-19 to Country Club	Total for FY 2012	\$4,925,039.00	Sahuarita
6.04		Sahuarita Rd: I-19 to Country Club	Total for FY 2013	\$7,934,581.00	Sahuarita
6.04		Sahuarita Rd: I-19 to Country Club	Total for FY 2014	\$6,432,365.00	Sahuarita
6.04		Sahuarita Rd: I-19 to Country Club	Total for FY 2015	\$8,319,043.00	Sahuarita
6.04		Sahuarita Rd: I-19 to Country Club	Total for FY 2016	\$2,686,655.00	Sahuarita
6.04		Sahuarita Rd: I-19 to Country Club	Total for FY 2017	\$161,989.00	Sahuarita
6.04		Sahuarita Rd: I-19 to Country Club	Total for FY 2018	\$460.00	Sahuarita
			Grand Total	\$36,584,336.00	
49.10		Sahuarita Road/ Nogales Highway Realignment and RR Crossing	Total for FY 2013	\$4,259,733.00	Sahuarita

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StatelD	Project Name	Drawdowns and Obligations		Sponsor
49.10		Sahuarita Road/ Nogales Highway Realignment and RR Crossing	Total for FY 2014	\$2,642,881.00	Sahuarita
49.10		Sahuarita Road/ Nogales Highway Realignment and RR Crossing	Total for FY 2015	\$113,233.00	Sahuarita
49.10		Sahuarita Road/ Nogales Highway Realignment and RR Crossing	Total for FY 2018	\$93,000.00	Sahuarita
		Grand Total		\$7,108,847.00	
79.10		San Xavier Rd: Little Nogales to I-19	Total for FY 2016	\$5,836.00	Tohono O'odham
79.10		San Xavier Rd: Little Nogales to I-19	Total for FY 2018	\$26,125.00	Tohono O'odham
		Grand Total		\$31,961.00	
91.09		San Xavier: Little Nogales Mission Gateway Path	Total for FY 2011	\$44,564.00	Tohono O'odham
91.09		San Xavier: Little Nogales Mission Gateway Path	Total for FY 2012	\$77,831.00	Tohono O'odham
91.09		San Xavier: Little Nogales Mission Gateway Path	Total for FY 2013	\$1,275.00	Tohono O'odham
91.09		San Xavier: Little Nogales Mission Gateway Path	Total for FY 2014	\$57,351.00	Tohono O'odham
91.09		San Xavier: Little Nogales Mission Gateway Path	Total for FY 2016	\$23,738.00	Tohono O'odham
91.09		San Xavier: Little Nogales Mission Gateway Path	Total for FY 2017	\$34,301.00	Tohono O'odham
91.09		San Xavier: Little Nogales Mission Gateway Path	Total for FY 2018	\$194,942.00	Tohono O'odham
91.09		San Xavier: Little Nogales Mission Gateway Path	Total for FY 2019	\$5,000.00	Tohono O'odham
		Grand Total		\$439,001.00	
56.06		Silverbell Rd: Grant to Ina	Total for FY 2009	\$13,041.00	Tucson
56.06		Silverbell Rd: Grant to Ina	Total for FY 2010	\$1,351,376.00	Tucson
56.06		Silverbell Rd: Grant to Ina	Total for FY 2011	\$891,458.00	Tucson
56.06		Silverbell Rd: Grant to Ina	Total for FY 2012	\$363,564.00	Tucson
56.06		Silverbell Rd: Grant to Ina	Total for FY 2013	\$281,431.00	Tucson
56.06		Silverbell Rd: Grant to Ina	Total for FY 2014	\$959,966.00	Tucson
56.06		Silverbell Rd: Grant to Ina	Total for FY 2015	\$436,917.00	Tucson
56.06		Silverbell Rd: Grant to Ina	Total for FY 2016	\$5,030,264.00	Tucson
56.06		Silverbell Rd: Grant to Ina	Total for FY 2017	\$5,551,107.00	Tucson
56.06		Silverbell Rd: Grant to Ina	Total for FY 2018	\$45,231.00	Tucson
56.06		Silverbell Rd: Grant to Ina	Total for FY 2019	\$716,178.00	Tucson
		Grand Total		\$15,640,533.00	
69.06		Small Business Assistance		\$0.00	Mainstreet
69.06		Small Business Assistance	Total for FY 2008	\$251,789.00	Mainstreet
69.06		Small Business Assistance	Total for FY 2009	\$385,865.00	Mainstreet
69.06		Small Business Assistance	Total for FY 2010	\$488,748.00	Mainstreet
69.06		Small Business Assistance	Total for FY 2011	\$524,848.00	Mainstreet
69.06		Small Business Assistance	Total for FY 2012	\$703,351.00	Mainstreet
69.06		Small Business Assistance	Total for FY 2013	\$787,843.00	Mainstreet
69.06		Small Business Assistance	Total for FY 2014	\$749,862.00	Mainstreet
69.06		Small Business Assistance	Total for FY 2015	\$728,097.00	Mainstreet
69.06		Small Business Assistance	Total for FY 2016	\$645,974.00	Mainstreet
69.06		Small Business Assistance	Total for FY 2017	\$543,129.00	Mainstreet
69.06		Small Business Assistance	Total for FY 2018	\$382,105.00	Mainstreet
		Grand Total		\$6,191,611.00	

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StatelD	Project Name	Drawdowns and Obligations		Sponsor
1.16		SR 410: Sonoran Corridor Tier 1 EIS	Total for FY 2018	\$714,821.00	ADOT
1.16		SR 410: Sonoran Corridor Tier 1 EIS	Total for FY 2019	\$5,997.00	ADOT
			Grand Total	\$720,818.00	
11.02	H6694	SR 77: Tangerine Rd to Pinal County Line	Total for FY 2010	\$725.00	ADOT
11.02	H6694	SR 77: Tangerine Rd to Pinal County Line	Total for FY 2011	\$105,787.00	ADOT
11.02	H6694	SR 77: Tangerine Rd to Pinal County Line	Total for FY 2012	\$457,559.00	ADOT
11.02	H6694	SR 77: Tangerine Rd to Pinal County Line	Total for FY 2013	\$1,336,000.00	ADOT
11.02	H6694	SR 77: Tangerine Rd to Pinal County Line	Total for FY 2014	\$696,567.00	ADOT
11.02	H6694	SR 77: Tangerine Rd to Pinal County Line	Total for FY 2015	\$62,514.00	ADOT
11.02	H6694	SR 77: Tangerine Rd to Pinal County Line	Total for FY 2016	\$122,327.00	ADOT
11.02	H6694	SR 77: Tangerine Rd to Pinal County Line	Total for FY 2017	\$5,317.00	ADOT
11.02	H6694	SR 77: Tangerine Rd to Pinal County Line	Total for FY 2018	\$287,724.00	ADOT
			Grand Total	\$3,074,520.00	
86.09		SR 77: Wildlife Crossing Structures		\$0.00	ADOT
86.09		SR 77: Wildlife Crossing Structures	Total for FY 2011	\$500,000.00	ADOT
86.09		SR 77: Wildlife Crossing Structures	Total for FY 2012	\$412,318.00	ADOT
86.09		SR 77: Wildlife Crossing Structures	Total for FY 2013	\$316,659.00	ADOT
86.09		SR 77: Wildlife Crossing Structures	Total for FY 2014	\$4,605,176.00	ADOT
86.09		SR 77: Wildlife Crossing Structures	Total for FY 2015	\$0.00	ADOT
86.09		SR 77: Wildlife Crossing Structures	Total for FY 2018	\$0.00	ADOT
			Grand Total	\$5,834,154.00	
47.06	H8469	SR 86: Fresno Segment	Total for FY 2014	\$521,015.00	ADOT
47.06	H8469	SR 86: Fresno Segment	Total for FY 2015	\$530,497.00	ADOT
47.06	H8469	SR 86: Fresno Segment	Total for FY 2016	\$143,270.00	ADOT
47.06	H8469	SR 86: Fresno Segment	Total for FY 2017	\$166,145.00	ADOT
47.06	H8469	SR 86: Fresno Segment	Total for FY 2018	\$479,861.00	ADOT
47.06	H8469	SR 86: Fresno Segment	Total for FY 2019	\$159,867.00	ADOT
			Grand Total	\$2,000,655.00	
105.03	H8010	SR 86: Kitt Peak Rd Segment	Total for FY 2012	\$3,107.00	ADOT
105.03	H8010	SR 86: Kitt Peak Rd Segment	Total for FY 2013	\$2,818.00	ADOT
105.03	H8010	SR 86: Kitt Peak Rd Segment	Total for FY 2014	\$184,967.00	ADOT
105.03	H8010	SR 86: Kitt Peak Rd Segment	Total for FY 2015	\$123,729.00	ADOT
105.03	H8010	SR 86: Kitt Peak Rd Segment	Total for FY 2016	\$90,980.00	ADOT
105.03	H8010	SR 86: Kitt Peak Rd Segment	Total for FY 2017	\$109,176.00	ADOT
105.03	H8010	SR 86: Kitt Peak Rd Segment	Total for FY 2018	\$4,584.00	ADOT
105.03	H8010	SR 86: Kitt Peak Rd Segment	Total for FY 2019	\$4,234.00	ADOT
			Grand Total	\$523,595.00	
45.01	H8468	SR 86: San Isidro Rd. Segment	Total for FY 2013	\$48.00	ADOT
45.01	H8468	SR 86: San Isidro Rd. Segment	Total for FY 2014	\$8,614.00	ADOT
45.01	H8468	SR 86: San Isidro Rd. Segment	Total for FY 2015	\$204,894.00	ADOT
45.01	H8468	SR 86: San Isidro Rd. Segment	Total for FY 2016	\$53,013.00	ADOT
45.01	H8468	SR 86: San Isidro Rd. Segment	Total for FY 2017	\$1,520,860.00	ADOT

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StatelD	Project Name	Drawdowns and Obligations		Sponsor
45.01	H8468	SR 86: San Isidro Rd. Segment	Total for FY 2018	\$100,261.00	ADOT
45.01	H8468	SR 86: San Isidro Rd. Segment	Total for FY 2019	\$7,805.00	ADOT
		Grand Total		\$1,895,495.00	
2.02	H6806	SR 86: Valencia Rd to Kinney Rd	Total for FY 2012	\$4,956,103.00	ADOT
2.02	H6806	SR 86: Valencia Rd to Kinney Rd	Total for FY 2013	\$12,609.00	ADOT
2.02	H6806	SR 86: Valencia Rd to Kinney Rd	Total for FY 2014	\$367,867.00	ADOT
2.02	H6806	SR 86: Valencia Rd to Kinney Rd	Total for FY 2015	\$5,027,780.00	ADOT
2.02	H6806	SR 86: Valencia Rd to Kinney Rd	Total for FY 2016	\$364,630.00	ADOT
2.02	H6806	SR 86: Valencia Rd to Kinney Rd	Total for FY 2017	\$709,051.00	ADOT
2.02	H6806	SR 86: Valencia Rd to Kinney Rd	Total for FY 2018	\$2,300,858.00	ADOT
2.02	H6806	SR 86: Valencia Rd to Kinney Rd	Total for FY 2019	\$4,805.00	ADOT
		Grand Total		\$13,743,704.00	
30.00		Stone Avenue Gateway: Drachman St to 5th St		\$0.00	Tucson
30.00		Stone Avenue Gateway: Drachman St to 5th St	Total for FY 2004	\$14,096.00	Tucson
30.00		Stone Avenue Gateway: Drachman St to 5th St	Total for FY 2006	\$441,874.00	Tucson
30.00		Stone Avenue Gateway: Drachman St to 5th St	Total for FY 2007	\$81,490.00	Tucson
30.00		Stone Avenue Gateway: Drachman St to 5th St	Total for FY 2008	\$734.00	Tucson
30.00		Stone Avenue Gateway: Drachman St to 5th St	Total for FY 2009	\$2,165.00	Tucson
30.00		Stone Avenue Gateway: Drachman St to 5th St	Total for FY 2010	\$212,651.00	Tucson
30.00		Stone Avenue Gateway: Drachman St to 5th St	Total for FY 2014	\$12,154.00	Tucson
30.00		Stone Avenue Gateway: Drachman St to 5th St	Total for FY 2016	\$37,635.00	Tucson
30.00		Stone Avenue Gateway: Drachman St to 5th St	Total for FY 2017	\$2,915,228.00	Tucson
30.00		Stone Avenue Gateway: Drachman St to 5th St	Total for FY 2018	\$166,253.00	Tucson
30.00		Stone Avenue Gateway: Drachman St to 5th St	Total for FY 2019	\$121,526.00	Tucson
		Grand Total		\$4,005,806.00	
4.18		Summerhaven Congestion Management	Total for FY 2019	\$30,913.00	Pima County
		Grand Total		\$30,913.00	
89.12		Summit View Elementary School Safe Routes to School	Total for FY 2013	\$159,480.00	Pima County
89.12		Summit View Elementary School Safe Routes to School	Total for FY 2016	\$700,000.00	Pima County
89.12		Summit View Elementary School Safe Routes to School	Total for FY 2017	\$29,696.00	Pima County
89.12		Summit View Elementary School Safe Routes to School	Total for FY 2018	\$29,715.00	Pima County
		Grand Total		\$918,891.00	
70.06		Sun Tran - Weekday Evening Service Expansion	Total for FY 2007	\$445,296.00	Tucson Transit
70.06		Sun Tran - Weekday Evening Service Expansion	Total for FY 2008	\$1,918,501.00	Tucson Transit
70.06		Sun Tran - Weekday Evening Service Expansion	Total for FY 2009	\$2,207,953.00	Tucson Transit
70.06		Sun Tran - Weekday Evening Service Expansion	Total for FY 2010	\$2,534,487.00	Tucson Transit
70.06		Sun Tran - Weekday Evening Service Expansion	Total for FY 2011	\$1,759,697.00	Tucson Transit
70.06		Sun Tran - Weekday Evening Service Expansion	Total for FY 2012	\$1,617,391.00	Tucson Transit
70.06		Sun Tran - Weekday Evening Service Expansion	Total for FY 2013	\$1,760,790.00	Tucson Transit
70.06		Sun Tran - Weekday Evening Service Expansion	Total for FY 2014	\$2,184,163.00	Tucson Transit
70.06		Sun Tran - Weekday Evening Service Expansion	Total for FY 2015	\$1,867,237.00	Tucson Transit
70.06		Sun Tran - Weekday Evening Service Expansion	Total for FY 2016	\$1,994,220.00	Tucson Transit

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StatelD	Project Name	Drawdowns and Obligations		Sponsor
70.06		Sun Tran - Weekday Evening Service Expansion	Total for FY 2017	\$2,038,288.00	Tucson Transit
70.06		Sun Tran - Weekday Evening Service Expansion	Total for FY 2018	\$154,608.00	Tucson Transit
		Grand Total		\$20,482,631.00	
94.06		Sun Tran - Weekend Service Expansion	Total for FY 2008	\$539,046.00	Tucson Transit
94.06		Sun Tran - Weekend Service Expansion	Total for FY 2009	\$1,005,873.00	Tucson Transit
94.06		Sun Tran - Weekend Service Expansion	Total for FY 2010	\$1,108,818.00	Tucson Transit
94.06		Sun Tran - Weekend Service Expansion	Total for FY 2011	\$853,102.00	Tucson Transit
94.06		Sun Tran - Weekend Service Expansion	Total for FY 2012	\$806,589.00	Tucson Transit
94.06		Sun Tran - Weekend Service Expansion	Total for FY 2013	\$896,557.00	Tucson Transit
94.06		Sun Tran - Weekend Service Expansion	Total for FY 2014	\$1,096,413.00	Tucson Transit
94.06		Sun Tran - Weekend Service Expansion	Total for FY 2015	\$972,526.00	Tucson Transit
94.06		Sun Tran - Weekend Service Expansion	Total for FY 2016	\$1,021,615.00	Tucson Transit
94.06		Sun Tran - Weekend Service Expansion	Total for FY 2017	\$1,072,530.00	Tucson Transit
94.06		Sun Tran - Weekend Service Expansion	Total for FY 2018	\$75,289.00	Tucson Transit
		Grand Total		\$9,448,358.00	
35.05		Sunset Rd: Silverbell Rd to I-10	Total for FY 2010	\$3,414.00	Pima County
35.05		Sunset Rd: Silverbell Rd to I-10	Total for FY 2011	\$3,725.00	Pima County
35.05		Sunset Rd: Silverbell Rd to I-10	Total for FY 2012	\$138.00	Pima County
35.05		Sunset Rd: Silverbell Rd to I-10	Total for FY 2013	\$24,487.00	Pima County
35.05		Sunset Rd: Silverbell Rd to I-10	Total for FY 2014	\$12,788.00	Pima County
35.05		Sunset Rd: Silverbell Rd to I-10	Total for FY 2015	\$1,344,840.00	Pima County
35.05		Sunset Rd: Silverbell Rd to I-10	Total for FY 2016	\$2,982,025.00	Pima County
35.05		Sunset Rd: Silverbell Rd to I-10	Total for FY 2017	\$7,979,283.00	Pima County
35.05		Sunset Rd: Silverbell Rd to I-10	Total for FY 2018	\$3,585.00	Pima County
		Grand Total		\$12,354,284.00	
86.06		Tangerine Rd: I-10 to La Canada Dr	Total for FY 2011	\$452,549.00	Marana
86.06		Tangerine Rd: I-10 to La Canada Dr	Total for FY 2012	\$1,261,346.00	Marana
86.06		Tangerine Rd: I-10 to La Canada Dr	Total for FY 2013	\$584,727.00	Marana
86.06		Tangerine Rd: I-10 to La Canada Dr	Total for FY 2014	\$386,415.00	Marana
86.06		Tangerine Rd: I-10 to La Canada Dr	Total for FY 2015	\$1,460,790.00	Marana
86.06		Tangerine Rd: I-10 to La Canada Dr	Total for FY 2016	\$6,138,766.00	Marana
86.06		Tangerine Rd: I-10 to La Canada Dr	Total for FY 2017	\$18,471,761.00	Marana
86.06		Tangerine Rd: I-10 to La Canada Dr	Total for FY 2018	\$13,750,227.00	Marana
86.06		Tangerine Rd: I-10 to La Canada Dr	Total for FY 2019	\$4,845,321.00	Marana
		Grand Total		\$47,351,902.00	
15.03		Tangerine Rd: Shannon Rd to La Canada Dr	Total for FY 2008	\$165,564.00	Oro Valley
15.03		Tangerine Rd: Shannon Rd to La Canada Dr	Total for FY 2017	\$340,579.00	Oro Valley
15.03		Tangerine Rd: Shannon Rd to La Canada Dr	Total for FY 2018	\$90,539.00	Oro Valley
15.03		Tangerine Rd: Shannon Rd to La Canada Dr	Total for FY 2019	\$180,000.00	Oro Valley
		Grand Total		\$776,683.00	
35.16		Tanque Verde Loop Intersection	Total for FY 2018	\$130,508.00	Pima County
35.16		Tanque Verde Loop Intersection	Total for FY 2019	\$70,000.00	Pima County

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StatelD	Project Name	Drawdowns and Obligations		Sponsor
			Grand Total	\$200,508.00	
769.00		Transportation Art by Youth - Marana	Total for FY 2001	\$25,000.00	OWP-LOCAL
769.00		Transportation Art by Youth - Marana	Total for FY 2003	\$25,000.00	OWP-LOCAL
769.00		Transportation Art by Youth - Marana	Total for FY 2006	\$25,000.00	OWP-LOCAL
769.00		Transportation Art by Youth - Marana	Total for FY 2007	\$25,000.00	OWP-LOCAL
769.00		Transportation Art by Youth - Marana	Total for FY 2008	\$25,000.00	OWP-LOCAL
769.00		Transportation Art by Youth - Marana	Total for FY 2012	\$25,000.00	OWP-LOCAL
769.00		Transportation Art by Youth - Marana	Total for FY 2013	\$25,000.00	OWP-LOCAL
769.00		Transportation Art by Youth - Marana	Total for FY 2014	\$25,000.00	OWP-LOCAL
769.00		Transportation Art by Youth - Marana	Total for FY 2015	\$25,000.00	OWP-LOCAL
769.00		Transportation Art by Youth - Marana	Total for FY 2016	\$25,000.00	OWP-LOCAL
769.00		Transportation Art by Youth - Marana	Total for FY 2019	\$12,500.00	OWP-LOCAL
			Grand Total	\$262,500.00	
766.00		Transportation Art by Youth - Oro Valley	Total for FY 2001	\$25,000.00	OWP-LOCAL
766.00		Transportation Art by Youth - Oro Valley	Total for FY 2003	\$25,000.00	OWP-LOCAL
766.00		Transportation Art by Youth - Oro Valley	Total for FY 2006	\$25,000.00	OWP-LOCAL
766.00		Transportation Art by Youth - Oro Valley	Total for FY 2007	\$25,000.00	OWP-LOCAL
766.00		Transportation Art by Youth - Oro Valley	Total for FY 2008	\$25,000.00	OWP-LOCAL
766.00		Transportation Art by Youth - Oro Valley	Total for FY 2010	\$75,000.00	OWP-LOCAL
766.00		Transportation Art by Youth - Oro Valley	Total for FY 2012	\$25,000.00	OWP-LOCAL
766.00		Transportation Art by Youth - Oro Valley	Total for FY 2013	\$25,000.00	OWP-LOCAL
766.00		Transportation Art by Youth - Oro Valley	Total for FY 2014	\$25,000.00	OWP-LOCAL
766.00		Transportation Art by Youth - Oro Valley	Total for FY 2015	\$25,000.00	OWP-LOCAL
766.00		Transportation Art by Youth - Oro Valley	Total for FY 2016	\$25,000.00	OWP-LOCAL
766.00		Transportation Art by Youth - Oro Valley	Total for FY 2019	\$12,500.00	OWP-LOCAL
			Grand Total	\$337,500.00	
765.00		Transportation Art by Youth - Pima Co.	Total for FY 2001	\$25,000.00	OWP-LOCAL
765.00		Transportation Art by Youth - Pima Co.	Total for FY 2003	\$25,000.00	OWP-LOCAL
765.00		Transportation Art by Youth - Pima Co.	Total for FY 2006	\$25,000.00	OWP-LOCAL
765.00		Transportation Art by Youth - Pima Co.	Total for FY 2007	\$25,000.00	OWP-LOCAL
765.00		Transportation Art by Youth - Pima Co.	Total for FY 2008	\$25,000.00	OWP-LOCAL
765.00		Transportation Art by Youth - Pima Co.	Total for FY 2011	\$25,000.00	OWP-LOCAL
765.00		Transportation Art by Youth - Pima Co.	Total for FY 2013	\$25,000.00	OWP-LOCAL
765.00		Transportation Art by Youth - Pima Co.	Total for FY 2014	\$25,000.00	OWP-LOCAL
765.00		Transportation Art by Youth - Pima Co.	Total for FY 2015	\$25,000.00	OWP-LOCAL
765.00		Transportation Art by Youth - Pima Co.	Total for FY 2016	\$25,000.00	OWP-LOCAL
765.00		Transportation Art by Youth - Pima Co.	Total for FY 2019	\$12,500.00	OWP-LOCAL
			Grand Total	\$262,500.00	
764.00		Transportation Art by Youth - Sahuarita	Total for FY 2001	\$25,000.00	OWP-LOCAL
764.00		Transportation Art by Youth - Sahuarita	Total for FY 2003	\$25,000.00	OWP-LOCAL
764.00		Transportation Art by Youth - Sahuarita	Total for FY 2006	\$25,000.00	OWP-LOCAL
764.00		Transportation Art by Youth - Sahuarita	Total for FY 2007	\$25,000.00	OWP-LOCAL
764.00		Transportation Art by Youth - Sahuarita	Total for FY 2008	\$25,000.00	OWP-LOCAL

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StatelD	Project Name	Drawdowns and Obligations		Sponsor
764.00		Transportation Art by Youth - Sahuarita	Total for FY 2010	\$25,000.00	OWP-LOCAL
764.00		Transportation Art by Youth - Sahuarita	Total for FY 2011	\$25,000.00	OWP-LOCAL
764.00		Transportation Art by Youth - Sahuarita	Total for FY 2013	\$25,000.00	OWP-LOCAL
764.00		Transportation Art by Youth - Sahuarita	Total for FY 2014	\$25,000.00	OWP-LOCAL
764.00		Transportation Art by Youth - Sahuarita	Total for FY 2015	\$25,000.00	OWP-LOCAL
764.00		Transportation Art by Youth - Sahuarita	Total for FY 2016	\$25,000.00	OWP-LOCAL
764.00		Transportation Art by Youth - Sahuarita	Total for FY 2019	\$12,500.00	OWP-LOCAL
			Grand Total	\$287,500.00	
767.00		Transportation Art by Youth - South Tucson	Total for FY 2001	\$25,000.00	OWP-LOCAL
767.00		Transportation Art by Youth - South Tucson	Total for FY 2003	\$25,000.00	OWP-LOCAL
767.00		Transportation Art by Youth - South Tucson	Total for FY 2006	\$25,000.00	OWP-LOCAL
767.00		Transportation Art by Youth - South Tucson	Total for FY 2007	\$25,000.00	OWP-LOCAL
767.00		Transportation Art by Youth - South Tucson	Total for FY 2008	\$25,000.00	OWP-LOCAL
767.00		Transportation Art by Youth - South Tucson	Total for FY 2011	\$25,000.00	OWP-LOCAL
767.00		Transportation Art by Youth - South Tucson	Total for FY 2013	\$25,000.00	OWP-LOCAL
767.00		Transportation Art by Youth - South Tucson	Total for FY 2014	\$25,000.00	OWP-LOCAL
767.00		Transportation Art by Youth - South Tucson	Total for FY 2015	\$25,000.00	OWP-LOCAL
767.00		Transportation Art by Youth - South Tucson	Total for FY 2016	\$25,000.00	OWP-LOCAL
767.00		Transportation Art by Youth - South Tucson	Total for FY 2019	\$12,500.00	OWP-LOCAL
			Grand Total	\$262,500.00	
768.00		Transportation Art by Youth - Tucson	Total for FY 2001	\$25,000.00	OWP-LOCAL
768.00		Transportation Art by Youth - Tucson	Total for FY 2003	\$25,000.00	OWP-LOCAL
768.00		Transportation Art by Youth - Tucson	Total for FY 2006	\$25,000.00	OWP-LOCAL
768.00		Transportation Art by Youth - Tucson	Total for FY 2007	\$25,000.00	OWP-LOCAL
768.00		Transportation Art by Youth - Tucson	Total for FY 2008	\$25,000.00	OWP-LOCAL
768.00		Transportation Art by Youth - Tucson	Total for FY 2010	\$50,000.00	OWP-LOCAL
768.00		Transportation Art by Youth - Tucson	Total for FY 2011	\$25,000.00	OWP-LOCAL
768.00		Transportation Art by Youth - Tucson	Total for FY 2013	\$25,000.00	OWP-LOCAL
768.00		Transportation Art by Youth - Tucson	Total for FY 2014	\$25,000.00	OWP-LOCAL
768.00		Transportation Art by Youth - Tucson	Total for FY 2015	\$25,000.00	OWP-LOCAL
768.00		Transportation Art by Youth - Tucson	Total for FY 2016	\$25,000.00	OWP-LOCAL
768.00		Transportation Art by Youth - Tucson	Total for FY 2019	\$12,500.00	OWP-LOCAL
			Grand Total	\$312,500.00	
659.00		Transportation Planning Program	Total for FY 1998	\$1,588,100.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 1999	\$2,475,997.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2000	\$1,027,879.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2001	\$686,001.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2002	\$1,631,285.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2003	\$696,700.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2004	\$881,000.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2005	\$1,500,000.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2006	\$1,812,000.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2007	\$1,500,000.00	OWP-PAG

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StatelD	Project Name	Drawdowns and Obligations		Sponsor
659.00		Transportation Planning Program	Total for FY 2008	\$1,529,435.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2009	\$1,500,000.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2010	\$1,470,564.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2011	\$1,500,000.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2012	\$1,837,040.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2013	\$6,084,605.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2014	\$1,029,036.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2015	\$2,100,000.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2016	\$3,726,057.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2017	\$3,222,982.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2018	\$100,000.00	OWP-PAG
659.00		Transportation Planning Program	Total for FY 2019	\$100,000.00	OWP-PAG
Grand Total				\$37,998,682.00	
78.12		Treat Ave: Rillito River to Barraza-Aviation Bike Boulevard	Total for FY 2014	\$49,424.00	Tucson
78.12		Treat Ave: Rillito River to Barraza-Aviation Bike Boulevard	Total for FY 2015	\$2,485.00	Tucson
78.12		Treat Ave: Rillito River to Barraza-Aviation Bike Boulevard	Total for FY 2016	\$96,459.00	Tucson
78.12		Treat Ave: Rillito River to Barraza-Aviation Bike Boulevard	Total for FY 2018	\$3,311.00	Tucson
Grand Total				\$151,680.00	
96.09		University/3rd Street Bike Boulevard	Total for FY 2011	\$91.00	Tucson
96.09		University/3rd Street Bike Boulevard	Total for FY 2012	\$21,512.00	Tucson
96.09		University/3rd Street Bike Boulevard	Total for FY 2013	\$2,625.00	Tucson
96.09		University/3rd Street Bike Boulevard	Total for FY 2014	\$125.00	Tucson
96.09		University/3rd Street Bike Boulevard	Total for FY 2015	\$23,936.00	Tucson
96.09		University/3rd Street Bike Boulevard	Total for FY 2016	\$5,469.00	Tucson
96.09		University/3rd Street Bike Boulevard	Total for FY 2017	\$3,241.00	Tucson
96.09		University/3rd Street Bike Boulevard	Total for FY 2018	\$730.00	Tucson
Grand Total				\$57,731.00	
158.07	4RTKVI	Valencia and Kolb Intersection reconstruction	Total for FY 2009	\$512,795.00	Tucson
158.07	4RTKVI	Valencia and Kolb Intersection reconstruction	Total for FY 2010	\$27,188.00	Tucson
158.07	4RTKVI	Valencia and Kolb Intersection reconstruction	Total for FY 2011	\$19,618.00	Tucson
158.07	4RTKVI	Valencia and Kolb Intersection reconstruction	Total for FY 2012	\$632,525.00	Tucson
158.07	4RTKVI	Valencia and Kolb Intersection reconstruction	Total for FY 2013	\$461,495.00	Tucson
158.07	4RTKVI	Valencia and Kolb Intersection reconstruction	Total for FY 2014	\$143,681.00	Tucson
158.07	4RTKVI	Valencia and Kolb Intersection reconstruction	Total for FY 2015	\$671,451.00	Tucson
158.07	4RTKVI	Valencia and Kolb Intersection reconstruction	Total for FY 2016	\$913,702.00	Tucson
158.07	4RTKVI	Valencia and Kolb Intersection reconstruction	Total for FY 2017	\$234,920.00	Tucson
158.07	4RTKVI	Valencia and Kolb Intersection reconstruction	Total for FY 2018	\$79,791.00	Tucson
158.07	4RTKVI	Valencia and Kolb Intersection reconstruction	Total for FY 2019	\$155,895.00	Tucson
Grand Total				\$3,853,059.00	
61.06	SR13	Valencia Rd.: Alvernon to Kolb	Total for FY 2009	\$1,305,619.00	Pima County
61.06	SR13	Valencia Rd.: Alvernon to Kolb	Total for FY 2010	\$65,638.00	Pima County

APPENDIX 8 - PREVIOUS TIP PROJECTS OBLIGATIONS AND DRAWDOWNS

TipID	StatelD	Project Name	Drawdowns and Obligations		Sponsor
61.06	SR13	Valencia Rd.: Alvernon to Kolb	Total for FY 2011	\$726,949.00	Pima County
61.06	SR13	Valencia Rd.: Alvernon to Kolb	Total for FY 2012	\$1,604,791.00	Pima County
61.06	SR13	Valencia Rd.: Alvernon to Kolb	Total for FY 2013	\$3,494,064.00	Pima County
61.06	SR13	Valencia Rd.: Alvernon to Kolb	Total for FY 2014	\$4,945,996.00	Pima County
61.06	SR13	Valencia Rd.: Alvernon to Kolb	Total for FY 2015	\$13,057,658.00	Pima County
61.06	SR13	Valencia Rd.: Alvernon to Kolb	Total for FY 2016	\$10,149,674.00	Pima County
61.06	SR13	Valencia Rd.: Alvernon to Kolb	Total for FY 2017	\$88.00	Pima County
61.06	SR13	Valencia Rd.: Alvernon to Kolb	Total for FY 2018	\$1,639.00	Pima County
Grand Total				\$35,352,115.00	
114.06		Valencia Rd: Ajo to Wade	Total for FY 2012	\$37,213.00	Pima County
114.06		Valencia Rd: Ajo to Wade	Total for FY 2016	\$213,606.00	Pima County
114.06		Valencia Rd: Ajo to Wade	Total for FY 2017	\$1,977,807.00	Pima County
114.06		Valencia Rd: Ajo to Wade	Total for FY 2018	\$1,060,030.00	Pima County
114.06		Valencia Rd: Ajo to Wade	Total for FY 2019	\$1,740,022.00	Pima County
Grand Total				\$5,028,678.00	
59.06		Valencia Rd: Kolb Rd to Houghton Rd	Total for FY 2018	\$69,522.00	Tucson
Grand Total				\$69,522.00	
78.06		Wilmot North of Sahuarita Rd	Total for FY 2011	\$5,508.00	Pima County
78.06		Wilmot North of Sahuarita Rd	Total for FY 2014	\$180,707.00	Pima County
78.06		Wilmot North of Sahuarita Rd	Total for FY 2015	\$343,371.00	Pima County
78.06		Wilmot North of Sahuarita Rd	Total for FY 2016	\$371,015.00	Pima County
78.06		Wilmot North of Sahuarita Rd	Total for FY 2017	\$2,842,754.00	Pima County
78.06		Wilmot North of Sahuarita Rd	Total for FY 2018	\$3,046,100.00	Pima County
Grand Total				\$6,789,454.00	
1.18		Wilmot Rd: Valencia Rd to DMAFB Entrance	Total for FY 2019	\$105,555.00	Pima County
Grand Total				\$105,555.00	
95.09		Wireless signal & controller/equipment upgrades	Total for FY 2015	\$12,859.00	Sahuarita
95.09		Wireless signal & controller/equipment upgrades	Total for FY 2017	\$8,172.00	Sahuarita
95.09		Wireless signal & controller/equipment upgrades	Total for FY 2018	\$6,400.00	Sahuarita
Grand Total				\$27,431.00	

APPENDIX 9

FY 2020 – 2024 TIP

Performance Assessment

About the 2020-2024 TIP Performance Assessment

The information within this assessment is intended to *describe the anticipated effect of the TIP and link investment priorities in the TIP* to achievement of performance targets identified by the 2045 RMAP.

There are nearly 8,200 centerline miles of roadways in Pima County. The 2020-2024 TIP will deliver 21 roadway corridor projects with \$470 million in project funding for a combined estimated total of 85 miles. Additionally, the TIP also allocates program funding to many non-corridor transportation projects such as regional public transportation services, pavement preservation programs, and bicycle and pedestrian programs for safety and accessibility.

This assessment is divided into seven performance areas, reflecting the goals established in the 2045 RMAP: system maintenance, safety, multi-modal choices, system performance, freight and economic growth, land use and transportation, and environmental stewardship. It contains analysis of the existing conditions of roadways within the corridor project areas and funding amounts for non-corridor program projects. Performance measure tables are also included for each goal displaying the region’s recent progress towards achieving the regional transportation performance targets identified by the RMAP.

Prior to executing the performance assessment, jurisdictional DOTs submitted corridor projects to PAG’s transportation planning department. Project submissions included details about the scope and goal priorities. Performance metrics were calculated for 10 values and a performance report was generated. The report allowed project sponsors to evaluate their projects based on the underlying conditions and performance.

Project data was then fed into PAG’s performance measure assessment tool to calculate the collective performance impacts of TIP corridor projects. Where available, TIP model impacts were also estimated for future year comparisons using a “build vs no-build” scenario analysis through PAG’s travel demand model.

Acronyms used in this document

ADA	Americans with Disabilities Act
ADOT	Arizona Department of Transportation
DOT	Department of Transportation
CMAQ	Congestion Mitigation and Air Quality
FAST Act	Fixing America’s Surface Transportation Act
GHG	Greenhouse Gases
HAWK	High-intensity Activated crossWalk
LOS	Level of Service
MPH	Miles Per Hour
NHS	National Highway System
PAG	Pima Association of Governments
PM	Performance Measure
RMAP	Regional Mobility and Accessibility Plan
TIP	Transportation Improvement Program
VHT	Vehicle Hours Traveled
VMT	Vehicle Miles Traveled

The 2020-2024 TIP Performance Assessment includes performance measures and targets defined specifically for the PAG region and adopted in the region’s long-range transportation plan, the 2045 RMAP. It also includes performance measures required by the FAST Act and performance targets established by ADOT.

System Maintenance

Regionally, overall pavement condition has been improving in recent years, while bridge conditions are declining. TIP corridor projects and program funding are helping to address this challenge by improving 44 miles of roadway pavement and six bridges while also allocating over \$5 million to other pavement improvements. It is important to note that pavement improvements shown in the TIP represent only a small portion of overall regional expenditures on road maintenance. Most pavement improvement projects are fully funded by local jurisdictions and are therefore not shown in the TIP.



TIP Corridor Projects

There are 21 roadway corridor projects in the TIP that will address system maintenance needs in the following way:

44

pavement

44 miles of roads with pavement currently rated in poor or fair condition

6

bridges

6 bridges currently rated in poor condition

Additional Program Funding



\$5.3 million for pavement preservation programs



\$22 million for transit fleet preventative maintenance programs and \$2.3 million for transit facilities maintenance

RMAP Performance Measures

	2015	2016	2017	change	2020 benchmark	trend	2045 RMAP Target
Federal-aid pavement in poor condition	37.9%	35.5%	unavailable	unavailable	30%	unkown	< 20%
Bridges in poor condition	9.1%	12.0%	11.5%	26.8%	8%	getting worse	< 10%
Average age of public buses (years)	6.5	6.4	7.8	20.0%	6.5	getting worse	< 7 years

FAST Act Performance Measures

	2017	ADOT 2020 Target	ADOT 2022 Target
Interstate pavement in good condition	unavailable	n/a	48%
Interstate pavement in poor condition	unavailable	n/a	2%
Non-Interstate NHS pavement in good condition	unavailable	31%	31%
Non-Interstate NHS pavement in poor condition	unavailable	6%	6%
NHS bridges in good condition	47.2%	52%	52%
NHS bridges in poor condition	12.8%	4%	4%



The TIP includes \$40 million to replace aging public transportation vehicles:

- \$28M - buses
- \$12M - paratransit

Safety

In recent years, total roadway fatalities have increased in Pima County, while the rate of fatalities and serious injuries per miles driven has decreased. The PAG region is making progress toward some RMAP safety targets, but it is getting worse in other areas.

The TIP seeks to improve regional roadway safety by improving 43 miles of roadways and 15 intersections that are underperforming from a safety perspective.



TIP Corridor Projects

There are 21 roadway corridor projects in the TIP that will address safety needs in the following way:

43

roadway miles

43 miles of roadway projects currently have poor safety ratings

15

intersections

12 intersections currently have poor safety ratings and another 3 are rated fair

Additional Program Funding



\$18 million in bicycle and pedestrian facilities including HAWK signals, multi-use paths, bike boulevards, and intersection improvements



\$1.4 million in safety-related programs including \$200 thousand for school zone enhancements

RMAP Performance Measures *

	2015	2016	2017	change	2020 benchmark	trend	2045 RMAP Target
Total fatalities	95.8	98.4	100	4.4%	95.8	no progress	reduce 25%
Total fatality rate (per 100 million VMT)	1.12	1.09	1.08	-3.2%	1.11	on track	reduce 45%
Total serious injuries	581.4	562.8	515.2	-11.4%	557.2	on track	reduce 25%
Total serious injury rate (per 100 million VMT)	6.8	6.4	5.8	-13.6%	6.26	on track	reduce 45%
Fatalities – bicycle	4.4	4.8	5.4	22.7%	4.2	getting worse	reduce 33%
Fatality rate – bicycle [@]	5.86	6.31	7.00	19.3%	5.2	getting worse	reduce 70%
Serious injuries – bicycle	31	33.2	30.6	-1.3%	29.3	on track	reduce 33%
Serious injury rate – bicycle [@]	41.3	43.6	39.7	-4.0%	36.5	on track	reduce 70%
Fatalities – pedestrian	21.2	20.0	23.2	9.4%	20.0	no progress	reduce 33%
Fatality rate – pedestrian [#]	20.7	20.3	23.5	13.8%	18.3	getting worse	reduce 70%
Serious injuries – pedestrian	53.4	57.6	52.4	-1.9%	51	on track	reduce 33%
Serious injury rate – pedestrian [#]	52.1	58.4	53.1	2.0%	46	no progress	reduce 70%
Transit crash rate [^]	1.9	2.01	2.58	35.8%	1.9	getting worse	reduce 10%

FAST Act Performance Measures *

	2015	2016	2017	change	ADOT 2018 Projection	ADOT 2019 Projection
Total fatalities	95.8	98.4	100	4.4%	increase 5.1%	increase 5%
Total fatality rate	1.12	1.09	1.1	-3.2%	increase 2.5%	increase 2%
Total serious injuries	581.4	562.8	515.2	-11.4%	decrease 1.6%	decrease 1%
Total serious injury rate	6.8	6.4	5.8	-13.6%	decrease 4.4%	decrease 4%
Non-motorized fatalities and serious injuries	110.0	115.6	111.6	1.5%	increase 2.8%	increase 2.8%

* fatality and serious injury measures are 5 year averages

[@] per 10,000 bike commutes

[#] per 10,000 walk commutes

[^] accidents per 100,000 miles (annual total)

Multimodal Choices

Walk, bike, and transit trips have been declining in recent years in the region. Additionally, investments in bike and pedestrian infrastructure remain critical needs. TIP corridor projects always include pedestrian and bicycle facility improvements such as new or upgraded sidewalks and crosswalks, ADA fixtures, bike lanes, separated paths, bus stops, shade trees and landscaping, and intersection improvements. Funding has also been programmed through the TIP



TIP Corridor Projects

There are 21 roadway corridor projects in the TIP that will address multi-modal choices goals in the following way:

56

pedestrian miles

56 miles of new or upgraded sidewalks, shared-use paths, and pedestrian facilities

22

bicycle miles

17 miles of bike lanes plus an additional 5 miles of bike boulevards.

Additional Program Funding



\$109 million for public transportation services such as transit, paratransit, express service, ADA services, and service expansion



\$12 million for construction of multi-use paths, bike lanes, and bike boulevards

RMAP Performance Measure	2015	2016	2017	change	2020 benchmark	trend	2045 RMAP Target
Walk, bike or transit to work rate*	7.07%	6.95%	6.74%	-4.7%	7.25%	getting worse	10% +
Walk, bike or transit for all trips	16.40%	16.43%	16.30%	-0.6%	17%	no progress	20% +
Total transit trips, millions	21.3	17.3	17.9	-16.0%	22	getting worse	increase 75%
Average transit travel time, minutes	50.8	51.9	52.0	2.4%	50.5	on track	< 50
Average transit speed, peak hour mph	13.25	13.09	13.34	0.7%	13.8	on track	15
Total miles of ADA pedestrian facilities	442.0	unavailable	unavailable	-	560	unknown	1,200
Total miles of bicycle facilities	1010.0	1059.0	1067.0	5.6%	1,130	slow progress	1,720

*5 year average

Anticipated TIP Impact	current	2022 build	2022 no build
Average transit travel time, minutes	52.04	51.29	51.33
Average transit speed, peak hour mph	13.55	13.29	13.53

System Performance

From a regional standpoint, automobile travel through the PAG region continues to be reliable with relatively low levels of congestion, even though congested travel does occur at some locations. Congestion typically occurs during morning and evening during weekday work commutes, in areas of construction or special events, or at locations where there was an accident or other emergency lane closure. TIP investments are adding roadway capacity on 10 miles of congested roadway and at three congested intersections to address known bottlenecks.



TIP Corridor Projects

There are 21 roadway corridor projects in the TIP that will address system performance goals in the following way:

10

congested miles

10 miles of capacity improvements to severely congested roadways

3

intersections

capacity improvements to 3 severely congested intersections

Additional Program Funding



\$1.7 million for technologies and programs aimed at minimizing congestion including signal timing projects and Trans View



\$2 million for construction of bus pullouts to minimize congestion at intersections

RMAP Performance Measures

	2015	2016	2017	2018	change	2020 benchmark	trend	2045 RMAP Target
VMT per capita	20.60	20.52	20.39	21.04	2.1%	20.26	no progress	reduce 10%
Daily VHT per capita, minutes	32.23	32.25	32.01	32.96	2.3%	31.96	no progress	reduce 5%
Weighted travel time index	1.44	1.45	1.43	1.45	0.7%	1.48	on track	< 10% increase
Percent of peak hour VMT under severe congestion (LOS E or F)	1.15%	1.15%	1.17%	unavailable	1.7%	1.20%	no progress	1.8%

FAST Act Performance Measures

	2017	ADOT 2020 Target	ADOT 2022 Target
Interstate travel time reliability*	98.3%	86.0%	85.8%
Non-interstate NHS travel time reliability*	91.0%	n/a	74.9%

*Percent of person miles that have reliable travel times

Anticipated TIP Impact

	current	2022 build	2022 no build
VMT per capita	21.04	21.30	21.43
Daily VHT per capita, minutes	32.96	33.80	33.47
Weighted travel time index	1.45	1.49	1.45

Weighted travel time index (TTI) measure shows the difference in travel time between free-flow conditions and peak hour travel. For example, a TTI of 2 means that peak hour travel will usually take twice as long to reach the same destination.

Freight and Economic Growth

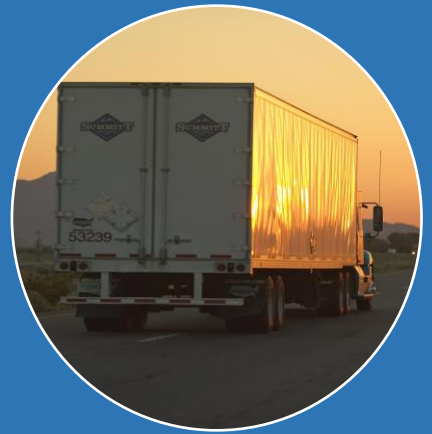
TIP Corridor Projects

There are 21 roadway corridor projects in the TIP that will address freight goals and economic goals in the following way:



26 miles of improved roadways currently with low to moderate freight reliability*

Freight movement through the PAG region occurs with expected and reliable travel times. On the interstate system, there are currently no known freight bottlenecks.



*Freight reliability is a measure of how predictable freight travel is during the worst congestion. For example, a reliability value of 3 means travel takes 3 times longer under the worst conditions on a given roadway. Current travel is very reliable.

RMAP Performance Measures

	2015	2016	2017	change	trend	2045 RMAP Target
Commercial vehicle delay on interstate	20.60	unavailable	unavailable	unavailable	unknown	no target
Share of commercial vehicles on interstate	32.23	32.25	unavailable	unavailable	unknown	no target

FAST Act Performance Measures

	2017	ADOT 2020 Target	ADOT 2022 Target
Freight reliability on the interstate [^]	1.18	1.21	1.23

[^]Percent of person miles that have reliable travel times

Land Use and Transportation

As the PAG region continues to grow in population, access to housing and jobs is critical. To track this, PAG measures how accessible the region's jobs are by automobile and by transit. The accessibility index is a way of quantifying the number of opportunities that a resident can reach by auto or transit. Values for this measure are relative and should only be used to determine if the region is becoming more or less accessible.



Anticipated TIP Impact

	Current	2022 build	2022 no build
Job accessibility index, all modes	57,713	55,045	53,402
Job accessibility to transit	57.8%	57.8%	57.9%
Residential accessibility to transit	40.6%	40.9%	40.9%

RMAP Performance Measures

	2015	2016	2017	2018	change	trend	2045 RMAP Target
Number of jobs within 30 min, auto	240,221	232,289	231,637	unavailable	-3.6%	no progress	increase 45%
Number of jobs within 45 min, transit	26,332	25,716	24,920	unavailable	-5.4%	no progress	increase 50%
Job accessibility index, all modes	57,142	55,380	54,973	57,713	-3.8%	slow progress	increase 15%
Job accessibility to transit*	58.9%	59.4%	58.3%	57.8%	-1.0%	no progress	60% +
Residential accessibility to transit [^]	42.6%	42.7%	41.9%	40.6%	-1.6%	no progress	45% +

* percent of jobs within 1/4 mile of transit stop

[^] percent of residents within 1/4 mile of transit stop

Environmental Stewardship

Program Funding



\$3.7 million for technologies and programs aimed at minimizing congestion and on-road emissions



\$2.5 million for critical wildlife linkages



Air quality for the PAG region is being tracked, and the amount of emissions from vehicles and other on-road sources are decreasing at a rapid pace, putting the region on track to achieve all RMAP targets.

RMAP Performance Measures

	2015	2016	2017	change	2020 benchmark	trend	2045 RMAP Target
Annual GHG emissions per capita	3.29	3.24	3.16	-4.0%	3.13	on track	reduce 30% +
On-road emissions reductions (<i>metric tons per day</i>)							
Volatile organic compounds	18.35	17.51	12.04	-34.4%	16.10	on track	reduce 75%
Carbon monoxide	164.37	115.14	106.82	-35.0%	145.20	on track	reduce 70%
Oxides of nitrogen	22.80	19.50	12.21	-46.4%	19.80	on track	reduce 80%
Course particulate matter (≤ 10 micrometers)	1.30	1.20	1.11	-14.6%	1.30	on track	maintain
Fine particulate matter (≤ 2.5 micrometers)	0.50	0.50	0.41	-18.0%	0.50	on track	maintain

FAST Act Performance Measures*

	2015-2018	ADOT 2020 Target	ADOT 2022 Target
Volatile Organic Compounds	0	210	385
Carbon Monoxide	0	3,720	6,985
Oxides of Nitrogen	0	418	761
Course particulate matter (≤ 10 micrometers)	0	873	1,399
Fine particulate matter (≤ 2.5 micrometers)	0	69	112

*CMAQ emissions reductions (kilograms per day) - the PAG region does not have CMAQ funded projects and does not contribute to CMAQ emissions reduction measures or targets

APPENDIX 10

Federal Certifications

APPENDIX 10 - FEDERAL CERTIFICATIONS

METROPOLITAN TRANSPORTATION PLANNING PROCESS SELF-CERTIFICATION

The Arizona Department of Transportation and the Pima Association of Governments, the Metropolitan Planning Organization for the Tucson urbanized area(s) hereby certify that the transportation planning process is addressing the major issues in the metropolitan planning area and is being conducted in accordance with all applicable requirements of:

- I. 23 U.S.C. 134, 49 U.S.C. 5303, and this subpart;
- II. In nonattainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93;
- III. Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;
- IV. 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
- V. Section 1101(b) of the FAST (Pub. L. 114-357) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;
- VI. 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;
- VII. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) and 49 CFR parts 27, 37, and 38;
- VIII. The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
- IX. Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender;
- X. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.


Pima Association of Governments



Farhad Moghimi
Executive Director

6/11/19
Date

**Arizona Department of Transportation
Multimodal Planning Division**



Greg D. Byres, PE
Director, Multimodal Planning

6/13/19
Date

PIMA ASSOCIATION OF GOVERNMENTS TIP FY 2020 – 2024

