



DRAFT
2014 ANNUAL REPORT ON THE STATUS
OF THE IMPLEMENTATION OF PROP 400
September 2014



Maricopa Association of Governments

**2014 ANNUAL REPORT
ON THE STATUS OF THE IMPLEMENTATION OF
PROPOSITION 400**

September 2014

**Maricopa Association of Governments
302 North First Avenue, Suite 300
Phoenix, Arizona 85003
Telephone: (602) 254-6300**

DRAFT

TABLE OF CONTENTS

SUMMARY OF FINDINGS AND ISSUES.....	S-1
CHAPTER ONE - INTRODUCTION	1-1
1.1 Requirement for the Annual Report.....	1-1
1.2 Annual Report Content	1-1
1.3 Clarifications Regarding Data and Terminology	1-1
CHAPTER TWO - PROPOSITION 400 LEGISLATION.....	2-1
2.1 House Bill 2292	2-1
2.2 House Bill 2456	2-2
2.2.1 Revenue Distribution	2-2
2.2.2 Revenue Firewalls	2-2
2.2.3 Five-Year Performance Audit	2-3
2.2.4 Major Amendment Process	2-3
2.2.5 Life Cycle Programs	2-4
2.2.6 Regional Transportation Plan: Enhancements and Material Changes	2-4
CHAPTER THREE - REGIONAL ROLES AND RESPONSIBILITIES.....	3-1
3.1 Maricopa Association of Governments.....	3-1
3.2 Transportation Policy Committee	3-2
3.3 Arizona Department of Transportation	3-3
3.4 State Transportation Board	3-3
3.5 Regional Public Transportation Authority/Valley Metro	3-4
3.6 Valley Metro Rail	3-5
3.7 Citizens Transportation Oversight Committee.....	3-6
CHAPTER FOUR - REGIONAL TRANSPORTATION PLAN.....	4-1
4.1 Plan Overview	4-1
4.1.1 Plan Development Process	4-1
4.1.2 Freeway/Highway Element	4-2
4.1.3 Arterial Street Element	4-2
4.1.4 Transit Element	4-3
4.1.5 Plan Funding	4-4
4.2 Priority Criteria.....	4-4
4.2.1 Extent of Local Public and Private Funding Participation	4-5
4.2.2 Social and Community Impact.....	4-5
4.2.3 Establishment of a Complete Transportation System for the Region.....	4-6
4.2.4 Construction of Projects to Serve Regional Transportation Needs.....	4-8

4.2.5 Construction of Segments that Provide Connectivity with Other Elements of the Regional Transportation System	4-9
4.2.6 Other Relevant Criteria Developed by the Regional Planning Agency	4-9
4.3 Regional Transportation Plan Changes and Outlook	4-10

CHAPTER FIVE - HALF CENT SALES TAX FOR TRANSPORTATION AND OTHER REGIONAL REVENUES 5-1

5.1 Half-Cent Tax Revenues (<i>Maricopa County Transportation Excise Tax</i>)	5-2
5.2 Arizona Department of Transportation (ADOT) Funds	5-3
5.2.1 ADOT Funding Overview.....	5-4
5.2.2 ADOT Funding in the MAG Area	5-4
5.3 MAG Area Federal Transportation Funds	5-6
5.3.1 Federal Transit Funds	5-6
5.3.2 Federal Highway Funds.....	5-8
5.4 Statewide Transportation Acceleration Needs (STAN) Account.....	5-9
5.5 American Recovery and Reinvestment Act	5-9
5.6 Regional Revenues Summary.....	5-10

CHAPTER SIX - FREEWAY/HIGHWAY LIFE CYCLE PROGRAM 6-1

6.1 Status of Freeway/Highway Projects	6-1
6.1.1 New Corridors	6-3
6.1.2 Widen Existing Facilities: General Purpose Lanes and HOV Lanes	6-6
6.1.3 New Interchanges and New HOV Ramps on Existing Facilities ...	6-12
6.1.4 Maintenance, Operations and Mitigation Programs.....	6-15
6.1.5 Systemwide Preliminary Engineering, Right-of-Way Acquisition, Risk Management and Property Management	6-16
6.1.6 Proposition 300 – Regional Freeway Program	6-17
6.2 Freeway/Highway Program Changes	6-17
6.2.1 Program Amendments and Cost Changes	6-17
6.2.2 Freeway/Highway Program Rebalancing.....	6-17
6.3 Freeway/Highway Program Expenditures, Estimated Future Costs, and Fiscal Status	6-18
6.3.1 Program Expenditures and Estimated Future Costs.....	6-19
6.3.2 Future Fiscal Status.....	6-19
6.4 Freeway/Highway Program Outlook	6-19

CHAPTER SEVEN - ARTERIAL STREET LIFE CYCLE PROGRAM 7-1

7.1 Program Components	7-1
7.1.1 Arterial Capacity/Intersection Improvements	7-3
7.1.2 Intelligent Transportation Systems	7-4
7.2 Arterial Street Program Disbursements and Fiscal Status.....	7-4
7.2.1 Program Reimbursements.....	7-4

7.2.2 Future Fiscal Status.....	7-6
7.3 Arterial Street Program Outlook.....	7-6

CHAPTER EIGHT - TRANSIT LIFE CYCLE PROGRAM..... 8-1

8.1 Status of Bus Projects	8-1
8.1.1 Bus Operations: BRT/Express.....	8-2
8.1.2 Bus Operations: SuperGrid.....	8-4
8.1.3 Bus Operations: Other.....	8-6
8.1.4 Bus Capital: Facilities	8-7
8.1.5 Bus Capital: Fleet	8-8
8.2 Status of High Capacity/Light Rail Transit Projects	8-8
8.2.1 Central Phoenix/East Valley (CP/EV) LRT	8-10
8.2.2 High Capacity/Light Rail Transit: Support Infrastructure	8-10
8.2.3 High Capacity/Light Rail Transit: Corridors.....	8-11
8.3 Transit Program Changes.....	8-13
8.4 Transit Program Expenditures, Estimated Future Costs, and Fiscal Status.....	8-13
8.4.1 Transit Life Cycle Program Update	8-13
8.4.2 Program Expenditures and Estimated Future Costs	8-14
8.4.3 Future Fiscal Status	8-14
8.5 Transit Program Outlook.....	8-16

CHAPTER NINE - TRANSPORTATION SYSTEM PERFORMANCE 9-1

9.1 Performance Monitoring and Assessment Concepts.....	9-1
9.1.1 Monitoring Current Conditions	9-2
9.1.2 Forecasting Future Performance	9-3
9.2 Roadway System Performance	9-4
9.2.1 Roadway Monitoring Data	9-4
9.2.2 Roadway Performance Forecasts.....	9-9
9.3 Transit System Performance	9-12
9.3.1 Service Efficiency and Effectiveness Study	9-13
9.3.2 Performance Targets and Operating Results	9-13
9.4 Performance Audit of the Regional Transportation Plan.....	9-15
9.5 Performance Monitoring Program Outlook	9-16

LIST OF TABLES iii

LIST OF FIGURES..... iv

APPENDIX LISTING..... iv

LIST OF TABLES

TABLE 5-1: Maricopa County Transportation Excise Tax - FY 2006-2026.....	5-3
TABLE 5-2: ADOT Funding in MAG Area FY 2006-2026	5-5

TABLE 5-3: MAG Federal Transportation Funds: FY 2006-2026	5-7
TABLE 5-4: Regional Revenues Summary.....	5-11
TABLE 6-1: Freeway/Highway Life Cycle Program Summary of Expenditures and Estimated Future Costs: FY 2006-2026.....	6-20
TABLE 6-2: Freeway/Highway Life Cycle Program Future Sources and Uses of Funds: FY 2015-2026	6-21
TABLE 7-1: Summary of Past and Estimated Future Reimbursements	7-6
TABLE 7-2: Future Sources and Uses of Funds: FY 2015-2026	7-7
TABLE 8-1: Transit Life Cycle Program Cost Changes	8-13
TABLE 8-2: Transit Life Cycle Program Summary of Expenditures and Estimated Future Costs: FY 2006-2026.....	8-15
TABLE 8-3: Transit Life Cycle Program Future Sources and Uses of Funds: FY 2015-2026	8-16
TABLE 9-1: Per Capital VMT for Phoenix/Mesa Urbanized Area	9-3
TABLE 9-2A: Freeway Travel Time Results for Selected Corridors	9-7
TABLE 9-2B: Freeway Travel Time Results for Selected Corridors	9-8
TABLE 9-3: Roadway Performance Measures from MAG Model	9-11
TABLE 9-4: Fixed Route Bus Performance Measures (System-Wide).....	9-14
TABLE 9-5: Light Rail Transit Performance Measures	9-14
TABLE 9-6: Paratransit Performance Measures.....	9-15

LIST OF FIGURES

FIGURE 6-1: Freeways/Highways.....	6-2
FIGURE 7-1: New/Improved Arterials	7-2
FIGURE 8-1: Bus Rapid Transit/Express Bus	8-3
FIGURE 8-2: Super Grid Bus System	8-5
FIGURE 8-3: Light Rail Transit/High Capacity Transit.....	8-9
FIGURE 9-1: Selected Freeway Corridors	9-6

APPENDIX LISTING

TABLE A-1: Freeway/Highway Life Cycle Program – Expenditures and Estimated Future Costs: FY 2006-2026, FY 2027-2035
TABLE B-1: Arterial Street Life Cycle Program – Regional Funding Reimbursements & Expd.: FY 2006-2026, FY 2027-2035
TABLE B-2: Arterial Street Life Cycle Program – ITS; Regional Funding Reimbursements & Expd.: FY 2006-2026, FY 2027-2035
TABLE C-1: Transit Life Cycle Program – Bus Operations: Bus Rapid Transit/Express Expenditures and Estimated Future Costs: FY 2006- FY 2026, FY 2027-2035
TABLE C-2: Transit Life Cycle Program – Bus Operations: Regional Grid Expenditures and Estimated Future Costs: FY 2006-FY 2026, FY 2027-2035
TABLE C-3: Transit Life Cycle Program – Bus Operations: Others Expenditures and Estimated Future Costs: FY 2006-FY 2026, FY 2027-2035
TABLE C-4: Transit Life Cycle Program – Bus Capital: Facilities Expenditures and Estimated Future Costs: FY 2006-FY 2026, FY 2027-2035

TABLE C-5: Transit Life Cycle Program – Bus Capital: Fleet Expenditures and Estimated Future Costs: FY 2006-FY 2026, FY 2027-2035
TABLE C-6: Transit Life Cycle Program – Light Rail Transit/High Capacity Transit: Support Infrastructure Expenditures and Estimated Future Costs: FY 2006-2026, FY 2027-2035
TABLE C-7: Transit Life Cycle Program – Light Rail Transit/High Capacity Transit: Route Extensions Expenditures and Estimated Future Costs: FY 2006-2026, FY 2027-2035
TABLE C-8: Transit Life Cycle Program – Bus Rapid Transit/Express Route Characteristics and Usage Summary: FY 2006-FY 2014
TABLE C-9: Transit Life Cycle Program – Regional Grid Route Characteristics and Usage Summary: FY 2006 to FY 2014
TABLE D-1: Average AM Peak Period Speed for Selected Freeway Corridors
TABLE D-2: Average PM Peak Period Speed for Selected Freeway Corridors
FIGURE D-1: 2011 Base Year Network: Freeway PM Peak Period LOS
FIGURE D-2: 2025 RPT Network: Freeway PM Peak Period LOS
FIGURE D-3: 2025 No-Build Network: Freeway PM Peak Period LOS
FIGURE D-4: 2011 Base Year Network: Intersections PM Peak Period LOS F&E
FIGURE D-5: 2025 RTP Network: Intersections PM Peak Period LOS E&F
FIGURE D-6: 2025 No-Build Network: Intersections PM Peak Period LOS E&F
TABLE E-1: 2014 Annual Report Data Sources

SUMMARY OF FINDINGS AND ISSUES

The *2014 Annual Report on the Status of the Implementation of Proposition 400* has been prepared by the Maricopa Association of Governments (MAG) in response to Arizona Revised Statute (ARS) 28-6354. ARS 28-6354 requires that MAG annually issue a report on the status of projects funded through Proposition 400, addressing project construction status, project financing, changes to the MAG Regional Transportation Plan, and criteria used to develop priorities. In addition, background information is provided on the overall transportation planning, programming and financing process. The key findings and issues from the 2014 Annual Report are summarized below.

MAG REGIONAL TRANSPORTATION PLAN

The MAG Regional Transportation Plan (RTP) provides the blueprint for the implementation of Proposition 400. By Arizona State law, the revenues from the half-cent sales tax for transportation must be used on projects and programs identified in the RTP adopted by MAG. The RTP identifies specific projects and revenue allocations by transportation mode, including freeways and other routes on the State Highway System, major arterial streets, and public transportation systems.

- The 2035 MAG Regional Transportation Plan was approved.

On January 29, 2014, the MAG Regional Council approved the 2035 MAG Regional Transportation Plan (RTP). This was the first update of the RTP since July 2010 and extends the horizon year of the plan from FY 2031 to FY 2035. It is important to note that the 2035 RTP largely continues the policies, priorities, and projects contained in previous plans. A technical air quality conformity analysis was performed on the RTP and demonstrated that the Plan meets all air quality conformity requirements. The finding of conformity was approved by the U.S Department of Transportation on February 12, 2014. The 2035 RTP encompasses the expanded MAG metropolitan planning area (MPA), which was designated by the Governor on May 9, 2013 and extends significantly into Pinal County.

- Development of the next Regional Transportation Plan Update was initiated.

The development of technical data for the next update of the RTP was initiated during the latter half of FY 2014. One of major goals of the next update will be to incorporate the new Federal metropolitan transportation planning regulations from MAP-21 (Moving Ahead for Progress in the 21st Century Act) into the planning process. A key requirement in the new regulations is the inclusion of performance measures and performance targets in the RTP. Also, it is anticipated that the planning horizon year of the

RTP will be extended to 2040. Currently, the target for MAG approval of the next update is July 2017.

HALF-CENT SALES TAX AND OTHER TRANSPORTATION REVENUES

The half-cent sales tax for transportation approved through Proposition 400 is a key funding source for the MAG Regional Transportation Plan (RTP), representing nearly half the regional revenues for the Plan. In addition to the half-cent sales tax, there are a number of other RTP funding sources, which are primarily from State and Federal agencies.

- Fiscal Year 2014 receipts from the Proposition 400 half-cent sales tax were 7.0 percent higher than receipts in FY 2013.

The receipts from the Proposition 400 half-cent sales tax in FY 2014 totaled approximately \$366 million, corresponding to a 7.0 percent increase over the total of \$342 million FY 2013. This represents the fourth consecutive year of higher revenues. However, the collections for FY 2014 remain 6.5 percent lower than those in FY 2007.

- Forecasts of Proposition 400 half-cent revenues are 0.4 percent higher for the period FY 2015 through FY 2026, compared to the 2013 Annual Report estimate.

Future half-cent revenues for the period FY 2015 through FY 2026 are currently forecasted to total \$5.8 billion. This amount is \$22 million, or 0.4 percent, higher than the forecast for the same period presented in the 2013 Annual Report. The Proposition 400 half-cent revenue forecasts will be updated again in the fall of 2014.

- Forecasts of total ADOT Funds dedicated to the MAG area for FY 2015 through FY 2026 are 5.7 percent lower than the 2013 Annual Report estimate.

The forecast for ADOT Funds for FY 2015 through FY 2026 totals \$2.8 billion, which is 5.7 percent lower than the 2013 Annual Report forecast of \$3.0 billion for the same period. This decrease reflects somewhat lower levels of both Federal aid and HURF revenues forecasted to be available in the later years of the program.

- Forecasts of total MAG Federal Transportation Funds for FY 2015 through FY 2026 are 0.6 percent lower than the 2013 Annual Report estimate.

Total MAG Federal funding for the period FY 2015 through FY 2026 is forecasted to total \$2.5 billion. This is about a 0.6 percent decrease from the slightly higher amount forecasted for the same period in the 2013 Annual

Report. These forecasts are only for those MAG Federal fund sources that are utilized in the Life Cycle Programs. Additional Federal funds are received in the MAG region and applied to other transportation program areas, which are not covered by this report.

- Federal transportation funding levels over the long-term remain uncertain.

On July 6, 2012, President Obama signed legislation known as the 'Moving Ahead for Progress in the 21st Century Act', or 'MAP-21'. Total annual funding provided by MAP-21 was generally comparable to that in the previous Federal legislation (SAFETEA-LU). MAP-21 was a two-year transportation reauthorization and was set to expire on September 30, 2014. On August 8, 2014, President Obama signed into law H.R. 5021, the Highway and Transportation Funding Act of 2014, which transfers an additional \$10.8 billion into the Highway Trust Fund and extends the surface transportation funding authorizations and policies of the 2012 MAP-21 law from October 1, 2014 to May 31, 2015.

In the past, Federal funding for transportation was generally reauthorized every six years. However, since MAP-21 originally covered only a two-year period, and will be subject to interim extensions, future Federal funding levels may change within a relatively short time. This makes long range forecasting of Federal aid to transportation a highly uncertain process.

FREEWAY/HIGHWAY LIFE CYCLE PROGRAM

The Freeway/Highway Life Cycle Program (FLCP) extends through FY 2026 and is maintained by the Arizona Department of Transportation (ADOT) to implement freeway/highway projects listed in the MAG Regional Transportation Plan (RTP). The program utilizes funding from the Proposition 400 half-cent sales tax extension, as well as funding from state and Federal revenue sources.

- A number of major freeway/highway construction projects were completed, underway, or advertised for bids during FY 2014.

Projects completed during FY 2014:

- SR 24 (Loop 202/Santan to Ellsworth Rd.): Construct interim freeway.
- Loop 101/Maryland Ave.: Construct Direct HOV ramps.
- Loop 303 (Thomas Rd. to Camelback Rd.): Construct new freeway.
- Loop 303 (Camelback Rd. to Glendale Ave.): Construct new freeway.
- Loop 303 (Peoria Ave. to Mountain View Blvd.): Construct new freeway.

Projects advertised for bids or under construction during FY 2014:

- I-10/Perryville Rd.: Construct new interchange.

- US 60 (71st Avenue to McDowell Road): Roadway improvements.
 - Loop 101 (Shea to 202 Red Mountain): Add GP lanes.
 - Loop 202 (Loop 101 to Broadway Road): Add GP and HOV lanes (DB).
 - Loop 303/I-10: Construct new system interchange (Phase I).
 - Loop 303 (Glendale Ave. to Peoria Ave.): Construct new freeway.
 - Loop 303 (US 60 to Happy Valley Road): Construct new freeway (DB).
 - Loop 303 El Mirage Road TI: Construct new interchange.
- Cash flow analysis indicates that there is a deficit of approximately \$162 million for the Regional Freeway/Highway Life Cycle Program through FY 2026.

During FY 2014, cash flow modeling based on new revenue forecasts was conducted. The analysis indicated that program totals show positive ending balances for FY 2015 to FY 2023, but there is a deficit of approximately \$162 million for the Regional Freeway and Highway Program through FY 2026. This deficit represents approximately 3.1 percent of the future estimated costs for the program during FY 2015 to FY 2026. This is an improvement compared to the ending balance of \$444 million reported in the FY 2013 Annual report and is due largely to reduced expectations for the level of inflation in future construction and other program implementation costs.

As in the past, the Freeway/Highway Life Cycle Program will be subjected to continuing analysis, addressing future revenue forecasts and project cost trends. Revised long-range revenue forecasts will be prepared and updated cash flow assessments will be conducted. Based on this analysis, the need for additional program adjustments will be considered during FY 2015. Key factors in this review effort will include:

- The current program deficit of 3.1 percent should not be overlooked, but is within the range of accuracy of cost and revenue forecasts.
- Revenue forecasts assume that \$120 million will be allocated by the State Legislature annually from the HURF to the Department of Public Safety for FY 2018 through FY 2026. While this diversion is consistent with recent legislative actions, it exceeds statutory levels and may not continue through the end of the program period.
- As the construction of Loop 303 comes to its conclusion, funding previously programmed for this facility may become available for other projects due to lower right-of-way and construction costs than originally estimated.
- Clarification of the cash flow requirements of the South Mountain Freeway project will be an important consideration. Completion and approval of a final Environmental Impact Statement and Design Concept Report, as well

as a U.S. Department of Transportation “Record-of-Decision” on the recommended alternative for the South Mountain Freeway corridor are anticipated in late 2014 or early in 2015.

ARTERIAL STREET LIFE CYCLE PROGRAM

The Arterial Street Life Cycle Program (ALCP) extends through FY 2026 and is maintained by the Maricopa Association of Governments (MAG) to implement arterial street projects in the MAG Regional Transportation Plan (RTP). The Program receives significant funding both from the Proposition 400 half-cent sales tax and Federal highway programs, as well as a local match component. Although MAG is charged with the responsibility of administering the overall program, the actual construction of projects is accomplished by local government agencies. MAG distributes the regional share of the funding on a reimbursement basis.

- During FY 2014, a total of \$69 million in ALCP project expenses were reimbursed to the implementing agencies.

During FY 2014, a total of \$69 million in ALCP project expenses were reimbursed to implementing agencies. This included reimbursements to seven individual agencies, as well as funding for projects in the MAG ITS program. Since the beginning of the program, \$479 million has been disbursed and 48 projects have been completed.

- Continuing progress on projects in the Arterial Street Life Cycle Program has been maintained.

During FY 2014, project overview reports were prepared by the lead agencies for 5 projects in the ALCP. Since the inception of the program, 80 project overviews have been submitted to MAG. A total of 11 project agreements were executed in FY 2014. In all, 78 project agreements have been executed to date. Lead agencies deferred approximately \$14 million in Federal and regional reimbursements from FY 2014 to later years due to project implementation and local funding issues. This is a major improvement over previous levels, which peaked at \$47 million in FY 2009.

- Projected Arterial Life Cycle Program (ALCP) reimbursements are slightly above estimated future revenues for the period FY 2015 - FY 2026.

Projected Arterial Life Cycle Program reimbursements are slightly above (\$31 million or 2.8 percent) estimated future revenues. This difference is considered to be within the variance of revenue projections and cost estimates, and specific remedial action is not anticipated at this time. On June 25, 2014, the MAG Regional Council approved the FY 2015 ALCP. The temporary elimination of the program bonding and project inflation remained

in place. These two actions, combined with adjustments to project schedules, meant that no involuntary funding deferrals were needed for the second straight year.

TRANSIT LIFE CYCLE PROGRAM

The Transit Life Cycle Program (TLCP) is maintained by the Regional Public Transportation Authority (RPTA)/Valley Metro and implements transit projects identified in the MAG Regional Transportation Plan. The RPTA maintains responsibility for administering half-cent sales tax revenues deposited in the Public Transportation Fund for use on transit projects, including light rail transit (LRT) projects. Although RPTA maintains responsibility for the distribution of half-cent funds for light rail projects, the nonprofit corporation of Valley Metro Rail, Inc. was created to oversee the design, construction and operation of the light rail starter segment, as well as future corridor extensions planned for the system.

- Two bus routes were implemented in FY 2014 and additional routes will be funded during the next five years.

Routes Implemented During FY 2014:

- Elliot Road (T53)
- Thomas Road (T68)

Routes Planned for Implementation During FY 2015 through FY 2019:

- Waddell/Thunderbird (T71); Service start: FY 2015.
- Van Buren Street (T70); Service start: FY 2016.
- Alma School Road (T43); Service start: FY 2018.

- Estimated future costs for the Transit Life Cycle Program are in balance with project future funds for the period of FY 2015 through FY 2026.

Estimated future costs for the period of FY 2015 through FY 2026 are in balance with project future funds available with a remainder of approximately \$4 million (2014 \$'s). Over the past several years, TLCP balance has been achieved by delaying the implementation of numerous projects and reducing the scope of many other projects, particularly bus routing and frequency adjustments. Additionally, operating efficiencies were achieved by consolidating contracts. The life cycle process continually requires a balance to be maintained through effective financing and cash flow management, value engineering of projects, and Plan and Program adjustments as necessary.

- Federal discretionary funding for transit continues to be an important issue.

A significant portion of the funding for the LRT/HCT system is awarded by the US Department of Transportation through the discretionary “New Starts Program”. The MAG area is subject to a highly competitive process with other regions for this Federal funding, resulting in uncertain timing and amounts of New Starts monies over the long term. Therefore, prospective New Starts awards require careful monitoring. Beyond the “New Starts Program” for the LRT/HCT system, other revenues from the Federal Transit Administration are a key source of funding for the bus capital program. At the Federal level, continued pressure to reduce spending could result in decreased Federal revenues for the TLCP. In the future, this could put additional projects in jeopardy as a result.

PERFORMANCE MONITORING PROGRAM

The MAG Transportation System Performance Monitoring and Assessment Program has been established to provide a framework for reporting performance at the system and project levels, and serve as a repository of historical, simulated and observed data for the transportation system in the MAG Region.

- Freeway vehicle miles of travel (VMT) has remained relatively steady during the last several years.

Freeway Vehicle-Miles of Travel (VMT) per day in the Phoenix-Mesa urbanized area tracks overall vehicle travel trends for the region. For the period 2010-2013, there has been a generally stable level of VMT, with total VMT increasing by only 1.1 percent between 2010 and 2013. During this same period, per capita VMT actually declined by 0.7 percent.

- Boardings on the light rail transit (LRT) system have continued to increased.

Boardings on the light rail transit system have increased significantly during the last several years, climbing by 11.7 percent from 12.9 million in 2011 to 14.3 million in 2013.

CHAPTER ONE

INTRODUCTION

The *2014 Annual Report on the Status of the Implementation of Proposition 400* covers progress on transportation projects being implemented under Proposition 400, through the fiscal year ending June 30, 2014. The report also addresses the future outlook for the Proposition 400 program through June 30, 2026. Proposition 400 was passed by the voters of Maricopa County on November 2, 2004, authorizing a 20-year extension of a half-cent sales tax for transportation projects in Maricopa County. The extension was initiated on January 1, 2006 and will be effective through December 31, 2025. The half-cent tax was originally approved by the voters in 1985 through Proposition 300.

1.1 REQUIREMENT FOR THE ANNUAL REPORT

Arizona Revised Statute (ARS) 28-6354 requires that the Maricopa Association of Governments (MAG) annually issue a report on the status of projects funded through Proposition 400. MAG produced the first *Annual Report on the Status of the Implementation of Proposition 400* in 2005 and will produce an updated report yearly during the life of the tax. The annual reporting process addresses project construction status, project financing, changes to the MAG Regional Transportation Plan (RTP), and criteria used to develop priorities. In addition, information is provided on the overall transportation planning, programming and financing process.

1.2 ANNUAL REPORT CONTENT

The Annual Report addresses project status and tabulates expenditures through the fiscal year (FY) ending June 30th. In addition, the overall program outlook through FY 2026 for each transportation mode is reviewed, with an emphasis on the balance between projected costs and forecasted revenues. All projects for the major transportation modes (freeways/highways, arterial streets, public transit), as defined in the RTP, are monitored, whether they specifically receive half-cent funding or not. This ensures that progress on the entire RTP is monitored and trends for all revenue sources are tracked. Any amendments to the RTP are also identified as part of the annual reporting process. A database of RTP projects by mode is maintained to track costs, expenditures and accomplishments on a continuing basis.

1.3 CLARIFICATIONS REGARDING DATA AND TERMINOLOGY

- Accounting Objectives - It should be noted that the Annual Report is intended to identify overall progress and future trends in the Proposition 400 program, as opposed to providing detailed financial documentation. Estimates of past

expenditures and revenue receipts, as well as future costs and revenue collections, are included for use as an aid in assessing past program progress and future program outlook. These figures should not be interpreted as an official, year-by-year financial accounting record of program activities.

- Data Consistency - In preparing the Annual Report, every effort is made to use data sources that are consistent with other documents that publish similar data, such as regional transportation plans, transportation improvement programs, and life cycle programs. However, these reports are issued at different times and serve different purposes, which means that each report may not contain exactly the same set of data presented in the other reports. Therefore, minor differences in the data provided in the reports may continue to be present. Delaying the issue of the Annual Report to achieve total uniformity with other reports would lessen the ability to provide a timely report to decision-makers and the public. Specific data sources used in the Annual Report are identified in Appendix E.
- Nominal vs. Real Dollars - Revenue projections are expressed in “Year of Expenditure” (YOE) dollars, which reflect the actual number of dollars collected/expended in a given year (nominal dollars). Therefore, there is no correction or discounting for inflation. The effect of inflation on revenues is accounted for separately through an allowance for inflation that is applied when comparing project costs and revenues, which is included in the modal chapters. In these chapters, costs reflect currently available, real dollars estimates as of the current year, but may not have been specifically factored, in every case, to a current dollar base year.
- Fourth Quarter Estimates - In some instances, expenditure data may include estimates for the fourth quarter of the most recent fiscal year included in the Annual Report. These estimates are updated later to reflect actual expenditures when that data is available and are provided in subsequent Annual Reports. This, in certain cases, may result in total expenditures reported for a given facility/service in one year being less than that reported in the previous year. Postponing the issue of the Annual Report to await final fourth quarter data would require significant delays, greatly lessen the relevancy of the Annual Report in the decision-making process.
- Expenditure Data Adjustments - Close coordination is maintained with the agencies that supply expenditure data for the Annual Report, in an effort to ensure that cost items are treated consistently from year-to-year. However, due to the timing of billing receipts, collection of other financial information, and posting of necessary accounting adjustments, there may be anomalies in the expenditures reported by the agencies for a given project from one year to the next. This variation (for example, total costs reported for a given facility/service in one year being less than that reported in the previous year) is minor and generally reflects the increasing accuracy of the figures being

provided by the agencies. Expenditure tabulations in the Annual Report correspond to the data received from the reporting agencies.

- Project Schedules - In describing project status, both “open to traffic” and “programmed for final construction” are used. The term “open to traffic” is used if the specific date when a facility has been opened, or will be open with some certainty, is known. The term “programmed for final construction” is utilized to indicate the year in which funding has been identified to begin final construction of a facility. The latter term is employed due to the difficulty in specifying an “open to traffic” date for future projects that may not even be designed at this time, much less have specific bid and construction schedules established. An “open to traffic” date for a future project may be identifiable if it is under construction or has scheduled bid dates.
- Bus Ridership Reporting - Beginning with the 2013 Annual Report, ridership data relates to all Public Transit Fund (PTF) supported routes or portions of routes. This includes existing routes receiving PTF funding that predate Prop 400 and may not have been reported on previously. This approach is being used to ensure that the broadest disclosure possible is being provided. As a result of this approach, total ridership on some routes may stay the same from year to year, because PTF funds no longer pay for the service. On the other hand, certain other routes may indicate a jump from no ridership to significant levels of ridership. This occurs in cases where a route is now being reported on but had not been reported on previously.

CHAPTER TWO

PROPOSITION 400 LEGISLATION

Proposition 400 was enabled by House Bill 2292 and House Bill 2456, which were signed by the Governor of Arizona on May 14, 2003 and on February 5, 2004, respectively. These two pieces of legislation were enacted to guide the process leading up to the Proposition 400 election on November 2, 2004 and establish the features of the half-cent tax sales extension. Key elements of House Bills 2292 and 2456 are described below.

2.1 HOUSE BILL 2292

Arizona House Bill 2292, which was passed during the Spring 2003 session of the Arizona Legislature, recognized MAG's establishment of a Transportation Policy Committee (TPC). The TPC, which was tasked with the development of the Regional Transportation Plan (RTP), is a public/private partnership and consists of 23 members. Seventeen seats are from the membership of MAG and six are members who represent region-wide business interests. The MAG members include one representative each from the Citizens Transportation Oversight Committee, the ADOT State Transportation Board, the County Board of Supervisors and the Native American Indian Communities in the County, as well as 13 representatives from a geographic cross-section of MAG cities and towns. The bill required the TPC to develop the RTP in cooperation with the Regional Public Transportation Authority (RPTA) and ADOT, and in consultation with the County Board of Supervisors, Native American Indian Communities, and cities and towns in the County.

The legislation identified the consultation process to be followed by the TPC in developing the RTP, and established a formal procedure for reviewing the Draft Plan. This included reviews at the alternatives stage and final draft stage of the planning process. As part of this process, the TPC was required to vote on, and provide written responses to, individual agency comments on the Draft Plan. After this extensive review and consultation process, the TPC was required to recommend a Plan to the MAG Regional Council for final approval.

Arizona House Bill 2292 also set forth the factors to be considered during the development of the RTP, such as the impact of growth on transportation systems and the use of a performance-based planning approach. It identified key features required in the final Plan, including a twenty-year planning horizon, allocation of funds between highways and transit, and priorities for expenditures. This legislation also established the process for authorizing the election to extend the existing half-cent county transportation excise tax. This existing tax was originally approved by Maricopa County voters under Proposition 300 in October 1985 and expires on December 31, 2005.

In addition, House Bill 2292 contained the requirement that MAG issue an annual report on the status of projects funded through the half-cent sales tax for transportation. This includes a public hearing within thirty days after the report is issued. Specific items to be addressed in the annual report cover the status of projects, changes to the RTP, changes to corridor and corridor segment priorities, project financing and project options, and criteria used to establish priorities.

2.2 HOUSE BILL 2456

House Bill 2456 was passed by the Arizona Legislature and signed by the Governor of Arizona in February 2004. This legislation authorized the election to extend the half-cent sales tax for transportation, known as Proposition 400, which was placed on the November 2, 2004 ballot by the Maricopa County Board of Supervisors. In addition to calling the election, this legislation included a number of requirements regarding the nature of the tax extension and its administration. Several of the key provisions are reviewed below.

2.2.1 Revenue Distribution

House Bill 2456 addresses the allocation of revenues from the collection of sales tax monies from January 1, 2006, to December 31, 2025, among the eligible transportation modes. In accordance with the legislation, the net revenues collected are to be distributed as follows:

- 56.2 percent to the regional area road fund for freeways and other routes in the State Highway System, including capital expense and maintenance.
- 10.5 percent to the regional area road fund for major arterial street and intersection improvements, including capital expense and implementation studies.
- 33.3 percent to the public transportation fund for capital construction, maintenance and operation of public transportation classifications, and capital costs and utility relocation costs associated with a light rail public transit system.

2.2.2 Revenue Firewalls

The legislation creates three “firewalls”, which prohibit the transfer of half-cent funding allocations from one transportation mode to another. These firewall divisions correspond to the categories established for the distribution of revenues and include:

- Freeways and highways (including sub-accounts for capital and maintenance).

- Arterial streets.
- Public transportation (with sub-accounts for capital, maintenance and operations, and light rail).
- Half-cent revenues cannot be moved among transportation modes (freeway/highway, arterial and transit).

2.2.3 Five-Year Performance Audit

As specified in House Bill 2456, beginning in 2010 and every fifth year thereafter, the Auditor General shall contract with a nationally recognized independent auditor with expertise in evaluating multimodal transportation systems and in regional transportation planning, to conduct a performance audit of the Regional Transportation Plan and all projects scheduled for funding during the next five years. In 2010, the Auditor General contracted with an independent auditor to conduct a performance audit of the Regional Transportation Plan. The results of the audit were released in December 2011. (See Chapter Three.)

2.2.4 Major Amendment Process

House Bill 2456 recognized that the Regional Transportation Plan may be updated to introduce new transportation projects or to modify the existing plan. To ensure that the amendment process receives broad exposure and careful consideration, the concept of a major amendment was established. A major amendment of the Regional Transportation Plan means:

- The addition or deletion of a freeway, a route on the State Highway System, or a Fixed Guideway Transit System.
- The addition or deletion of a portion of a freeway; route on the State Highway System; or a Fixed Guideway Transit System that either exceeds one mile in length, or exceeds an estimated cost of forty million dollars as provided in the Regional Transportation Plan.
- The modification of a transportation project in a manner that eliminates a connection between freeways or fixed guideway facilities.

A major amendment is required if:

- An audit finding recommends that a project or system in the Regional Transportation Plan is not warranted, or requires a modification that is a major amendment.

- The MAG Transportation Policy Committee (TPC) recommends to the Regional Planning Agency a modification of the Regional Transportation Plan that is a major amendment.

The consideration and approval of a major amendment must adhere to a specific and rigorous consultation and review process set forth in the legislation. A major amendment requires that alternatives in the same modal category, which will relieve congestion and improve mobility in the same general corridor, are to be addressed. The TPC may recommend that funds be moved among projects within a mode, but half-cent revenues cannot be moved among transportation modes (freeway/highway, arterial and transit).

2.2.5 Life Cycle Programs

The legislation required that the agencies implementing the regional freeway, arterial, and transit programs are to adopt a budget process ensuring that the estimated cost of the program of improvements does not exceed the total amount of revenues available. These “life cycle programs” are the management tools used by the implementing agencies to ensure that transportation program costs and revenues are in balance, and that project schedules can be met. Responsibilities for maintaining these programs are as follows:

- Freeway/Highway Life Cycle Program: Arizona Department of Transportation.
- Arterial Life Cycle Program: Maricopa Association of Governments.
- Transit Life Cycle Program: Regional Public Transportation Authority.

The life cycle programs develop a schedule of projects through the life of the half-cent sales tax, monitor progress on project implementation, and balance annual and total program costs with estimated revenues. The MAG Annual Report draws heavily on life cycle program data and other life-cycle progress documentation.

2.2.6 Regional Transportation Plan: Enhancements and Material Changes

House Bill 2456 requires that any change in the Regional Transportation Plan and the projects funded that affect the MAG Transportation Improvement Program, including priorities, be approved by the MAG Regional Council. Requests for changes to projects funded in the Regional Transportation Plan that would materially increase costs are also required to be submitted to the MAG Regional Council for approval. If a local authority requests an enhancement to a project funded in the Regional Transportation Plan, the local authority is required to pay all costs associated with the enhancement.

CHAPTER THREE

REGIONAL ROLES AND RESPONSIBILITIES

The responsibility for implementing and monitoring projects and programs funded through Proposition 400 is shared by several regional and State entities. These organizations include:

- Maricopa Association of Governments.
- Transportation Policy Committee.
- Arizona Department of Transportation.
- State Transportation Board.
- Regional Public Transportation Authority.
- Valley Metro Rail.
- Citizens Transportation Oversight Committee.

A brief description of each agency and committee, and their role in implementing freeway/highway, arterial street and transit programs is provided below. It should be noted that local governments also design and construct projects covered in the regional arterial street program, and manage and operate elements of the bus transit system. These agencies are not discussed here.

3.1 MARICOPA ASSOCIATION OF GOVERNMENTS

The Maricopa Association of Governments (MAG) was formed in 1967, as the designated Metropolitan Planning Organization (MPO) for transportation planning in the Phoenix metropolitan area. On May 9, 2013, the Governor of Arizona approved an expanded metropolitan planning area (MPA) boundary for MAG, and the MAG MPA boundary now extends significantly into Pinal County. The new MPA boundary is in accordance with Federal regulations, which require that metropolitan planning areas encompass at least the existing urbanized area and the contiguous area expected to become urbanized within a 20-year forecast. MAG members include the region's 27 incorporated cities and towns, Maricopa County, Pinal County, the Gila River Indian Community, the Fort McDowell Indian Community, the Salt River Pima-Maricopa Indian Community, the Citizens Transportation Oversight Committee, and the Arizona Department of Transportation.

It is important to note that Proposition 400 applies only to the Maricopa County portion of MAG, and all expenditures related to Proposition 400 are on projects within the Maricopa County area.

MAG is responsible for the coordination of the following regional planning activities:

- Multi-modal Transportation Planning.
- Air Quality.
- Wastewater.
- Solid Waste.
- Human Services.
- Socioeconomic Projections.

MAG strives to develop plans that are comprehensive and that are consistent and compatible with one another. For example, the Regional Transportation Plan must be in conformance with the air quality plans for the metropolitan area. MAG is responsible for the air quality conformity analysis that shows whether the transportation plan complies with the provisions of air quality plans and other air quality standards. MAG is also responsible for the development of the Arterial Street Life Cycle Program. Individual projects in this program are constructed by the cities, towns and Maricopa County.

The MAG Regional Council is the decision-making body of MAG. The Regional Council consists of elected officials from each member agency. The Chairman of Citizens Transportation Oversight Committee (COTC) and the Maricopa County representatives from the State Transportation Board also sit on the Regional Council, but only vote on transportation-related issues. Many policy and technical committees provide analysis and information to the MAG Regional Council.

The MAG Regional Council is the ultimate approving body for the MAG Regional Transportation Plan and MAG Transportation Improvement Program. Any change in the Regional Transportation Plan or the projects funded that affect the Transportation Improvement Program, including priorities, must be approved by the MAG Regional Council.

3.2 TRANSPORTATION POLICY COMMITTEE

The MAG Transportation Policy Committee (TPC), which met for the first time in September 2002, was initially tasked with the responsibility of developing the

Regional Transportation Plan (RTP) and recommending the plan for adoption by the MAG Regional Council. The TPC recommended a Plan in September 2003 and it was adopted unanimously by the MAG Regional Council on November 25, 2003. In addition to developing the RTP, the TPC has continuing responsibilities to advise the Regional Council on transportation issues, including, but not limited to recommendations regarding: the MAG Transportation Improvement Program; the Life Cycle Programs; and requested material changes and amendments to the RTP.

The TPC is comprised of 23 members and is a public/private partnership. Of the total membership, six are members representing business interests and 17 are from the membership of MAG. The MAG members include 13 representatives from a geographic cross-section of MAG cities and towns, as well as one representative each from the Citizens Transportation Oversight Committee, the ADOT State Transportation Board, the County Board of Supervisors and the Native American Indian Communities in the County. The business representatives are from businesses with region-wide interest, including one representing transit interests and a representative from the freight industry. Three of the business representatives are appointed by the Speaker of the Arizona House of Representatives and the other three are appointed by the President of the Arizona State Senate.

3.3 ARIZONA DEPARTMENT OF TRANSPORTATION

The primary role of the Arizona Department of Transportation (ADOT) is to provide a transportation system that meets the needs of the citizens of Arizona. The transportation system includes the State Highway System, which is designed to provide safe and efficient highway travel around the State. The Governor of Arizona appoints the Director of ADOT. The MAG Regional Freeway/Highway Program is part of the State Highway System, and is the responsibility of ADOT. However, ADOT is not responsible for highways, streets, or roads that are not part of the State Highway System, which are owned and maintained by counties, or cities and towns in Arizona.

ADOT is responsible for the overall management of the Regional Freeway/Highway Program. This includes the design, engineering, right-of-way acquisition, and construction and maintenance activities. ADOT develops and maintains the Freeway/Highway Life Cycle Program, making projections of available revenues and developing financing strategies to fund projects.

ADOT also has a role for the arterial streets component of the MAG Regional Transportation Plan. Although MAG is responsible for the development of the Arterial Street Life Cycle Program, in accordance with ARS 28-6303.D.2, ADOT maintains the arterial street fund and issues bonds on behalf of the MAG Arterial Street Program.

3.4 STATE TRANSPORTATION BOARD

The State Transportation Board has statutory authority over the State Highway System. The State Transportation Board also sets priorities for the State Highway System (except the MAG Regional Freeway/Highway Program), establishes a five-year construction program for individual airport and highway projects, awards construction contracts, issues bonds and sets policy. The Board consists of seven members appointed by the Governor representing six geographic regions of the State. Two members are appointed from Maricopa County. Each member serves a six-year term.

Each year, the Board approves the ADOT Five-Year Highway Construction Program for statewide projects and the Life Cycle Program for the MAG Freeway/Highway System. The Life Cycle Program incorporates the priorities set by the MAG Regional Council. ADOT and MAG cooperatively develop the program for the MAG region. The State Transportation Board cannot approve projects within the MAG region that are not consistent with the MAG Regional Transportation Plan and the MAG Transportation Improvement Program. This limitation provides for the participation of local governments in project selection and to ensure conformity with air quality standards.

The State Transportation Board adopts policies that affect the MAG Regional Freeway/Highway Program. The Board has the authority to issue bonds supported by both the Regional Area Road Fund and the Highway User Revenue Fund and issue other forms of debt. Issuance of these bonds allows for significant acceleration of the MAG Regional Freeway/Highway Program than what would be possible on a pay-as-you-go basis.

3.5 REGIONAL PUBLIC TRANSPORTATION AUTHORITY/VALLEY METRO

The Regional Public Transportation Authority (RPTA)/Valley Metro is a political subdivision of the State of Arizona, and is overseen by a board of elected officials. Membership is open to all municipalities in Maricopa County and to the county government. In 1993, the RPTA Board adopted Valley Metro as the identity for the regional transit system. The (RPTA)/Valley Metro Board of Directors helps guide the agency by providing transportation leadership to best serve the region and their communities. Members are represented by an elected official who is appointed by their Mayor, Councilmembers or Board of Supervisors. Currently the Board includes Avondale, Buckeye, Chandler, El Mirage, Gilbert, Glendale, Goodyear, Maricopa County, Mesa, Peoria, Phoenix, Scottsdale, Surprise, Tempe, and Tolleson, and Wickenburg. The RPTA Board cannot approve projects and programs within the MAG area that are not consistent with the MAG RTP and the MAG TIP.

The primary goal of RPTA/Valley Metro is to ensure that a viable public transportation system is provided for regional mobility, and to ease the traffic

congestion and improve air quality. The RPTA is responsible for transit public information, the management and operation of regional bus and dial-a-ride services, the Regional Ridesharing program, a regional vanpool program and elements of the countywide Trip Reduction program and Clean Air Campaign. The RPTA is also responsible for maintaining the Transit Life Cycle Program.

In November of 2004, the passage of Proposition 400 increased the amount of funding for public transit from the former amount of approximately two percent of total half-cent sales tax revenues (\$5 million annually inflated), to a figure of over 33 percent, which will begin on January 1, 2006. These monies are deposited in the Public Transportation Fund (PTF), which was created as part of the Proposition 400 legislation. The RPTA is charged with the responsibility of administering monies in the PTF for use on transit projects, including light rail transit projects, identified in the MAG Regional Transportation Plan. The RPTA Board must separately account for monies allocated to: 1) light rail transit, 2) capital costs for other transit, and 3) operation and maintenance costs for other transit.

3.6 VALLEY METRO RAIL

Valley Metro Rail is a non-profit, public corporation overseeing the design, construction, and operation of the light rail transit starter segment, as well as extensions to the project. The Valley Metro Rail Board of Directors is composed of the mayors of each of the participating cities. The five cities currently participating are Phoenix, Tempe, Mesa, Glendale and Chandler.

The Valley Metro Rail Board of Directors establishes procedures for the administration and oversight of the design, construction and operation of light rail, as well as receives and disburses funds and grants from Federal, State, local and other funding sources. The Valley Metro Rail board has the authority to enter into contracts for light rail design and construction, hire or contract for staff for the Light Rail Project, and undertake extensions to the system. The Valley Metro Rail Board cannot approve projects and programs within the MAG region that are not consistent with the MAG Regional Transportation Plan and the MAG Transportation Improvement Program.

In March 2012, a decision was made to employ a single Chief Executive Officer (CEO) for both RPTA/Valley Metro (Bus) and Valley Metro Rail. Subsequently, the staffs of the two agencies were integrated into a single organization under the direction of the CEO. The combined staff organization addresses all administrative, planning and operational functions for both agencies, including: (1) communications and marketing, (2) planning and development, (3) design and construction, (4) operations and maintenance, (5) finance, (6) administrative and organizational development, (7) legal, and (8) intergovernmental relations. The legal structure and Boards of the two agencies will not be affected.

3.7 CITIZENS TRANSPORTATION OVERSIGHT COMMITTEE

ARS 28-6356 provides for the establishment of a Citizens Transportation Oversight Committee (CTOC) in a county that has a transportation sales tax such as Maricopa County. CTOC consists of seven persons - one member appointed from each of the five supervisory districts in Maricopa County. The Governor appoints an at-large member and the Chair of the committee. Members serve three-year terms. ADOT provides a special assistant to provide staff support to CTOC and to assist in coordination among CTOC, ADOT, MAG, RPTA and local jurisdictions.

The CTOC plays a number of important roles in the regional transportation process. It reviews and advises MAG, RPTA and the State Transportation Board on matters relating to the Regional Transportation Plan, the Transportation Improvement Program, the ADOT 5-year Construction Program and the life cycle management programs. This includes making recommendations on any proposed major amendment of the RTP, on criteria for establishing priorities, and on the five-year performance audit of the RTP. The CTOC is charged with annually contracting for a financial compliance audit of expenditures from the Regional Area Road Fund and the Public Transportation Fund, as well as setting parameters for periodic performance audits of the administration of those funds (life cycle programs).

The CTOC also holds public hearings and issues reports as appropriate, receives written complaints from citizens regarding adverse impacts of transportation projects funded in the RTP, receives complaints from citizens relating to regional planning agency responsibilities, and makes recommendations regarding transportation projects and public transportation systems funded in the Regional Transportation Plan.

CHAPTER FOUR

REGIONAL TRANSPORTATION PLAN

The MAG Regional Transportation Plan (RTP) provides the blueprint for the implementation of Proposition 400. By Arizona State law, the revenues from the half-cent sales tax for transportation must be used on projects and programs identified in the RTP adopted by MAG. The RTP identifies specific projects and revenue allocations by transportation mode, addressing freeways and other routes on the State Highway System, major arterial streets and intersection improvements, and public transportation systems. An overview of the RTP is provided below, including plan elements, priority criteria, and changes to the RTP during FY 2014.

On May 9, 2013, the Governor of Arizona approved an expanded metropolitan planning area (MPA) boundary for MAG, and the MAG MPA boundary now extends significantly into Pinal County. *It is important to note that Proposition 400 applies only to the Maricopa County portion of MAG, and all expenditures related to Proposition 400 are on projects within the Maricopa County area.*

4.1 PLAN OVERVIEW

The MAG Regional Transportation Plan (RTP) is a comprehensive, performance based, multi-modal and coordinated regional plan, covering all major modes of transportation, including freeways/highways, streets, public mass transit, airports, bicycles and pedestrian facilities, goods movement and special needs transportation. In addition, key transportation related activities are addressed, such as transportation demand management, system management, safety and air quality conformity analysis.

4.1.1 Plan Development Process

The Regional Transportation Plan is developed and updated through a comprehensive, performance-based process, consistent with State legislation. This process takes into account household trip-making characteristics and regional travel patterns, as well as the effects of population growth, to identify future demand for transportation facilities. The transportation planning process establishes goals and objectives, estimates future travel demand, identifies and evaluates facility options, and defines a planned, multi-modal transportation network. As part of the process, funding for the implementation of the plan is identified and a facility phasing program is prepared.

The transportation planning process also includes broad-based public input, which is received as the result of an extensive public involvement process that

includes an extensive public outreach effort. Public involvement meetings and events are held to receive input from citizens throughout the MAG Region. Additional comments are also received through the MAG Web Site. In addition, MAG is committed to ensuring that communities of concern as defined and included in the Title VI Act of 1964, Executive Order 12898 addressing environmental justice, and other Federal directives are specifically considered during the transportation planning and programming process.

As required by the Clean Air Act, air quality conformity analyses are conducted on the RTP and the associated Transportation Improvement Program (TIP). Analyses are conducted on carbon monoxide, volatile organic compounds, and particulate matter (PM-10). These conformity analyses have demonstrated that the RTP and TIP are in conformance with regional air quality plans and will not contribute to air quality violations.

4.1.2 Freeway/Highway Element

The RTP includes new freeway corridors, as well as improvements to existing freeways and highways. Operation and maintenance of the freeway/highway system are also addressed. All projects are on the State Highway System.

New Freeway/Highway Corridors: New corridors in the RTP include: Loop 202 (South Mountain Freeway), Loop 303 (Estrella Freeway, State Route 30 (I-10 Reliever Freeway), and State Route 24 (Gateway Freeway).

Freeway/Highway Widening and Other Improvements: Freeway/highway widening improvements cover essentially the entire existing freeway system. Improvements to US 60/Grand Avenue, State Route 85 and other State Highways are also funded. In addition to new travel lanes, additional interchanges with arterial streets on existing freeways are included, as well as improvements at freeway-to-freeway interchanges to provide direct connections between HOV lanes.

Freeway/Highway Maintenance, Operations, Mitigation and System-wide Programs: The RTP provides funding for maintenance of the freeway system, directed at litter pickup, landscaping, and noise mitigation. System-wide programs, such as freeway operations management, are also identified.

Freeway/Highway Priorities: The RTP takes into account the ADOT Freeway/Highway Life Cycle Program, which is a schedule of projects that implements the freeway/highway priorities identified in the RTP (see Chapter Six).

4.1.3 Arterial Street Element

The RTP includes a component for major arterial streets in the MAG Region. While MAG is responsible for developing the RTP, local jurisdictions are primarily responsible for design, right-of-way acquisition, construction and maintenance of arterial facilities as identified in the RTP.

New Arterial Facilities, Widening and Intersection Improvements: The RTP identifies regional funding for widening existing streets, improving intersections, and constructing new arterial segments. This is in addition to extensive local government funding for arterial street improvements. As growth extends into new areas, widening and extension of the arterial street network will be needed in order to keep up with growing traffic volumes. Congestion on the arterial street network is often caused by inadequate intersection capacity. The RTP also includes a number of intersection improvements, which enhance traffic flow and reduce congestion.

Intelligent Transportation System (ITS): The RTP allocates funding to assist in the implementation of projects identified in the regional ITS Plan. These projects smooth traffic flow and help the transportation system to operate more efficiently.

Arterial Street Priorities: The RTP takes into account the MAG Arterial Life Cycle Program, which is a listing of street projects that have been identified in the RTP for regional funding (see Chapter Seven).

4.1.4 Transit Element

The RTP includes a range of regionally funded transit facilities and services that address needs throughout the region. A regional bus network is included to ensure that reliable service is available on a continuing basis. In addition, light rail/high capacity transit corridors are identified to provide a high-capacity backbone for the transit network. Other transit services are included to provide a full range of options, such as paratransit and rural transit service.

Regional Bus: Regional bus services include both arterial grid and express type services that are designed to provide regional connections. Regional bus service consists of three categories of service: Supergrid routes, which provide local fixed route service on the arterial street grid system; limited-stop LINK routes, which operate as express overlays on streets served by local fixed route service; and Freeway BRT Routes, which use freeways to connect remote park-and-ride lots with major activity centers. Funding for both capital and operating needs is identified in the RTP.

Light Rail/High Capacity Transit: The RTP includes a 60.0-mile Light Rail Transit (LRT)/High Capacity Transit (HCT) system, which incorporates the 19.7-mile, LRT minimum-operating segment (MOS); a 4.6-mile northwest extension; a 5.0-mile extension to downtown Glendale; an 11.0-mile extension along I-10 west to 79th Avenue; a 12.0-mile extension to Paradise Valley Mall; a 2.7-mile extension

south of the MOS in Tempe; and a 5.0-mile extension from the east terminus of the MOS to Gilbert Road. Light rail transit has been selected as the technology on the northwest extension, the Capitol/I-10 west extension, and the extension to Gilbert Road. A modern streetcar has been designated for the extension in Tempe. The technology for the remaining segments has not yet been determined.

A light rail transit corridor from downtown Phoenix south along Central Ave. is under consideration for future addition to the RTP. The RTP also provides for the continued investigation of commuter rail implementation strategies for the region.

It is important to note that LRT/HCT capital needs, only, are funded from regional revenue sources in the RTP. Operating costs are the responsibility of the implementing agencies.

Other Transit Services: Other transit services provided in the RTP include rural/non-fixed route transit, commuter vanpools, and paratransit transportation.

Transit Priorities: The RTP takes into account the RPTA Transit Life Cycle Program, which is a schedule of bus and light rail projects that implements the transit priorities identified in the RTP (see Chapter Eight).

4.1.5 Plan Funding

The half-cent sales tax for transportation is the major funding source for the MAG RTP. In addition, there are other funding sources from State and Federal agencies. These revenue sources, and the half-cent tax, have been termed regional revenues in the RTP. In addition to regional revenues, local governments provide certain funding allocations that support the implementation of the RTP. The regional revenue sources are discussed in detail in Chapter Five.

4.2 PRIORITY CRITERIA

Arizona Revised Statute 28-6354 B. directs MAG to develop criteria that establish the priority of corridors, corridor segments, and other transportation projects. These criteria include public and private funding participation; the consideration of social and community impacts; the establishment of a complete transportation system for the region; the construction of projects to serve regional transportation needs; the construction of segments to provide connectivity on the regional system; and other relevant criteria for regional transportation. The discussion below describes how these kinds of criteria have been applied in the MAG regional transportation planning process, both for the development and the implementation of the Regional Transportation Plan (RTP).

4.2.1 Extent of Local Public and Private Funding Participation

A higher level of local public and private funding participation in the RTP benefits the region by leveraging regional revenues and helping ensure local government commitment to the success of the regional program. The extent of local public and private funding participation is addressed in a number of ways in the MAG transportation planning process.

Project Matching Requirements: In developing funding allocations among the various RTP components and project types, local matching requirements have been established. The local matching requirements in the RTP are:

- Generally, 30 percent for major street projects, bicycle and pedestrian projects. Under certain limited conditions, this requirement may be less depending on the type of Federal funds that may be utilized on a given project.
- For air quality and transit projects involving Federal funds, minimum Federal match requirements are assumed. Depending on the specific project funding mix, this match may be provided from regional revenue sources.

Private Funding Participation: As part of the policies and procedures developed for the Arterial Street Life Cycle Program, private funding participation is recognized as applicable local match for half-cent funds for street and intersections projects. This policy helps free local monies that may then be applied to additional transportation improvements.

Local Government Incentives: In the Arterial Street Life Cycle Program, incentives to make efficient use of regional funds have been established by ensuring that project savings by local governments may be applied to new projects in the jurisdiction that achieved those savings.

In the Freeway/Highway Life Cycle Program, MAG recognizes that local jurisdictions may want to accelerate highway projects by providing the local jurisdiction's financial resources to the program. Acceleration of specific highway projects benefits not only the affected local jurisdiction, but also the entire region. To facilitate local financing that allows the acceleration of freeway/highway construction in the region, MAG has adopted a Highway Acceleration Policy. This policy includes a provision that 50 percent of the interest expense incurred by the local jurisdiction will be paid by regional program revenues.

4.2.2 Social and Community Impacts

Regional transportation improvements can have both beneficial and negative social and community impacts. It is important to conduct a thorough assessment of these impacts, to ensure that they are taken into account in the decision-

making process. The MAG planning effort assesses social and community impacts at each key stage of the transportation planning and programming process. In addition, it should be noted that similar efforts are carried out by the agencies implementing specific transportation improvement projects.

Public Participation and Community Outreach: An aggressive citizen participation and outreach program is conducted to obtain public views on the potential community and social impacts of transportation improvements. In particular, input is sought regarding the possible impacts of specific transportation alternatives on the community's social values and physical structure.

Social Impact Assessment: The social impact of transportation options is evaluated as part of the Title VI/Environmental Justice assessment. In this assessment, potential transportation impacts are evaluated for key communities of concern, including minority populations, low-income populations, aged populations, mobility disability populations, and female head of household populations. In addition, community goals are taken into account by basing future travel demand estimates, on local land use plans.

Corridor and Community Impact Assessment: Corridor-level analyses are conducted, which assess the possible social and community impacts of alternative facility alignments based on neighborhood factors such as noise, air quality and land use. Community impacts of transportation facilities are further analyzed by assessing air quality effects through the emissions analysis of plan alternatives, as well as conducting a federally required air quality conformity analysis of the RTP. In addition, the process for annually updating the Regional Transportation Improvement Program includes project air quality scores, which reflect the potential community impacts of the projects.

Consultation on Resource and Environmental Factors: As part of the planning process for the update of the Regional Transportation Plan (RTP), MAG reaches out to Federal, State, Tribal, regional, and local agencies to consult on environmental and resource issues and concerns. This effort includes consultation regarding conservation plans and maps, inventories of natural or historic resources, and potential environmental mitigation activities. Specific topics of interest include: land use management, wildlife, natural resources, environmental protection, conservation, historic preservation, and potential environmental mitigation activities. The primary goal of this consultation effort is to make transportation planning decisions and prepare planning products that are sensitive to environmental mitigation and resource conservation considerations.

4.2.3 Establishment of a Complete Transportation System for the Region

The RTP includes major investments in all elements of the regional transportation system over the next several decades. It is critical that these

expenditures result in a complete and integrated transportation network for the region. The MAG planning process responds directly to this need by conducting transportation planning at the system level, giving priority to segments that can lead to a complete transportation system as quickly as possible, and maintaining a life cycle programming process for all the major modes.

System Level Planning Approach: The regional planning effort is conducted at the system level, taking into account all transportation modes in all parts of the MAG geographic area. This systems level approach is applied in identifying and analyzing alternatives, as well as specifying the final Regional Transportation Plan. In this way, the complete transportation needs of the region, as a whole, are identified and addressed in the planning process.

Project Development Process and Project Readiness: The implementation of regional transportation projects requires a complex development process. This process involves extensive corridor assessments, environmental studies, and engineering concept analyses. This is followed by right-of-way acquisition and final design work, before actual construction may begin. For a variety of reasons, certain projects may progress through this process more rapidly than others. By moving forward, where possible, on those projects with the highest level of readiness for construction, important transportation improvements can be delivered as quickly as possible.

Progress on Multiple Projects: Major needs for transportation improvements exist throughout the MAG area. The scheduling of projects is aimed at proceeding with improvements to the transportation network throughout the planning period in all areas of the region. This will lead toward a complete and functioning regional transportation system that benefits all parts of the MAG area.

Revenues, Expenditures and Life Cycle Programming: Cash flow patterns from revenue sources limit the amount of work that can be accomplished within a given period of time. Project expenditures need to be scheduled to accommodate these cash flows. Life cycle programs have been established that take these conditions into account and implement the projects in the RTP for the major transportation modes: freeways/highways, arterial streets, and transit. The life cycle programs provide a budget process that ensures that the estimated cost of the program of improvements does not exceed the total amount of revenues available. This ensures that a complete transportation system for the region will be developed within available revenues.

As part of the life cycle programming process, consideration is given to bonding a portion of cash flows to implement projects that provide critical connections earlier than might otherwise be possible. This has to be weighed against the reduction in total revenues available for constructing projects, which results from interest costs.

4.2.4 Construction of Projects to Serve Regional Transportation Needs

The resources to implement the RTP are drawn from regional revenue sources and should address regional transportation needs. Transportation projects that serve broad regional needs should have a higher priority than those that primarily only serve a local area. At the same time, the nature of regional transportation needs varies across the MAG area and the same type of transportation solution does not apply everywhere in the region. Enhancing the arterial network may represent the most pressing regional need in one part of the region, whereas adding new freeway corridors may be the key need in another; and expanding transit capacity may represent the best approach in yet another area. The process to develop the RTP recognized that this was the nature of regional transportation needs in the MAG area. As a result, the RTP is structured to respond to different types of needs in different parts of the MAG Region.

Although the modal emphasis of the transportation improvements identified in the RTP varies from area to area, the effects of these improvements can be assessed using common measures of system performance and regional mobility. The measures that were utilized for this purpose are described below. These criteria were applied in the development of the RTP to evaluate alternatives and establish implementation priorities. They can also be applied in the future to evaluate potential adjustments to the priority of corridors, corridor segments, and other transportation projects and services.

Facility/Service Performance Measures: Facility performance measures focus on the amount of travel on specific facilities, the usage of transportation services, the degree of congestion, and other indicators of the level of service as provided:

- Accident rate per million miles of passenger travel.
- Travel time between selected origins and destinations.
- Peak period delay by facility type and geographic location.
- Peak hour speed by facility type and geographic location.
- Number of major intersections at level of service “E” or worse.
- Miles of freeways with level of service “E” or worse during peak period.
- Average Daily Traffic on freeways/highways and arterials.
- Total transit ridership by route and transit mode.
- Cost effectiveness: trips served per dollar invested.

Mobility Measures: Mobility measures focus on the availability of transportation facilities and services, as well as the range of service options as provided:

- Percentage of persons within 30 minutes travel time of employment by mode.
- Jobs and housing within one-quarter mile distance of transit service.
- Percentage of workforce that can reach their workplace by transit within one hour with no more than one transfer.
- Per Capita Vehicle Miles of Travel (VMT) by facility type and mode.
- Households within one-quarter mile of transit.
- Transit share of travel (by transit sub-mode).
- Households within five miles of park-and-ride lots or major transit centers.

4.2.5 Construction of Segments that Provide Connectivity with other Elements of the Regional Transportation System

The phasing of the development of the transportation network should be done in a logical sequence, so that maximum possible system continuity, connectivity and efficiency are maintained.

Appropriately located transportation facilities around the region enhance the general mobility throughout the region. To the extent possible, facility construction and transportation service should be sequenced to result in a continuous and coherent network and to avoid gaps and isolated segments, bottlenecks and dead-end routes. Segments that allow for the connection of existing portions of the transportation system should be given a higher priority than segments that do not provide connectivity.

4.2.6 Other relevant criteria developed by the regional planning agency

As part of the RTP, a series of objectives for the regional transportation network were identified. Two key objectives were to achieve broad public support for the needed investments, and to develop a regionally balanced plan that provides geographic equity in the distribution of investments. Specific criteria related to these objectives are:

- Transportation decisions that result in effective and efficient use of public resources and strong public support.
- Geographic distribution of transportation investments.

- Inclusion of committed corridors.

4.3 REGIONAL TRANSPORTATION PLAN CHANGES AND OUTLOOK

The RTP is a long range plan for transportation improvements in the region, covering a period of over two decades. During a program of this length, inevitably, new information will be obtained and changing conditions will be faced as the implementation effort proceeds. As a result, the RTP and the MAG Transportation Improvement Program (TIP) are revised periodically to reflect factors such as changes in costs, project schedules, and the outlook for future revenues. Significant actions during FY 2014 affecting the RTP are discussed below.

Approval of the 2035 Regional Transportation Plan: On January 29, 2014, the MAG Regional Council approved the 2035 MAG Regional Transportation Plan (RTP). This was the first update of the RTP since July 2010 and extends the horizon year of the plan from FY 2031 to FY 2035. The 2035 RTP is a comprehensive, performance based, multi-modal and coordinated plan, identifying transportation improvements in the region over the next 20 years. It includes updated regional networks for freeways/highways, arterials streets, and public transit, as well as information on plans for other transportation programs in the region. In addition, the plan addresses topics such as revenue estimates, consultation on environmental mitigation and resource conservation, transportation security and safety, and congestion management. It is important to note that the 2035 RTP largely continues the policies, priorities, and projects contained in previous plans.

The 2035 RTP encompasses the expanded MAG metropolitan planning area (MPA), which was designated by the Governor on May 9, 2013. The MAG MPA boundary now extends significantly into Pinal County and includes the entire Gila River Indian Community, the Town of Florence, the City of Maricopa, all of the City of Apache Junction, and certain unincorporated areas of Pinal County. The new areas in the MAG MPA do not participate in the Life Cycle Programs.

The Draft 2035 RTP was approved by the Regional Council for air quality conformity analysis on October 23, 2013. A technical air quality conformity analysis was performed on the RTP and demonstrated that the Plan meets all air quality conformity requirements. On November 25, 2013, a public hearing was conducted on the Draft 2035 RTP, the Draft FY 2014-2018 Transportation Improvement Program, the Draft FY 2014 and 2015 Transit Program of Projects, and the Draft 2014 Air Quality Conformity Analysis. On December 12, 2013, the MAG Transportation Review Committee recommended approval of the Draft 2035 RTP, and on January 8, 2014, the MAG Management Committee also recommended approval of the Draft 2035 RTP. The Transportation Policy Committee recommended approval on January 29, 2014. A finding of air quality

conformity was approved by the U.S Department of Transportation on February 12, 2014.

Development of the next Regional Transportation Plan Update: Although the 2035 RTP was just approved in January 2014, concepts for the development of the next update of the RTP are already being pursued. One of major goals of the update will be to incorporate the new Federal metropolitan transportation planning regulations from MAP-21 (Moving Ahead for Progress in the 21st Century Act) into the planning process. A key requirement in the new regulations is the inclusion of performance measures and performance targets in the RTP. Also, it is anticipated that the planning horizon year of the RTP will be extended to 2040. According to Federal planning regulations, the next update of the 2035 RTP must be approved through the MAG committee process no later than January 2018. The target for MAG approval of the next update currently is July 2017.

CHAPTER FIVE

HALF-CENT SALES TAX FOR TRANSPORTATION AND OTHER REGIONAL REVENUES

The half-cent sales tax for transportation approved through Proposition 400 is the major funding source for the MAG Regional Transportation Plan (RTP), providing over half the revenues for the Plan. In addition to the half-cent sales tax, there are a number of other RTP funding sources, which are primarily from State and Federal agencies. These revenue sources and the half-cent tax have been termed regional revenues in the RTP. The specific regional revenue sources are:

- Half-cent Sales Tax.
- Arizona Department of Transportation (ADOT) Funds.
- MAG Area Federal Highway Funds.
- MAG Area Federal Transit Funds.

In addition to regional revenues, local governments provide funding that supports implementation of the RTP. These resources provide matching monies for capital projects in the Arterial Street Program and Light Rail Transit/High Capacity Transit Program; subsidize certain transit operating costs; and, in the form of transit farebox monies, contribute significant funding for transit operations.

A block of funding from State sources, the Statewide Transportation Acceleration Needs (STAN) Account, was available for a time but the remaining funds were discontinued in January 2009 by the Legislature to balance the FY 2009 State Budget. Resources from another, non-recurring source were made available in early 2009 in the form of infrastructure funding from the American Recovery and Reinvestment Act (ARRA).

It should also be noted that revenue projections are expressed in “Year of Expenditure” (YOE) dollars, which reflect the actual number of dollars collected/expended in a given year. Therefore, there is no correction or discounting for inflation. The effect of inflation is accounted for separately through an allowance for inflation that is applied when comparing project costs and revenues, which is included in the modal chapters. In these chapters, costs reflect currently available, real dollars estimates as of 2014, but may not have been specifically factored, in every case, to a 2014 base year. In addition, both actual and forecasted revenues have been updated from previous reports.

5.1 HALF-CENT SALES TAX (*Maricopa County Transportation Excise Tax*)

On November 2, 2004, the voters of Maricopa County passed Proposition 400, which authorized the continuation of the existing half-cent sales tax for transportation in the region (also known as the *Maricopa County Transportation Excise Tax*). This action provides a 20-year extension of the half-cent sales tax through calendar year 2025 and went into affect on January 1, 2006.

The revenues collected from the half-cent sales tax extension are deposited into the Regional Area Road Fund (RARF), and allocated between freeway/highway and arterial street projects; and into the Public Transportation Fund (PTF) for public transit programs and projects. These monies must be applied to projects and programs consistent with the MAG RTP. Table 5-1 displays the actual and projected Proposition 400 half-cent sales tax revenues for the period FY 2006-2026. As specified in ARS 42-6105.E, 56.2 percent of all sales tax collections are distributed to freeways and highways (RARF); 10.5 percent will be distributed to arterial street improvements (RARF); and 33.3 percent of all collections will be distributed to transit (PTF). The use of PTF monies must be separately accounted for based on allocations to: (1) light rail transit, (2) capital costs for other transit, and (3) operation and maintenance costs for other transit.

As displayed in Table 5-1, actual receipts from the Proposition 400 half-cent sales tax have totaled \$2.9 billion through FY 2014. Beginning in FY 2008, annual receipts steadily declined, with the year-over-year decreases for the three years from the end of FY 2007 through the end of FY 2010 equaling, respectively, 3.1, 13.7 and 8.9 percent. Beginning in FY 2011, receipts began to recover, with year-over-year increases of 3.4, 5.1, 5.5 and 7.0 percent, respectively, for FY 2011, FY 2012, FY 2013 and FY 2014. However, the collections for FY 2013 remain 6.5 percent lower than those in FY 2007. In addition, the current estimate of total 20-year revenues from the half-cent sales tax is approximately 42 percent lower than the estimate of \$15.0 billion prepared before the effects of the 2007-2009 recession.

Future half-cent revenues for the period FY 2015 through FY 2026 are forecasted to total \$5.8 billion. This amount is approximately \$22 million, or 0.4 percent, higher than the forecast for the same period presented in the 2013 Annual Report. Of the \$5.8 billion total included in the current forecast, \$3.2 billion will be allocated to freeway/highway projects; \$606 million to arterial street improvements; and \$1.9 billion to transit projects and programs. The actual receipts for FY 2014 (\$366 million) were nearly identical to the amount forecasted for that year in FY 2013 (\$361 million). The Proposition 400 half-cent revenue forecasts will be updated again in the fall of 2014.

TABLE 5-1
MARICOPA COUNTY TRANSPORTATION EXCISE TAX: FY 2006-2026
 (Year of Expenditure Dollars in Millions)

Fiscal Year	Regional Area Road Fund (RARF)		Public Transportation Fund (PTF) (33.3%)	Total
	Freeways (56.2%)	Arterial Streets (10.5%)		
Historical (2)				
2006 (1)	86.3	16.1	51.1	153.6
2007	219.7	41.1	130.2	391.0
2008	213.2	39.8	126.3	379.4
2009	184.0	34.4	109.0	327.4
2010	167.7	31.3	99.4	298.4
2011	173.3	32.4	102.7	308.4
2012	182.1	34.0	107.9	324.0
2013	192.0	35.9	113.8	341.7
2014 (3)	205.5	38.4	121.7	365.6
Subtotal	1,623.9	303.4	962.2	2,889.5
Forecasted				
2015	215.5	40.3	127.7	383.4
2016	227.7	42.5	134.9	405.1
2017	239.8	44.8	142.1	426.7
2018	251.9	47.1	149.3	448.2
2019	263.7	49.3	156.3	469.3
2020	274.7	51.3	162.8	488.8
2021	287.0	53.6	170.1	510.7
2022	299.8	56.0	177.7	533.5
2023	311.9	58.3	184.8	555.0
2024	324.8	60.7	192.5	578.0
2025	338.4	63.2	200.5	602.2
2026 (4)	205.6	38.4	121.8	365.8
Subtotal	3,240.9	605.5	1,920.3	5,766.7
Total				
Totals	4,864.8	908.9	2,882.5	8,656.2

(1) Represents Proposition 400 tax revenues, which began on January 1, 2006.

(2) Fiscal Year totals reflect the lag in actual receipt of revenues by the fund.

(3) Estimated subject to change.

(4) Reflects end of Proposition 400 half-cent sales tax on December 31, 2025.

5.2 ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT) FUNDS

ADOT funding sources include the Arizona State Highway User Revenue Fund (HURF) monies allocated to ADOT to support the State Highway System, ADOT Federal Aid Highway Funds, and other miscellaneous sources.

5.2.1 ADOT Funding Overview

ADOT relies on funding from two primary sources: the Highway User Revenue Fund (HURF) and Federal transportation funds. The HURF is comprised of funds from the gasoline and use fuel taxes, a portion of the vehicle license tax, registration fees and other miscellaneous sources. According to the Arizona constitution, HURF funds can only be used on highways and streets, therefore, HURF funds cannot be used for transit purposes.

ADOT, Arizona counties and cities and towns, and the Department of Public Safety (DPS) receive an allocation from HURF. Of the funds remaining after the allocation for DPS, ADOT receives 50.5 percent; 19 percent is allocated to counties; and 27.5 percent is allocated to Arizona cities and towns. The remaining three percent is allocated to cities with populations over 300,000. For the purposes of revenue forecasting, total HURF funds are projected based on forecasted population and economic growth, assuming that there would no change in tax rates. Total forecasted HURF funds are then distributed to ADOT and the other entities based on the current statutory formula and policy.

From the ADOT HURF allocation, State statute provides that 12.6 percent of the HURF funds flowing to ADOT are earmarked for the MAG Region, and the region comprising the Pima Association of Governments (PAG), which includes metropolitan Tucson, Arizona. In addition, the State Transportation Board has established a policy that another 2.6 percent of ADOT HURF funds would be allocated to the two regions. These funds are divided into 75 percent for the MAG Region and 25 percent for the PAG Region. These funds are referred to as “15 Percent Funds”.

After the deduction of the 15 Percent Funds, ADOT must pay for operations, maintenance and debt service on outstanding bonds. This includes funds for the Motor Vehicle Division, department administration, highway maintenance and additional funding for DPS.

ADOT also receives Federal transportation funds which are allocated to Arizona through various Federal programs and allocation formulas. The remaining HURF funds are combined with the Federal highway funds to provide the basis for the ADOT Highway Construction Program. This block of funds is often referred to as “ADOT Discretionary Funds”.

5.2.2 ADOT Funding in the MAG Area

Table 5-2 summarizes ADOT funds applicable to projects in the MAG Regional Transportation Plan. As displayed in Table 5-2, actual receipts from ADOT Funds through FY 2013 totaled \$2.3 billion, and forecasted revenues for the period FY 2015 through FY 2026 total \$2.8 billion. This forecast is 5.7 percent lower than the 2013 Annual Report forecast for the same period. This decrease reflects

somewhat lower levels of both Federal aid and HURF revenues forecasted to be available in the later years of the program.

TABLE 5-2
ADOT FUNDING IN MAG AREA: FY 2006-2026
 (Year of Expenditure Dollars in Millions)

Fiscal Year	15% Funds	ADOT Discretionary	Total Funding
Historical			
2006-07	149.7	262.5	412.2
2008	76.9	248.0	324.9
2009	60.5	156.3	216.8
2010	59.1	122.4	181.5
2011	59.5	230.9	290.4
2012	45.7	223.7	269.4
2013	60.7	244.7	305.4
2014	63.5	242.2	305.7
Subtotal	575.6	1,730.7	2,306.3
Forecasted			
2015	67.5	159.9	227.4
2016	70.2	219.0	289.2
2017	76.1	185.0	261.1
2018	72.8	145.1	217.9
2019	75.6	130.4	206.0
2020	78.4	133.0	211.4
2021	81.1	135.7	216.8
2022	84.0	138.7	222.7
2023	86.9	141.6	228.5
2024	89.8	144.3	234.1
2025	92.8	147.0	239.8
2026	95.9	150.8	246.7
Subtotal	971.1	1,830.5	2,801.6
Total			
Totals	1,546.7	3,561.2	5,107.9

The MAG area receives annual funding through the Arizona Department of Transportation (ADOT) in the form of 15 Percent Funds, which are allocated from the State Highway Fund to the MAG area. These funds are spent exclusively for improvements on limited access facilities on the State Highway System in the MAG area through the ADOT Five-Year Construction Program.

In addition, a 37 percent share of ADOT Discretionary Funds is targeted to the MAG Region. Arizona Revised Statute 28-304 C.1 states that the percentage of ADOT discretionary monies allocated to the MAG region in the Regional Transportation Plan shall not increase or decrease unless the State Transportation Board, in cooperation with the regional planning agency, agrees to change the percentage of the discretionary monies.

5.3 MAG AREA FEDERAL TRANSPORTATION FUNDS

In addition to the half-cent sales tax revenues and ADOT funding, Federal transportation funding directed to the MAG region is available for use in implementing projects in the MAG Regional Transportation Plan. On July 6, 2012, President Obama signed legislation known as the 'Moving Ahead for Progress in the 21st Century Act', or 'MAP-21'. This two-year transportation reauthorization bill provides Federal funding of transportation programs through September 2014. The MAG area Federal transportation funding forecasts included in 2014 Annual Report correspond to the programs as structured in MAP-21. In the past, Federal funding for transportation was generally reauthorized every six years. The two-year authorization in MAP-21 makes long range forecasting of Federal aid to transportation considerably more uncertain.

On August 8, 2014, President Obama signed into law H.R. 5021, the Highway and Transportation Funding Act of 2014, which transfers an additional \$10.8 billion into the Highway Trust Fund and extends the surface transportation funding authorizations and policies of the 2012 MAP-21 law from October 1, 2014 to May 31, 2015.

MAG area Federal transportation funding sources are summarized in Table 5-3, which displays actual and forecasted revenues. *It is important to note that the Federal funds estimates are only for those sources that are utilized in the Life Cycle Programs. Additional Federal funds are received in the MAG region and applied to other transportation program areas, which are not covered by this report.* Total Federal funding for the period FY 2015 through FY 2026 is forecasted to total \$2.5 billion. This is about a 0.6 percent decrease from the amount forecasted for the same period in the 2013 Annual Report.

5.3.1 Federal Transit Funds

The Federal Transit Administration (FTA) is an agency within the U.S. Department of Transportation that provides financial and technical assistance to local public transit systems, including buses and light rail transit. The Federal government, through the FTA, provides financial assistance to develop new transit systems and improve, maintain, and operate existing systems. The FTA funding includes both formula and discretionary programs.

TABLE 5-3
MAG FEDERAL TRANSPORTATION FUNDS: FY 2006-2026
 (Year of Expenditure Dollars in Millions)

Fiscal Year	Transit			MAG STP			MAG CMAQ				Grand Total
	FTA Formula	FTA Discr.	Total	Fwy/Hwy	Arterial	Total	Fwy/Hwy	Arterial	Transit	Total	
Historical											
2006	10.2	0.0	10.2	38.1	0.0	38.1	0.0	0.0	0.0	0.0	48.3
2007	23.6	0.0	23.6	42.3	0.0	42.3	0.0	0.0	0.0	0.0	65.8
2008	88.8	0.0	88.8	38.0	0.2	38.2	5.9	11.7	15.0	32.7	159.7
2009	35.1	0.0	35.1	34.4	17.5	51.9	0.0	16.3	17.0	33.3	120.4
2010	14.2	2.1	16.4	39.3	19.6	58.9	29.1	9.3	19.0	57.4	132.6
2011	31.3	1.2	32.5	33.9	39.4	73.2	4.3	3.5	5.4	13.2	118.9
2012	29.3	1.1	30.5	34.1	24.5	58.6	10.6	7.4	5.9	23.9	112.9
2013	21.5	18.2	39.7	34.1	24.1	58.2	8.2	15.7	10.2	34.1	132.0
2014	95.9	31.7	127.6	34.1	26.9	61.0	8.8	7.1	13.6	29.5	218.0
Subtotal	350.0	54.4	404.4	328.2	152.2	480.4	66.9	71.0	86.2	224.0	1,108.8
Forecasted											
2015	82.9	24.4	107.4	34.1	25.4	59.5	8.7	6.1	34.0	48.8	215.7
2016	52.9	22.6	75.5	12.7	32.8	45.5	8.7	4.6	21.9	35.3	156.2
2017	33.5	20.2	53.7	0.0	42.4	42.4	8.7	5.7	23.5	38.0	134.0
2018	29.3	57.6	87.0	0.0	43.2	43.2	8.7	4.1	16.3	29.1	159.3
2019	48.6	52.2	100.8	0.0	32.3	32.3	8.9	6.3	16.7	31.8	164.9
2020	66.3	120.1	186.5	0.0	46.5	46.5	9.1	6.4	17.0	32.5	265.5
2021	43.6	104.3	147.9	0.0	47.3	47.3	9.3	6.5	17.3	33.1	228.3
2022	44.6	124.9	169.5	0.0	48.0	48.0	9.5	6.6	17.7	33.8	251.3
2023	79.0	135.9	214.8	0.0	48.8	48.8	9.6	6.8	18.0	34.4	298.0
2024	49.1	101.6	150.7	0.0	49.5	49.5	9.8	6.9	18.3	35.1	235.3
2025	68.6	70.1	138.7	0.0	50.3	50.3	10.0	7.0	18.7	35.7	224.8
2026	13.2	112.0	125.2	0.0	51.2	51.2	10.2	7.2	19.0	36.4	212.8
Subtotal	611.6	946.0	1,557.6	46.8	517.6	564.4	111.4	74.3	238.3	423.9	2,546.0
Total											
Totals	961.6	1,000.4	1,962.0	375.0	669.8	1,044.8	178.3	145.2	324.5	647.9	3,654.8

Notes:

- Values in Table 5-3 represent use of federal funds in life cycle programs, only.
- Values in Table 5-3 represent obligation authority utilized during the fiscal year, except for FTA funds and CMAQ transit funds, which are the amounts actually expended.
- Forecasted STP and CMAQ revenues are based on a 96.5% Obligation Authority.

Formula Programs: Funding is apportioned to areas on the basis of legislative formulas. The formulas include factors such bus revenue vehicle miles, bus passenger miles, fixed guideway revenue vehicle miles, and fixed guideway

route miles, as well as population and population density. The Federal share is not to exceed 80 percent of the net project cost. The Federal share may be 90 percent for the cost of vehicle-related equipment attributable to compliance with the Americans With Disabilities Act and the Clean Air Act. The Federal share also be 90 percent for projects or portions of projects related to bicycles. The Federal share may not exceed 50 percent of the net project cost of operating assistance.

A number of FTA funding programs that cover a range of uses fall into this category. Individual programs have specific restrictions regarding eligible expenditures. These programs include: (1) 5307/5340 Funds - capital and planning needs, as well as operating expenses in certain circumstances; (2) 5310 Funds - special needs of transit-dependent populations; (3) 5337 Funds - replacement and rehabilitation or capital projects required to maintain public transportation systems in a state of good repair; (4) 5339 Funds - capital funding to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities; and (5) STP-AZ Funds - STP Flexible Funds that ADOT makes available for transit purposes in urban and rural Arizona. It should be noted that STP-AZ funds are not included under Formula Programs in Table 5-3 but are listed separately in Table 8-3.

Discretionary Programs: Transit 5309 funds are available through discretionary grants from the Federal Transit Administration (FTA), and applications are on a competitive basis. They include grants for “New Starts” and expanded rail and bus rapid transit systems that reflect local priorities to improve transportation options in key corridors. The statutory match for New Starts funding is 80 percent Federal and 20 percent local. However, for projects under a Full Funding Grant Agreement, FTA continues to encourage project sponsors to request a Federal New Starts funding share that is as low as possible.

Table 5-3 indicates that it is anticipated that a total of \$612 million will be expended from the Formula Programs category and \$946 million will be expended from the Discretionary Programs category during FY 2015 - FY 2026. The total of these estimates is approximately 1.4 percent lower than the amount forecasted for the same period in the 2013 Annual Report.

5.3.2 Federal Highway Funds

The Federal Highway Administration (FHWA) is an agency within the U.S. Department of Transportation that supports state and local governments in the design, construction, and maintenance of the nation’s highway system and various federally and tribal owned lands. Through financial and technical assistance to state and local governments, the Federal Highway Administration is responsible for ensuring that America’s roads and highways continue to be among the safest and most technologically sound in the world. Funding mostly comes from the federal gasoline tax. FHWA oversees projects using these funds

to ensure that federal requirements for project eligibility, contract administration and construction standards are adhered to. The FHWA funding programs applicable to the MAG area are described below. Table 5-3 indicates the FHWA program funding levels forecasted for the period FY 2015 - FY 2026.

Surface Transportation Funds (STP): STP funds are the most flexible Federal transportation funds and may be used for highways, transit or streets. During the period from FY 2015 through FY 2026, it is estimated that \$564 million will be available from STP funds. Of this amount, approximately \$34 million per year has been allocated through FY 2015 to retire debt related to the completion of the Proposition 300 program, and the remainder is dedicated to the RTP arterial program. This funding level is about 3.7 percent lower than the 2013 Annual Report estimate for the same period.

Congestion Mitigation and Air Quality (CMAQ): CMAQ funds are available for projects that improve air quality in areas that do not meet clean air standards (“non-attainment” areas). Projects may include a wide variety of highway, transit and alternate mode projects that contribute to improved air quality. While they are allocated to the State, Arizona’s funds have been dedicated entirely to the MAG Region, due to the high congestion levels and major air quality issues in the area. MAG CMAQ funds are projected to generate \$424 million from FY 2015 through FY 2026 for the Life Cycle Programs. This funding level is about 7.3 percent higher than the 2013 Annual Report estimate for the same period.

5.4 STATEWIDE TRANSPORTATION ACCELERATION NEEDS (STAN) ACCOUNT

During the spring 2006 legislative session, the Arizona Legislature provided \$307 million to accelerate highway projects statewide, of which \$184 million was allocated to the MAG region. On December 13, 2006, the MAG Regional Council approved a set of projects to be funded with these monies. In January 2009, any remaining STAN monies were used by the Legislature to help balance the FY 2009 State Budget. As a result, only \$121 million in STAN funding was applied to projects in the MAG area. Subsequently, in the spring of 2009, certain projects that would have been funded by STAN monies on I-10 and I-17 were re-accelerated, as a result of funding from the American Recovery and Reinvestment Act. In addition, in FY 2014 through legislative action some STAN funding was restored to the MAG program, resulting in a program total of \$141.1 million, including interest earnings.

5.5 AMERICAN RECOVERY AND REINVESTMENT ACT

The American Recovery and Reinvestment Act (ARRA) was signed by President Obama on February 17, 2009 and contains a national highway infrastructure component that provides approximately \$350 million to the Arizona Department of Transportation (ADOT) for highway infrastructure improvements throughout

Arizona. The ADOT Board determined that approximately \$129 million of this amount would be spent on projects on the State Highway System in the MAG area. On February 25, 2009, the MAG Regional Council approved the projects to utilize these funds.

The ARRA also sub-allocated \$105 million in funding to local jurisdictions in the MAG area for road and street improvements. On March 25, 2009, the MAG Regional Council approved allocation of these funds to MAG jurisdictions on the basis of a minimum allocation of \$500,000, plus an allocation proportional to population. A total of \$12.5 million from this allocation was utilized to provide funding for projects in the Arterial Life Cycle Program (ALCP), freeing up monies that can be applied later in the ALCP for other projects

In addition, the ARRA directed approximately \$66 million in funding to the MAG area for transit projects. On March 25, 2009, the MAG Regional Council approved allocation of these funds to transit projects such as park-and-ride lots, maintenance facilities, transit centers, and bus stop improvements. Approximately \$39.9 million of this funding was utilized in the Transit Life Cycle Program.

5.6 REGIONAL REVENUES SUMMARY

Actual and forecasted regional revenue sources for the Life Cycle Programs between FY 2006 and FY 2026 are summarized in Table 5-4. Actual receipts from all regional revenue sources through FY 2014 total \$6.6 billion. Future regional revenues are projected to total \$11.1 billion for the period FY 2015 through FY 2026. This is about a 1.4 percent decrease from the \$11.3 billion forecasted for the same period in the 2013 Annual Report.

In addition to the funding sources listed in Table 5-4, bonding and other debt financing assumptions, as well as allowances for inflation, are applied in each modal life cycle program. These amounts are listed in the respective modal chapters (see Chapters Six, Seven and Eight).

TABLE 5-4
REGIONAL REVENUES SUMMARY
 (Year of Expenditure Dollars in Millions)

Sources	FY 2006 - 2014 Historical	FY 2015 - 2026 Forecast	Total
Proposition 400: Half Cent Sales Tax Extension	2,889.5	5,766.7	8,656.2
ADOT Funds	2,306.3	2,801.6	5,107.9
American Recovery and Reinvestment Act (Freeways) *	129.0	0.0	129.0
American Recovery and Reinvestment Act (Arterials) **	12.5	0.0	12.5
American Recovery and Reinvestment Act (Transit) ***	39.9	0.0	39.9
Statewide Transportation Acceleration Needs (STAN)	141.1	0.0	141.1
Federal Highway	704.4	988.4	1,692.8
Federal Transit Funds	404.4	1,557.6	1,962.0
Total	6,627.1	11,114.3	17,741.4

* Represents amount applied to FLCP projects only.

** Represents amount applied to ALCP projects only.

*** Represents amount applied to TLCP projects only.

CHAPTER SIX

FREEWAY/HIGHWAY LIFE CYCLE PROGRAM

The Freeway/Highway Life Cycle Program (FLCP) extends through FY 2026 and is maintained by the Arizona Department of Transportation (ADOT) to implement freeway/highway projects identified in the MAG Regional Transportation Plan (RTP). The program utilizes funding from the Proposition 400 half-cent sales tax extension, as well as funding from State and Federal revenue sources.

During FY 2014, cash flow modeling based on new revenue forecasts and cost estimates revealed an overall Freeway/Highway Life Cycle Program deficit, amounting to \$161.7 million by the end of FY 2026. This represents 3.1 percent of estimated program costs during FY 2015 through FY 2026. MAG and ADOT will continuously work together to monitor and update estimated costs and revenues, as well as project schedules, to bring costs and revenues in greater balance.

6.1 STATUS OF FREEWAY/HIGHWAY PROJECTS

The Freeway/Highway Life Cycle Program includes both new freeway corridors to serve growth in the region and improvements to the existing system to address current and future congestion. In addition, effective operation and maintenance of the existing and future system are addressed. Figure 6-1, as well as appendix Table A-1, provides information on the locations and costs associated with Freeway/Highway Life Cycle projects. The projects depicted in Figure 6-1 are cross-referenced with the data in the tables by the code associated with each project segment.

It should be noted that, beginning with the 2013 Annual Report, the freeway/highway facility segments listed in the appendix tables are revised somewhat compared to previous annual reports. The new segment definitions/limits correspond more closely to those utilized by ADOT's cost reporting system, and are being used to facilitate more accurate compilation of expenditure data and facility cost estimates.

In the discussion of project status below, the following abbreviations are used:

- DCR: Design Concept Report
- EIS: Environmental Impact Statement
- EA: Environmental Assessment
- CE: Categorical Exclusion
- T.I.: Traffic Interchange

Figure 6-1



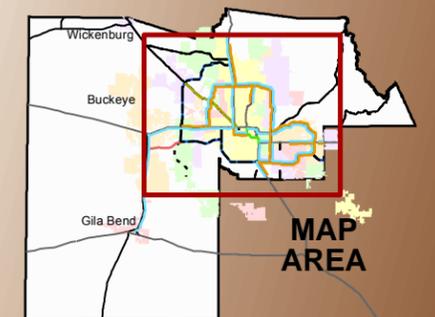
MAG 2014 Annual Report on Proposition 400

Freeways/Highways

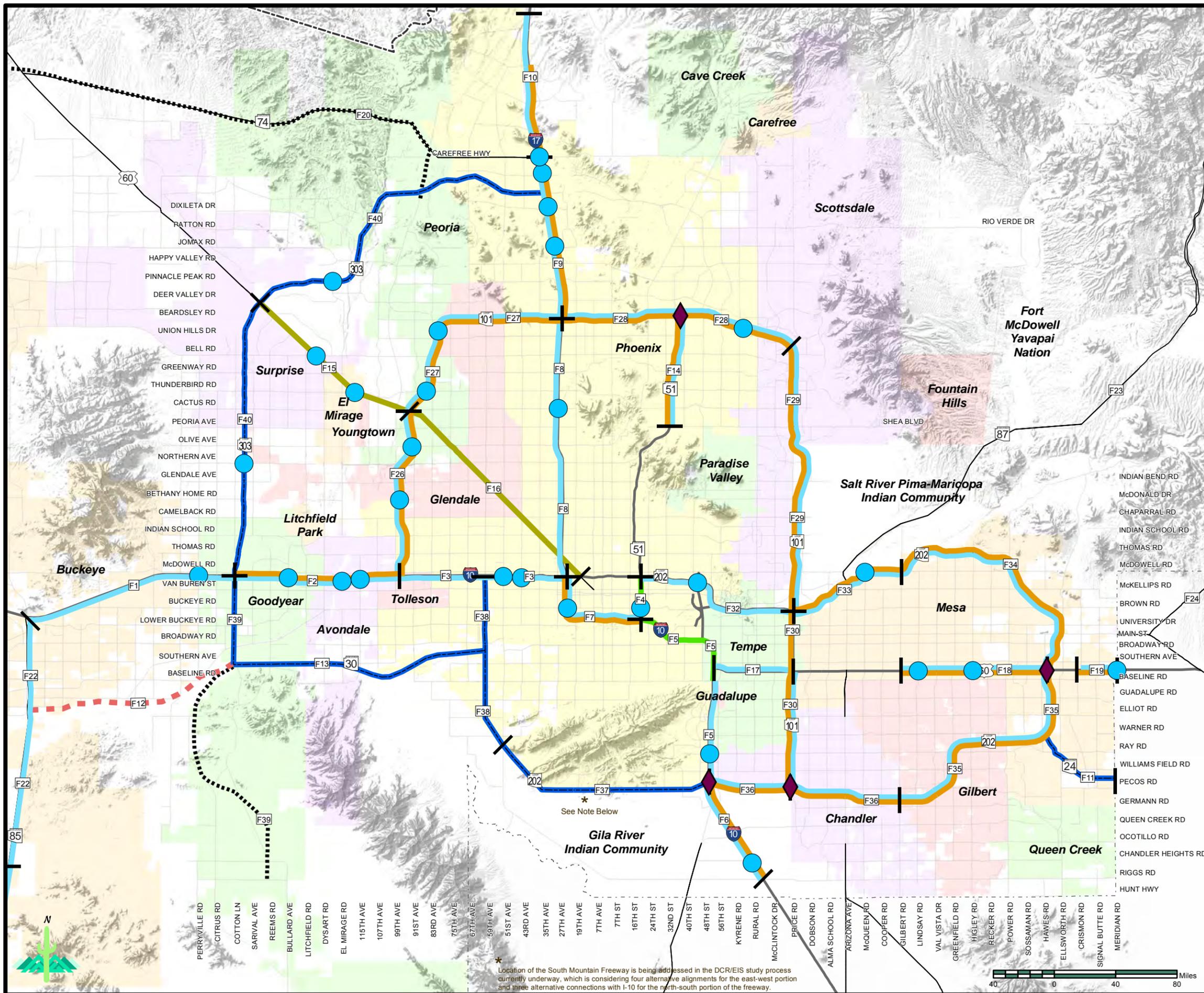
- New/Improved Traffic Interchange
- New High Occupancy Vehicle Ramp Connection
- New Freeway/Highway Construction
- New General Purpose Lanes
- New High Occupancy Vehicle Lanes
- Grand Avenue Corridor Improvements
- Corridor Capacity Improvements
- Interim Corridor Development
- Right of Way Preservation
- Existing Freeway
- Project Segment Separators
- Highways
- Other Roads
- County Boundary

Alignments for new freeway, highway, arterial, and light rail/high capacity transit facilities will be determined following the completion of appropriate design and environmental studies.

© 2014, All Rights Reserved



While every effort has been made to ensure the accuracy of this information, the Maricopa Association of Governments makes no warranty, expressed or implied, as to its accuracy and expressly disclaims liability for the accuracy thereof.



* Location of the South Mountain Freeway is being addressed in the DCR/EIS study process currently underway, which is considering four alternative alignments for the east-west portion and three alternative connections with I-10 for the north-south portion of the freeway.



6.1.1 New Corridors

SR 153 (Sky Harbor Expressway):

- On July 25, 2007, the MAG Regional Council deleted SR 153/Sky Harbor Expressway from the RTP, and shifted the funding to improvements on SR 143/Hohokam Expressway. This action was taken in accordance with the requirements of Arizona Revised Statute (A.R.S.) 28-6353 and met applicable Federal air quality conformity requirements. In October 2007, the State Transportation Board approved deleting SR 153 from the Arizona State Highway System and transferring the facility to the City of Phoenix.

Loop 202 (South Mountain Freeway):

- Overview - The South Mountain Freeway is planned as a freeway loop facility south of the central area of the region, connecting the western terminus of the Santan Freeway in the East Valley with I-10 at 59th Ave. in the West Valley. It is planned for three general purpose lanes and one HOV lane in each direction.
- DCR/EIS - A DCR/EIS is currently progressing for the South Mountain Freeway corridor. The Draft EIS was completed in April 2013. The public hearing for the project was held on May 21, 2013 at the Phoenix Convention Center, followed by several community meetings in Ahwatukee, Chandler, and Laveen, and on the Gila River Indian Community. The Draft Final EIS has been provided to the “Cooperating and Participating Agencies” for review and comment. Completion and approval of a final EIS and Design Concept Report, as well as a U.S. Department of Transportation “Record-of-Decision” on the recommended alternative for the corridor, are anticipated late in calendar year 2014.
- I-10/Maricopa to 51st Ave. - ADOT and MAG worked closely with the Gila River Indian Community (GRIC) regarding the possibility of locating a portion of the corridor on the GRIC. The concept was presented to the Community in the fall of 2010 and a community-wide referendum was held on February 7, 2012. Based on the result of the referendum, there is no longer consideration of placing the freeway within the GRIC boundary, and that option was not analyzed or presented in the Draft EIS.
- 51st Ave. to I-10/Papago - The portion of the roadway alignment that was on 55th Ave. has been shifted to fall on 59th Ave. Within the vicinity of Dobbins Road, ADOT, MAG, and FHWA have made localized alignment shifts to avoid several historic properties in the area.

Loop 303 (Estrella Freeway):

- Overview - Loop 303 is planned as a six-lane freeway facility extending west from I-17 at Lone Mountain Rd., swinging southwest to Grand Ave., running south in the vicinity of Cotton Lane to I-10, and then to SR 30. Right-of-way preservation south to Riggs Rd. is also part of the plan.
- I-17 to Happy Valley Rd. - Construction has been completed on an interim four-lane divided roadway, which was opened to traffic in May of 2011. Upgrading this facility to a six-lane freeway, including construction of the full system interchange at I-17, has been shifted beyond FY 2026 but remains in the MAG Regional Transportation Plan.
- Happy Valley Rd. to Grand Ave. - An interim four-lane divided roadway was completed between Grand Ave. and Happy Valley Rd. by Maricopa County in 2004, and full freeway right-of-way was also acquired along most of this segment. A DCR/CE was completed in April 2010, covering construction of a full freeway facility in the corridor. Preliminary design was completed in 2012. Upgrading this facility to a six-lane freeway had been shifted beyond FY 2026 but remained in the MAG Regional Transportation Plan.

At the end of FY 2013, the project was advanced to take full advantage of available Federal highway funding. A design-build project to complete the six-lane freeway was advanced in the MAG and ADOT programs, and funding for construction was identified for FY 2013. A design-builder has been selected and the contract has been awarded. This project is anticipated to begin construction in September 2014 and be complete in 2015. A separate project to construct a grade-separated interchange at El Mirage Road has been advertised, and construction should begin by the end of 2014, with completion scheduled in early 2016.

- Grand Ave. to I-10 - An interim two-lane roadway was constructed in the 1990's by ADOT. A DCR and EA on the segment for construction of a freeway facility were completed in 2009, and a "Finding of No Significant Impact" issued.

Construction of crossroad improvements in anticipation of future T.I.s at Bell Road, Waddell Road, and Cactus Road was completed in May 2011. Construction on the system T.I. at I-10 started in 2011, along with the segment from Peoria Ave. to Mountain View Blvd. Segments from Thomas Rd. to Camelback Rd., Glendale Ave. to Peoria Ave., and Camelback Road to Glendale Ave. have been advertised and awarded and are under construction or have been completed. All segments between I-10 and Grand Ave. are expected to be completed by the end of calendar year 2015. A project to complete the I-10 system interchange, to provide ramp connections to Cotton Lane, to and from I-10, and to complete the frontage road system at the interchange, was added to the program for delivery in FY 2016. Design for this project was programmed in FY 2013, and final design is underway.

- Grand Ave. Interchange - Preliminary design of an interim interchange at Loop 303 and Grand Ave. was completed in spring 2011. Final design, using the construction manager at risk (CMAR) method of project delivery, is underway. The CMAR was selected in early 2013, and construction of the interim TI is programmed in FY 2014. Currently, construction is expected to begin late in 2014.
- I-10 to SR 30 - A DCR/EA is scheduled for completion early in 2015, covering construction of a full freeway facility in the corridor. Construction of this segment was previously shifted beyond FY 2026 but has been brought forward, with funding for some construction programmed as early as FY 2023.
- SR 30 to Riggs Rd. - A location DCR and environmental overview are underway for a freeway concept. Right-of-way protection for this segment was shifted beyond FY 2026 but remains within the FY 2035 planning horizon of the RTP.

SR 30 (I-10 Reliever):

- Overview - The I-10 Reliever (SR 30) is planned as an east-west facility south of I-10 in the vicinity of Southern Ave. connecting the South Mountain Freeway (Loop 202) and SR 85. The route is identified as a six-lane freeway between Loop 202 and Loop 303; and as an arterial roadway, with right-of-way preservation for a future freeway facility, between Loop 303 and SR 85.

Construction of SR 30 has been shifted beyond FY 2026 but remains within the FY 2035 planning horizon of the RTP.

- DCR/EA – A DCR and EA are underway on the segment between Loop 202 and Loop 303, and are targeted for completion early in 2015. A location study for the segment between Loop 303 and SR 85 has been placed on hold pending determination of the SR30/SR303L interchange location.

SR 24 (Gateway Freeway):

- Overview - The Gateway Freeway (formerly Williams Gateway) is planned as a six-lane freeway extending from Loop 202 south to the Phoenix-Mesa Gateway Airport, and east to the Pinal County line at Meridian Rd.
- DCR/EA - A DCR and EA between Loop 202 and Ironwood Rd. (logical terminus one mile east of Meridian Rd.) have been completed and a Finding of “No Significant Impact” has been received.
- Loop 202 (Santan) to Ellsworth Rd. - Final design for an interim roadway was completed, the project has been awarded, and construction is underway. The

project was substantially complete in June 2014, and final acceptance is anticipated in August 2014. The City of Mesa advanced the construction funds for repayment in FY 2016. Final construction of this segment has been shifted beyond FY 2026 but remains within the FY 2035 planning horizon of the RTP.

- Ellsworth Rd. to Meridian Rd. - Final construction of this segment has been shifted beyond FY 2026 but remains within the FY 2035 planning horizon of the RTP.

Other Right-of-Way Protection on SR 74 and Loop 303 (Buckeye Rd. to Riggs Rd.):

- SR 74 - Funding for right-of-way protection on SR 74 has been shifted beyond FY 2026 but remains within the FY 2035 planning horizon of the RTP.
- Loop 303 (MC 85 to Riggs Rd.) - Funding for right-of-way protection has been shifted beyond FY 2026 but remains within the FY 2035 planning horizon of the RTP.

6.1.2 Widen Existing Facilities: General Purpose Lanes and HOV Lanes

I-10:

- Overview - Additional general purpose lanes have been identified for construction along essentially the entire length of I-10, between State Route 85 on the west and Riggs Rd. on the east (no additional lanes are planned between I-17 and SR 51). HOV lanes will also be added along several segments to provide continuous HOV service on I-10, between Loop 303 on the west and Riggs Rd. on the east.
- Verrado Way to Sarival Ave. - Construction of one general purpose lane in each direction between Sarival Ave. and Verrado Way was advertised for bids in March 2009 using ARRA funds. Construction was completed in summer 2011. This segment now has three general purpose lanes in each direction.
- Sarival Ave. to Loop 101 (Agua Fria) - Construction work to add one HOV lane and one general purpose lane in each direction in the median of I-10 was completed in June 2010. The addition of one general purpose lane in each direction along the outside of the facility between Sarival Ave. and Dysart Rd. was completed in summer 2011. This segment now has four general purpose lanes and one HOV lane in each direction.
- Loop 101 (Agua Fria) to I-17 - A DCR/EA is underway on this segment addressing future needs for increased capacity. The approach taken will be contingent on the design and timing of the South Mountain Freeway, as well

as the recommendations of the MAG Central Phoenix Framework Study, and will also consider the possibility of a future light rail extension along I-10 in this segment. Construction funding is programmed in FY 2019.

- SR 51 to 32nd St. - Construction of local/express lanes along this segment has been shifted beyond FY 2026, and has been designated as an illustrative project falling beyond the FY 2035 planning horizon of the RTP.
- 32nd St. to Loop 202 (Santan) - A DCR/EIS for capacity improvements along this segment, including local/express lanes from 32nd St. to US 60, had been underway through FY 2012. In early FY 2013, the DCR/EIS was cancelled with the intent of considering other options for traffic flow enhancements. Funding for improvements along this segment has been programmed for FY 2019-2024. The nature of these improvements will be determined through additional studies.
- Loop 202 (Santan) to Riggs Rd. - A project to construct one general purpose lane and one HOV lane in each direction between Loop 202 (Santan Freeway) and Riggs Rd. is programmed for FY 2021. Upon completion, this segment will have a total of three general purpose lanes and one HOV lane in each direction.

I-17:

- Overview - Construction of additional general purpose lanes has been identified for I-17 between I-10 (Maricopa TI) on the south and New River Rd. on the north. HOV lanes are also being added to fill gaps, and to extend the HOV system along the entire stretch of I-17 from I-10 (Maricopa TI) to Anthem Way.
- New River Rd. to Anthem Way - Construction of one general purpose lane in each direction on this segment has been shifted beyond FY 2026 but remains within the FY 2035 planning horizon of the RTP. Upon completion, this segment will have a total of three general purpose lanes in each direction. In 2006, ADOT completed a DCR to construct additional lanes from Loop 101 to Black Canyon City, as well as an EA for additional lanes between Loop 101 and New River Road. The New River Road to Anthem Way project and the following two projects were initiated as a result of that study.
- Anthem Way to Carefree Highway - The addition of one general purpose lane in each direction, using ARRA funding, was completed in May 2010 for a total of three general purpose lanes in each direction. A project to convert the pavement to PCCP and add one HOV lane in each direction has been shifted beyond FY 2026 but remains within the FY 2035 planning horizon of the RTP.

- Carefree Highway to Loop 101 (Agua Fria) - Construction work was completed in May 2010 to add one general purpose lane and one HOV lane in each direction. With completion of this project, this segment has three general purpose lanes and one HOV lane in each direction. The interval between Pinnacle Peak Rd. and Loop 101 includes additional lanes for exiting/merging traffic to/from Loop 101.
- Loop 101 to I-10/Maricopa Fwy.- A DCR/EIS addressing capacity improvements along I-17 between Loop 101 and I-10/Maricopa Fwy. had been underway through FY 2012. In early FY 2013, the DCR/EIS was cancelled with the intent of considering other options for traffic flow enhancements. Funding for improvements along this segment has been programmed for FY 2022-2025. The nature of these improvements will be determined through additional studies.

SR 51 (Piestewa Freeway):

- Overview - Construction of additional general purpose lanes and HOV lanes has been identified for the stretch of SR 51 between Shea Boulevard and Loop 101.
- Loop 101 to Shea Blvd. - The project to construct the HOV lanes, including ramps at the system interchange between SR 51 and Loop 101, has been completed and was opened to traffic in January 2009, resulting in a cross section of three general purpose lanes and one HOV lane in each direction. The project to construct one additional general purpose lane in each direction has been shifted beyond FY 2026 but remains within the FY 2035 planning horizon of the RTP.

US 60 (Grand Ave.):

- Overview - A series of improvement projects have been identified for construction along various segments of Grand Ave. between Loop 303 and McDowell Rd., including the addition of general purpose lanes, grade separations and other improvements. With completion of the projects between Loop 303 and 83rd Ave., described below, Grand Avenue is now six lanes from Van Buren Street in Phoenix to Loop 303 in Surprise.
- Loop 303 to 99th Ave. - A project to widen Grand Ave. to six lanes between Loop 303 and 99th Ave. was completed in June 2011. A feasibility study on potential grade separation projects on Grand Ave. between Loop 303 and Loop 101 was completed in January 2009 and funding for construction is programmed in FY 2015 (see Other Interchange Improvements: US-60 (Grand) Bell Road and Thunderbird/Thompson Ranch Road Intersections).

- 99th Ave. to 83rd Ave. - A project to widen Grand Ave. to six lanes between 99th Ave. and 83rd Ave. was completed in June 2011.
- Loop 101 to McDowell Rd. - A DCR/CE for roadway improvement projects between Loop 101 and McDowell Rd. was finalized in October 2008, and design work was completed in 2012. The project was split for construction, and the Peoria segment, from Loop 101 to 71st Avenue, was completed in 2013. The Glendale/Phoenix segment, from 71st Avenue to Van Buren Street, advertised for construction in June 2012. Construction is underway, and completion is expected around mid-2014. Funding for additional roadway improvements along this segment had been programmed in FY 2014, but has been deleted from the program. Potential grade separation projects identified for this segment have been shifted beyond FY 2026 but remain within the FY 2035 planning horizon of the RTP.

US 60 (Superstition Freeway):

- Overview - Widening projects have been identified for construction along several segments of the Superstition Freeway, providing a combination of additional general purpose and HOV lanes. These projects will increase general purpose lane capacity along certain segments and provide continuous HOV lane service between I-10 and Meridian Rd.
- I-10 to Loop 101 - Construction of one additional general purpose lane in each direction was completed in May 2010, resulting in a cross-section of four general purpose lanes and one HOV lane in each direction along this segment.
- Gilbert Rd. to Power Rd. - Construction work on the addition of both general purpose and HOV lanes from Gilbert Rd. to Power Rd. was completed and was opened in June 2007. As a result, the entire segment of the Superstition Freeway between Loop 101 and Loop 202 has five general purpose lanes and one HOV lane in each direction.
- Crismon Rd. to Meridian Rd. - A project to add one additional HOV lane and one additional GP has been programmed in FY 2020. Study work began in FY 2014 and will take approximately two years to complete. Design is programmed in FY 2016, with construction in FY 2020.

SR 74:

- Passing Lanes - Projects for the construction of passing lanes along mile-post segment 20-22, and mile-post segment 13-15, were completed in fall 2010 and summer 2011, respectively.

SR 85:

- Overview - Plans call for the widening of SR 85 to a four-lane, divided roadway between I-10 and I-8. With the completion of the projects noted below, a four-lane divided roadway has been completed from 2 ½ miles north of Gila Bend to I-10.
- I-10 to Southern Ave. - Construction to provide four lanes between I-10 and Southern Ave. was completed in fall 2010.
- Southern Ave. to MC 85 - Construction of frontage roads between Southern Ave. and MC 85 was completed in May 2008.
- Mile-post 130 to Mile-post 137 - Construction of a four-lane divided roadway between Mile-post 130 and Mile-post 137 was completed in January 2010.
- SR 85/B-8/Maricopa Rd. Intersection - The project includes construction of a new, elevated intersection at State Route 85 (Pima St.) and Business Route 8 (B-8), a wider bridge over the Union Pacific Railroad, and realigning both State Route 85 (Pima St.) and Maricopa Road. Construction began in February 2011 and was completed in late 2012.

SR 87:

- Overview - Since identification of the original concepts for corridors in the RTP, projects were added on SR 87 to refine roadway cross-section and provide for turning movements at a high volume recreational location.
- Forest Boundary to New Four Peaks - A project for improvements between Forest Boundary and New Four Peaks Rd., including an interchange at Bush Hwy., was completed in late 2008.
- New Four Peaks Rd. to Dos S Ranch Rd. – Reconstruction of the southbound lanes, construction of a climbing lane and shoulder widening between New Four Peaks Rd. and Dos S Ranch Rd. were completed in May 2011. This project included the erosion control and shoulder improvements between MP 211.8 and MP 213.0 and that were completed in summer 2011.

US 93 (Wickenburg Bypass):

- A bypass of downtown Wickenburg was completed September 2009.

Loop 101:

- Overview - Additional general purpose lanes and HOV lanes have been identified for construction along most of the length of Loop 101 (the Agua

Fria, Pima, and Price Freeways). Only additional HOV lanes are planned between the Red Mountain Freeway and Baseline Rd.

- Van Buren St. to I-10 (99th Ave.) - A project to provide improvements along 99th Ave. between I-10 and Van Buren Rd. at the southern terminus of Loop 101/Agua Fria was completed in spring 2011.
- I-10 to Tatum Blvd. - A project to construct one HOV lane in each direction from I-10 (Papago) to Tatum Blvd. was advanced into FY 2010. This project combined three HOV segments originally identified for construction between FY 2013 to FY 2015 into a single design/build project. The construction of this 39-mile segment, which includes a general-purpose lane in each direction at the I-17 TI, started early in 2011 and was completed in fall 2011. This completes the installation of HOV lanes on Loop 101 from the Papago Freeway in west Phoenix to the Santan Freeway in Chandler. Installation of freeway management system equipment on the Pima Freeway between I-17 and SR 51 was completed in January 2010.
- I-17 to Princess Drive - A DCR/CE for GP lanes in this segment was started in FY 2013, with completion of the study expected in 2014. Design work is currently planned for FY 2020. Construction between SR-51 and Princess Drive, and between I-17 and SR-51, are planned in FY 2021 and FY 2024, respectively.
- Tatum Blvd. to Princess Dr. - Construction of HOV lanes from Tatum Boulevard to Princess Drive on the Pima Freeway was completed in August 2009.
- Princess Dr. to Loop 202 (Red Mountain Freeway) - The construction of HOV lanes on the Pima Freeway between Princess Dr. and Via De Ventura was completed in June 2009. HOV lanes between Via De Ventura and Loop 202/Red Mountain were completed in November 2008. In addition, a DCR/CE for general purpose lanes on the Pima Freeway between Princess Dr. and Loop 202 was completed in summer 2010. The Categorical Exclusion was granted by FHWA on the project in May 2010. Preliminary design of the GP lanes between Shea Blvd. and Red Mountain Freeway was completed in spring 2012; final design was completed in 2014, and the project was advertised and awarded in spring 2014. Construction is expected to begin in summer 2014 and be completed late in 2016.
- Loop 202 (Red Mountain Freeway) to Loop 202 (Santan Freeway) - On the Price Freeway, HOV lanes were completed between Loop 202/Red Mountain and Loop 202/Santan in October 2009.
- Baseline Road to Loop 202 (Santan Freeway) - A DCR and EA to add a fourth GP lane in each direction was started for this project in 2014.

Completion of the study is expected in 2015. Final design of this segment is planned in 2021, with construction scheduled in 2023.

Loop 202:

- Overview - Construction of additional general purpose and HOV lanes has been identified along essentially the entire length of Loop 202 (Red Mountain and Santan Freeways). The segment of the Red Mountain Freeway from SR 51 to Loop 101 had HOV lanes prior to Proposition 400.
- SR 51 to Loop 101 -. Construction of a project to widen the Red Mountain Freeway between State Route 51 and Loop 101 was completed through a design/build contract in July 2010. This project added one general purpose lane eastbound between SR 51 and Loop 101, and one general purpose lane westbound between Loop 101 and Scottsdale Rd.
- Loop 101 to Gilbert Rd (on Red Mt. Fwy.) - Construction was completed on one HOV lane in each direction on the Red Mountain Freeway between 101 and Gilbert Rd. in July 2010. A DCR/CE to construct one additional general purpose lane in each direction in this segment was completed in October 2012. 30% design was completed in July 2013. A design-build project to construct the additional lane was advanced in the MAG and ADOT programs to FY 2013 to take full advantage of available Federal highway funding. The project will also include the construction of HOV lanes between Gilbert Road and Broadway Road. Contractor selection is underway, and the construction is anticipated to begin late in FY 2014 and be complete in 2016.
- Gilbert Rd. to I-10 (on Santan Fwy.) - A project to construct one HOV lane in each direction from Gilbert Rd. to I-10 on the Santan Freeway was advanced into FY 2010. This project combined two HOV segments originally identified for construction between FY 2013 to FY 2015 into a single design/build project. The project was completed in fall 2011, and included construction of direct HOV ramp connections at the freeway-to-freeway interchanges with Loop 101 and I-10.
- Gilbert Rd. (at Red Mt. Fwy.) to Gilbert Rd. (at Santan Fwy.) - A DCR/CE to construct HOV lanes on the remainder of Loop 202 between Gilbert Rd. (at Red Mt. Fwy.) and Gilbert Rd. (at Santan Fwy.) was completed in August 2010. A Categorical Exclusion was granted by FHWA on the project in April 2010. As discussed above, construction of the HOV lanes between Gilbert Rd. and Broadway Rd. (on the Red Mountain Freeway) is included in a design-build project that will be advertised in FY 2014.

6.1.3 New Interchanges and New HOV Ramps on Existing Facilities

New Interchanges at Arterial Streets:

- Overview - The RTP identifies a total of thirteen new traffic interchanges (T.I.s) to be constructed on existing freeways at arterial street crossings. These projects are located along most of the major segments of the regional freeway system, including I-10, I-17, Loop 101, Loop 202, and US 60 (Superstition Freeway).
- Bullard Rd. - A new traffic interchange at I-10 was completed in FY 2008.
- Bethany Home Rd. - A new traffic interchange at Loop 101 (Agua Fria Freeway) was completed in FY 2008.
- Jomax Rd./Dixileta Dr. - New traffic interchanges at I-17 were opened to traffic in September 2008.
- SR 74/Carefree Hwy. - The reconstruction of the T.I. at I-17 was completed and opened to traffic in October 2008.
- 64th St. - The construction of a new traffic interchange at Loop 101(Pima Freeway) was completed in October 2008.
- Dove Valley Rd./Sonoran Blvd. - A new traffic interchange at I-17 was completed in January 2010, and was opened to traffic in fall 2013 to coincide with the completion of Dove Valley Road by the City of Phoenix.
- Beardsley/Union Hills T.I. - The widening of the Union Hills traffic interchange bridge at Loop 101 was accelerated from FY 2012 to FY 2009, allowing the project to be constructed concurrently with a project for a Beardsley Rd. connector with Loop 101. Construction was completed in May 2011.
- Perryville Rd. - A DCR/CE for a new T.I. at I-10 was completed in 2012. Funding for construction was programmed in FY 2013. Contractor selection for this design-build project was completed in fall of 2013, and the project is under construction with completion expected in fall 2014.
- El Mirage Rd. (Fairway Dr.)/(I-10) - Funding for construction of a new T.I. at I-10 is programmed in FY 2023. A DCR and CE for the project are currently underway, with completion scheduled in summer 2014. Design and Right of Way funds are programmed in FY 2015, with construction in FY 2023.
- Chandler Hts. Rd. - Funding for construction of a new T.I. at I-10 is programmed in FY 2022.
- Mesa Dr. - Funding for construction of ramps only at Loop 202 (Red Mountain Freeway) was moved beyond FY 2026 and is included in FY 2030 in the RTP Potential grade separation projects identified for this segment have been

shifted beyond FY 2026 but remain within the FY 2035 planning horizon of the RTP.

- Lindsay Rd. - Funding for construction of ramps only (half interchange) at US 60 was moved beyond FY 2026 but remain within the FY 2035 planning horizon of the RTP.
- Meridian Rd. (Meridian Road Half-Diamond TI) - Preliminary engineering studies were completed in FY 2013. Design of a project to construct a half-diamond interchange to the west was completed in spring 2014. Advertisement for construction is planned in summer 2014, with completion of construction expected in 2016.
- El Mirage Rd. (Loop 303) - A project to design a grade-separated interchange at El Mirage Road and Loop 303 has been funded for FY 2014. Final design was completed in spring 2014. The project has been advertised, and construction should begin by the end of 2014 with completion scheduled in early 2016.

New HOV Ramps at Existing Freeway-to-Freeway Interchanges:

- Overview - The RTP identifies a total of six locations at freeway-to-freeway interchanges on existing freeways where HOV ramps (DHOV ramps) will be constructed to provide a direct connection through the interchange. These projects are located at major connections among components of the Regional Freeway System, including I-10, I-17, Loop 101, Loop 202, US 60 (Superstition Freeway) and SR 51.
- I-10/Loop 101 (Aqua Fria Freeway) - DHOV ramps at this location were moved beyond the horizon year of the RTP and included in the Plan as illustrative projects.
- I-17/Loop 101 (Pima Freeway) - DHOV ramps at this location were moved beyond the horizon year of the RTP and included in the Plan as illustrative projects.
- SR 51/Loop 101 (Pima Freeway) - Construction of DHOV ramps (northbound to eastbound and westbound to southbound) at this location was programmed in FY 2007 as part of the addition of HOV lanes on SR 51 and completed in January 2009.
- US 60/Loop 202 (Red Mountain Freeway) - Construction of DHOV ramps at this location was moved beyond FY 2026 and is included in FY 2029 in the RTP.

- Loop 101 (Price Freeway)/Loop 202 (Santan Freeway) - Construction of DHOV ramps at this location was combined with the HOV project on Loop 202 between Gilbert Rd. and I-10, which was completed in fall 2011.
- I-10/Loop 202 (Santan Freeway) - Construction of DHOV ramps at this location was combined with the HOV project on Loop 202 between Gilbert Rd. and I-10, which was completed in fall 2011.

Other Interchange Improvements:

- SR 143 - A total of \$37 million was programmed in FY 2009 and FY 2010 for the design and construction of improvements to the interchange between SR 143 and the Loop 202 access road to Sky Harbor Airport. Construction began in December 2010 and was completed in summer 2012.
- I-10 (West side airport access) - Construction of a project for improved access to the west entrance to Sky Harbor Airport from I-10 has been programmed for FY 2025.
- US60 (Grand) Bell Road and Thunderbird/Thompson Ranch Road Intersections - DCRs and EAs for intersection improvements at Bell Road and at Thunderbird Road on Grand Avenue are underway with completion expected early in FY 2015. Designer selection for the Thunderbird project is expected in summer 2015. Final design is expected to be complete in spring 2015, and an advertisement for construction is anticipated in summer 2015. Bell Road intersection improvements will be delivered as a design-build project, with contractor selection planned to begin in winter 2014.
- Other Interchanges - The Freeway Life Cycle Program also funds improvements at certain other existing traffic interchanges. Work has been completed at:

- Higley Rd./US 60 (FY 2006)	- Thunderbird Rd./Loop 101 (FY 2010)
- Cactus Rd./I-17 (FY 2007)	- Chaparral Rd./Loop 101 (FY2011)
- 43 rd Ave./I-10 (FY 2008)	- Avondale Blvd./I-10 (FY2011)
- Ray Rd./I-10 (FY 2008)	- Olive Ave./Loop 101 (FY 2012)

6.1.4 Maintenance, Operations and Mitigation Programs

Freeway Management System:

- A block of funding for the freeway management system (FMS) has been identified for the MAG area. This includes projects to enhance FMS on existing facilities, as well as to expand the system to new corridors. FMS covers items such as ramp metering, changeable message signs, and other measures to facilitate traffic flow.

- Enhancement and operation of the freeway management system has proceeded since the start of the Proposition 400 program. It is estimated that future costs will total approximately \$133 million for FY 2015-2026, including development of new projects, preservation and maintenance of existing equipment, and the freeway service patrol.

Maintenance:

- A block of regional funding for the freeway system in the MAG area has been dedicated to litter pick-up, landscaping maintenance and landscaping restoration. The remainder of maintenance functions are funded through ADOT state-level sources.
- The Proposition 400 program has allowed ADOT to provide a level of landscaping, litter pick up and sweeping maintenance on the freeway system that would not have been possible without this funding. Approximately \$161 million has been identified for FY 2015-2026 for activities related to this program.

Noise Mitigation:

- A block of funding has been identified for noise mitigation projects on the freeway system in the MAG area. This funding has been used for mitigation projects such as rubberized asphalt overlays and noise walls.
- Approximately \$63 million has been expended through FY 2014 for rubberized asphalt on freeway facilities and noise wall projects. The list of noise wall projects was approved by the Regional Council in 2008 and construction was completed in mid-2012.

6.1.5 System-wide Preliminary Engineering, Advance Right-of-Way Acquisition, Property Management/Plans and Titles, and Risk Management

- The overall highway development process involves a number of steps that are necessary to prepare projects for eventual construction. Key elements of the development process include: (1) Preliminary Engineering - preparation of preliminary plans defining facility design concepts, right-of-way requirements and environmental factors; (2) Advance Right-of-Way Acquisition - acquisition of right-of-way to respond to development pressures in a corridor; (3) Property Management/Plans and Titles - procedures to acquire property and manage it until needed for construction; and (4) Risk Management - programs to minimize risk of litigation.

- It is estimated that future costs for these types of system-wide projects and programs will total approximately \$257 million for FY 2015-2026.

6.1.6 Proposition 300 - Regional Freeway Program

- The Proposition 300/Regional Freeway Program was drawn to a close with the opening of the freeway segment between University Dr. and Power Rd. on the Red Mountain Freeway on July 21, 2008.
- Although sales tax collections for Proposition 300 ended on December 31, 2005, work utilizing State and Federal funding sources continued through FY 2008 to complete the last segment of the program. In addition, certain debt service requirements and other financial obligations for the program continue through FY 2026. These obligations have been taken fully into account in the planning process for the current Freeway/Highway Life Cycle Program, so that there are no conflicting demands on revenues.

6.2 FREEWAY/HIGHWAY PROGRAM CHANGES

Arizona Revised Statute 28-6353 requires that MAG approve any change in the RTP, and projects funded in the RTP that affect the agency's transportation improvement program, including priorities. In addition, requests for changes to transportation projects funded in the RTP that would materially increase costs must be submitted to MAG for approval.

6.2.1 Program Amendments and Cost Changes

Generally, material cost increases that affect projects programmed in the current fiscal year are approved individually prior to the projects going to bid. According to the MAG Material Cost Change Policy, a material cost change is defined as: "An increase in the cost of a project that is more than five (5) percent of the adopted budget, but not less than \$500,000, or any increase greater than \$2.5 million."

A detailed accounting of cost changes or other project changes during FY 2014 may be obtained by reviewing actions to amend the FY 2011- FY 2015 and FY 2014-FY 2018 MAG Transportation Improvement Programs. One of the more significant changes in this regard was the deletion from the program of spot improvements on U.S. 60/Grand Ave. (SR 101 to Van Buren St.) by the MAG Regional Council on May 28, 2014. The overall Freeway/Highway Life Cycle Program cost for the period FY 2006 - FY 2026 as reported in the 2014 Annual Report is \$8.9 billion, which is 2.8 percent less than the total of \$9.1 billion indicated in the 2013 report.

6.2.2 Freeway/Highway Program Rebalancing

Arizona Revised Statutes (ARS) 28-6352 (A) requires a budget process that ensures the estimated cost of the freeways and other controlled access highways in the Regional Transportation Plan (RTP) does not exceed the total amount of revenues estimated to be available. Due to the “Great Recession” and a changing Federal government outlook for transportation funding, revenue collections and forecasts have declined, requiring action to rebalance the Freeway/Highway Life Cycle Program.

In October 2009, the MAG Regional Council approved a tentative scenario to balance the Freeway/Highway Life Cycle Program. As part of this effort, project scopes were reevaluated and cost estimates reviewed, resulting in project cost reductions amounting to \$2.4 billion. Also, projects totaling approximately \$4.4 billion were shifted beyond FY 2026, which is the end of the life cycle program period. This scenario was subsequently incorporated into the Regional Transportation Plan - 2010 Update and the FY 2011-2015 MAG Transportation Improvement Program, which were approved by the MAG Regional Council on July 28, 2010.

On May 23, 2012, the MAG Regional Council approved a rebalancing scenario for the Regional Freeway/Highway Life Cycle Program. The rebalancing scenario addressed an overall life cycle program deficit of approximately \$390 million and eliminated any annual year end negative cash balances. A rebalancing scenario was approved that: (1) repositioned the SR-202L/South Mountain Freeway and Interstate 10/Maricopa Freeway projects to improve the Program’s cash flow, (2) transferred funding from the SR-303L segment between US-60 and Interstate 17 to the SR-303L segment between Interstate 10 and MC-85, and (3) removed \$300 million from the Program’s budget for the Interstate 17/Black Canyon Freeway corridor.

In FY 2013, a comparison forecasted revenues and estimated future costs for FY 2014 through FY 2026 of the Freeway/Highway Life Cycle Program indicated a negative ending balance in FY 2026 of \$444 million, which was largely due to significantly lower forecasts for Federal funding for transportation. This ending balance represents approximately 8.0 percent of the estimated remaining program costs for the period FY 2014 - FY 2026. MAG and ADOT will continue to work together during the coming year to monitor costs and revenues to establish a balanced program in the future.

In FY 2014, cash flow modeling based on new revenue forecasts and cost estimates revealed an overall Freeway/Highway Life Cycle Program deficit, amounting to \$161.7 million by the end of FY 2026. This represents 3.1 percent of estimated program costs during FY 2015 through FY 2026. MAG and ADOT will continuously work together to monitor and update estimated costs and revenues, as well as project schedules, to bring costs and revenues in greater balance.

6.3 FREEWAY/HIGHWAY PROGRAM EXPENDITURES, ESTIMATED FUTURE COSTS, AND FISCAL STATUS

6.3.1 Program Expenditures and Estimated Future Costs

Table 6-1 provides a summary of past expenditures, estimated future costs and total costs by major program category for the Freeway/Highway Life Cycle Program. Detailed data on costs at the project level is included in Table A-1 in the Appendix. In the Life Cycle Program, future costs reflect currently available, real dollars estimates as of 2014, but may not have been specifically factored, in every case, to a 2014 dollar base year.

As indicated in Table 6-1, expenditures through FY 2014 equal \$3.6 billion (YOE \$'s) and estimated future costs covering the period FY 2015-2026 amount to \$5.3 billion (2014 \$'s). The total FY 2006-2026 cost for the program is currently estimated to be \$8.9 billion (YOE and 2013 \$'s). As indicated in Appendix A, the estimated cost for the Life Cycle Program through FY 2035 totals \$12.7 billion (YOE and 2014 \$'s).

6.3.2 Future Fiscal Status

Table 6-2 summarizes the future funding sources and uses for the Freeway/Highway Life Cycle Program between FY 2015 and FY 2026. Sources for the Life Cycle Program between FY 2015 through FY 2026 include the Proposition 400 half-cent sales tax extension (\$3.2 billion); ADOT funds, (\$2.8 billion); Federal highway funds (\$158 million); bond and loan proceeds (\$1.0 billion); and other income (\$88 million). Expenses totaling \$2.6 billion are deducted from these sources, which includes an RTP implementation allowance identified in legislation, estimated future debt service, and repayment of other financing. In addition, an allowance for inflation of \$502 million is deducted. Including a beginning balance of \$775 million, there is a net total of \$5.0 billion (2014 \$'s) for use on freeway and highway projects through FY 2026.

Table 6-2 also lists the estimated future uses identified in the Life Cycle Program for the period covering FY 2015 through FY 2026, which result in a cash flow requirement of \$5.1 billion (2014 \$'s). A comparison of these projects costs with the expected revenues indicates a negative balance of approximately \$162 million through FY 2026.

6.4 FREEWAY/HIGHWAY PROGRAM OUTLOOK

During FY 2014, cash flow modeling based on new revenue forecasts was conducted. The analysis indicated that program totals show positive ending balances for FY 2015 to FY 2022, but there is a deficit of approximately \$162 million for the Regional Freeway and Highway Program through FY 2026. This deficit represents approximately 3.1 percent of the future estimated costs for the

TABLE 6-1
FREEWAY/HIGHWAY LIFE CYCLE PROGRAM
SUMMARY OF EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026
(2014 and Year of Expenditure Dollars in Millions)

Category	Expenditures through FY 2014 (Year of Expenditure Dollars)				Estimated Future Costs: FY 2015 -2026 (2014 Dollars)	Total Cost: FY 2006-2026 (2014 and YOE Dollars)
	Design	Right-of-Way	Construction	Total		
New Corridors	160.4	334.7	808.6	1,303.7	2,433.5	3,737.2
Widen Existing Facilities	144.4	295.4	1,274.3	1,714.1	1,975.3	3,689.4
New/Improved Interchanges	32.3	15.9	231.5	279.7	272.7	552.4
Maintenance	0.0	0.0	95.1	95.1	161.3	256.4
Freeway Management	14.0	0.0	46.9	60.9	133.1	194.0
Noise Mitigation	3.3	0.2	59.2	62.7	1.8	64.5
Minor/Other Projects	9.7	2.9	55.8	68.4	18.6	87.0
Pre-Engr., Adv. R/W, Admin.	19.2	5.7	0.1	25.0	256.5	281.5
Total	383.3	654.8	2,571.5	3,609.6	5,252.8	8,862.4

program during FY 2014 to FY 2026. This is an improvement compared to an ending balance of \$444 million reported in the FY 2013 Annual report and is due largely to reduced expectations for the level of inflation in future construction and other program implementation costs.

As in the past, the Freeway/Highway Life Cycle Program will be subjected to continuing analysis, addressing future revenue forecasts and project cost trends. Revised long-range revenue forecasts will be prepared and updated cash flow assessments will be conducted. Based on this analysis, the need for additional program adjustments will be considered during FY 2015. Key factors in this review effort will include:

- The current program deficit of 3.1 percent should not be overlooked, but is within the range of accuracy of cost and revenue forecasts.
- Revenue forecasts assume that \$120 million will be allocated by the State Legislature annually from the HURF to the Department of Public Safety for FY 2018 through FY 2026. While this diversion is consistent with recent legislative actions, it exceeds statutory levels and may not continue through the end of the program period.

TABLE 6-2
FREEWAY/HIGHWAY LIFE CYCLE PROGRAM
FUTURE SOURCES AND USES OF FUNDS: FY 2015-2026
(2014 and Year of Expenditure Dollars in Millions)

SOURCES OF FUNDS	
Source	Projected Future Funding: FY 2015-2026 (YOE Dollars)
Proposition 400: One-Half Cent Sales Tax Extension	3,240.9
ADOT Funds	2,801.6
MAG CMAQ and STP (Federal Highway)	158.2
Other Income	88.3
Bond and Loan Proceeds	1,045.0
Plus Beginning Balance	774.7
Less Debt Service and Other Expenses	(2,648.0)
Less Inflation Allowance	(502.1)
Total (2014 \$'s)	4,958.6
USES OF FUNDS	
Category	Estimated Future Costs: FY 2015-2026 (2014 Dollars)
New Corridors	2,433.5
Widen Existing Facilities	1,975.3
New/Improved Interchanges	272.7
Maintenance (Litter & Landscaping)	161.3
Freeway Management	133.1
Noise Mitigation	1.8
Minor/Other Projects	18.6
Pre-Engr., Adv. R/W, Admin.	256.5
Cash Flow Adjustment*	(132.5)
Total (2014 \$'s)	5,120.3

* Represents adjustment for cash flow requirements of project costs during program period of FY 2015 - FY 2026.

- As the construction of Loop 303 comes to its conclusion, funding previously programmed for this facility may become available for other projects due to lower right-of-way and construction costs than originally estimated.
- Clarification of the cash flow requirements of the South Mountain Freeway project will be an important consideration. Completion and approval of a

final Environmental Impact Statement and Design Concept Report, as well as a U.S. Department of Transportation “Record-of-Decision” on the recommended alternative for the South Mountain Freeway corridor are anticipated in late 2014 or early in 2015.

CHAPTER SEVEN

ARTERIAL LIFE CYCLE PROGRAM

The Arterial Life Cycle Program (ALCP) extends through FY 2026 and is maintained by the Maricopa Association of Governments (MAG) to implement arterial street projects identified in the MAG Regional Transportation Plan (RTP). The Program meets the requirements of State legislation calling on MAG to conduct a budget process to ensure the estimated costs of the programmed arterial street improvements do not exceed the total amount of revenues available for these improvements.

The Arterial Life Cycle Program (ALCP) provides MAG with a management tool to administer regional funding for arterial street improvements. The Program receives funding from both the Proposition 400 half-cent sales tax extension and Federal highway programs. Although MAG is charged with the responsibility of administering the overall program, the actual construction of projects is accomplished by local government agencies that provide funding to match regional level revenues.

7.1 PROGRAM COMPONENTS

The ALCP provides regional funding to widen existing streets, improve intersections, and construct new arterial segments. The program also provides resources for MAG planning studies and implementation of arterial Intelligent Transportation System (ITS) projects. It should be noted that the funding for the construction of arterial improvements is spread throughout the 20-year period covered by the Life Cycle Program.

In certain cases, local governments plan to construct projects sooner than originally scheduled in the Regional Transportation Plan in response to local priorities and development issues. When this occurs, the local jurisdiction implementing the project will be reimbursed according to the original arterial street program schedule identified in the RTP adopted in November 2003, even though construction occurs earlier. In cases when a project is deferred, the reimbursement does not occur until work is completed. Funding swaps among an individual jurisdiction's projects and the allocation of "close-out" funds may alter the reimbursement sequence for certain projects. In some cases, advanced projects will not be reimbursed unless sales tax or other program revenues in the future are higher than currently projected.

Figure 7-1, depicts the location of the projects in the ALCP. The projects shown in Figure 7-1 are cross-referenced with the data in the Appendix B by the code associated with each project.

7.1.1 Arterial Capacity/Intersection Improvements

A total of 94 arterial capacity/intersection improvement projects were originally identified in the RTP and included in the Arterial Life Cycle Program. As the engineering process has proceeded, specific types of improvements have been defined and project concepts prepared. After the detailing of the various project elements, the original 94 projects have been segmented into a total of 200 individually defined projects.

Through FY 2014, 48 ALCP projects have been completed. These projects included arterial street widenings, capacity improvement projects, and intersection improvements at the following locations.

- 75th Ave. at Thunderbird Rd.: Intersection Improvement
- 83rd Ave.: Butler Rd. to Mountain View Rd.
- Arizona Ave. at Chandler Blvd.: Intersection Improvements
- Arizona Ave. at Elliot Rd.: Intersection Improvements
- Arizona Ave. at Ray Rd.: Intersection Improvement
- Beardsley Rd.: Loop 101 to 83rd Ave/Lake Pleasant Parkway
- Chandler Blvd. at Dobson Rd.: Intersection Improvements
- Dobson Rd. at Guadalupe Rd.: Intersection Improvements
- El Mirage Rd.: Deer Valley Drive to Loop 303
- El Mirage Rd.: Bell Rd to Deer Valley Dr.
- El Mirage Rd.: Bell Rd. to Picerne Dr.
- El Mirage Rd.: Northern to Cactus (design only)
- Frank Lloyd Wright at 76th/78th/82nd Street: Intersection Improvements
- Gilbert Rd. at University Dr.: Intersection Improvements
- Gilbert Rd.: Queen Creek Rd. to Hunt Hwy. (design & right-of-way only)
- Gilbert Rd.: SR202L/Germann Road to Queen Creek Rd.
- Greenfield Rd.: Baseline Rd. to Southern Ave.
- Happy Valley Rd.: Lake Pleasant Pkwy to 67th Ave.
- Happy Valley: I-17 to 35th Ave.
- Hawes Rd.: Santan Freeway to Ray Rd.
- Lake Pleasant Pkwy.: Union Hills to Dynamite Rd.
- Loop 101 at Beardsley Rd/Union Hills Dr.
- Loop 101 Frontage Rd.: Hayden Rd to Scottsdale Rd.
- Mesa Dr.: US-60 to Southern Ave.
- Northern Parkway: Sarival to Dysart
- Northsight Blvd.: Hayden Rd. to Frank Lloyd Wright Blvd.
- Pima Rd.: SR101L to Thompson Peak Pkwy.
- Pima Rd./Happy Valley Rd.: Intersection Improvements
- Pima Rd.: Thompson Peak Parkway to Pinnacle Peak Rd.
- Pima Rd.: Via De Ventura to Krail St.
- Power Rd at Pecos: Intersection Improvements

- Power Rd.: Baseline Rd. to East Maricopa Floodway
- Power Rd: Santan Fwy to Pecos Rd.
- Price Rd.: Santan Freeway to Germann Rd.
- Queen Creek Rd.: Arizona Ave. to McQueen Rd.
- Queen Creek Rd.: Val Vista Dr. to Higley Rd.
- Ray Rd. at Alma School Rd.: Intersection Improvements
- Ray Rd.: Sossaman Rd. to Ellsworth Rd.
- Scottsdale Rd.: Thompson Peak Pkwy. to Pinnacle Peak Rd. (Phase I)
- Shea Blvd. at 90th/92nd/96th: Intersection Improvements
- Shea Blvd. at 120/124th St.: Intersection Improvements
- Shea Blvd. at Mayo/134th St.: Intersection Improvements
- Shea Blvd. at Via Linda (Phase1): Intersection Improvements
- Shea Blvd.: 96th Street to 144th Street
- Shea Blvd.: Palisades Blvd. to Fountain Hills Blvd.
- Sonoran Blvd.: 15th Ave. to Cave Creek Rd.
- Warner Rd. at Cooper Rd.: Intersection Improvements
- Val Vista Dr.: Warner Rd to Pecos Rd.

7.1.2 Intelligent Transportation Systems (ITS)

The RTP allocates funding to assist in the implementation of projects identified in the Regional ITS Plan. The ITS projects smooth traffic flow and help the transportation system to operate more efficiently. The focus of the arterial ITS program is to assist MAG member agencies with the development of their arterial traffic management systems to better address jurisdictional needs. The process for identifying and recommending arterial ITS projects for funding is overseen by the MAG ITS Committee. The ITS Committee has used an objective project rating system, which is linked to the region's ITS Strategic Plan and Regional ITS Architecture, to provide guidance in prioritizing projects.

A total of \$39.5 million in reimbursements has been provided to ITS projects through FY 2014. It is estimated that an additional \$26.4 million (2014 \$'s) in reimbursements will be provided for ITS projects between FY 2015 and FY 2018.

7.2 ARTERIAL PROGRAM REIMBURSEMENTS AND FISCAL STATUS

7.2.1 Program Reimbursements

The Arterial Life Cycle Program (ALCP) is based on the principle of project budget caps. Under this approach, regional funding allocated to a specific project is fixed (on an inflation adjusted basis) in the Regional Transportation Plan. The budgeted amount must be matched by the implementing, or lead, agency with a 30 percent minimum contribution to the total project costs. Any project costs above the amount budgeted are the responsibility of the lead agency. Under this funding scheme, program administration focuses on tracking

actual project expenditures and determining the corresponding regional share. As a result, data monitoring is primarily directed at regional funding reimbursements and total project expenditures.

During FY 2014, a total of more than \$69 million in ALCP project expenses were reimbursed or obligated to implementing agencies. This included reimbursements to seven individual agencies, as well as funding for projects in the MAG ITS program. Since the beginning of the program in FY 2006, a total of \$479 million in reimbursements or obligations has been provided (\$440 arterial street and \$39 ITS projects). An additional \$11 million has been provided for MAG Implementation Studies for a grand total of \$490 million.

The ALCP Policies and Procedures detail the three required documents for each ALCP project - the Project Overview, the Project Agreement, and Project Reimbursement Request. The Project Overview describes the general design features of the project, the implementation schedule, estimated costs, and the relationships among participating agencies. The Project Agreement is developed jointly between the lead agency and MAG and determines the responsibilities of each party. Project Reimbursement Requests may be submitted by jurisdictions once a Project Agreement has been executed. The Project Reimbursement Request requires an invoice and request for payment signed by the lead agency and MAG. The signed request for payment form is submitted to the Arizona Department of Transportation, who, in turn, reimburses the lead agency.

Table 7-1 provides a summary of project reimbursements and obligations that have occurred through FY 2014. Table 7-1 also indicates the anticipated level of future reimbursements for the period FY 2015 - FY 2026. As indicated, a total of over \$1.2 billion is anticipated to be reimbursed during this period for all ALCP categories. Appendix Tables B-1 and B-2 provide detailed information on reimbursements and obligations associated with individual ALCP projects. The appendix tables also compile total project expenditures, which include local funding on the projects. This local funding, to date, has represented approximately 45 percent of total project costs.

7.2.2 Future Fiscal Status

Table 7-2 summarizes the future funding sources and uses applicable to the Arterial Life Cycle Program for FY 2015 through FY 2026. Sources for the Life Cycle Program include the Proposition 400 half-cent sales tax extension (\$605 million); Federal Highway Congestion Mitigation and Air Quality (CMAQ) funds (\$74 million); and Federal Highway Surface Transportation Program (STP) funds (\$518 million). In addition, an allowance for inflation of \$98 million has been deducted. Including a beginning balance of approximately \$26 million, this yields a net total of \$1.13 billion (2014 \$'s) for use on arterial street projects (including ITS and Implementation Studies) through FY 2026.

TABLE 7-1
ARTERIAL STREET LIFE CYCLE PROGRAM
SUMMARY OF PAST AND ESTIMATED FUTURE
REIMBURSEMENTS: FY 2006-2026
(2014 and Year of Expenditure Dollars in Millions)

Category	Reimbursements from Regional Funding		
	Reimbursements through FY 2014 (YOE Dollars)	Estimated Future Reimbursements: FY 2015-2026 (2014 Dollars)	Total Reimbursements: FY 2006-2026 (2014 and YOE Dollars)
Capacity / Intersection Improvements	439.7	1,111.4	1,551.1
Intelligent Transportation Systems	39.5	26.4	66.0
MAG Implementation Studies	10.5	18.9	29.4
Total	489.8	1,156.7	1,646.4

Table 7-2 also lists the estimated future regional funding reimbursements totaling \$1.16 billion, identified in the Life Cycle Program for the period FY 2015 through FY 2026. As shown, projected Arterial Life Cycle Program reimbursements are slightly above (\$31 million or 2.8 percent) estimated future revenues. This difference is considered to be within the variance of revenue projections and cost estimates, and specific remedial action is not anticipated at this time.

7.3 ARTERIAL STREET PROGRAM OUTLOOK

The Arterial Life Cycle Program (ALCP) is based on the principle of project budget caps, with a fixed amount of regional funding allocated to individual projects (on an inflation adjusted basis). Since the beginning of the program, \$439 million has been disbursed and 48 arterial street projects have been completed. Additional blocks of funding have been provided for ITS projects and implementation studies, amounting to \$39 million and \$11 million, respectively.

During FY 2014, project overview reports were prepared by the lead agencies for 5 projects in the ALCP. Since the inception of the program, 80 project overviews have been submitted to MAG. These reports describe the general design features of the project, estimated costs, implementation schedules, and relationships among participating agencies. The project overview reports provide the basis for preparation of project agreements, which must be executed before agencies may receive any reimbursements from the program. A total of 11 project agreements were executed in FY 2014. Seven jurisdictions received

TABLE 7-2
ARTERIAL STREET LIFE CYCLE PROGRAM
FUTURE SOURCES AND USES OF FUNDS: FY 2015-2026
(2014 and Year of Expenditure Dollars in Millions)

SOURCES OF FUNDS	
Source	Projected Future Regional Funding FY 2015-2026 (YOE Dollars)
Proposition 400: One-Half Cent Sales Tax Extension	605.5
Federal Highway / MAG CMAQ	74.3
Federal Highway / MAG STP	517.6
Other Income	-
Bond and Loan Proceeds	0.0
Plus Beginning Balance	25.7
Less Debt Service	0.0
Less Inflation Allowance	(97.6)
Total (2014\$'s)	1,125.5
USES OF FUNDS	
Category	Estimated Future Regional Disbursements: FY 2015-2026 (2014 Dollars)
Capacity / Intersection Improvements	1,111.4
Intelligent Transportation Systems	26.4
MAG Implementation Studies	18.9
Total (2014 \$'s)	1,156.7

reimbursements or obligations for project work during FY 2014 totaling almost \$69 million, including the MAG ITS program. In all, 78 project agreements have been executed to date. Lead agencies deferred approximately \$13.7 million in federal and regional reimbursements from FY 2014 to later years due to project implementation and local funding issues.

On June 25, 2014, the MAG Regional Council approved the FY 2015 ALCP. The Regional Area Road Fund (RARF) forecast, released by the Arizona Department of Transportation in the fall of 2013, indicated a slight increase in half-cent revenues. The projection of Federal funds into the program, however, decreased under the second year of the new surface transportation funding and authorization bill, Moving Ahead for Progress in the 21st Century Act (MAP-21). As a result, the temporary elimination of program bonding and project inflation

remained in place. With the elimination of program bonding and project inflation, combined with adjustments to project schedules, no involuntary funding deferrals were needed for the second straight year.

CHAPTER EIGHT

TRANSIT LIFE CYCLE PROGRAM

The Regional Public Transportation Authority (RPTA) maintains the Transit Life Cycle Program (TLCP) and implements transit projects identified in the MAG Regional Transportation Plan. Per state legislation requirements, the RPTA conducts the budget process to ensure the estimated cost of the Regional Public Transportation System does not exceed the total amount of expected revenues available. Transit expenses include fleet purchases, operating costs, passenger and maintenance facilities, light rail construction, and other transit projects.

Major funding for the TLCP is from the Proposition 400 half-cent sales tax extension, federal transit funds, fare revenues, and local sources. The sales tax extension started on January 2, 2006 with revenues available beginning March 2006.

The RPTA is responsible for administering the half-cent sales tax revenues deposited into the Public Transportation Fund (PTF) for use on transit projects (ARS 48-5103). The RPTA maintains responsibility for the distribution of the PTF for use on transit projects as identified in the MAG RTP. The RPTA Board must separately account for monies allocated to light rail transit, capital costs, and operation and maintenance costs for other transit modes.

Although RPTA maintains responsibility for the distribution of PTF, Valley Metro Rail, Inc., (VMR) is a public nonprofit corporation created to implement the light rail system through a partnership among the cities of Phoenix, Tempe, Mesa, Glendale, and Chandler. VMR is responsible for overseeing the design, construction, and operation of the current light rail line as well as future extensions. RPTA frequently uses the name “*Valley Metro*” for the agency after adopting the term in 1993 as a marketing identity for the regional transit system. VMR uses the term “*METRO*” to refer to the light rail system similarly. In 2012, the RPTA and VMR Boards of Directors decided to integrate the staffs of the two agencies under a single Chief Executive Officer.

8.1 STATUS OF BUS PROJECTS

The Transit Life Cycle Program includes funding for Freeway Bus Rapid Transit (BRT)/Express, Arterial BRT (known as LINK), Supergrid, and other bus service. This includes operations, vehicle fleet and new capital facility improvements to the regional bus network. An overview of the status of the bus operations and capital projects in the TLCP are included in the following sections. In these discussions, the emphasis is placed on reviewing ongoing activities and service additions anticipated during the next five years (FY 2015 through FY 2019).

8.1.1 Bus Operations: Bus Rapid Transit (BRT)/Express

Regional BRT/Express transit services are comprised of Arterial BRT and Freeway BRT/Express routes. Arterial BRT routes are intended to operate as overlays on corridors served by local fixed route service, but provide higher speed services by operating with limited stops and bus only lanes, queue-jumpers, signal priority systems or other enhancements. The proposed Arterial BRT routes are intended to operate during peak and off-peak periods. In addition to Arterial BRT routes identified in the RTP, Freeway routes are also included. These routes vary by using existing and proposed high occupancy vehicle (HOV) facilities to connect park-and-ride lots with major activity centers such as downtown core areas. Freeway routes provide suburb-to-suburb and suburb to central city connections using the regional freeway system and limited stops. Location and cost information of BRT/Express Transit Services are provided in Figure 8-1 and Table C-1. The routes depicted in Figure 8-1 are cross-referenced with the data in Table C-1 by the code associated with each route.

Collectively, the Regional BRT/Express transit services account for a total of \$129 million (2014 and YOY \$'s) in regional funding for operating costs for the period FY 2006 through FY 2026 (see Table 8-2). This total represents approximately 2.4 percent of the total regional funding budget allocated for transit. There are 16 BRT/Express routes identified for funding in the TLCP during the planning period from FY 2006 through 2026. Though included in the Regional Transportation Plan, an additional 15 routes have been shifted beyond FY 2026. Included in the TLCP as an illustrative project is the Chandler Blvd. Arterial BRT. Since funding became available, a total of 14 routes have been implemented.

Service improvements along Scottsdale/Rural road are planned for implementation in FY 2016. These improvements will be implemented in lieu of the proposed Scottsdale/Rural Road LINK project that was the only route planned for implementation during the next five years, FY 2015 through FY 2019. Additional service is proposed on a segment of Route 72. The LINK service will be deferred for implementation in the future.

Routes Implemented During FY 2014

- None

Routes Planned for Implementation During FY 2015 through FY 2019

- None

Figure 8-1



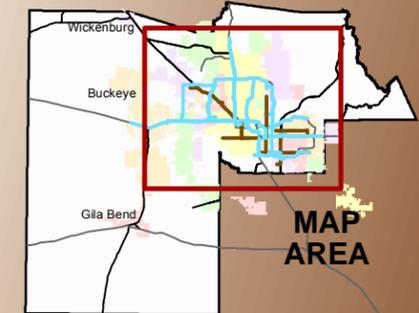
MAG 2014 Annual Report on Proposition 400 Bus Rapid Transit (BRT)/ Express Bus

-  Arterial BRT Routes
-  Freeway BRT Routes
-  Freeways
-  Highways
-  Other Roads
-  County Boundary

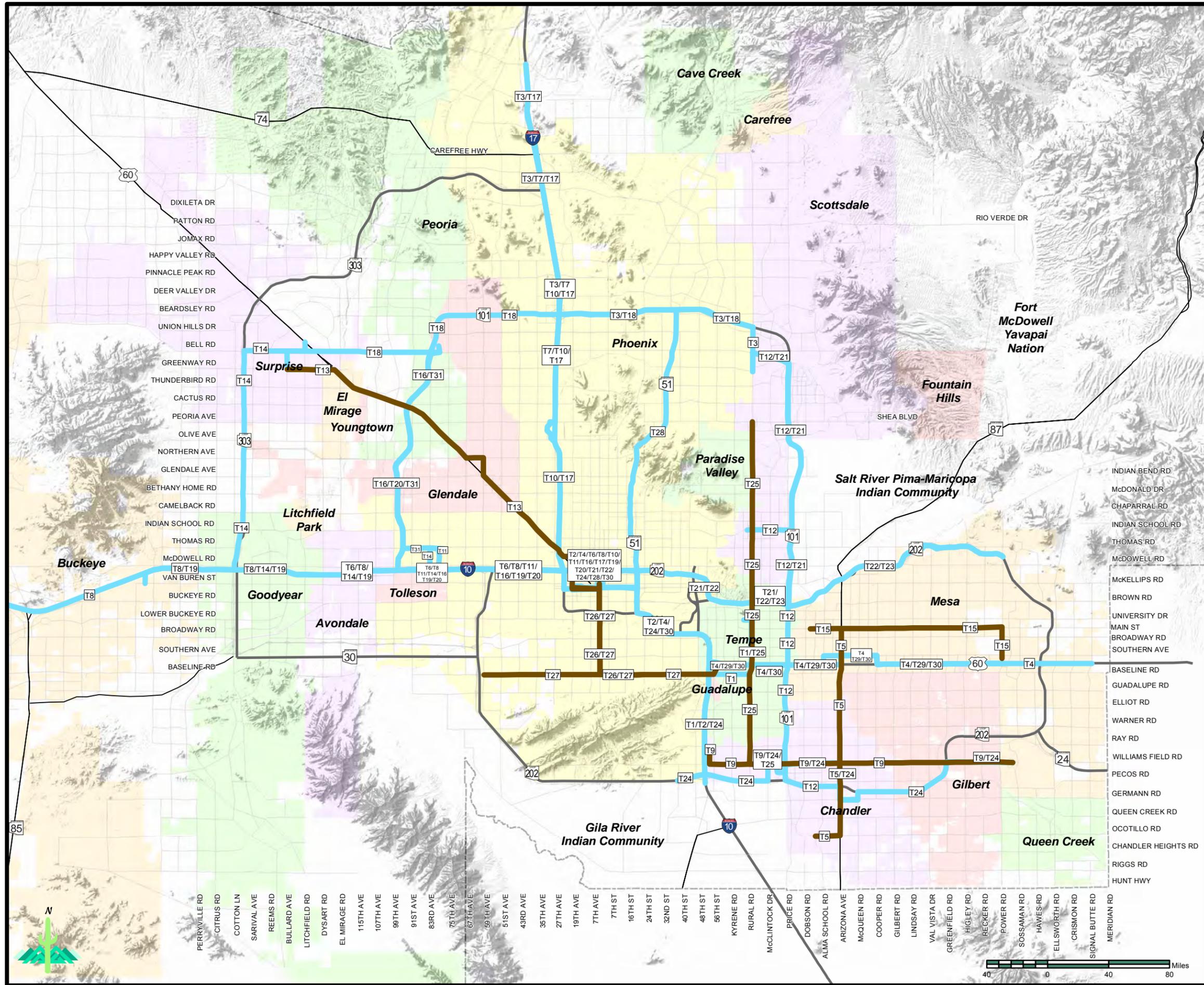
Routes are conceptual and subject to change. Contact Valley Metro to obtain current status. Ongoing operational planning includes an extensive public outreach component.

Alignments for new freeway, highway, arterial, and light rail/high capacity transit facilities will be determined following the completion of appropriate design and environmental studies.

©2014, All Rights Reserved



While every effort has been made to ensure the accuracy of this information, the Maricopa Association of Governments makes no warranty, expressed or implied, as to its accuracy and expressly disclaims liability for the accuracy thereof.



8.1.2 Bus Operations: Supergrid

Commonly referred to as “Supergrid Routes,” the Regional Grid routes are bus routes situated along major roads in the regional arterial grid network. The supergrid network allows a higher level of operational efficiency than the local bus network by regionally funding the key routes at a consistent level of service across all served jurisdictions. Other elements of the fixed route bus network are hindered by varying service levels across routes and jurisdictions, which is a direct result of the variability of local funding from jurisdiction to jurisdiction. Due to current funding limitations at the local level, consistent service operation across jurisdictions may not be possible. Regionally funding bus operations ensures a degree of consistency along the supergrid network.

Figure 8-2 and Table C-2 provide information on the locations and costs associated with the regional bus grid. The routes depicted in Figure 8-2 are cross-referenced with the data in Table C-2 by the code associated with each route.

Regional Grid bus operations account for \$639 million (2014 and YOE \$'s) in regional funding for the period FY 2006 through FY 2026 (see Table 8-2). This represents approximately 11.8 percent of the total regional funding budget allocated for transit. There are 23 Regional Grid routes identified for funding in the TLCP during the planning period from FY 2006 through 2026. Many of the routes scheduled for funding will not be implemented with the full service levels originally programmed, due to the decline in revenues. Lower service levels have been programmed in order to implement more of the routes through FY 2026. An additional 10 routes have been shifted beyond FY 2026 but are in the Regional Transportation Plan. In total, nineteen routes have been implemented since funding became available.

Two routes were implemented during FY 2014. In general, these routes were originally planned to operate in the peak direction at 15-minute intervals during the two-hour morning and afternoon commute periods, and at 30-minute intervals during the rest of the service day. In addition, weekend service is provided at 30-minute intervals. Due to the reduction in revenues, these routes are currently planned for lesser service levels. Funding is only adequate for existing service levels in some cases. Three routes are planned for FY 2015 through 2019. These are existing routes that will receive TLCP funding and may also receive improved service levels and/or route extensions.

Routes Implemented During FY 2014

- Elliot Road (T53)
- Thomas Road (T68)

Figure 8-2



MAG 2014 Annual Report on Proposition 400

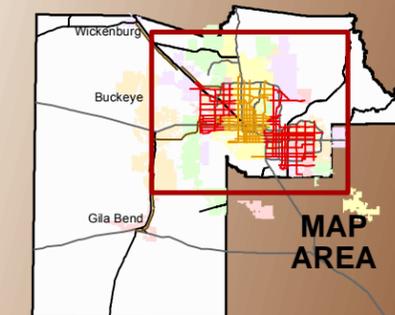
Super Grid Bus System

- Regional Grid Routes
- Grid Routes Funded by City of Phoenix
- New Rural Routes
- Freeways
- Highways
- Other Roads
- County Boundary

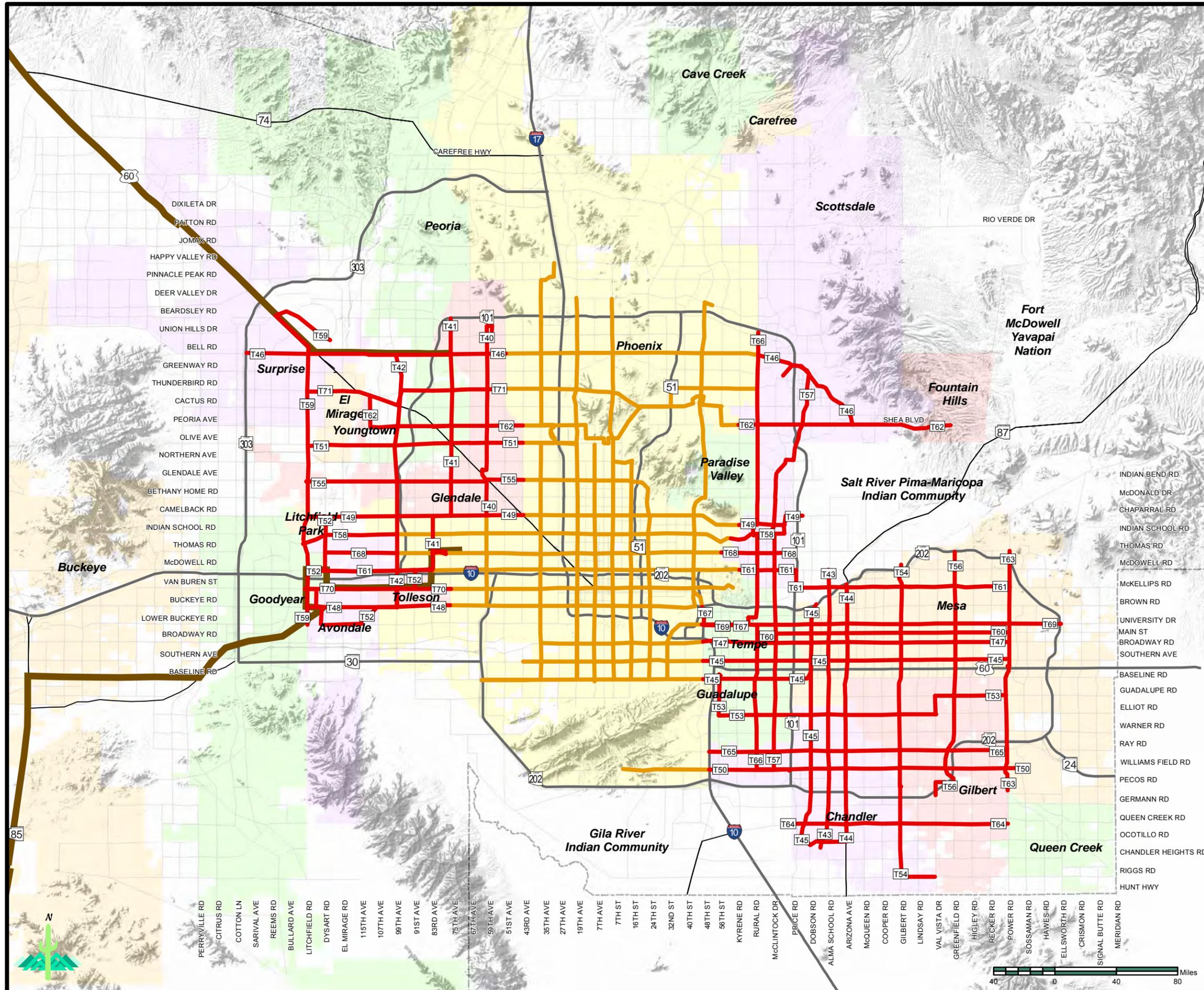
Routes are conceptual and subject to change. Contact Valley Metro to obtain current status. Ongoing operational planning includes an extensive public outreach component.

Alignments for new freeway, highway, arterial, and light rail/high capacity transit facilities will be determined following the completion of appropriate design and environmental studies.

©2014, All Rights Reserved



While every effort has been made to ensure the accuracy of this information, the Maricopa Association of Governments makes no warranty, expressed or implied, as to its accuracy and expressly disclaims liability for the accuracy thereof.



Routes Planned for Implementation During FY 2015 through FY 2019

- Waddell/Thunderbird (T71); Service start: FY 2015.
- Van Buren Street (T70); Service start: FY 2016.
- Alma School Road (T43); Service start: FY 2018.

8.1.3 Bus Operations: Other

Other bus services operating costs account for a total of \$751 million (2014 and YOE \$'s) in regional funding for the period FY 2006 through FY 2026 (see Table 8-2). Other bus operations costs include paratransit services, rural/flexible routes, commuter vanpools, safety and security, operating contingencies and RPTA planning and administration costs. Table C-3 provides information on the costs associated with these services. The services are described briefly below:

ADA Paratransit Services – ADA paratransit services address the needs of disabled riders who cannot utilize fixed route bus service due to physical or cognitive disability. Paratransit service provides curbside pick-ups and drop-offs by demand-response services. As required by the Americans with Disabilities Act (ADA) this service is provided for all ADA-certified patrons for all areas within three-quarter miles of fixed bus route service. These services account for a total of \$433 million (2014 and YOE \$'s) in regional funding during FY 2006 through FY 2026 (see Table C-3). During the next five years (FY 2015 through FY 2019), it is anticipated that \$143.6 million (2014 \$'s) will be expended providing paratransit services.

Rural/flexible Routes - This service type addresses the need to provide connections to urban areas from rural communities of the county. Rural routes provide connections between remote communities and urban transit nodes to address a range of trip needs such as work, shopping, education, and access to various community services. These services account for a total of \$8 million (2014 and YOE \$'s) in regional funding during FY 2006 through FY 2026 (see Table C-3).

Funding has been identified for two rural transit routes. A route operating between Gila Bend and West Phoenix was initiated in FY 2006. The second route was initiated in FY 2007 with service between Wickenburg and Glendale. Valley Metro looked at ways to enhance ridership on the Wickenburg route due to low productivity. However, as the productivity continued to be very low, the route was eliminated in FY 2012.

Commuter Vanpools – The Commuter Vanpool Program is a customized express service for commuters managed by Valley Metro through its complementary rideshare program. Commuter vanpools allow groups of commuters throughout the region to self-organize and utilize a vehicle from Valley Metro to operate a carpool service. Vanpools can be effective at serving suburban employment

centers such as office parks and office campuses. Vanpooling is one of the Transportation Demand Management strategies many employers have implemented as a Trip Reduction Program measure. Through sponsorship and funding of a vanpool program, Valley Metro aspires to maintain rider fares at a level that is attractive to the commuter. This service is available to all employers and commuter groups in Maricopa County. Operating costs are fully recovered through fare revenues and are not subsidized.

Safety and Security – Funds are set aside to improve the safety and security of passengers and transit assets such as rolling stock and facilities. Specific expenditures will be programmed each year based on need. Items may include closed circuit television at facilities, cameras on buses, and other needed infrastructure improvements in support of safety and security. These services account for a total of \$13 million (2014 and YOE \$'s) in regional funding during FY 2006 through FY 2026 (see Table C-3).

RPTA Planning, Administration and Passenger Support Services – Valley Metro/RPTA receives an allocation from the Regional Area Road Fund (RARF) for planning and administration. This pays for the overhead, administration costs, and any regional or general planning costs that are not attributable to specific RTP projects. These services account for a total of \$78 million (2014 and YOE \$'s) in regional funding during FY 2006 through FY 2026 (see Table C-3). In addition, passenger support services account for a total of \$141 million (2014 and YOE \$'s) in regional funding during FY 2006 through FY 2026 (see Table C-3).

Existing Local and Express Service: Supplementary funding is allocated to previously existing local and express services, which complement the planned BRT and regional grid networks. This accounts for a total of \$78 million (2014 and YOE \$'s) in regional funding during FY 2006 through FY 2026 (see Table C-3).

8.1.4 Bus Capital: Facilities

Design and construction is underway on a number of facilities including park-and-ride and transit center facilities. Other passenger facilities are to be implemented over the next several years. It is anticipated that a total of \$63 million (2014 \$'s) in regional funding will be expended during the next five years (FY 2015 through FY 2019) on bus capital facilities.

With the expansion of transit service, there is additional need for passenger facilities and associated maintenance. Ongoing capital planning efforts will identify specific locations and the timing of construction for these facilities. Efforts including the identification and evaluation of potential transit passenger and maintenance facilities sites are included in the capital planning process. In cooperation with the host communities, this process will guide the selection of

sites including public outreach efforts to identify and address the concerns of affected neighborhoods, institutions, and commercial users.

Capital projects affiliated with regional bus operations account for a total of \$263.7 million (2014 and YOE \$'s) during FY 2006 through 2026 (see Table C-4). Due to the decline in revenues, many of the facilities originally programmed are currently unfunded through FY 2026. Capital projects currently funded in the RTP are the completion of 11 park-and-ride lots; 5 transit centers (4 bus-bay); 2 transit centers (6 bus-bay); 2 transit centers (for major activity centers); 2 new bus maintenance facilities; one dial-a-ride maintenance facility; the purchase of BRT Right-of-way and associated improvements in 3 corridors; and 230 bus stop pullouts/improvements at various locations.

Design and construction is underway on a number of facilities including park-and-ride and transit center facilities. Other passenger facilities are to be implemented over the next several years. It is anticipated that a total of \$63.4 million (2014 \$'s) in regional funding will be expended during the next five years (FY 2015 through FY 2019) on bus capital facilities.

8.1.5 Bus Capital: Fleet

Over the planning horizon associated with Proposition 400, fleet purchases account for a total of \$853 million (2014 and YOE \$'s) during FY 2006 to FY 2026 (see Table C-5). Planned fleet purchases include 1,383 buses for fixed route networks; 26 buses for rural routes; 643 Dial-a-Ride (DAR) vans for paratransit purposes; and 1,392 vanpool vans. It is anticipated that a total of \$219 million (2014 \$'s) in regional funding will be expended during the period FY 2015 through FY 2019 on vehicle purchases. These purchases will include 292 fixed route buses, 6 express/BRT buses, 5 rural transit buses, 173 paratransit vehicles, and 350 commuter vans. Both replacement and expansion vehicles are reflected in these amounts.

8.2 STATUS OF HIGH CAPACITY/ LIGHT RAIL TRANSIT PROJECTS

An extensive High Capacity / Light Rail Transit (HCT/LRT) component is included in the TLCP for the MAG Region. This includes future extensions of HCT/LRT corridors planned throughout the region as well as support infrastructure for the system. A portion of this amount supported the existing 20-mile Central Phoenix / East Valley (CP/EV) light rail.

Figure 8-3, Tables C-6, and C-7, provide information on the locations and costs of HCT/LRT support infrastructure and route extensions throughout the metropolitan area. The TLCP accounts for a total of \$2.77 billion (2014 and YOE \$'s) for HCT/LRT projects (see Table 8-2). This amount represents approximately 51.2 percent of the total regional funding dedicated to transit. Approximately \$2.1 billion (2014 and YOE \$'s) of this amount applies toward construction of route

Figure 8-3



MAG 2014 Annual Report
on Proposition 400

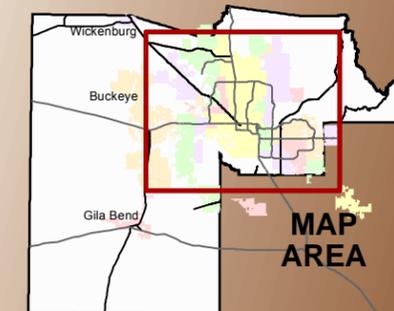
Light Rail Transit (LRT)/
High Capacity Transit

- Initial 20-mile Light Rail Segment
- Future High Capacity Transit Corridor
- Freeways
- Highways
- Other Roads
- County Boundary

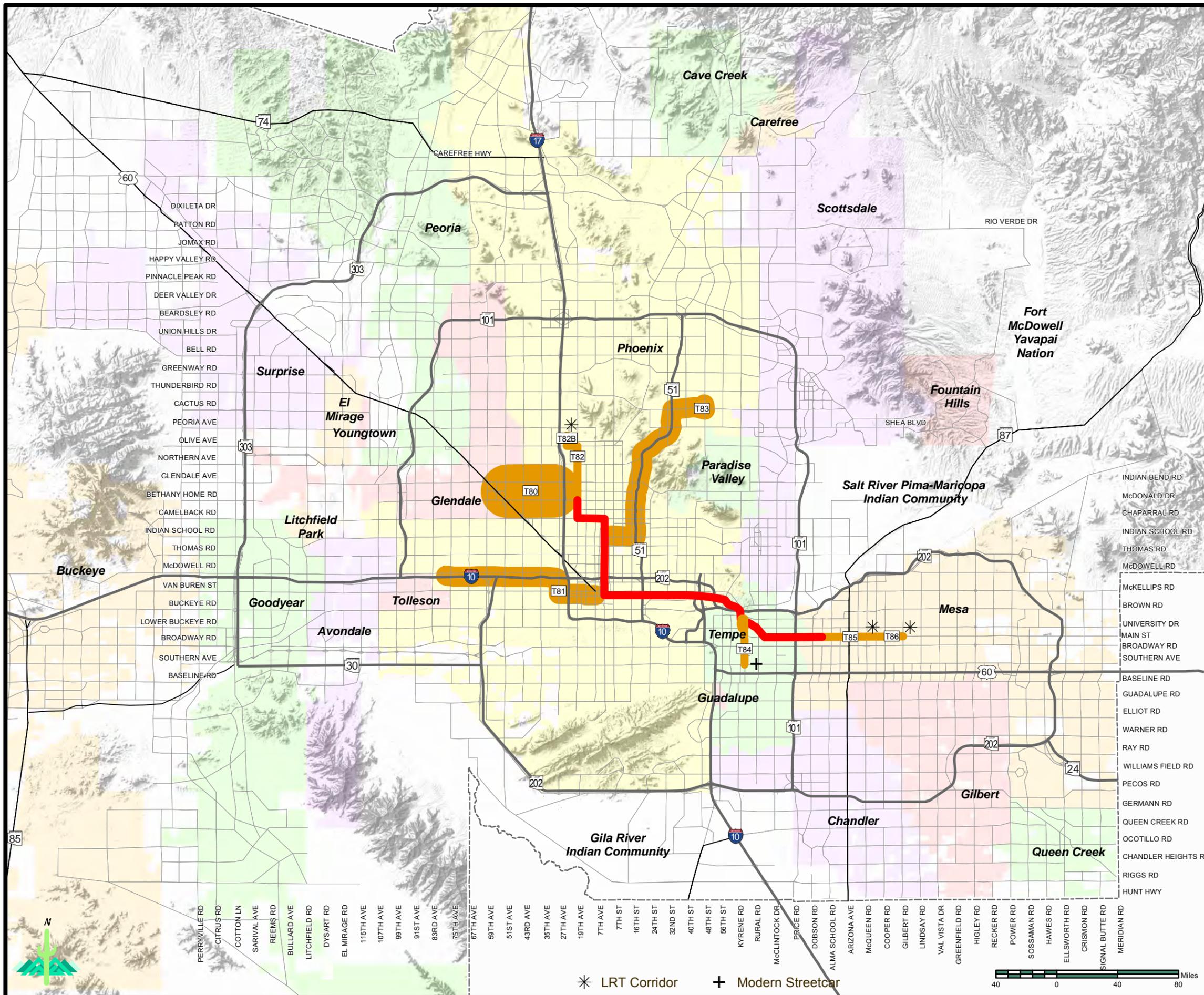
The Transit Life Cycle Program does not include funding for the Eligible High Capacity Corridors

Alignments for new freeway, highway, arterial, and light rail/high capacity transit facilities will be determined following the completion of appropriate design and environmental studies.

©2014, All Rights Reserved



While every effort has been made to ensure the accuracy of this information, the Maricopa Association of Governments makes no warranty, expressed or implied, as to its accuracy and expressly disclaims liability for the accuracy thereof.



extensions. The remaining \$700.9 million (2014 and YOE \$'s) applies to support infrastructure affiliated with the HCT/LRT system. Operating costs do not account for any of the regional funding for HCT/LRT system.

8.2.1 Central Phoenix/East Valley (CP/EV) LRT

The CP/EV light rail starter segment was an outcome from the 1998 CP/EV Major Investment Study (MIS). The purpose of the CP/EV MIS was to identify transportation improvements designed to reduce existing and future traffic congestion, improve mobility options, and provide transportation alternatives in the corridor linking central Phoenix, Tempe and Mesa. The alignment for the CP/EV LRT covers a total of 19.7 miles, extending from Bethany Home Road and 19th Avenue into downtown Phoenix; from downtown Phoenix to downtown Tempe and Arizona State University; and continuing to the intersection of Main Street and Sycamore in Mesa. The CP/EV LRT starter segment was completed and began operations in December 2008.

The CP/EV LRT system includes 28 stations, 9 park-and-ride lots, and 50 light rail vehicles. Additionally the CP/EV LRT utilizes traffic signal priority strategies to improve the system's speed. Light rail stations are generally located about 3/4-mile apart, but closer (1/3-mile) in urban centers. The park-and-ride facilities have over 3,600 spaces.

The CP/EV LRT operates primarily at-grade on city streets, with two tracks and light rail vehicles running in trains from one to three cars. The trains run in both directions approximately 18 hours per day on weekdays, and 22 hours per day on weekends. The trains operate every 12 minutes during peak hours, 15 minutes on weekends and 20 minutes during off-peak hours.

The CP/EV system is complemented by shuttle buses and a fixed route bus service network. Half-cent sales tax money from Proposition 400 is allocated toward certain elements of the support infrastructure of the system. Regional funding for the HCT/LRT system is not utilized to pay for operating costs or route construction.

8.2.2 High Capacity / Light Rail Transit: Support Infrastructure

The TLCP for the period FY 2006 through FY 2026, support infrastructure affiliated with the HCT/LRT system accounts for a total of \$700.9 million (2014 and YOE \$'s, see Table C-6). Of this amount, \$199 million applies toward infrastructure along the CP/EV (expended by 2010); \$120.1 million applies toward corridor preliminary planning, project development and system integration planning (to be expended by 2026); \$201.8 million for utility relocation reimbursements; and \$180.3 million applies to other HCT/LRT improvements throughout the system (to be expended by 2026).

8.2.3 High Capacity / Light Rail Transit: Corridors

The completions of seven additional LRT/HCT segments on the system are included in the TLCP using regional funding. These include: (1) a 4.6-mile Northwest Extension, which in FY 2007 was split into two phases; (2) a 2.7-mile Tempe Streetcar; (3) a 3.1-mile light rail extension from the east terminus of the CP/EV to Mesa Drive; (4) a new 1.9-mile extension from Mesa Dr. to Gilbert Rd., which was amended into the Regional Transportation Plan in 2013; (5) a 5.0-mile corridor to downtown Glendale; (6) an 11.0-mile corridor along I-10 into west Phoenix; and (7) a 12.0-mile corridor to northeast Phoenix. The development of the route extensions account for a total of \$2.1 billion (2014 and YOE \$'s) during FY 2006 through FY 2026 (see Table C-7).

Local sources will provide approximately half of the funding for the Northwest Extension (phase II) and Glendale corridor. For some of these segments, Federal 5309 funds will provide the remaining half as a regional funding source. It is not anticipated that half-cent funds will be applied to these segments apart from funding for support infrastructure (including vehicles, bridges and regional park-and-ride lots) and preliminary planning efforts. The status of development work on the route extensions is described below.

Northwest Extension:

The Northwest Extension was split into two phases in FY 2007. For Phase 1 (to Dunlap Rd.), design and right-of-way acquisition were completed in 2008-2009 and 2008-2010 respectively. Construction for the Phase 1 extension is scheduled to be complete in 2016. Utility relocations and street improvements have been completed and construction activities were initiated in January 2013 in the Phase 1 corridor. Northwest Extension Phase 2 is scheduled to be complete in 2026.

Tempe Streetcar:

The Tempe Streetcar Locally Preferred Alternative (LPA) was approved in FY 2011. In April 2013, the project was approved into the Project Development phase by the Federal Transit Administration (FTA). To fit FTA's new federal funding criteria better, Valley Metro and the City of Tempe made modifications to the streetcar route. The modified project would include an alignment along Rio Salado Parkway and connect with the one-mile downtown Tempe loop on Ash and Mill Avenues then travel south to Apache Boulevard. The route would then continue on Apache Boulevard east to the Dorsey LRT station. The modified alignment is anticipated to be adopted by Tempe City Council in November 2014. The Environmental Assessment phase is expected to be complete by summer 2015. Construction is estimated to be complete in 2018.

Central Mesa Extension:

The Central Mesa LRT Extension will extend along Main Street from the end of line station for the CP/EV at Sycamore eastward to Mesa Drive. Most land acquisition has been completed along the corridor. Construction activities were initiated in May 2012 and after the approval of the Project Construction Grant Agreement (PCGA) in October 2012. Construction is scheduled to be complete in 2015. The extension from Mesa Drive to Gilbert Rd., which was amended into the RTP in 2013, is anticipated to be completed in 2018.

Gilbert Road Extension:

The extension to Gilbert Rd., which was amended into the RTP in 2013, will be funded with local and federal sources provided by the City of Mesa. None of the costs for this extension, including vehicles and utility relocations, will be borne by the half-cent regional funds. The federal funds are Congestion Mitigation/Air Quality (CMAQ) and Surface Transportation Program (STP) funds from Federal Highway Administration which are being flexed to transit.

West Phoenix/Central Glendale:

The West Phoenix/Central Glendale project will travel westbound from the existing CP/EV line through Phoenix to the city of Glendale. In 2013, Valley Metro, city of Phoenix, and the city of Glendale initiated a transit corridor study to identify determine a route location and a type of transit that would best serve the transportation needs in the corridor. The corridor study is expected to be complete in the spring 2015. It is anticipated that the environmental phase of the project would begin in spring 2017. Construction is anticipated to be completed in 2026.

Capitol/I-10 West:

The Capitol/I-10 West LPA recommendation for alignment and technology were formally adopted by Phoenix City Council in May 2012 and by MAG regional council in July 2012. The 11-mile light rail alignment would extend from downtown Phoenix through the State Capitol area to approximately 79th Avenue and the I-10 West freeway. The Environmental Assessment began in spring 2013 and is scheduled to be completed in the summer 2015. Construction is scheduled to be complete in 2023.

Northeast Phoenix:

The Northeast Phoenix LRT corridor is planned to connect to the current 20-mile CP/EV LRT and extend near Paradise Valley Mall. While remaining in the RTP, the project has been shifted beyond the TLCP horizon year of FY 2026 to accommodate the decrease in actual and forecasted revenues. Construction is now anticipated to be complete in 2034.

8.3 TRANSIT PROGRAM CHANGES

The \$5.4 billion for FY 2006-2026 estimated total transit costs represent a 2.7 percent increase over the figure of \$5.0 billion provided in the 2013 Annual Report. In FY 2014, cost adjustments were minimal and estimates for the Transit Life Cycle Programs components are summarized in Table 8-1. The FY 2014 changes amounted to a net total increase of approximately \$142 million. The TLCP is dynamic program updated based on changing economic conditions, development patterns, local priorities and availability of funding. Included projects are continually reevaluated to reflect the fluidity of the program.

As noted in the transit appendix tables, the “service start date” for a number of bus routes was shifted beyond FY 2026, Due to TLCP adjustments made in FY 2009 and FY 2010. Additionally, in FY 2011 four BRT/Express routes were eliminated and the City of Phoenix assumed funding for four other BRT/Express routes already in service.

TABLE 8-1
TRANSIT LIFE CYCLE PROGRAM COST CHANGES
 (2013, 2014 and Year of Expenditure Dollars in Millions)

Category	2013 Annual Report Total Costs: FY 2006 - 2026 (2013 and YOE Dollars)	2014 Annual Report Total Costs: FY 2006 - 2026 (2014 and YOE Dollars)	Change in Total Costs: 2013 vs. 2014
Bus Operations: BRT/Express	130.6	128.8	(1.8)
Bus Operations: Regional Grid	616.2	639.2	23.0
Bus Operations: Other	735.2	751.0	15.8
Bus Capital Projects: Facilities	260.6	263.7	3.1
Bus Capital Projects: Fleet	849.4	853.1	3.6
Light Rail Transit: Support Infrastructure	663.5	700.9	37.4
Light Rail Transit Capital: Route Extensions	2,007.0	2,068.1	61.1
Total	5,262.6	5,404.7	142.2

8.4 TRANSIT PROGRAM EXPENDITURES, ESTIMATED FUTURE COSTS AND FISCAL STATUS

8.4.1 Transit Life Cycle Program Update

Valley Metro RPTA and METRO Boards of Directors unanimously approved the 2014 Transit Life Cycle Program (TLCP) update on June 19, 2014. The bus and rail program financial models are balanced both annually and through the sunset

of the half-cent tax. The bus financial model provides guidance for the continuing effort to fully rebalance the bus component of the TLCP. The high capacity / light rail transit (HCT/LRT) component of the TLCP has a fund balance of \$39 million in FY 2026 after the completion of all other HCT/LRT projects in the RTP.

In FY 2014, TLCP balance was achieved by finding operational efficiencies, including consolidation of two separate operating contracts to one master contract. During FY 2014, significant efforts were made to identify further cost savings or to enhance operating revenues.

8.4.2 Program Expenditures and Estimated Future Costs

Table 8-2 provides a summary of past expenditures, estimated future costs and total costs by major program category for the Transit Life Cycle Program. In the appendix, Tables C-1 through C-7 provide detailed data on costs at the project level.

As part of light rail expenditures, all costs for relocation of utility facilities incurred after July 1, 2003 as a direct result of the construction and operation of a light rail project are reimbursed to the utility by the light rail project as required by A.R.S. 48-5107. Additionally, as light rail operating expenses were excluded at inception from the Proposition 400 program, for light rail projects only capital expenditures and costs are reported. These expenditures and costs are reported to reflect total capital costs and include all funding sources to offset those costs.

For bus services, the Proposition 400 program covers both capital and operating expenses. Accordingly, both capital and operating expenditures and costs are reported. These expenditures and costs reflect total costs and include all funding sources to offset those costs, including local funds and farebox revenues.

For the period FY 2006 through FY 2026 the total estimated cost for the Transit Life Cycle Program is \$5.4 billion (2014 and YOE \$'s) as indicated in Table 8-2. Expenditures through FY 2014 total \$1.8 billion (YOE \$'s), while estimated future costs total \$3.7 billion (2014 \$'s).

8.4.3 Future Fiscal Status

Future funding sources and uses that apply to the Transit Life Cycle Program are summarized in Table 8-3 for the period FY 2014 through FY 2026. Available funding sources include the Proposition 400 half-cent sales tax extension (\$1.9 billion); Regional Area Road Fund transfer (\$63 million); Federal Transit/Formula Program funds (\$612 million); Federal Transit/Discretionary Program funds (\$946 million); Federal Highway/CMAQ funds (\$238 million); Federal Highway/STP funds (\$32 million); other income from local sources (\$486 million); and bond and

TABLE 8-2
TRANSIT LIFE CYCLE PROGRAM
SUMMARY OF EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026
(2014 and Year of Expenditure Dollars in Millions)

Category	Expenditures: through FY 2014 (Year of Expenditure Dollars)			Estimated Future Costs: FY 2015-2026 (2013 Dollars)	Total Costs: FY 2006 - 2026 (2014 and YOE Dollars)
	Operations	Capital Investments	Total		
Bus Operations: BRT/Express	49.7	--	49.7	79.1	128.8
Bus Operations: Regional Grid	194.0	--	194.0	445.2	639.2
Bus Operations: Other	251.0	--	251.0	500.0	751.0
Bus Capital Projects: Facilities	--	193.4	193.4	70.3	263.7
Bus Capital Projects: Fleet	--	337.1	337.1	516.0	853.1
Light Rail Transit: Support Infrastructure	--	406.7	406.7	294.3	700.9
Light Rail Transit Capital: Route Extensions	--	322.6	322.6	1,745.6	2,068.1
Total	494.7	1,259.7	1,754.3	3,650.4	5,404.7

loan proceeds (\$180 million). Additional revenue from future bus farebox receipts are estimated as a total of \$174 million. To cover estimated future debt service a total of \$470 million is deducted from these sources. Additionally deducted is an allowance for inflation in the amount of \$684 million. With a beginning balance of \$157 million, a net total of \$3.7 billion (2014 \$'s) is available for use on transit projects and programs through FY 2026. It should be noted that the Federal Highway funding amounts incorporate funds "flexed" from the Arterial Life Cycle Program.

Estimated future uses totaling \$3.7 billion (2014 \$'s) are also listed in Table 8-3 for the period covering FY 2014 through FY 2026, as identified in the Transit Life Cycle Program. Expressed in 2014 \$'s these costs are estimated at \$1.0 billion for bus operations, \$586 million for bus capital projects, and \$2.0 billion for light rail transit capital project. Projected revenues are sufficient to meet future projects costs with a small surplus of approximately \$4 million (2014 \$'s) remaining in the Transit Life Cycle Program. Achieving a balanced program can be attributed to significant efforts over the past several years by RPTA and METRO in conjunction with their members and MAG.

TABLE 8-3
TRANSIT LIFE CYCLE PROGRAM
FUTURE SOURCES AND USES OF FUNDS: FY 2015-2026
(2014 and Year of Expenditure Dollars in Millions)

SOURCES OF FUNDS	
Category	Projected Future Funding: FY 2015-2026 (YOE Dollars)
Proposition 400: One-Half Cent Sales Tax Extension	1,920.4
Regional Area Road Fund	62.7
Federal Transit / Formula Program Funds	611.6
Federal Transit / Discretionary Program Funds	946.0
Federal Highway/ MAG CMAQ	238.3
STP-AZ	32.1
Other Income	485.7
Bond and Loan Proceeds	179.9
Bus Farebox Revenues	174.1
Plus Beginning Balance	157.3
Less Debt Service	(470.3)
Less Inflation Allowance	(683.6)
Total (2014 \$'s)	3,654.1
USES OF FUNDS	
Category	Estimated Future Costs: FY 2015-2026 (2014 Dollars)
Bus Operations: BRT/Express	79.1
Bus Operations: Regional Grid	445.2
Bus Operations: Other	500.0
Bus Capital Projects: Facilities	70.3
Bus Capital Projects: Fleet	516.0
Light Rail Transit: Support Infrastructure	294.3
Light Rail Transit Capital: Route Extensions	1,745.6
Total (2014 \$'s)	3,650.4

8.5 TRANSIT PROGRAM OUTLOOK

The Transit Life Cycle Program began on July 1, 2005 with a primary goal of the development and implementation of transit projects identified in the MAG RTP covering FY 2006 through FY 2026. Estimated future costs for the period of FY 2014 through FY 2026 are in balance with project future funds available with a remainder of approximately \$4 million (2014 \$'s). Over the past several years, the TLCP balance was achieved by delaying the implementation of numerous

projects and reducing the scope of many other projects, particularly bus routing and frequencies adjustments. Additionally, operating efficiencies were achieved by consolidating contracts. The life cycle process continually requires a balance to be maintained through effective financing and cash flow management, value engineering of projects, and Plan and Program adjustments as necessary.

Through the discretionary “New Starts Program”, a significant portion of the funding for the LRT/HCT system is awarded by the US Department of Transportation. At the Federal level, the MAG region is subject to a highly competitive process resulting in indeterminate timing and amounts of New Starts monies. Therefore, the prospective New Starts awards require careful monitoring. Beyond the “New Starts Program” for the LRT/HCT system revenues from the Federal Transit Administration are a key source of funding for the bus capital program. At the federal level, continued pressure to reduce spending could result in decreased federal revenues for the TLCP. In the future, this could put additional projects in jeopardy as a result.

Moreover, the latest Federal transportation legislation, Moving Ahead for Progress in the 21st Century (MAP-21), makes significant changes to the federal transit funding programs. MAP-21 eliminates many of the discretionary programs in favor of formula based programs. This allows a more predictable stream of federal revenues for planning purposes. Throughout the implementation of MAP-21, Valley Metro and MAG will continue to monitor revenues and evaluate the legislation’s impact on the RTP.

CHAPTER NINE

TRANSPORTATION SYSTEM PERFORMANCE

Proposition 400 legislation set forth the factors to be considered during the development of the MAG Regional Transportation Plan (RTP), such as the impact of growth on transportation systems and the use of a performance-based planning approach. Consistent with state legislation, the development of the MAG Regional Transportation Plan (RTP) included a performance-based planning and programming process. This process established goals, objectives and performance measures for developing various options and evaluating potential scenarios to be included in the Plan. A number of the goals and objectives adopted relate to the performance of the system as a whole as well as the individual components of the systems across all modes, such as freeway, arterial and transit corridors.

In conjunction with the adoption of the MAG RTP in November 2003 and the passage of Proposition 400 in November 2004, the Arizona Legislature issued A.R.S. 28-6313 which requires the Auditor General to contract with a nationally recognized independent auditor to conduct a performance audit of the regional transportation system beginning in 2010 and every five years thereafter. The 2010 Performance Audit of the MAG RTP was successfully completed and released to the public on December 21, 2011. The audit examined the RTP multimodal plan and evaluated it using specific performance measures included in MAG's Performance Measurement Program.

Pursuant to national goals and performance management requirements set forth in the current federal transportation legislation (MAP-21), MAG continues to place emphasis on performance-based planning, and focuses on enhancing the ongoing Transportation System Performance Monitoring and Assessment Program. Over the last five years, this program has developed various reporting methodologies and web-based components, allowing policymakers, technical users and the public in general easy access to performance data and visualization. The material presented in this chapter documents performance of the regional transportation system, utilizing the on-going MAG data monitoring and assessment program, as well as peak period forecasted performance of the system for 2025 based on simulations from the MAG travel demand model.

9.1 PERFORMANCE MONITORING AND ASSESSMENT CONCEPTS

The transportation system performance monitoring and assessment process includes: (1) tracking of the performance of the transportation system on an ongoing basis, and (2) forecasting how the system is likely to perform in the future. The tracking element emphasizes collection of observed data and development of comparative statistics that reveal trends in system performance over time. The forecasting element focuses on the use of travel demand

computer models to project travel conditions and draw conclusions regarding future performance of the transportation system.

9.1.1 Monitoring Current Conditions

The optimum combination of accuracy and detail for performance measurement is based on real time, observed data sources. This data provides the information to assess the principal operating characteristics of the current transportation system and to establish a historical record that tracks performance trends over time. The specific parameters observed vary by transportation mode and must take into consideration the practicality and expense of collecting data on a continuing basis. The latter factor is particularly important if a historical record is to be established that allows effective analysis of performance trends. A large amount of data is collected annually in the MAG region related to the movement of people, goods, and services.

- Data Items - For roadway systems, typical data collected to assess current performance includes: vehicle counts at a sample of locations; vehicle densities along various roadway segments; speeds and point-to-point travel times; delays; number and types of accidents and, as a result of special studies, intersection queue lengths. For transit systems, common data items cover: boardings and farebox revenues by route; on-board passenger loadings at various points in the system; operating costs; and service standards.
- Data Sources - Data from the Arizona Department of Transportation's (ADOT) Freeway Management System (FMS), which now includes 122 centerline miles of the regional freeway system, is collected continuously in five minute increments from loop and acoustic sensors that detect and record the movement of vehicles across a large portion of the MAG region. Currently the FMS instrumented portion covers approximately 40 percent of the of the entire MAG freeway system. As the FMS system continues to grow, it will allow the use of these data for future reliability performance calculations over the entire urban highway system.

For the past three years, MAG has also acquired speed traffic data for freeways and arterials in the region from third party commercial sources; this acquisition has enhanced the baseline traffic data archive serving planning, programming and performance measurement activities. Two private data providers are under contract with MAG to supply GPS-probe based speed data for all regional freeways and all major arterials, thus supplementing the existing arterial database and ADOT FMS freeway database. This acquisition is proposed to be renewed on a yearly basis allowing the current data archive to be more geographically complete and enable MAG to perform analysis on system and corridor performance from comprehensive data sources.

In addition, traffic count data is collected on arterial roadways through both permanent and temporary counting stations deployed by a variety of MAG member agencies as well as a by a MAG sponsored vehicle counts program at selected regional locations. Moreover, periodic studies are conducted to collect information on topics such as the average number of people in cars, the proportion of trucks on the roadways, and levels of congestion on the freeways and arterials.

- Recent Monitoring Results - Per Capita Freeway Vehicle-Miles of Travel (VMT) is defined as the average number of freeway miles a vehicle in the Phoenix-Mesa urbanized area travels per day per person. This measure tracks overall vehicle travel trends for the region. Table 9-1 lists the total number of freeway vehicle miles traveled each year during 2010 to 2013. The results in Table 9-1 are reflective of a generally stable level of VMT during the last several years, with total VMT increasing by 1.1 percent between 2010 and 2013. During this same period, per capita VMT actually declined by 0.7 percent.

**TABLE 9-1
FREEWAY VMT for the PHOENIX/MESA URBANIZED AREA**

	2010	2011	2012	2013
Total Freeway VMT*	29,087,000	29,495,000	29,073,331	29,400,899
Population of Phoenix-Mesa Urbanized Area**	3,348,298	3,370,250	3,392,348	3,414,591
Per Capita Freeway VMT	8.67	8.75	8.57	8.61

Source:

*ADOT Highway Performance Monitoring System (HPMS) 2013 Draft

** ACS and Census 2010 (2013 Draft Estimate)

9.1.2 Forecasting Future Performance

A secondary aspect of performance monitoring and assessment is the analysis of future conditions on the transportation system. An understanding of potential future performance status provides valuable input into the decision-making process for prioritizing expansions, rebalancing activities or other improvements to the system.

- Travel Demand Forecasting - Forecasts of travel on the roadway and transit system are developed through the use of computer simulations of the future transportation network. These simulations are based on assumptions regarding potential future improvements to the transportation system, projections of future population levels, and other critical factors

such as land use densities and patterns. The use of computer simulations allows the testing of various network options to determine how future system performance is affected by alternative investment strategies. The models have the capability to produce simulated data for all the same factors that are collected as part of the monitoring process, as well as additional data that would be impractical or too costly to collect.

An important observation regarding the current MAG four-step Travel Demand Model is that it is inherently a static model. Statistics on performance results have been tabulated for the Maricopa County portion of the MAG modeling area, while performance maps have been prepared covering the fully expanded MAG metropolitan planning area (including Pinal County areas). Modeling was based on the MAG 2013 Socio-economic Projections, which reflect recent changes in regional demographics and market. Conditions such as fuel costs and other road user costs are not factored into the simulation runs.

- Build vs. No-Build Scenarios - Transportation network simulation models are also used to assess the impact of improvements (Build Scenarios) compared to conditions without improvements (No-Build Scenarios). This capability is especially important when an area experiences significant changes in growth patterns. Under high growth conditions, the performance of the transportation system may decline even though improvements are made, due to additional travel demand brought on by the increase in housing units and population. The reverse occurs when a decrease in demand results in a reduction in congestion levels. However, in the case of an increased demand scenario such as the one depicted in the “2025 No-Build” column of Table 9-3, conditions easily reach critical levels, if improvements are not implemented. Network simulation models provide the capability to analyze conditions with and without improvements, allowing an assessment of project performance relative to a “No-Build” option.

9.2 ROADWAY SYSTEM PERFORMANCE

A broad range of monitoring data on the performance of the roadway system in the MAG area has been collected over the years. These data collection efforts have supported a variety of performance factors and have enabled historical comparisons to be made.

9.2.1 Roadway Monitoring Data

Currently traffic data is available for the MAG Region from various studies and surveys completed within the last five years. Besides the yearly ADOT FMS and private sector speed data mentioned previously, data sources include:

- 2006 Weekday Traffic Volume Study and Database
 - 2006 Regional Freeway Bottleneck Study
 - 2006 Freeway Level of Service Study
 - 2006 Phoenix External Travel Survey
 - 2006 Freeway Travel Conditions and Trends Study
 - 2007 Travel Time and Speed Study
 - 2007 Regional On-Board Transit Survey
 - 2007 Internal Truck Travel Survey
 - 2008 Regional Household Survey
 - 2011 MAG Non-Recurring Congestion Study
 - 2011/12 Traffic Data Collection Management Study
 - 2012 Transit Standards and Performance Measures Study
 - 2012-2013 Southwest Corridor Major Investment Study (data base)
 - 2012-2013 Mode Choice Model Update (data base)
 - 2012-2013 Central Phoenix Framework Study (data base)
 - 2012-2013 Sustainable Transportation-Land Use Study (data base)
 - 2013 Bottleneck Data collection and Model Validation Study
- Volume Data - The ADOT Freeway Management System (FMS) provides count data on the mainline general purpose lanes and HOV lanes 24/7/365, and on ramps on the majority of the urbanized freeway system. Traffic counts are collected through in-pavement loop detectors and passive acoustic detectors (PADs). This data feeds directly to the Arizona AZ511 system, providing real-time traveler information. Data is also aggregated in periods from five minutes to 24 hours for weekdays and weekends.

For the arterial system, MAG collects traffic data at over 770 stations using machine counts. Data is collected on weekdays every three to four years, over a 48-hour time period, and aggregated by 15 minute, hour, peak period, and 24 hours. Counts are conducted by direction at mid-block locations throughout the region. Data from the MAG count program undergoes a variety of data quality control checks; count data collected from other jurisdictions/member agencies is usually subject to the same kind of quality control checks. Since 2010 MAG has developed a web-based Traffic Data Management System which is a repository of all available traffic counts, turning movement counts and travel time databases.

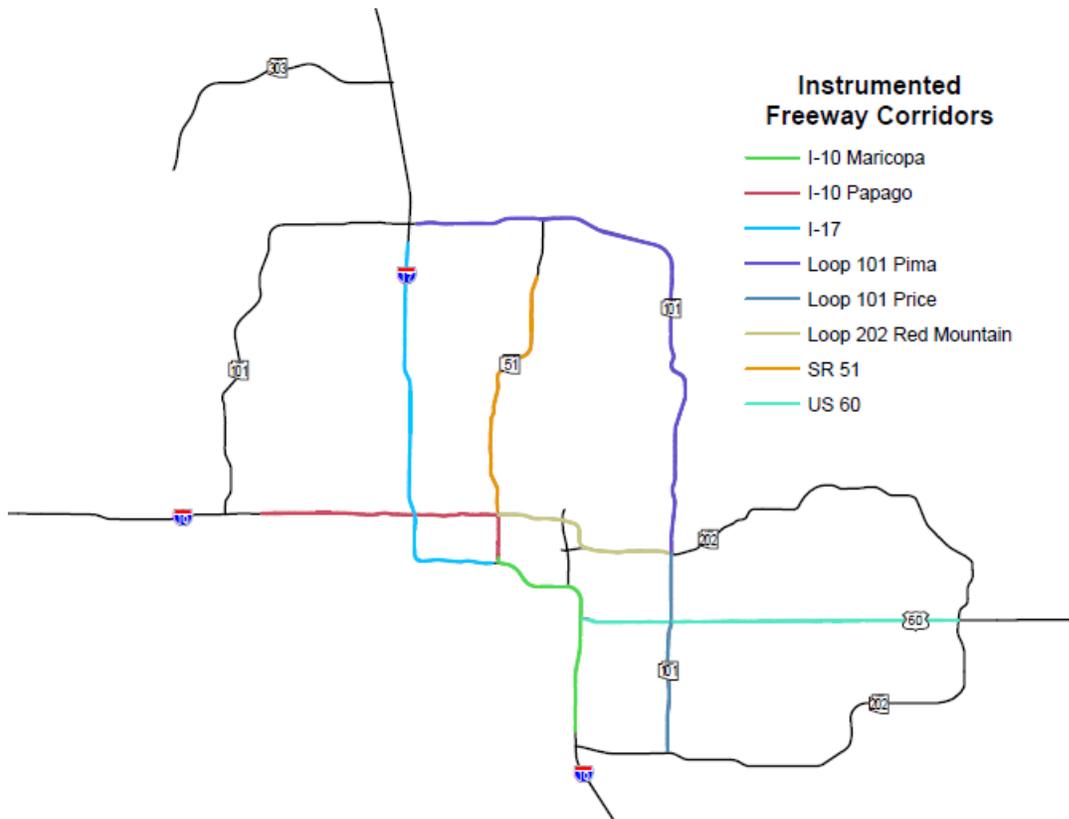
- Travel Time Data - Travel time is among the measures that are most meaningful to travelers and system managers alike, since it relates to their experience of everyday travel. The Travel Time Index (TTI) is a measure of average conditions that tells one how much longer, on average, travel times are during congestion compared to during light traffic. For example, a value of 1.30 TTI means that a 20 minute trip at free flow speeds takes 30 percent longer, or 26 minutes in the peak hours.

Figure 9-1 depicts the location of the regional freeway segments for which TTI's have been calculated. Tables 9-2 A and 9-2 B provide a detailed listing of the calculated commuting TTI's for the a.m. and p.m. commuting peak periods on the instrumented freeway corridors, based on 2011 and 2012 ADOT FMS data. The 2012 TTI peak period values have generally maintained their levels. Most a.m. peak travel conditions are slightly improved in 2012. Nevertheless certain corridors have experienced slight declines.

Significant declines (a lower TTI indicates improved conditions) in the TTI for selected corridors include:

- I-10 Fwy. (Loop 202 to US60): Westbound/AM/peak, TTI decreased by 10.18%
- I-17 Fwy. (Loop 101 Agua Fria to Peoria.): Southbound/PM/peak, TTI decreased by 11.5%.

**FIGURE 9-1
SELECTED FREEWAY CORRIDORS**



- Loop 101 Pima (I-17 to SR51): Eastbound AM/peak, TTI decreased by 8.17%.
- Loop 202 Santan (Loop 101 to I-10): Westbound/AM/peak, TTI decreased by 10.61%.
- Loop 202 Santan (Lindsay Rd to Loop 101) Westbound/PM/peak TTI, decreased by 10.46%.

Slight increases (a higher TTI indicates worse conditions) in the TTI for selected corridors include:

- I-10 Maricopa Fwy. (US 60. to SR-51): Eastbound/PM/peak, TTI increased by 2.91%.
- SR 143 (McDowell Rd to I-10): Southbound/PM/peak, TTI increased by 3.53%.
- Loop 101 Pima Fwy. (Pima Rd./90th St. to Princess Dr.): Northbound/PM/peak, TTI increased by 2.4%.

TABLE 9-2 A
TRAVEL TIME INDEX FOR SELECTED FREEWAY CORRIDORS (GENERAL PURPOSE LANES)

Freeway	Direction	From	To	AM Peak Period TTI			PM Peak Period TTI		
				2011	2012	% change	2011	2012	% change
I-10	EB	AZ 85	Loop 303	1.074	1.065	-0.87%	1.044	1.029	-1.42%
	WB	Loop 303	AZ 85	1.058	1.046	-1.09%	1.041	1.031	-1.01%
I-10	EB	Loop 303	Loop 101 Agua Fria	1.080	1.063	-1.62%	1.036	1.026	-0.93%
	WB	Loop 101 Agua Fria	Loop 303	1.064	1.049	-1.41%	1.063	1.030	-3.15%
I-10	EB	Loop 101 Agua Fria	I-17	1.677	1.600	-4.59%	1.056	1.055	-0.09%
	WB	I-17	Loop 101 Agua Fria	1.074	1.064	-0.98%	1.300	1.287	-1.01%
I-10	EB	I-17	SR 51	1.326	1.316	-0.75%	1.256	1.273	1.34%
	WB	SR 51	I-17	1.092	1.066	-2.42%	2.072	2.097	1.22%
I-10	EB	SR 51	US 60	1.105	1.098	-0.65%	1.531	1.531	0.00%
	WB	US 60	SR 51	1.214	1.168	-3.78%	1.118	1.150	2.91%
I-10	EB	US 60	Loop 202 Santan	1.075	1.065	-0.95%	1.198	1.208	0.76%
	WB	Loop 202 Santan	US 60	1.591	1.429	-10.18%	1.078	1.090	1.12%
I-17	NB	I-10 Maricopa	I-10 Papago	1.079	1.069	-0.90%	1.285	1.300	1.14%
	SB	I-10 Papago	I-10 Maricopa	1.235	1.267	2.60%	1.068	1.086	1.68%
I-17	NB	I-10 Papago	Peoria Ave	1.084	1.074	-0.92%	1.437	1.388	-3.44%
	SB	Peoria Ave	I-10 Papago	1.337	1.321	-1.22%	1.095	1.106	1.03%
I-17	NB	Peoria Ave	Loop 101 Agua Fria	1.087	1.077	-0.86%	1.137	1.133	-0.40%
	SB	Loop 101 Agua Fria	Peoria Ave	1.408	1.246	-11.51%	1.072	1.076	0.36%
I-17	NB	Loop 101 Agua Fria	Loop 303	1.071	1.054	-1.62%	1.044	1.032	-1.14%
	SB	Loop 303	Loop 101 Agua Fria	1.065	1.046	-1.82%	1.028	1.029	0.12%
US 60	EB	I-10	Loop 101 Price	1.066	1.068	0.16%	1.198	1.180	-1.51%
	WB	Loop 101 Price	I-10	1.356	1.288	-5.01%	1.087	1.083	-0.39%
US 60	EB	Loop 101 Price	Val Vista Dr	1.072	1.076	0.34%	1.150	1.164	1.22%
	WB	Val Vista Dr	Loop 101 Price	1.271	1.255	-1.28%	1.060	1.068	0.78%
US 60	EB	Val Vista Dr	Loop 202 Santan	1.068	1.066	-0.20%	1.052	1.043	-0.90%
	WB	Loop 202 Santan	Val Vista Dr	1.050	1.047	-0.33%	1.045	1.042	-0.27%
US 60	EB	Loop 202 Santan	Goldfield Rd	1.060	1.051	-0.82%	1.059	1.049	-0.94%
	WB	Goldfield Rd	Loop 202 Santan	1.046	1.050	0.44%	1.025	1.030	0.48%
SR 51	NB	I-10	Glendale Ave	1.089	1.093	0.34%	1.291	1.303	0.92%
	SB	Glendale Ave	I-10	1.318	1.279	-2.97%	1.154	1.148	-0.48%
SR 51	NB	Glendale Ave	Loop 101 Pima	1.077	1.084	0.64%	1.083	1.082	-0.03%
	SB	Loop 101 Pima	Glendale Ave	1.175	1.140	-2.99%	1.044	1.055	1.10%

Source: Private Sector Speed Data

TABLE 9-2 B

TRAVEL TIME INDEX FOR SELECTED FREEWAY CORRIDORS (GENERAL PURPOSE LANES)

Freeway	Direction	From	To	AM Peak Period TTI			PM Peak Period TTI		
				2011	2012	% change	2011	2012	% change
SR 143	NB	I-10	McDowell Rd	1.041	1.054	1.25%	1.037	1.034	-0.31%
	SB	McDowell Rd	I-10	1.035	1.056	1.99%	1.108	1.147	3.53%
Loop 101 Agua Fria	NB	I-10	Union Hills Dr	1.086	1.084	-0.17%	1.047	1.054	0.67%
	SB	Union Hills Dr	I-10	1.086	1.075	-0.99%	1.040	1.057	1.56%
Loop 101 Agua Fria	NB/EB	Union Hills Dr	I-17	1.257	1.178	-6.28%	1.023	1.040	1.63%
	WB/SB	I-17	Union Hills Dr	1.078	1.067	-1.00%	1.115	1.104	-0.99%
Loop 101 Price	NB	Loop 202 Santan	US 60	1.326	1.304	-1.64%	1.069	1.089	1.95%
	SB	US 60	Loop 202 Santan	1.083	1.091	0.75%	1.187	1.198	0.97%
Loop 101 Price	NB	US 60	Loop 202 Red Mountain	1.334	1.279	-4.09%	1.060	1.077	1.64%
	SB	Loop 202 Red Mountain	US 60	1.093	1.092	-0.05%	1.638	1.631	-0.39%
Loop 101 Pima	NB	Loop 202 Red Mountain	Pima Rd / 90th St	1.281	1.249	-2.50%	1.132	1.143	0.97%
	SB	Pima Rd / 90th St	Loop 202 Red Mountain	1.098	1.081	-1.55%	1.410	1.412	0.13%
Loop 101 Pima	NB	Pima Rd / 90th St	Pima Rd / Princess Dr	1.079	1.085	0.52%	1.067	1.092	2.40%
	SB	Pima Rd / Princess Dr	Pima Rd / 90th St	1.113	1.090	-2.07%	1.095	1.114	1.73%
Loop 101 Pima	NB/WB	Pima Rd / 90th St	SR 51	1.076	1.063	-1.16%	1.215	1.169	-3.71%
	EB/SB	SR 51	Pima Rd / 90th St	1.175	1.177	0.14%	1.034	1.049	1.43%
Loop 101 Pima	WB	SR 51	I-17	1.081	1.074	-0.66%	1.336	1.310	-1.92%
	EB	I-17	SR 51	1.535	1.410	-8.17%	1.090	1.063	-2.52%
Loop 202 Red Mountain	EB	I-10	Washington St	1.091	1.092	0.15%	1.070	1.085	1.34%
	WB	Washington St	I-10	1.298	1.214	-6.48%	1.258	1.268	0.78%
Loop 202 Red Mountain	EB	Washington St	Loop 101 Price	1.066	1.075	0.90%	1.133	1.161	2.40%
	WB	Loop 101 Price	Washington St	1.305	1.224	-6.19%	1.039	1.052	1.26%
Loop 202 Red Mountain	EB	Loop 101 Price	McDowell Rd	1.085	1.098	1.17%	1.043	1.061	1.69%
	WB	McDowell Rd	Loop 101 Price	1.095	1.084	-0.99%	1.027	1.040	1.32%
Loop 202 Red Mountain	EB/SB	McDowell Rd	US 60	1.067	1.100	3.11%	0.969	0.996	2.80%
	NB/WB	US 60	McDowell Rd	1.010	1.015	0.48%	0.997	1.012	1.60%
Loop 202 Santan	EB	I-10	Loop 101 Price	1.106	1.081	-2.28%	1.012	1.032	2.00%
	WB	Loop 101 Price	I-10	1.188	1.062	-10.61%	1.057	1.049	-0.76%
Loop 202 Santan	EB	Loop 101 Price	Lindsay Rd	1.146	1.098	-4.18%	1.149	1.153	0.36%
	WB	Lindsay Rd	Loop 101 Price	1.291	1.156	-10.46%	1.089	1.057	-2.98%
Loop 202 Santan	EB/NB	Lindsay Rd	US 60	1.051	1.072	1.99%	1.006	1.021	1.53%
	SB/WB	US 60	Lindsay Rd	1.042	1.049	0.76%	1.002	1.014	1.22%

Source: Private Sector Speed Data

- Loop 202 Red Mtn. Fwy. (McDowell Rd. to US 60): Eastbound/Southbound AM/peak, TTI increased by 3.11%.

In general, improvements in TTIs can be traced to the completion of new general purpose, HOV lanes, and direct HOV ramps, which have helped to encourage carpooling along major regional commuter routes. In addition, strategic capacity increases, enhanced ADOT Traffic Operations Center monitoring capabilities and the Dynamic Messaging System (DMS) on urban freeways continue to provide additional operational benefits to the travelling public, helping to mitigation recurring congestion levels. Some corridors are experiencing the return of congestion levels, albeit at low percentages, likely due to the early effects of an economic recovery across our region.

- Speed Data - Currently, the two principal, most comprehensive sources of speed data for the MAG region are: the private sector data bases, which have been acquired by MAG starting in 2010, and the ADOT freeway

management system (FMS) permanent count detector database. The source for private sector traffic data is mainly probe GPS-equipped vehicles and other mobile consumer devices. The significant benefit to these products is their consistency in reporting, as well as the full coverage of the MAG freeway and major arterial network. Speed data for the instrumented portions of the freeway system is also available through the ADOT FMS, and the ADOT Transportation Planning Division traffic detector stations.

Appendix Tables D-1 and D-2 depict changes in average speed for all freeway corridors monitored by ADOT'S FMS System between 2012 and 2013. For these two years, it can be observed that major facilities have generally maintained their average speeds, with afternoon peak period changes fluctuating between two and five miles per hour. It can be observed that HOV lanes on I-10 Papago, SR 51 and Loop 101 are experiencing measurable slower speeds in 2013 as compared to 2012.

9.2.2 Roadway Performance Forecasts

In order to analyze future congestion, it is necessary to make use of simulations of the regional transportation network. The MAG travel demand model, which is a state-of-the-art computer travel demand model, was utilized for this purpose.

- Forecast Modeling Scenarios - For the analysis presented in this chapter, three network scenarios were modeled to assess potential future conditions on the transportation system in the region.
 - 2011 Base Year Scenario: For this scenario the highway, arterial and transit networks reflect the base year 2011. This network reflects "up-to date" conditions after implementing a number of projects identified in the RTP, as well as 2011 travel demand. The socio-economic data that generated the travel demand for this scenario is based on the 2013 Socioeconomic Projections.
 - 2025 RTP Plan Scenario: The network used for this model run includes all the projects in the RTP Plan in place by 2025 and utilizes MAG's 2013 Socioeconomic Projections for the year 2025.
 - 2025 No-Build Scenario: The purpose of this scenario is to quantify the performance of the system without including the RTP major investments and assess the impact on levels of service. This scenario uses the same socioeconomic data for 2025 as that used for the RTP scenario, but does not include the system improvements identified in the 2025 RTP Plan Scenario.

- Forecast Performance Measures - To illustrate the relationship between the various indicators of future roadway system performance, data has been grouped into three categories: Supply Measures, Demand Measures and Level of Service Measures. These measures have been selected as representative indicators of the overall performance of the transportation system for the p.m. peak period and are presented in a comparative fashion among three modeling scenarios: the 2011 Current Base Year, the 2025 RTP and the 2025 No-Build. All data is for the Maricopa County portion of the MAG transportation modeling area. Table 9-3 provides a comparison of key system level parameters and performance measures for the three scenarios that were modeled. The figures reported for Level of Service Measures reflect p.m. peak conditions.
 - Supply Measures: Two measures of the supply of roadway capacity in the region are included in Table 9-3: lanes miles and capacity miles. Taking into account both general purpose (GP) lanes and high occupancy vehicle (HOV) lanes, there is an increase of 19.5 percent in freeway capacity miles between the 2011 Base Year and the 2025 RTP. Arterial capacity miles for the 2025 RTP also increase significantly, by 40.7 percent, as compared to the Base 2011 Year network.
 - Demand Measures: The demand measure identified in Table 9-3 is vehicle miles of travel (VMT) for arterials and freeways on an average weekday p.m. peak period. These facility types were selected, since they carry the vast majority of travel in the roadway network. However, there is some additional VMT carried by local and collector streets, which is not reflected in the figures in Table 9-3. Comparing the 2011 Base Year and the 2025 RTP, a 34.6 percent VMT increase is observed on freeways and 31.4 percent on arterials. For the No-Build scenario, the VMT increases are 22.2 percent and 32.6 percent, respectively, with the lower increase in freeway VMT reflecting the lack of facility improvements.
 - Level of Service (LOS) Measures: A number of LOS measures are included in Table 9-3 for the three modeled scenarios, including p.m. peak congestion on freeways and arterials, congested VMT, and vehicle hours of delay. As noted previously, congested segments are those with LOS E-F, and delay represents amount of extra travel time due to congestion.
 - Build vs. No-Build: A review of Table 9-3 indicates that, while the number of lane miles of congested freeways increases by 54 percent between the 2011 Base Year and the 2025 RTP, the percentage of total lane miles that are congested increases by only 28 percent. When comparing the 2011 Base Year to the 2025 No-

**TABLE 9-3
ROADWAY PERFORMANCE MEASURES FROM MAG MODEL**

Measures	Scenario		
	2011	2025	2025 No Build
Population	4,104,542	5,307,945	5,307,945
Supply Measures			
Lane-Miles			
Freeways (GP Lane)	2,243	2,641	2,243
Freeways (HOV Lane)	370	502	370
Arterials	10,614	14,947	10,614
Daily Capacity Miles			
Freeways (GP Lane)	59,835,611	70,000,130	59,143,765
Freeways (HOV Lane)	9,837,583	13,182,407	9,560,068
Arterials	108,321,840	152,441,924	105,747,939
Demand Measures			
Daily Vehicle-Miles Traveled (VMT)			
Freeways (GP Lane)	33,105,891	44,483,461	40,288,875
Freeways (HOV Lane)	1,285,728	1,836,433	1,720,008
Arterials	40,608,357	53,361,899	53,876,554
Level of Service Measures PM Peak Period			
Congested Lane-Miles			
	485	747	847
Arterials	229	468	818
% Congested Lane-Miles			
Freeways	18.6	23.8	32.4
Arterials	2.2	3.1	7.7
Congested VMT			
Freeways	3,567,430	5,392,219	6,289,092
Arterials	636,116	1,269,683	2,358,881
% Congested VMT			
Freeways	36.5	41.3	53.4
Arterials	5.3	8.1	15.2
Vehicle Hours of Delay			
Hours of Delay	191,894	282,777	370,386
Hrs of. Delay per 1000 VMT	8.8	9.9	13.6

Note: Level of Service measures are based on PM peak traffic conditions.

Source: MAG Transportation Model Update (20140502.07.07.07.TC50R2 - ConfTest2);
Maricopa County portion of modeling area.

Build scenario, the percentage of congested freeway lane miles increases by 74 percent.

- For arterials, the percentage of p.m. peak period lane miles that are congested in the 2025 RTP scenario shows a measurable increase compared to the 2011 Base Year, increasing from 18.6 percent to 23.8 percent. However, for the 2025 No-Build scenario, the percentage of lane miles that is congested increases from 18.6 percent to 32.4 percent. A similar pattern occurs for the percentage of daily VMT on arterials that is congested. This percentage increases from 5.3 percent to 8.1 percent for the 2025 RTP scenario, while it increases from 5.3 percent to 15.2 percent for the No-Build scenario.
- The total vehicle hours of delay experiences an increase of 47.3 percent between the 2011 Base Year and the 2025 RTP, but dramatically increases by 93.0 percent under the No-Build scenario. The vehicle hours of delay per 1,000 VMT increases by 12.5 percent between the 2011 Base Year and the 2025 RTP; however, it increases at a much higher rate, by 54.6 percent, under the No-Build scenario.
- Clearly, the enhanced freeway network and additional arterial mileage provided in the RTP, but not included in the No-Build scenario, result in significant congestion relief on the both the freeway and arterial systems. These system improvements also help significantly to mitigate the effects of a growing population.
- Level of Service Maps: Appendix Figures D-1 through D-6 show the geographic distribution of P.M. peak period congestion patterns for the three modeled scenarios, depicting facility Levels of Service for the Maricopa County portion of the MAG freeway system and Levels of Service at arterial intersections. Figures D-1 through D-3 show levels of service on the freeway system for the 2011 Base Year, 2025 RTP, and the 2025 No-Build scenarios. Figures D-4 through D-6 indicate locations and distribution of congested intersections for the p.m. peak period at arterial intersections for these same scenarios. A complete Freeway and Arterial Performance Dashboard Report can be accessed interactively from the MAG performance website (www.performance.azmag.gov).

9.3 TRANSIT SYSTEM PERFORMANCE

There are two key components to the transit performance monitoring effort: the Transit Performance Report (TPR) and the Ridership Report. The TPR is prepared and updated annually by Valley Metro/Regional Public Transportation

Authority (RPTA). This report is developed using input from, and is reviewed by, member agencies and the RPTA Board. The TPR serves as an important information source for the MAG regional transportation planning process. This Report also updates the Valley Metro Short Range Transit Plan. Valley Metro also publishes an annual report of transit passenger ridership for all the operating agencies in the region. The report includes annual weekday, Saturday and Sunday ridership figures by select transit modes (bus, circulator, rural and light rail). Principal performance measures include total boardings and boardings per mile across the system as well as total number of riders and revenue miles by route and by city.

The full Transit Performance Report and The Valley Metro Ridership report can be accessed from the Valley Metro Website (www.valleymetro.org).

9.3.1 Service Standards and Performance Measures

In 2006 RPTA hired a consultant to conduct a Service Efficiency and Effectiveness Study (SEES). One task of this study was to develop a series of performance measures. This SEES also developed initial performance targets that allow comparison between performance expectations and actual performance. These performance measures and performance targets are being incorporated into the TPR. As plan implementation continues, targets are reviewed, refined and indexed to inflation as appropriate.

The SEES framework established a baseline of performance expectation for Fixed Route bus (system-wide); Fixed Route bus at the route level; Paratransit; and Light Rail Transit (LRT). One of the key goals of the performance targets is to ensure consistent service levels throughout the region.

A Technical Advisory Group (TAG) made up of Valley Metro member agencies and MAG, was formed in November 2012 and has been tasked with the development of Regional Transit Standards and Performance Measures. The first Phase I of this effort was completed with Valley Metro/RPTA Board adoption in November of 2013, and included service standards and service delivery goals and objectives. It also developed transit standards, initiated a performance measures review, and developed a fully documented process for transit service changes. Phase II is underway and addresses additional standards for new services and focuses on the development of performance measures, thresholds and targets to complement agency goals, as well as to comply with MAP-21 FTA regulations.

9.3.2 Performance Targets and Operating Results

The specific performance measures and targets developed during the Service Efficiency and Effectiveness Study are listed in Tables 9-4 through 9-6. Tables 9-4 through 9-6 also include actual operating results, from the 2011, 2012 and

2013 Transit Performance Reports (TPR). The data presented is based on the findings from the SEES and data available at this time. The modes covered by the TPR include fixed route bus, paratransit, and light rail transit. Fixed route bus service includes local routes, super grid (major arterial routes), express/bus, circulators, rural connector routes and shuttles.

**TABLE 9-4
LIGHT RAIL TRANSIT (LRT) PERFORMANCE MEASURES**

Measure	2011	2012	2013
Cost Efficiency/Effectiveness			
Farebox Recovery Ratio	33.00%	41.00%	45.00%
Operating Cost per Boarding	\$2.42	\$2.13	\$2.01
Subsidy (Net Operating Cost per Boarding)	\$1.62	\$1.26	\$1.11
Operating Cost per Revenue Hour	\$12.90	\$11.87	\$11.81
Service Effectiveness			
Annual Total Boardings	12,800,000	13,600,000	14,300,000
Boardings per Revenue Mile	5.32	5.56	5.88
ADA On-time Performance	97.50%	97.20%	94.70%

Source: FY 2013 Valley Metro Transit Performance Report

**TABLE 9-5
PARATRANSIT PERFORMANCE MEASURES**

Measure	2011	2012	2013
Cost Efficiency/Effectiveness			
Farebox Recovery Ratio	6.80%	5.40%	5.70%
Operating Cost per Boarding	\$37.72	\$42.18	\$36.90
Subsidy (Net Operating Cost per Boarding)	\$35.17	\$39.89	\$34.81
Operating Cost per Revenue Hour	\$68.26	\$74.98	\$97.17
Service Effectiveness			
ADA On-time Performance	97.39%	96.16%	95.81%

Source: FY 2013 Valley Metro Transit Performance Report

**TABLE 9-6
FIXED ROUTE BUS PERFORMANCE MEASURES (SYSTEM-WIDE)**

Measure	2011	2012	2013
Cost Efficiency/Effectiveness			
Farebox Recovery Ratio	22.00%	21.40%	21.60%
Operating Cost per Boarding	\$3.77	\$3.88	\$3.85
Subsidy (Net Operating Cost per Boarding)	\$2.94	\$3.05	\$3.02
Operating Cost per Revenue Mile	\$7.08	\$7.78	\$8.09
Average Fare	\$0.83	\$0.83	\$0.83
Service Effectiveness			
Annual Increase in Total Boardings	-1.37%	4.88%	2.84%
Annual Increase in Average Boardings Weekday	0.98%	3.37%	4.34%
Sat.	-2.13%	6.56%	5.12%
Sun.	3.82%	3.60%	6.50%
Average Boardings per Revenue Mile	1.88	2.00	2.10

Source: FY 2013 Valley Metro Transit Performance Report

Since the adoption of service provision goals and standards, Valley Metro has undertaken the development of transit service performance measures and thresholds to evaluate transit operations and assess the attainment of the adopted service provision goals. Transit service performance measures are intended to assess the effectiveness of transit operations in achieving the adopted system goals.

Transit performance is also reported on in Appendix Tables C-8 and C-9. Beginning with the 2013 Annual Report, ridership data relates to all Public Transit Fund (PTF) supported routes or portions of routes. This includes existing routes receiving PTF funding that predate Prop 400 and may not have been reported on previously. This approach is being used to ensure that the broadest disclosure possible is being provided. As a result of this approach, total ridership on some routes may stay the same from year to year, because PTF funds no longer pay for the service. On the other hand, certain other routes may indicate a jump from no ridership to significant levels of ridership. This occurs in cases where a route is now being reported on but had not been reported on previously.

9.4 PERFORMANCE AUDIT OF THE REGIONAL TRANSPORTATION PLAN

In conjunction with the adoption of the MAG RTP in November 2003 and the passage of Proposition 400 in November 2004, the Arizona Legislature issued A.R.S. 28-6313, which requires the Auditor General to contract with a nationally recognized independent auditor to conduct a performance audit of the regional

transportation system beginning in 2010 and every five years thereafter. The 2010 Performance Audit of the MAG RTP was successfully completed and released to the public on December 21, 2011. The audit examined the RTP multimodal plan and evaluated it using specific performance measures included in MAG's Performance Measurement Program.

By August of 2013 twenty recommendations derived from the audit were completed by MAG. Performance measurement for freeway, arterial and transit facilities is now abundantly documented, quantified and communicated via dashboard visualization, web archives and project descriptions that are located on web-based project cards.

9.5 PERFORMANCE MONITORING AND ASSESSMENT PROGRAM OUTLOOK

The MAG Transportation System Performance Monitoring and Assessment Program has been established to provide a framework for reporting performance at the system and corridor levels, and serves as a repository of historical, simulated and observed data for the transportation system in the MAG Region. In light of MAP-21 legislation and emerging federal rulemaking documents, this program has reached an important level of development and is poised to serve as the performance measurement and management component in the planning and programming activities at MAG. A major goal of the program is to communicate measures related to mobility and accessibility in the MAG Region, and to continuously provide the public with timely and relevant information on the performance of the multi-modal transportation system.

As part of this effort, the program consolidates the data collection efforts related to system performance and develops an archive of historic and current performance data sets that can be used for future evaluation, analysis and decision making. Recent web-based, performance monitoring products published by MAG include MAGnitude (a performance dashboard) and the RTP Project Cards. These products serve as a primary source for roadway system and corridor performance information in the region, providing a broad range of data to support analysis for planning and programming activities at MAG.

Considerable reporting has been also developed by Valley Metro, starting with the SEES report, which established an initial set of performance measures to monitor and evaluate bus and rail systems in the region. These measures will be complemented by the results of the Service Standards and Performance Measures effort underway.

The MAG Performance Measurement Framework was developed with the participation of MAG's member agencies and will continue to be used as a vital information source, as the implementation of the RTP moves forward. Additionally, recognizing the close relationship between congestion and performance, and in an effort to align key performance measurement indicators

with the congestion management process, MAG continues to use the tools developed with the Congestion Management Process in 2010 to coordinate results, prioritize investments, and assess the implementation of strategies. Based on the multitude of observed and archived data sources, as well as input from the Transit Performance Report, MAG will continue to publish semi-annual performance reports in various formats including hard-copy, web-based, map and interactive dashboards.

Appendix A

Freeway/Highway Life Cycle Program

ABREV.

1
2
3
U

PROGRAM GROUPS

GROUP 1 (FY 2015 – FY 2019)
GROUP 2 (FY 2020 - FY2026)
GROUP 3 (FY 2027 - FY 2035)
UNDERWAY*

PROJECT CATEGORIES

NEW	New Freeway or Highway
GPL	Addition of General Purpose Lanes
HOV	Addition of HOV Lanes
GPL HOV	Addition of General Purpose Lane Widening & HOV Lane Widening
NEW TI	New TI or Reconstruct TI
IMP TI	Existing TI Improvement
HOV TI	HOV Ramps
LS	Landscaping
IMP	Improvements to Existing Roadway
MINOR	Minor Improvements to Existing Roadway
WIDENING	Minor lane widening improvement, shoulder widening, turn lanes
FMS	Freeway Management
FSP	Freeway Service Patrol
NOISE	Noise Mitigation Project (Quiet Pavement)
RW	Right of Way Administration
RW PROT	Right of Way Protection
MAINT	Maintenance
P R LOTS	Park and Ride Lots
DESIGN	Design Administration
ADMIN	Administrative Tasks or Functions

*Includes projects programmed in FY 2014

TABLE A-1
FREEWAY/HIGHWAY LIFE CYCLE PROGRAM
EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

PROJECTS				EXPENDITURES				ESTIMATED FUTURE COSTS				COMMENTS		
MAP ID	SEGMENT / PROJECT	BEGIN MILE POST	LEN. (MI.)	PROJ. TYPE	DESIGN (FY06-FY14) YOЕ \$'s	R/W (FY06-FY14) YOЕ \$'s	CONST. (FY06-FY14) YOЕ \$'s	TOTAL (FY06-FY14) YOЕ \$'s	COSTS (FY15-FY26) '14 \$'s	TOTAL COSTS (FY06-FY26) YOЕ & '14 \$'s	COSTS (FY27-FY35) '14 \$'s	TOTAL COSTS (FY06-FY35) YOЕ & '14 \$'s	Prog. Group for Construct.	Date Open to Traffic
	I-10													
F1	<u>SR-85 to SR-303</u>													
	395th Avenue TI (Belmont Road)	96.2	0.5	NEW TI				0.0	20.0	20.0		20.0	1	
	Desert Creek TI	105.3	0.5	NEW TI				0.0	20.4	20.4		20.4	1	
	County Line - 303L (MC Oversight)	112.0	42.0	DESIGN	1.5	0.5		2.0		2.0		2.0		
	SR 85 - 303L (RW & DCR)	112.0	11.0	GPL	0.2			0.2	0.1	0.3		0.3		
	SR85 - Verrado Way (GPL)	112.0	8.2	GPL				0.0		0.0	42.8	42.8	3	
	Verrado Way - Sarival Rd (GPL)	120.2	6.1	GPL	2.6		28.2	30.8		30.8		30.8		8/16/11
	Perryville Road TI (Design Build)	122.7	0.0	NEW TI	1.3	4.0	15.2	20.4	13.6	34.0		34.0	U	
	Subtotal				5.5	4.5	43.3	53.4	54.1	107.4	42.8	150.2		
F2	<u>SR-303 to SR-101</u>													
	303L - I-17 Blk Canyon (MC Oversight)	124.0	18.0	DESIGN	2.7	0.2		3.0		3.0		3.0		
	303L - I-17 Blk Canyon (RW & DCR)	124.0	18.0	GPL HOV	0.2			0.2		0.2		0.2		
	303L - 101L Agua Fria Median (RW & DCR)	124.0	9.0	GPL HOV	2.9	1.9		4.8	0.5	5.3		5.3		
	Cotton Lane - Dysart Road (FMS)	124.7	5.0	FMS				0.0	4.7	4.7		4.7		
	Sarival Ave - Dysart Rd (GPL Outside)	126.0	4.0	GPL	2.9		35.8	38.7	2.4	41.1		41.1		1/15/11
	Sarival Rd - 101L Agua Fria (GPL HOV Med)	126.0	8.0	GPL HOV	0.5		4.3	4.8		4.8		4.8		7/30/10
	Sarival Avenue - 107th Avenue (Landscape)	126.0	4.0	LS	4.3		88.6	93.0		93.0		93.0		
	Bullard Road TI (New TI)	127.7	0.0	NEW TI	1.2	5.6	9.7	16.6		16.6		16.6		4/11/08
	Dysart Road - 83rd Ave (FMS)	130.0	6.0	FMS	0.5		2.3	2.8	1.6	4.5		4.5		
	Dysart Road - 101L Agua Fria (Landscape)	130.0	4.0	LS				0.0	6.1	6.1		6.1		
	Fairway Drive TI (El Mirage Rd)	130.7	0.0	NEW TI	0.5			0.5	20.3	20.7		20.7	2	
	Avondale Blvd @ I-10 (TI Impr)	131.7	0.0	IMP TI	0.1		2.8	2.8		2.8		2.8		FY 2011
	Subtotal				15.9	7.7	143.6	167.2	35.5	202.8	0.0	202.8		
F3	<u>SR-101 to I-17</u>													
	101L AGUA Fria - I-17 Black Canyon (DCR & RW)	133.0	9.0	GPL	3.0	0.6	0.2	3.9		3.9		3.9		
	101L AGUA Fria - I-17 Black Canyon, (Utility)	133.0	9.0	GPL				0.0	14.4	14.4		14.4	1	
	43Rrd Avenue / 51ST Avenue TIs	139.7	0.0	IMP TI	0.4		2.6	3.0		3.0		3.0		8/8/07
	51st Avenue TIs	140.7	0.0	IMP TI										See above
	Subtotal				3.4	0.6	2.9	6.9	14.4	21.3	0.0	21.3		
F4	<u>I-17 (Stack) to I-17 (Split)</u>													
	SR51 - 202L Santan (DCR & RW)	147.0	11.0	GPL HOV	10.7	15.0	0.2	25.9	2.9	28.8		28.8		
	Sky Harbor West Airport Access	148.0	1.0	NEW TI				0.0	50.6	50.6		50.6	2	
	Subtotal				10.7	15.0	0.2	25.9	53.5	79.4	0.0	79.4		
F5	<u>24th St. to SR-202</u>													

TABLE A-1
FREEWAY/HIGHWAY LIFE CYCLE PROGRAM
EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

PROJECTS				EXPENDITURES				ESTIMATED FUTURE COSTS				COMMENTS		
MAP ID	SEGMENT / PROJECT	BEGIN MILE POST	LEN. (MI.)	PROJ. TYPE	DESIGN (FY06-FY14) YOЕ \$'s	R/W (FY06-FY14) YOЕ \$'s	CONST. (FY06-FY14) YOЕ \$'s	TOTAL (FY06-FY14) YOЕ \$'s	COSTS (FY15-FY26) '14 \$'s	TOTAL COSTS (FY06-FY26) YOЕ & '14 \$'s	COSTS (FY27-FY35) '14 \$'s	TOTAL COSTS (FY06-FY35) YOЕ & '14 \$'s	Prog. Group for Construct.	Date Open to Traffic
	Salt River - Baseline Rd (RW)	150.7	3.5	GPL HOV		131.0	5.7	136.8	5.8	142.6		142.6		
	32nd St - 202L Santan, Ph 1	151.5	3.5	GPL HOV				0.0	179.1	179.1		179.1	1	
	32nd St - 202L Santan, Ph 2	151.5	3.5	GPL HOV				0.0	122.0	122.0		122.0	2	
	32nd St - 202L Santan, Ph 3	151.5	4.0	GPL HOV				0.0	191.2	191.2		191.2	2	
	Southern Ave - SR143 Hohokam (GPL)	153.0	2.0	GPL	0.3		3.3	3.6		3.6		3.6		10/3/08
	Baseline Rd - Riggs Rd (MC Oversight)	156.0	11.5	GPL				0.0		0.0		0.0		
	Ray Rd - Wildhorse Pass (FMS)	159.8	2.7	FMS				0.0	0.8	0.8		0.8		
	Ray Rd TI (TI Impr)	160.0	0.5	IMP TI	0.6		9.6	10.2		10.2		10.2		7/13/07
	Subtotal				0.9	131.0	18.7	150.7	498.9	649.6	0.0	649.6		
F6	SR-202 to Riggs Rd.													
	202L Santan - Riggs Rd (GPL)	162.0	6.0	GPL	0.2			0.2	75.5	75.7		75.7	2	
	Chandler Heights Rd TI	166.2	0.0	NEW TI				0.0	22.9	22.9		22.9	2	
	Subtotal				0.2	0.0	0.0	0.2	98.4	98.6	0.0	98.6		
	TOTAL I-10				36.7	158.9	208.7	404.3	754.8	1,159.1	42.8	1,201.9		
	I-17													
F7	I-10/Maricopa - I-10/Papago													
	I-10 Maricopa - 101L Agua Fria (RW & DCR)	194.0	19.0	GPL HOV	6.9	0.1	0.3	7.3	2.5	9.8		9.8		
	I-10 Maricopa - I-10 Papago (MC Oversight)	194.0	6.0	HOV				0.0		0.0		0.0		
	I-10 Maricopa - I-10 Papago	194.0	6.0	HOV				0.0	400.0	400.0		400.0	2	
	Subtotal				6.9	0.1	0.3	7.3	402.5	409.8	0.0	409.8		
F8	I-10/Papago to SR-101													
	McDowell Rd - Arizona Canal (MC Oversight)	200.0	7.0	GPL	0.6			0.6		0.6		0.6		
	McDowell Rd - Arizona Canal	200.0	7.0	GPL				0.0	385.0	385.0		385.0	2	
	Arizona Canal - 101L Agua Fria (DCR)	208.0	6.8	GPL	2.0			2.0	0.1	2.1		2.1		
	Arizona Canal - 101L Agua Fria (FMS)	208.0	6.8	FMS	0.5		4.7	5.2	0.3	5.5		5.5		
	Arizona Canal - 101L Agua Fria	208.0	6.8	GPL				0.0	6.0	6.0	86.4	92.4	3	
	Peoria Ave - Greenway Rd (Drainage)	208.9	3.0	MINOR	1.0		0.0	1.0	16.5	17.5		17.5	2	
	Cactus Rd TI	209.0	0.0	IMP TI	0.1	0.2	6.7	7.1		7.1		7.1		12/3/06
	Subtotal				4.1	0.2	11.5	15.9	407.9	423.7	86.4	510.1		
F9	SR-101 to SR-74													
	101L Agua Fria - Anthem Way (FMS)	215.0	14.0	FMS	0.8		0.1	0.8	7.9	8.8		8.8		
	101L Agua Fria - Black Canyon TI (RW & DCR)	215.0	17.0	GPL HOV			0.1	0.1	0.9	1.0		1.0		
	101L Agua Fria - SR74 (Design)	215.0	9.0	GPL HOV	3.8	77.4		81.3		81.3		81.3		
	101L Agua Fria - SR74 (Landscape)	215.0	9.0	LS	0.8		6.6	7.4		7.4		7.4		

TABLE A-1
FREEWAY/HIGHWAY LIFE CYCLE PROGRAM
EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

PROJECTS				EXPENDITURES				ESTIMATED FUTURE COSTS				COMMENTS		
MAP ID	SEGMENT / PROJECT	BEGIN MILE POST	LEN. (MI.)	PROJ. TYPE	DESIGN (FY06-FY14) YOY \$'s	R/W (FY06-FY14) YOY \$'s	CONST. (FY06-FY14) YOY \$'s	TOTAL (FY06-FY14) YOY \$'s	COSTS (FY15-FY26) '14 \$'s	TOTAL COSTS (FY06-FY26) YOY & '14 \$'s	COSTS (FY27-FY35) '14 \$'s	TOTAL COSTS (FY06-FY35) YOY & '14 \$'s	Prog. Group for Construct.	Date Open to Traffic
	101L Agua Fria – Jomax Rd (GPL HOV)	215.0	4.0	GPL HOV	4.9		76.7	81.6		81.6		81.6		11/8/09
	Jomax Rd – SR74 Carefree Hwy (GPL HOV)	219.0	5.0	GPL HOV	4.6		93.0	97.6		97.6		97.6		7/30/10
	Jomax Rd TI / Dixletta Rd TI	219.0	0.0	NEW TI	4.1		40.8	44.8		44.8		44.8		10/1/08
	Dove Valley Rd TI	222.5	0.0	NEW TI	2.3	2.7	20.5	25.5		25.5		25.5		4/21/10
	Subtotal				21.3	80.2	237.8	339.2	8.8	348.0	0.0	348.0		
F10	SR-74 to New River Rd.													
	SR74 Carefree Hwy TI	223.5	0.0	NEW TI	1.6		22.7	24.3		24.3		24.3		10/10/08
	SR74 Carefree - New River (RW)	224.0	10.0	GPL		0.3		0.3		0.3		0.3		
	SR74 Carefree - New River (RW)	224.0	10.0	GPL		0.4		0.4		0.4		0.4		
	SR74 Carefree - Anthem Way (GPL)	224.0	5.0	GPL	2.9		14.3	17.2		17.2		17.2		5/15/10
	SR74 Carefree - Anthem Way (HOV)	224.0	5.0	HOV				0.0		0.0	89.5	89.5	3	
	Anthem Way - New River (GPL)	229.0	3.0	GPL				0.0		0.0	57.4	57.4	3	
	Subtotal				4.4	0.7	37.1	42.2	0.0	42.2	146.9	189.1		
	TOTAL I-17				36.7	81.2	286.7	404.6	819.1	1,223.7	233.3	1,457.0		
	SR-24													
F11	202L Santan -Meridian Rd.													
	202L Santan - Ellsworth Rd, Ph 1 (New)	0.0	1.0	NEW	14.8	24.5	78.8	118.1	26.0	144.1		144.1		5/4/14
	202L Santan - Ellsworth Rd, Ph 2 (New)	0.0	1.0	NEW				0.0		0.0	46.9	46.9	3	
	Ellsworth Rd - Meridian Rd (New)	1.0	5.0	NEW				0.0		0.0	212.6	212.6	3	
	Subtotal				14.8	24.5	78.8	118.1	26.0	144.1	259.5	403.6		
	TOTAL SR-24				14.8	24.5	78.8	118.1	26.0	144.1	259.5	403.6		
	SR-30													
F12	SR-85 to SR-303													
	SR85 - 303L Bob Stump (DCR)	100.0	12.0	NEW	3.2		0.1	3.3	2.0	5.3	192.7	198.0		
	Subtotal				3.2	0.0	0.1	3.3	2.0	5.3	192.7	198.0		
F13	SR-303 to SR-202													
	303L Bob Stump - 202L South Mountain (DCR & RW)	112.0	16.5	NEW	14.1	15.1	0.3	29.5	1.1	30.5	55.9	86.4		
	303L Bob Stump - Estrella Pkwy	112.0	4.2	NEW				0.0		0.0	279.4	279.4	3	
	Estrella Pkwy - Dysart Rd	116.2	3.3	NEW				0.0		0.0	243.4	243.4	3	
	Dysart Rd - Avondale Blvd	119.5	2.0	NEW				0.0		0.0	116.6	116.6	3	
	Avondale Blvd - 97th Ave	121.5	2.5	NEW				0.0		0.0	148.9	148.9	3	
	97th Ave - 67th Ave	124.0	3.8	NEW				0.0		0.0	223.2	223.2	3	

TABLE A-1
FREEWAY/HIGHWAY LIFE CYCLE PROGRAM
EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

PROJECTS					EXPENDITURES				ESTIMATED FUTURE COSTS				COMMENTS	
MAP ID	SEGMENT / PROJECT	BEGIN MILE POST	LEN. (MI.)	PROJ. TYPE	DESIGN (FY06-FY14) YOЕ \$'s	R/W (FY06-FY14) YOЕ \$'s	CONST. (FY06-FY14) YOЕ \$'s	TOTAL (FY06-FY14) YOЕ \$'s	COSTS (FY15-FY26) '14 \$'s	TOTAL COSTS (FY06-FY26) YOЕ & '14 \$'s	COSTS (FY27-FY35) '14 \$'s	TOTAL COSTS (FY06-FY35) YOЕ & '14 \$'s	Prog. Group for Construct.	Date Open to Traffic
	67th Ave - 202L South Mountain	127.8	0.7	NEW				0.0		0.0	296.8	296.8	3	
	Subtotal				14.1	15.1	0.3	29.5	1.1	30.5	1,364.2	1,394.7		
	TOTAL SR-30				17.3	15.1	0.4	32.8	3.1	35.8	1,556.9	1,592.7		
	SR-51													
F14	Shea Blvd to SR-101													
	Glendale Ave - 101L Pima (FMS)	5.7	13.0	FMS	0.3		2.4	2.7	0.2	2.8		2.8		
	Shea Blvd - 101IL Pima (GPL)	9.5	5.2	GPL	4.0		48.7	52.7		52.7		52.7	3	
	Shea Blvd - 101L Pima (HOV/ HOV Ramp)	9.5	7.3	HOV				0.0		0.0	60.2	60.2		2/13/09
	Subtotal				4.3	0.0	51.1	55.4	0.2	55.6	60.2	115.8		
	TOTAL SR-51				4.3	0.0	51.1	55.4	0.2	55.6	60.2	115.8		
	US-60 (GRAND AVE.)													
F15	SR-303 to SR-101													
	303L Bob Stump - 99th Ave (Ph 1)	138.0	10.0	GPL	7.1	1.2	24.8	33.1	0.2	33.3		33.3		6/14/11
	303L Bob Stump - 101L Agua Fria (Ph 2)	138.0	9.0	IMP	0.1			0.1		0.1		0.1		
	Bell Road TI	142.5	0.0	IMP TI	1.7		0.1	1.8	49.9	51.7		51.7	1	
	Thompson Ranch Rd TI (Thunderbird)	145.5	0.0	IMP TI	0.8	0.0	0.1	0.9	14.2	15.0		15.0	1	
	99th Ave - 83rd Ave, Incl New River Bridge	148.0	3.0	GPL	1.3	1.2	9.5	12.0		12.0		12.0		4/30/11
	83rd Ave & Peoria Ave (Intersection Impr)	148.5	1.8	MINOR	0.1		2.0	2.2		2.2		2.2		10/4/06
	Subtotal				11.1	2.5	36.5	50.0	64.2	114.3	0.0	114.3		
F16	SR-101 to Van Buren													
	101L Agua Fria - 71st Ave	149.0	3.5	IMP			6.2	6.2		6.2		6.2		8/7/13
	101L Agua Fria - Van Buren (DCR)	149.0	14.0	IMP	1.2			1.2	0.1	1.3		1.3		
	101L Agua Fria - McDowell Rd (RW & MIS)	149.0	13.0	IMP	1.0	8.1	0.5	9.6	1.6	11.2		11.2		
	101L Agua Fria - Van Buren Ph 2	149.0	14.0	IMP				0.0	1.6	1.6		1.6		Dropped FY14
	101L Agua Fria - Van Buren Ph 3	149.0	14.0	GPL/IMP				0.0		0.0	86.2	86.2	3	
	71st Ave - McDowell Rd (101L - McDowell Rd)	152.5	6.0	IMP	5.3	2.5	22.6	30.4	2.8	33.2		33.2	U	
	71st Ave - Grand Canal Bridge (Impr)	152.5	5.0	MINOR	0.1		3.6	3.7		3.7		3.7		5/16/07
	Subtotal				7.5	10.6	32.9	51.1	6.1	57.2	86.2	143.4		
	TOTAL US-60 (GRAND)				18.6	13.1	69.4	101.1	70.3	171.4	86.2	257.6		
	US-60 (SUPERSTITION FWY.)													
F17	I-10 to SR-101													

TABLE A-1
FREEWAY/HIGHWAY LIFE CYCLE PROGRAM
EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

PROJECTS					EXPENDITURES				ESTIMATED FUTURE COSTS				COMMENTS	
MAP ID	SEGMENT / PROJECT	BEGIN MILE POST	LEN. (MI.)	PROJ. TYPE	DESIGN (FY06-FY14) YOЕ \$'s	R/W (FY06-FY14) YOЕ \$'s	CONST. (FY06-FY14) YOЕ \$'s	TOTAL (FY06-FY14) YOЕ \$'s	COSTS (FY15-FY26) '14 \$'s	TOTAL COSTS (FY06-FY26) YOЕ & '14 \$'s	COSTS (FY27-FY35) '14 \$'s	TOTAL COSTS (FY06-FY35) YOЕ & '14 \$'s	Prog. Group for Construct.	Date Open to Traffic
	I-10 Maricopa – 101L Price (GPL)	172.0	4.5	GPL	2.7	0.0	27.3	30.0	0.0	30.0	0.0	30.0		3/29/10
	Subtotal				2.7	0.0	27.3	30.0	0.0	30.0	0.0	30.0		
F18	SR-101 to SR-202													
	Gilbert Rd - Power Rd (GPL HOV)	182.5	6.0	GPL HOV	1.1	0.0	88.2	89.3	0.0	89.3	0.0	89.3		3/15/07
	Lindsay Rd TI (Half TI)	182.9	0.5	NEW TI				0.0	0.6	0.6	7.6	8.2	3	
	Val Vista Dr – Power Rd (Landscaping)	183.0	6.0	LS	0.0	0.0	5.0	5.0	0.0	5.0	0.0	5.0		
	Higley Rd TI	186.4	1.0	IMP TI	0.4	0.2	5.0	5.6	0.0	5.6	0.0	5.6		7/24/07
	Subtotal				1.5	0.2	98.2	99.9	0.6	100.5	7.6	108.1		
F19	SR-202 to Meridian Rd.													
	Chrismon Rd - Idahoe Rd (FMS)	192.4	2.0	FMS				0.0	2.5	2.5		2.5		
	Chrismon Rd - Meridian Rd (GPL HOV)	192.4	2.0	GPL HOV	0.2			0.2	30.3	30.4		30.4	2	
	Meridian TI (West Half)	194.0	1.0	NEW TI	1.7	0.1	0.1	2.0	23.3	25.3		25.3	U	
	Subtotal				1.9	0.1	0.1	2.2	56.1	58.3	0.0	58.3		
	TOTAL US-60 (SUPERSTITION)				6.1	0.3	125.6	132.1	56.7	188.8	7.6	196.4		
	SR-74													
F20	US-60 to SR-303													
	US60 Grand - 303L Bob Stump (RW Protection)	0.0	26.0	RW PROT	0.4			0.4		0.4		0.4		
	US60 Grand - 303L Bob Stump (RW Protection)	0.0	26.0	RW PROT				0.0		0.0	1.9	1.9		
	US60 Grand - I-17 Black Canyon (RW Prot Survey)	0.0	31.0	RW PROT		0.2		0.2		0.2		0.2		
	US60 Grand - MP 13 (RW Protection)	0.0	13.0	RW PROT		0.2		0.2		0.2		0.2		
	US60 Grand - I-17 Black Canyon (RW)	0.0	31.0	RW PROT				0.0		0.0	40.1	40.1		
	US60 Grand – 303L Bob Stump (Pass Ln MP 13-15)	13.0	2.0	MINOR	0.5	0.1	3.5	4.1		4.1		4.1		4/1/11
	US60 Grand – 303L Bob Stump (Pass Ln MP 20-22)	20.0	2.0	MINOR	0.3	1.1	2.9	4.3	1.1	5.4		5.4		10/20/10
	Subtotal				1.2	1.6	6.4	9.2	1.1	10.3	42.0	52.3		
	TOTAL SR-74				1.2	1.6	6.4	9.2	1.1	10.3	42.0	52.3		
	SR-85													
F21	I-8 to MC-85													
	SR85 Corridor (MC Oversight)	120.0	35.0	DESIGN	0.3			0.3		0.3		0.3		
	I-8 - I-10 (RW) FY2006-2013)	120.0	35.0	GPL	0.1	32.7	2.1	35.0		35.0		35.0		
	SR85 at Gila Bend, Phase 1 (New)	120.5	2.5	GPL	3.3	3.4	18.2	24.9		24.9		24.9		1/8/13
	MP 130.7 – MP 137.0 (New)	130.7	6.3	GPL	0.3		24.9	25.2	0.1	25.3		25.3		1/29/10
	MP 139.01 – MP 141.71 (New)	139.0	2.7	GPL	0.3		22.9	23.2		23.2		23.2		11/26/08

TABLE A-1
FREEWAY/HIGHWAY LIFE CYCLE PROGRAM
EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

PROJECTS				EXPENDITURES				ESTIMATED FUTURE COSTS				COMMENTS		
MAP ID	SEGMENT / PROJECT	BEGIN MILE POST	LEN. (MI.)	PROJ. TYPE	DESIGN (FY06-FY14) YOЕ \$'s	R/W (FY06-FY14) YOЕ \$'s	CONST. (FY06-FY14) YOЕ \$'s	TOTAL (FY06-FY14) YOЕ \$'s	COSTS (FY15-FY26) '14 \$'s	TOTAL COSTS (FY06-FY26) YOЕ & '14 \$'s	COSTS (FY27-FY35) '14 \$'s	TOTAL COSTS (FY06-FY35) YOЕ & '14 \$'s	Prog. Group for Construct.	Date Open to Traffic
	Subtotal				4.3	36.1	68.1	108.5	0.1	108.6	0.0	108.6		
F22	MC-85 to I-10													
	Hazen Rd - Broadway Rd (New)	149.5	3.5	GPL	2.2		0.1	2.3		2.3		2.3		
	MC85 - Southern Ave (New)	150.0	3.0	GPL	0.5		9.2	9.6		9.6		9.6		5/29/08
	Southern Ave – I-10 Papago (New)	152.0	3.0	GPL	1.6		11.1	12.6		12.6		12.6		7/27/11
	Broadway Rd - Lower Buckeye (Connecting Rd)	153.0	3.0	GPL	0.0		4.7	4.7		4.7		4.7		FY 2009
	Warner Street Bridge	153.4	0.2	GPL	0.0		0.0	0.0	5.3	5.3		5.3	1	
	Subtotal				4.2	0.0	25.0	29.2	5.3	34.5	0.0	34.5		
	TOTAL SR-85				8.5	36.1	93.1	137.7	5.4	143.1	0.0	143.1		
	SR-87													
F23	Forest Boundry to Mile Post 213.0													
	Forest Boundary – New Four Peaks (Widening)	194.0	8.0	MINOR	3.0	0.6	22.6	26.3	0.0	26.3	0.0	26.3		9/30/08
	New Four Pks Rd - Dos S Ranch (Widening)	202.0	5.4	MINOR	2.7	0.2	13.7	16.5	0.0	16.5	0.0	16.5		5/9/11
	MP 211.8 - MP 213.0 (Drainage)	211.8	1.2	MINOR	0.3	0.1	1.0	1.4	0.0	1.4	0.0	1.4		5/9/11
	Subtotal				6.1	0.9	37.3	44.2	0.0	44.2	0.0	44.2		
	TOTAL SR-87				6.1	0.9	37.3	44.2	0.0	44.2	0.0	44.2		
	SR-88													
F24	Fish Creek Hill													
	Fish Creek Hill (Ret Walls)	223.0	2.0	MINOR	0.6	0.0	0.0	0.6	0.0	0.6	0.0	0.6		2/2012
	Subtotal				0.6	0.0	0.0	0.6	0.0	0.6	0.0	0.6		
	TOTAL SR-88				0.6	0.0	0.0	0.6	0.0	0.6	0.0	0.6		
	US-93													
F25	Wickenburg By-Pass													
	Wickenburg By-Pass	196.0	1.7	GPL	2.8	15.5	35.8	54.1	0.4	54.5	0.0	54.5		2/26/10
	Subtotal				2.8	15.5	35.8	54.1	0.4	54.5	0.0	54.5		
	TOTAL US-93				2.8	15.5	35.8	54.1	0.4	54.5	0.0	54.5		
	SR-101													
F26	I-10 to US-60													
	I-10 Papago - VanBuren (99th Ave) (Widening)	1.7	1.7	MINOR	0.9	0.8	4.0	5.7	0.2	5.9		5.9		12/19/10

TABLE A-1
FREEWAY/HIGHWAY LIFE CYCLE PROGRAM
EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

PROJECTS				EXPENDITURES				ESTIMATED FUTURE COSTS				COMMENTS		
MAP ID	SEGMENT / PROJECT	BEGIN MILE POST	LEN. (MI.)	PROJ. TYPE	DESIGN	R/W	CONST.	TOTAL	COSTS	TOTAL	COSTS	TOTAL	Program. Group for Construct.	Date Open to Traffic
					(FY06-FY14) YOE \$'s	(FY06-FY14) YOE \$'s	(FY06-FY14) YOE \$'s	(FY06-FY14) YOE \$'s	(FY15-FY26) '14 \$'s	(FY06-FY26) YOE & '14 \$'s	(FY06-FY35) YOE & '14 \$'s			
	I-10 Papago - Tatum Blvd (HOV) DESIGN BUILD	1.7	31.0	HOV	2.2	0.3	106.9	109.3	0.6	109.9		109.9		10/29/11
	I-10 Papago - I-17 Black Canyon, Ph 1 (FMS)	1.7	21.7	FMS	0.9		9.8	10.7		10.7		10.7		
	I-10 Papago - I-17 Black Canyon, Ph 2 (FMS)	1.7	21.7	FMS	0.8		2.5	3.3	6.8	10.1		10.1		
	I-10 Papago - Grand Ave (GPL)	1.7	9.0	GPL				0.0		0.0	116.4	116.4	3	
	Bethany Home Rd TI, North Half	6.0	0.5	NEW TI	1.2		8.4	9.6		9.6		9.6		9/14/07
	Maryland Ave HOV Ramps DESIGN BUILD	6.5	0.8	HOV TI	0.7		13.4	14.2	2.4	16.6		16.6		3/29/14
	Northern Ave - 31st Ave (Med LS)	8.0	14.0	MINOR	0.2		0.7	0.9		0.9		0.9		
	Olive Ave TI (Impr)	9.0	1.0	IMP TI	0.4		3.4	3.9		3.9		3.9		7/22/11
	Subtotal				7.3	1.0	149.2	157.6	10.0	167.5	116.4	283.9		
F27	US-60 to I-17													
	Grand Ave - I-17 Black Canyon (GPL)	11.2	12.4	GPL				0.0	0.0	0.0	150.4	150.4	3	
	Thunderbird Rd TI (Impr)	12.0	1.0	IMP TI	0.4		3.6	4.0	0.0	4.0	0.0	4.0		7/28/09
	Beardsley Rd / Union Hills Dr (TI Impr)	15.8	1.0	NEW TI	0.8	0.3	19.0	20.1	0.0	20.1	0.0	20.1		5/6/11
	Subtotal				1.2	0.3	22.6	24.0	0.0	24.0	150.4	174.4		
F28	I-17 to Princess Dr.													
	I-17 Black Cyn - 202L Red Mtn (MC Oversight)	23.0	28.0	HOV										
	I-17 Black Cyn - Princess Dr (GPL) (DCR & RW)	23.0	12.6	GPL	2.9		0.2	3.1	0.4	3.5		3.5		
	I-17 Black Canyon - SR51 Piestewa (FMS)	23.0	6.6	FMS	1.4		5.2	6.6		6.6		6.6		
	I-17 Black Cyn - SR51 Piewstewa (GPL)	23.0	6.6	GPL				0.0	73.5	73.5		73.5	2	
	SR51 Piestewa - Princess Dr (GPL)	30.0	6.0	GPL				0.0	77.9	77.9		77.9	2	
	SR51 Piestewa - Princess Dr (FMS)	30.0	6.0	FMS			3.1	3.1		3.1		3.1		
	Tatum Blvd - Princess Dr (HOV)	31.0	5.0	HOV	1.4		16.3	17.7		17.7		17.7		7/19/09
	64th St TI	33.0	1.0	NEW TI	2.9	2.3	24.4	29.5	1.7	31.3		31.3		10/24/08
	Hayden Rd - Princess Drive (Drainage)	35.5	1.0	MINOR			0.0	0.0		0.0		0.0		
	Subtotal				8.6	2.3	49.1	60.0	153.5	213.5	0.0	213.5		
F29	Princess Dr. to SR-202													
	Princess Dr - 202L Red Mountain (HOV)	36.0	15.4	HOV	4.4		57.4	61.9		61.9		61.9		11/8/08
	Princess Dr - Shea Blvd (GPL)	36.0	5.0	GPL				0.0	56.4	56.4		56.4	2	
	Princess Drive TI (Study)	36.0	1.0	TI	1.2			1.2	0.2	1.4		1.4		
	Shea Blvd - 202L Red Mtn (GPL) Constr	41.0	15.4	GPL	5.6		0.2	5.8	99.7	105.5		105.5	U	
	Shea Blvd - Chaparral Rd (GPL) Design	41.0	5.5	GPL	4.6		0.4	4.9	0.2	5.1		5.1		
	Chaparral Rd - 202L Red Mtn (GPL) Design	46.0	5.0	GPL	4.4		0.2	4.7	0.1	4.8		4.8		
	Chaparral Rd TI Improvements	46.0	0.2	TI IMP	0.2		0.9	1.2		1.2		1.2		FY 2011
	Pima Rd Extension, JPA	49.5	1.5	GPL				0.0	3.9	3.9		3.9	1	
	Subtotal				20.5	0.0	59.2	79.7	160.5	240.2	0.0	240.2		

**TABLE A-1
 FREEWAY/HIGHWAY LIFE CYCLE PROGRAM
 EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
 (2014 and Year of Expenditure Dollars in Millions)**

PROJECTS				EXPENDITURES				ESTIMATED FUTURE COSTS				COMMENTS		
MAP ID	SEGMENT / PROJECT	BEGIN MILE POST	LEN. (MI.)	PROJ. TYPE	DESIGN (FY06-FY14) YOЕ \$'s	R/W (FY06-FY14) YOЕ \$'s	CONST. (FY06-FY14) YOЕ \$'s	TOTAL (FY06-FY14) YOЕ \$'s	COSTS (FY15-FY26) '14 \$'s	TOTAL COSTS (FY06-FY26) YOЕ & '14 \$'s	COSTS (FY27-FY35) '14 \$'s	TOTAL COSTS (FY06-FY35) YOЕ & '14 \$'s	Program. Group for Construct.	Date Open to Traffic
F30	SR-202/Red Mt. to SR-202/Santan													
	202L Red Mountain – 202L Santan (GPL)(DCR)	51.0	7.0	HOV	1.6		0.1	1.6	0.2	1.9		1.9		See below
	202L Red Mountain – Baseline (HOV) Design	51.0	4.2	HOV	1.3		0.0	1.3		1.3		1.3		
	202L Red Mountain – 202L Santan (HOV)	51.0	7.0	HOV	2.0		35.8	37.8		37.8		37.8		2/2/11
	Balboa Drive Multi Use Path, Local	54.0	0.0	GPL				0.0	2.0	2.0		2.0		
	Baseline Rd - 202L Santan (FMS) Ramp Meters	55.6	4.8	FMS	0.1		0.4	0.5		0.5		0.5		
	Baseline Rd - 202L Santan (GPL)	55.6	6.4	GPL				0.0	53.4	53.4		53.4	2	
	Guadalupe Rd - Chandler Blvd (FMS)	56.6	4.6	FMS	0.2		3.1	3.3		3.3		3.3		
	Galveston Street (Drainage Imprv.)	59.0	1.0	MINOR			1.4	1.4	0.8	2.2		2.2		
	Subtotal				5.2	0.0	40.8	46.0	56.4	102.4	0.0	102.4		
	TOTAL SR-101				42.7	3.6	320.9	367.3	380.5	747.7	266.8	1,014.5		
	SR-143													
F31	SR-143 at SR-202													
	SR143 / SR202L TI	0.8	1.5	NEW TI	5.2	0.4	22.0	27.6		27.6		27.6		7/9/12
	Subtotal				5.2	0.4	22.0	27.6	0.0	27.6	0.0	27.6		
	TOTAL SR-143				5.2	0.4	22.0	27.6	0.0	27.6	0.0	27.6		
	SR-202													
F32	I-10 to SR-101/Pima													
	I 10 / SR51 TI - US60 (MC Oversight)	0.0	10.0	DESIGN				0.0		0.0		0.0		
	I 10 / SR51 TI - 101L Pima (Design Build) (GPL)	0.0	10.0	GPL	10.5		205.8	216.3		216.3		216.3		8/11/10
	Mill Ave & Washington St (GPL)	4.5	2.5	GPL	1.2		5.7	6.8		6.8		6.8		4/11/09
	Subtotal				11.6	0.0	211.5	223.1	0.0	223.1	0.0	223.1		
F33	SR-101/Pima to Gilbert Rd.													
	Power Rd - University Dr (Hab. Mit. Monitoring)	5.0	23.0	MINOR			0.2	0.2		0.2		0.2		
	101L Pima – Gilbert Rd (HOV)	10.0	6.5	HOV	3.3		24.3	27.6		27.6		27.6		8/27/10
	101L Pima – Gilbert Rd (FMS)	10.0	6.5	FMS	0.5		3.4	3.9		3.9		3.9		
	101L Pima – Gilbert Rd (GPL) DESIGN BUILD	10.0	6.5	GPL	3.9	2.9	0.6	7.4	118.7	126.1		126.1	U	
	Mesa Drive TI (Ramps Only)	14.0	0.5	NEW TI				0.0		0.0	13.5	13.5	3	
	Subtotal				7.8	2.9	28.4	39.1	118.7	157.7	13.5	171.2		
F34	Gilbert Rd. to US-60													
	Gilbert Rd - Broadway Rd (HOV) DESIGN BUILD	16.3	12.5	HOV				0.0		0.0		0.0	See F33	

TABLE A-1
FREEWAY/HIGHWAY LIFE CYCLE PROGRAM
EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

PROJECTS					EXPENDITURES				ESTIMATED FUTURE COSTS				COMMENTS	
MAP ID	SEGMENT / PROJECT	BEGIN MILE POST	LEN. (MI.)	PROJ. TYPE	DESIGN (FY06-FY14) YOЕ \$'s	R/W (FY06-FY14) YOЕ \$'s	CONST. (FY06-FY14) YOЕ \$'s	TOTAL (FY06-FY14) YOЕ \$'s	COSTS (FY15-FY26) '14 \$'s	TOTAL COSTS (FY06-FY26) YOЕ & '14 \$'s	COSTS (FY27-FY35) '14 \$'s	TOTAL COSTS (FY06-FY35) YOЕ & '14 \$'s	Prog. Group for Construct.	Date Open to Traffic
	Gilbert Rd - Higley Rd (GPL)	16.5	4.5	GPL				0.0		0.0	51.9	51.9	3	
	Higley Rd - US60 Superstition (GPL)	21.0	9.0	GPL				0.0		0.0	108.3	108.3	3	
	Broadway Rd Higley Rd - US60 Superstition (HOV)	28.8	2.2	HOV				0.0	5.7	5.7		5.7	2	
	Broadway Rd - Ray Rd (FMS)	29.0	10.7	FMS				0.0	5.6	5.6		5.6		
	US60 Superstition System TI HOV Ramps	29.5	1.0	HOV				0.0		0.0	42.1	42.1	3	
	Subtotal				0.0	0.0	0.0	0.0	11.3	11.3	202.3	213.6		
F35	US-60 to Val Vista Dr. - Gilbert Rd.													
	US60 Superstition - Gilbert Rd (HOV)	31.0	11.0	HOV				0.0	50.2	50.2	0.0	50.2	2	
	US60 Superstition - Val Vista Dr (GPL)	30.3	12.0	GPL				0.0	0.0	0.0	104.0	104.0	3	
	Subtotal				0.0	0.0	0.0	0.0	50.2	50.2	104.0	154.2		
F36	Val Vista Dr. - Gilbert Rd. to I-10/Maricopa													
	Ray Rd/Val Vista Dr - Dobson Rd (FMS)	42.3	8.0	FMS	0.8			0.8	6.2	7.0	0.0	7.0		
	Val Vista Dr - Dobson Rd (GPL)	42.3	7.0	GPL				0.0	0.0	0.0	83.5	83.5	3	
	Gilbert Rd - I-10 Maricopa (HOV & 2 HOV Ramps)	44.5	13.0	HOV	2.1		99.2	101.3	0.0	101.3	0.0	101.3		10/9/11
	Dobson Rd - I-10 Maricopa (FMS)	49.3	6.0	FMS	0.4	0.0	0.0	0.4	5.4	5.8	0.0	5.8		
	Dobson Rd - I-10 Maricopa (GPL)	49.3	5.7	GPL				0.0	0.0	0.0	50.3	50.3	3	
	Subtotal				3.3	0.0	99.2	102.5	11.6	114.1	133.8	247.9		
F37	I-10/Maricopa to 51st Ave.													
	I-10 Maricopa - I-10 Papago (RW)	56.0	21.5	NEW	0.0	63.9	1.2	65.2	66.7	131.8		131.8		
	I-10 Maricopa - I-10 Papago (DCR)	56.0	21.5	NEW	21.2		0.8	22.1	2.9	25.0		25.0		
	I-10 Maricopa - 24th St (Seg 1)	56.3	3.0	NEW				0.0	178.3	178.3		178.3	1	
	24th St - 17th Ave (Seg 2)	59.3	3.8	NEW				0.0	138.8	138.8		138.8	1	
	17th Ave - 51st Ave (Seg 3)	63.1	5.5	NEW				0.0	387.2	387.2		387.2	1	
	Subtotal				21.2	63.9	2.0	87.2	773.9	861.1	0.0	861.1		
F38	51st Ave. to I-10/Papago													
	51st Ave - Elliot Rd (Seg 4)	68.6	1.7	NEW				0.0	69.4	69.4	0.0	69.4	2	
	Elliot Rd - Baseline Rd (Seg 5)	70.3	2.0	NEW				0.0	96.8	96.8	0.0	96.8	2	
	Baseline Rd - Salt River (Seg 6)	72.3	1.2	NEW				0.0	53.2	53.2	0.0	53.2	2	
	Salt River Bridge (Seg 7)	73.3	1.0	NEW				0.0	92.9	92.9	0.0	92.9	1	
	Salt River - Buckeye Rd (Seg 8)	75.3	2.0	NEW				0.0	181.0	181.0	0.0	181.0	1	
	I-10 Papago / 202L System TI (Seg 9)	77.3	2.0	NEW				0.0	594.1	594.1	0.0	594.1	1	
	Subtotal				0.0	0.0	0.0	0.0	1,087.4	1,087.4	0.0	1,087.4		
	TOTAL SR-202				43.9	66.8	341.2	451.9	2,053.1	2,505.0	453.6	2,958.6		
	SR-303													

TABLE A-1
FREEWAY/HIGHWAY LIFE CYCLE PROGRAM
EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

PROJECTS				EXPENDITURES				ESTIMATED FUTURE COSTS				COMMENTS		
MAP ID	SEGMENT / PROJECT	BEGIN MILE POST	LEN. (MI.)	PROJ. TYPE	DESIGN (FY06-FY14) YOЕ \$'s	R/W (FY06-FY14) YOЕ \$'s	CONST. (FY06-FY14) YOЕ \$'s	TOTAL (FY06-FY14) YOЕ \$'s	COSTS (FY15-FY26) '14 \$'s	TOTAL COSTS (FY06-FY26) YOЕ & '14 \$'s	COSTS (FY27-FY35) '14 \$'s	TOTAL COSTS (FY06-FY35) YOЕ & '14 \$'s	Prog. Group for Construct.	Date Open to Traffic
F39	Riggs Rd. to I-10													
	Riggs Rd - SR30 / MC85 (Study)	86.0	14.0	NEW	1.5	0.0	0.6	2.1	1.0	3.1	46.6	49.7		
	MC85 - I-17 Black Canyon (RW)	100.0	3.0	NEW		7.1	0.0	7.1	0.2	7.2	0.0	7.2		
	MC85 - Van Buren St, Ph1 (I-10) (DCR & RW)	100.0	3.0	NEW	4.8	0.0	0.2	5.0	83.1	88.2	0.0	88.2		
	MC85 - Van Buren St, Ph 2 (I-10)	100.0	3.0	NEW				0.0	81.0	81.0	85.8	166.8	3	
	Subtotal				6.3	7.1	0.8	14.2	165.3	179.5	132.4	311.9		
F40	I-10 to US-60													
	I-10 / 303L System TI, Ph 2	103.0	1.0	NEW	0.9		0.1	1.0	68.5	69.5	0.0	69.5	1	
	I-10 Papago - US60 Grand (DCR)	103.9	15.5	NEW	1.2		0.1	1.2	0.0	1.2	0.0	1.2		
	I-10 Papago - US60 Grand (DCR)	103.9	15.5	NEW	1.6		0.0	1.6	0.0	1.6	0.0	1.6		
	I-10 / 303L System TI, Ph 1, I-10 Realignment	103.9	1.7	NEW	19.5	89.2	166.6	275.3	25.0	300.3	0.0	300.3		9/12/14
	I-10 / 303L TI, Ph 1 (Landscape)	103.9	1.7	LS	0.1	0.0	0.0	0.1	7.5	7.6	0.0	7.6		
	I-10 Papago - Northern Ave (FMS)	103.9	6.1	FMS				0.0	4.7	4.7	0.0	4.7		
	SR303L / FCDMC Study (JPA)	104.0	NA	NEW	0.4		0.0	0.4	0.0	0.4	0.0	0.4		
	Thomas Rd - Peoria Ave (30% Design & RW)	105.6	7.0	NEW	2.4	54.1	3.1	59.5	39.2	98.8	0.0	98.8		
	Thomas Rd - Camelback Rd (Seg C) (New)	105.6	2.0	NEW	4.6		37.2	41.8	5.3	47.1	0.0	47.1		11/22/13
	Thomas Rd - Camelback Rd (Landscape)	105.6	2.0	LS	0.2	0.0	0.0	0.2	2.4	2.7	0.0	2.7		
	Camelback Rd - Glendale Ave (Seg) (New)	107.6	2.0	NEW	4.4		49.2	53.6	9.0	62.6	0.0	62.6		5/21/14
	Camelback Rd - Glendale Ave (Landscape)	107.6	2.0	LS	0.3	0.0	0.0	0.3	3.0	3.3	0.0	3.3		
	Glendale Ave - Peoria Ave)Seg) (New)	109.6	3.0	NEW	8.0		84.6	92.5	12.5	105.0	0.0	105.0		9/16/13
	Glendale Ave - Peoria Ave (Landscape)	109.6	3.0	LS	0.3	0.0	0.0	0.4	5.7	6.1	0.0	6.1		
	Northern Ave - Clearview Blvd (FMS)	110.0	7.4	FMS				0.0	4.8	4.8	0.0	4.8		
	Northern Ave Parkway (Final T.I.)	111.0	1.0	NEW TI				0.0	0.0	0.0	85.6	85.6	3	
	Peoria Ave -Bell Rd (30% Design & RW)	112.6	3.4	NEW	1.7	28.2	1.3	31.1	13.8	44.9	0.0	44.9		
	Peoria Ave - Mtn View Rd (Seg D & F) (New)	112.6	5.9	NEW	4.3		146.0	150.3	14.0	164.3	0.0	164.3		11/13/13
	Peoria Ave - Waddell Rd (Landscape)	112.6	2.0	LS	0.3	0.0	1.6	1.9	1.2	3.2	0.0	3.2		
	Cactus Rd, Waddell Rd & Bell Rd (New)	113.6	0.2	NEW	3.9		33.9	37.8	0.2	38.1	0.0	38.1		3/8/11
	Waddell Rd	114.0	0.2	NEW	0.1		0.0	0.1	0.0	0.1	0.0	0.1		
	Waddell Rd - Mtn View Rd (F) (New)	114.6	3.0	NEW	7.2		4.3	11.5	2.5	14.0	0.0	14.0		
	Waddell Rd - Mtn View Blvd (Landscape)	114.6	3.9	LS	0.5	0.0	1.0	1.5	2.2	3.7	0.0	3.7		
	Bell Rd - US60 Grand (30% Design & RW)	116.6	3.0	NEW	1.4	10.6	0.3	12.4	22.3	34.6	0.0	34.6		
	US60 Grand / 303L TI (Interim)	118.1	1.1	NEW	4.6	0.0	0.4	4.9	61.5	66.5	0.0	66.5	U	
	US60 / 303L TI (Interim) (Landscaping)	118.1	1.1	LS				0.0	3.2	3.2	0.0	3.2		
	US60 Grand / 303L TI (Final)	118.1	1.1	NEW				0.0	8.2	8.2	116.4	124.6	2	

TABLE A-1
FREEWAY/HIGHWAY LIFE CYCLE PROGRAM
EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

PROJECTS				EXPENDITURES				ESTIMATED FUTURE COSTS				COMMENTS		
MAP ID	SEGMENT / PROJECT	BEGIN MILE POST	LEN. (MI.)	PROJ. TYPE	DESIGN (FY06-FY14) YOЕ \$'s	R/W (FY06-FY14) YOЕ \$'s	CONST. (FY06-FY14) YOЕ \$'s	TOTAL (FY06-FY14) YOЕ \$'s	COSTS (FY15-FY26) '14 \$'s	TOTAL COSTS (FY06-FY26) YOЕ & '14 \$'s	COSTS (FY27-FY35) '14 \$'s	TOTAL COSTS (FY06-FY35) YOЕ & '14 \$'s	Prog. Group for Construct.	Date Open to Traffic
	Subtotal				67.8	182.1	529.6	779.6	316.8	1,096.4	202.0	1,298.4		
F41	US-60 to I-17													
	US60 Grand - Happy Valley Rd (DESIGN BUILD)	119.6	7.0	NEW	4.0	0.5	0.2	4.7	53.0	57.6	0.0	57.6	U	
	US60 Grand Ave - I-17 Black Canyon (Final)	119.6	20.0	NEW				0.0	0.0	0.0	227.4	227.4	3	
	El Mirage Rd TI	123.2	1.0	NEW TI	2.6	0.0	0.2	2.9	33.1	36.1	0.0	36.1	U	
	Happy Valley Rd - I-17 Blk Cyn (RW & 30% Design)	125.2	13.0	NEW	4.4	41.6	0.0	46.0	0.9	46.9	0.0	46.9		
	Happy Valley Rd – Lake Pleasant Rd (Interim)	125.2	5.3	NEW	14.2		114.2	128.3	10.0	138.4	0.0	138.4		5/13/12
	Lake Pleasant Rd – I-17 Black Canyon (Interim)	130.5	7.2	NEW	10.5		82.1	92.6	6.3	98.9	0.0	98.9		5/13/11
	Lake Pleasant Rd – I-17 Black Canyon (Landscape)	130.5	7.2	LS	0.0		0.3	0.3	0.0	0.4	0.0	0.4		
	Lake Pleasant - I-17 Black Canyon (FMS)	130.5	9.2	FMS				0.0	4.5	4.5	0.0	4.5		
	Subtotal				35.7	42.1	197.1	274.9	107.9	382.7	227.4	610.1		
	TOTAL SR-303				109.7	231.3	727.6	1,068.6	590.0	1,658.6	561.8	2,220.4		
	SYSTEMWIDE PROGRAMS													
	Maintenance (Landscape, Litter & Sweep)				0.0	0.0	95.1	95.1	161.3	256.4	148.5	404.9		
	Freeway Management (FMS, Frwy. Service Patrol)				7.1	0.0	12.1	19.2	72.6	91.8	18.9	110.7		
	Noise Mitigation (Quiet Pavement, Noise Walls)				3.3	0.2	59.2	62.8	1.8	64.6	150.0	214.6		
	Engineering (Pre. Engr., R/W Mgmt, Risk Mgmt.)				17.7	5.3	0.1	23.0	256.4	279.4	81.8	361.2		
	Subtotal				28.0	5.5	166.5	200.1	492.1	692.2	399.2	1,091.4		
	TOTAL SYSTEMWIDE PROGRAMS				28.0	5.5	166.5	200.1	492.1	692.2	399.2	1,091.4		
	GRAND TOTALS				383.3	654.8	2,571.5	3,609.6	5,252.8	8,862.4	3,969.8	12,832.2		

Source: Chuck E-mail of 8-7-14

Appendix B

Arterial Street Life Cycle Program

TABLE B-1
ARTERIAL STREET LIFE CYCLE PROGRAM
REGIONAL FUNDING REIMBURSEMENTS AND TOTAL EXPENDITURES: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

TABLE B-1

YOE Year of Expenditure CONST Construction
FY Fiscal Year Expend Expenditures
\$ Dollars Reimb Reimbursement(s)

MAP CODE	FACILITY/LOCATION	REGIONAL FUNDING				TOTAL EXPENDITURES				FINAL FY for CONST	LENGTH* (Miles)	OTHER PROJECT INFORMATION
		Reimb. through FY14 (YOES)	Estimated Future Reimb (2014\$'s)		Total Reimb. (2014\$, YOES)	Expend through FY14 (YOES)	Estimated Future Expend (2014 \$'s)		Total Expend. (2014\$, YOES)			
			FY15-FY26	FY27-FY35			FY15-FY26	FY27-FY35				
CHANDLER												
A1	Arizona Ave/Chandler Blvd	3.582	0.000	0.000	3.582	7.209	0.000	0.000	7.209	2006	0.25	Project Completed
A2	Arizona Ave/Elliot Rd	3.211	0.000	0.000	3.211	4.587	0.000	0.000	4.587	2007	0.25	Project Completed
A3	Arizona Ave/Ray Rd	3.464	0.000	0.000	3.464	4.949	0.000	0.000	4.949	2007	0.25	Project Completed
A4	Arizona Ave: Ocotillo Rd to Hunt Highway	0.000	4.433	3.018	7.451	0.000	16.320	0.000	16.320	2024	3.00	
A5	Chandler Blvd/Alma School Rd	0.622	2.726	0.942	4.289	3.047	7.764	0.000	10.810	2017	0.25	HSIP Recipient
A6	Chandler Blvd/Dobson Rd	2.500	0.000	0.000	2.500	10.316	0.000	0.000	10.316	2012	0.25	Project Completed
A7	Chandler Blvd/Kyrene Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2027	0.25	Project deleted in exchange for ACICOP1003
A8	Gilbert Rd: SR-202L to Hunt Hwy	19.294	8.363	1.770	29.427	43.847	0.000	0.000	43.847	2019		
	Gilbert Rd: SR-202L/Germann to Queen Creek Rd	6.752	0.000	0.000	6.752	10.316	0.000	0.000	10.316	2010	1.25	Project Completed
	Gilbert Rd: Queen Creek Rd to Hunt Hwy	2.582	0.661	0.000	3.244	4.634	0.000	0.000	4.634	N/A	N/A	Project Completed. Design and ROW project only.
	Gilbert Rd: Queen Creek Rd to Ocotillo Rd	7.475	0.062	0.000	7.537	10.767	0.000	0.000	10.767	2014	1.00	
	Gilbert Rd: Ocotillo Rd to Chandler Heights	0.000	6.160	0.000	6.160	9.706	0.000	0.000	9.706	2014	1.00	
	Gilbert Rd: Chandler Heights Rd to Riggs Rd	1.242	0.740	0.885	2.867	4.212	0.000	0.000	4.212	2015	1.00	Project combined with ACIGIL1003F
	Gilbert Rd: Riggs Rd to to Hunt Hwy	1.242	0.740	0.885	2.867	4.212	0.000	0.000	4.212	2015	1.00	Project combined with ACIGIL1003E
A9	Kyrene Rd/Ray Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2025	0.25	Project deleted in exchange for ACICOP1003
A10	Price Rd Substitute Projects	8.110	32.301	1.408	41.819	22.954	74.893	1.408	99.254	2024	6.00	
	Chandler Heights Rd: Arizona Avenue to McQueen Road	0.000	7.325	0.000	7.325	0.000	21.689	0.000	21.689	2021	1.00	
	Chandler Heights Road: McQueen Road to Gilbert Road	0.000	6.535	0.000	6.535	0.000	27.903	0.000	27.903	2023	3.00	
	McQueen Road: Ocotillo Road to Riggs Road	0.000	1.997	0.000	1.997	1.997	0.000	0.000	1.997	N/A	N/A	Design and ROW project only. Construction split into ACIPRC1003I and ACIPRC1003J

MAP CODE	FACILITY/LOCATION	REGIONAL FUNDING				TOTAL EXPENDITURES				FINAL FY for CONST	LENGTH* (Miles)	OTHER PROJECT INFORMATION
		Reimb. through FY14 (YOES)	Estimated Future Reimb (2014\$'s)		Total Reimb. (2014\$, YOES)	Expend through FY14 (YOES)	Estimated Future Expend (2014 \$'s)		Total Expend. (2014\$, YOES)			
			FY15-FY26	FY27-FY35			FY15-FY26	FY27-FY35				
	Ocotillo Road: Arizona Avenue to McQueen Road	1.161	4.134	1.408	6.703	10.023	0.000	1.408	11.431	2015	1.00	HSIP Recipient
	Ocotillo Road: Cooper Road to Gilbert Road	0.000	6.499	0.000	6.499	0.000	13.365	0.000	13.365	2022	2.50	
	Price Rd at Germann Rd: Intersection Improvements	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2021	0.25	Project deleted in exchange fro ACIOCT1003
	Old Price Rd at Queen Creek Rd: Intersection Improvements	0.000	5.222	0.000	5.222	2.441	0.980	0.000	3.421	2015	0.25	Project limits changed from Price Rd at Germann Rd to Old Price Rd at Germann Rd
	Price Rd: Santan to Germann	3.053	0.000	0.000	3.053	4.361	0.000	0.000	4.361	2008	1.25	Project Completed
	McQueen Rd: Ocotillo Rd to Chandler Heights	3.896	0.000	0.000	3.896	4.131	0.000	0.000	4.131	2016	1.00	ACI-PRC1003C construction phase split into ACIPRC1003I and ACIPRC1003J
	McQueen Rd: Chandler Heights to Riggs Rd	0.000	0.590	0.000	0.590	0.000	10.956	0.000	10.956	2016	1.00	ACI-PRC1003C construction phase split into ACIPRC1003I and ACIPRC1003J
A11	Ray Rd/Alma School Rd	2.217	0.000	0.000	2.217	14.217	0.000	0.000	14.217	2012	0.25	Project Completed. HSIP Recipient
A12	Ray Rd/Dobson Rd	0.000	6.718	0.000	6.718	0.380	9.216	0.000	9.596	2020	0.25	
	Ray Rd at Dobson Rd: Intersection Improvements Phase I	0.000	0.266	0.000	0.266	0.380	0.000	0.000	0.380	2015	0.30	Project split into two phases.
	Ray Rd at Dobson Rd: Intersection Improvements Phase II	0.000	6.452	0.000	6.452	0.000	9.216	0.000	9.216	2024	0.30	Project split into two phases.
A13	Ray Rd/McClintock Dr	0.000	3.775	0.000	3.775	0.000	3.387186.06	0.000	0.000	2025	0.30	
A14	Ray Rd/Rural Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2025	0.25	Project deleted in exchange for ACICOP1003
A95	Ocotillo Rd: Gilbert Rd to 148th Street	0.000	3.178	0.000	3.178	0.000	11.404	0.000	11.404	2024	2.00	Substitute project in exchange for ACIPRC1003F
A96	Cooper Rd: South of Queen Creek to Riggs Rd	0.000	9.401	3.776	13.177	0.000	18.134	0.000	18.134	2022	2.60	Substitute project in exchange for AIICHN3003, AIIKYR1003, and AIIRAY5003
	Cooper Rd: South of Queen Creek Rd to Chandler Heights	0.000	5.646	0.000	5.646	0.000	8.066	0.000	8.066	2019	1.60	New Project
	Cooper Rd: Chandler Heights to Riggs Rd	0.000	3.755	3.776	7.531	0.000	10.068	0.000	10.068	2022	1.00	New Project
CHANDLER/GILBERT												
A15	Queen Creek Rd: Arizona Ave to Higley Rd	18.080	5.933	5.112	29.125	25.828	16.852	0.000	42.681	2021	4.00	
	CHANDLER Queen Creek Rd: Arizona Ave to McQueen Rd	5.672	0.000	0.000	5.672	8.103	0.000	0.000	8.103	2009	1.00	Project Completed
	CHANDLER Queen Creek Rd: McQueen Rd to Gilbert Rd	1.515	5.933	5.112	12.560	2.164	16.852	0.000	19.016	2019	2.00	
	GILBERT Queen Creek Rd: Greenfield Rd to Higley	10.893	0.000	0.000	10.893	15.562	0.000	0.000	15.562	2011	1.00	Project Completed. Savings reallocated to AIIIGUD3003 and ACIGER2003B
EL MIRAGE/MARICOPA COUNTY												
A94	El Mirage Rd: Northern Ave to Bell Rd (Phase I)	3.066	21.595	0.000	24.661	15.915	25.264	0.000	41.180	2015	4.25	
	El Mirage Road Design Concept Report	1.448	0.000	0.000	1.448	1.448	0.000	0.000	1.448	----	----	Project completed.

MAP CODE	FACILITY/LOCATION	REGIONAL FUNDING				TOTAL EXPENDITURES				FINAL FY for CONST	LENGTH* (Miles)	OTHER PROJECT INFORMATION
		Reimb. through FY14 (YOES)	Estimated Future Reimb (2014\$'s)		Total Reimb. (2014\$, YOES)	Expend through FY14 (YOES)	Estimated Future Expend (2014 \$'s)		Total Expend. (2014\$, YOES)			
			FY15-FY26	FY27-FY35			FY15-FY26	FY27-FY35				
	El Mirage Rd: Bell Rd to Picerne Dr (MC)	0.000	0.000	0.000	0.000	7.013	0.000	0.000	7.013	2014	0.50	Project completed.
	El Mirage Rd: Northern Ave to Cactus (MC)	0.669	0.000	0.000	0.669	0.956	0.000	0.000	0.956	----	----	Project completed. Design only. Savings reallocated to ACIELM2003D.
	El Mirage Rd: Cactus to Grand & Thunderbird Rd: El Mirage to Grand (ELM)	0.853	0.935	0.000	1.788	2.554	0.000	0.000	2.554	----	----	Design only
	El Mirage Rd: Northern Ave to Peoria Ave (MC)	0.096	10.231	0.000	10.327	0.500	10.484	0.000	10.984	2015	2.00	
	Thunderbird Rd: El Mirage Rd to Grand Avenue (ELM)	0.000	3.993	0.000	3.993	2.025	9.714	0.000	11.739	2016	0.50	
	El Mirage Rd: Peoria Ave to Cactus Rd (ELM)	0.000	6.436	0.000	6.436	1.420	5.066	0.000	6.486	2016	1.00	
A37	El Mirage Rd: Northern Ave to Bell Rd (Phase II)	0.000	13.553	0.000	13.553	0.000	19.361	0.000	19.361	2031	3.60	
	El Mirage Rd: Cactus to Grand Avenue (ELM)	0.000	13.553	0.000	13.553	0.000	19.361	0.000	19.361	2016	1.60	
	El Mirage Rd: Grand Avenue to Picerne Drive (MC)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2031	2.00	
FOUNTAIN HILLS												
A16	Shea Blvd: Palisades Blvd to Cereus Wash	0.536	4.968	0.692	6.196	1.318	8.033	0.000	9.351	2021	3.00	
	Shea Blvd: Palisades Blvd to Fountain Hills Blvd	0.248	0.000	0.000	0.248	0.358	0.000	0.000	0.358	----	----	Project is for design only. Project Completed.
	Shea Blvd: Technology Dr to Cereus Wash	0.288	2.838	0.000	3.125	0.960	3.456	0.000	4.417	2016	0.80	
	Shea Blvd: Fountain Hills Blvd to Technology Dr	0.000	2.131	0.692	2.823	0.000	4.576	0.000	4.576	2020	2.20	
GILBERT												
A17	Elliot Rd/Cooper Rd	0.000	4.140	0.000	4.140	0.000	7.615	0.000	7.615	2016	0.50	
A18	Elliot Rd/Gilbert Rd	0.000	3.775	3.600	7.375	0.000	9.382	0.000	9.382	2020	0.50	
A19	Elliot Rd/Greenfield Rd	0.000	3.774	0.000	3.774	0.000	7.615	0.000	7.615	2021	0.50	
A20	Elliot Rd/Higley Rd	0.000	3.775	1.137	4.912	0.000	7.615	0.000	7.615	2021	0.50	
A21	Elliot Rd/Val Vista Dr	0.000	3.775	0.669	4.444	0.000	7.615	0.000	7.615	2020	0.50	
A22	Germann Rd: Gilbert Rd to Power Rd	0.000	23.101	1.458	24.559	5.759	28.911	0.000	34.670	2020	4.00	
	Germann Rd: Gilbert Rd to Val Vista Dr	0.000	5.285	1.458	6.743	0.000	11.967	0.000	11.967	2022	2.00	
	Germann Rd: Val Vista Dr to Higley Rd	0.000	17.816	0.000	17.816	5.759	16.944	0.000	22.703	2015	2.00	Received project savings from ACIQNC1003C
A23	Greenfield Rd: Elliot Rd to Ray Rd	0.000	3.775	0.000	3.775	0.000	0.000	5.254	5.254	2027	2.00	
A24	Guadalupe Rd/Cooper Rd	0.873	4.576	0.000	5.449	2.335	9.109	0.000	11.444	2015	0.50	Received project savings from ACIQNC1003C.

MAP CODE	FACILITY/LOCATION	REGIONAL FUNDING				TOTAL EXPENDITURES				FINAL FY for CONST	LENGTH* (Miles)	OTHER PROJECT INFORMATION
		Reimb. through FY14 (YOES)	Estimated Future Reimb (2014\$'s)		Total Reimb. (2014\$, YOES)	Expend through FY14 (YOES)	Estimated Future Expend (2014 \$'s)		Total Expend. (2014\$, YOES)			
			FY15-FY26	FY27-FY35			FY15-FY26	FY27-FY35				
A25	Guadalupe Rd/Gilbert Rd	1.320	2.455	0.000	3.775	3.270	7.069	0.000	10.339	2015	0.50	
A26	Guadalupe Rd/Greenfield Rd	0.000	2.992	1.919	4.912	0.000	9.534	0.000	9.534	2024	0.50	
A27	Guadalupe Rd/Power Rd	0.000	2.379	3.901	6.280	0.000	7.428	0.000	7.428	2025	0.50	
A28	Guadalupe Rd/Val Vista Dr	0.000	3.775	0.000	3.775	0.000	7.615	0.000	7.615	2021	0.50	
A30	Ray Rd: Val Vista Dr to Power Rd	0.000	16.683	0.000	16.683	0.000	15.187	0.000	15.187	2025	4.00	Project segments combined
A31	Ray Rd/Gilbert Rd	0.000	0.000	3.775	3.775	0.000	7.588	0.000	7.588	2026	0.50	
A32	Val Vista Dr: Warner Rd to Pecos	10.398	0.000	0.000	10.398	16.308	0.000	0.000	16.308	2006	2.90	FY08 RARF Closeout Project. Project Completed.
A33	Warner Rd/Cooper Rd	3.701	0.000	0.000	3.701	6.268	0.000	0.000	6.268	2010	0.50	Project Completed
A34	Warner Rd/Greenfield Rd	0.000	3.775	0.000	3.775	0.000	7.615	0.000	7.615	2021	0.50	
GILBERT/MESA/MARICOPA COUNTY												
A29	Power Rd: Santan Fwy to Chandler Heights	13.334	7.257	0.000	20.591	36.765	27.993	0.000	64.758	2024	5.00	
	Power Rd/Pecos (GIL)	5.143	0.000	0.000	5.143	7.347	0.000	0.000	7.347	2008	0.50	Project Completed
	Power Rd: Santan Fwy to Pecos Rd (MES)	8.191	7.257	0.000	15.448	29.418	0.000	0.000	29.418	2014	1.50	Project Completed. Lead Agency changed from Gilbert to Mesa in July 2012.
	Power Rd: Pecos to Chandler Heights (GIL)	0.000	0.000	0.000	0.000	0.000	27.993	0.000	27.993	2025	3.00	
A45	Power Rd: Baseline Rd to Santan Fwy	7.760	8.193	0.000	15.953	22.615	11.996	0.000	34.611	2018	4.50	
	Power Rd: East Maricopa Floodway to Santan Fwy/Loop 202 (MES)	0.000	8.193	0.000	8.193	0.575	11.996	0.000	12.571	2023	3.50	
	Power Rd: Baseline Rd to East Maricopa Floodway (MC)	7.760	0.000	0.000	7.760	22.040	0.000	0.000	22.040	2009	1.00	Project Completed
MARICOPA COUNTY												
A35	Dobson Rd: Bridge over Salt River	0.000	18.632	0.000	18.632	0.692	47.110	0.000	47.802	2019	1.60	
A36	El Mirage Rd: Bell Rd to Jomax Rd	9.736	9.725	0.000	19.461	22.826	12.298	5.590	40.714	2027	6.20	
	El Mirage Rd: Bell Rd to Deer Valley Dr	4.201	9.725	0.000	13.926	22.826	0.000	0.000	22.826	2010	3.00	Project Completed
	El Mirage Rd: L303 to Jomax	0.000	0.000	0.000	0.000	0.000	12.298	5.590	17.889	2027	2.00	
	El Mirage Rd: Deer Valley Dr to L303	5.535	0.000	0.000	5.535	0.000	0.000	0.000	0.000	2009	1.20	FY10 RARF Closeout Project. Project Completed.
A38	Gilbert Rd: Bridge over Salt River	0.000	14.005	0.000	14.005	1.285	65.487	0.000	66.773	2021	1.62	
A39	Jomax Rd: SR-303L to Sun Valley Parkway	0.000	6.830	17.761	24.591	0.000	35.130	0.000	35.130	-----	18.50	ROW project only
A40	McKellips Rd: Bridge over Salt River	0.000	0.000	14.005	14.005	0.925	2.832	24.586	28.343	2028	0.80	
A41	McKellips Rd: SR-101L to SRP-MIC/Alma School Rd	0.581	22.304	14.567	37.452	0.629	23.905	0.000	24.534	2023	1.96	

MAP CODE	FACILITY/LOCATION	REGIONAL FUNDING				TOTAL EXPENDITURES				FINAL FY for CONST	LENGTH* (Miles)	OTHER PROJECT INFORMATION
		Reimb. through FY14 (YOES)	Estimated Future Reimb (2014\$'s)		Total Reimb. (2014\$, YOES)	Expend through FY14 (YOES)	Estimated Future Expend (2014 \$'s)		Total Expend. (2014\$, YOES)			
			FY15-FY26	FY27-FY35			FY15-FY26	FY27-FY35				
A42	Northern Pkwy: Sarival to Grand (Phase I)	60.713	0.000	0.000	60.713	86.741	0.000	0.000	86.741	2013	12.50	Total corridor length is 12.5 miles
	Northern Parkway: Sarival to Dysart	58.112	0.000	0.000	58.112	83.026	0.000	0.000	83.026	2013	4.10	Project Completed
	Northern Parkway: ROW Protection	2.601	0.000	0.000	2.601	3.716	0.000	0.000	3.716	2013	12.50	Project Completed
A43	Northern Pkwy: Sarival to Grand (Phase II)	18.531	68.917	0.000	87.448	25.804	99.121	0.000	124.926	2021	12.50	
	Northern Parkway: Sarival to Dysart	2.400	0.000	0.000	2.400	3.429	0.000	0.000	3.429	2014	4.10	Landscape and construction project.
	Northern Pkwy: Dysart to 111th	8.917	17.832	0.000	26.749	12.070	26.143	0.000	38.213	2016	2.50	Project scope includes Agua Fria Bridge and Sarival Overpass
	Northern Parkway: Reems and Litchfield Overpasses	7.214	0.000	0.000	7.214	10.306	0.000	0.000	10.306	2014	0.20	Combined two segments
	Northern Pkwy: Northern Ave at L101	0.000	8.448	0.000	8.448	0.000	12.069	0.000	12.069	2016	0.50	
	Northern Pkwy: Dysart Overpass	0.000	23.357	0.000	23.357	0.000	33.367	0.000	33.367	2019	0.10	
	Northern Pkwy: ROW Protection	0.000	1.400	0.000	1.400	0.000	2.000	0.000	2.000	2017	12.50	
	Northern Parkway: Interim Construction	0.000	17.880	0.000	17.880	0.000	25.543	0.000	25.543	2023	12.50	
A44	Northern Pkwy: Sarival to Grand (Phase III)	0.000	88.564	0.000	88.564	0.000	126.520	0.000	126.520	2027	12.50	
	Northern Pkwy: El Mirage Alternative Access	0.000	2.915	0.000	2.915	0.000	4.164	0.000	4.164	2020	1.00	
	Northern Pkwy: El Mirage Overpass	0.000	21.515	0.000	21.515	0.000	30.736	0.000	30.736	2023	0.10	
	Northern Pkwy: Agua Fria to 111th	0.000	2.817	0.000	2.817	0.000	4.024	0.000	4.024	2024	1.00	
	Northern Pkwy: 111th to 107th	0.000	15.423	0.000	15.423	0.000	22.033	0.000	22.033	2025	0.50	
	Northern Pkwy: 107th to 99th	0.000	20.572	0.000	20.572	0.000	29.389	0.000	29.389	2026	1.00	
	Northern Pkwy: Loop 101 to 91st	0.000	3.575	0.000	3.575	0.000	5.107	0.000	5.107	2027	0.50	
	Northern Pkwy: 91st to Grand Intersection Improvements	0.000	5.907	0.000	5.907	0.000	8.439	0.000	8.439	2026	3.00	
	Northern Pkwy: ROW Protection	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2026	12.50	
	Northern Pkwy: Ultimate Construction	0.000	15.840	0.000	15.840	0.000	22.629	0.000	22.629	2027	12.50	
MESA												
A46	Baseline Rd: Power Rd to Meridian Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2017	6.00	
	Baseline Rd: Power Rd to Ellsworth Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2016	3.00	Project was deleted in FY 2013. Funding was transferred to the Gilbert Road LRT extension.
	Baseline Rd: Ellsworth Rd to Meridian Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2017	3.00	Project was deleted in FY 2013. Funding was transferred to the Gilbert Road LRT extension.

MAP CODE	FACILITY/LOCATION	REGIONAL FUNDING				TOTAL EXPENDITURES				FINAL FY for CONST	LENGTH* (Miles)	OTHER PROJECT INFORMATION
		Reimb. through FY14 (YOES)	Estimated Future Reimb (2014\$'s)		Total Reimb. (2014\$, YOES)	Expend through FY14 (YOES)	Estimated Future Expend (2014 \$'s)		Total Expend. (2014\$, YOES)			
			FY15-FY26	FY27-FY35			FY15-FY26	FY27-FY35				
A47	Broadway Rd: Dobson Rd to Country Club	0.082	3.751	4.741	8.574	0.117	18.442	0.000	18.558	2023	2.00	
A48	Country Club/University Dr	0.000	8.325	0.000	8.325	0.000	21.282	0.000	21.282	2022	1.00	
A49	Country Club/Brown Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2019	0.50	Project was deleted in FY 2013. Funding was transferred to the Gilbert Road LRT extension.
A50	Crismon Rd: Broadway Rd to Germann Rd	0.000	12.406	9.919	22.324	0.000	36.059	0.000	36.059	2026	9.00	
	Crismon Rd: Broadway Rd to Guadalupe Rd	0.000	0.000	9.919	9.919	0.000	17.965	0.000	17.965	2026	3.00	
	Crismon Rd: Guadalupe Rd to Ray Rd	0.000	12.406	0.000	12.406	0.000	18.094	0.000	18.094	2025	3.00	
	Crismon Rd: Ray Rd to Germann Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2017	3.00	Project was deleted in FY 2013. Funding was transferred to the Gilbert Road LRT extension.
A51	Dobson Rd/Guadalupe Rd	2.170	0.000	0.000	2.170	3.100	0.000	0.000	3.100	2010	0.50	Project Completed
A52	Dobson Rd/University Dr	0.000	0.000	4.921	4.921	0.000	0.763	7.460	8.224	2027	0.50	
A53	Elliot Rd: Power Rd to Meridian Rd	0.000	9.330	8.646	17.976	0.000	27.003	0.000	27.003	2026	6.00	
	Elliot Rd: Power Rd to Ellsworth Rd	0.000	0.000	8.646	8.646	0.000	13.396	0.000	13.396	2027	3.00	
	Elliot Rd: Ellsworth Rd to Meridian Rd	0.000	9.330	0.000	9.330	0.000	13.607	0.000	13.607	2025	3.00	
A54	Germann Rd: Ellsworth Rd to Signal Butte Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2018	2.00	Project was deleted in FY 2013. Funding was transferred to the Gilbert Road LRT extension.
A55	Gilbert Rd/University Dr	2.741	0.000	0.000	2.741	11.765	0.000	0.000	11.765	2010	0.50	Project Completed
A56	Greenfield Rd: University Rd to Baseline Rd	5.777	0.000	6.585	12.362	9.692	11.756	0.000	21.448	2021	3.00	
	Greenfield Rd: Baseline Rd to Southern Ave	5.777	0.000	0.000	5.777	9.692	0.000	0.000	9.692	2010	1.00	Project Completed
	Greenfield Rd: Southern Ave to University Rd	0.000	0.000	6.585	6.585	0.000	11.756	0.000	11.756	2021	2.00	
A57	Guadalupe Rd: Power Rd to Meridian Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2019	6.00	
	Guadalupe Rd: Power Rd to Hawes Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2018	2.00	Project was deleted in FY 2013. Funding was transferred to the Gilbert Road LRT extension.
	Guadalupe Rd: Hawes Rd to Crimson Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2018	2.00	Project was deleted in FY 2013. Funding was transferred to the Gilbert Road LRT extension.
	Guadalupe Rd: Crimson Rd to Meridian Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2019	2.00	Project was deleted in FY 2013. Funding was transferred to the Gilbert Road LRT extension.

MAP CODE	FACILITY/LOCATION	REGIONAL FUNDING				TOTAL EXPENDITURES				FINAL FY for CONST	LENGTH* (Miles)	OTHER PROJECT INFORMATION
		Reimb. through FY14 (YOES)	Estimated Future Reimb (2014\$'s)		Total Reimb. (2014\$, YOES)	Expend through FY14 (YOES)	Estimated Future Expend (2014 \$'s)		Total Expend. (2014\$, YOES)			
			FY15-FY26	FY27-FY35			FY15-FY26	FY27-FY35				
A58	Hawes Rd: Broadway Rd to Ray Rd	0.416	11.523	0.000	11.939	0.595	23.058	4.389	28.042	2026	6.00	
	Hawes Rd: Broadway Rd to US60	0.000	0.000	0.000	0.000	0.000	10.697	0.000	10.697	2022	2.00	
	Hawes Rd: Baseline Rd to Elliot Rd	0.000	7.108	0.000	7.108	0.000	5.979	4.389	10.368	2027	2.00	
	Hawes Rd: Elliot Rd to Santan Freeway	0.000	4.415	0.000	4.415	0.000	6.383	0.000	6.383	2027	1.25	
	Hawes Rd: Santan Freeway to Ray Rd	0.416	0.000	0.000	0.416	0.595	0.000	0.000	0.595	2011	0.75	Project Completed
A59	Higley Rd Parkway: S 60 to SR-202L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2020	6.50	
	Higley Rd Parkway: SR-202L to Brown Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2019	3.00	Project was deleted in FY 2013. Funding was transferred to the Gilbert Road LRT extension.
	Higley Rd Parkway: Brown Rd to US-60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2020	3.50	Project was deleted in FY 2013. Funding was transferred to the Gilbert Road LRT extension.
A60	Higley Rd Parkway: US 60 to SR 202L (RM) Grade Separations	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2020	1.00	Project was deleted in FY 2013. Funding was transferred to the Gilbert Road LRT extension.
A61	Lindsay Rd/Brown Rd	0.000	3.919	0.000	3.919	0.000	5.668	0.000	5.668	2022	0.50	
A62	McKellips Rd: East of Sossaman to Meridian	0.000	12.283	0.000	12.283	0.000	28.989	0.000	28.989	2026	5.00	
	McKellips Rd: East of Sossaman to Crismon Rd	0.000	12.283	0.000	12.283	0.000	17.444	0.000	17.444	2024	3.00	
	McKellips Rd: Crismon Rd to Meridian Rd	0.000	0.000	0.000	0.000	0.000	11.545	0.000	11.545	2028	2.00	
A63	McKellips Rd: Gilbert Rd to Power Rd	0.122	18.471	0.000	18.592	0.176	27.960	0.000	28.136	2026	3.00	
	McKellips Rd/Lindsay Rd	0.043	6.137	0.000	6.180	0.061	9.690	0.000	9.751	2026	0.50	
	McKellips Rd/Greenfield Rd	0.040	2.630	0.000	2.670	0.057	3.893	0.000	3.950	2022	0.50	
	McKellips Rd/Higley Rd	0.040	6.310	0.000	6.350	0.058	9.167	0.000	9.225	2022	0.50	
	McKellips Rd/Power Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2019	0.50	Project was deleted in FY 2013. Funding was transferred to the Gilbert Road LRT extension.
	McKellips Rd/Recker Rd	0.000	3.393	0.000	3.393	0.000	5.210	0.000	5.210	2027	0.50	
	McKellips Rd/Val Vista Dr	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2018	0.50	Project was deleted in FY 2013. Funding was transferred to the Gilbert Road LRT extension.
A64	Meridian Rd: Baseline Rd to Germann Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2020	7.00	

MAP CODE	FACILITY/LOCATION	REGIONAL FUNDING				TOTAL EXPENDITURES				FINAL FY for CONST	LENGTH* (Miles)	OTHER PROJECT INFORMATION
		Reimb. through FY14 (YOE\$)	Estimated Future Reimb (2014\$'s)		Total Reimb. (2014\$, YOE\$)	Expend through FY14 (YOE\$)	Estimated Future Expend (2014 \$'s)		Total Expend. (2014\$, YOE\$)			
			FY15-FY26	FY27-FY35			FY15-FY26	FY27-FY35				
	Meridian Rd: Baseline Rd to Ray Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2018	4.00	Project was deleted in FY 2013. Funding was transferred to the Gilbert Road LRT extension.
	Meridian Rd: Ray Rd to Germann Rd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2020	3.00	Project was deleted in FY 2013. Funding was transferred to the Gilbert Road LRT extension.
A65	Mesa Dr: Southern Ave to US60 and Mesa Dr to Broadway Rd	10.905	12.447	0.000	9.316	21.622	15.931	0.000	37.554	2016	2.00	
	Mesa Dr: US 60 to Southern Ave	10.849	4.231	0.000	15.080	21.543	0.000	0.000	21.543	2013	1.00	Project Completed.
	Mesa Dr: 8th Avenue to Main Street	0.056	8.217	0.000	8.272	0.079	15.931	0.000	16.011	2016	1.00	Project limits changed from Mesa Dr at Broadway Rd
A66	Pecos Rd: Ellsworth Rd to Meridian Rd	0.000	15.381	0.000	15.381	0.000	22.158	0.000	22.158	2021	3.00	
A67	Ray Rd: Sossaman Rd to Meridian Rd	3.023	21.848	0.000	24.871	11.119	18.271	0.000	29.390	2026	5.00	
	Ray Rd: Sossaman Rd to Ellsworth Rd	3.023	0.000	0.000	3.023	4.319	0.000	0.000	4.319	2011	2.00	Project Completed
	Ray Rd: Ellsworth Rd to Signal Butte Rd	0.000	7.420	0.000	7.420	6.800	5.300	0.000	12.100	2015	2.00	Project segmented from Ray Rd: Ellsworth Rd to Meridian Rd
	Ray Rd: Signal Butte Rd to Meridian Rd	0.000	14.428	0.000	14.428	0.000	12.971	0.000	12.971	2016	1.00	Project segmented from Ray Rd: Ellsworth Rd to Meridian Rd
A68	Signal Butte Rd: Broadway to Pecos Rd	0.000	33.793	0.000	33.793	3.800	44.626	0.000	48.426	2026	8.00	
	Signal Butte Rd: Broadway Rd to Elliot Rd	0.000	17.217	0.000	17.217	0.000	18.151	0.000	18.151	2022	4.00	
	Signal Butte Rd: Elliot Rd to Ray Rd	0.000	3.912	0.000	3.912	3.800	2.300	0.000	6.100	2015	2.00	Project segmented from Signal Butte Rd: Elliot Rd to Pecos Rd
	Signal Butte Rd: Ray Rd to Pecos Rd	0.000	12.664	0.000	12.664	0.000	24.175	0.000	24.175	2026	2.00	Project segmented from Signal Butte Rd: Elliot Rd to Pecos Rd
A69	Southern Ave: Country Club Dr to Recker Rd	0.936	28.535	0.000	29.471	2.079	48.529	0.000	50.608	2019	2.00	
	Southern/Country Club Dr	0.342	6.469	0.000	6.811	1.285	11.321	0.000	12.605	2021	0.50	
	Southern Ave/Stapley Dr	0.594	11.528	0.000	12.122	0.794	20.950	0.000	21.744	2021	0.50	HSIP Recipient
	Southern Ave/Lindsay Rd	0.000	4.251	0.000	4.251	0.000	7.089	0.000	7.089	2022	0.50	
	Southern Ave/Higley Rd	0.000	6.287	0.000	6.287	0.000	9.170	0.000	9.170	2021	0.50	
A70	Southern Ave: Sossaman Rd to Meridian Rd	0.000	0.000	13.310	18.038	0.000	26.524	0.000	26.524	2025	5.00	
	Southern Ave: Sossaman Rd to Crismon Rd	0.000	0.000	8.014	8.014	0.000	15.735	0.000	15.735	2023	3.00	
	Southern Ave: Crismon Rd to Meridian Rd	0.000	0.000	5.296	5.296	0.000	10.788	0.000	10.788	2025	2.00	
A71	Stapley Dr/University Dr	0.000	7.785	0.000	7.785	0.000	30.534	0.000	30.534	2022	0.50	

MAP CODE	FACILITY/LOCATION	REGIONAL FUNDING				TOTAL EXPENDITURES				FINAL FY for CONST	LENGTH* (Miles)	OTHER PROJECT INFORMATION
		Reimb. through FY14 (YOE\$)	Estimated Future Reimb (2014\$'s)		Total Reimb. (2014\$, YOE\$)	Expend through FY14 (YOE\$)	Estimated Future Expend (2014 \$'s)		Total Expend. (2014\$, YOE\$)			
			FY15-FY26	FY27-FY35			FY15-FY26	FY27-FY35				
A72	Thomas Rd: Gilbert Rd to Val Vista Dr	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2020	2.00	Project was deleted in FY 2013. Funding was transferred to the Gilbert Road LRT extension.
A73	University Dr: Val Vista Dr to Hawes Rd	0.000	22.033	0.000	22.033	0.000	32.467	0.000	32.467	2024	6.00	
	University Dr: Val Vista Dr to Higley Rd	0.000	11.204	0.000	11.204	0.000	16.340	0.000	16.340	2022	2.00	
	University Dr: Higley Rd to Hawes Rd	0.000	10.829	0.000	10.829	0.000	16.127	0.000	16.127	2024	4.00	
A74	Val Vista Dr: University Dr to Baseline Rd	0.000	8.320	4.722	13.042	0.000	24.757	0.000	24.757	2026	3.00	
	Val Vista Dr: Baseline Rd to Southern Ave	0.000	8.320	0.000	8.320	0.000	12.247	0.000	12.247	2023	1.00	
	Val Vista Dr: Southern Ave to University Dr	0.000	0.000	4.722	4.722	0.000	12.510	0.000	12.510	2027	2.00	
	Mesa Main Street: Mesa Dr to Gilbert Rd Light Rail Extension	5.415	147.952	0.000	153.367	5.742	156.895	0.000	162.637	2020	2.00	
PEORIA												
A75	Beardsley Connection: SR-101L to Beardsley Rd at 83rd Ave/Lake Pleasant Pkwy	20.430	2.593	0.000	23.023	34.621	0.000	0.000	0.000	2012	3.95	
	Beardsley Connection: Loop 101 to 83rd Ave/Lake Pleasant Pkwy	6.125	0.000	0.000	6.125	8.473	0.000	0.000	0.000	2010	0.75	Project Completed.
	Loop 101 (Agua Fria Fwy) at Beardsley Rd/Union Hills Dr	10.851	0.000	0.000	10.851	13.484	0.000	0.000	0.000	2010	2.00	Project Completed
	83rd Avenue: Butler Rd to Mountain View	1.561	2.593	0.000	4.154	6.734	0.000	0.000	0.000	2014	1.00	Project Completed
	75th Ave at Thunderbird Rd: Intersection Improvement	1.893	0.000	0.000	1.893	5.931	0.000	0.000	0.000	2014	0.20	Project Completed
A76	Happy Valley Rd: L303 to 67th Avenue	20.634	0.000	0.000	20.634	7.744	21.800	0.000	0.000	2029	8.000	
	Happy Valley Rd: Loop 303 to Lake Pleasant Parkway	0.000	0.000	0.000	0.000	0.000	21.800	0.000	0.000	2025	3.00	
	Happy Valley Rd: Lake Pleasant Pkwy to 67th Ave	20.634	0.000	0.000	20.634	7.744	0.000	0.000	0.000	2010	5.00	Project Completed
A77	Lake Pleasant Pkwy: Union Hills to SR74	29.772	13.867	0.000	43.639	65.313	11.114	47.500	123.928	2020	14.06	
	Lake Pleasant Pkwy: Dynamite Blvd to CAP	2.645	13.867	0.000	16.512	26.560	11.114	0.000	37.675	2014	2.50	
	Lake Pleasant Pkwy: Union Hills to Dynamite Rd	27.127	0.000	0.000	27.127	38.753	0.000	0.000	38.753	2007	9.76	Project Completed
	Lake Pleasant Pkwy: CAP to SR-74/Carefree Hwy	0.000	0.000	0.000	0.000	0.000	0.000	47.500	47.500	2030	1.80	

MAP CODE	FACILITY/LOCATION	REGIONAL FUNDING				TOTAL EXPENDITURES				FINAL FY for CONST	LENGTH* (Miles)	OTHER PROJECT INFORMATION
		Reimb. through FY14 (YOE\$)	Estimated Future Reimb (2014\$'s)		Total Reimb. (2014\$, YOE\$)	Expend through FY14 (YOE\$)	Estimated Future Expend (2014 \$'s)		Total Expend. (2014\$, YOE\$)			
			FY15-FY26	FY27-FY35			FY15-FY26	FY27-FY35				
PHOENIX												
A78	Avenida Rio Salado: 51st Ave. to 7th St.	35.454	9.240	0.000	44.693	42.466	15.584	0.000	58.050	2015	6.00	Project length and scope changed.
A79	Black Mountain Blvd: SR-51and Loop 101/ Pima Fwy to Deer Valley Rd	11.790	10.740	0.000	22.530	16.842	15.343	0.000	32.185	2015	2.00	
A80	Happy Valley Rd: 67th Ave to I-17	0.000	5.343	13.291	18.634	8.220	17.083	16.321	41.623	2030	4.50	
	Happy Valley: I-17 to 35th Ave	0.000	5.343	0.078	5.421	7.744	0.000	0.000	7.744	2005	1.00	Project Completed
	Happy Valley: 35th Ave to 43rd Ave	0.000	0.000	5.232	5.232	0.440	11.700	0.000	12.141	2024	1.00	
	Happy Valley: 43rd Ave to 55th Ave	0.000	0.000	4.671	4.671	0.035	2.718	8.403	11.157	2030	1.50	
	Happy Valley: 55th Ave to 67th Ave	0.000	0.000	3.310	3.310	0.000	2.665	7.917	10.582	2030	1.00	
A81	Sonoran Blvd: 15th Avenue to Cave Creek	32.572	0.000	0.000	32.572	58.650	0.000	0.000	58.650	2013	8.00	Project completed.
SCOTTSDALE/CAREFREE												
A87	Pima Rd: SR101L to Happy Valley Rd and Dynamite Rd to Cave Creek	31.486	58.816	0.625	90.302	47.065	86.054	0.000	133.119	2022	10.65	
	Pima Rd: Thompson Peak Parkway to Pinnacle Peak (SCT)	17.847	0.000	0.000	17.847	25.540	0.000	0.000	25.540	2012	1.50	Project completed. Savings reallocated to ACISCT1003A
	Pima Rd/Happy Valley (SCT)	0.000	0.000	0.000	0.000	1.599	0.000	0.000	1.599	2020	0.40	Project Completed
	Pima Rd: Pinnacle Peak to Happy Valley Rd (SCT)	0.000	15.991	0.000	15.991	0.000	22.844	0.000	22.844	2019	1.00	
	Pima Rd: Dynamite Blvd to Stagecoach Rd (SCT)	0.000	37.892	0.000	37.892	0.000	55.270	0.000	55.270	2022	5.00	
	Pima Rd: Stagecoach Rd to Cave Creek (CFR)	0.000	4.933	0.625	5.558	0.000	7.940	0.000	7.940	2020	0.25	
	Pima Rd: SR101L to Thompson Peak Pkwy (SCT)	13.639	0.000	0.000	13.639	19.926	0.000	0.000	19.926	2007	2.50	Project Completed
SCOTTSDALE												
A82	Carefree Hwy: Cave Creek Rd to Scottsdale Rd	0.000	8.012	0.000	8.012	0.000	14.344	0.000	14.344	2022	2.00	
A83	SR-101L North Frontage Roads: Pima/Princess Dr to Scottsdale Rd	3.745	0.000	29.014	32.759	5.350	0.000	41.449	46.799	2028	2.00	
	SR-101L Frontage Rd: Hayden Rd to Scottsdale Rd	3.745	0.000	0.000	3.745	5.350	0.000	0.000	5.350	2009	1.00	Project Completed
	SR-101L Frontage Rd: Pima Rd/Princess Dr to Hayden Rd	0.000	0.000	29.014	29.014	0.000	0.000	41.449	41.449	2028	1.00	
A84	SR-101L South Frontage Rd: Hayden Rd to Pima	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	1.00	This project was deleted in FY2009.
A85	Miller Rd/SR-101L Underpass	0.000	14.005	0.000	14.005	0.000	20.007	0.000	20.007	2020	1.30	

MAP CODE	FACILITY/LOCATION	REGIONAL FUNDING				TOTAL EXPENDITURES				FINAL FY for CONST	LENGTH* (Miles)	OTHER PROJECT INFORMATION
		Reimb. through FY14 (YOE\$)	Estimated Future Reimb (2014\$'s)		Total Reimb. (2014\$, YOE\$)	Expend through FY14 (YOE\$)	Estimated Future Expend (2014 \$'s)		Total Expend. (2014\$, YOE\$)			
			FY15-FY26	FY27-FY35			FY15-FY26	FY27-FY35				
A86	Pima Rd: Happy Valley Rd to Dynamite Blvd	0.000	23.747	0.000	23.747	0.000	33.925	0.000	33.925	2023	2.00	
A88	Pima Rd: McKellips Rd to Via Linda	7.463	23.256	0.000	30.719	10.745	38.706	0.000	49.451	2011	7.40	
	Pima Rd: Via Linda to Via De Ventura	0.000	1.339	0.000	1.339	0.000	2.354	0.000	2.354	2016	1.30	
	Pima Rd: Via De Ventura to Krail	7.463	0.000	0.000	7.463	10.745	0.000	0.000	10.745	2012	1.30	Project Completed
	Pima Rd: Thomas Rd to McDowell Rd	0.000	9.463	0.000	9.463	0.000	16.551	0.000	16.551	2019	1.00	
	Pima Rd: Krail to Chaparral	0.000	6.326	0.000	6.326	0.000	11.041	0.000	11.041	2020	1.80	
	Pima Rd: Chaparral Rd to Thomas Rd	0.000	6.128	0.000	6.128	0.000	8.761	0.000	8.761	2019	2.00	
A89	Scottsdale Airport: Runway Tunnel	9.583	60.669	0.000	70.253	22.650	72.966	0.000	95.616	2026	6.85	
	Frank Lloyd Wright -Loop 101 Traffic Interchange	0.000	5.983	0.000	5.983	0.000	8.547	0.000	8.547	2020	0.40	
	Raintree -Loop 101 Traffic Interchange	0.000	3.167	0.000	3.167	0.000	4.524	0.000	4.524	2020	0.40	
	Northsight Blvd: Hayden to Frank Lloyd Wright	8.495	5.378	0.000	13.873	21.096	0.000	0.000	21.096	2014	0.35	Project Completed. Received project savings from ACISHA2003H.
	Frank Lloyd Wright Frontage Rd: Northsight to Greenway-Hayden Loop	0.000	7.746	0.000	7.746	0.000	11.065	0.000	11.065	2022	0.75	
	Redfield Rd: Scottsdale Rd to Hayden	0.000	3.951	0.000	3.951	0.000	5.630	0.000	5.630	2018	1.20	
	Raintree Drive Extension: 76th Pl to hayden	0.000	13.523	0.000	13.523	0.000	15.893	0.000	15.893	2017	1.00	Renamed in FY2012
	Raintree Drive: Loop 101 to Hayden	0.000	6.304	0.000	6.304	0.000	6.036	0.000	6.036	2017	1.00	
	Frank Lloyd Wright at 76th/78th/82nd Street: Intersection Improvements	0.398	0.000	0.000	0.398	0.568	0.000	0.000	0.568	2014	0.50	Project Completed. Savings transferred to ACISAT1003C.
	Southbound Loop 101 Frontage Road Connections	0.000	3.052	0.000	3.052	0.000	4.600	0.000	4.600	2017	0.50	Project Scope changed in FY2012
	Hayden Rd - Loop 101 Interchange Improvements	0.000	11.428	0.000	11.428	0.000	16.652	0.000	16.652	2026	0.75	
	Airpark DCR	0.690	0.137	0.000	0.827	0.986	0.020	0.000	1.006	-----	-----	Received \$704,000 in project savings from ACISHA2003E
A90	Scottsdale Rd: Thompson Peak Pkwy to Jomax Rd	8.212	11.301	0.000	19.513	17.888	54.937	0.000	72.825	2015	4.00	
	Scottsdale Rd: Thompson Peak Pkwy to Pinnacle Peak Pkwy Phase I	8.212	3.373	0.000	11.585	17.888	0.000	0.000	17.888	2014	2.00	Project segmented into two phases. Phase one completed. Received \$6.1m in project savings from ACIPMA1003A and \$16,756 in project savings from ACISHA2003E.
	Scottsdale Rd: Thompson Peak Pkwy to Pinnacle Peak Pkwy Phase II	0.000	6.128	0.000	6.128	0.000	18.000	0.000	18.000	2020	2.00	Project segmented into two phases.
	Scottsdale Rd: Pinnacle Peak Pkwy to Jomax Rd	0.000	1.800	0.000	1.800	0.000	36.937	0.000	36.937	2022	2.00	
A91	Scottsdale Rd: Jomax Rd to Carefree Hwy	0.000	28.348	0.000	28.348	0.000	51.329	0.000	51.329	2024	5.00	

MAP CODE	FACILITY/LOCATION	REGIONAL FUNDING				TOTAL EXPENDITURES				FINAL FY for CONST	LENGTH* (Miles)	OTHER PROJECT INFORMATION
		Reimb. through FY14 (YOES)	Estimated Future Reimb (2014\$'s)		Total Reimb. (2014\$, YOES)	Expend through FY14 (YOES)	Estimated Future Expend (2014 \$'s)		Total Expend. (2014\$, YOES)			
			FY15-FY26	FY27-FY35			FY15-FY26	FY27-FY35				
	Scottsdale Rd: Jomax Rd to Dixileta Dr	0.000	9.499	0.000	9.499	0.000	18.081	0.000	18.081	2021	2.00	
	Scottsdale Rd: Dixileta Dr to Ashler Hills Dr	0.000	9.499	0.000	9.499	0.000	16.624	0.000	16.624	2022	1.50	
	Scottsdale Rd: Ashler Hills Dr to Carefree Highway	0.000	9.350	0.000	9.350	0.000	16.624	0.000	16.624	2024	1.50	
A92	Shea Blvd: SR-101L to SR-87	5.366	17.197	0.000	22.563	7.609	25.210	0.000	32.819	2019	12.80	
	Shea Blvd at 90th/92nd/96th	4.056	0.000	0.000	4.056	5.794	0.000	0.000	5.794	2007	0.75	Project Completed
	Shea Auxiliary Lane from 90th St to Loop 101	0.000	6.390	0.000	6.390	0.000	9.129	0.000	9.129	2018	1.00	
	Shea Blvd at Via Linda (Phase1)	0.621	0.000	0.000	0.621	0.887	0.000	0.000	0.887	2007	0.20	Project Completed
	Shea Blvd at Via Linda (Phase 2)	0.000	2.086	0.000	2.086	0.000	2.980	0.000	2.980	2025	0.25	
	Shea Blvd at 120/124th St	0.183	0.000	0.000	0.183	0.206	0.000	0.000	0.206	2012	0.40	Project Completed
	Shea Blvd at Mayo/134th St	0.162	0.000	0.000	0.162	0.231	0.000	0.000	0.231	2007	0.20	Project Completed
	Shea Blvd: SR-101L to 96th St, ITS Improvements	0.344	0.000	0.000	0.344	0.491	0.000	0.000	0.491	2010	1.00	Project Completed. Project savings transferred to ACISAT1003C.
	Shea Blvd: 96th St to 144th St, ITS Improvements	0.000	2.360	0.000	2.360	0.000	3.372	0.000	3.372	2025	6.25	
	Shea Blvd at Loop 101	0.000	3.688	0.000	3.688	0.000	5.269	0.000	5.269	2025	1.00	
	Shea Blvd at 110th St	0.000	0.266	0.000	0.266	0.000	0.379	0.000	0.379	2025	0.25	
	Shea Blvd at 114th St	0.000	0.266	0.000	0.266	0.000	0.379	0.000	0.379	2019	0.25	
	Shea Blvd at Frank Lloyd Wright Blvd	0.000	0.664	0.000	0.664	0.000	1.489	0.000	1.489	2018	0.25	
	Shea Blvd at 115th St	0.000	0.111	0.000	0.111	0.000	0.159	0.000	0.159	2025	0.25	
	Shea Blvd at 125th St	0.000	0.880	0.000	0.880	0.000	1.257	0.000	1.257	2025	0.25	
	Shea Blvd at 135th St	0.000	0.111	0.000	0.111	0.000	0.159	0.000	0.159	2025	0.25	
	Shea Blvd at 136th St	0.000	0.376	0.000	0.376	0.000	0.637	0.000	0.637	2025	0.25	
A93	Legacy Dr: Hayden Rd to 88th Street	0.000	2.073	10.021	12.094	0.000	21.910	0.000	21.910	2025	1.00	
	TOTALS	439.7	1111.4	185.3	1736.5	801.8	1921.5	154.0	2813.1			

TABLE B-2
ARTERIAL STREET LIFE CYCLE PROGRAM - INTELLIGENT TRANSPORTATION SYSTEMS
REGIONAL FUNDING REIMBURSEMENTS: FY 2006-2026
(2014 and Year of Expenditure Dollars in Millions)

Year of Expenditure CONST Construction
Fiscal Year Expend Expenditures
Dollars Reimb Reimbursement(s)

FACILITY/LOCATION	REGIONAL FUNDING			Total Reimb. (2014\$, YOES\$)	FINAL FY for CONST	LENGTH (Miles)	OTHER PROJECT INFORMATION
	Reimb. through FY14 (YOES\$)	Estimated Future Reimb (2014 \$'s)					
		FY15-FY26	FY27-FY35				
REGION-WIDE							
Intelligent Transportation System Projects	39.543	26.413	0.000	65.956	2018	N/A	

Appendix C
Transit Life Cycle Program

TABLE C-1
TRANSIT LIFE CYCLE PROGRAM - BUS OPERATIONS: BUS RAPID TRANSIT/EXPRESS
EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

Map Code	Route	Expenditures through FY 2014: (YOE Dollars)	Est. Future Costs: FY 2015 - 2026 (2014 Dollars)	Total Est. Costs: FY 2006-2026 (2014 and YOE Dollars)	Est. Future Costs: FY 2027 - 2035 (2014 Dollars)	Total Est. Costs: FY 2006-2035 (2014 and YOE Dollars)	Funding Start (Fiscal Year)	Other Project Information
T1	Ahwatukee Connector	0.00	0.00	0.00	1.20	1.20	2030	
T2	Ahwatukee Express	5.17	0.00	5.17	0.00	5.17	2006	I-10 East RAPID (Phoenix assumed funding in FY 2011)
T3	Anthem Express	0.00	0.00	0.00	2.90	2.90	2031	
T4	Apache Junction Express	0.00	0.00	0.00	4.25	4.25	2027	
T5	Arizona Avenue LINK	4.57	16.15	20.72	13.65	34.37	2011	
T6	Avondale Express	0.00	1.73	1.73	2.54	4.27	2020	
T7	Black Canyon Freeway Corridor	0.00	0.00	0.00	1.96	1.96	2030	
T8	Buckeye Express	0.00	0.00	0.00	3.73	3.73	2029	
T9	Chandler Boulevard LINK	0.00	0.00	0.00	7.70	7.70	2034	Designated as illustrative project in FY 2010.
T10	Deer Valley Express	5.51	0.00	5.51	0.00	5.51	2006	I-17 RAPID (Phoenix assumed funding in FY 2011)
T11	Desert Sky Express	2.16	0.00	2.16	0.00	2.16	2006	I-10 West RAPID (Phoenix assumed funding in FY 2011)
T12	East Loop 101 Connector	1.87	3.44	5.31	2.90	8.21	2009	Route 511 - Chandler/Scottsdale Airpark Express (route modified in FY 2012)
T13	Grand Avenue Limited	1.94	1.89	3.83	1.59	5.42	2006	
T14	Loop 303 Express	0.00	0.00	0.00	3.46	3.46	2031	
T15	Main Street LINK	9.91	14.89	24.80	11.09	35.89	2009	
T16	North Glendale Express	4.81	6.42	11.24	5.41	16.64	2008	Route 573 - Northwest Valley
T17	North I-17 Express	0.00	0.00	0.00	3.13	3.13	2031	
T18	North Loop 101 Connector	2.74	0.00	2.74	0.00	2.74	2008	Route 572 - Surprise/Scottsdale Express (route eliminated in FY 2011)
T19	Papago Fwy Connector	1.67	4.19	5.86	3.53	9.40	2009	Routes 562 - Goodyear Express and Route 563 - Buckeye Express
T20	Peoria Express	0.00	0.00	0.00	3.27	3.27	2030	
T21	Pima Express	0.00	0.00	0.00	3.11	3.11	2029	
T22	Red Mountain Express	2.16	5.14	7.30	4.34	11.64	2009	Routes 535 & 536 - Northeast Mesa Express (route 536 eliminated in FY 2011)
T23	Red Mountain Fwy Connector	0.00	0.00	0.00	2.67	2.67	2031	
T24	Santan Express	0.00	0.00	0.00	7.59	7.59	2031	
T25	Scottsdale/Rural LINK	0.00	15.13	15.13	13.93	29.07	2015	Limited implementation (Rural/Apache LRT station to Scottsdale/Thunderbird park and ride)

Map Code	Route	Expenditures through FY 2014: (YOE Dollars)	Est. Future Costs: FY 2015-2026 (2014 Dollars)	Total Est. Costs: FY 2006-2026 (2014 and YOE Dollars)	Est. Future Costs: FY 2027-2035 (2014 Dollars)	Total Est. Costs: FY 2006-2035 (2014 and YOE Dollars)	Funding Start (Fiscal Year)	Other Project Information
T26	South Central Avenue	0.25	5.93	6.19	5.22	11.41	2013	Advanced 2 years
T27	South Central Avenue LINK	0.00	0.00	0.00	5.13	5.13	2030	
T28	SR 51 Express	4.19	0.00	4.19	0.00	4.19	2006	SR-51 RAPID (Phoenix assumed funding in FY 2011)
T29	Superstition Fwy Connector	0.00	0.00	0.00	1.26	1.26	2028	
T30	Superstition Springs Express	0.00	0.00	0.00	4.05	4.05	2031	
T31	West Loop 101 Connector	2.74	4.15	6.89	3.49	10.38	2009	Routes 575 & 576 - Northwest Valley Express (route 576 eliminated in FY 2011)
	TOTAL	49.70	79.07	128.77	123.12	251.88		

TABLE C-2
TRANSIT LIFE CYCLE PROGRAM - BUS OPERATIONS: REGIONAL GRID
EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

Map Code	Route	Expenditures through FY 2014 (YOE Dollars)	Est. Future Costs: FY 2015 - 2026 (2014 Dollars)	Total Est. Costs: FY 2006-2026 (2014 and YOE Dollars)	Est. Future Costs: FY 2027 - 2035 (2014 Dollars)	Total Est. Costs: FY 2006-2035 (2014 and YOE Dollars)	Funding Start (Fiscal Year)	Sched. Imprv. (Fiscal Year)	Other Project Information
T40	59th Avenue	7.15	13.36	20.52	11.25	31.77	2006		Route 59 - 59th Avenue
T41	83rd Avenue/75th Avenue	0.00	0.00	0.00	20.39	20.39	2028		
T42	99th Avenue	0.00	0.00	0.00	9.95	9.95	2031		
T43	Alma School Rd.	2.93	13.24	16.17	13.39	29.56	2006	2018	Route 104 - Alma School Road
T44	Arizona Avenue/Country Club	7.74	15.86	23.60	13.40	37.01	2006	2012	Route 112 - Country Club Drive/Arizona Avenue
T45	Baseline Rd	3.00	13.20	16.20	12.17	28.37	2013		Route 77 - Baseline Road
	Dobson Rd	13.19	21.82	35.01	18.45	53.46	2009		Route 96 - Dobson Road
	Southern Ave	19.29	41.05	60.34	34.72	95.06	2006	2009	Route 61 - Southern Avenue
T46	Bell Road	0.00	4.60	4.60	9.69	14.29	2022		Route 170 - Bell Road
T47	Broadway	2.20	6.76	8.95	5.70	14.65	2011		Route 45 - Broadway Road
T48	Buckeye Road	0.00	0.00	0.00	4.60	4.60	2031		
T49	Camelback Road	1.10	3.97	5.06	4.76	9.83	2006	2019	Route 50 - Camelback Road
T50	Chandler Blvd.	21.04	33.09	54.14	28.01	82.14	2008		Route 156 - Chandler Boulevard
T51	Dunlap/Olive Avenue	0.00	0.00	0.00	8.25	8.25	2031		
T52	Dysart Road	0.00	0.00	0.00	3.26	3.26	2030		
T53	Elliot Road	2.95	20.32	23.26	17.17	40.44	2011	2014	Route 108 - Elliot Road
T54	Gilbert Road	6.94	18.00	24.94	15.20	40.14	2010		Route 136 - Gilbert Road
T55	Glendale Avenue	16.70	23.48	40.18	19.82	60.00	2006	2008	Route 70 - Glendale Avenue
T56	Greenfield Road	0.00	0.00	0.00	14.14	14.14	2029		
T57	Hayden/McClintock	7.38	28.14	35.52	33.91	69.43	2006	2021	Route 81 - Hayden Road/McClintock Drive
T58	Indian School Road	0.00	0.00	0.00	7.19	7.19	2031		
T59	Litchfield Road	0.00	0.00	0.00	15.80	15.80	2032		Designated as illustrative project in FY 2010.
T60	Main Street	12.34	24.77	37.11	20.97	58.08	2009		Route 40 - Apache/Main Street
T61	McDowell/McKellips	2.03	14.07	16.10	11.88	27.98	2013		Route 17 - McDowell Road
T62	Peoria Ave./Shea	11.51	22.97	34.48	19.36	53.84	2006		Route 106 - Peoria Road/Shea Boulevard
T63	Power Road	6.01	21.61	27.62	18.26	45.88	2011		Route 184 - Power Road
T64	Queen Creek Road	0.00	0.00	0.00	3.90	3.90	2031		
T65	Ray Road	0.00	0.00	0.00	22.20	22.20	2027		
T66	Scottsdale/Rural	47.95	63.20	111.15	53.45	164.60	2006	2007	Route 72 - Scottsdale/Rural Road
T67	Tatum / 44th Street	0.00	0.00	0.00	1.03	1.03	2027		

Map Code	Route	Expenditures through FY 2014: (YOE: Dollars)	Est. Future Costs: FY 2015 - 2026 (2014 Dollars)	Total Est. Costs: FY 2006-2026 (2014 and YOE: Dollars)	Est. Future Costs: FY 2027 - 2035 (2014 Dollars)	Total Est. Costs: FY 2006-2035 (2014 and YOE: Dollars)	Funding Start (Fiscal Year)	Sched. Imprv. (Fiscal Year)	Other Project Information
T68	Thomas Road	0.47	7.67	8.15	6.49	14.63	2014	2031	Route 29 - Thomas Road
T69	University Drive	1.04	10.45	11.49	18.03	29.53	2021		Route 30 - University Drive
T70	Van Buren	1.02	12.68	13.70	11.02	24.71	2013	2016	Route 3 - Van Buren Street
T71	Waddell/Thunderbird	0.00	10.86	10.86	9.90	20.76	2015	2015	Route 138 - Thunderbird Road
	TOTAL	194.00	445.16	639.15	517.72	1,156.88			

TABLE C-3
TRANSIT LIFE CYCLE PROGRAM - BUS OPERATIONS: OTHERS
EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

Route	Expenditures: through FY 2014: (YOE Dollars)	Est. Future Costs: FY 2015- 2026 (2014 Dollars)	Total Est. Costs: FY 2006-2026 (2014 and YOE Dollars)	Est. Future Costs: FY 2027- 2035 (2014 Dollars)	Total Est. Costs: FY 2006-2035 (2014 and YOE Dollars)	Service Start (Fiscal Year)	Other Project Information
ADA Paratransit	115.34	317.56	432.90	274.29	707.19	2006	
Regional Passenger Support Services	59.02	82.33	141.35	64.86	206.21	2006	
Existing Local Service	6.77	10.15	16.92	8.79	25.71	2006	
Existing Express Service	30.58	30.48	61.06	29.33	90.39	2006	
Rural/Non-Fixed Route Service	3.35	4.20	7.55	3.53	11.09	2006	
Vanpool Service	0.00	0.00	0.00	0.00	0.00	2006	Vanpool operations are funded entirely through fares
Safety and Security Costs	3.56	9.35	12.91	7.90	20.81	2006	
Operating Contingency	0.00	0.00	0.00	0.00	0.00	2006	Most contingencies were eliminated to help balance the program
RPTA Planning and Administration	32.34	45.95	78.29	35.80	114.10	2006	Primarily funded through RPTA's allocation from Regional Area Road Fund
TOTAL	250.96	500.02	750.99	424.51	1,175.50		

TABLE C-4
TRANSIT LIFE CYCLE PROGRAM - BUS CAPITAL: FACILITIES
EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

Category	Expenditures through FY 2014: (YOE Dollars)	Est. Future Costs: FY 2015-2026 (2014 Dollars)	Total Est. Costs: FY 2006-2026 (2014 and YOE Dollars)	Est. Future Costs: FY 2027-2035 (2014 Dollars)	Total Est. Costs: FY 2006-2035 (2014 and YOE Dollars)	No. of Units Constructed/Installed through FY 2014	Tot. No. of Units to be Constructed/Installed through FY 2026	Tot. No. of Units to be Constructed/Installed through FY 2035	Other Project Information
Arterial BRT Right-of-Way and Improvements	24.04	14.14	38.18	55.84	94.01	25	39	51	
Bus Stop Pullouts/Improvements	4.02	0.00	4.02	0.00	4.02	230	230	230	Major reduction in planned bus stop improvements beginning in FY 2011 due to funding shortfall.
Dial-a-Ride and Rural Bus Maintenance Facilities	0.00	0.00	0.00	13.03	13.03	0	0	1	Rural facility was postponed beyond 2031 and 1 DAR facilities is started
Intelligent Transportation Systems (ITS) / Vehicle Management Systems (VMS)	12.24	9.28	21.52	0.00	21.52				Funding designated for system wide radio communications. Also see note below.
Park & Ride Lots	44.36	41.06	85.42	6.35	91.77	5	11	11	
Standard Bus Maintenance Facilities	103.78	0.00	103.78	92.80	196.58	2	2	2	
Transit Centers (4 Bay)	0.00	2.40	2.40	13.04	15.44	0	1	5	
Transit Centers (6 Bay)	0.07	3.45	3.52	7.51	11.03	0	1	2	
Transit Centers (Major Activity Centers)	4.86	0.00	4.86	8.96	13.81	1	1	2	
Vanpool Vehicle Maintenance Facilities	0.00	0.00	0.00	0.00	0.00	0	0	0	Project was postponed indefinitely
Contingency	0.00	0.00	0.00	0.00	0.00				
TOTAL	193.36	70.33	263.69	197.53	461.22				

Note: Expenditures through FY 2012 are lower than those reported for FY 2011, due to deferral of IGA with City of Phoenix.

TABLE C-5
TRANSIT LIFE CYCLE PROGRAM - BUS CAPITAL: FLEET
EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

Category	Expenditures through FY 2014 (YOE Dollars)	Est. Future Costs: FY 2015-2026 (2014 Dollars)	Total Est. Costs: FY 2006-2026 (2014 and YOE Dollars)	Est. Future Costs: FY 2027-2035 (2014 Dollars)	Total Est. Costs: FY 2006-2035 (2014 and YOE Dollars)	No. of Units Acquired through FY 2014	Tot. No. of Units to be Acquired through FY 2026	Tot. No. of Units to be Acquired through FY 2035	Other Project Information
Paratransit	15.74	27.06	42.81	27.61	70.42	256	643	946	See note below.
Fixed Route	302.21	460.72	762.93	277.99	1,040.92	646	1383	1809	
Rural Route	1.56	1.00	2.56	0.71	3.28	13	26	33	
Vanpool	17.58	27.20	44.78	23.55	68.33	552	1,392	2,022	
Contingency	0.00	0.00	0.00	0.00	0.00				
TOTAL	337.10	515.98	853.08	329.87	1,182.95				

Note: Expenditures through FY 2012 are lower than those reported for FY 2011, due to local purchase of vehicles that were not reimbursed by the TLCP as originally planned.

TABLE C-6
TRANSIT LIFE CYCLE PROGRAM - LIGHT RAIL TRANSIT/HIGH CAPACITY TRANSIT: SUPPORT INFRASTRUCTURE
EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

Facility	Expenditures: through FY 2014 (Year of Expenditure Dollars)				Est. Future Costs: FY 2015-2026 (2014 Dollars)	Tot. Costs: FY 2006- 2026 (2014 and YOE Dollars)	Est. Future Costs: FY 2027-2035 (2014 Dollars)	Tot. Costs: FY 2006- 2035 (2014 and YOE Dollars)	Target Opening Date	Project Length (Center- line Miles)	Other Project Information
	Design	RAW	Construc.	Total							
CPEV Regional Reimbursements	0.00	0.00	198.75	198.75	0.00	198.75	0.00	198.75	12 / 2008	20	Includes final disbursement request
Central Mesa Link: Main St./Sycamore to Main St./Mesa Dr. *	4.25	0.00	0.00	4.25	0.00	4.25	0.00	4.25	03/2016	3.1	AA Costs
Northwest Link Phase 1: 19th Ave./Bethany Home to 19th Ave./Dunlop	3.19	0.00	0.00	3.19	0.00	3.19	0.00	3.19	03/2016	3.2	
Tempe South Link: Main St./ Rural Rd. to Southern Ave.	5.01	0.00	0.00	5.01	0.00	5.01	0.00	5.01	06/2017	2.6	Project added in FY 2012 to cover AA costs as part of infrastructure support.
Gilbert Road: Main St./Mesa Dr. to Main St./Gilbert Rd.	0.95	0.00	0.00	0.95	0.00	0.95	0.00	0.95	07/2018	1.9	AA Costs - Project funded by City of Mesa
Phoenix West Link: Washington Ave./Central Ave. to 79th Ave.	10.23	0.00	0.00	10.23	3.00	13.24	0.00	13.24	12/2023	11	AA Costs
Glendale Link: 19th Ave./Bethany Home to Downtown Glendale	2.30	0.00	0.00	2.30	3.75	6.05	0.00	6.05	10/2026	5	AA Costs
Northwest Link Phase 2: 19th Ave./Dunlop to Rose Mofford Sports Complex	0.93	0.00	0.00	0.93	0.11	1.04	0.00	1.04	12/2026	1.8	AA & Draft EA

Facility	Expenditures: through FY 2014 (Year of Expenditure Dollars)				Est. Future Costs: FY 2015-2026 (2014 Dollars)	Tot. Costs: FY 2006- 2026 (2014 and YOE Dollars)	Est. Future Costs: FY 2027-2035 (2014 Dollars)	Tot. Costs: FY 2006- 2035 (2014 and YOE Dollars)	Target Opening Date	Project Length (Center- line Miles)	Other Project Information
	Design	R/W	Construc.	Total							
Northeast Phoenix Link: Indian School Rd./Central Ave. to Paradise Valley Mall	0.00	0.00	0.00	0.00	10.11	10.11	0.00	10.11	12/2035	12	AA & Draft EA
Systemwide Support Infrastructure	0.71	0.00	59.05	59.75	120.51	180.26	8.20	188.47	N/A		
Design Standards and System Planning	12.50	0.00	0.00	12.50	38.49	50.99	0.00	50.99	N/A		
Capital Project Development Admin.	7.34	0.00	0.00	7.34	17.93	25.27	14.45	39.71	N/A		
Utility Reimbursements	2.00	0.00	99.44	101.44	100.39	201.83	58.41	260.25	N/A		
TOTAL	49.42	0.00	357.24	406.66	294.28	700.95	81.06	782.01			

TABLE C-7
TRANSIT LIFE CYCLE PROGRAM - LIGHT RAIL TRANSIT/HIGH CAPACITY TRANSIT: ROUTE EXTENSIONS
EXPENDITURES AND ESTIMATED FUTURE COSTS: FY 2006-2026, FY 2027-2035
(2014 and Year of Expenditure Dollars in Millions)

Map Code	Facility	Expenditures: through FY 2014 (Year of Expenditure Dollars)				Est. Future Costs: FY 2015-2026 (2014 Dollars)	Tot. Costs: FY 2006-2026 (2014 and YOE Dollars)	Est. Future Costs: FY 2027-2035 (2014 Dollars)	Tot. Costs: FY 2006-2035 (2014 and YOE Dollars)	Target Opening Date	Project Length (Center-line Miles)	Other Project Information
		Design	R/W	Construc.	Total							
T85	Central Mesa Link: Main St./Sycamore to Main St./Mesa Dr. *	7.78	13.00	102.81	123.59	65.48	189.07	0.00	189.07	11/2015	3.1	Permission to enter PE in 8/2010
T82	Northwest Link Phase 1: 19th Ave./Bethany Home to 19th Ave./Dunlap	25.37	72.95	99.96	198.28	98.73	297.01	0.00	297.01	07/2016	3.2	
T84	Tempe South Link: Main St./ Rural Rd. to Southern Ave.	0.68	0.00	0.00	0.68	118.23	118.91	0.00	118.91	08/2018	2.6	Permission to enter Project Development in 2013
T86	Gilbert Road: Main St./Mesa Dr. to Main St./Gilbert Rd.	0.00	0.00	0.00	0.00	136.98	136.98	0.00	136.98	10/2018	1.9	Project is funded by City of Mesa
T81	Phoenix West Link: Washington Ave./Central Ave. to 79th Ave.	0.00	0.00	0.00	0.00	795.01	795.01	0.00	795.01	12/2023	11.0	
T80	Glendale Link: 19th Ave./Bethany Home to Downtown Glendale	0.00	0.00	0.00	0.00	395.98	395.98	14.10	410.08	10/2026	5.0	
T82B	Northwest Link Phase 2: 19th Ave./Dunlap to Rose Mofford Sports Complex	0.00	0.00	0.00	0.00	122.17	122.17	7.17	129.33	12/2026	1.4	
T83	Northeast Phoenix Link: Indian School Rd./Central Ave. to Paradise Valley Mall	0.00	0.00	0.00	0.00	12.99	12.99	963.02	976.01	9/2035	12.0	Project begins in FY 33
	TOTAL	33.84	85.95	202.77	322.56	1,745.56	2,068.12	984.28	3,052.40			

TABLE C-8
TRANSIT LIFE CYCLE PROGRAM - BUS RAPID TRANSIT/EXPRESS
ROUTE CHARACTERISTICS AND USAGE SUMMARY: FY 2006 - FY 2014

Map Code	Route	Service Start (Fiscal Year)	Route Length (Miles)	Annual Bus Miles of Service (Thousands)	Total Boardings through FY 2014 (Thousands)	Farebox Revenues through FY 2014 (YOE Dollars)	Annual Average Boardings through FY 2014 (Thousands)	Annual Average Farebox Revenues through FY 2014 (YOE Dollars)	Other Project Information
T1	Ahwatukee Connector	2031	14.7	30.0					
T2	Ahwatukee Express	2006	20.8	160.3	654.0	1,401,377	130.8	280,300	
T3	Anthem Express	2031	30.4	77.4					
T4	Apache Junction Express	2027	37.4	76.4					
T5	Arizona Avenue Arterial BRT	2011	12.0	221.2	1,104.1	786,621	276.0	196,700	
T6	Avondale Express	2020	19.0	77.6					
T7	Black Canyon Freeway Corridor	2031	16.6	67.7					
T8	Buckeye Express	2028	43.7	66.9					
T9	Chandler Boulevard Arterial BRT	2034	18.5	226.6					
T10	Deer Valley Express	2008	13.6	188.2	900.2	1,429,493	300.1	476,500	
T11	Desert Sky Express	2008	22.6	89.1	520.4	724,549	173.5	241,500	
T12	East Loop 101 Connector	2009	44.6	45.9	36.5	59,920	6.1	10,000	
T13	Grand Avenue Limited	2006	25.9	17.5	103.4	166,294	11.5	18,500	
T14	Loop 303 Express	2031	38.1	77.8					
T15	Main Street Arterial BRT	2009	13.0	295.2	1,861.9	1,526,164	310.3	254,400	
T16	North Glendale Express	2008	29.6	61.1	321.8	647,726	46.0	92,500	
T17	North I-17 Express	2031	34.4	87.6					
T18	North Loop 101 Connector (Surprise to Scottsdale)	2008	31.6	105.3	57.5	77,989	19.2	26,000	
T19	Papago Fwy Connector	2009	30.0	53.4	318.2	379,668	53.0	63,300	
T20	Peoria Express	2028	24.1	73.6					
T21	Pima Express	2028	35.4	72.2					
T22	Red Mountain Express	2009	32.8	69.0	307.9	420,364	51.3	70,100	
T23	Red Mountain Fwy Connector	2031	19.2	78.5					

Map Code	Route	Service Start (Fiscal Year)	Route Length (Miles)	Annual Bus Miles of Service (Thousands)	Total Boardings through FY 2014 (Thousands)	Farebox Revenues through FY 2014 (YOE Dollars)	Annual Average Boardings through FY 2014 (Thousands)	Annual Average Farebox Revenues through FY 2014 (YOE Dollars)	Other Project Information
T24	Santan Express	2031	44.9	228.9					
T25	Scottsdale/Rural Arterial BRT	2016	13.2	282.8					
T26	South Central Avenue	2013	9.4	29.2	59.2	72,466	29.6	36,200	
T27	South Central Avenue Arterial BRT	2031	11.4	120.9					
T28	SR 51 Express	2008	22.3	128.3	541.6	1,047,606	180.5	349,200	
T29	Superstition Fwy Connector	2027	17.5	26.8					
T30	Superstition Springs Express	2031	31.9	162.5					
T31	West Loop 101 Connector	2009	31.4	39.5	257.2	250,144	42.9	41,700	
	TOTAL				7,043.9	8,990,382	1,630.7	2,156,900	

TABLE C-9
TRANSIT LIFE CYCLE PROGRAM - REGIONAL GRID
ROUTE CHARACTERISTICS AND USAGE SUMMARY: FY 2006 - FY 2014

Map Code	Route	Service Start (Fiscal Year)	Route Length (Miles)	Annual Bus Miles of Service (Thousands)	Total Boardings through FY 2014 (Thousands)	Farebox Revenues through FY 2014 (YOE Dollars)	Annual Average Boardings through FY 2014 (Thousands)	Annual Average Farebox Revenues through FY 2014 (YOE Dollars)	Other Project Information
T40	59th Avenue	2006	16.2	161.0	2,929.8	2,229,207	325.5	247,700	
T41	83rd Avenue/75th Avenue	2023	21.4	542.4					
T42	99th Avenue	2031	16.5	401.3					
T43	Alma School Rd.	2006	19.1	75.0	667.1	507,157	74.1	56,400	
T44	Arizona Avenue/Country Club	2012	16.3	191.4	1,567.2	2,528,856	522.4	843,000	
T45	Baseline Road	2013	19.6	162.4	802.1	825,658	401.0	412,800	
T45	Dobson Road	2009	15.7	295.7	3,972.1	3,330,191	662.0	555,000	
T45	Southern Avenue	2006	28.1	568.8	8,270.0	6,133,441	918.9	681,500	
T46	Bell Road (via 303)	2024	38.1	1,138.5					
T47	Broadway	2011	27.8	93.3	715.2	579,572	178.8	144,900	
T48	Buckeye Road (Litchfield Road to Central Ave.)	2031	22.7	586.5					
T49	Camelback Road	2006	28.5	17.1	279.7	250,377	31.1	27,800	
T50	Chandler Blvd.	2008	32.7	471.5	2,491.4	2,089,256	355.9	298,500	
T51	Dunlap/Olive Avenue	2031	14.3	411.7					
T52	Dysart Road	2030	21.0	311.9					
T53	Elliot Road	2011	21.9	109.1	255.2	271,867	63.8	68,000	
T54	Gilbert Road	2010	20.9	232.6	1,194.0	1,047,638	238.8	209,500	
T55	Glendale Avenue	2008	32.7	240.3	8,525.5	3,223,805	1,217.9	460,500	
T56	Greenfield Road	2022	15.2	369.3					
T57	Hayden/McClintock	2006	29.7	235.9	1,746.8	1,314,871	194.1	146,100	
T58	Indian School Road	2031	30.4	879.1					
T59	Litchfield Road	2032	21.5	523.8					
T60	Main Street	2009	17.3	343.5	3,663.1	2,872,657	610.5	478,800	
T61	McDowell/McKellips	2013	41.8	114.7	520.4	361,752	260.2	180,900	
T62	Peoria Ave./Shea	2006	43.0	249.4	2,451.2	2,346,479	272.4	260,700	
T63	Power Road	2011	14.2	275.6	464.1	308,340	116.0	77,100	

Map Code	Route	Service Start (Fiscal Year)	Route Length (Miles)	Annual Bus Miles of Service (Thousands)	Total Boardings through FY 2014 (Thousands)	Farebox Revenues through FY 2014 (YOE Dollars)	Annual Average Boardings through FY 2014 (Thousands)	Annual Average Farebox Revenues through FY 2014 (YOE Dollars)	Other Project Information
T64	Queen Creek Road (Pecos P&R to Power Road)	2031	12.0	293.4					
T65	Ray Road	2023	18.4	447.9					
T66	Scottsdale/Rural	2007	28.9	915.4	11,889.3	9,742,355	1,486.2	1,217,800	
T67	Tatum / 44th Street	2031	22.8	682.2					
T68	Thomas Road	2014	26.7	770.5	277.7	145,140	277.7	145,100	
T69	University Drive (to Ellsworth Road)	2016	27.8	802.2					
T70	Van Buren	2013	23.4	76.9	291.3	22,880	145.6	11,400	
T71	Waddell/Thunderbird	2024	27.9	692.4					
	TOTAL				52,973.1	40,131,496	8,352.9	6,523,500	

Appendix D

Performance Monitoring and Assessment

TABLE D-1
AVERAGE AM PEAK PERIOD SPEED FOR SELECTED FREEWAY CORRIDORS

Freeway Corridor	Dir	From	To	Average AM Peak Period Speed (mph)							
				General-purpose Lanes				HOV Lanes			
				2011	2012	2013	% Change 2012 to 2013	2011	2012	2013	% Change 2012 to 2013
I-10 Papago	EB	83rd Ave	I-17	51.1	50.2	46.9	-6.6%	55.4	54.5	52.2	-4.1%
	WB	I-17	83rd Ave	63.2	66.4	67.2	1.1%	65.6	68.1	68.2	0.1%
I-10 Papago	EB	I-17	SR 51/Loop 202	54.0	53.1	52.1	-1.9%	63.3	62.6	62.3	-0.5%
	WB	SR 51/Loop 202	I-17	60.8	62.8	63.1	0.5%	68.8	70.4	70.7	0.4%
I-10 Maricopa	EB	SR 51/Loop 202	US 60	62.3	61.9	62.0	0.2%	67.1	67.6	68.3	1.0%
	WB	US 60	SR 51/Loop 202	61.2	57.5	57.9	0.7%	64.3	63.6	63.8	0.3%
I-10 Maricopa	EB	US 60	Chandler Blvd	66.8	65.5	65.1	-0.5%	70.7	71.0	71.9	1.3%
	WB	Chandler Blvd	US 60	46.0	44.3	43.8	-1.2%	61.3	58.3	60.1	3.1%
I-17	NB	Maricopa TI	I-10	60.1	61.5	61.4	-0.2%	n/a	n/a	n/a	n/a
	SB	I-10	Maricopa TI	53.3	52.9	49.5	-6.4%	n/a	n/a	n/a	n/a
I-17	NB	I-10	Peoria Ave	60.6	59.5	58.7	-1.3%	63.9	60.4	59.7	-1.2%
	SB	Peoria Ave	I-10	55.8	53.8	50.9	-5.5%	62.6	58.6	53.4	-8.8%
SR 51	NB	I-10/Loop 202	Glendale Ave	65.9	63.4	62.7	-1.1%	68.4	64.5	63.1	-2.1%
	SB	Glendale Ave	I-10/Loop 202	58.6	55.8	55.1	-1.2%	61.7	59.2	54.9	-7.2%
SR 51	NB	Glendale Ave	Bell Road	69.2	67.7	66.7	-1.4%	65.9	68.8	71.9	4.5%
	SB	Bell Road	Glendale Ave	63.3	63.3	61.4	-3.0%	68.7	67.0	66.9	-0.2%
Loop 202	EB	I-10/SR 51	Loop 101	66.2	65.9	66.9	1.5%	70.4	70.5	71.2	1.0%
	WB	Loop 101	I-10/SR 51	55.7	57.8	57.1	-1.2%	67.4	66.7	64.4	-3.5%
US 60	EB	I-10	Loop 101	62.0	63.7	63.4	-0.5%	63.9	63.5	66.9	5.4%
	WB	Loop 101	I-10	53.4	52.9	51.4	-2.8%	not available	not available	not available	not available
US 60	EB	Loop 101	Val Vista Dr	62.9	65.3	64.9	-0.6%	63.5	67.1	67.6	0.7%
	WB	Val Vista Dr	Loop 101	60.0	61.7	60.7	-1.6%	65.5	69.8	69.6	-0.2%
US 60	EB	Val Vista Dr	Loop 202	67.3	68.4	67.4	-1.5%	70.3	71.2	70.0	-1.7%
	WB	Loop 202	Val Vista Dr	66.4	69.1	69.7	0.8%	43.2	71.2	71.6	0.6%
SR 143	NB	I-10	Loop 202/McDowell Rd	54.3	not available	not available	not available	n/a	n/a	n/a	n/a
	SB	Loop 202/McDowell Rd	I-10	52.4	not available	not available	not available	n/a	n/a	n/a	n/a
Loop 101	NB	Loop 202 Santan	US 60	56.0	54.7	54.3	-0.7%	66.3	65.5	66.6	1.7%
	SB	US 60	Loop 202 Santan	68.5	66.4	67.3	1.4%	74.4	72.4	74.9	3.5%
Loop 101	NB	US 60	Loop 202 Red Mountain	56.1	56.0	57.1	2.0%	67.6	68.2	70.4	3.3%
	SB	Loop 202 Red Mountain	US 60	67.5	67.5	68.0	0.8%	72.6	74.5	75.5	1.3%
Loop 101	NB	Loop 202 Red Mountain	90th St	56.6	54.8	52.8	-3.6%	66.1	66.1	64.6	-2.2%
	SB	90th St	Loop 202 Red Mountain	65.5	66.4	65.4	-1.6%	73.2	71.0	72.2	1.6%
Loop 101	NB	90th St	Pima Rd	65.4	65.9	66.4	0.7%	69.7	70.7	70.7	0.0%
	SB	Pima Rd	90th St	65.8	66.8	66.9	0.1%	72.9	73.3	73.0	-0.4%
Loop 101	EB	SR 51	Pima Rd	62.6	61.1	59.9	-2.0%	70.5	69.9	63.4	-9.2%
	WB	Pima Rd	SR 51	68.0	69.9	70.2	0.5%	71.2	75.2	74.5	-1.0%
Loop 101	EB	I-17	SR 51	48.1	50.8	49.9	-1.8%	not available	64.0	not available	not available
	WB	SR 51	I-17	61.9	68.7	69.4	1.0%	not available	74.7	not available	not available

Source: ADOT FMS
n/a = not applicable

**TABLE D-2
AVERAGE PM PEAK PERIOD SPEED FOR SELECTED FREEWAY CORRIDORS**

Freeway Corridor	Dir	From	To	Average PM Peak Period Speed (mph)							
				General-purpose Lanes				HOV Lanes			
				2011	2012	2013	% Change 2012 to 2013	2011	2012	2013	% Change 2012 to 2013
I-10 Papago	EB	83rd Ave	I-17	64.4	66.8	66.4	-0.7%	64.8	67.3	67.6	0.5%
	WB	I-17	83rd Ave	55.9	58.8	57.3	-2.6%	60.5	62.7	61.0	-2.7%
I-10 Papago	EB	I-17	SR 51/Loop 202	56.8	56.9	56.0	-1.6%	63.8	63.7	63.3	-0.7%
	WB	SR 51/Loop 202	I-17	37.2	40.6	36.9	-9.2%	47.0	48.4	43.8	-9.5%
I-10 Maricopa	EB	SR 51/Loop 202	US 60	48.6	47.9	46.7	-2.6%	56.6	55.3	54.3	-1.9%
	WB	US 60	SR 51/Loop 202	64.2	60.3	58.0	-3.8%	65.7	65.1	64.3	-1.3%
I-10 Maricopa	EB	US 60	Chandler Blvd	58.3	57.0	55.2	-3.1%	66.5	64.6	65.9	1.9%
	WB	Chandler Blvd	US 60	63.6	61.9	61.4	-0.8%	67.2	66.1	68.0	2.8%
I-17	NB	Maricopa TI	I-10	51.1	51.8	48.3	-6.8%	n/a	n/a	n/a	n/a
	SB	I-10	Maricopa TI	59.7	60.9	60.6	-0.5%	n/a	n/a	n/a	n/a
I-17	NB	I-10	Peoria Ave	49.9	48.4	45.3	-6.3%	57.5	52.6	50.4	-4.2%
	SB	Peoria Ave	I-10	61.6	61.4	60.5	-1.5%	68.4	64.6	59.7	-7.6%
SR 51	NB	I-10/Loop 202	Glendale Ave	58.0	55.2	53.9	-2.3%	66.1	61.2	59.6	-2.6%
	SB	Glendale Ave	I-10/Loop 202	61.8	61.6	61.2	-0.7%	63.6	62.1	57.8	-6.9%
SR 51	NB	Glendale Ave	Bell Road	68.2	66.6	64.3	-3.4%	65.7	68.1	70.0	2.8%
	SB	Bell Road	Glendale Ave	66.9	67.6	67.6	0.0%	70.2	68.8	70.3	2.2%
Loop 202	EB	I-10/SR 51	Loop 101	63.2	62.1	62.1	0.0%	69.6	69.1	69.1	0.0%
	WB	Loop 101	I-10/SR 51	59.1	60.7	60.2	-0.9%	66.9	66.1	67.4	2.0%
US 60	EB	I-10	Loop 101	58.4	59.9	59.3	-1.0%	64.9	64.7	65.6	1.4%
	WB	Loop 101	I-10	64.0	65.2	65.1	-0.2%	not available	not available	not available	not available
US 60	EB	Loop 101	Val Vista Dr	61.1	63.0	62.5	-0.8%	64.8	68.8	68.9	0.1%
	WB	Val Vista Dr	Loop 101	64.7	66.7	66.2	-0.8%	63.9	67.4	68.2	1.2%
US 60	EB	Val Vista Dr	Loop 202	67.6	68.8	67.8	-1.4%	73.2	72.4	70.6	-2.5%
	WB	Loop 202	Val Vista Dr	66.0	68.9	69.5	0.8%	71.5	70.0	70.5	0.8%
SR 143	NB	I-10	Loop 202/McDowell Rd	54.4	not available	not available	not available	n/a	n/a	n/a	n/a
	SB	Loop 202/McDowell Rd	I-10	53.2	not available	not available	not available	n/a	n/a	n/a	n/a
Loop 101	NB	Loop 202 Santan	US 60	65.5	64.8	65.5	1.1%	72.1	71.0	72.3	1.8%
	SB	US 60	Loop 202 Santan	59.1	57.5	58.2	1.2%	70.2	66.0	68.0	3.0%
Loop 101	NB	US 60	Loop 202 Red Mountain	64.8	65.2	67.4	3.3%	72.0	73.0	75.6	3.6%
	SB	Loop 202 Red Mountain	US 60	46.4	44.9	42.7	-4.9%	60.4	60.3	60.5	0.4%
Loop 101	NB	Loop 202 Red Mountain	90th St	61.6	60.6	60.4	-0.3%	68.8	69.2	68.6	-0.9%
	SB	90th St	Loop 202 Red Mountain	52.1	51.0	50.7	-0.6%	65.7	61.4	62.7	2.0%
Loop 101	NB	90th St	Pima Rd	63.8	63.7	63.7	0.0%	69.5	69.9	69.5	-0.6%
	SB	Pima Rd	90th St	65.3	65.6	66.0	0.6%	72.9	72.8	72.6	-0.3%
Loop 101	EB	SR 51	Pima Rd	67.0	68.1	69.0	1.3%	73.1	74.0	68.2	-7.8%
	WB	Pima Rd	SR 51	58.5	61.8	58.8	-4.9%	69.0	70.9	67.9	-4.2%
Loop 101	EB	I-17	SR 51	59.0	66.4	66.6	0.3%	not available	72.4	not available	not available
	WB	SR 51	I-17	51.4	55.5	54.0	-2.7%	not available	66.9	not available	not available

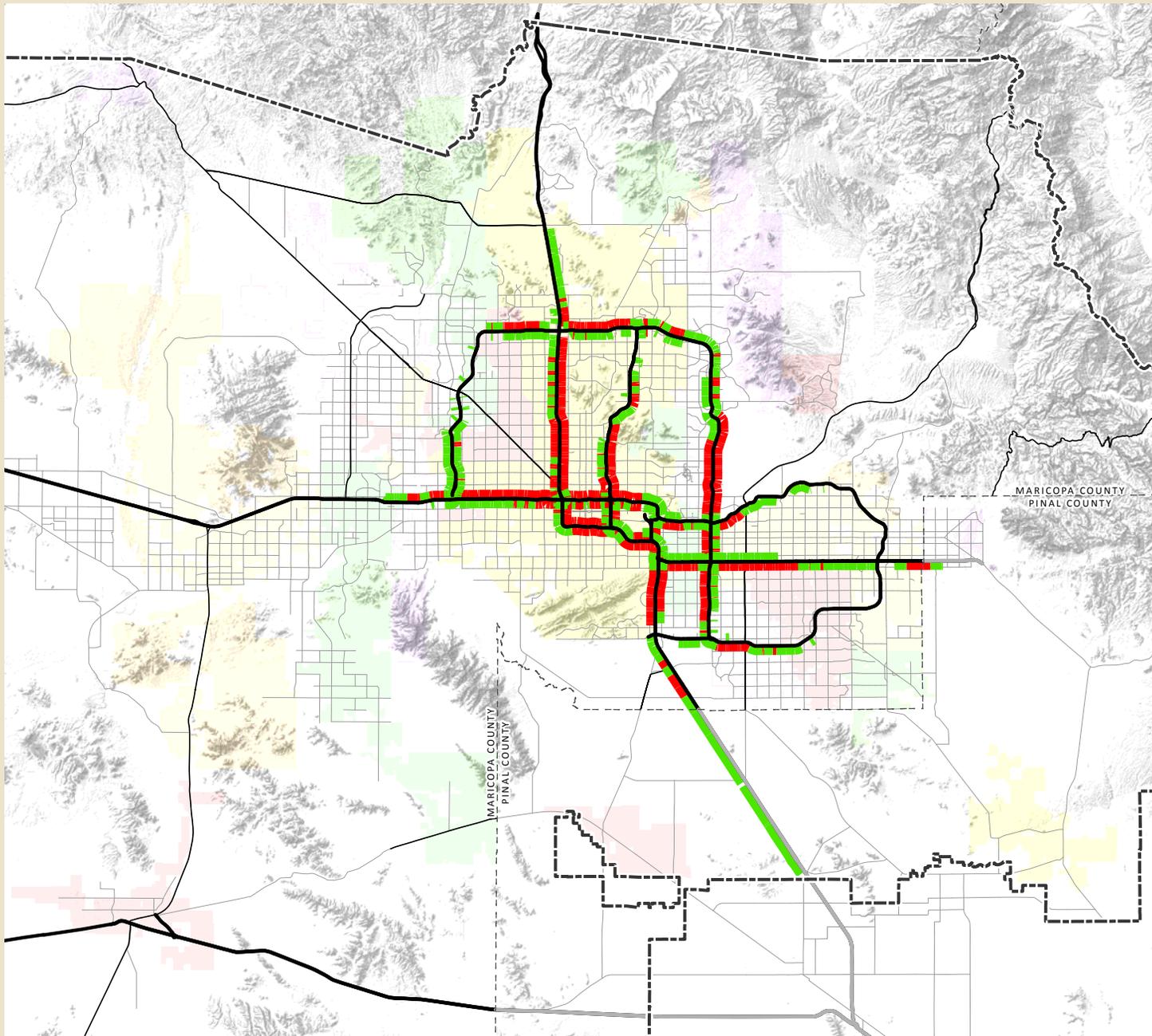
Source: ADOT FMS
n/a = not applicable

MAG 2014 Annual Report on Proposition 400

Fig.D-1



2011 Base Year Network: Freeway PM Peak Period Level of Service

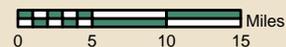


-  Levels C & D
-  Levels E & F
-  Freeways
-  Highways
-  Other Roads
-  Metropolitan Planning Area Boundary
-  County Boundary

Regional transportation facilities in Pinal County are planned by the Central Arizona Association of Governments (CAAG).



While every effort has been made to ensure the accuracy of this information, the Maricopa Association of Governments makes no warranty, expressed or implied, as to its accuracy and expressly disclaims liability for the accuracy thereof.



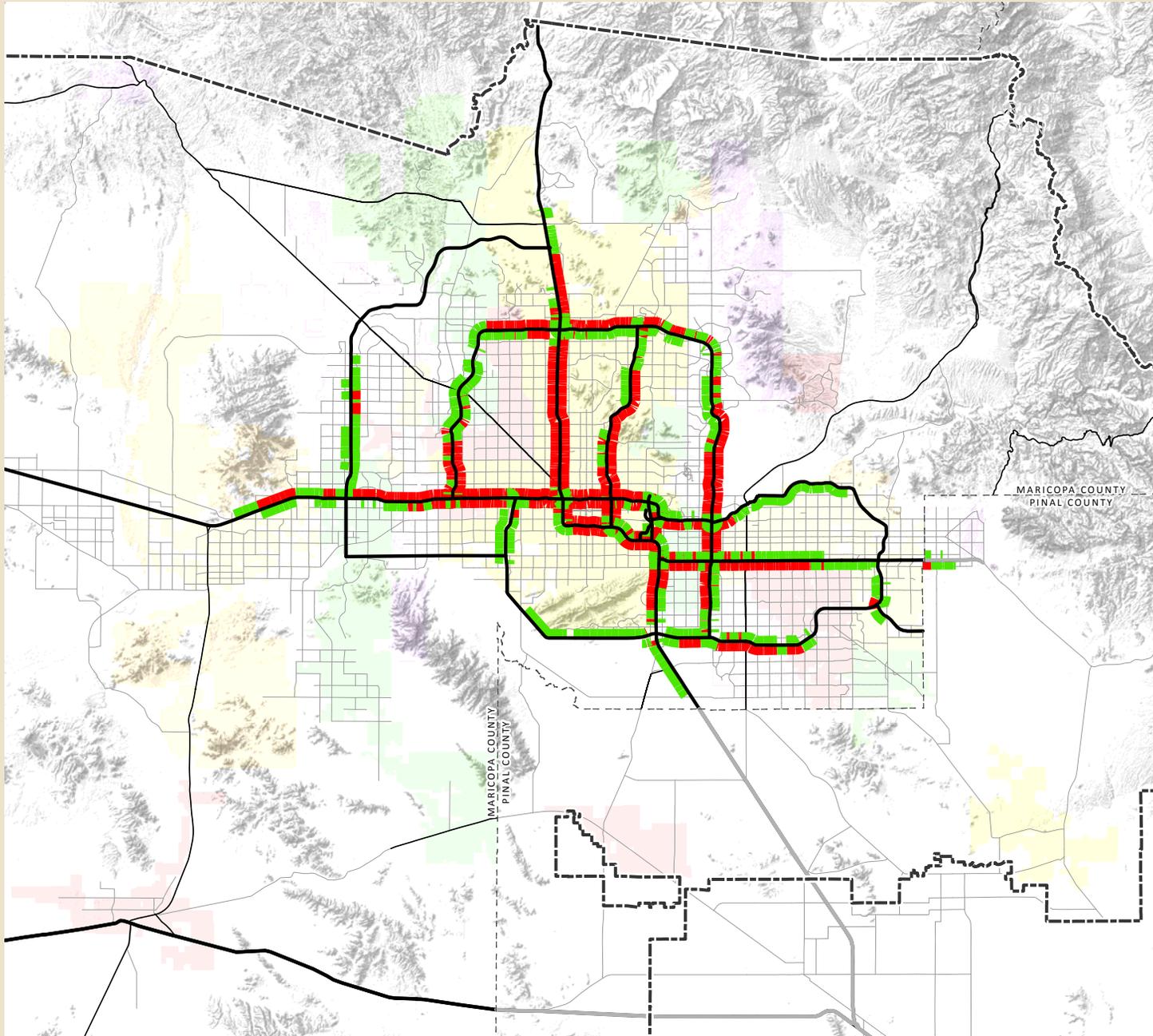
©2014, All Rights Reserved

MAG 2014 Annual Report on Proposition 400

Fig. D-2



2025 RTP Network: Freeway PM Peak Period Level of Service

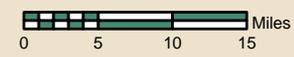


-  Levels C & D
-  Levels E & F
-  Freeways
-  Highways
-  Other Roads
-  Metropolitan Planning Area Boundary
-  County Boundary

Regional transportation facilities in Pinal County are planned by the Central Arizona Association of Governments (CAAG).



While every effort has been made to ensure the accuracy of this information, the Maricopa Association of Governments makes no warranty, expressed or implied, as to its accuracy and expressly disclaims liability for the accuracy thereof.



©2014, All Rights Reserved

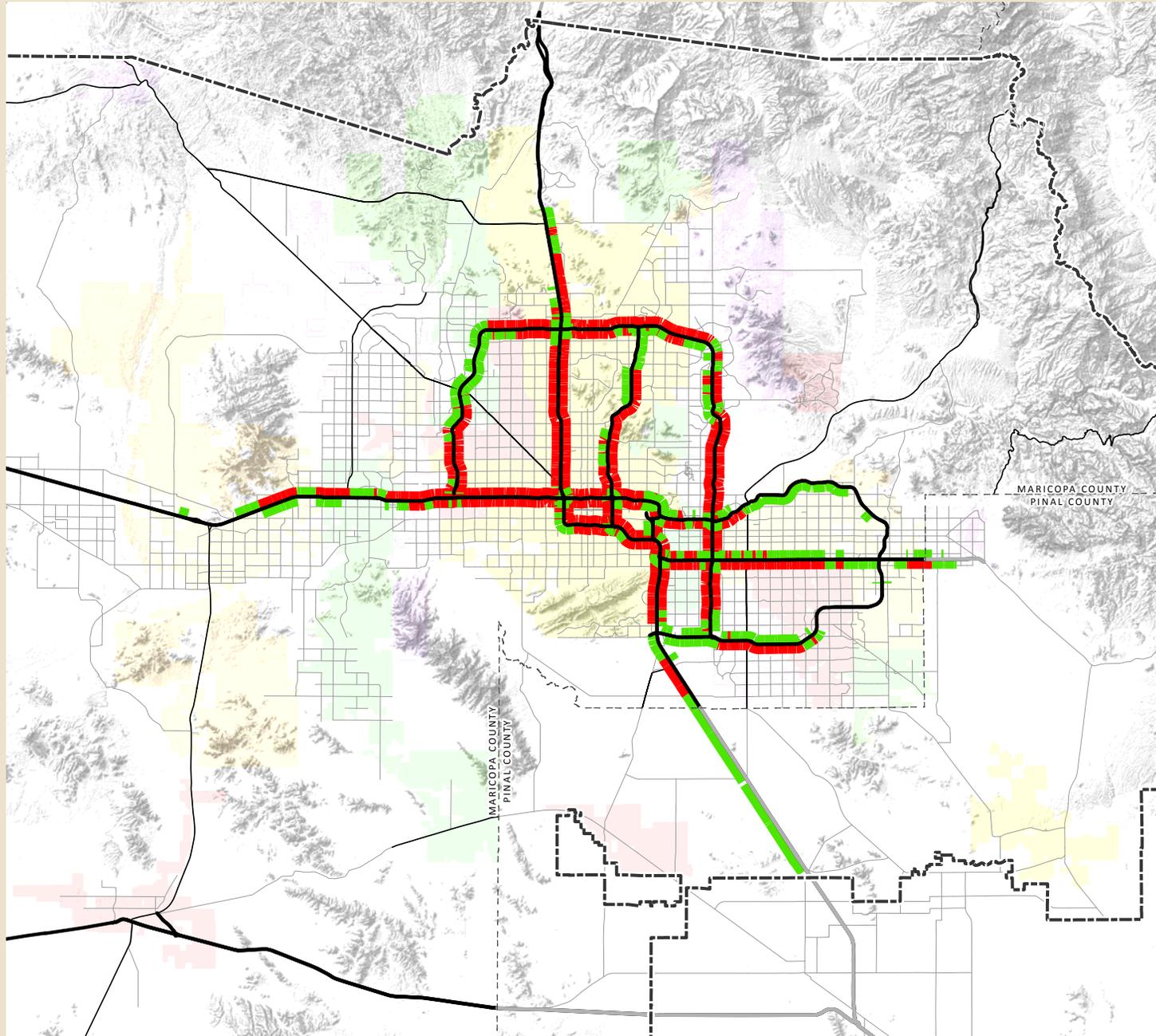
DRAFT

MAG 2014 Annual Report on Proposition 400

Fig. D-3



2025 No Build Network: Freeway PM Peak Period Level of Service

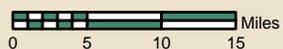


- █ Levels C & D
- █ Levels E & F
- █ Freeways
- █ Highways
- █ Other Roads
- Metropolitan Planning Area Boundary
- County Boundary

Regional transportation facilities in Pinal County are planned by the Central Arizona Association of Governments (CAAG).



While every effort has been made to ensure the accuracy of this information, the Maricopa Association of Governments makes no warranty, expressed or implied, as to its accuracy and expressly disclaims liability for the accuracy thereof.



©2014, All Rights Reserved

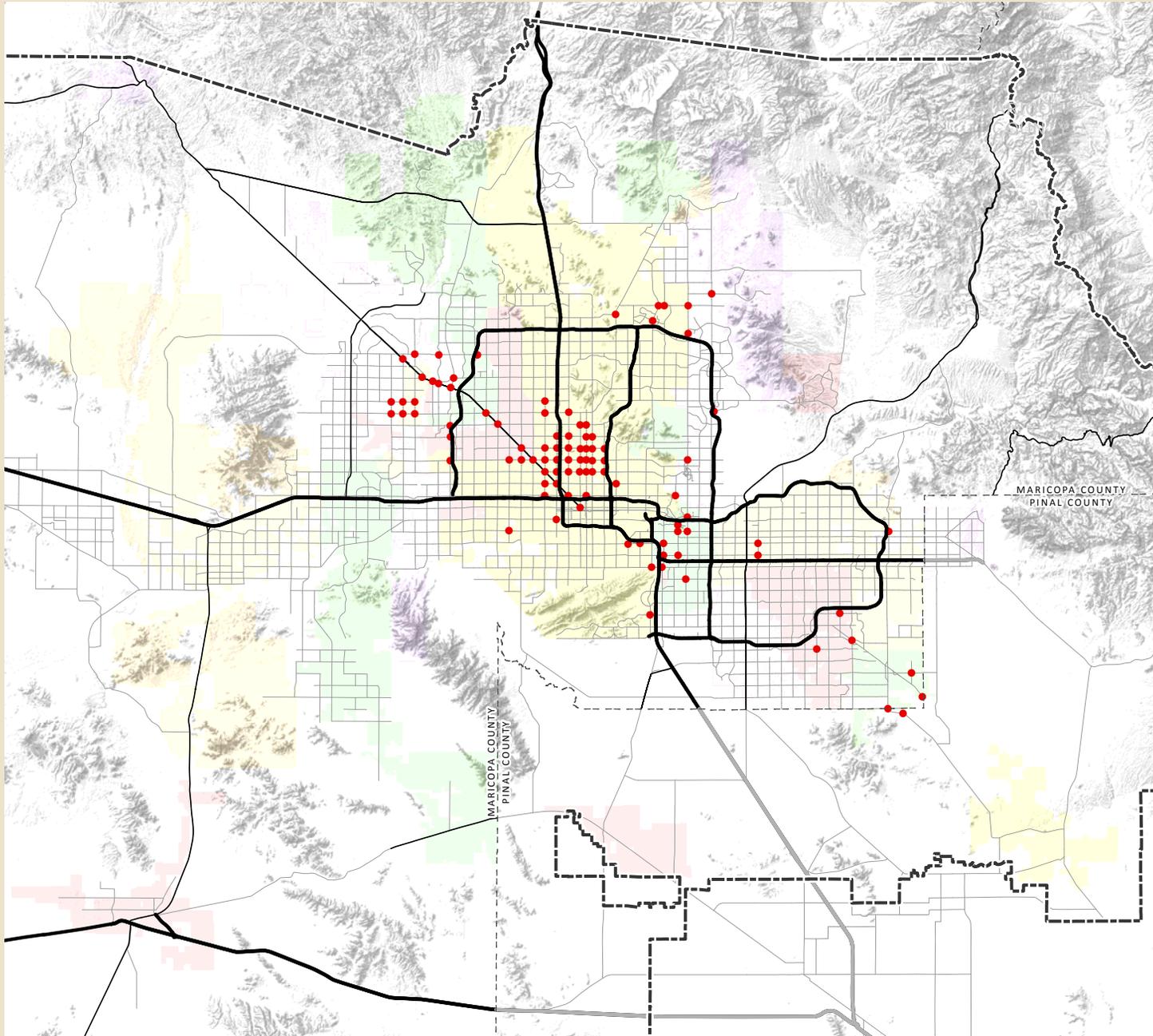
DRAFT

MAG 2014 Annual Report on Proposition 400

Fig. D-4



2011 Base Year Network: Intersections PM Peak Period Level of Service E & F

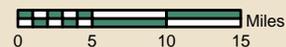


- Level of Service E & F
- Freeways
- Highways
- Other Roads
- ⋮ Metropolitan Planning Area Boundary
- ⋮ County Boundary

Regional transportation facilities in Pinal County are planned by the Central Arizona Association of Governments (CAAG).



While every effort has been made to ensure the accuracy of this information, the Maricopa Association of Governments makes no warranty, expressed or implied, as to its accuracy and expressly disclaims liability for the accuracy thereof.



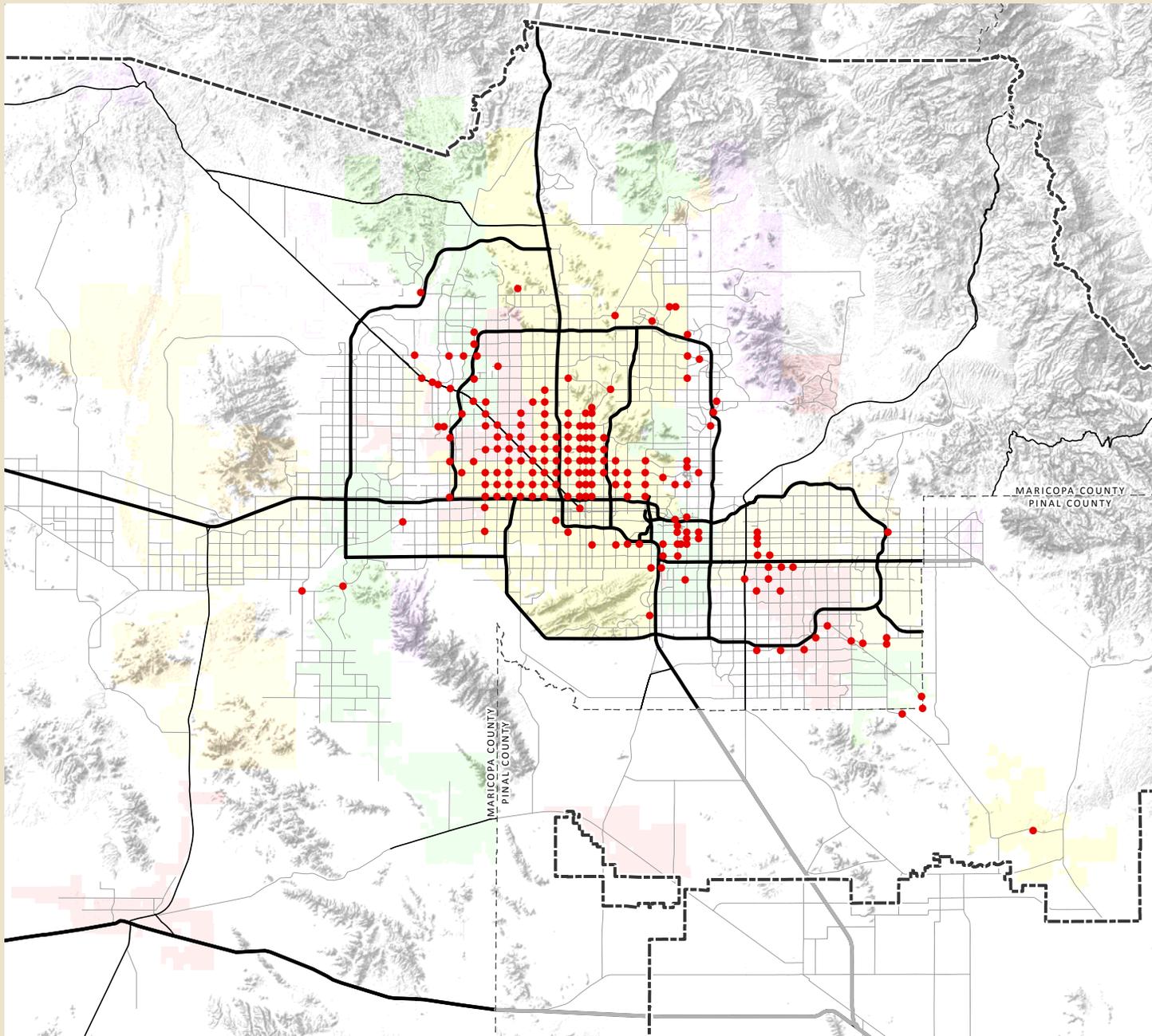
©2014, All Rights Reserved

MAG 2014 Annual Report on Proposition 400

Fig. D-5



2025 RTP Network: Intersections PM Peak Period Level of Service E & F

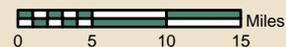


- Level of Service E & F
- Freeways
- Highways
- Other Roads
- ⬡ Metropolitan Planning Area Boundary
- ⬡ County Boundary

Regional transportation facilities in Pinal County are planned by the Central Arizona Association of Governments (CAAG).



While every effort has been made to ensure the accuracy of this information, the Maricopa Association of Governments makes no warranty, expressed or implied, as to its accuracy and expressly disclaims liability for the accuracy thereof.



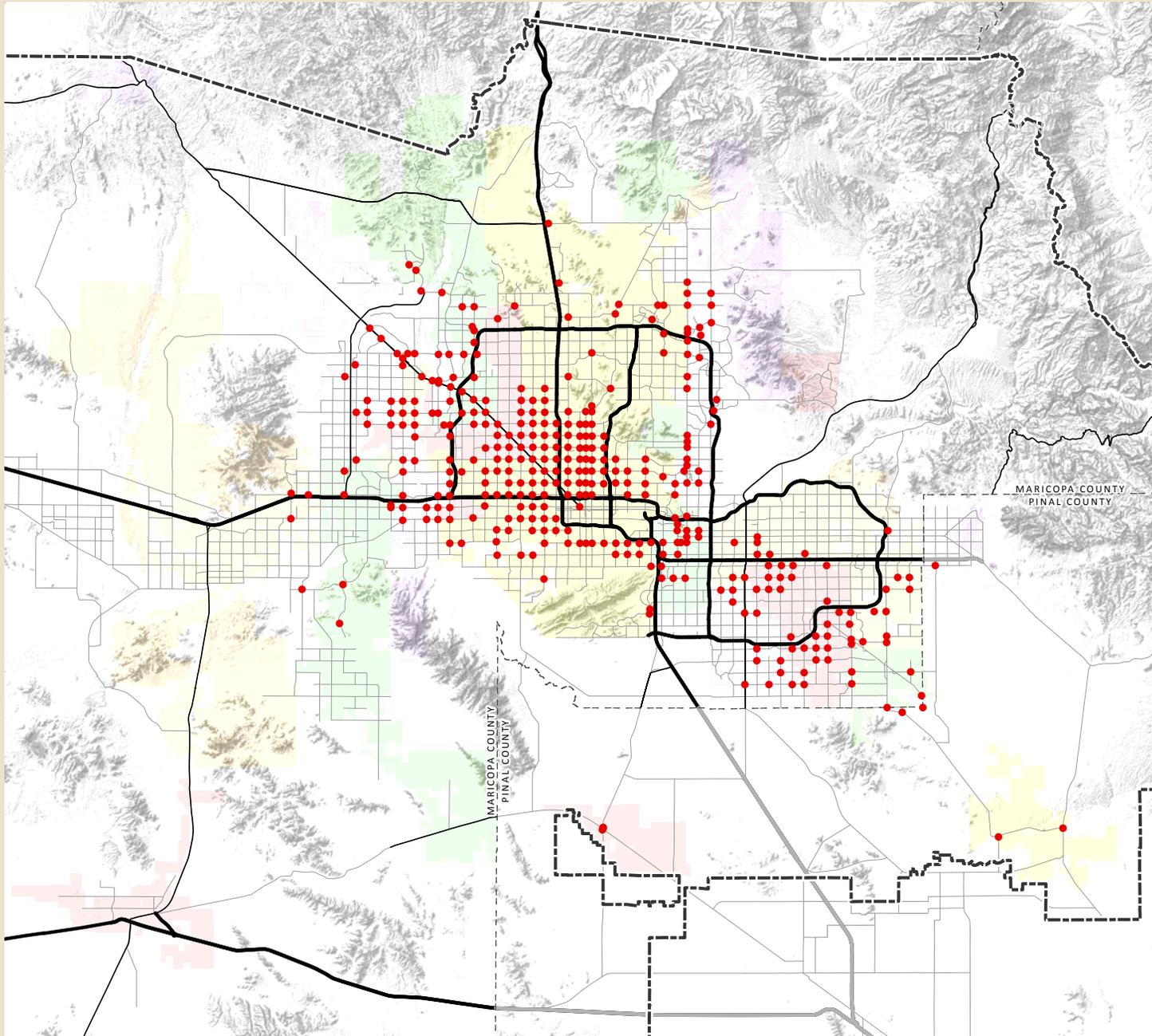
©2014, All Rights Reserved

MAG 2014 Annual Report on Proposition 400

Fig. D-6



2025 No Build Network: Intersections PM Peak Period Level of Service E & F

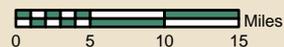


- Level of Service E & F
- Freeways
- Highways
- Other Roads
- ⬡ Metropolitan Planning Area Boundary
- ⬡ County Boundary

Regional transportation facilities in Pinal County are planned by the Central Arizona Association of Governments (CAAG).



While every effort has been made to ensure the accuracy of this information, the Maricopa Association of Governments makes no warranty, expressed or implied, as to its accuracy and expressly disclaims liability for the accuracy thereof.



©2014, All Rights Reserved

Appendix E
2014 Annual Report Data Sources

2014 ANNUAL REPORT DATA SOURCES

From ADOT:

Sent: Thursday, June 26, 2014 1:49 PM

Subject: Draft MAG RTP Cash Flow July 2014 Certification

Attachments:

- Draft July 2014 Certification MAG RTP Cash Flow.xlsx

From ADOT:

Sent: Thursday, August 07, 2014 12:24 PM

Subject: 2014 RTPFP Project Expenditures Report Initial for MAG.xlsx

Attachments:

- 2014 RTPFP Project Expenditures Report Initial for MAG.xlsx

ADOT Financial Management Services:

Maricopa County Transportation Excise Tax – Forecasting Process and Results FY 2014-2026, November 2013.

From MAG:

Sent: Monday, August 11, 2014 11:15 AM

Subject: RTP Information

Attachments:

- 8-8-14 Chap 07 - 13 Ann Rept (Art) .doc
- 8-7-2014 13 Ann Rept - Chap 5 Tables (Fin) Done 9-27-13 (3).xls
- 8-7-14-Ann Rept - Chap 7 Tables (Art).xls
- 8-7-14-22014 Ann Rept - Arterial Appdx Tables (John Draft July 2014).xls
- Federal ALCP Funding Assumptions.pdf

From MAG:

Sent: Friday, August 15, 2014 9:48 AM

Subject: Updated RTP Info

Attachments:

DRAFT

- 8-15-14-Ann Rept - Chap 7 Tables (Art).xls
- 8-15-14-22014 Ann Rept - Arterial Appdx Tables (John Draft July 2014).xls

From MAG:

Sent: Thursday, August 21, 2014 2:19 PM

- T:\Brian Rubin\2014 Annual Report

MAG Historical File:

“ V:\Revenues\RARF\Ongoing RARF Revenues 2014 (as of July 2014).

From RPTA:

Sent: Thursday, September 11, 2014 3:29 PM

Subject: Annual Report data

Attachments:

- 2014 Ann Rept - Chap 8 Tables (Transit) submitted 9-11-14.xlsx
- 2014 Ann Rept - Chap. 5 Table 5-3 submitted 9-11-14.xlsx
- 2014 Ann Rept - Transit Appdx Tables submitted 9-11-14.xlsx

From RPTA:

Sent: Friday, September 12, 2014 11:12 AM

Subject: RE: 2014 Annual Report

Attachments:

- 2014 Ann Rept - Chap 8 Tables (Transit) submitted 9-12-14.xlsx