

What Moves You Arizona

Arizona Long Range Transportation Plan Update

Final Working Paper #4:

Revenue Forecast and Gap Analysis

April 2017



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1. INTRODUCTION

This technical memorandum documents the 25-year (FY 2016 – FY 2040) revenue forecast results and associated funding gap assessment used to support development of the Arizona Long Range Transportation Plan (LRTP) Update entitled What Moves You Arizona (WMYA) 2040. The research and analysis for this effort was conducted in close coordination with the ADOT Office of Financial Management Services and the Maricopa Association of Governments (MAG). The effort focused on development of a baseline revenue forecast to support development and analysis of Alternative Investment Choices (AICs) and determination of the final Recommended Investment Choice (RIC) for WMYA 2040.

In addition to providing the 25-year revenue forecast results and identifying the anticipated funding gap, this technical memorandum also documents the data sources, estimating methodologies, and assumptions that were used to develop the forecasts.

2. OVERVIEW OF TRANSPORTATION FUNDING IN ARIZONA

Transportation investments in Arizona are paid for with a combination of federal, state, and local funding sources. In terms of funding that goes to (or through) ADOT, there are three primary revenue sources: the State Highway User Revenue Fund (HURF), the Regional Area Road Fund (RARF), and various federal funding programs. The following section provides a brief description of these three sources.

2.1 Highway User Revenue Fund

Arizona taxes motor fuels and collects a variety of fees related to the registration and operation of motor vehicles in the State. The gross receipts from these taxes and fees are deposited into the HURF and distributed for various uses, based on a combination of existing statutory formulae and annual appropriations for specific purposes, as determined by the Arizona State Legislature (e.g., counties and municipalities, motor vehicles services, and public safety). The remaining revenue in HURF is then split between funds designated for spending on state highways in the planning regions of MAG and the Pima Association of Governments (PAG), based on decisions made by these Metropolitan Planning Organizations (MPOs), which amounts to 15.2% of HURF, and “discretionary” spending on the state highway system as determined by ADOT (84.8%).

2.2 Regional Area Road Fund

In 2004, Maricopa County voters approved a ½-cent sales tax that sunsets after 20 years and, thus, is set to expire December 31, 2025 unless extended. The gross receipts from this tax are collected by the Arizona Department of Revenue and split 66.7% to the Maricopa County Regional Area Road Fund

(RARF) and 33.3% to the Public Transportation Fund (PTF). These funds are designated for specific transportation investment purposes in the MAG region as follows:

- **Freeways (RARF)** – 84% of the RARF (56.2% of total sales tax receipts) is used to cover debt service on existing RARF debt, with remaining funds available for investments in freeways and other State Highway System (SHS) routes in the MAG planning area.
- **Arterial Streets (RARF)** – 16% of the RARF (10.5 % of total sales tax receipts) is allocated for major arterial streets and intersection improvements (facilities that are not on the SHS).
- **Public Transportation Fund.** After approximately \$5 million annually is allocated from the PTF for MAG planning costs, remaining PTF funds are designated for MAG-area public transportation projects, as follows:
 - 56.76% for bus capital costs; and
 - 43.24% percent for light rail/high capacity transit capital costs.

ADOT administers the RARF, and the Maricopa County Regional Public Transportation Authority (RPTA) is responsible for administering the PTF.

2.3 Federal Funding

The Department’s third source of core funding comes from the Federal-Aid Highway Program administered by the Federal Highway Administration (FHWA) and Federal Transit Funding administered by the Federal Transit Administration (FTA). Both programs primarily are funded through the Federal Highway Trust Fund (there are separate highway and transit accounts within the trust fund), which receives revenues from federal excise taxes on motor fuels along with excise taxes on tires, trucks and trailers, and truck-use taxes. The current federal transportation funding law, Fixing America’s Surface Transportation (FAST) Act, was signed December 4, 2015, and provides apportionments for FY2016 through FY2020.

Arizona’s annual federal transportation funding levels are determined by multi-year federal surface transportation appropriations through authorization acts. The authorization acts establish funding allocation apportionment formulae, based on considerations such as national highway system mileage, traffic volumes, estimated federal fuel tax contributions for highway funding, and population for transit funding. Authorization acts also create discretionary grant programs that are administered by the US Department of Transportation (USDOT), FHWA, and FTA. Federal-Aid Highway Program funding falls into several core programs that define eligible types of investment, including: National Highway Performance Program (NHPP), Surface Transportation Program (STP), Highway Safety Improvement Program (HSIP), and Congestion Mitigation and Air Quality (CMAQ). Federal transit funding is provided in program areas such as metropolitan and statewide planning, urbanized areas, bus, and rural areas; ADOT is responsible for administering the pass-through of these funds to local transit agencies throughout Arizona.¹

¹ Other Federal Transit Funds for activities, such as light rail new starts, are awarded directly to transit agencies and do not pass through ADOT.

3. BASELINE REVENUE FORECAST

The following sections summarize the findings from the baseline estimate of future revenue from sources identified in the previous sections, and provides details about the methodology and assumptions used to develop forecasts for each major source of funding.

3.1 Forecast Overview

The baseline revenue forecast includes State revenues and federal funding for surface transportation that go to or flow through ADOT.² To generate the forecast, the project team built from ADOT's existing revenue forecasts for HURF and RARF to document historic revenues and funding. Growth rate assumptions then were developed over the forecast period for each funding source. Overarching assumptions for the forecast included:

- No changes to state or federal legislation stipulating the amount of revenues ADOT receives;
- No changes in tax rates, fee levels, or existing revenue allocations;
- No new revenue sources, including general revenue appropriations from the State or other special one-time funding; and
- No issuance of future debt and receipt of proceeds other than currently planned RARF debt issues;
- Approval to extend the current RARF tax (or replace it with a comparable funding source) beyond 2025 to 2040, and

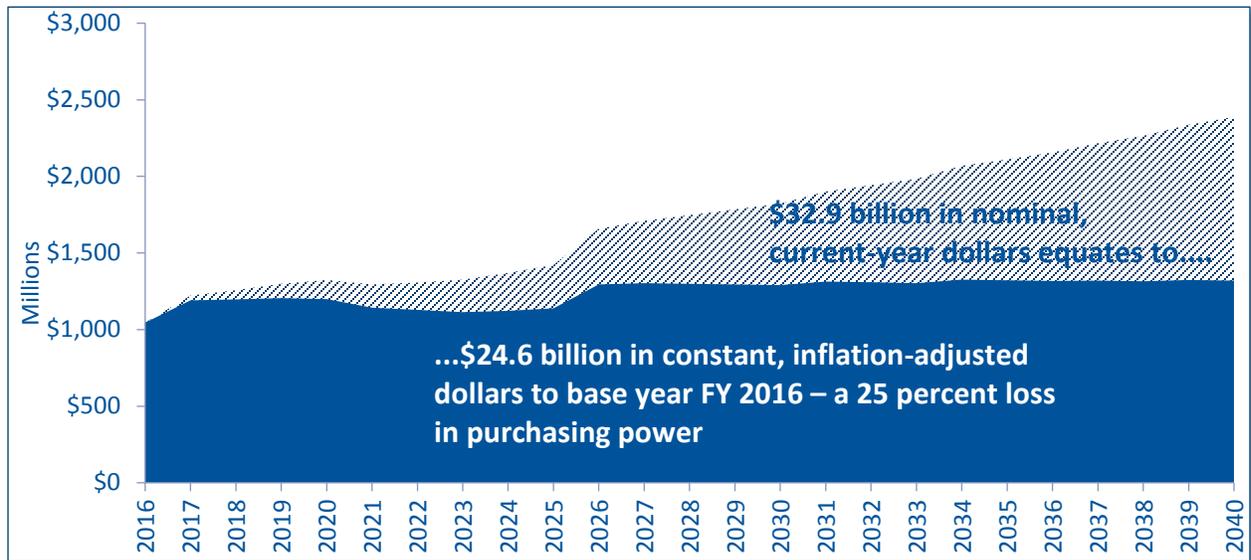
Forecasts then were converted from nominal to constant dollars using an annual inflation factor of 2.5 percent.^{3,4} To determine the net funding available for transportation investment over the 25-year WMYA 2040 planning horizon, known and anticipated costs for non-infrastructure related costs (e.g., administration, research, current operations and maintenance spending levels, and planning) and required debt service payments on currently outstanding debt and planned RARF-supported debt were deducted from gross revenue forecasts .

The graph on the following page reveals total projected ADOT revenues available for transportation infrastructure investment (highways and rural transit) from FY 2016 – FY 2040 will total **\$24.6 billion** in constant dollars (**\$32.9 billion** in nominal dollars). Of this total, **\$22.8 billion** will be available for capital spending on SHS bridges, highways, interchanges, and appurtenances, **\$4.8 billion** will be available for highway operations and maintenance (O&M), and **\$3.5 billion** will be available for capital public transportation investments by transit agencies including infrastructure and rolling stock.

² The forecast does not include local funding, except where local funds are required as matching funds to receive certain federal transit funds.

³ "Nominal dollars" refer to the actual face value, or current value, of money in the year of receipt or expenditure. "Constant dollars" is a term describing future dollars after adjustment for inflation to reflect the real value, or purchasing power, of future funds.

⁴ Based on recent trends in the consumer price index (CPI) published by the U.S. Bureau of Labor Statistics.



Notes:

Inflation adjustment assumes base year of FY 2016 and a 2.5 percent annual inflation factor.

Federal funds are assumed to remain flat (i.e., zero percent growth) once the FAST Act expires in 2020 (assuming a similar act is not passed at that time). When adjusted for inflation, this zero percent growth becomes negative, offsetting the positive HURF revenue growth, which results in the flat overall inflation adjusted forecast shown as dark blue in the graph above.

3.2 State Funding

Combined HURF and RARF State transportation funding for SHS highways and bridges and transit support is expected to total **\$18.6 billion** (**\$26.2 billion** in nominal dollars), with **\$14.6 billion** of this for highways (**\$11.1 billion** for capital spending and **\$3.5 billion** for O&M), and the remaining **\$4.0 billion** for transit. Despite solid year-over-year growth in recent years, HURF and RARF revenue sources are projected to remain at fiscal year 2005 and fiscal year 2006 revenue levels, respectively.

Over the 25-year WMYA planning horizon, it is estimated that **\$8.7 billion** in HURF funding (**\$12.4 billion** in nominal dollars) will be available for spending on SHS bridges and highways. Of this amount, **\$3.5 billion** is expected to be appropriated for O&M, leaving **\$5.2 billion** for SHS capital projects. These estimates reflect deductions for other non-transportation distributions, which include ADOT administration costs, allocations to MAG and PAG, and debt service. The estimates incorporate ADOT's HURF revenue forecast for the period FY 2016 through FY 2035. For the period FY 2036 through FY 2040, the estimate is based on the assumption that each HURF revenue source grows at the average annual projected growth of the prior five-year period (i.e., FY 2030 through FY 2035).

Revenue collected through the RARF over the WMYA planning horizon is estimated to total **\$9.9 billion** (**\$13.8 billion** in nominal dollars). Of this amount, **\$5.9 billion** is expected to be available for SHS capital projects, and **\$4.0 billion** will be available for transit. These estimates are based on ADOT forecasts

through December 31, 2025, when the current Maricopa County RARF tax is set to expire. Based on discussions with ADOT and MAG staff, it was determined reasonable to assume for planning purposes that the RARF tax will either be extended through 2040, or replaced by a comparable funding source. To develop forecasts for the out years (2026-2040), nominal RARF revenues for 2025 were grown at an annual rate of 2.5% to account for both inflation and growth (the current consumer price index – CPI – for the MAG region is 1.9%).

3.3 Federal Funding

The baseline federal funding estimates for FY 2016 through FY 2020 reflect Arizona’s apportionments as defined under the FAST Act. For baseline federal revenue estimates from 2021 through 2040, funding is assumed to remain flat at 2020 levels in nominal terms – that is, a growth rate of zero percent annually is assumed – reflecting the uncertainty related to future federal funding legislation. Over the 25-year WMYA 2040 planning horizon, these assumptions lead to total estimated federal funding of **\$12.6 billion** (\$16.8 billion in nominal dollars). Of this amount **\$11.7 billion** will be available for investment in SHS highways and bridges, and **\$0.9 billion** will be available for spending on public transportation capital and rolling stock needs.

It is important to note that the “apportionment amount” represents the upper limit of what may be available for Arizona to spend in a given year. Annually, Arizona is provided an “obligation limitation” that establishes the amount of the federal government’s legal commitment to pay or reimburse the State. This obligation limitation typically is less than the apportionment amount. In addition, the FAST Act includes a provision authorizing the federal government (specifically FHWA) to effect a rescission of \$7.6 billion nationally of unobligated contract authority in federal fiscal year 2020. Rescissions are reductions of unobligated federal funding that was appropriated by previous legislation.

As of the end of FY2015, \$15.2 billion of unobligated contract authority was carried by all states. The amount of unobligated contract authority rescinded relative to Arizona would be based on the unobligated balances in Arizona relative to the unobligated balances nationally as of September 30, 2019. If put into effect, the rescission would require Arizona to return a certain amount of unobligated highway contract authority to the federal government. The exact amount of the ADOT rescission will not be known until closer to September 30, 2019, the date the rescission can be activated. Nevertheless, there likely will be a legislative effort prior that that date to eliminate or delay implementation of the rescission.

4. FUNDING GAP ANALYSIS

The purpose of defining the “funding gap” as part WMYA 2040 development is twofold. First, quantification of the gap provides important information to decision makers about the magnitude of funding shortfall and the level of additional funding that would be require to fully meet identified needs. Secondly, identification of the gap provides context for deliberations about system performance trade-offs that will need to be made to define a WMYA 2040 RIC that is financially constrained based on the baseline revenue forecast.

A state’s “transportation funding gap” can be expressed in a range of ways – from a broad approach comparing needs for all modes and all levels of jurisdictions with all anticipated resources to targeted approaches that compare only what a state DOT is directly responsible for with only the anticipated funding it controls. Because Arizona State Statute largely limit’s ADOT decision-making role to capital spending on the SHS (transit funding is passed through to local agencies and O&M spending levels are determined annually by the State Legislature), the gap analysis for WMYA 2040 focuses on comparing 25-year capital spending needs on the SHS with estimated available revenues that can be spent on SHS capital investments over the WMYA 2040 planning horizon.

As documented in Working Paper #3, total 25-year spending needs for preservation, modernization, and expansion of the SHS total **\$53.3 billion**. Comparing this figure to the **\$22.8 billion** in estimated available revenues for the same period results in a total funding gap of **\$30.5 billion**, or 134% of anticipated funding based on existing dedicated revenue mechanisms. This relationship of forecast revenues relative to funding needs is graphically depicted at right.

