

# Chapter 7

## Transportation Funding Options

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## Table of Contents

7.1	Introduction .....	7-1
7.2	Transportation Revenue Sources in Arizona and the Hidden Valley Study Area.....	7-1
7.2.1	FY 2007 Transportation Revenue.....	7-3
7.2.2	Projected Transportation Revenue.....	7-7
7.3	Overview of Transportation Revenue Sources.....	7-9
7.3.1	Basic Sources of Transportation Revenue.....	7-9
7.3.2	Comparing Arizona and Hidden Valley Transportation Revenue to National Data.....	7-18
7.3.3	Transportation Funding Source Options .....	7-23
7.4	Conclusion: Policy Considerations and Strategies for Further Discussion .....	7-30

## List of Figures

Figure 7-1	Source of HURF Collections, FY 1990 to 2007 (Percent).....	7-20
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## List of Tables

Table 7.1	Summary of Existing Transportation Revenue for Hidden Valley Study Area .....	7-2
Table 7.2	FY 2007 ADOT Revenue.....	7-3
Table 7.3	FY 2007 Federal Allocations to Local Governments.....	7-4
Table 7.4	Estimated Hidden Valley Transportation Revenue, FY 2007 .....	7-5
Table 7.5	Estimated Hidden Valley Transportation Revenue, FY 2007 without MCDOT, FY 2007.....	7-6
Table 7.6	Projected ADOT Revenue .....	7-7
Table 7.7	Projected Federal Transportation Allocations to MAG and CAAG .....	7-7
Table 7.8	Projected Hidden Valley Transportation Revenue, FY 2008 to 2040.....	7-8
Table 7.9	Transportation Revenue Overview .....	7-10
Table 7.10	Federal Highway User Taxes and Allocations .....	7-14
Table 7.11	Federal Highway Account Program Categories.....	7-14
Table 7.12	HURF Collections, FY 1988 to FY 2007.....	7-16
Table 7.13	HURF Allocation Formulas.....	7-17
Table 7.14	Allocation of State Vehicle License Tax Revenue, FY 2008 (\$ Million).....	7-17
Table 7.15	Percent of Revenue by Source, Highway Mode Only, FY 2004 (\$ Billion).....	7-18
Table 7.16	Revenue Source, Highway Mode Only, by Level of Government, FY 2004 (\$ Billion).....	7-19
Table 7.17	Sources of Arizona HURF (FY 2007).....	7-20
Table 7.18	Local Transportation Revenue Sources Currently Authorized and Used .....	7-22
Table 7.19	Local Jurisdiction FY 2007 Transportation Revenue .....	7-23
Table 7.20	NCHRP Transportation Revenue Options.....	7-24
Table 7.21	Currently Authorized Revenue Options, Used and Not Used .....	7-27
Table 7.22	Transportation Revenue Options Requiring State Approval.....	7-28
Table 7.23	Transportation Innovative Financing Overview .....	7-29

## 7.1 Introduction

This chapter analyzes transportation revenue available to jurisdictions in the Interstate 8 and Interstate 10 Hidden Valley Transportation Framework study area. It is similar to the assessment of transportation resources prepared for the I-10/Hassayampa Valley Transportation Framework Study. The two framework studies together provide a comprehensive analysis of existing and potential transportation revenue for a major portion of central Arizona.

The chapter serves three purposes. First, it identifies and quantifies transportation revenue sources currently used by the Hidden Valley study area jurisdictions. The focus is on revenue sources that the jurisdictions are currently using, not sources that they are enabled to use. (For example, all of the jurisdictions except Arizona Department of Transportation can seek voter approval for general obligation bonds for transportation, but only one jurisdiction currently uses these bonds.)

Second, it develops reasonable methodologies and assumptions for projecting transportation revenue from the currently used sources into the future, from fiscal year (FY) 2008 to FY 2040. The purpose is not to quantify future revenue precisely, but to develop order-of-magnitude estimates of revenue that might be available over time.

Third, it sketches policy issues that Hidden Valley study area jurisdictions will face, individually and regionally, regarding transportation revenue in the future.

The study only briefly discusses transit revenues for two primary reasons. First, there are very limited transit services in the study area today, with only negligible expenditures for transit. For example, Valley Metro provides dial-a-ride service from Ajo, through Gila Bend, into Phoenix; and the city of Maricopa provides several daily trips to and from the Phoenix metropolitan area. Second, transit funding typically comes from the farebox, from the federal government (mostly for purchasing buses, but also for operations), and from general fund transfers to cover any shortfall. Arizona's Highway User Revenue Funds (HURF) cannot be used for transit, except for incidental improvements to the roadway, such as bus pullouts. Any recommendations for future transit service in the Hidden Valley study area will need to be accompanied by new revenue sources to provide local match for federal funding. Alternatively, the services could be provided with federal funding, which is deemed unlikely because local funding (to match the federal funds) would also need to increase markedly.

Unless otherwise stated, costs are reported in 2007 dollars.

## 7.2 Transportation Revenue Sources in Arizona and the Hidden Valley Study Area

Section 7.2 provides a brief overview of transportation revenue sources and presents revenue estimates for the study area jurisdictions, first in FY 2007 and then for FY 2008-2040.

The jurisdictions with surface transportation responsibilities in the study area include:

- Arizona Department of Transportation (ADOT)
- Maricopa County jurisdictions
  - Maricopa County Department of Transportation (MCDOT)
  - City of Avondale
  - Town of Buckeye
  - Town of Gila Bend
  - City of Goodyear
- Pinal County Jurisdictions
  - Pinal County
  - City of Casa Grande
  - City of Maricopa

Table 7.1 summarizes the transportation revenue sources currently available in Arizona and the Hidden Valley study area. "State-shared revenue" refers to the distribution of HURF revenue to the state highway system and to municipal and county governments. (HURF revenue is constitutionally restricted to roadway purposes and cannot be used for transit.) For counties, State-shared revenue also includes a statutory allocation of Vehicle License Tax revenue for "County Highway Purposes" (VLT/CHP). "Other revenue" refers to federal funds, grants, private donations, and miscellaneous sources. These other sources are described more fully under each city, town and county.

**Table 7.1 Summary of Existing Transportation Revenue for Hidden Valley Study Area**

Jurisdiction	Transportation Revenue Sources								
	State Shared	Sales Tax			DIF	GFT	GOB	LTAF	Other
		County	Local	Construction					
ADOT	✓	✓							✓
MCDOT	✓								✓
Avondale	✓		✓		✓	✓	✓		✓
Buckeye	✓			✓	✓				
Gila Bend	✓		✓			✓			
Goodyear	✓				✓	✓		✓	
Pinal County	✓	✓			✓				
Casa Grande*	✓	✓			✓			✓	✓
City of Maricopa*	✓	✓			✓				✓

\*Refers to city's share of the Pinal County ½ percent excise tax for transportation.

DIF = Development Impact Fee  
 GFT = General Fund Transfer  
 GOB = General Obligation Bonds  
 LTAF = Local Transportation Assistance Fund  
 Source: Curtis Lueck & Associates

The information in Table 7.1 can be summarized as follows:

- State-shared revenue is common to all the Hidden Valley study area jurisdictions.
- Both Maricopa County and Pinal County have county sales taxes dedicated wholly or partially to roadway improvements. The Maricopa County sales tax (Proposition 400) allocates revenue to three programs--freeways, arterials, and public transportation--and identifies specific projects to be completed with the revenue from FY 2006 through FY 2026, when the tax will expire. ADOT is responsible for building and operating the freeways, which are the only Proposition 400 improvements in the Hidden Valley study area. Pinal County's sales tax for roadways only, which is effective from FY 2006 through 2026, is structured to allocate revenue by population to each jurisdiction, with the jurisdictions responsible for programming the revenue. Therefore, each Pinal County jurisdiction shows a county sales tax revenue source.
- Most incorporated jurisdictions levy a general sales tax, and two jurisdictions (Avondale and Gila Bend) currently devote a portion of their sales tax revenue to transportation.
- One jurisdiction (Buckeye) levies a construction sales tax, with revenue allocated to transportation.
- Six of the eight local jurisdictions collect transportation development impact fees. These fees are assessed against all new residential and non-residential development. Revenue raised can be spent only on improvements that are directly related to and proportionate to the impact of the new developments on the roadway systems. Only Maricopa County and Gila Bend do not have such fees. Maricopa County currently has an impact fee study underway for roadways and other purposes.
- One jurisdiction (Avondale) reports using voter-approved general obligation bonding for transportation capital improvements.
- While all jurisdictions received some Local Transportation Assistance Fund (LTAF) revenue, only two (Goodyear and Casa Grande) report on its use in annual budget documents. There are two LTAF funds: LTAF I, deriving from the Arizona Lottery, and LTAF II, deriving from the Powerball lottery game and the vehicle license tax. LTAF I is capped at \$23 million per year, and so has lost much of its value to inflation. LTAFII is administered by ADOT, and the amount varies annually. The LTAF allocations are primarily intended for public transit, but may be used for roadway purposes in smaller jurisdictions. The distribution and use of LTAF are tracked and monitored by ADOT's Financial Management Services group.

The next two sections present estimates of FY 2007 revenue and projected FY 2008-2040 revenue for each jurisdiction by source. Several jurisdictions, including the two counties, lie only partially in the Hidden Valley study area. This analysis does not attempt to divide revenue between the study-area and non-study-area portions of each jurisdiction. Also, the revenue estimates for ADOT are statewide for state-shared revenue and federal funds, but specific to Maricopa County for the Regional Area Road Fund (RARF) revenue derived from Proposition 400. Thus, the ADOT data is not specific to Hidden Valley study area.

### 7.2.1 FY 2007 Transportation Revenue

#### FY 2007 ADOT Revenue

Table 7.2 shows the estimated revenue from the three major sources in ADOT’s FY 2007 budget. Statewide, ADOT received \$569 million (46 percent of its total revenue) from HURF, \$454 million (36 percent) in federal funds, and \$223 million (18 percent) from the Maricopa County RARF.

**Table 7.2 FY 2007 ADOT Revenue**

Revenue Source	FY 2007 (\$ million)	Percent of Total
HURF	\$569	46%
Federal funds	\$454	36%
Maricopa County sales tax	\$223	18%
<b>Total</b>	<b>\$1,246</b>	<b>100%</b>

Source: ADOT FY 2007 year end reports on HURF and RARF and the FY 2007 to 2011 State Transportation Improvement Plan

ADOT’s HURF revenue and federal funds are crucial to all areas of the state. In Maricopa and Pinal counties, the dedicated countywide sales tax revenue are also critical—for roads in Pinal County and for both roads and transit in Maricopa County.

#### FY 2007 Federal Revenue Allocations to Local Governments

A portion of Arizona’s federal transportation revenue is allocated to local governments, reported as allocations to Maricopa Association of Governments (MAG), Pima Association of Governments (PAG), and other locals (in the remaining thirteen counties). Since FY 2000, there has been a federal transportation revenue allocation to “Optional Use by MAG, PAG, and Other Locals.” The ADOT 5-Year State Transportation Improvement Plan, as shown in Table 7.3, reports the following allocations to local governments for FY 2007:

- Total federal revenue to local governments: \$176 million;
- \$118 million (67 percent) to MAG;
- \$22 million (13 percent) to PAG;
- \$13 million (8 percent) to locals outside Maricopa and Pima counties; and,
- \$23 million (13 percent) for optional use by local governments.

**Table 7.3 FY 2007 Federal Allocations to Local Governments**

Recipient	Revenue (\$ million)	% of Total
MAG	\$118	67%
PAG	\$22	13%
Other locals (e.g., CAAG)	\$13	8%
Optional use by MAG, PAG, & other locals	\$23	13%
<b>Total</b>	<b>\$176</b>	<b>100%*</b>

\*In this table and others, percents do not always add to 100 due to rounding.  
 Source: ADOT FY 2007 to 2011 State Transportation Improvement Plan

The Casa Grande Small Area Transportation Study (July 2007) reported that the Central Arizona Association of Governments (CAAG), which covers Pinal and Gila counties, has \$1.8 million of federal funds available annually, which is included under “Other Locals” in Table 7.3. When combined with the reported MAG allocation for FY 2007 of \$118 million, total federal funds to local governments potentially available to Hidden Valley jurisdictions was approximately \$120 million.

**FY 2007 Hidden Valley Study Area Jurisdiction Revenue**

Table 7.4 provides estimates of revenue and revenue sources available to local jurisdictions in the Hidden Valley study area for FY 2007. Table 7.5 presents the same information, but without reporting the MCDOT data. The reason for reporting the numbers without MCDOT is that most of unincorporated Maricopa County lies outside the Hidden Valley study area.

Looking at all jurisdictions for the year, there was \$252 million in available revenue. Nearly two-thirds of this (\$164 million), however, was MCDOT revenue, available countywide and not just in the Hidden Valley portion of the county. Three-fifths of the available revenue was state-shared (HURF and VLT/CHP). The next largest source of revenue came from development impact fees (\$24 million or 10 percent).

The three sales tax sources (county sales tax, local sales tax, and construction sales tax) accounted for a combined \$19 million (8 percent). MCDOT accounted for most of the “other revenue” (\$47 million of \$49 million). Excluding MCDOT from the Hidden Valley jurisdictions (Table 7.5), state-shared revenue remains the largest source--\$38 million (43 percent).

To sum up: in FY 2007, state-shared revenue (62 percent), development impact fees (10 percent), and sales taxes (8 percent) accounted for four-fifths of transportation revenue for jurisdictions in the Hidden Valley study area. This proportion is even greater (more than 90 percent) when MCDOT is excluded.

**Table 7.4 Estimated Hidden Valley Transportation Revenue, FY 2007**

Transportation Revenue Sources (\$ million)											
Jurisdiction	State Shared Revenue	County Sales Tax	Local Sales Tax	Construction Sales Tax	DIF	GFT	GOB	LTAF	Other Revenue	Total	Percent of Total
MCDOT	\$117								\$47	\$164	65%
Avondale	\$5		\$3		\$1		\$1		\$1	\$11	4%
Buckeye	\$2			\$8	\$1					\$11	4%
Gila Bend	\$<1									\$<1	<1%
Goodyear	\$3				\$2	\$3		\$<1		\$9	4%
Pinal County	\$22	\$5			\$11					\$38	15%
Casa Grande	\$3	\$2*			\$2			\$<1	\$<1	\$7	3%
City of Maricopa	\$3	\$1*			\$7				\$<1	\$11	4%
<b>Total</b>	<b>\$155</b>	<b>\$8</b>	<b>\$3</b>	<b>\$8</b>	<b>\$24</b>	<b>\$3</b>	<b>\$1</b>	<b>\$1</b>	<b>\$49</b>	<b>\$252</b>	<b>100%</b>
<b>Percent of Total</b>	<b>62%</b>	<b>3%</b>	<b>1%</b>	<b>3%</b>	<b>10%</b>	<b>1%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>19%</b>	<b>100%</b>	

\*Refers to city's share of the Pinal County 1/2 percent excise tax for transportation.

DIF = Development Impact Fee  
 GFT = General Fund Transfer  
 GOB = General Obligation Bonds  
 LTAF = Local Transportation Assistance Fund

Source: Curtis Lueck & Associates

**Table 7.5 Estimated Hidden Valley Transportation Revenue, FY 2007 without MCDOT, FY 2007**

Transportation Revenue Sources (\$ million)											
Jurisdiction	State Shared Revenue	County Sales Tax	Local Sales Tax	Construction Sales Tax	DIF	GFT	GOB	LTAf	Other Revenue	Total	Percent of Total
Avondale	\$5		\$3		\$1		\$1		\$1	\$11	13%
Buckeye	\$2			\$8	\$1					\$11	13%
Gila Bend	\$<1									\$<1	<1%
Goodyear	\$3				\$2	\$3		\$<1		\$9	10%
Pinal County	\$22	\$5			\$11					\$38	43%
Casa Grande	\$3	\$2*			\$2			<1	<1	\$7	8%
City of Maricopa	\$3	\$1*			\$7				<1	\$11	13%
<b>Total</b>	<b>\$38</b>	<b>\$8</b>	<b>\$3</b>	<b>\$8</b>	<b>\$24</b>	<b>\$3</b>	<b>\$1</b>	<b>\$1</b>	<b>\$2</b>	<b>\$88</b>	<b>100%</b>
<b>Percent of Total</b>	<b>43%</b>	<b>9%</b>	<b>3%</b>	<b>9%</b>	<b>27%</b>	<b>3%</b>	<b>1%</b>	<b>1%</b>	<b>2%</b>	<b>100%</b>	

\*Refers to city's share of the Pinal County 1/2 percent excise tax for transportation.

DIF = Development Impact Fee  
 GFT = General Fund Transfer  
 GOB = General Obligation Bonds  
 LTAf = Local Transportation Assistance Fund

Source: Curtis Lueck & Associates



## 7.2.2 Projected Transportation Revenue

This section presents projections for transportation revenue from FY 2008 to FY 2040. Projections for ADOT and other jurisdictions are presented separately.

### Projected ADOT Revenue

Table 7.6 shows projected ADOT revenue through FY 2040. In the future, HURF is expected to comprise a larger share of ADOT revenue: 63 percent from FY 2008 through 2040, versus 46 percent in FY 2007. The main reasons are that HURF revenue is projected to grow faster than federal funding (at least in the short run) and expiration of the Maricopa County transportation sales tax at the end of 2025.

**Table 7.6 Projected ADOT Revenue**

Revenue Source	Projected FY 2008 to 2040 (\$ million)	% of Total
HURF	\$59,392	63%
Federal Funds	\$26,600	28%
Maricopa County Excise Tax	\$8,119	9%
Total	\$94,111	100%

Source: Curtis Lueck & Associates

### Projected Federal Revenue Allocations to Local Governments

The FY 2007–2011 ADOT State Transportation Improvement Plan projects allocations of federal revenue to MAG of approximately \$118 million in FY 2008, \$123 million in FY 2009, and \$124 million in both 2010 and 2011. Our analysis assumes that revenue will then remain stable at \$124 million per year through 2040. For CAAG, the analysis assumes a recurrent \$1.8 million per year (equaling the current allocation) throughout the period.

Based on these assumptions, MAG would receive \$4.076 billion in federal revenue through 2040; CAAG would receive \$59 million; and the total potential federal allocations to local governments in the Hidden Valley area would be \$4.135 billion, as Table 7.7 shows.

**Table 7.7 Projected Federal Transportation Allocations to MAG and CAAG**

Years	Projected MAG Revenue (\$ million)	Projected CAAG Revenue (\$ million)	Projected Total Revenue (\$ million)
FY 2008 - 2010	\$365	\$5	\$370
FY 2011 - 2020	\$1,237	\$18	\$1,255
FY 2021 - 2030	\$1,237	\$18	\$1,255
FY 2031 - 2040	\$1,237	\$18	\$1,255
Total	\$4,076	\$59	\$4,135

Source: Curtis Lueck & Associates

### Projected Hidden Valley Study Area Jurisdiction Revenue

Table 7.8 presents transportation revenue projections for the Hidden Valley area jurisdictions, including MCDOT. Tables 7.4 and 7.8 together show that state-shared revenue is expected to contribute a larger share of revenue in 2008-2040 than in 2007: 74 percent versus 60 percent. Sales tax revenue and development impact fees will make up a slightly larger share of transportation revenue than today. Sales tax revenue accounts for 12 percent of revenue from 2008 through 2040, versus 9 percent in FY 2007. Projected development impact fee revenue remains 10 percent of the total.

**Table 7.8 Projected Hidden Valley Transportation Revenue, FY 2008 to 2040**

Transportation Revenue Sources (\$ million)											
Jurisdiction	State Shared Revenue	County Sales Tax	Local Sales Tax	Construction Sales Tax	DIF	GFT	GOB	LTAF	Other Revenue	Total	Percent
MCDOT	\$9,957								\$661	\$10,618	56%
Avondale	\$372		\$233		\$31	\$38	\$75		\$26	\$775	4%
Buckeye	\$565			\$844	\$74					\$1,483	8%
Gila Bend	\$13									\$13	<1%
Goodyear	\$489				\$127	\$66		\$15		\$697	4%
Pinal County	\$2,070	\$412			\$756					\$3,238	17%
Casa Grande	\$245	\$167			\$186			\$7	\$6	\$611	3%
City of Maricopa	\$240	\$93	\$515		\$663				\$25	\$1,536	8%
Total	\$13,951	\$672	\$748	\$844	\$1,837	\$104	\$75	\$22	\$718	\$18,971	100%
Percent of Total	74%	4%	4%	4%	10%	1%	<1%	<1%	4%	100%	

DIF = Development Impact Fee  
 GFT = General Fund Transfer  
 GOB = General Obligation Bonds  
 LTAF = Local Transportation Assistance Fund

Source: Curtis Lueck & Associates

## **7.3 Overview of Transportation Revenue Sources**

This section gives an overview of transportation revenue sources, how they are paid, who pays them, who collects them, and how they are used.<sup>1</sup> The overview provides a national benchmark of transportation revenue with which to compare Hidden Valley transportation revenue.

### **7.3.1 Basic Sources of Transportation Revenue**

There are many sources and types of transportation revenue, each with its own advantages and limitations. No single source meets all of the needs, so jurisdictions must rely on multiple revenue streams. Most major transportation sources are public revenue, levied and collected as taxes by federal, state and local governments. Public-private partnerships and direct private ownership, operation and maintenance of transportation facilities do occur, however, and could become more prominent in the future.

Some transportation revenue comes from direct user taxes and fees, such as the (per gallon) tax on gasoline sales, the vehicle license tax, toll roads, and transit fares. These taxes and fees are assessed on the users of transportation systems, to offset the demands that users make for new capital investments as well as for operations and maintenance. In Arizona, the user fees and fuel taxes for a mid-size car amount to about two of the 57 cents per mile to own and operate the vehicle.<sup>2</sup> The amount is different in other states because their taxes and fee structure are different.

Other transportation revenue consists of indirect taxes and fees levied by governments that allocate the revenue to transportation purposes. Property taxes and sales taxes are the primary sources of indirect transportation revenue. They are considered indirect because they are imposed on the taxpaying public at large, rather than on transportation system users in particular.

Table 7.9 presents a simplified profile of transportation revenue, distinguishing between direct user taxes and fees, and indirect taxes and fees.

#### **Direct User Taxes and Fees**

Direct user taxes and fees include motor fuel taxes, vehicle license and registration taxes and fees, fees based on vehicle weight, tolls and fares, and other fees.

#### **Sale of Motor Vehicle Fuel**

The primary component of direct user taxes and fees, these taxes are typically levied as cents per gallon. Some states impose a sales tax on fuel sales instead of, or in addition to, the cents-per-gallon tax. The federal government and the state of Arizona collect taxes on the sales of gasoline at 18.3 cents per gallon<sup>3</sup> and 18 cents per gallon. The federal government and Arizona collect taxes on diesel fuels; the federal government collects taxes on the sales of alternative fuels (such as liquefied petroleum and natural gas, compressed natural gas, and E-85), but at lower rates. Motor fuel taxes are paid by the general motoring public (passenger cars) and owners of commercial vehicles. A few states index the tax rate to inflation, but Arizona—whose fuel tax rate has not increased since 1991—does not. If adjusted for inflation since the last increase, the Arizona rate would be 39 cents today. (Source: Center for Transportation Excellence, “Paying for Progress: 2008 State Transportation Funding & Finance Scorecard.”) Rates in other states range from 8 cents in Alaska to 32.9 cents in Wisconsin. Revenue from fuel sales is relatively predictable because the volume of sales changes little in response to price fluctuations (i.e., consumer demand for gasoline is inelastic with respect to price). However, improvements in vehicle fuel economy reduce fuel sales, and hence revenue from the tax. At 20 miles per gallon, a person driving 15,000 miles per year pays about \$135 in Arizona gasoline tax and \$137 in federal gasoline tax.

#### **Vehicle License Tax (VLT)**

A second significant source of direct user taxes and fees, the VLT is imposed by the state of Arizona and collected annually. It is a personal property tax on motor vehicles, based on statutorily defined formulas rather than direct market values. These fees are paid by all vehicle owners, at the time of initial licensing and on annual license renewal. In Arizona, the amount decreases as the vehicle depreciates. Therefore, VLT receipts are largely driven by new car sales. The VLT on a typical \$25,000 new car is about \$420 and drops about 16 percent per year. As discussed later, only a portion of the VLT is dedicated to transportation purposes.

**Table 7.9 Transportation Revenue Overview**

Revenue Sources	How Paid	Who Collects	Who Pays
<b>Direct User Taxes and Fees</b>			
<b>Fuel Sales</b>			
Gasoline Sales	Typically charged as cents-per-gallon and charged at the pump	Federal/state	Passenger/commercial vehicles
Diesel Fuel sales	Typically charged as cents-per-gallon and charged at the pump	Federal/state	Commercial vehicles
Alternate Fuels	Typically charged as cents-per-gallon and charged at the pump	Federal	Alternate fuel users
<b>Vehicle License/Registration Fees</b>			
Vehicle License Fees	Fees based upon the value of the vehicle ("ad valorem"), assessed annually	State	All vehicle owners
Vehicle Registration/Title Fees	Typically one-time fees paid at the time of the initial vehicle registration	State	All vehicle owners
<b>Vehicle Weight Taxes and Fees</b>			
Truck and trailer sales	Taxes and fees assessed against vehicles above specified weights Sales taxes on trucks and trailers above specified weight	Federal	Commercial vehicles
Tires	Cents per each 10 pounds over rated loads in excess of 3,5000 pounds	Federal	Commercial vehicles
Heavy Vehicle Use	Annual taxes on trucks over a specified gross vehicle weight	Federal/state	Commercial vehicles
<b>Tolls and Fares</b>			
Toll Roads	Tolls paid for use of roadways	State or interstate agencies/private entities	All vehicles using roadway
Transit Fares	Fares paid by transit riders	Local	Transit riders
<b>Other Miscellaneous Fees</b>	Various fees charged for operators licenses, specialized license plates, requests for special services, licenses and permits	State/local	Varies

**Table 7.9 Continued**

<b>Revenue Sources</b>	<b>How Paid</b>	<b>Who Collects</b>	<b>Who Pays</b>
<b>Indirect Taxes and Fees</b>			
<b>Property Taxes/Assessments</b>			
Primary Property Taxes	Taxes on assessed property valuations, collected annually, with some general fund revenues allocated to transportation	Local	All property owners
Secondary Property Taxes	Taxes on assessed property valuations, collected annually, for debt service on general obligation bond debt allocated to transportation capital improvements	Local	All property owners
Improvement and Community Facilities Districts	Assessments or property taxes against properties in specified geographic areas to pay for improvements benefiting the area	Local	All property owners in district
Development Impact Fees	One-time fees against new residential and non-residential property development, to offset the costs of transportation demand generated by the new development	Local	All new development
Private Contributions	Exactions/conditions of rezoning/dedications (of right-of-way), construction and other "in lieu" payments	Local	Private developers
<b>Revenue Sources</b>	<b>How Paid</b>	<b>Who Collects</b>	<b>Who Pays</b>
<b>Sales Taxes</b>			
General Sales Tax	Taxes levied on sales of taxable items, with all or some of the proceeds provided for transportation	Local	All purchasers of taxable goods and services
Transportation Sales Tax	Taxes levied on sales of taxable items, with all proceeds dedicated to transportation	Local	All purchasers of taxable goods and services
Construction Sales Tax	A tax levied on all construction activity, in addition to general sales taxes, with all or a portion of the proceeds dedicated to transportation	Local	All purchasers of taxable goods and services

Source: Curtis Lueck & Associates

## **Vehicle Registration/Title Fees**

Vehicle registration fees and certificate of title fees typically are minor charges. For motor vehicles in Arizona, the certificate of title costs \$4 and the annual registration fee is \$8.<sup>4</sup> These fees are collected by the state and paid by all vehicle owners.<sup>5</sup>

## **Vehicle Weight Charges**

The federal government and states also assess fees based on vehicle weight. These charges are typically levied against large trucks and trailers, to recoup some of the extra wear and tear that heavy vehicles impose on roadways. The federal government assesses sales taxes on trucks and trailers above a specified weight, and on large tires with rated loads in excess of 3,500 pounds. Both the federal government and states impose charges against “heavy-vehicle use” as well. Arizona imposes a commercial registration fee and a “gross weight fee” for designated vehicles that increases with the vehicle weight, from \$7.50 for vehicles up to 8,000 pounds gross weight to \$918 for vehicles with a gross weight of 75,001 to 80,000 pounds<sup>6</sup> These charges are paid by owners/operators of large commercial vehicles.

## **Toll Roads**

Toll roads are operated by public toll road agencies or by private entities. Tolls are usually based on miles traveled and paid by all users of the road. Toll charges typically range from 5 cents to 15 cents per mile for passenger cars and twice that for commercial vehicles, and can vary by time of day and congestion level.<sup>7</sup> Interest has grown in both selling existing public toll road systems to private investors, and asking private investors to build, own (or lease long-term) and operate new toll roads. Arizona considered toll roads in the 1990s for the Phoenix area, but the interest was short-lived and none were constructed. Most toll roads have fully controlled access. In recent decades, vehicle transponder technology and automatic billing have enabled many users to bypass the traditional toll plazas. These users receive a monthly bill based on miles driven.

## **Indirect Taxes and Fees**

Direct user taxes and fees typically do not generate enough revenue to meet all capital, operation, and maintenance costs of the transportation system. Many local governments enhance transportation revenue by levying indirect taxes and fees on the two principal sources of local revenue – real property and retail sales.

### **Real Property Taxes and Fees**

Real property taxes and fees can be primary or secondary property taxes, taxes against improvement districts or community facilities districts, or development impact fees.

#### **Primary Property Taxes**

Primary property taxes are collected by local governments, based on assessed valuations (“ad valorem” in Latin), and collected annually. Primary property taxes are deposited in the local government’s general fund, and some governments allocate a portion of this revenue to transportation.

#### **Secondary Property Taxes**

Secondary property taxes are also “ad valorem”, but they are levied to pay debt service on general obligation bonds approved by voters. General obligation bond debt has been used to fund transportation capital investments in Arizona and around the country.

#### **Improvement Districts or Community Facilities Districts**

Many local governments form improvement district or community facilities districts, which are special taxing districts that can be formed to fund capital improvements, operations and maintenance, or both. The districts are funded through assessments placed on all benefiting properties within the district. The Arizona enabling legislation is slightly different for counties than for municipalities.

## **Development Impact Fees, Exactions, and “In Lieu” Fees**

Development impact fees have become a common source of revenue for local governments, notably for transportation capital improvements. Impact fees are charged against new development, usually both residential and non-residential, to offset the costs of new travel demand generated by the development. These fees are paid by developers at the time of building permit issuance, and are typically passed along to the owners and tenants. The fees cannot be used to cure existing deficiencies or for non-capital expenditures. In Arizona, jurisdictions that impose impact fees must prepare annual reports that simplify tracking the revenue. Impact fees for roads range from a few hundred dollars to \$10,000 per new house. The fees for non-residential uses also vary widely. Impact fees must be demonstrably proportionate to the actual cost of accommodating travel demand due to the development.

Property development may also generate transportation revenue in the form of private contributions, such as exactions and other conditions of rezoning, developer contributions (typically of right-of-way for public improvements), and direct developer construction of improvements or payments “in lieu” of construction. Contributions may be either in cash or in kind.

## **Local Sales Taxes**

Sales taxes are a major source of transportation revenue in many states, including Arizona, where local sales taxes are levied in addition to the state rate of 5.6 percent, of which 0.6 percent is earmarked for public education and 5 percent goes to the state’s general fund. Local sales taxes may be levied for general purposes or earmarked for specific uses such as transportation. Unlike cities and towns, Arizona counties lack the authority to charge a general sales tax.

## **Local General Sales Taxes (Cities and Towns)**

Local general sales taxes are levied against all taxable sales, typically as a percent of the purchase price, and are usually deposited in the general fund. Some local governments allocate a portion of their general fund revenue to transportation. The total local sales tax rate is not prescribed by state law, but may be limited by municipal charter. Most cities charge a 1.5 percent to 2.0 percent sales tax. In communities with balanced land uses, sales taxes are large and relatively reliable revenue producers, typically generating at least \$150 per capita per year for each percent of the tax rate.

## **Transportation Sales Taxes**

Some local governments levy transportation sales taxes on all taxable sales, with all of the proceeds dedicated to transportation. This revenue is typically deposited in special accounts and tracked separately from other government accounts. In Arizona, governments have used both regional transportation sales taxes, levied countywide, and local transportation sales taxes, levied by cities and towns. In many cases, voters are asked to approve a sales tax for specific projects, such as the roadway and transit improvements in the adopted MAG Regional Transportation Plan.

## **Construction Sales Taxes**

In addition to general sales tax, some municipalities levy incremental sales taxes on certain construction-related activities.<sup>8</sup> This revenue, which is statutorily based on 65 percent of the sale or contract price, is then earmarked for transportation. The tax is collected on new homes and other activities that involve a construction contract, such as installing a swimming pool, re-roofing, or recurring structural maintenance. Activities subject to the tax are defined by local policy or adopted ordinance. A 2 percent construction sales tax on a typical \$300,000 new home generates about \$3,900 ( $\$300,000 \times 2 \text{ percent} \times 0.65$ ) in revenue.<sup>9</sup>

## **Some Basics on Federal and State Highway Revenue**

This section provides basic information on federal and state of Arizona highway revenue. Both federal and state revenue are somewhat complex in their sources and allocation procedures.

## **Federal Highway Revenue**

Federal transportation revenue and spending are governed by authorization bills enacted by Congress. The current authorizing legislation is “The *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users*” (SAFETEA-LU), signed into law on August 10, 2005. Federal transportation revenue is collected from motor fuel taxes and vehicle

weight-related taxes, as shown in Table 7.10. Federal funding is deposited into either the highway account or the mass transit account of the Highway Trust Fund.<sup>10</sup>

The federal government collects taxes on gasoline, diesel fuel, and five forms of alternative fuels. With the exception of compressed natural gas, these taxes are imposed on a cents-per-gallon basis, with the rate for gasoline being \$0.183/gallon and for diesel \$0.243/gallon. These tax rates have been in effect since the early 1990s. Gasohol is also taxed at \$0.183/gallon, but the tax rates on other alternative fuels are lower.

The federal government also collects taxes on the sale of tires used for vehicles with a gross vehicle weight in excess of 3,500 pounds; on the sale of trucks and trailers in excess of 55,000 pounds and 26,000 pounds (respectively); and (annually) on trucks over 55,000 pounds.

Depending on the type of fuel, 80 percent to 88 percent of the motor fuel tax revenue is deposited in the highway account of the trust fund (with the remainder going to the mass transit account). All of the truck-related taxes are deposited into this account. Revenue in the highway account is allocated among a number of programs, as Table 7.11 shows. Four programs account for 55 percent of federal highway authorizations: Interstate Maintenance Program, National Highway System, Bridge Program, and Surface Transportation Program. These four, plus the Equity Bonus Program, account for 76 percent of the authorizations.<sup>11</sup>

**Table 7.10 Federal Highway User Taxes and Allocations**

Type of Excise Tax	Tax Rates (cents/gallon)	Distribution of Tax	
		Highway Account	Mass Transit Account
Gasoline	18.3	84%	16%
Diesel	24.3	88%	12%
Gasohol	18.3	84%	16%
Liquefied petroleum gas	13.6	84%	16%
Liquefied natural gas	11.9	84%	16%
M85 (from natural gas)	9.15	84%	16%
Compressed natural gas	48.54/1,000 cu. ft.	80%	20%
Tires	9.45 cents/10 lbs	100%	0%
Truck and trailer sales	12% of sales price	100%	0%
Heavy-vehicle use	Weight-based—max \$550	100%	0%

Source: U.S. Government Accountability Office, "Highway Trust Fund: Overview of Highway Trust Fund Estimates," Table 1, page 4, April 4, 2006

**Table 7.11 Federal Highway Account Program Categories**

Authorization Category	5-Year Authorizations (\$ million)	% of Total
Interstate Maintenance Program	\$25,202	13%
National Highway System	\$30,542	15%
Bridge Program	\$21,607	11%
Surface Transportation Program	\$32,550	16%
Equity Bonus Program	\$40,896	21%
High Priority Projects Program	\$14,832	7%
Congestion Mitigation/Air Quality Improvement Program	\$8,609	4%
Highway Safety Improvement Program	\$5,064	3%
Coordinated Border Infrastructure Program	\$833	<1%
Safe Routes to School Program	\$612	<1%
Other Programs	\$18,744	9%
<b>Total</b>	<b>\$199,491</b>	<b>100%</b>

Source: Federal Highway Administration, "Highway Authorizations: Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (Public Law 109-59)," April 6, 2006



## **State-shared Revenue**

The state of Arizona shares transportation revenue with counties, cities and towns through allocations from HURF, and through a small allocation of (non-HURF) VLT revenue to counties for transportation. The percentages of each allocation are fixed by statute.

### **HURF Revenue**

Arizona collects an array of user-related taxes and fees, which are then deposited in the HURF account. HURF is a primary source of transportation funds for ADOT, municipalities, and counties. In FY 2006, HURF generated about \$71 per resident of Maricopa County municipalities, \$73 per resident of Pinal County municipalities, \$435 per resident of unincorporated Maricopa County, and \$120 per resident of unincorporated Pinal County.

The major transportation revenue sources that the state collects are gasoline taxes, use fuel (diesel) taxes, vehicle license taxes, registration fees, and other fees. Table 7.12 shows that, from FY 1988 through 2007, gasoline taxes were the single largest source of HURF revenue, providing 41 percent of the total (\$7.56 billion<sup>12</sup>). The next largest source of revenue was the transportation-dedicated portion of the VLT, which accounted for 21 percent (approximately \$4 billion) of collections. Diesel fuel taxes accounted for 14 percent, followed by vehicle registration fees at 12 percent. Motor carrier (commercial vehicle) fees made up 8 percent of the total, with various other fees accounting for the remaining 4 percent.<sup>13</sup> All of these taxes and fees are assessed at a fixed rate (not indexed or responsive to inflation) except the VLT, which reflects the changing price of new motor vehicles.

**Table 7.12 HURF Collections, FY 1988 to FY 2007**

Fiscal Year	Total Revenue (\$ thousand)							Total
	Gas Tax	Vehicle License Tax	Diesel Fuel Tax	Motor Carrier	Registration Fees	Other	General Fund Transfer	
1988	\$267,318	\$79,240	\$47,610	\$98,707	\$79,090	\$22,996	\$12,422	\$607,383
1989	\$286,101	\$80,125	\$50,797	\$104,709	\$80,338	\$23,402	\$13,789	\$639,261
1990	\$286,240	\$91,390	\$52,876	\$104,343	\$88,536	\$25,474	\$15,198	\$664,057
1991	\$296,816	\$92,826	\$65,202	\$108,655	\$75,657	\$24,033	\$16,632	\$679,821
1992	\$307,879	\$96,146	\$61,910	\$109,573	\$74,180	\$25,507		\$675,195
1993	\$315,227	\$105,027	\$72,008	\$120,303	\$80,717	\$24,161		\$717,443
1994	\$334,643	\$113,990	\$87,913	\$118,530	\$83,826	\$37,161		\$776,063
1995	\$342,299	\$131,562	\$108,790	\$92,103	\$86,159	\$39,238		\$800,151
1996	\$358,961	\$160,145	\$114,780	\$85,433	\$97,601	\$42,654		\$859,574
1997	\$363,953	\$175,253	\$124,748	\$90,186	\$101,528	\$41,294		\$896,962
1998	\$366,377	\$176,950	\$142,167	\$56,123	\$109,445	\$36,425		\$887,487
1999	\$397,463	\$220,126	\$160,312	\$34,150	\$131,952	\$38,775		\$982,778
2000	\$409,137	\$236,547	\$156,599	\$36,563	\$140,345	\$40,409		\$1,019,600
2001	\$418,400	\$251,613	\$155,859	\$32,678	\$132,269	\$40,147		\$1,030,966
2002	\$434,818	\$270,641	\$161,507	\$29,347	\$138,210	\$41,873		\$1,076,396
2003	\$446,891	\$281,947	\$166,744	\$32,856	\$141,328	\$41,490		\$1,111,256
2004	\$463,531	\$312,262	\$179,002	\$34,617	\$146,638	\$43,510		\$1,179,560
2005	\$481,284	\$328,232	\$194,368	\$37,980	\$154,122	\$49,567		\$1,245,553
2006	\$489,081	\$373,864	\$213,460	\$40,504	\$158,805	\$55,911		\$1,331,625
2007	\$497,702	\$393,497	\$210,282	\$45,226	\$177,788	\$57,979		\$1,382,474
	\$7,564,121	\$3,971,383	\$2,526,934	\$1,412,586	\$2,278,534	\$752,006	\$58,041	\$18,563,605
Total	41%	21%	14%	8%	12%	4%	<1%	100%

Note: Details may not add to the totals due to rounding  
 Source: Arizona Department of Transportation, Annual Report for Fiscal Years 1998 to 2007

State statutes prescribe how HURF revenue is allocated to the State Highway Fund and to cities, towns and counties (Table 7.13). Just over one-half of HURF (approximately 51 percent) is distributed to the State Highway Fund—including 8 percent to Maricopa and Pima counties for controlled-access highways, leaving 43 percent for ADOT discretionary programs involving state highway projects throughout Arizona. Cities and towns receive 28 percent of HURF revenue and counties 19 percent. These funds are disbursed among the jurisdictions based on population and origin of fuel sales. Phoenix, Tucson, and Mesa, the three largest cities, share the remaining 3 percent of HURF revenue (in addition to their portion of the 28 percent), allocated among the jurisdictions by population.

**Table 7.13 HURF Allocation Formulas**

Distribution Breakdown	Distribution Formulas
50.5% to State Highway Fund	7.67% to Maricopa and Pima Counties for controlled access, with a 75%/25% split between them; 42.83% to ADOT Discretionary
27.5% to (all) cities and towns	One-half distributed by incorporated population, and one-half by county origin of gasoline sales and city or town population within each county
3% to cities over 300,000	Distributed to Phoenix, Tucson, and Mesa based on population
19% to counties	Distributed in part by gasoline distribution and diesel consumption (72%), and in part by unincorporated population (28%)

Source: FY 2007 Year End HURF Report

**Vehicle License Tax Revenue (County Highway Purposes)**

Table 7.14 presents the allocation of state VLT for FY 2007. Approximately 45 percent of VLT collections were deposited into the HURF, which were then allocated as described under “HURF Revenue.” Another 5.83 percent of VLT revenue was distributed among the fifteen Arizona counties for highway purposes. The remaining 49 percent of VLT revenue went to the general funds of the state, counties, cities and towns.<sup>14</sup>

**Table 7.14 Allocation of State Vehicle License Tax Revenue, FY 2008 (\$ Million)**

Category	Distribution	% of Total
Highway User Revenue Fund	\$394	45%
State Highway Fund	\$<1	<1%
County General Fund	\$215	25%
Cities/Towns Fund	\$215	25%
State General Fund (School Aid)	\$1	<1%
State Highway Fund	\$<1	<1%
Counties (Highway Purposes)	\$51	6%
Total	\$876	100%

Source: FY 2007 Year End Report, ADOT

**Local Transportation Assistance Fund**

There are two Local Transportation Assistance Fund (LTAF) accounts. LTAF I is funded from state lottery proceeds, up to \$23 million per year (not indexed for inflation). The funds are distributed to cities and towns—but not counties--by population. The funds must be used for public transportation or for general transportation purposes, depending on population. The specific use of the funds is decided locally. Municipalities larger than 300,000 must use the funds solely for public transit; smaller jurisdictions may use it for transit or roads.

The legislature created LTAF II in 1998 to provide additional state transit and transportation funding to cities, towns and counties. The LTAF II funding, capped at \$18 million per year, comes from the multistate Powerball lottery game and instant bingo game monies, along with a portion of the State Highway Fund's VLT money. ADOT administers LTAF II and funds are distributed to metropolitan planning organizations (or the Regional Public Transportation Authority in a county where one exists), and directly to cities, towns and counties not represented by an RPTA or MPO.<sup>15</sup> ADOT administers this program and awards are based on an application process. Funds must be used for public transit unless a jurisdiction receives less than \$2,500 in a calendar year. At the jurisdictional level, LTAF II is not deemed a reliable revenue source because the total annual allocation varies, and the distributions are made competitively. Statewide LTAF II distributions were \$10.1 million for FY 2008.

### 7.3.2 Comparing Arizona and Hidden Valley Transportation Revenue to National Data

#### Review of National Data on Transportation Revenue

The National Cooperative Highway Research Program report, “Future Funding Options to Meet Highway and Transit Needs” (hereafter “NCHRP report”), provides national data on funding that permits comparison with data on Arizona and the Hidden Valley jurisdictions.

The NCHRP report classifies funding sources as user fees, specialized taxes, and general taxes, as Table 7.15 shows.

#### *User Fees*

The NCHRP report divides user fees into direct fees, such as tolls and transit fares, and indirect fees, such as motor fuel taxes, vehicle license tax, registration and sales taxes, and taxes on tires.

#### *Specialized Taxes*

These are non-user taxes and fees that are collected on non-transportation uses, but with the revenue dedicated to transportation. Examples of specialized taxes commonly used in Arizona are transportation excise (sales) taxes, roadway development impact fees, and secondary property taxes used to retire transportation general obligation bond issues. Impact fees for public transit are used in some other states (California, Florida), but are not currently allowed in Arizona.

#### *General Taxes*

These are taxes collected for broad purposes, but with some of the revenue used for transportation. Examples are income taxes, general sales taxes, and primary property taxes.

NCHRP calculated nationwide highway revenue from all three sources in 2004 at \$129 billion. Exhibit 7.15 shows the percent of this \$129 billion that came from each of the three sources.

**Table 7.15 Percent of Revenue by Source, Highway Mode Only, FY 2004 (\$ Billion)**

<b>Funding Category</b>	<b>Revenue Collected</b>	<b>% of Total</b>
User Fees	\$83	64%
Specialized Taxes	\$15	12%
General Taxes	\$31	24%
<b>Total</b>	<b>\$129</b>	<b>100%</b>

Source: National Cooperative Highway Research Program, “Future Financing Options to Meet Highway and Transit Needs,” Table 2.3

The NCHRP report also distinguishes between the level of government that collects the tax or fee—federal, state, or local. Table 7.16 shows the nationwide composition of taxes/fees used for highway purposes by level of government.

- The federal and state governments rely almost exclusively on user fees (93 percent and 83 percent respectively).
- Local governments collect 60 percent of their highway dollars from general taxes and 32 percent from specialized taxes. The remaining 8 percent comes from a range of other taxes and fees. Local governments typically do not collect user fees.

The NCHRP report further discusses the sources of state and local highway revenue.

- State governments rely very heavily on fees from users and owners of motor vehicles. According to the NCHRP report, “Motor fuel taxes and motor vehicle taxes and fees ... (account) for 73 to 80 percent of total state highway funding over the last 25 years.”
- At the local level, general taxes in the form of “general fund and property taxes ... accounted for about two-thirds of total highway funds.” The NCHRP report notes that, over the last 25 years, specialized taxes have come to account for a larger share of local government highway revenue.

**Table 7.16 Revenue Source, Highway Mode Only, by Level of Government, FY 2004 (\$ Billion)**

Funding Category	Federal		State		Local	
	Revenue Collected	% of Total	Revenue Collected	% of Total	Revenue Collected	% of Total
User Fees	\$28.6	93%	\$51.5	82%	\$2.8	8%
Specialized Taxes	\$0.3	1%	\$3.5	6%	\$11.6	32%
General Taxes	\$2.0	7%	\$7.4	12%	\$21.7	60%
Total	\$30.9	100%	\$62.5	100%	\$36.1	100%

Source: National Cooperative Highway Research Program, “Future Financing Options to Meet Highway and Transit Needs,” Table 2.3

### Comparison of Arizona and Hidden Valley Study Area Transportation Revenue to National Data

#### Arizona Statewide HURF Revenue

Table 7.17 reports the sources of FY 2007 HURF collections, which exclude federal funding available to ADOT. Just over one-half (51 percent) of HURF revenue came from motor fuel taxes (principally the gasoline tax) and 41 percent came from vehicle-related taxes and fees (principally the VLT). In all, 93 percent of HURF collections came from motor fuel taxes and vehicle-related taxes and fees—higher than the 82 percent for all states reported in Table 7.16).

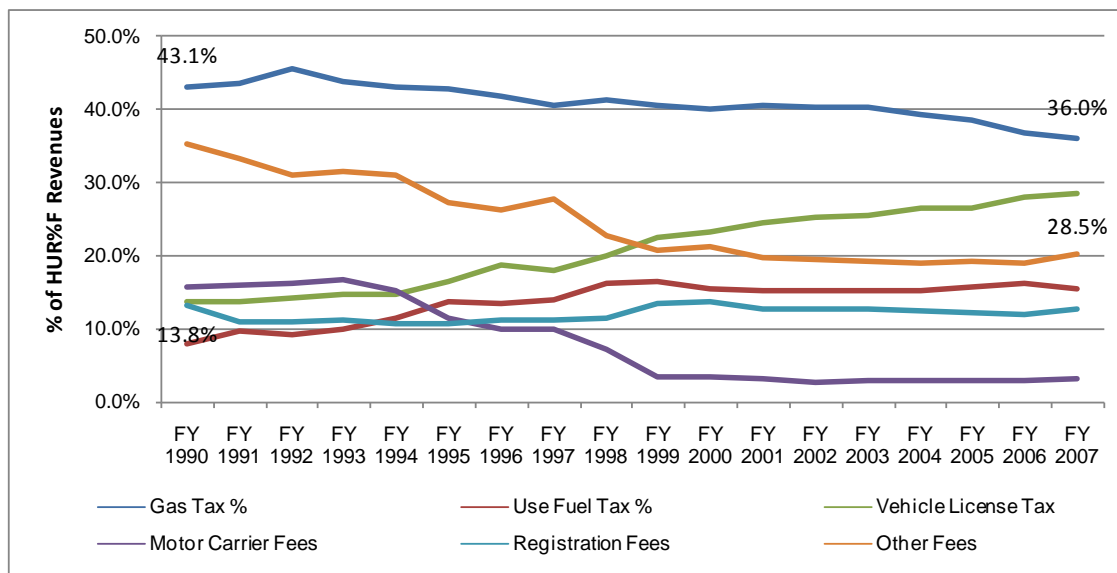
**Table 7.17 Sources of Arizona HURF (FY 2007)**

Revenue Source	FY 2007 Collections (\$000)	Percent of Total
Motor Fuel Taxes	\$707,984	51%
Gasoline Tax	\$497,702	36%
Diesel Fuel Tax	\$210,282	15%
Vehicle-Related Taxes/Fees	\$571,285	41%
Vehicle License Tax	\$393,497	29%
Registration Fees	\$177,788	13%
All Other Taxes/Fees	\$103,205	8%
Motor Carrier Fees	\$45,226	3%
Other Revenue	\$57,979	4%
<b>Total Revenue</b>	<b>\$1,382,474</b>	<b>100%</b>

Source: National Cooperative Highway Research Program, "Future Financing Options to Meet Highway and Transit Needs," Table 2.3

The composition of HURF revenue shifted from 1990 to 2007, as Figure 7-1 shows. The gasoline tax declined as a percent of HURF revenue from 43 percent in FY 1990 to 36 percent in FY 2007, while the VLT increased from 14 percent to 29 percent. This is a function of the erosion of fuel tax revenue by inflation and improving fuel economy.

**Figure 7-1 Source of HURF Collections, FY 1990 to 2007 (Percent)**



Source: Curtis Lueck & Associates

The American Petroleum Institute maintains a database on state motor fuel taxes.<sup>16</sup> Arizona's gasoline tax of 18 cents per gallon ranks thirty-second among the 51 states (including DC). Four other states are also at 18 cents per gallon, leaving fifteen states with a lower gasoline tax. The average gasoline tax nationwide is 18.2 cents per gallon. The Arizona diesel tax is 26 cents per gallon--about 3 cents below the national average.

One other comparison of Arizona with other states is instructive: how is state transportation revenue allocated? The Brookings Institution study, “Fueling Transportation Finance: A Primer on the Gas Tax,” reports the disposition of state motor fuel tax receipts for 1998–2001 to four categories:

- State-administered highways
- Local roads and streets
- Mass transit purposes
- General fund and non-highway uses

Nationwide, the proportion allocated to state-administered highways was 62 percent. Arizona ranked 39<sup>th</sup> in this respect, allocating 47 percent of its highway revenue to state-administered highways. On the other hand, Arizona allocated 52 percent to local road and streets, the fifth highest, compared with an average of 29 percent nationwide. The Arizona constitution prohibits the use of motor fuel taxes for non-highway purposes. Also, the percent of urban and rural roadway miles in the state highway system varies substantially from one state to another.

### **Local Transportation Revenue**

Local jurisdictions can collect only the revenue authorized by state statutes. In Arizona, no local jurisdiction is authorized to collect direct highway user taxes and fees, such as gasoline taxes or vehicle license taxes, although jurisdictions may impose transit fares. The revenue sources that are authorized for use by local jurisdictions are primarily indirect taxes and taxes on real property or sales. Table 7.18 summarizes the indirect taxes and fees that local Arizona jurisdictions may use, and identifies which Hidden Valley jurisdictions currently use each source.<sup>17</sup>

Table 7.19 provides details of local government transportation revenue in the Hidden Valley study area. The table first compares revenue in three categories: state-shared HURF and VLT (including the 5.83 percent set-aside for county highway purposes, per ARS 28-5808), specialized taxes, and general taxes. It conveys the importance of state-shared revenue to local governments. State-shared revenue accounted for 62 percent of local government revenue in 2007, specialized taxes for 32 percent and general taxes for 6 percent. Tribal revenue is not included, owing to the relatively small amount and restriction to tribal transportation purposes.

In Table 7.19, “Specialized Taxes” and “General Taxes” refer to highway revenue generated by the local governments. The Hidden Valley jurisdictions generated \$95 million in specialized and general taxes, of which 84 percent came from specialized taxes, versus 32 percent of locally generated revenue nationwide (Table 7.16). Neither MCDOT nor Pinal County uses general taxes for highway purposes.

**Table 7.18 Local Transportation Revenue Sources Currently Authorized and Used**

Sources		MCDOT	Avondale	Buckeye	Gila Bend	Goodyear	Pinal County	Casa Grande	Maricopa
Property Related Taxes and Fees	Primary Property Taxes	≠	<input type="checkbox"/>	≠	<input type="checkbox"/>	<input type="checkbox"/>	≠	≠	≠
	Secondary Property Taxes	≠	<input type="checkbox"/>	≠	≠	≠	≠	≠	≠
	Improvement or Community Facilities Districts	≠	≠	<input type="checkbox"/>	≠	≠	≠	≠	≠
	Development Impact Fees	≠	<input type="checkbox"/>	<input type="checkbox"/>	≠	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Private Contributions	Unk	Unk	Unk	Unk	Unk	Unk	Unk	Unk
Sales Taxes	General Sales Tax	0	<input type="checkbox"/>	≠	<input type="checkbox"/>	<input type="checkbox"/>	0	≠	≠
	Transportation Sales Tax	0	≠	≠	≠	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	≠
	Construction Sales Tax	0	≠	<input type="checkbox"/>	≠	≠	0	≠	≠
<input type="checkbox"/>	Authorized and used								
≠	Authorized but not used								
0	Not authorized								

Unk Unknown due to lack of data  
 Source: Curtis Lueck & Associates



**Table 7.19 Local Jurisdiction FY 2007 Transportation Revenue**

<b>All Jurisdictions and Revenue Sources (\$ million)</b>				
<b>Jurisdiction</b>	<b>State Shared Revenues</b>	<b>Specialized Taxes</b>	<b>General Taxes</b>	<b>Total</b>
MCDOT	\$116.8	\$47.1		\$163.9
Avondale	\$4.9	\$1.9	\$3.4	\$10.2
Buckeye	\$1.8	\$1.1	\$7.9	\$10.8
Goodyear	\$3.3	\$1.7	\$3.8	\$8.8
Pinal County	\$22.2	\$16.1		\$38.3
Casa Grande	\$3.1	\$3.5	\$0.4	\$7.0
City of Maricopa	\$2.5	\$8.0		\$10.5
	\$154.6	\$79.4	\$15.5	\$249.5
<b>Total</b>	<b>62%</b>	<b>32%</b>	<b>6%</b>	<b>100%</b>

Source: Curtis Lueck & Associates

### 7.3.3 Transportation Funding Source Options

This section identifies a menu of transportation funding options that are or could be available to the state and Hidden Valley jurisdictions. The NCHRP report presented a checklist of transportation revenue options, as adapted and shown in Table 7.20. The following text and tables identify, from this list of options, (a) sources currently available in Arizona, (b) sources used in other states that would require state legislative action for use here, and (c) those options that are considered innovative finance options.

One of the most innovative concepts is the vehicle-mile of travel charge, in which a vehicle's use of the highway network is tracked via global position systems. In Oregon's successful pilot programs, a fee is based on the amount of travel, route, and time of day, instead of a flat-rate gasoline tax.

**Table 7.20 NCHRP Transportation Revenue Options**

Revenue Tool	Scope				Where Used
	Preservation & Maintenance	New Capacity	Program or Project	Potential Yield	
<b>Fuel Taxes</b>					
Motor fuel excise (per gallon) tax	✓	✓	✓	High	All states, federal
Indexing of the motor fuel tax (can be indexed to inflation or to other factors)	✓	✓	✓	High	FL, IA, KY, ME, NE, NC, PA, WV
Sales tax on motor fuel	✓	✓	✓	High	CA, GA, HI, IL, IN, MI, NY
Petroleum franchise or business taxes	✓	✓	✓	High	NY, PA
<b>Vehicle Registration and Related Fees</b>					
Vehicle registration and license fees	✓	✓	✓	High	All states
Vehicle personal property taxes	✓	✓	✓	Medium	CA, KS, VA
Excise tax on vehicle sales dedicated to transportation	✓	✓	✓	High	CT, IA, KS, MD, MI, MN, MO, NC, NE, OK, SD, VA, federal for heavy trucks
<b>Tolling, Pricing, and Other User Fees</b>					
Tolling new roads and bridges		✓	✓	Medium	About half the states
Retrofitting tolls to existing roads	✓	✓	✓	Low	VA proposed; others considering
High Occupancy Toll (HOT) lanes, express toll lanes, truck toll lanes	✓	✓	✓	Medium	CA, CO, GA, MN, TX
Vehicle Miles of Travel fees	✓	✓	✓	High	OR testing; recommended by 15-state study
Transit fees (mainly fares)			✓	High	All transit agencies (fares)

**Table 7.20 Continued**

Revenue Tool	Scope			Potential Yield	Where Used
	Preservation & Maintenance	New Capacity	Program or Project		
<b>Beneficiary Charges and Local Option</b>					
Dedicated property taxes	✓	✓	✓	High	Many local governments
Beneficiary charges/value capture (impact fees, tax increment financing, mortgage recording fees, lease fees)		✓	✓	Low	Many states and localities (e.g., CA, FL, NY, OR)
Local option taxes for highway improvements					
Local option vehicle or registration fees	✓	✓	✓	Med.	21 states
Local option sales taxes	✓	✓	✓	High	22 states
Local option motor fuel taxes	✓	✓	✓	Medium	10 states
<b>Other Dedicated Taxes</b>					
Dedicate portion of state sales tax	✓	✓	✓	High	CA, IN, KS, MA, MS, NY, PA, UT, VA
Miscellaneous transit taxes (lottery, cigarette, room tax, rental car fees, etc.)			✓	Low	Various states and localities
<b>General Revenue</b>	✓	✓		High	Most states and localities

Source: NCHRP "Future Financing Options to Meet Highway and Transit Needs," Table 3.1

## Currently Authorized Hidden Valley Revenue Options

Table 7.21 shows which jurisdictions are currently using each available transportation funding source.

Under “property-related taxes and fees,” all of the identified options are currently authorized, but their use varies. Three jurisdictions allocate general fund dollars to transportation. Only one jurisdiction (Avondale) is currently using secondary property taxes to repay general obligation bonding. One jurisdiction (Buckeye) reports using improvement districts. All but two jurisdictions (MCDOT and Gila Bend) use development impact fees to fund transportation capacity improvements.

Maricopa County voters approved a 20-year extension (through 2025) of a countywide one-half cent transportation sales tax, which is deposited in the Regional Area Road Fund, with roadway projects administered primarily by the Arizona Department of Transportation and transit improvements by the Regional Public Transit Authority. Pinal County voters also extended a countywide one-half cent transportation sales tax through 2025, with the revenue distributed to each jurisdiction based upon its proportion of countywide population.

Only cities and towns are authorized to levy general sales taxes or construction sales taxes. Avondale voters approved a one-half sales tax for capital improvements, including transportation, in 2001. Gila Bend and the City of Maricopa allocate a portion of their general sales tax revenues to capital improvements. Buckeye has a construction sales tax that it partially allocates to transportation. A construction sales tax as an increment of local sales tax (usually 1% to 2%) above the jurisdiction’s base rate, and applied only to specific construction-related activities. The use of construction sales tax revenue is determined by the local government, but is typically dedicated to infrastructure improvements needed to support new growth.

All of the jurisdictions could use general obligation bonding to support transportation improvements. Maricopa County has a high legal debt limit, but currently has a policy against debt financing. Pinal County currently has no outstanding general obligation bonding, and therefore has its full legal debt limit available as of June 30, 2007. Avondale, Buckeye, Casa Grande and Goodyear have an aggregate currently available general obligation debt capacity of \$161.2 million.<sup>18</sup> Neither Maricopa County nor Gila Bend has an impact fee program. Maricopa County recently began a study of impact fees for roads and other purposes.

**Table 7.21 Currently Authorized Revenue Options, Used and Not Used**

Revenue Sources		MCDOT	Avondale	Buckeye	Gila Bend	Goodyear	Pinal County	Casa Grande	Maricopa
Property-Related Taxes and Fees	Primary property taxes	≠	☐	≠	☐	☐	≠	≠	≠
	Secondary property taxes	≠	☐	≠	≠	≠	≠	≠	≠
	Improvement or community facilities districts	≠	≠	☐	≠	≠	≠	≠	≠
	Development impact fees	≠	☐	☐	≠	☐	☐	☐	☐
	Private contributions	Unk	Unk	Unk	Unk	Unk	Unk	Unk	Unk
Sales Taxes	General sales tax	0	☐	≠	☐	≠	0	≠	☐
	Transportation sales tax	*	≠	≠	≠	≠	☐	☐	≠
	Construction sales tax	0	≠	☐	≠	≠	0	≠	≠
☐	Authorized and used								
≠	Authorized but not used								
0	Not authorized								

Unk Unknown due to lack of data

\*Maricopa County has a transportation sales tax, but MCDOT is not a major recipient.

Source: Curtis Lueck & Associates

### Revenue Options Requiring State Action

Table 7.22 identifies additional revenue options that would require authorization through changes in state law. Legislative changes could either raise new revenue directly or permit a local option.

The state could increase fuel taxes, index these taxes to inflation, or do both. A citizen initiative from 1992 mandates that any tax increase requires a two-thirds (“supermajority”) vote of the legislature, however. Alternatively, the legislature could authorize local governments to levy their own fuel taxes, and this is exempt from the supermajority requirement by Article 9, § 22(C)3 of the State Constitution.

The state could levy a sales tax on vehicles or fuel, or a general sales tax with the revenue dedicated to transportation. Alternatively, the legislature could allow local governments to levy vehicle-related taxes and fees. A sales tax—except on motor fuel—could be used for modes other than highways.

**Table 7.22 Transportation Revenue Options Requiring State Approval**

Revenue Source Category		State Options	Local Government Options
<b>User Fees</b>	<b>Indirect User Fees</b>		
	Fuel Taxes	Increase and/or index fuel taxes  Levy a sales tax on sale of motor fuels	Local option for motor fuel tax, with indexing permitted
	Vehicle-Related Taxes/Fees	Vehicle excise tax dedicated to transportation	Local option for vehicle related taxes or fees
		Vehicle personal property tax	Local option for vehicle personal property tax
	<b>Pricing Mechanisms</b>	Tolling new roads and bridges	Congestion pricing
			HOT lanes
		VMT fees	
<b>Specialized Taxes</b>	<b>Sales Taxes</b>	Statewide general sales tax for transportation	Enable Maricopa County to impose an additional transportation sales tax
	<b>Impact Fees</b>	Impact fee for state highways	Enable local jurisdictions to levy impact fees for state highways

Source: Curtis Lueck & Associates

Regarding pricing mechanisms, the state probably is more suited to use toll facilities, while local governments are more likely to benefit from congestion pricing. Both the state and local governments could consider VMT fees. The legislature could also consider fees to address development impacts on the state highway system.

## Innovative Financing Options

Table 7.23 presents an overview of currently discussed innovative transportation financing options. This classification is derived from the U.S. Department of Transportation (USDOT) “Innovative Finance for Surface Transportation” website.

USDOT defines “innovative finances” to include the following categories, with examples from the USDOT website shown in Table 7.23:

- New or non-traditional sources of revenue
- New financing mechanisms designed to attract additional investment
- New funds management techniques
- New institutional arrangements

Each of the innovative financing options identified below is already in use, either in Arizona or elsewhere.

The state of Arizona already uses Transportation Infrastructure Finance and Innovation Act (TIFIA) support, the state infrastructure bank, Grant Anticipation Revenue Vehicles (GARVEES), Grant Anticipation Notes (GANS) loans, revenue bonds (HURF and RARF), and Board Funding Obligations. All of these strategies fund projects through new debt which is retired by committed federal and state funding. Accordingly, they are financing mechanisms that build today’s roads with tomorrow’s dollars. They are not funding sources, *per se*. For a detailed discussion on these and other sources, the reader is referred to the FHWA Innovative Finance website at [www.Innovativefinance.org](http://www.Innovativefinance.org).

**Table 7.23 Transportation Innovative Financing Overview**

<b>Federal Loans and Credit Support</b>
Transportation Infrastructure Finance and Innovation Act (TIFIA)
Section 129 loans
<b>State Credit Assistance</b>
State infrastructure banks
<b>Bonding and Debt Instruments</b>
Municipal/public bond Issues
Revenue bonds
General obligation bonds
Limited and special tax bonds
Hybrid bonds
Private activity bonds
Anticipation Notes
Grant Anticipation Revenue Vehicles (GARVEES)
Transit Grant Anticipation Notes (GANS)
Private bond issues
Certificates of participation
Shadow tolls
<b>Federal Matching Flexibility</b>
Tapered match
Third party donations
Using federal funds as match
Toll credits
Program match

Source: Derived from U.S. Department of Transportation (USDOT) “Innovative Finance for Surface Transportation” website [www.innovativefinance.org](http://www.innovativefinance.org).

## 7.4 Conclusion: Policy Considerations and Strategies for Further Discussion

A series of reports paints a grim picture for transportation funding today and in the future: costs of necessary capital improvements and operations/maintenance vastly exceed available and expected revenue. The shortfall may result in increasing congestion, a stifled state economy, compromised traffic safety, and an unhappy traveling public.

On a broad-brush level, there are four options for addressing this gap:

- Raise revenue to more fully cover costs;
- Substitute lower-cost alternatives--such as travel demand management, transportation system management, and Intelligent Transportation Systems--for more costly capacity solutions;
- Accept lower performance standards to bring revenue and needs into balance; or,
- Some blend of these three strategies.

It is apparent that no single option will close the gap between needs and revenue. The need exists to investigate an array of revenue sources, including both current sources and new or enhanced sources.

An effective roadway system is critical to the state's current and future economy. Additional action to expand the revenue base can be taken at the state, municipal and county levels. Successful local revenue sources have included development impact fees, construction sales taxes, and special districts. The state could authorize regional impact fees, impact fees for transit, and impact fees for state highways; it could further empower local government with more local options to raise revenue.

The estimated cost of arterial roadway capacity consumed by each new home built in urban and suburban Arizona is approximately \$15,000. The cost of local and collector roadway capacity is rolled into the construction of new development projects and passed on to the end user (the homeowner and motorist).. The cost of high-capacity roadways (freeways and Interstate highways), which can add another \$5,000 to \$10,000 per dwelling unit, is frequently funded by the state or federal government with local matching funds. Therefore, the total cost of required new freeway and arterial capacity is about \$20,000 to \$25,000 per new home. However, impact fees and other existing sources typically raise less than \$5,000 per home, leaving a large shortfall and funding conundrum. In addition, the cost of long-term maintenance is roughly equal to the capital cost of initial construction, when the latter is amortized over the useful life of the roadway.

For the Hidden Valley, the following list offers strategies for raising revenue to meet the needs of a rapidly growing population:

- Use improvement districts, revenue bonds, innovative financing, and construction sales taxes to help resolve as many as possible of today's capacity and maintenance deficiencies. No new legislation is needed.
- To accommodate new growth, establish a regional development impact fee program for the major corridors identified in the study, possibly including state routes. The program could be modeled after other jurisdictions (see for example California) using new legislation. No new legislation is needed if joint powers agreements (such as intergovernmental agreements) are used. (New legislation would be needed, however, to enable the state to collect impact fees for improvements to the ADOT highway system.)
- Consider the use of community facilities districts to fund offsite improvements for new development.
- Vigorously pursue toll roads along one or more new or existing corridors. New toll legislation may be needed to enhance the feasibility of toll roads anywhere in Arizona. For example, current state law requires the availability of a reasonably convenient free alternative.
- Implement a life cycle cost program, similar to MAG's RARF, for the Hidden Valley area, to address both capital and maintenance needs. No new legislation is required.
- Implement a concurrency program, in which new development cannot proceed into construction until needed roadways are funded, permitted, and fully programmed for implementation. No new legislation is needed. This can be incorporated into each municipality's general plan and each county's comprehensive plan, pursuant to ARS Title 9 and Title 11, respectively.



- Seek legislative approval for local revenue options such as a local gasoline tax, a local sales tax on fuel, and local vehicle registration fees. This requires a simple majority vote at the legislature followed by local adoption.
- Seek an increase in the state gasoline tax, and possibly distribution of a larger percentage of HURF to counties and municipalities in order to implement the Hidden Valley plan. A tax increase requires a supermajority vote of the legislature to comply with the constitution, but changes to the HURF formula require a simple majority vote.
- Seek an increase in the federal gasoline tax, with a larger share being available to counties and municipalities for implementing the Hidden Valley plan. This requires action by the U.S. Congress.
- Strive for a balanced transportation system, with due consideration of land use patterns, that incorporates transit and alternative modes of travel. This will require investigation of additional sources of funding for public transportation in the study area, such as a ¼ to ½ percent sales tax, a property tax, or a new transit district with taxation authority. These options may require new legislation, but some may be achievable under current statutes.

#### Endnotes

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<sup>1</sup> This section was included in the Interstate 10/Hassayampa Valley Roadway Framework Study and is repeated here for continuity.

<sup>2</sup> AAA auto cost estimates for a sedan. Further information available at <http://www.aaaexchange.com/Assets/Files/20073261133460.YourDrivingCosts2007.pdf>.

<sup>3</sup> The federal rate also includes 0.1¢ for the leaking underground storage tank (LUST) cleanup program, for a total of 18.4¢ per gallon.

<sup>4</sup> ARS §28-2003.

<sup>5</sup> On the other hand, the sales tax on vehicle purchases is substantial<sup>5</sup>, yet typically flows into the general fund at the state and local level and is not considered a transportation revenue source. In Arizona, the total sales tax on a new \$25,000 vehicle can exceed \$2,000.

<sup>6</sup> ARS §28-5433.

<sup>7</sup> Data obtained from the World Bank, 2005.

<sup>8</sup> Counties cannot impose this type of sales tax.

<sup>9</sup> The calculation is thus:  $\$300,000 \times 65\% \times 2\% = \$3900$ . The 65% factor is imposed by state law.

<sup>10</sup> Minor allocations from the motor fuel taxes are allocated to the Leaking Underground Storage Tank Trust Fund and the General Fund.

<sup>11</sup> The Equity Bonus Program provides funding to states to ensure a minimum rate of return to the state of contributions from the state to the Highway Account.

<sup>12</sup> Ibid.

<sup>13</sup> Under Collections, ADOT reports General Fund Transfers of \$58 million between FY 1998 and 1991.

<sup>14</sup> Source: ADOT 2006 Vehicle License Tax report.

<sup>15</sup> Source: ADOT Public Transportation Division.

<sup>16</sup> See [http://www.api.org/policy/tax/stateexcise/upload/December\\_2007\\_notes.pdf](http://www.api.org/policy/tax/stateexcise/upload/December_2007_notes.pdf).

<sup>17</sup> No data was collected on jurisdictions that are involved with transit and how those services are being funded with transit fares.

<sup>18</sup> The other two jurisdictions were Gila Bend and Maricopa City, neither of which currently have a significant amount of available legal debt limit. See Arizona Department of Revenue reports on bonded indebtedness for FY 2006-07 at [http://www.azdor.gov/ResearchStats/bonding/FY07%20Report\\_web.pdf](http://www.azdor.gov/ResearchStats/bonding/FY07%20Report_web.pdf).