

# HIGHWAY FUNDING, FUTURE ROADWAY UPDATE & SUSTAINABILITY OF THE FEDERAL HIGHWAY FUND



# **HIGHWAY FUNDING & FUTURE ROADWAYS UPDATE**

- **Federal Highway funding**
- **Arizona Highway funding**
- **MAG 10 year forecast**
- **Freeway update**
- **Sustainability of the Federal Highway Fund**

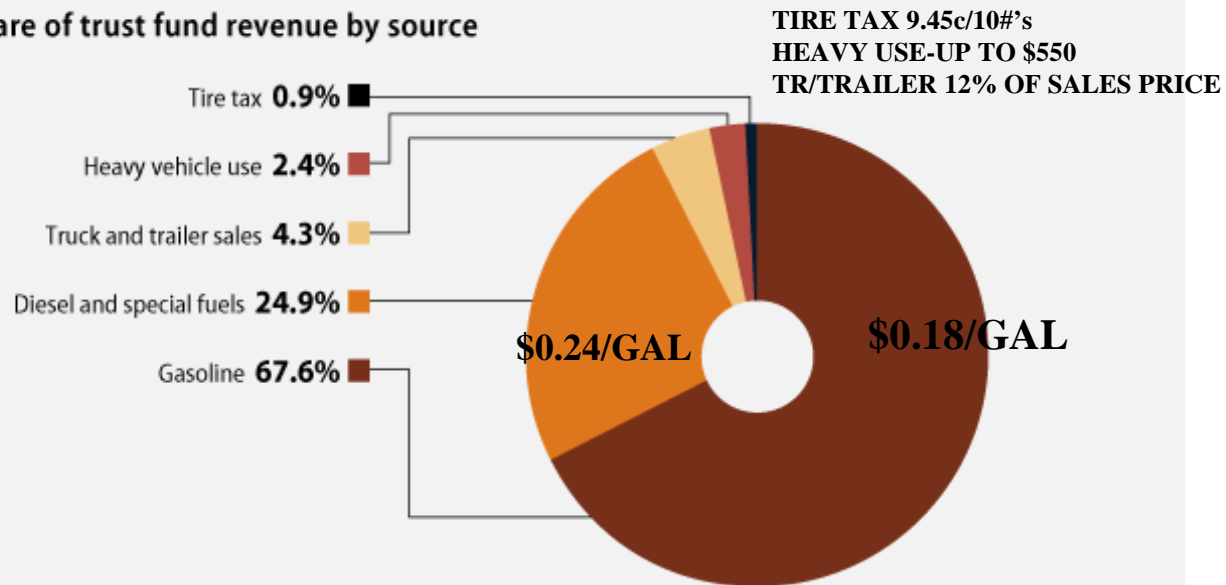
# FEDERAL HIGHWAY FUNDING

THE FEDERAL HIGHWAY TRUST FUND GENERATES REVENUE FOR ROW ACQUISITION, DESIGN, CONSTRUCTION AND MAINTENANCE OF HIGHWAYS

Gas tax (gas, diesel, tire, truck, trailer, etc...) is collected into the Federal Highway Trust Fund. The system is a pay-as-you-go revenue stream for highway & roadway construction by the states. Funding is distributed to the state agency (ADOT for Arizona) and in turn distributed to the shareholders.

FIGURE 1

Share of trust fund revenue by source



Source: Government Accountability Office, "Highway Trust Fund: Pilot Program Could Help Determine the Viability of Mileage Fees for Certain Vehicles," GAO-13-77, Report to the Subcommittee on Transportation, Housing, and Urban Development, and Related Agencies, Committee on Appropriations, House of Representatives, December 2012, p. 6, available at <http://www.gao.gov/assets/660/650863.pdf>.

140 billion gallons gas sold in 2015

# HIGHWAY FUNDING

## FEDERAL HIGHWAY TRUST PROGRAMS

Account for 98% of funding via MAP 21

**NHPP**

**58%**

(National Highway  
Performance  
Program)

**STP 27%**

(Surface  
Transportation  
Program)

**CMAQ**

**6%**

(Congestion  
Maintenance and  
Air Quality)

**HSIP 6%**

(Highway Safety  
Improvement  
Program)

Other programs 2% of funding via MAP 21

**HIGHWAY  
MAINT.**

**BORDER  
INFRAST.**

**RECREAT.  
TRAILS**

**BRIDGE  
REPL.**

**METRO**

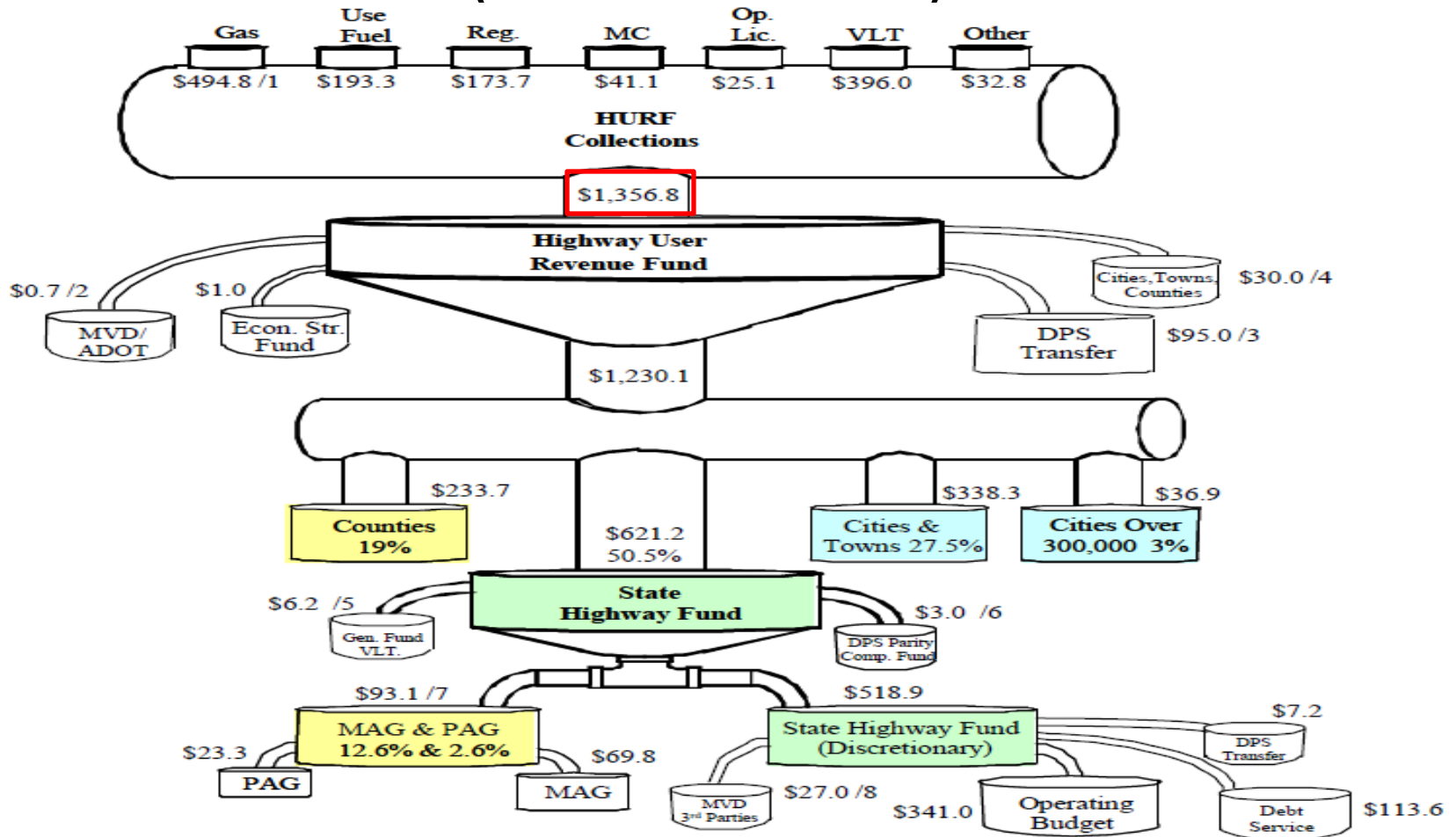
**MISC.  
PROGRAMS**

Special programs and appropriations may also  
be approved similar to the 2009 American  
Recovery and Reinvestment Act

# 2016 HURF DISTRIBUTION

FUNDING IS DISTRIBUTED TO ADOT AND IN TURN DISTRIBUTED TO THE SHAREHOLDERS BASED ON THE FOLLOWING:

(MILLIONS OF DOLLARS)



# 2017 AZ HURF DISTRIBUTION

FY 2017

As Per FY 2017 Budget

## HURF Estimated Revenue (Millions of Dollars) Distribution Flow



\*ADOT official forecast, September 2015.

<sup>b</sup> HURF Transfer to DPS of \$96,409,200 and continues to suspend the \$10 million statutory cap (A.R.S. 28-6537).

<sup>c</sup> \$625,200 for Registration Compliance & \$26,300 for retention.

<sup>d</sup> \$1.0 million for highway projects recommended by the Commerce Authority and approved by the State Transportation Board.

<sup>e</sup> Laws 2015, Ch.10, Sec. 12 creates a special, off-the-top distribution for local governments in FY2017.

<sup>f</sup> As session law, the FY 2017 budget appropriates \$30 million in general fund revenue to local governments.

<sup>g</sup> County Share of HURF Revenue to be allocated to each county based on fuel sales and unincorporated population.

<sup>h</sup> Monies are allocated to individual cities and towns based on incorporated population and fuel sales.

<sup>i</sup> Cities over 300,000 persons receive 3% of HURF.

<sup>j</sup> Distribution of SHF monies for design, acquisition and construction of controlled access highways. 25/75 split.

<sup>k</sup> Transfer 1.51% of SHF share of VLT to the Parity Compensation Fund.

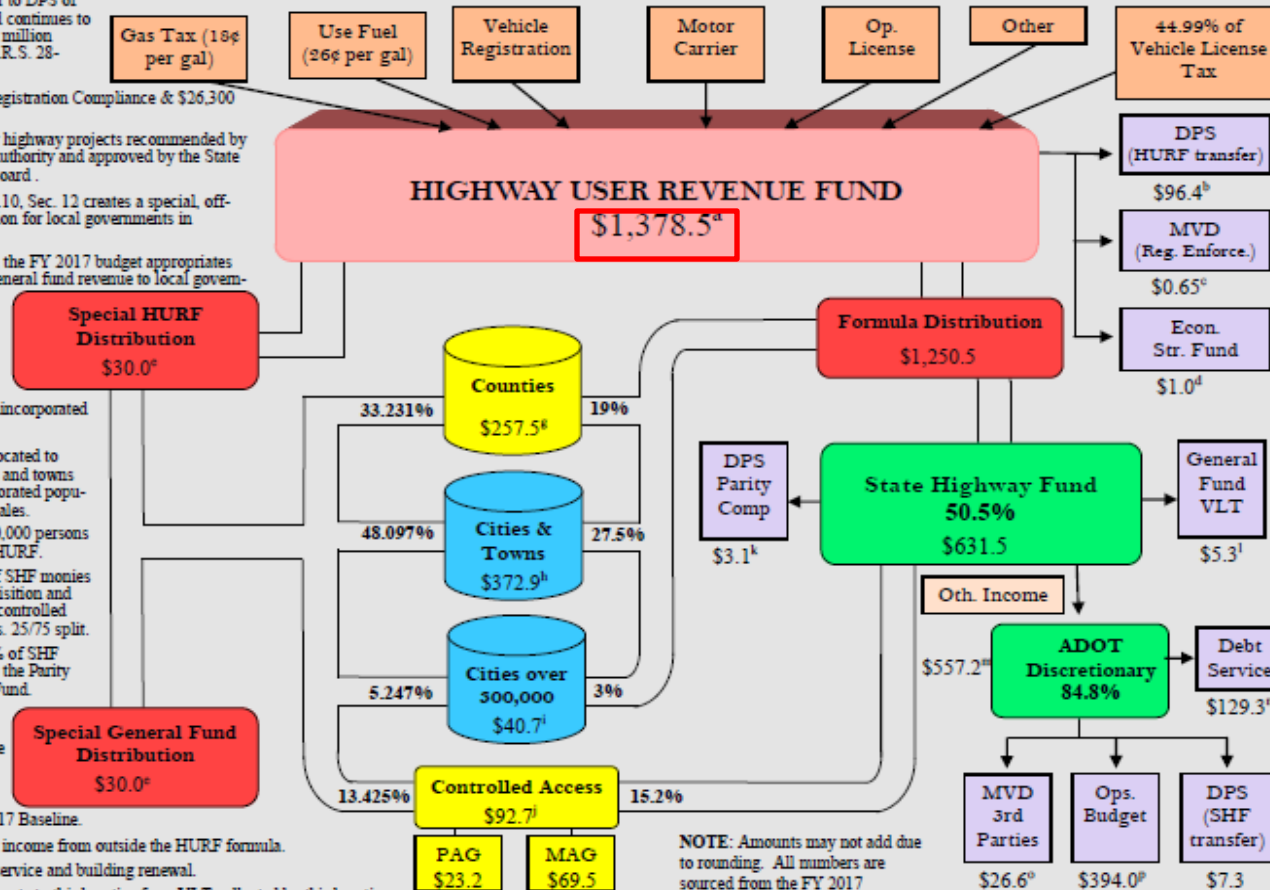
<sup>l</sup> Special Transfer of a portion of the SHF share of VLT to the General Fund. Estimate based on FY 2017 Baseline.

<sup>m</sup> Includes other income from outside the HURF formula.

<sup>n</sup> Includes debt service and building renewal.

<sup>o</sup> Statutory payments to third parties from VLT collected by third parties.

<sup>p</sup> Includes Operating Budget, miscellaneous, and statewide highway construction



NOTE: Amounts may not add due to rounding. All numbers are sourced from the FY 2017 JLBC Baseline and the ADOT HURF Forecast Report.

# 2017-2026 HURF FORECAST

## HURF OFFICIAL REVENUE FORECAST DISTRIBUTION (Current Dollars in Millions)

Fiscal Year	HURF	DPS/ ESP /1	Net HURF	DPS Parity Comp. Fund /2	ADOT 50.5%/1,3	Cities/Towns 27.5%/1	Cities +300K 3%/1	Counties 19%/1
2017	\$1,415.6	\$127.7	\$1,287.9	(\$3.2)	\$644.4	\$368.6	\$40.2	\$254.7
2018	1,476.4	41.0	1,435.4	(3.4)	718.2	409.2	44.6	282.7
2019	1,532.8	11.0	1,521.8	(3.6)	757.1	418.5	45.7	289.1
2020	1,587.6	11.0	1,576.6	(3.9)	784.0	433.6	47.3	299.6
2021	1,640.2	11.0	1,629.2	(4.1)	809.8	448.0	48.9	309.5
2022	1,693.0	11.0	1,682.0	(4.3)	835.8	462.6	50.5	319.6
2023	1,747.8	11.0	1,736.8	(4.6)	862.7	477.6	52.1	330.0
2024	1,802.3	11.0	1,791.3	(4.8)	889.5	492.6	53.7	340.3
2025	1,861.4	11.0	1,850.4	(5.1)	918.6	508.9	55.5	351.6
2026	1,923.2	11.0	1,912.2	(5.4)	949.0	525.9	57.4	363.3
<b>Total</b>	<b>\$16,680.3</b>	<b>\$256.7</b>	<b>\$16,423.6</b>	<b>(\$42.5)</b>	<b>\$8,169.0</b>	<b>\$4,545.4</b>	<b>\$495.9</b>	<b>\$3,140.4</b>

Maricopa County cities  
receive +/- 65%

Maricopa County  
receives +/- 40%

# HIGHWAY FUNDING

Figure 5-7: Arizona Programmed Transportation Investments FY2012-FY2020 (\$34.8 billion)

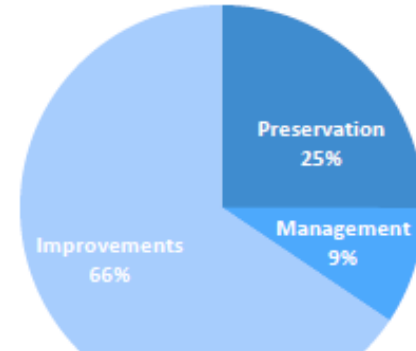


Figure 5-9: Preservation Detail FY2012-FY2020

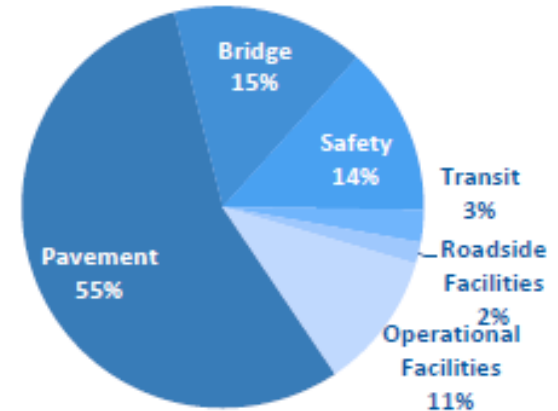
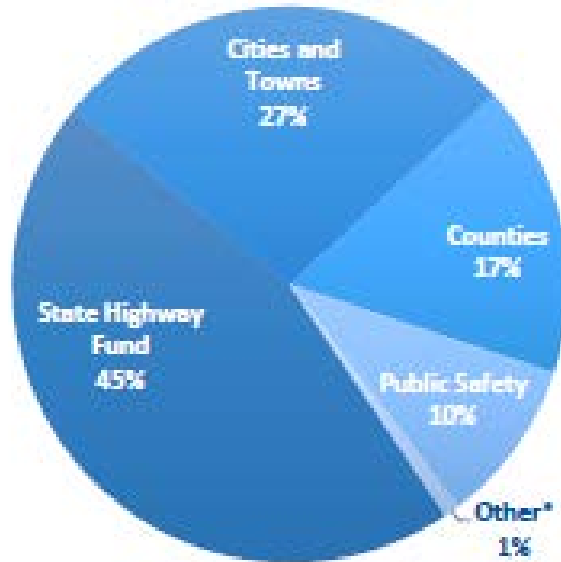


Figure 5-1: Distribution of HURF Collections (\$1.2B, FY2014)<sup>7</sup>





# HURF FUNDING-TOP 30

RANK	CITY/TOWN	% of total	2015		
			CENSUS	HURF	1 x HURF
1	PHOENIX	28.8657%	1,563,025	\$94,505,276	\$3,805,832
2	TUCSON	9.8183%	531,641	\$38,263,168	\$1,540,900
3	MESA	8.7136%	471,825	\$28,527,984	\$1,148,853
4	CHANDLER	4.8169%	260,828	\$15,770,459	\$635,094
5	GILBERT	4.5716%	247,542	\$14,967,147	\$602,744
6	GLENDALE	4.4346%	240,126	\$14,518,753	\$584,686
7	SCOTTSDALE	4.3739%	236,839	\$14,320,011	\$576,683
8	TEMPE	3.2471%	175,826	\$10,630,978	\$428,121
9	PEORIA	3.1624%	171,237	\$10,353,513	\$416,947
10	SURPRISE	2.3717%	128,422	\$7,764,787	\$312,697
11	YUMA	1.7385%	94,139	\$7,111,701	\$286,396
12	AVONDALE	1.4901%	80,684	\$4,878,402	\$196,459
13	GOODYEAR	1.4590%	79,003	\$4,776,763	\$192,366
14	FLAGSTAFF	1.2987%	70,320	\$7,459,917	\$300,419
15	BUCKEYE	1.1558%	62,582	\$3,783,899	\$152,382
16	LAKE HAVASU	0.9890%	53,553	\$4,753,290	\$191,420
17	CASA GRANDE	0.9504%	51,460	\$3,590,668	\$144,600
18	MARICOPA	0.8976%	48,602	\$3,391,248	\$136,569
19	ORO VALLEY	0.8046%	43,565	\$3,135,452	\$126,268
20	SIERRA VISTA	0.8007%	43,355	\$3,206,881	\$129,145
21	PRESCOTT VALLEY	0.7793%	42,197	\$3,242,516	\$130,580
22	PRESCOTT	0.7738%	41,899	\$3,219,617	\$129,658
23	MARANA	0.7630%	41,315	\$2,973,516	\$119,747
24	BULLHEAD CITY	0.7285%	39,445	\$3,501,083	\$140,992
25	APACHE JUNCTION	0.7031%	38,074	\$2,656,648	\$106,986
26	QUEEN CREEK	0.6392%	34,614	\$2,092,868	\$84,282
27	EL MIRAGE	0.6267%	33,935	\$2,051,814	\$82,629
28	SAN LUIS	0.5821%	31,520	\$2,381,168	\$95,892
29	FLORENCE	0.5745%	31,110	\$2,170,728	\$87,418
30	KINGMAN	0.5339%	28,912	\$2,566,189	\$103,343

# HURF FUNDING

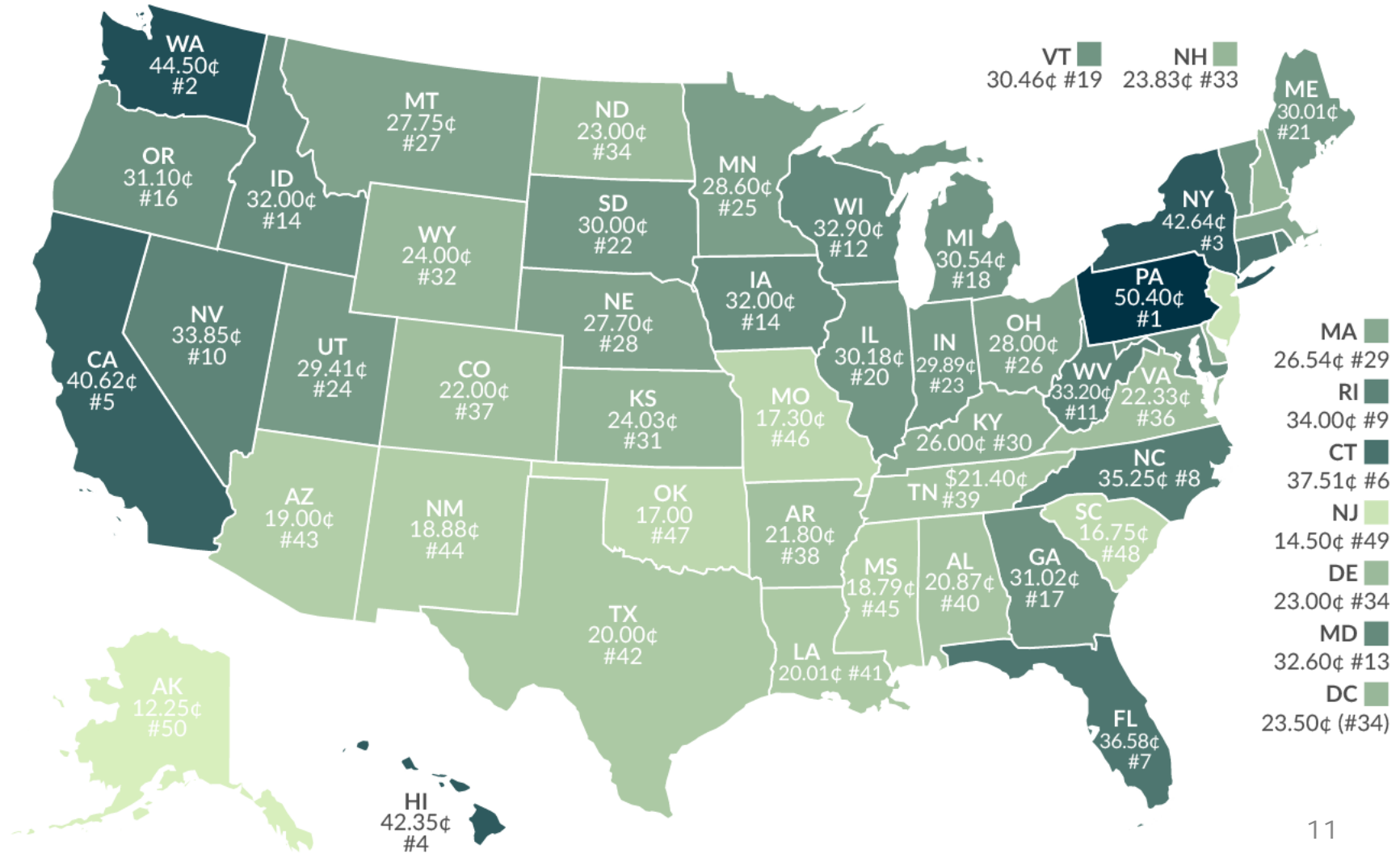
## MARICOPA COUNTY

	CITY/TOWN	% of total	2015		% based on	
			CENSUS	HURF	HURF total	1 x HURF
1	PHOENIX	28.8657%	1,563,025	\$94,505,276	26.3761%	\$3,805,832
3	MESA	8.7136%	471,825	\$28,527,984	7.9621%	\$1,148,853
4	CHANDLER	4.8169%	260,828	\$15,770,459	4.4015%	\$635,094
5	GILBERT	4.5716%	247,542	\$14,967,147	4.1773%	\$602,744
6	GLENDALE	4.4346%	240,126	\$14,518,753	4.0521%	\$584,686
7	SCOTTSDALE	4.3739%	236,839	\$14,320,011	3.9967%	\$576,683
8	TEMPE	3.2471%	175,826	\$10,630,978	2.9671%	\$428,121
9	PEORIA	3.1624%	171,237	\$10,353,513	2.8896%	\$416,947
10	SURPRISE	2.3717%	128,422	\$7,764,787	2.1671%	\$312,697
12	AVONDALE	1.4901%	80,684	\$4,878,402	1.3615%	\$196,459
13	GOODYEAR	1.4590%	79,003	\$4,776,763	1.3332%	\$192,366
15	BUCKEYE	1.1558%	62,582	\$3,783,899	1.0561%	\$152,382
26	QUEEN CREEK	0.6392%	34,614	\$2,092,868	0.5841%	\$84,282
27	EL MIRAGE	0.6267%	33,935	\$2,051,814	0.5727%	\$82,629
32	FOUNTAIN Hills	0.4414%	23,899	\$1,445,007	0.4033%	\$58,192
38	PARADISE VALLEY	0.2571%	13,922	\$841,767	0.2349%	\$33,899
49	TOLLESON	0.1294%	7,008	\$423,725	0.1183%	\$17,064
52	GUADALUPE	0.1141%	6,177	\$373,480	0.1042%	\$15,040
55	LITCHFIELD	0.1022%	5,533	\$334,542	0.0934%	\$13,472
56	CAVE CREEK	0.0986%	5,341	\$322,933	0.0901%	\$13,005
69	CAREFREE	0.0667%	3,610	\$218,272	0.0609%	\$8,790

Maricopa County cities controls 65% of HURF funds for a total of \$232 million in 2016. In addition, Maricopa County received \$69.7 million in HURF funds

# How High Are Gasoline Taxes in Your State?

Total State Taxes and Fees on Gasoline, as of January 2016 (cents per gallon)



# RARF/PROP 400 FUNDING

## 1/2c SALES TAX

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

Fiscal Year	Regional Area Road Fund (RARF)		Public Transportation Fund (PTF) (33.3%)	Total
	Freeways (56.2%)	Arterial Streets (10.5%)		
<b>Forecasted</b>				
2017	239.7	44.8	142.1	426.6
2018	253.8	47.4	150.4	451.6
2019	268.0	50.1	158.8	476.8
2020	281.8	52.7	167.0	501.5
2021	296.0	55.3	175.4	526.7
2022	310.0	57.9	183.7	551.6
2023	323.7	60.5	191.8	576.0
2024	338.5	63.2	200.6	602.3
2025	353.5	66.0	209.5	629.0
2026 (4)	215.1	40.2	127.4	382.7
<b>Subtotal</b>	<b>2,880.1</b>	<b>538.1</b>	<b>1,706.6</b>	<b>5,124.8</b>
<b>Total</b>				
<b>Totals</b>	<b>4,941.9</b>	<b>923.3</b>	<b>2,928.2</b>	<b>8,793.4</b>

# MAG-Reg. Trans. Plan

## HISTORICAL & 10 YEAR FORECAST

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

Sources	FY 2006 - 2016 Historical	FY 2017 - 2026 Forecast	Total
Proposition 400: Half Cent Sales Tax Extension	3,668.6	5,124.8	8,793.4
ADOT Funds	2,867.7	2,644.7	5,512.4
American Recovery and Reinvestment Act (Freeways) *	112.3	0.0	112.3
American Recovery and Reinvestment Act (Arterials) **	11.9	0.0	11.9
American Recovery and Reinvestment Act (Transit) ***	39.6	0.0	39.6
Statewide Transportation Acceleration Needs (STAN)	141.1	0.0	141.1
Federal Highway	850.0	930.3	1,780.3
Federal Transit Funds	475.7	1,391.0	1,866.7
<b>Total</b>	<b>8,166.8</b>	<b>10,090.8</b>	<b>18,257.7</b>

# ADOT 5 YEAR FORECAST

## within Maricopa County

### Summary of Dollars by Freeway (Cost in Thousands)

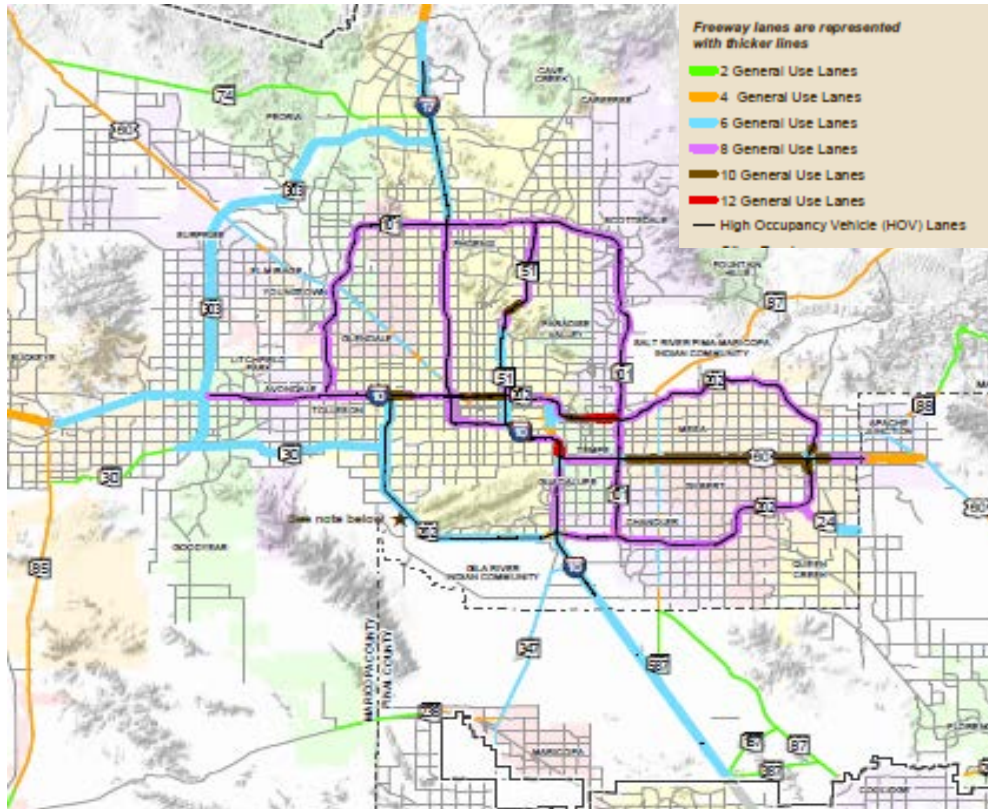
		2017	2018	2019	2020	2021	Total
RTPFP	SR 30, I-10 RELIEVER	\$0	\$18,300	\$0	\$0	\$0	\$18,300
	I-10, PAPAGO	\$0	\$4,160	\$0	\$0	\$0	\$4,160
	I-10, MARICOPA	\$0	\$0	\$162,470	\$118,800	\$117,400	\$398,670
	I-17, BLACK CANYON	\$2,210	\$0	\$0	\$6,000	\$60,500	\$68,710
	US 60, SUPERSTITION	\$0	\$1,900	\$500	\$30,000	\$0	\$32,400
	SR 85	\$0	\$5,300	\$0	\$0	\$0	\$5,300
	SR 101L, PIMA	\$0	\$0	\$297	\$12,434	\$113,800	\$126,531
	SR 101L, PRICE	\$0	\$0	\$0	\$0	\$3,500	\$3,500
	SR 202L, RED MOUNTAIN	\$0	\$0	\$0	\$0	\$400	\$400
	SR 202L, SANTAN	\$6,220	\$0	\$0	\$0	\$3,400	\$9,620
	SR 202L, SOUTH MOUNTAIN	\$445,996	\$390,666	\$135,972	\$0	\$0	\$972,634
	SR 303L, BOB STUMP MEMORIAL	\$500	\$9,160	\$19,720	\$0	\$21,700	\$51,080
	<b>Total</b>	<b>\$454,926</b>	<b>\$429,486</b>	<b>\$318,959</b>	<b>\$167,234</b>	<b>\$320,700</b>	<b>\$1,691,305</b>
SYSTEMWIDE	SYSTEMWIDE	\$29,625	\$27,305	\$26,555	\$31,988	\$35,340	\$150,813
	<b>Total</b>	<b>\$29,625</b>	<b>\$27,305</b>	<b>\$26,555</b>	<b>\$31,988</b>	<b>\$35,340</b>	<b>\$150,813</b>
<b>Total</b>		<b>\$484,551</b>	<b>\$456,791</b>	<b>\$345,514</b>	<b>\$199,222</b>	<b>\$356,040</b>	<b>\$1,842,118</b>

# **MARICOPA COUNTY**

## **Freeway Update**

# 2035 REGIONAL FREEWAYS EXPANSION

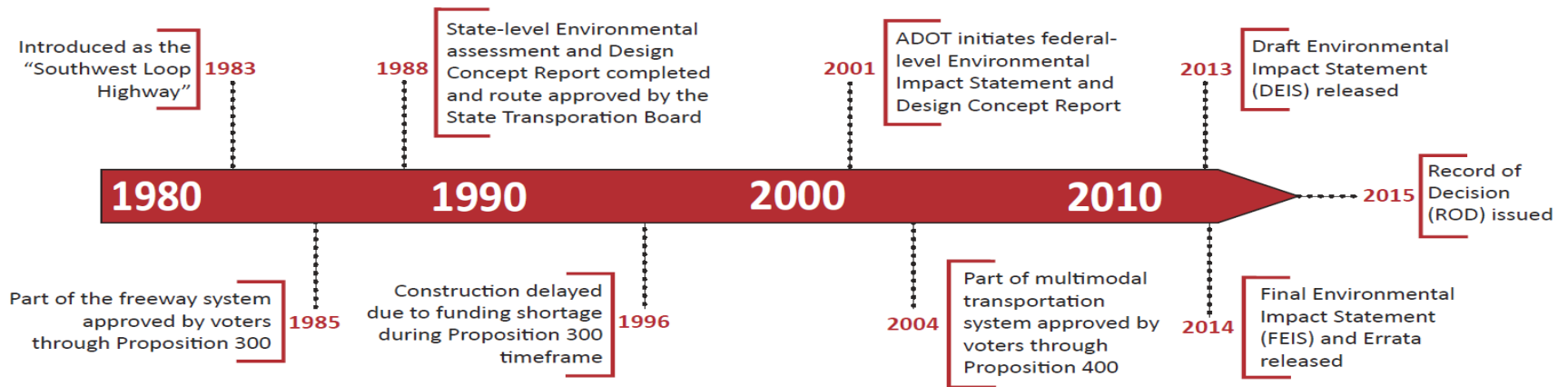
## FREEWAY/HIGHWAY FUNDING PLAN FY 2014 - 2035



FUNDING (Year of Expenditure \$'s in Millions)		Totals
<b>Regional Funds</b>		
MAG Half-Cent Sales Tax	7,620.7	
MAG Area ADOT Funds	6,663.2	
MAG Federal CMAQ and STP	302.0	
Other Income	105.2	
Beginning Available Cash	750.1	
Bond Proceeds	1,040.0	
Allowance for Debt Service and Other Expenses	(3,063.6)	
<b>Total Regional Funds</b>		<b>13,417.6</b>
<b>Other Funding</b>		
ADOT Statewide Funding	1,526.4	
<b>Total Other Funding</b>		<b>1,526.4</b>
<b>Total Funding</b>		<b>14,944.0</b>
EXPENDITURES (Year of Expenditure \$'s in Millions)		Totals
<b>Regionally Funded Projects</b>		
New Corridors	6,214.5	
Improvements to Existing Facilities: General Purpose Lanes, HOV Lanes, Interchanges	5,051.7	
Freeway Management System, Freeway Safety Patrol	253.0	
Preliminary Engr., Risk Mgmt., RW Management, Advance RW Acquisition	444.6	
Quiet Pavement Rehab.	204.0	
Litter Pick-Up, Sweeping, Landscaping	437.4	
Other Maintenance Programs	504.3	
Other Regionally Funded Projects	308.1	
<b>Total Regionally Funded Projects</b>		<b>13,417.6</b>
<b>Other Funded Projects</b>		
System Operation, Maintenance and Preservation	1,526.4	
<b>Total Expenditures</b>		<b>14,944.0</b>



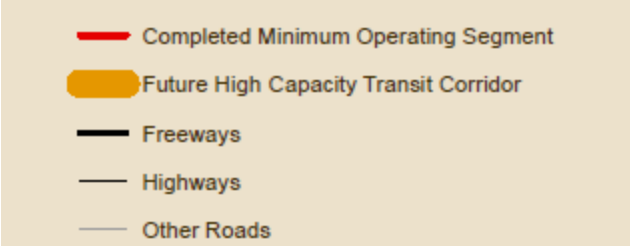
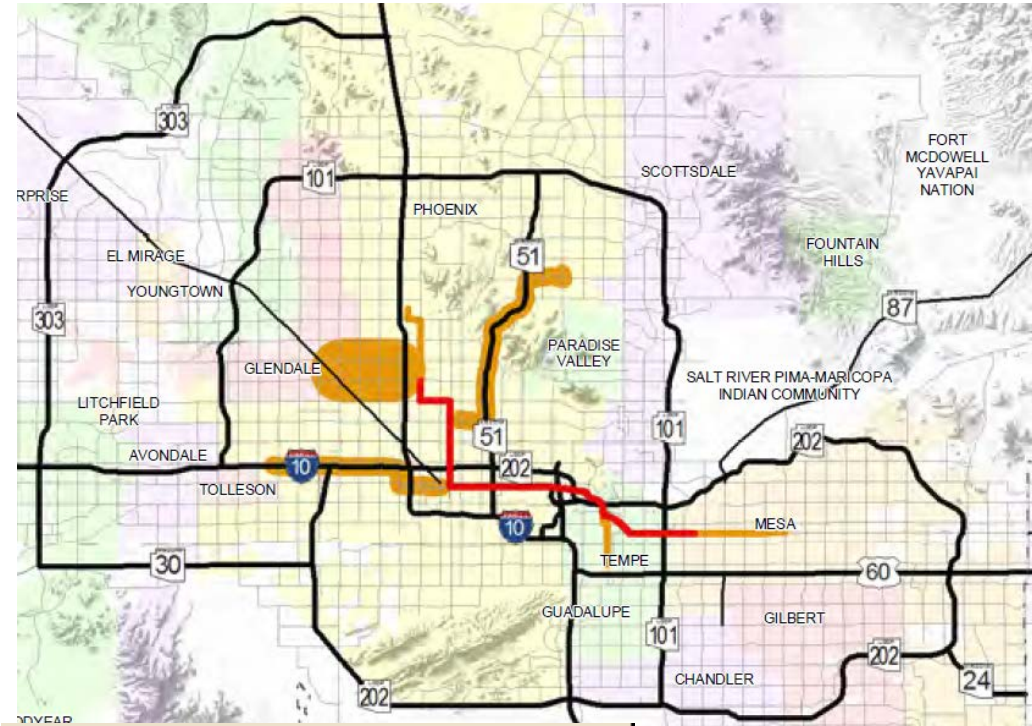
# TIMELINES CAN BE EXTENDED/DELAYED



**South Mountain Freeway timeline**



# 2035 LRT/HCT EXPANSION



**TABLE ES-5  
HIGH CAPACITY TRANSIT/LIGHT RAIL - EXTENSIONS**

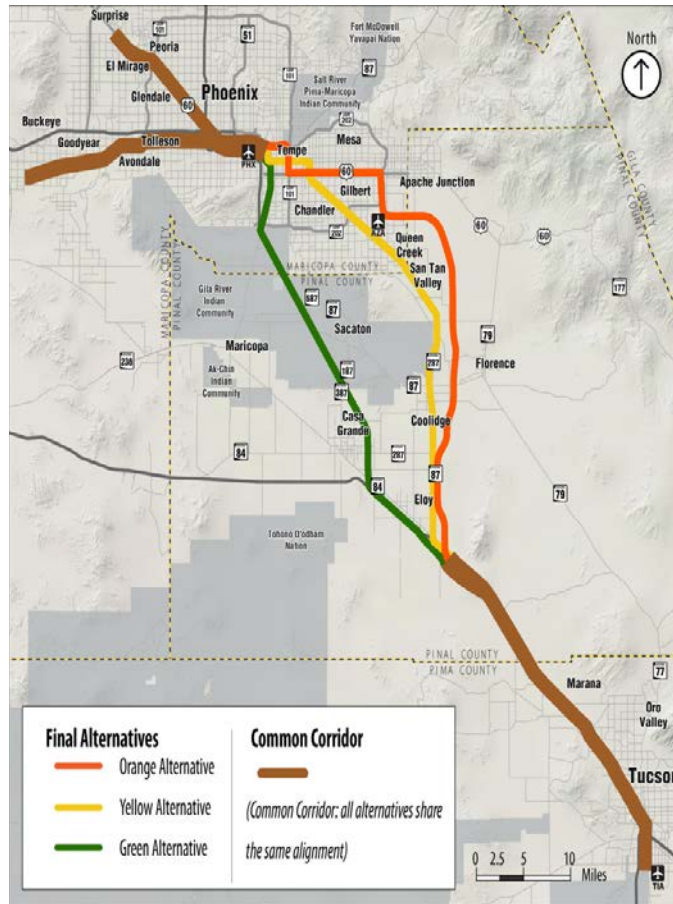
Extension Route Name	Technology	Length	Year Open
Main Street, Mesa	LRT	3.1	2016
Northwest Phoenix - Phase 1	LRT	3.2	2016
Northwest Phoenix - Phase 2	LRT	To be determined	2026
Tempe Street Car	Street Car	2.6	2017
West Phoenix/Central Glendale	To be determined	5.0	2026
Phoenix West/I-10	LRT	11.0	2023
Paradise Valley Mall	To be determined	12.0	2034
Gilbert Rd., Mesa	LRT	1.9	2018

**REGIONAL LIGHT RAIL TRANSIT/HIGH CAPACITY TRANSIT - CAPITAL**

ROUTE		CAPITAL COSTS FY 2014 - FY 2035 (2013 \$'s in THOUSANDS)	PLAN GROUP
<b>LRT/HCT Segments</b>			
	NW Extension Phase I	174,369	Group 1
	Central Mesa	111,438	Group 1
	Tempe Streetcar	105,908	Group 1
	Glendale	411,692	Group 2,3
	NW Extension Phase II	115,651	Group 2,3
	Phoenix West	895,920	Group 1,2
	NE Phoenix	961,216	Group 2,3
	Gilbert Road Extension	122,814	Group 1
	Sub-total	2,899,009	
<b>LRT Systemwide Support</b>			
	Systemwide Support Infrastructure	91,238	Group 1,2
	Capital Project Development	36,301	Group 1,2,3
	System Planning and Design	2,939	Group 1
	Utility Reimbursements	142,924	Group 1,2,3
	Sub-total	273,402	Group 1,2,3
	<b>TOTAL</b>	<b>3,172,410</b>	

Group 1 (FY 2014 - FY 2018)  
Group 2 (FY 2019 - FY 2026)  
Group 3 (FY 2027 - FY 2035)

# North-South Alignment Tucson-Phoenix



**Highway Corridor**



**Passenger Rail Corridor**

(Estimated \$5-8 billion)

EIS completed Dec 2016

**NOTE: Overlap of orange and yellow alternative corridors between Rail and Highway**

# SR30 (Loop 202 to Loop 303)



**SR30 (202-303)**

**\$18M allocated for Eng/ROW**

**Preservation**

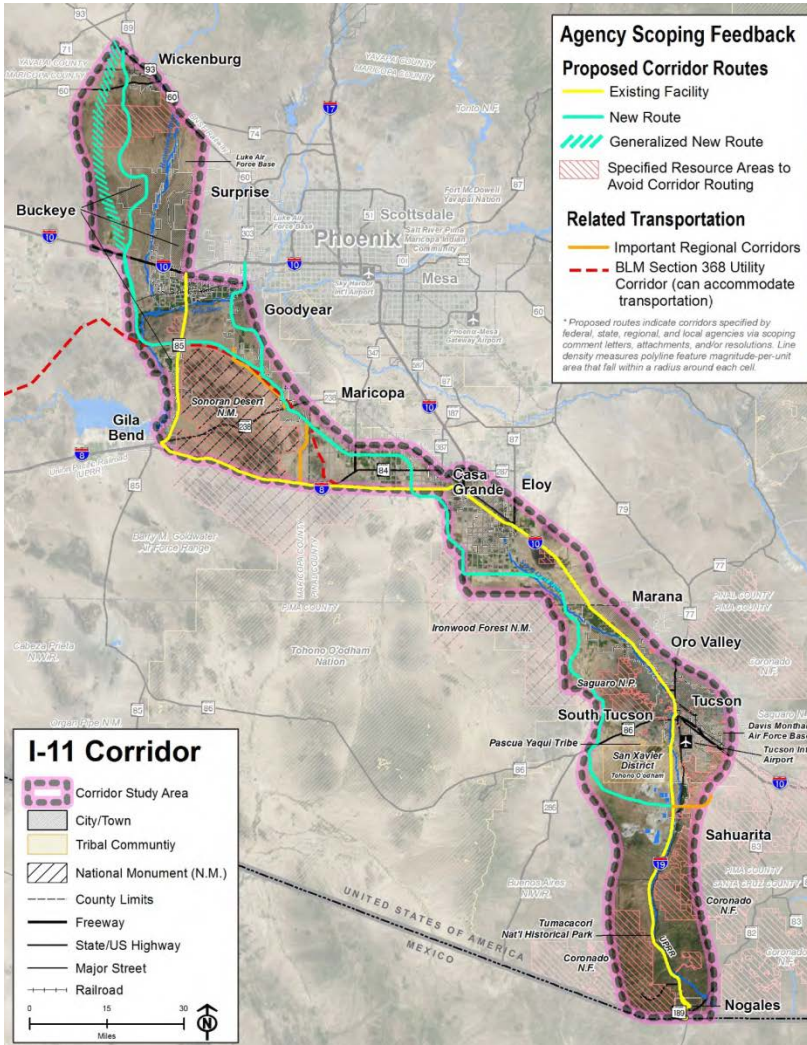
**\$1.5 billion by 2035**

**LEGEND**

	SR 30 North		Options: SR 303L
	SR 30 Center		Future SR 202L
	SR 30 Hybrid		Common to all alternatives
	SR 30 South		

Map not to scale

# I-11 (Wickenburg-Nogales)



## What is being Studied?

- 280-mile study area from Nogales to Wickenburg
- 2,000-foot corridor alternatives
- Proposed transportation facility
- Phased Implementation Plans

**I-11 Corridor**

North  
Central  
South

## Recommended Corridor Alternatives

Feasible Build Alternatives within Corridor Alternative

**Recommended Corridor Alternatives** advance into Tier 1 EIS as **"Build" Alternatives** to compare against **"No Build" Alternative** (i.e., do nothing alternative).

400-700 Feet  
2000 Feet

## I-11 freeway from Las Vegas-Phoenix-Mexico

Scoping completed Jan. 2017

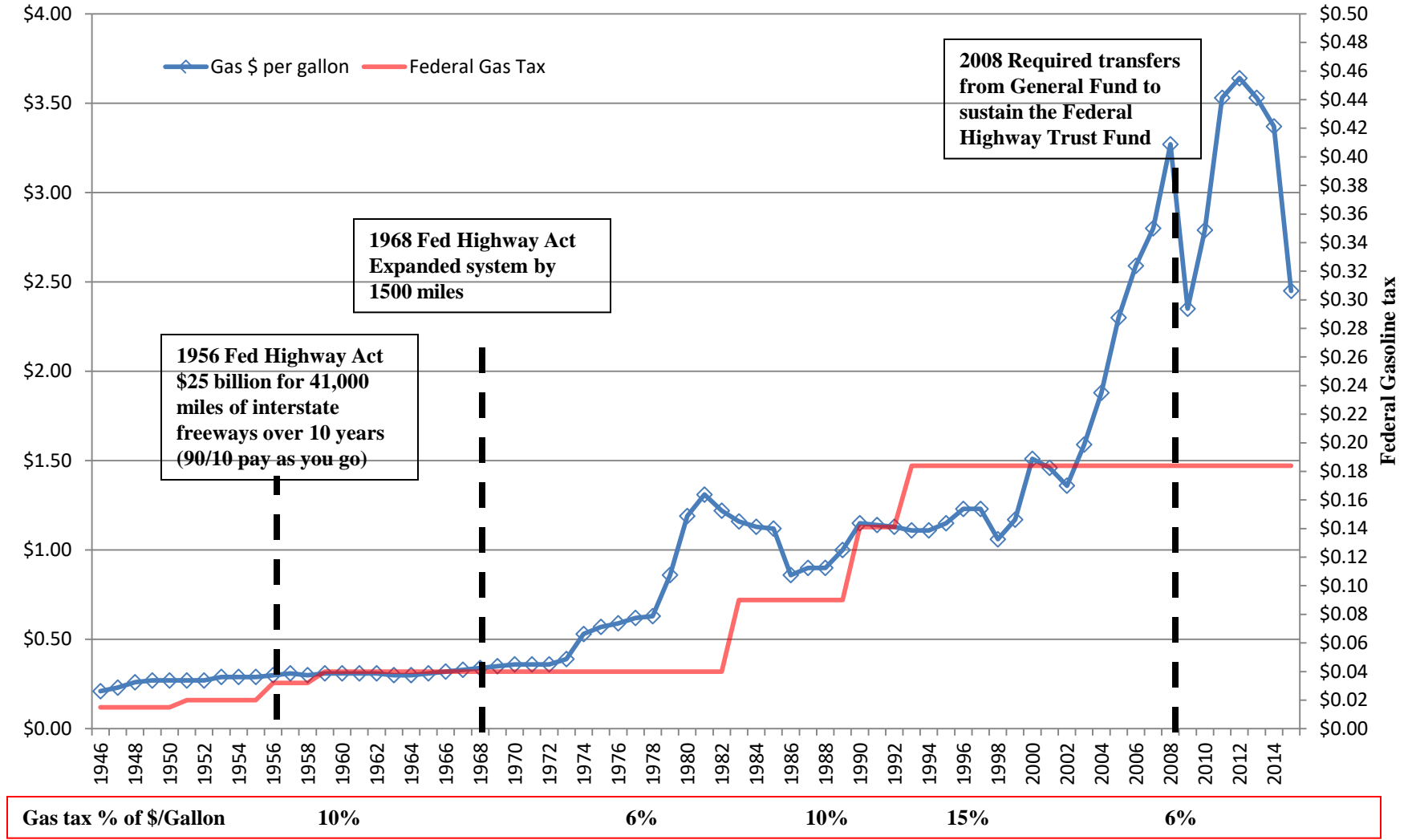
# IS THE FEDERAL HIGHWAY FUND SUSTAINABLE



# FEDERAL GAS TAX

## VS. RISING FUEL COST

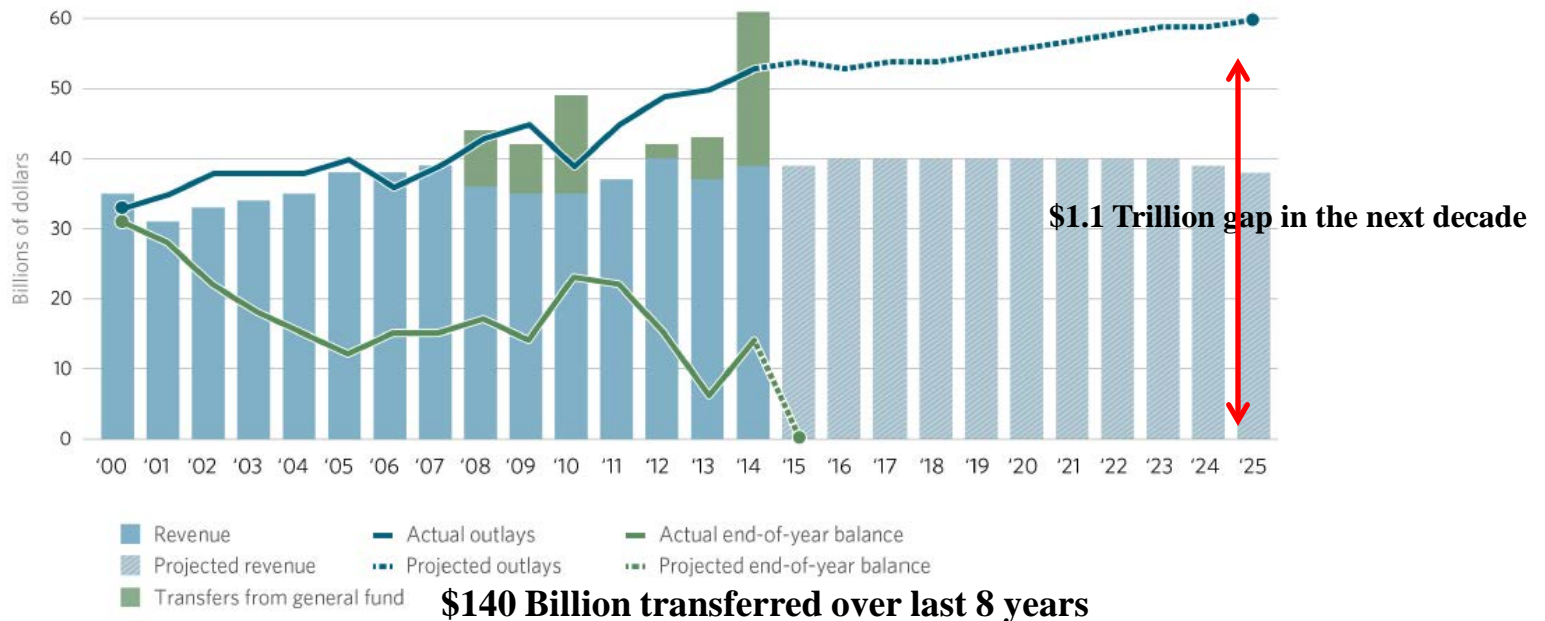
Ave. price  
/gallon





# FEDERAL FUNDING IN JEOPARDY

Figure 8  
 Federal Highway Trust Fund Faces Growing Shortfalls  
 Actual and projected revenue and outlays, 2000-25



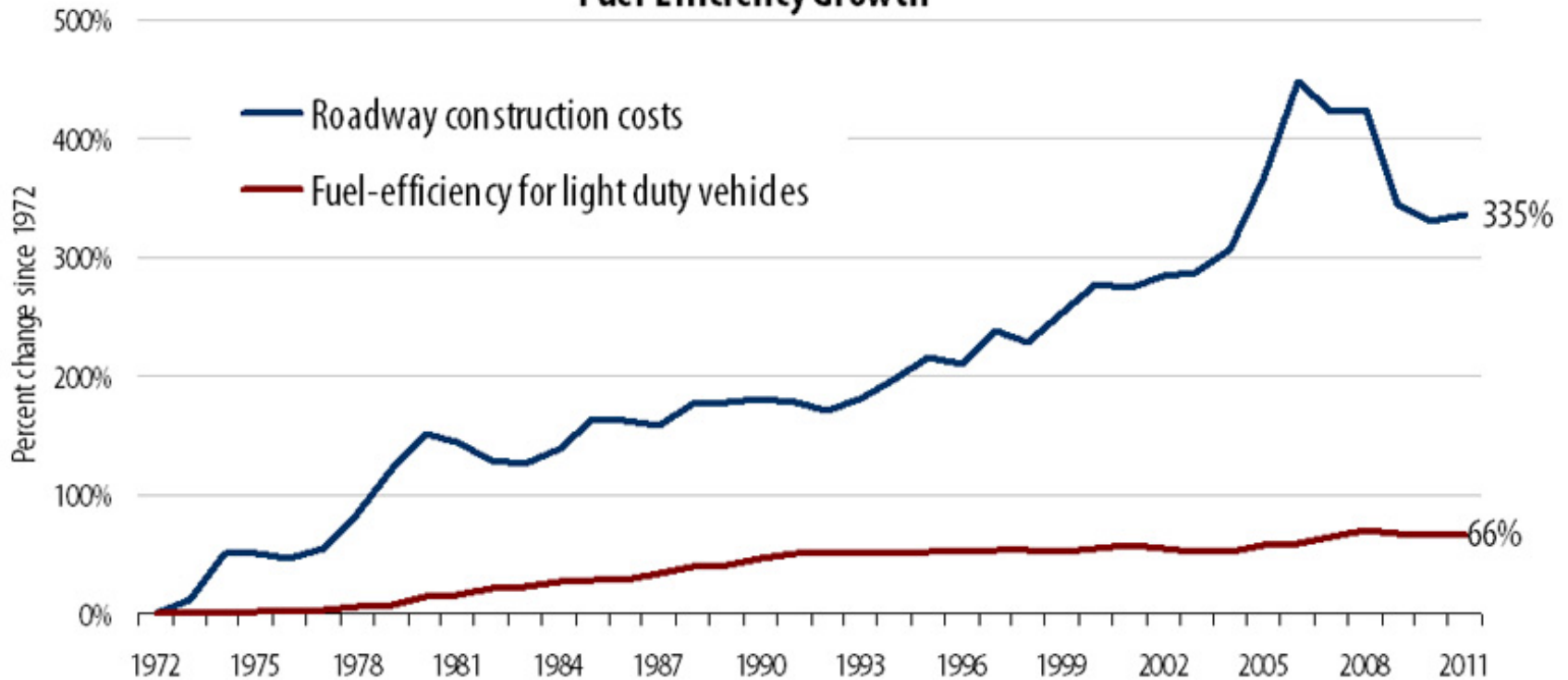
Note: Numbers not adjusted for inflation.

Source: Pew's analysis of Congressional Budget Office and Federal Highway Administration data

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# CONSTRUCTION \$ HAVE TRIPLED COUPLED WITH FUEL EFFICIENCY

**Figure 2: Construction Cost Growth Has Consistently Exceeded  
Fuel-Efficiency Growth**



**2012-2025 Federal requirements is expected to increase fuel efficiency by another 67%**

# HOW TO BRIDGE THE GAP

- Temporary measures have included transfers from the General Fund including
  - **MAP-21** approved in 2012. The Moving Ahead for Progress in the 21st Century Act, MAP-21, \$105 billion two-year bill does not significantly alter total funding from the previous authorization, but does include many significant reforms. It's estimated that enacting MAP-21 will reduce the federal budget deficit over the 2012–22 period by \$16.3 billion.
  - **FAST Act** approved in 2015 (Fixing America's Surface Transportation ) \$305 billion to be spent over 5 years with revenues derived from passport rules, Federal Reserve Dividends and Privatized Tax Collection
- Proposed measures could include any of the below options along with variations of the below
  - Increase gas tax by \$0.10-.15/ gallons and include inflation measures, fuel efficiency escalations and backstop limits. \$0.15/gallon increase would generate an estimated \$25 billion or \$1.7 billion for every \$0.01/gallon increase. Based on 15,000 miles/year @ 25 MPG a \$0.15/gallon increase would cost each vehicle \$90/year. **The cumulative federal gas tax would be \$0.33/gallon and equate to \$198/year based on the same 15,000 miles/year.**
  - Add a Mileage Based User Fee (MBUF) based on Vehicle Miles Traveled (VMT) for alternative energy vehicles. **If a rate of \$0.013/mile were applied, based on 15,000 miles/year, it would cost each vehicle \$195/year.**
  - Continue to transfer from the General Fund

# Questions

(Give Thelma & Louise a happy ending?)

