

Transportation Policy Committee  
January 23, 2008



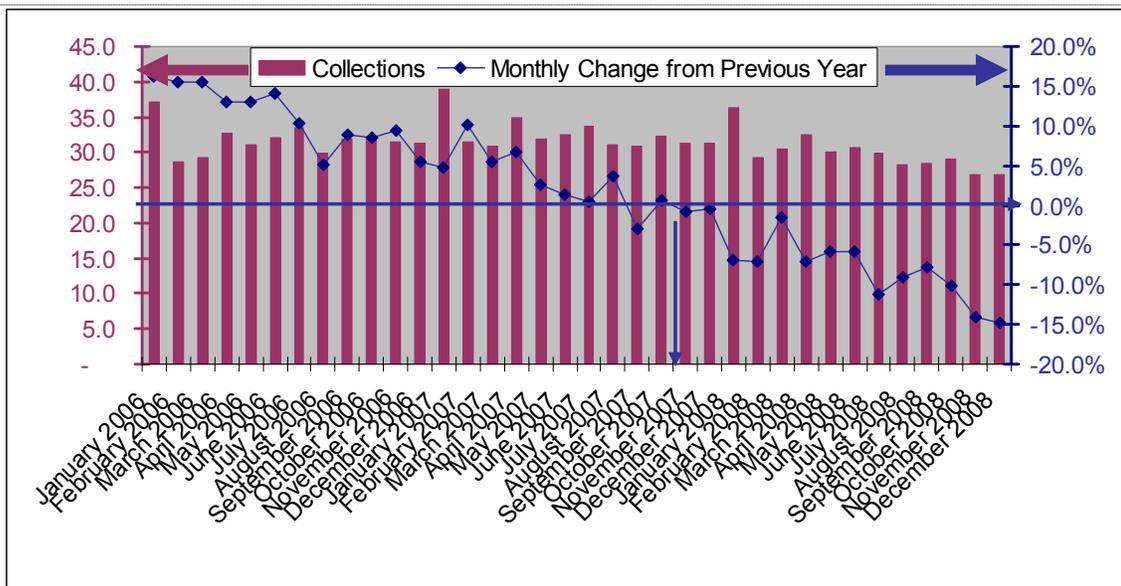
# Transportation Planning Update Proposition 400



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## Proposition 400 Sales Tax Revenues



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# Summary of Freeway Revenues and Costs

Summary of Revenues & Costs			
Proposition 400 Freeway Program (2006 - 2026)			
Category	July 2008	Current	Change
Sales Tax Revenues	8,420.8	7,765.4	(655.4)
ADOT Funds	8,208.1	7,253.3	(954.8)
Federal Funds	638.2	679.3	41.1
STAN & Other	473.7	452.1	(21.6)
<b>Total Revenues</b>	<b>17,740.8</b>	<b>16,150.1</b>	<b>(1,590.7)</b>
Debt Service	2,379.2	2402.5	23.3
Inflation Allowance	3,486.1	3112.9	(373.2)
Transfers & Misc	249.5	253.3	3.8
<b>Total Nonproject Costs</b>	<b>6,114.8</b>	<b>5,768.7</b>	<b>(346.1)</b>
<b>Net Funds Available</b>	<b>11,626.0</b>	<b>10,381.4</b>	<b>(1,244.6)</b>
<b>Less:</b>			
Projects Obligated thru 2009	2,150.8	2,150.8	-
Systemwide costs (FY09-FY25)	1,275.9	1,275.9	-
Planned Projects	12,063.6	12,063.6	-
<b>Equals:</b>			
<b>Deficit</b>	<b>(3,864.2)</b>	<b>(5,108.8)</b>	<b>(1,244.6)</b>



# Recent and Current Activities

- Inner Loop Peer Review Panel
- Corridor Options Review
- Options for Moving Forward
- Next Steps and Schedule



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## Inner Loop Peer Review Panel



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## Inner Loop Peer Review Panel

- Convened in November 2008
- Joint effort by ADOT and MAG
- Examine RTP and DCR recommendations for freeways leading to the Inner Loop



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# Inner Loop Peer Review Panel

- Panelists:
  - John Conrad, CH2M Hill – WSDOT
  - Mike Falini, Wilson & Company – FDOT, CDOT, UDOT
  - Jack Lettiere, Lettiere Consulting - NJDOT



# Inner Loop Peer Review Panel

- Initial Findings
  - Performance versus Building for Congestion
    - Movement of people and goods versus vehicles
    - LOS targets may be unattainable
  - Interstate 10/Interstate 17 Stack Interchange constraints
    - Papago Freeway Widening
    - Interstate 17 Truck Route
    - Black Canyon Freeway Proposal
  - Interstate 10/Maricopa Freeway “Broadway Curve”



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## Corridor Review of South Mountain and SR-801 Corridors



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## Six-lane Corridor Options

	Arterial	Arizona Parkway	Freeway
Cost per mile	\$7 - \$15 million	\$20 - \$40 million	\$90 - \$120 million
Capacity at LOS E (vehicles per day)	55,000 vpd	90,000 vpd	140,000 vpd
Right of Way (minimum)	130-ft	200-ft	300-ft
Measure of Effectiveness (Annual volume/\$ per mi)	39.5	21.0	9.3
Average Crash Rate (Crashes/1 million miles)	2.4	0.5	1.7

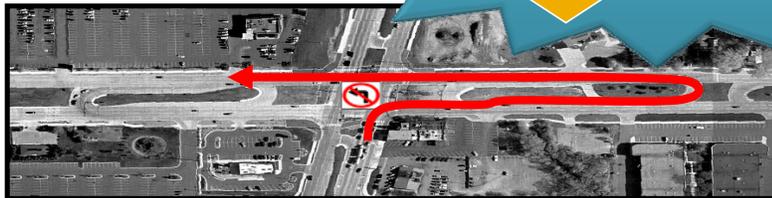
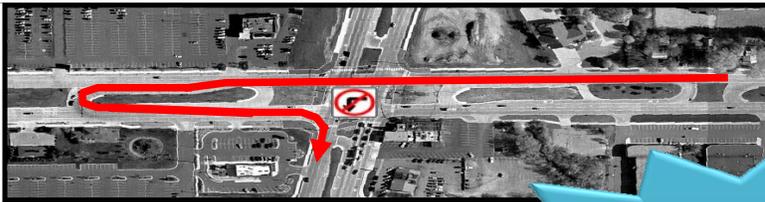
# "The Arizona Parkway"



- 40 years practice in seven states
- Marginal cost increase over conventional arterials
- Near-freeway volumes
- Context-sensitive



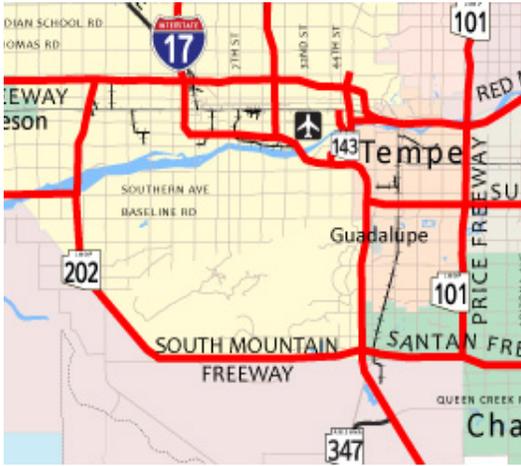
# Indirect Left Turn



INJURY CRASHES  
↓  
60-75%



# Loop 202/South Mountain Freeway



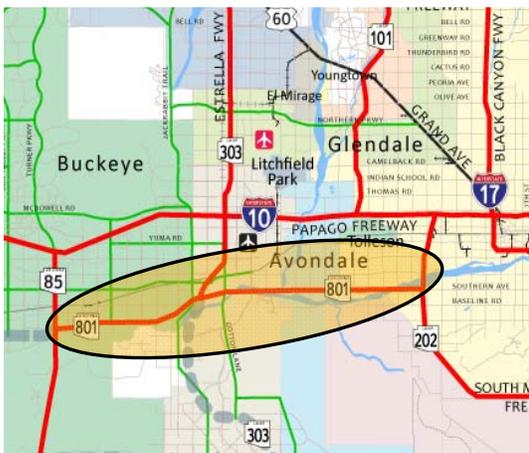
Original RTP Estimate	Current Estimate
\$1,067 million	\$2,655 million

Projects			
SEGMENT	CONCEPT	COMMENTS	PHASE
Interstate 10/ Papago to 51st Ave	+3 GP – new freeway	<b>EIS underway; proposal to clear for ultimate section; study completed by 2011</b>	I, II
51st Ave to Interstate 10/ Maricopa	+3 GP – new freeway		II

- Current Plans
  - Construct six-lane freeway
  - Clear EIS and obtain right-of-way for ultimate 10-lanes



# Arizona State Route 801



Original RTP Estimate	Current Estimate
\$805 million	\$1,864 million

Projects			
SEGMENT	CONCEPT	COMMENTS	PHASE
SR-85 to SR-303L	+1 GP – interim facility	<b>ROW for freeway facility</b>	IV
SR-303L to SR-202L	+3 GP – new freeway		IV

- Current Plans
  - Construct six-lane freeway
  - Clear EIS and obtain right-of-way for ultimate 10-lanes



# Options South Mountain and SR-801 Corridors

- Continue with current plans for 6-lane construction; clear and obtain ROW for ultimate 10-lane freeway
- Construct as a 6-lane freeway only with provision for HOV lanes in median
- “SR-51 Option” – Build freeway within narrower ROW footprint
- Construct as an Arizona Parkway in Freeway ROW
- Construct as an Arizona Parkway in Parkway ROW
- No Build



## For Example . . . what happens if . . . South Mountain Corridor

- Construct as an Arizona Parkway in Parkway Right-of-Way
  - Pros
    - Less land needed for corridor
    - Fewer business and residence relocations
    - Smaller impact on South Mountain Park
  - Cons
    - Opportunity for ultimate Freeway lost
    - May need additional system improvements to make up for lower capacity



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What are we thinking?  
Options for moving forward . . .



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## Issues:

- **Performance** versus building to reduce congestion
  - “Now” vs “Future Cost”
  - “Build what can be affected”
  - Future Generations



# Notes:

- Decisions are inter-related, for example:
  - South Mountain Corridor
    - SR-801
    - Interstate 10/Papago Freeway
    - Interstate 10/Maricopa Freeway
    - Surface Streets

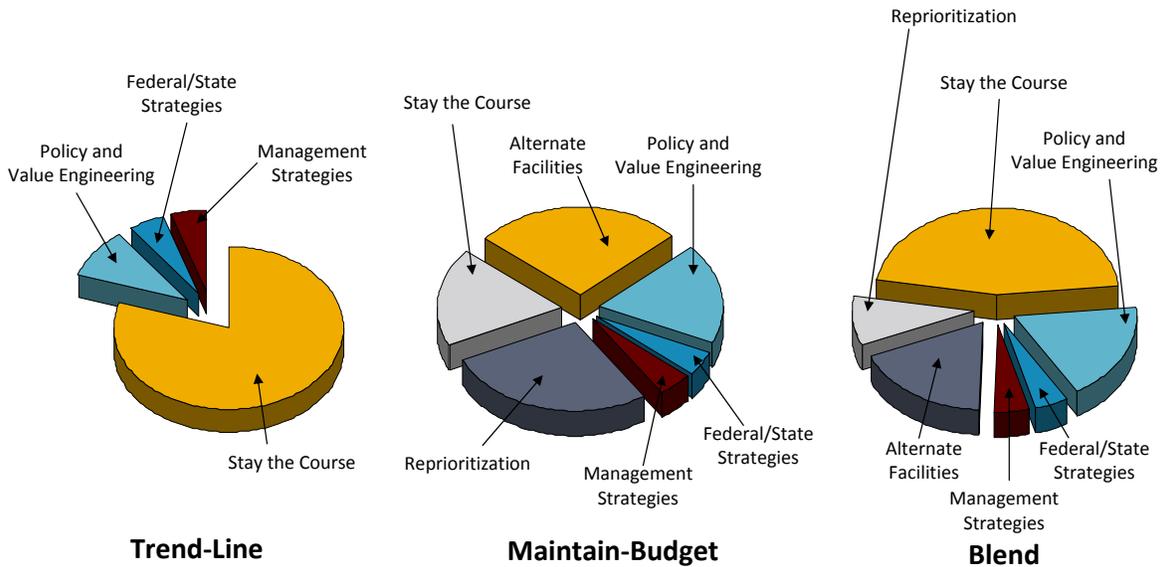


Corridor	RTP Estimate	Current Estimate	Cost Difference	Percent Difference
Interstate 10/Maricopa Freeway	\$616m	\$817m	\$201m	+33%
Interstate 10/Papago Freeway	\$332m	\$523m	\$191m	+58%
Interstate 17/Black Canyon Freeway	\$1,451m	\$1,685m	\$234m	+16%
US-60/Superstition Freeway	\$135m	\$170m	\$35m	+26%
US-60/Grand Avenue	\$255m	\$264m	\$9m	+4%
Loop 101/Agua Fria Freeway	\$471m	\$634m	\$163m	+35%
Loop 101/Pima Freeway	\$404m	\$494m	\$90m	+22%
Loop 101/Price Freeway	\$104m	\$101m	(\$3m)	-3%
Loop 202/Red Mountain Freeway	\$420m	\$657m	\$237m	+56%
Loop 202/Santan Freeway	\$358m	\$437m	\$79m	+22%
Loop 202/South Mountain Freeway	\$1,067m	\$2,655m	\$1,588m	+149%
Loop 303	\$1,420m	\$2,757m	\$1,337m	+94%
SR-51/Piestewa Freeway	\$103m	\$126m	\$23m	+22%
Arizona State Route 801	\$805m	\$1,864m	\$1,059m	+132%
SR-802/Williams Gateway Freeway	\$325m	\$546m	\$221m	+68%
Arizona SR-85	\$119m	\$306m	\$187m	+157%
SR-74, SR-87, SR-88, US-93, SR-143	\$85m	\$173m	\$88m	+104%
System-wide Improvements	\$993m	\$1,539m	\$546m	+55%
<b>Totals:</b>	<b>\$9,463m</b>	<b>\$15,748m</b>	<b>\$6,285m</b>	<b>+66%</b>



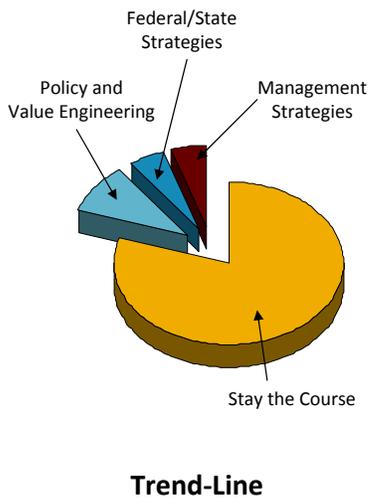
# Program Direction

## Regional Freeway Program Scenarios



# Trend-Line Scenario

## EXAMPLE TO DEMONSTRATE SCENARIO



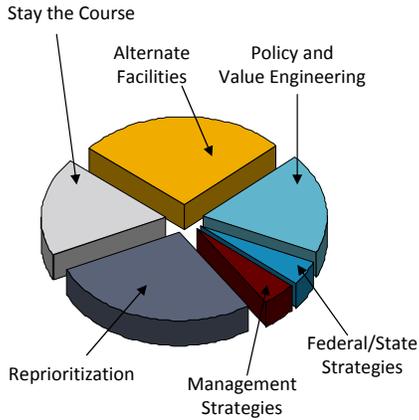
**Savings Target - \$600 million**  
**Additional Revenue Need - \$4,700 million**

Expand the delivery horizon of the program to 2035 . . . provided:

- A new revenue source is available to meet the program shortfall
- RTP improvements leading to and in the Inner Loop are
  - consistent with recommendations by the Inner Loop Peer Review Panel
  - outcomes of the proposed Central Phoenix Framework Study
- Identify cost savings:
  - Reduce new corridor footprints
  - Re-evaluate I-10/SR-303L and US-60/SR-303L System Traffic Interchange designs
  - Incorporate performance versus level of service in delivery options

# Maintain Budget Scenario

## EXAMPLE TO DEMONSTRATE SCENARIO



### Maintain-Budget

Savings Target - \$5,300 million  
Additional Revenue Need - \$0

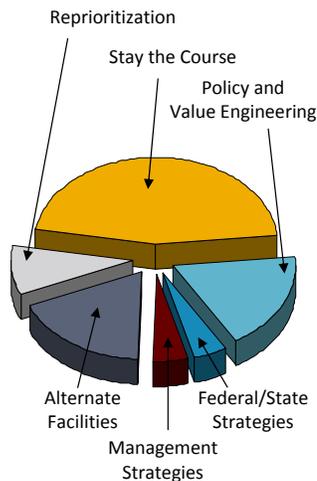
### Maintain delivery horizon of the program at 2025 . . . provided:

- Shelve SR-801 corridor and Interstate 17 improvements between I-10 and SR-101L
- Limit improvements to the I-10/Maricopa corridor to the SR-143 traffic interchange, only
- Construct South Mountain corridor as a Parkway
- Identify further cost savings
  - Reduce new corridor footprints
  - Re-evaluate I-10/SR-303L and US-60/SR-303L System Traffic Interchange designs
  - Re-consider HOV-to-HOV direct connections at I-10/SR-101L and I-17/SR-101
  - Incorporate performance versus level of service in delivery options
- Reprioritize delivery to be consistent with revenue stream



# Blend Scenario

## EXAMPLE TO DEMONSTRATE SCENARIO



### Blend

Savings Target - \$4,600 million  
Revenue Generated (tolls) - \$700 million

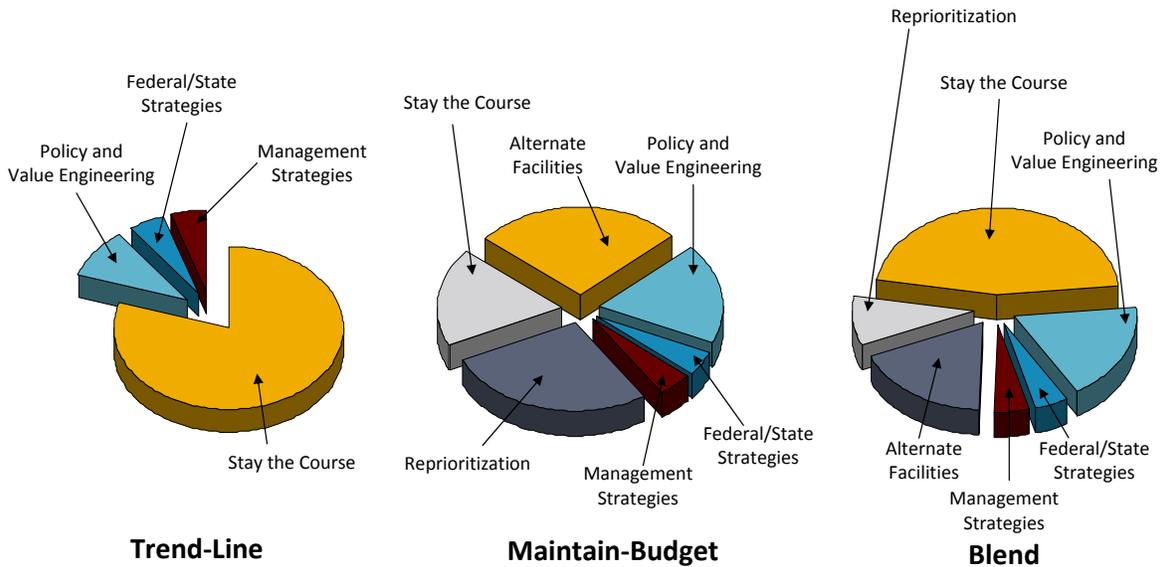
### Maintain delivery horizon of the program at 2025, provided:

- Construct South Mountain and SR-801 as Parkways
- Study improvements in I-17 and I-10/Maricopa corridors as potential tolling options
- Delay additional general purpose lane construction along Red Mountain, Santan, and Papago Freeways
- Identify cost savings:
  - Reduce new corridor footprints
  - Re-evaluate I-10/SR-303L and US-60/SR-303L System Traffic Interchange designs
  - Re-consider HOV-to-HOV direct connections at I-10/SR-101L and I-17/SR-101
  - Incorporate performance versus level of service in delivery options
- Reprioritize delivery to be consistent with revenue stream



# Program Direction

## Regional Freeway Program Scenarios



## Upcoming Activities

	Task
February 2009	Conduct additional corridor options reviews
March 2009	Refine RTP program scenarios with specific projects
April 2009	Develop program scenarios with financial options
May 2009	Update TPC with program opportunities
Summer 2009	TPC select program scenario
Fall 2009	Update and amend Regional Transportation Plan

**“Success is that old ABC – ability, breaks, and courage.”**  
**CHARLES LUCKMAN, AMERICAN ARCHITECT**

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