Interstate 10/Interstate 17 Corridor

- **35-mile corridor** representing the transportation “spine” of Metro Phoenix.

- **$1.47 billion** programmed for improving the corridor.

- Previous Corridor and EIS Studies for Interstate 10 and Interstate 17 were cancelled.
Path Forward Defined

Near-Term Improvements
- Immediate Needs addressing bottlenecks.
- Within ADOT Rights-of-Way (ROW).
- Near Term Construction.

Environmental Studies
- Joint Project Management.
- Identify Corridor Operating Principles.
- Coordinate with Stakeholders.
- Frame next environmental and design efforts.

Design, Construction, Operation
- Joint Project Management.
- ADOT Procurement.
- Multiple Studies and Efforts.
- Consistent with Corridor Master Plan.
- Implementation.

spine.azmag.gov
Near-Term Improvements

- Under **development and study by ADOT**.

- Multiple options under consideration including those targeting bottlenecks and enhancing traffic operations.

- Candidate projects must rapidly meet environmental requirements and a **near-term construction time-frame**.

OUTBOUND
- SR-51/SR-202L to US-60 Add Lane
Interstate 10 - between SR-143 and US-60

INBOUND
- I-10 to SR-143 Exit in advance of US-60 entrance
- US-60 to SR-143 Exit in advance of I-10 Entrance

OUTBOUND
- SR-143 to US-60 Follow CD Rd to existing ramp
- SR-143 to I-10 Follow CD Rd enter after US-60
- SR-51/SR-202L to US-60 Add Lane

INBOUND
- I-10 to SR-143 Exit in advance of US-60 entrance
- US-60 to SR-143 Exit in advance of I-10 Entrance

spine.azmag.gov
Interstate 10 – between Baseline Rd and SR-202L
Interstate 17 – between 16th St and 19th Ave
Traffic Operations and ITS Enhancements

Strategies for:

- **ADOT – DPS**
  - Incident Management
  - **Ramp Metering Coordination**
- **Cities (Chandler, Phoenix, Tempe)**
  - Arterial Infrastructure
  - Supporting Corridor Operations
- **Maricopa County DOT**
  - Traffic Video Sharing
  - Maintenance Support

spine.azmag.gov
Corridor Master Plan Overview

Initiate Project
- Project Management Plan
- Public Involvement Plan
- Controlling Design Criteria and Design Exception / Variance Procedures

Conduct Corridor Needs Assessment
- Existing Conditions
- PEL Checklist Part 1
- Future Conditions (No-Build)
- Agency and Public Outreach – Round 1
- Goals and Objectives

Develop Corridor Alternatives Screening
- Alternatives Workshop
- Categorize Alternatives
- Tier 1 Qualitative Screening
- Tier 2 Quantitative Screening
- System Bundles
- Tier 3 Quantitative Screening (Bundles)
- Agency and Public Outreach – Round 2
- Select Preferred Alternative

Establish Corridor Master Plan
- Completed PEL
- Priority Resource Impacts Evaluation
- Mitigation Strategy
- Implementation Plan
- Design Exceptions
- MAG Policies
- P&N guidance for future projects

spine.azmag.gov
2040 Unconstrained Demand

- Between **6-12 lanes** needed in each direction on Interstate 10 and Interstate 17 to achieve **LOS D**.
- Strong preference for freeway route, especially as more lanes are added.
2014 and 2040 Employment Analysis

- Corridor jobs make up 1/3 of all jobs in Maricopa County.
- Jobs create demand (traffic) in the study area.
- Distinct travel markets meaning multiple destinations and activity centers.
Demand Characteristics

- More GP than HOV.
- More cars than trucks.
- 5 Local Markets PLUS Regional.

2040 Travel Needs.

spine.azmag.gov
Communications Plan
Agency and Public Involvement Process Overview Round #1 (early 2015)

Sept. 2014
- Revise PIP
- Reinitiate study website tasks
- Initiate MetroQuest planning and coordination
- Agency Involvement workshop
- Stakeholder database clean-up

Oct. 2014
- Confirm agency and public meeting dates and locations
- Initiate agency/public mtg. material development process
- Study website goes live

Nov. - Dec. 2014
- Mtg. announcement and materials review and approval process
  - Agency meeting invites
  - Agency meeting materials
  - Public meeting ads and e-newsletter
  - Press release
  - Social Media
  - Fact Sheet
  - Banners
  - Mtg handouts
  - Presentations
  - Talking Points, FAQs

Jan. 2015
- Distribute agency info mtg. invites
- Print public meeting ads
- Launch MetroQuest
- Agency Info Meeting
- Start Public Info Mtgs.

Feb. 2015
- Finish Public Info Mtgs.
- Summarize outreach efforts

spine.azmag.gov
Communications Needs

- How much congestion is tolerable?
- Where does reducing congestion rank compared to:
  - Speed?
  - Access?
  - Reliability?
  - Connectivity?
  - Business preservation?
  - Neighborhood preservation/livability?
  - Environmental impacts?
  - Economic development (i.e. jobs, strong economy, etc.)?
Corridor Master Plan Overview

**Initiate Project**
- Project Management Plan
- Public Involvement Plan
- Controlling Design Criteria and Design Exception / Variance Procedures

**Conduct Corridor Needs Assessment**
- Existing Conditions
- PEL Checklist Part 1
- Future Conditions (No Build)
- Agency and Public Outreach – Round 1
- Goals and Objectives

**Develop Corridor Alternatives Screening**
- Alternatives Workshop
- Categorize Alternatives
- Tier 1 Qualitative Screening
- Tier 2 Quantitative Screening
- System Bundles
- Tier 3 Quantitative Screening (Bundles)
- Agency and Public Outreach – Round 2
- Select Preferred Alternative

**Establish Corridor Master Plan**
- Completed PEL
- Priority Resource Impacts Evaluation
- Mitigation Strategy
- Implementation Plan
- Design Exceptions
- MAG Policies
- P&N guidance for future projects

DECEMBER 2016
That’s all good. What else do you have?

2014 ASCE-ASHE Arizona State Conference
September 11, 2014
Projects Recent or Nearing Completion
MAG REGIONAL FREEWAY AND HIGHWAY PROGRAM

- **US-60 Widening to 6-lanes from 83rd Ave to Loop 303**
- **Loop 303 13-mi of New Freeway**
- **Loop 303 Interstate 10 to US-60**
- **US-60 Reconstruction from 83rd Ave to 19th Ave**
- **61-Miles of new HOV Lanes on Loop 101**
- **SR-24/Gateway Freeway Loop 202 to Ellsworth Rd**
- **11-Miles of new HOV Lanes on Loop 202**
- **New DHOV Ramp I-10 at Loop 202 (Pecos Stack)**
- **New DHOV Ramp Loop 101 at Loop 202**
Projects Still to Come
MAG REGIONAL FREEWAY AND HIGHWAY PROGRAM

- Loop 303, US-60 to Happy Valley Rd
  Add Lanes
- US-60/Grand Ave
  Loop 303 to Loop 101
  Intersection Improvements
- I-10/I-17 Spine, Loop 101 to Loop 202
  Near-Term and Long-Term Projects
- Loop 303, Interstate 10 to MC-85
  New Freeway
- Loop 202/South Mountain
  New Freeway
- Loop 101, I-17 to Shea Blvd
  Add Lanes
- Loop 101, Shea Blvd to Loop 202
  Add Lanes
- Loop 202, Loop 101 to Broadway
  Add HOV and General Lanes
- Loop 101, US-60 to Loop 202
  Add Lanes
Regional Transit Program

- Planned Service Improvements:
  - Bus Rapid Transit
  - Super Grid Bus System Expansion
  - High Capacity Transit
    - Northwest LRT Phase I and II
    - Central Mesa (to Mesa Dr)
    - Central Mesa (to Gilbert Rd)
    - Tempe Streetcar
      - Phoenix West (planning)
Arterial Life Cycle Program
MORE THAN 30 PROJECTS COMPLETED

- Arizona Ave. at Chandler Blvd.: Intersection Improvements
- Arizona Ave. at Elliot Rd.: Intersection Improvements
- Arizona Ave. at Ray Rd.: Intersection Improvement
- Beardsley Rd.: Loop 101 to 83rd Ave/Lake Pleasant Parkway
- Chandler Blvd. at Dobson Rd.: Intersection Improvements
- Dobson Rd. at Guadalupe Rd.: Intersection Improvements
- El Mirage Rd.: Bell Rd to Deer Valley Dr.
- El Mirage Rd.: Deer Valley Drive to Loop 303
- Gilbert Rd. at University Dr.: Intersection Improvements
- Gilbert Rd.: SR-202L/Germann Road to Queen Creek Rd.
- Greenfield Rd.: Baseline Rd. to Southern Ave.
- Guadalupe Rd./Cooper Rd.: Intersection Improvements
- Happy Valley Rd.: Lake Pleasant Pkwy to 67th Ave.
- Happy Valley: I-17 to 35th Ave.
- Hawes Rd.: Santan Freeway to Ray Rd.
- Lake Pleasant Pkwy.: Union Hills to Dynamite Rd.
- Loop 101 at Beardsley Rd/Union Hills Dr.
- Loop 101 Frontage Rd.: Hayden Rd to Scottsdale Rd.
- Pima Rd.: SR-101L to Thompson Peak Pkwy.
- Pima Rd./Happy Valley Rd.: Intersection Improvements
- Power Rd at Pecos: Intersection Improvements
- Power Rd.: Baseline Rd. to East Maricopa Floodway
- Queen Creek Rd.: Arizona Ave. to McQueen Rd.
- Ray Rd.: Sossaman Rd. to Biloxi Rd.
- Shea Blvd. at 90th/92nd/96th: Intersection Improvements
- Shea Blvd. at Mayo/134th St.: Intersection Improvements
- Shea Blvd. at Via Linda (Phase1): Intersection Improvements
- Shea Blvd.: Palisades Blvd. to Fountain Hills Blvd.
- Warner Rd. at Cooper Rd.: Intersection Improvements
- Val Vista Dr.: Warner Rd to Pecos Rd.
Regional Transportation Plan Review and Approval Process

- **September 2013**: Mid Phase Public Meeting on Transportation Improvement Program and Regional Transportation Plan.
- **October 2013**: Approval to Proceed with Air Quality Analysis.
- **November 2013**: Final Phase Public Hearing on Transportation Improvement Program, Regional Transportation Plan and Air Quality Analysis.
- **December 2013**: MAG Committee Recommendations.
- **January 2014**: MAG Approval of Transportation Improvement Program, Regional Transportation Plan, and Air Quality Analysis.
Sales tax revenues
$6.0 billion below 2003 forecast

Statewide HURF revenues
$7.5 billion below 2003 forecast
MAG 2013-14 Transportation Survey

Objective
- Understanding of transportation.
- Satisfaction.
- Support for additional revenue for transportation.

On-line focus group of 29 participants.
- Used to gain basic understanding of knowledge.
- Interactive with moderator.

602 telephone survey of high efficacy voters.
- Maricopa and Pinal County areas within MAG Region.
MAG Region High Efficacy Voters

- **High efficacy voter** = voted at least **three** times in the last **five** elections (every two years, does not include local elections).
- Voters between the ages of 18 to 24 were required to have voted at least once.
- As a result of specifically targeting high efficacy voters, the demographic makeup of the sample skews 1) **older in age** and 2) **Caucasian**, compared to a representative sample of all residents in the region or registered voters.

Source: MAG 2013-14 Transportation Survey.
D1. Thinking about the future, do you think you/your family will be in a better or worse financial place next year or will it remain the same?

Perceived Future Financial Status

- Better: 17%
- Worse: 19%
- The same: 59%
- Don't know: 5%

Source: MAG 2013-14 Transportation Survey.
Q1. Using a scale of 1 to 5, where 1 means extremely dissatisfied and 5 means extremely satisfied, how satisfied are you with each of the following components of the transportation system in the greater Phoenix area. To start, how satisfied are you with...

- The freeways/highways: 3% (1) - 6% (2) - 26% (3) - 41% (4) - 23% (5) - 1%
- The main streets and roads: 3% (1) - 7% (2) - 34% (3) - 38% (4) - 17% (5) - 1%
- The sidewalks and bicycle facilities: 4% (1) - 10% (2) - 26% (3) - 30% (4) - 19% (5) - 11%
- The light rail service: 8% (1) - 7% (2) - 17% (3) - 18% (4) - 14% (5) - 36%
- The local bus service: 8% (1) - 10% (2) - 20% (3) - 12% (4) - 5% (5) - 45%

Source: MAG 2013-14 Transportation Survey.
Los Angeles #4: Congestion Level 35%
Portland #13: Congestion Level 25%
Houston #20: Congestion Level 22%
Atlanta #23: Congestion Level 22%
Dallas –Ft Worth #39: Congestion Level 16%

Phoenix is 56 of 61 metro areas in the Americas.

<table>
<thead>
<tr>
<th>Ranking</th>
<th>City</th>
<th>Country</th>
<th>Congestion Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rio de Janeiro</td>
<td>Brazil</td>
<td>95%</td>
</tr>
<tr>
<td>2</td>
<td>Sao Paulo</td>
<td>Brazil</td>
<td>64%</td>
</tr>
<tr>
<td>3</td>
<td>Vancouver</td>
<td>Canada</td>
<td>61%</td>
</tr>
<tr>
<td>4</td>
<td>Los Angeles</td>
<td>United States</td>
<td>55%</td>
</tr>
<tr>
<td>5</td>
<td>San Francisco</td>
<td>United States</td>
<td>52%</td>
</tr>
<tr>
<td>6</td>
<td>Honolulu</td>
<td>United States</td>
<td>51%</td>
</tr>
<tr>
<td>7</td>
<td>Seattle</td>
<td>United States</td>
<td>50%</td>
</tr>
<tr>
<td>8</td>
<td>San Jose</td>
<td>United States</td>
<td>49%</td>
</tr>
<tr>
<td>9</td>
<td>Toronto</td>
<td>Canada</td>
<td>50%</td>
</tr>
<tr>
<td>10</td>
<td>Washington</td>
<td>United States</td>
<td>49%</td>
</tr>
<tr>
<td>11</td>
<td>New York</td>
<td>United States</td>
<td>49%</td>
</tr>
<tr>
<td>12</td>
<td>Montreal</td>
<td>Canada</td>
<td>48%</td>
</tr>
<tr>
<td>13</td>
<td>Portland</td>
<td>United States</td>
<td>47%</td>
</tr>
<tr>
<td>14</td>
<td>Boston</td>
<td>United States</td>
<td>47%</td>
</tr>
<tr>
<td>15</td>
<td>Chicago</td>
<td>United States</td>
<td>46%</td>
</tr>
<tr>
<td>16</td>
<td>Miami</td>
<td>United States</td>
<td>45%</td>
</tr>
<tr>
<td>17</td>
<td>Dallas</td>
<td>United States</td>
<td>45%</td>
</tr>
<tr>
<td>18</td>
<td>Charlotte</td>
<td>United States</td>
<td>44%</td>
</tr>
<tr>
<td>19</td>
<td>Houston</td>
<td>United States</td>
<td>44%</td>
</tr>
<tr>
<td>20</td>
<td>Phoenix</td>
<td>United States</td>
<td>44%</td>
</tr>
<tr>
<td>21</td>
<td>Austin</td>
<td>United States</td>
<td>44%</td>
</tr>
<tr>
<td>22</td>
<td>New Orleans</td>
<td>United States</td>
<td>43%</td>
</tr>
<tr>
<td>23</td>
<td>Atlanta</td>
<td>United States</td>
<td>43%</td>
</tr>
<tr>
<td>24</td>
<td>Philadelphia</td>
<td>United States</td>
<td>42%</td>
</tr>
<tr>
<td>25</td>
<td>Calgary</td>
<td>Canada</td>
<td>42%</td>
</tr>
<tr>
<td>26</td>
<td>San Diego</td>
<td>United States</td>
<td>42%</td>
</tr>
<tr>
<td>27</td>
<td>Orlando</td>
<td>United States</td>
<td>42%</td>
</tr>
<tr>
<td>28</td>
<td>Fresno</td>
<td>United States</td>
<td>42%</td>
</tr>
<tr>
<td>29</td>
<td>Pittsburgh</td>
<td>United States</td>
<td>42%</td>
</tr>
<tr>
<td>30</td>
<td>Virginia Beach</td>
<td>United States</td>
<td>42%</td>
</tr>
<tr>
<td>31</td>
<td>Nashville</td>
<td>United States</td>
<td>42%</td>
</tr>
<tr>
<td>32</td>
<td>Phoenix</td>
<td>United States</td>
<td>41%</td>
</tr>
<tr>
<td>33</td>
<td>Las Vegas</td>
<td>United States</td>
<td>41%</td>
</tr>
<tr>
<td>34</td>
<td>Sacramento</td>
<td>United States</td>
<td>41%</td>
</tr>
<tr>
<td>35</td>
<td>Providence</td>
<td>United States</td>
<td>41%</td>
</tr>
<tr>
<td>36</td>
<td>Richmond</td>
<td>United States</td>
<td>41%</td>
</tr>
<tr>
<td>37</td>
<td>Spokane</td>
<td>United States</td>
<td>41%</td>
</tr>
<tr>
<td>38</td>
<td>Minneapolis</td>
<td>United States</td>
<td>41%</td>
</tr>
<tr>
<td>39</td>
<td>Dallas–Fort Worth</td>
<td>United States</td>
<td>41%</td>
</tr>
<tr>
<td>40</td>
<td>Minneapolis</td>
<td>United States</td>
<td>41%</td>
</tr>
<tr>
<td>41</td>
<td>Hartford</td>
<td>United States</td>
<td>40%</td>
</tr>
<tr>
<td>42</td>
<td>St. Louis</td>
<td>United States</td>
<td>40%</td>
</tr>
<tr>
<td>43</td>
<td>Memphis</td>
<td>United States</td>
<td>39%</td>
</tr>
<tr>
<td>44</td>
<td>San Antonio</td>
<td>United States</td>
<td>37%</td>
</tr>
<tr>
<td>45</td>
<td>Milwaukee</td>
<td>United States</td>
<td>35%</td>
</tr>
<tr>
<td>46</td>
<td>Jacksonville</td>
<td>United States</td>
<td>28%</td>
</tr>
<tr>
<td>47</td>
<td>Cleveland</td>
<td>United States</td>
<td>27%</td>
</tr>
<tr>
<td>48</td>
<td>Buffalo</td>
<td>United States</td>
<td>16%</td>
</tr>
<tr>
<td>49</td>
<td>Detroit</td>
<td>United States</td>
<td>15%</td>
</tr>
<tr>
<td>50</td>
<td>Columbus</td>
<td>United States</td>
<td>14%</td>
</tr>
<tr>
<td>51</td>
<td>Indianapolis</td>
<td>United States</td>
<td>14%</td>
</tr>
<tr>
<td>52</td>
<td>Rochester</td>
<td>United States</td>
<td>13%</td>
</tr>
<tr>
<td>53</td>
<td>Salt Lake City</td>
<td>United States</td>
<td>13%</td>
</tr>
<tr>
<td>54</td>
<td>Louisville</td>
<td>United States</td>
<td>13%</td>
</tr>
<tr>
<td>55</td>
<td>Columbus City</td>
<td>United States</td>
<td>13%</td>
</tr>
<tr>
<td>56</td>
<td>Indianapolis</td>
<td>United States</td>
<td>12%</td>
</tr>
<tr>
<td>57</td>
<td>Raleigh</td>
<td>United States</td>
<td>12%</td>
</tr>
<tr>
<td>58</td>
<td>Richmond</td>
<td>United States</td>
<td>10%</td>
</tr>
<tr>
<td>59</td>
<td>Kansas City</td>
<td>United States</td>
<td>10%</td>
</tr>
<tr>
<td>60</td>
<td>Cleveland</td>
<td>United States</td>
<td>10%</td>
</tr>
</tbody>
</table>
Q2. What do you think is the ONE most important transportation-related issue or problem in the greater Phoenix area today? (Open Ended)

- Traffic congestion on freeways: 18%
- Lack of bus service/public transit: 18%
- Lack of light rail/access to light rail: 11%
- Traffic congestion on major streets: 8%
- Road maintenance and repair: 5%
- Not enough highways/freeways: 5%
- Unsafe/bad drivers: 3%
- Traffic safety/road rage: 3%
- Need for commuter trains: 2%
- Traffic congestion (general): 2%
- Population growth/too many people: 2%
- Other: 14%
- Don’t know: 9%

Source: MAG 2013-14 Transportation Survey.
Q5. Of the following six components of the transportation system, which one do you think should be the number one priority for the greater Phoenix area? Of the remaining items, which one should be the second highest priority?

<table>
<thead>
<tr>
<th>Top Priorities for Greater Phoenix Transportation System Components</th>
<th>1st choice</th>
<th>2nd choice</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of our regional freeway system</td>
<td>27%</td>
<td>23%</td>
<td>50%</td>
</tr>
<tr>
<td>Expanding the existing light rail system</td>
<td>27%</td>
<td>18%</td>
<td>45%</td>
</tr>
<tr>
<td>Improving major streets and intersections</td>
<td>14%</td>
<td>21%</td>
<td>35%</td>
</tr>
<tr>
<td>Implementing a valley-wide regional bus system</td>
<td>15%</td>
<td>16%</td>
<td>31%</td>
</tr>
<tr>
<td>Add commuter (heavy) rail service</td>
<td>8%</td>
<td>10%</td>
<td>18%</td>
</tr>
<tr>
<td>Adding sidewalks and bicycle pathways</td>
<td>5%</td>
<td>7%</td>
<td>12%</td>
</tr>
<tr>
<td>Other/None of the Above</td>
<td>1%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Don't know</td>
<td>3%</td>
<td>2%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: MAG 2013-14 Transportation Survey.
Q6. Next, as far as you know, is there definitely, probably, probably not, or definitely not enough funding available to cover needed transportation improvements in the greater Phoenix area over the next 20 years?

Knowledge of Funding for Next 20 Years

- Definitely Enough: 6%
- Probably Enough: 15%
- Probably not Enough: 44%
- Definitely not Enough: 19%
- Don’t Know: 16%

Source: MAG 2013-14 Transportation Survey.
Transportation Funding Knowledge

To the best of your knowledge, how do you contribute to the funding of the transportation system in your city and the region (select all that apply)?

- Tax on Miles Driven: 2
- Luxury Registration: 2
- Developer Fees: 9
- Property Tax: 12
- Drivers License Fees: 17
- Rental Car Fees: 11
- Gas Tax: 23
- Food Tax: 7
- State Sales Tax: 24
- County Sales Tax: 20
- City Sales Tax: 24

Source: MAG 2013-14 Transportation Survey.
Q7. How important is the regional transportation system for the Greater Phoenix area’s economy? Please use a 1 to 5 scale where 1 means not at all important and 5 mean extremely important.

Transportation System and the Economy

- 5 - Extremely Important: 48%
- 4: 30%
- 3: 14%
- 2: 3%
- 1 - Not at all Important: 3%
- Don’t know: 2%

Source: MAG 2013-14 Transportation Survey.
Preamble

Our transportation system primarily relies on gas taxes and dedicated sales taxes for funding. The Arizona gas tax has been **18 cents a gallon since 1991**, which means that the purchasing power of the gas tax is almost **60 percent less** due to inflation and increased fuel economy. The 20-year transportation sales tax for Maricopa County, which ends in 2025, is expected to generate **40 percent less** than projected due to the recession. Because of lower revenue, maintenance and expansion of major parts of the regional transportation system have been delayed indefinitely.

Source: MAG 2013-14 Transportation Survey.
Q8. Based on that information, using a 1 to 5 scale where “1” means you “strongly oppose” an option and “5” means you “strongly support” an option, please rate your level of support for each proposed funding option to improve the transportation system in the greater Phoenix area.

<table>
<thead>
<tr>
<th>Option</th>
<th>1 - Strongly oppose</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 - Strongly support</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extending the current County half cent...</td>
<td>19%</td>
<td>5%</td>
<td>21%</td>
<td>23%</td>
<td>30%</td>
<td>2%</td>
</tr>
<tr>
<td>Increase developers' fees</td>
<td>18%</td>
<td>12%</td>
<td>24%</td>
<td>20%</td>
<td>22%</td>
<td>4%</td>
</tr>
<tr>
<td>Increase gas tax</td>
<td>38%</td>
<td>14%</td>
<td>19%</td>
<td>15%</td>
<td>13%</td>
<td>4%</td>
</tr>
<tr>
<td>Tax service-based businesses</td>
<td>25%</td>
<td>17%</td>
<td>29%</td>
<td>13%</td>
<td>12%</td>
<td>4%</td>
</tr>
<tr>
<td>Increase vehicle registration/license fees</td>
<td>39%</td>
<td>15%</td>
<td>23%</td>
<td>14%</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>Increase sales tax</td>
<td>42%</td>
<td>19%</td>
<td>22%</td>
<td>9%</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>Increase property tax</td>
<td>50%</td>
<td>18%</td>
<td>20%</td>
<td>8%</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: MAG 2013-14 Transportation Survey.
Q9. Using the same 1 to 5 scale, please rate your level of support for an increase in the taxes dedicated for transportation improvements if it would result in you paying approximately $50 more in taxes spread across the course of a year.

Q10. Again, using the same 1 to 5 scale, please rate your level of support for increasing the gas tax each year in the future to match the general inflation rate in order to fund transportation system improvements.

Source: MAG 2013-14 Transportation Survey.
Q11. If you had a choice of paying this $50 more per year in the sales tax or gas tax, which is about a quarter of a cent increase in sales tax or a 10 cent increase per gallon in gas tax, which tax would you prefer?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter cent sales tax increase</td>
<td>50%</td>
</tr>
<tr>
<td>10 cent gas tax increase</td>
<td>33%</td>
</tr>
<tr>
<td>Neither</td>
<td>15%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: MAG 2013-14 Transportation Survey.
Combined (State, County, and Local) Sales Tax Rates for Cities within MAG Planning Area

Source: The Tax Foundation (TaxFoundation.org)

©2014, All Rights Reserved.

Source: MAG Analysis.
Q12. Using a 1 to 5 scale where “1” means “not at all supportive” and “5” means “very supportive,” how supportive of additional taxes or fees would you be if the money would be used to...

<table>
<thead>
<tr>
<th>Project</th>
<th>1 - Strongly oppose</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 - Strongly support</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repair/maintain existing streets</td>
<td>8%</td>
<td>8%</td>
<td>21%</td>
<td>37%</td>
<td>26%</td>
<td>10%</td>
</tr>
<tr>
<td>Repair/maintain existing freeways</td>
<td>7%</td>
<td>8%</td>
<td>22%</td>
<td>34%</td>
<td>29%</td>
<td>10%</td>
</tr>
<tr>
<td>Utilize tech. to make freeways more reliable/efficient</td>
<td>14%</td>
<td>10%</td>
<td>22%</td>
<td>26%</td>
<td>27%</td>
<td>11%</td>
</tr>
<tr>
<td>Expand the light rail</td>
<td>23%</td>
<td>13%</td>
<td>16%</td>
<td>22%</td>
<td>25%</td>
<td>11%</td>
</tr>
<tr>
<td>Build new freeways/lanes</td>
<td>15%</td>
<td>12%</td>
<td>27%</td>
<td>23%</td>
<td>23%</td>
<td>9%</td>
</tr>
<tr>
<td>Expand the bus routes</td>
<td>14%</td>
<td>13%</td>
<td>24%</td>
<td>23%</td>
<td>22%</td>
<td>4%</td>
</tr>
<tr>
<td>Make the bus service more frequent</td>
<td>17%</td>
<td>13%</td>
<td>24%</td>
<td>22%</td>
<td>20%</td>
<td>4%</td>
</tr>
<tr>
<td>Build commuter rail</td>
<td>26%</td>
<td>14%</td>
<td>19%</td>
<td>19%</td>
<td>20%</td>
<td>2%</td>
</tr>
<tr>
<td>Build or improve highways outside urban area</td>
<td>21%</td>
<td>16%</td>
<td>29%</td>
<td>18%</td>
<td>15%</td>
<td>14%</td>
</tr>
<tr>
<td>Build or improve sidewalks/bike paths</td>
<td>23%</td>
<td>18%</td>
<td>27%</td>
<td>19%</td>
<td>12%</td>
<td>11%</td>
</tr>
<tr>
<td>Expand new streets</td>
<td>20%</td>
<td>20%</td>
<td>29%</td>
<td>18%</td>
<td>11%</td>
<td>2%</td>
</tr>
<tr>
<td>Expedite freight crossing at Mexico border</td>
<td>36%</td>
<td>19%</td>
<td>22%</td>
<td>9%</td>
<td>7%</td>
<td>7%</td>
</tr>
</tbody>
</table>
Survey Conclusions

- Voters don’t appear to support any new taxes/fees.
- Voters not overwhelmingly ready to support the extension of the existing $0.5$ cent sales tax.
- Little interest/support for increasing the gas tax.
- Many “undecided” or “middle of the road” meaning room for education.
- Majority of the voters understand the link between transportation and the economy.
- This can be the foundation to build the case for the need for additional funds.

Source: MAG 2013-14 Transportation Survey.
Survey Conclusions

- Many responses emphasized the need for public transportation improvements.

- **Satisfaction was high with freeways and roads/streets, but voters want additional funding to improve and maintain the existing freeways and streets.**

- While improved public transportation is important by voters, they also recognize the importance of maintaining the existing roads.

Source: MAG 2013-14 Transportation Survey.
Deferred Projects
REGIONAL FREEWAY AND HIGHWAY PROGRAM

- SR-74
  ROW Preservation, US-60 to Loop 303

- Loop 303
  Add GP Lanes, I-17 Interchange

- Loop 101/Aqua Fria
  Add GP Lanes

- Interstate 10/Loop 101
  DHOV – North to/from East

- Interstate 10/Papago
  Add GP Lanes

- Arizona SR-30
  New Freeway, Loop 303 to Loop 202
  Interim Corridor, SR-85 to Loop 303

- Loop 303
  ROW Preservation, South of SR-30

- Interstate 17
  Add GP Lanes

- Interstate 17
  Add HOV Lanes

- Interstate 17/Loop 101
  DHOV – South to/from West

- SR-51/Piestewa
  Add GP Lanes

- Loop 202/Red Mountain
  Add GP Lanes

- Loop 202/Santan
  Add GP Lanes

- SR-24/Gateway
  New Freeway, Ellsworth to Meridian
ADOT Roadways within MAG Region

7,000 Lane-Miles
5,300 Freeway Lane-Miles
2,700 Highway Lane-Miles
2013 Operations and Maintenance Costs

$80.8 million
Ideal

$31.2 million
GAP

$49.6 million
ACTUAL

- Pavement Preservation (not Quiet Pave).
- Bridge Scour and Deck Maintenance.
- Drainage/Pumps.
- Deck Park Tunnel.
- Lighting.
- Traffic Operations.
- Litter/Graffiti.
- Signs, Signals, and Striping.

Operations and Maintenance Costs with New Corridors

$80.8 million
Existing System

$91.6 million
With Opening of Loop 303, Loop 202, I-10/I-17

Total Operations and Maintenance thru 2040
$2.4 billion

2013
by 2025
“Big Budget” Maintenance Items

By 2040:

- Quiet Pavement Replacement – up to three applications.
- Interstate 10/Interstate 17 traffic interchange - “The Stack” - structure rehabilitation and deck replacement.
- Deck Park Tunnel Maintenance.
- Pump Replacement and Rehabilitation.

Rough Estimate - $1.0 billion
Impact of Funding Loss on BRT/Express and Grid Routes

2003 Regional Transportation Plan

- By 2011, 18
- 2011 to 2025, 45

Current Transit Life Cycle Program

- After 2025, 24
- By 2011, 18
- 2011 to 2025, 21
Scenario 1

- Minimal service expansion: Many deficiencies not addressed.
- Shifts Light Rail operation costs to regional service.
- New Express routes and increase frequencies (32 to 192 trips) for select express routes.
Scenario 2

- Higher speed options: Express, Bus Rapid Transit, Light Rail and Commuter Rail.
- Improves regional transit service levels.
- Suburban activity centers connected by frequent express routes.
- Peer Region: Denver.
Scenario 3

- Provides a comprehensive regional transit system.
- Nearly all deficiencies are addressed.
- Most aggressive service expansion with many of high speed options.
- Peer Regions: Seattle and Salt Lake City.
Needs Summary

Regional Freeways and Highways
- Base Case: $15.6 billion

Regional Transit Options
- Scenario 1: $6.3 billion
- Scenario 2: $8.2 billion
- Scenario 3: $32.7 billion

Regional Arterials-Parkways
- Scenario 1: $21.7 billion
- Scenario 2: $32.7 billion

Regional Arterials-Parkways
- Scenario 3: $3 billion
Potential Highway Revenue Sources
Projected 2025 to 2040

Federal Highway Funds
- MAG STP and MAG CMAQ

ADOT Funds
- Includes Highway Users Revenue Fund (HURF) and Federal Aid

Regional Area Roadway Fund (RARF)
- Half Cent Sales Tax

Source: MAG 2035 Regional Transportation Plan (2013 Draft), September 2013.
Federal and State Gas Gas Rates

US Average: 49.5¢/gal
Western USA: 47.2¢/gal
Arizona #43: 37.4¢/gal

Source: American Petroleum Institute, July 2013.
Highway Account of the Highway Trust Fund

FY 2014 Projected Estimates for End-of-Month Cash Balances (as of 2/28/2014) 1/2/3/

Highway Account of the Highway Trust Fund (includes FHWA, FMCSA & NHTSA)

<table>
<thead>
<tr>
<th>Month</th>
<th>Actual</th>
<th>Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct</td>
<td>$10.5</td>
<td></td>
</tr>
<tr>
<td>Nov</td>
<td>$9.3</td>
<td></td>
</tr>
<tr>
<td>Dec</td>
<td>$8.5</td>
<td></td>
</tr>
<tr>
<td>Jan</td>
<td>$8.3</td>
<td></td>
</tr>
<tr>
<td>Feb</td>
<td>$8.6</td>
<td></td>
</tr>
<tr>
<td>Mar</td>
<td>$8.1</td>
<td></td>
</tr>
<tr>
<td>Apr</td>
<td>$8.5</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>$8.0</td>
<td></td>
</tr>
<tr>
<td>Jun</td>
<td>$5.1</td>
<td></td>
</tr>
<tr>
<td>Jul</td>
<td>$3.8</td>
<td></td>
</tr>
<tr>
<td>Aug</td>
<td>$1.2</td>
<td></td>
</tr>
<tr>
<td>Sep</td>
<td>($0.4)</td>
<td>($1.7)</td>
</tr>
</tbody>
</table>

1/ Graph reflects actual data through 2/28/14 and end-of-month projections for the remainder of the fiscal year.
2/ Total receipt and outlay projections are based on FY 2015 President's Budget Baseline assumptions. Projected monthly receipt and outlay rates are based on historic averages.
3/ Range of anticipated shortfall: Green brackets denote the estimated window of when the anticipated shortfall will occur.

Source: FHWA
Major Components and Revenue Categories

- Operations and Maintenance funding for transit, streets and highways – permanent and sustainable.
- Capital program – project specific and limited term for the tax (20-year sunset?).
- Tools – redevelopment and value capture.
Annual Average Net New Statewide Revenue
2013 to 2022 (millions of dollars)

$10 drivers’ license fee increase
10% Surcharge on Luxury Tax Collections
$10 registration fee increase
Property tax for transportation
5 Cent Local Option Fuel Tax in Maricopa County Indexed
Index current state fuel tax to CPI
Replace fuel tax with state sales tax
Add 5 cents to fuel tax
Index current state & federal fuel tax to CPI (state & federal)
Add 5 cents and index state fuel taxes to CPI
Replace fuel tax with state & local sales tax
Add 5 cents and index state & federal fuel taxes to CPI
1/2 cent State Transportation Sales Tax
Add state sales tax in addition to current fuel taxes
Add state & local sales tax in addition to current fuel taxes

Percent Increase in HURF Revenues Compared to Projections for 2013 to 2022

Source: Maricopa Association of Governments, August 2013.
Corridor Master Plan Overview

**Initiate Project**
- Project Management Plan
- Public Involvement Plan
- Controlling Design Criteria and Design Exception / Variance Procedures

**Conduct Corridor Needs Assessment**
- Existing Conditions
- PEL Checklist Part 1
- Future Conditions (No-Build)
- Agency and Public Outreach – Round 1
- Goals and Objectives

**Develop Corridor Alternatives Screening**
- Alternatives Workshop
- Categorize Alternatives
- Tier 1 Qualitative Screening
- Tier 2 Quantitative Screening
- System Bundles
- Tier 3 Quantitative Screening (Bundles)
- Agency and Public Outreach – Round 2
- Select Preferred Alternative

**Establish Corridor Master Plan**
- Completed PEL
- Priority Resource Impacts Evaluation
- Mitigation Strategy
- Implementation Plan
- Design Exceptions
- MAG Policies
- P&N guidance for future projects

spine.azmag.gov
Interstate 10 /
Interstate 17
Corridor Master Plan

Bob Hazlett
MAG Senior Engineering Manager
bhzazlett@azmag.gov
602 254-6300