MAG Committee Structure
Regional Planning Districts
Councils of Governments (COGs)

Boundaries for planning defined in a Governor’s Executive Order in 1970. Regional Councils comprise primarily local elected officials.

COGs are nonprofit corporations formed within the planning boundaries. Serve as overall planning agencies throughout the regions. Rural COGs assist in service delivery for the regions. Urban COGs are generally more focused on regional planning activities.
Metropolitan Planning Organizations (MPOs)

Urbanized areas of more than 50,000 residents.

Boundary includes at a minimum, the urbanized area and the contiguous geographic area(s) likely to become urbanized within 20 years.

A forum for cooperative transportation decision making for the metropolitan planning area.

Purpose is to ensure that the expenditure of federal transportation funds is based on a continuing, cooperative & comprehensive (3-C) transportation process.
Transportation Management Areas (TMAs)

An urbanized area over 200,000 in population designated by the U.S. Secretary of Transportation.

Greater authority is given to TMAs in project selection.

The FHWA & FTA jointly review and evaluate the transportation planning process every four years.

In nonattainment or maintenance areas FHWA & FTA review to ensure air quality conformity regulations are followed.
GOVERNANCE – NOT GOVERNMENT

Local governments represent the greatest resource for regional planning in Arizona:

- Provide the local voice on planning
- Partner with state and federal government
- Offer leadership on decisions affecting local stakeholders
Core Planning Roles Required by Federal Transportation Law
Transportation Best Practices

Regional Business at the Table

Transportation Policy Committee

- Created by the Regional Council, later recognized in state law.
- 23 Members
  - MAG members
    - Central City
    - 7 largest cities
    - Geographically balanced
    - 1 Native American Indian Community
    - 1 Maricopa County Board of Supervisors member
    - CTOC
    - ADOT
  - Six Business Representatives
    - Must be regional in nature
    - Transit representative
    - Freight representative
    - Construction representative
Freeway Opening Dates

This map shows the initial opening dates for segments of the regional freeway system. It also includes the planned opening dates for future freeways, including the South Mountain Loop 202 and the Loop 303 in the West Valley.
Best Driving Experience in the World – Phoenix

Waze is the world's largest community-based traffic and navigation app.

<table>
<thead>
<tr>
<th>Best</th>
<th>Worst</th>
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<tbody>
<tr>
<td>Phoenix</td>
<td>Bogota</td>
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<tr>
<td>Greensboro</td>
<td>Bogor</td>
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<tr>
<td>Dallas</td>
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<td>Nantes</td>
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<tr>
<td>Rennes</td>
<td>San Salvador</td>
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</tbody>
</table>

Here are the metros that offer the best and worst driving experiences in the world.
1998

MOBILITY TOOL BOX

Dial-a-Ride        Car Pools/Van Pools        Walking
Park and Ride Lots  Bike Lanes and Paths
Freeway Management & Maintenance  High Occupancy Vehicle Lanes (HOV)  Intelligent Transportation Systems (ITS)
Light Rail        Bus Rapid Transit  Local, Express and Circulator Buses
New & Improved Freeways
New & Improved Streets and Arterials
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…
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%
2013 Operations and Maintenance Costs

- 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
Autonomous Vehicles
What Does This Mean?
PLANNING FOR CONNECTED AND AUTONOMOUS VEHICLES

**Engineering**
- Traffic Engineering.
- Roadway Design.
- Speed Limits.
- Parking.
- Freight Operations.
- Safety.

**Planning and Policy**
- Long Range Transportation Plans.
- Land Use and Urban/Rural Form.
- Impact Assessment.
- Driver Education and Licensing.
- Vehicle Regulation.
- Insurance and Liability.
- Safety.
Autonomous Car Sales Will Surge By 2035

The cars will represent 25 percent of the global market

[Bar chart showing the increase in autonomous car sales from 2015 to 2035, with a note that 2015 data is used.]

Source: The Boston Consulting Group
Note: 2015 data
Are We Building Smart Streets/Highways?

Better Roads and Better Vehicles = Better Driving

Connected and automated driving brings good driving experience.

- On-Board Sensor
  - Collision Mitigation
  - Collision Avoidance
- DSRC
  - Risk Mitigation
  - Risk Avoidance
- Map, Data, and Other Technology Improvement
  - Guarded Driving

“Stress free driving”
“No confusion”
“Fun of driving”
“Nice to the others”

Markings (Level 1)
Asphalt Rubber: Making a Difference
Charles McDonald – City of Phoenix
Asphalt Rubber: Making an Economic Difference
Vehicle Miles Traveled (VMT) by Major Facility Types

- 49.2% Freeway
- 42.4% Expressway
- 4.9% HOV Lane
- 3.5% Major Arterial

Source: 2015 MAG Regional Travel Demand Model.
Minor facilities excluded.
MAG Specifications and Details

LONGITUDINAL TRENCH
(TRENCH IN PAVEMENT PARALLEL TO TRAFFIC)

EXISTING S/W TYP.

EXISTING PAVEMENT

Q OF STREET

EXISTING C/G TYP.

TRENCH WIDTH

FINAL BACKFILL

TOP OF PIPE, CONDUIT OR CONCRETE-ENCASED DUCT BANK

SOUTHỀNE LINE

HAUNCHING

BEDDING

MINIMUM WIDTH AT SPRINGLINE ON EACH SIDE OF PIPE

TRENCH CROSS-SECTION DETAIL
Arterial Life Cycle Program (ALCP)

The ALCP is the financial management tool for the arterial component of the RTP and is managed by MAG.

- 63 project segments completed to date
  - Beardsley Rd Connection: L101 to 83rd Ave
  - Gilbert Rd: SR-202L to Hunt Hwy
  - Northern Parkway: L303 to Dysart Rd
  - Power Road: Santan Fwy to Pecos Rd
  - Sonoran Blvd: 15th Ave to Cave Creek

- $942 million in regional funding remaining for Valley projects
  - Elliot Rd: Power Rd to Meridian Rd
  - Gilbert Road Bridge over the Salt River
  - Happy Valley Rd: L303 to Lake Pleasant Parkway
  - Pima Rd: Via de Ventura to McDowell
  - Scottsdale Airpark area improvements
While every effort has been made to ensure the accuracy of this information, the Maricopa Association of Governments makes no warranty, expressed or implied, as to its accuracy and expressly excludes liability for the accuracy thereof.
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