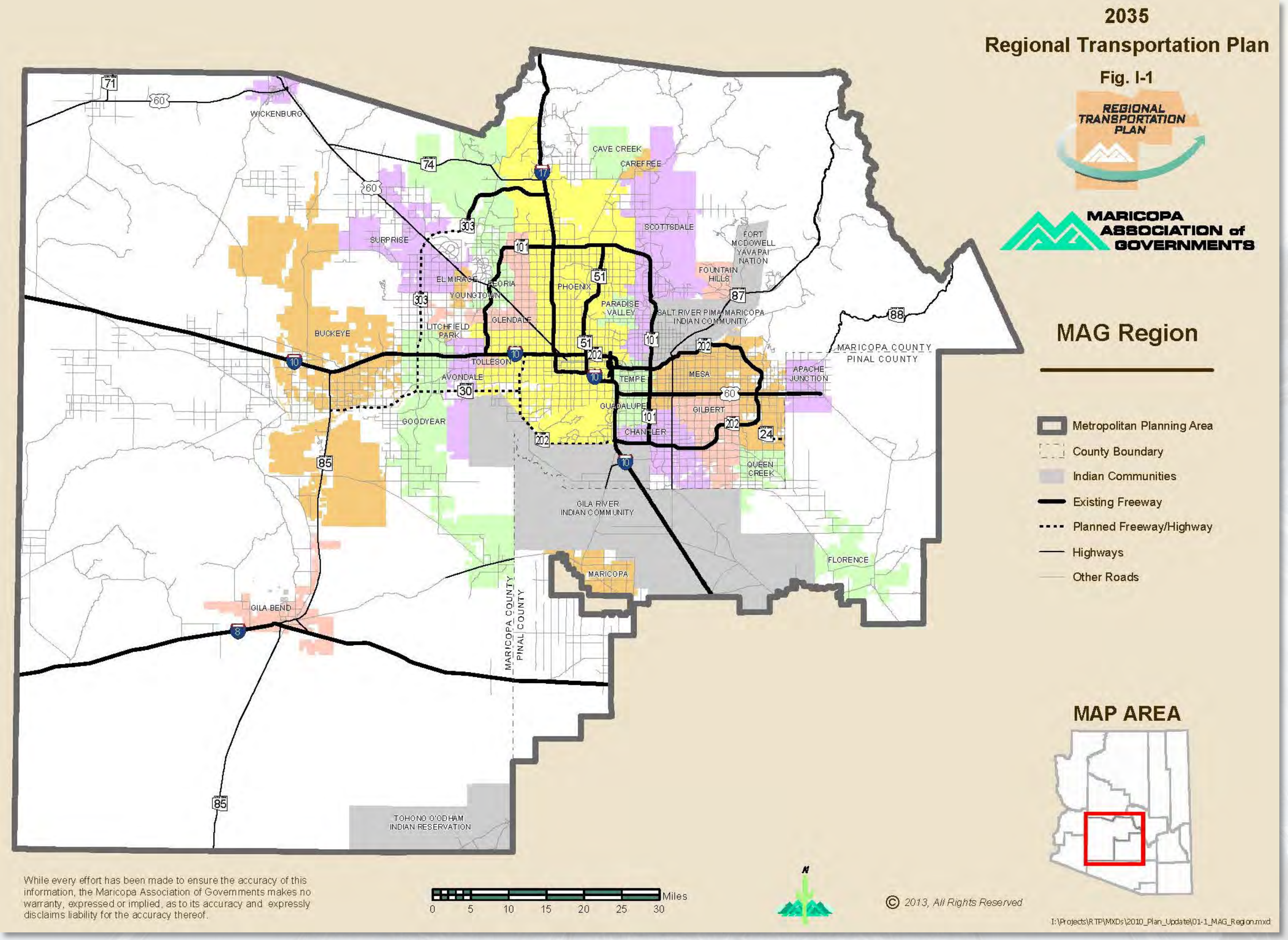
EAST VALLEY PARTNERSHIP
PINAL PARTNERSHIP

Transportation Funding Options: Thinking Outside of the Box!

Transportation Summit
November 15, 2013

MARICOPA ASSOCIATION of GOVERNMENTS

System Traffic Interchange, Mesa



2035
Regional Transportation Plan
Fig. I-1
REGIONAL TRANSPORTATION PLAN
MARICOPA ASSOCIATION of GOVERNMENTS
MAG Region
Metropolitan Planning Area
County Boundary
Indian Communities
Existing Freeway
Planned Freeway/Highway
Highways
Other Roads
MAP AREA
WICKENBURG
CAVE CREEK
CAREFREE
SCOTTSDALE
FORT MCDOWELL YAVAPAI NATION
FOUNTAIN HILLS
SURPRISE
EL MIRAGE
PEORIA
YOUNGTOWN
PHOENIX
PARADISE VALLEY
SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY
GLENDALE
LITCHFIELD PARK
BUCKEYE
TOLLESON
AVONDALE
TEMPE
MESA
APACHE JUNCTION
MARICOPA COUNTY
PINAL COUNTY
GUADALUPE
GILBERT
CHANDLER
GOODYEAR
QUEEN CREEK
GILA RIVER INDIAN COMMUNITY
MARICOPA
FLORENCE
GILA BEND
TOHONO O'ODHAM INDIAN RESERVATION
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 disclaims liability for the accuracy thereof.
Miles
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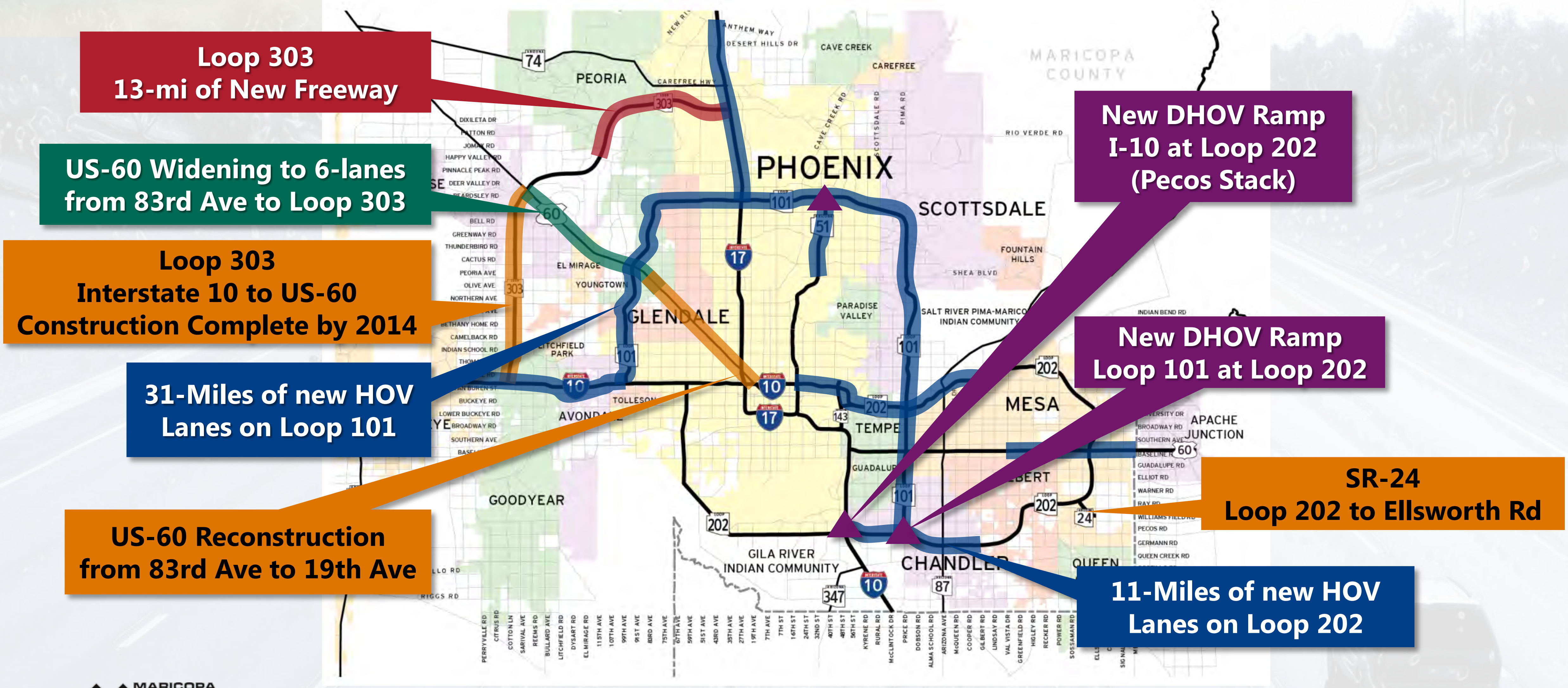
Projects Recently Completed and Underway

MAG REGIONAL FREEWAY AND HIGHWAY PROGRAM



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Projects Still to Come

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
Add Lanes

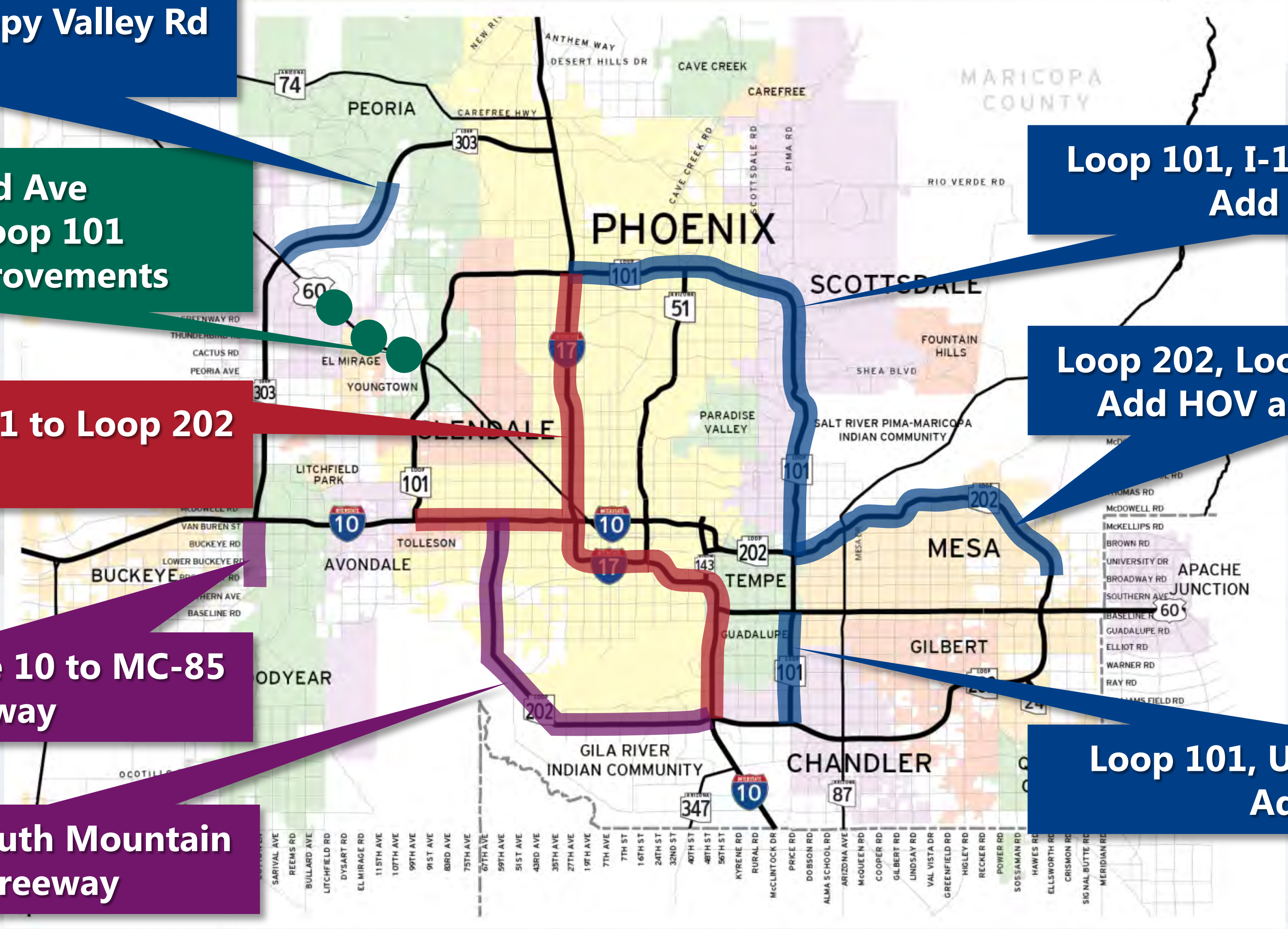
Loop 303, Interstate 10 to MC-85
New Freeway

Loop 202/South Mountain
New Freeway

Loop 101, I-17 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)

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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.: SR101L 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 Ellsworth 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.

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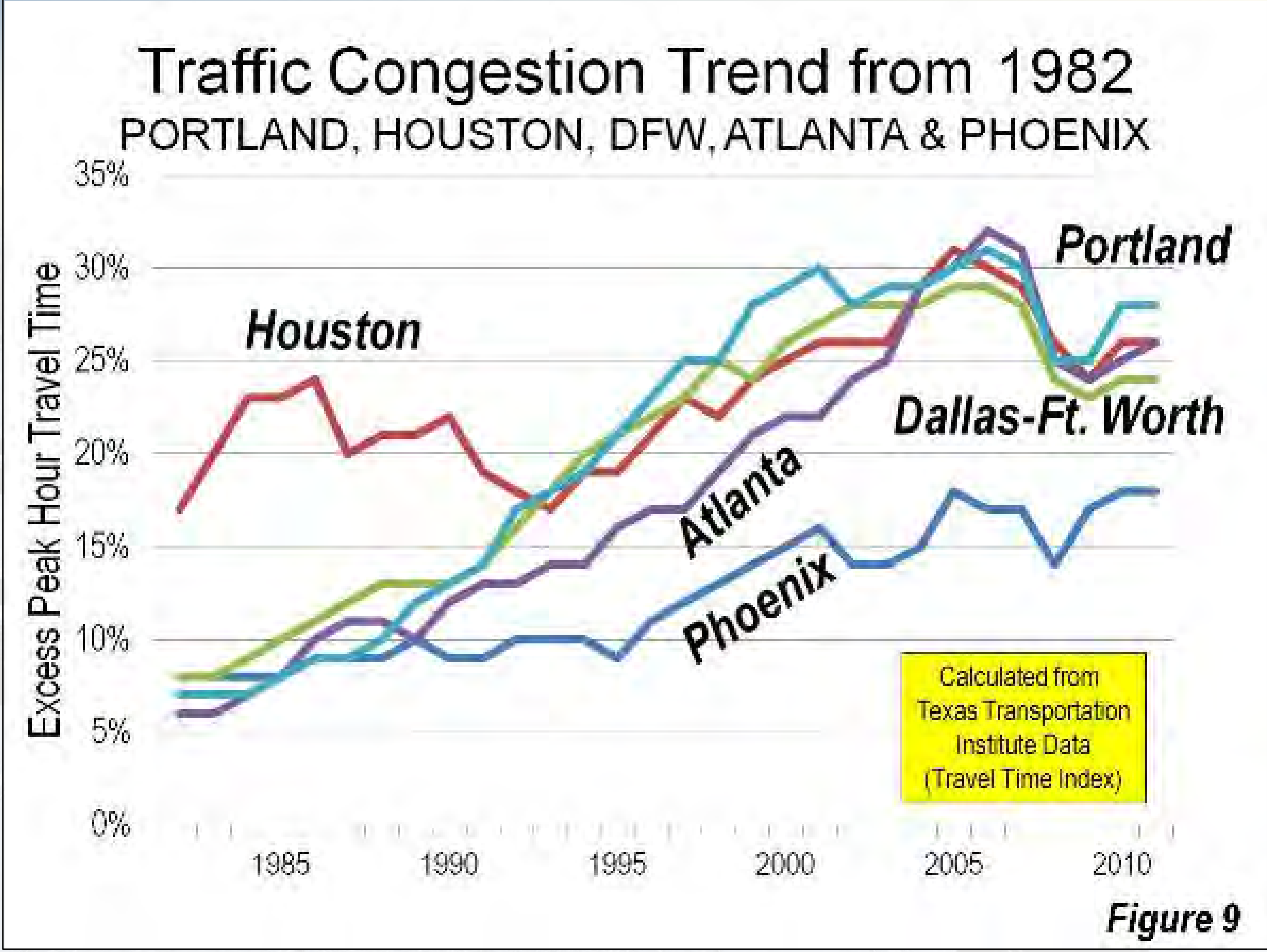
Metro Phoenix Congestion

Comparing Phoenix to Houston, Atlanta, Dallas-Ft. Worth and Portland



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Metro Phoenix Congestion

2013 TomTom Traffic Index
Phoenix is ***56 of 61*** metro areas in the Americas

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%

56	---	Phoenix	United States	12%
57	---	Raleigh	United States	12%
58	---	Richmond	United States	10%
59	---	Kansas City	United States	10%
60	▼	Cleveland	United States	10%

PHOENIX #56: Congestion Level 12%

TomTom Traffic Index

TOMTOM

Americas

Rank	CI change	City	Country	Congestion	Morning peak	Evening peak	Highways	Non-Highways
1	▲	Rio de Janeiro	Brazil	50%	96%	125%	44%	53%
2	▼	São Paulo	Brazil	39%	66%	100%	30%	47%
3	▲	Vancouver	Canada	36%	61%	76%	23%	40%
4	▲	Los Angeles	United States	35%	55%	78%	33%	38%
5	▲	San Francisco	United States	32%	53%	71%	28%	37%
6	▼	Honolulu	United States	28%	36%	59%	19%	36%
7	▲	Seattle	United States	28%	50%	76%	22%	35%
8	▲	San Jose	United States	27%	53%	73%	19%	38%
9	---	Toronto	Canada	27%	54%	72%	21%	34%
10	▲	Washington	United States	27%	49%	66%	20%	34%
11	▲	New York	United States	26%	43%	58%	22%	31%
12	▼	Montreal	Canada	25%	55%	72%	23%	29%
13	▲	Portland	United States	25%	34%	67%	19%	29%
14	▲	Boston	United States	23%	47%	59%	18%	32%
15	—	Chicago	United States	23%	39%	58%	17%	30%
16	▲	Miami	United States	23%	43%	51%	12%	32%
17	▲	Ottawa	Canada	23%	49%	92%	19%	32%
18	▲	Tampa	United States	23%	35%	51%	13%	28%
19	▲	Denver	United States	23%	38%	54%	16%	28%
20	▲	Houston	United States	22%	45%	64%	19%	27%
21	---	Austin	United States	22%	44%	67%	17%	24%
22	▼	New Orleans	United States	22%	29%	51%	17%	24%
23	▲	Atlanta	United States	22%	42%	59%	16%	28%
24	▲	Philadelphia	United States	22%	39%	52%	16%	29%
25	▲	Calgary	Canada	21%	39%	57%	18%	23%
26	▲	San Diego	United States	21%	36%	48%	12%	35%
27	▲	Orlando	United States	21%	27%	47%	9%	30%
28	▲	Tucson	United States	20%	25%	34%	4%	27%
29	▼	Pittsburgh	United States	19%	31%	45%	11%	29%
30	---	Virginia Beach	United States	19%	22%	47%	13%	24%
31	▼	Nashville	United States	18%	35%	55%	13%	35%
32	▲	Riverside	United States	18%	31%	38%	14%	28%
33	▼	Las Vegas	United States	18%	18%	32%	7%	22%
34	---	Sacramento	United States	17%	29%	41%	8%	25%
35	▲	Providence	United States	17%	26%	42%	10%	26%
36	—	Baltimore	United States	17%	33%	47%	12%	28%
37	▲	Edmonton	Canada	17%	22%	37%	6%	22%
38	▲	Minneapolis	United States	17%	29%	48%	13%	22%
39	▼	Dallas-Fort Worth	United States	16%	30%	44%	12%	23%
40	▲	Charlotte	United States	16%	27%	48%	10%	25%
41	▲	Hartford	United States	15%	26%	43%	11%	22%
42	▲	St. Louis	United States	15%	25%	37%	9%	24%
43	---	Memphis	United States	15%	22%	30%	7%	21%
44	—	San Antonio	United States	15%	27%	44%	8%	23%
45	▲	Milwaukee	United States	15%	29%	35%	11%	19%
46	▲	Jacksonville	United States	15%	28%	37%	6%	26%
47	▼	Cincinnati	United States	14%	21%	46%	9%	23%
48	▲	Buffalo	United States	14%	16%	31%	6%	27%
49	▼	Detroit	United States	14%	22%	39%	8%	19%
50	---	Columbus	United States	14%	20%	40%	7%	23%
51	---	Birmingham	United States	14%	25%	39%	6%	33%
52	▲	Rochester	United States	13%	19%	30%	6%	18%
53	▼	Salt Lake City	United States	13%	15%	35%	4%	22%
54	▼	Louisville	United States	13%	15%	35%	5%	25%
55	▲	Oklahoma City	United States	13%	20%	36%	9%	26%
56	---	Phoenix	United States	12%	24%	29%	5%	18%
57	---	Raleigh	United States	12%	21%	33%	4%	21%
58	—	Richmond	United States	10%	14%	20%	4%	19%
59	---	Kansas City	United States	10%	18%	26%	5%	20%
60	▼	Cleveland	United States	10%	18%	25%	4%	20%

Source: TomTom Americas Traffic Index 2013 Report

Interstate 10/Interstate 17 Corridor

2014-2015	2014-2017	2017-2021	After 2021
Near-Term Improvements	**CORRIDOR MASTER PLAN**	**Environmental Studies**	**Design, Construction, Operation**

Near-Term Improvements

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

CORRIDOR MASTER PLAN

- Joint Project Management.
- MAG Procurement.
- **Identify Corridor Operating Principles.**
- **Coordinate with Stakeholders.**
- Frame next environmental and design efforts.

Environmental Studies

- Joint Project Management.
- ADOT Procurement.
- **Multiple Studies and Efforts.**
- Consistent with Corridor Master Plan.

Design, Construction, Operation

- Implementation.

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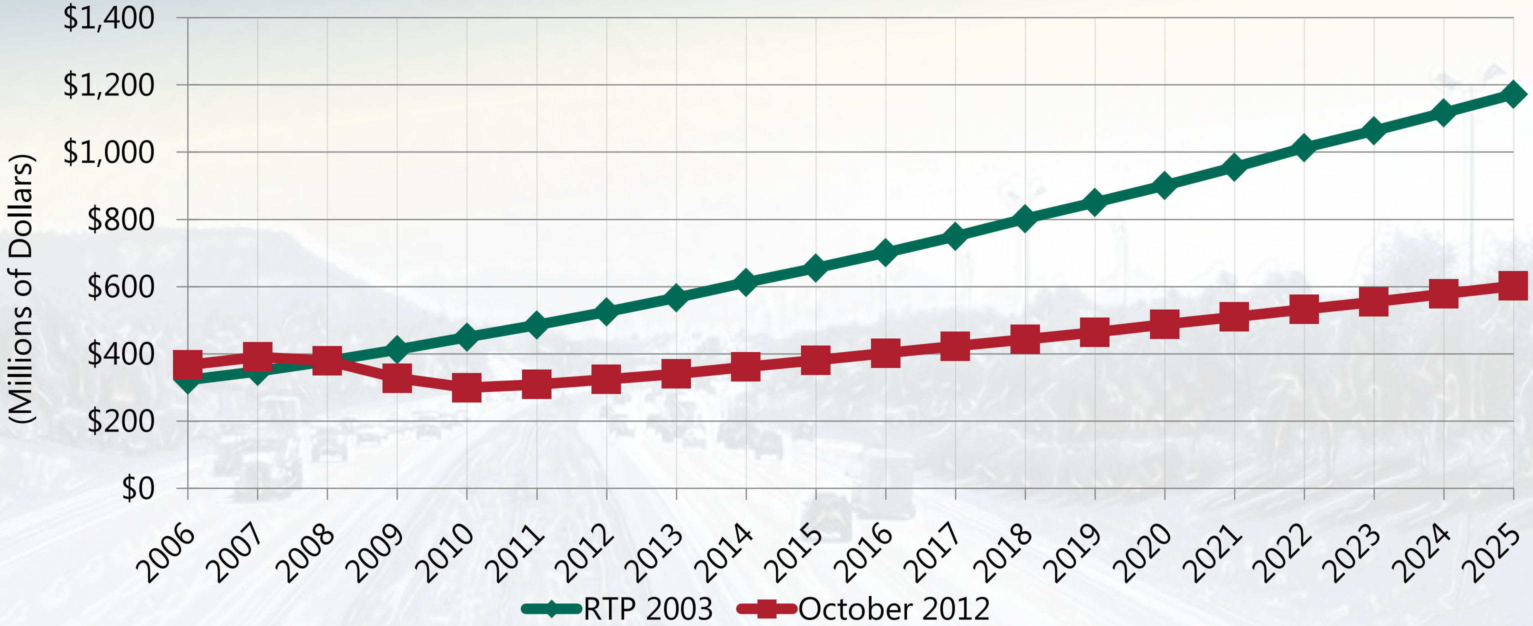
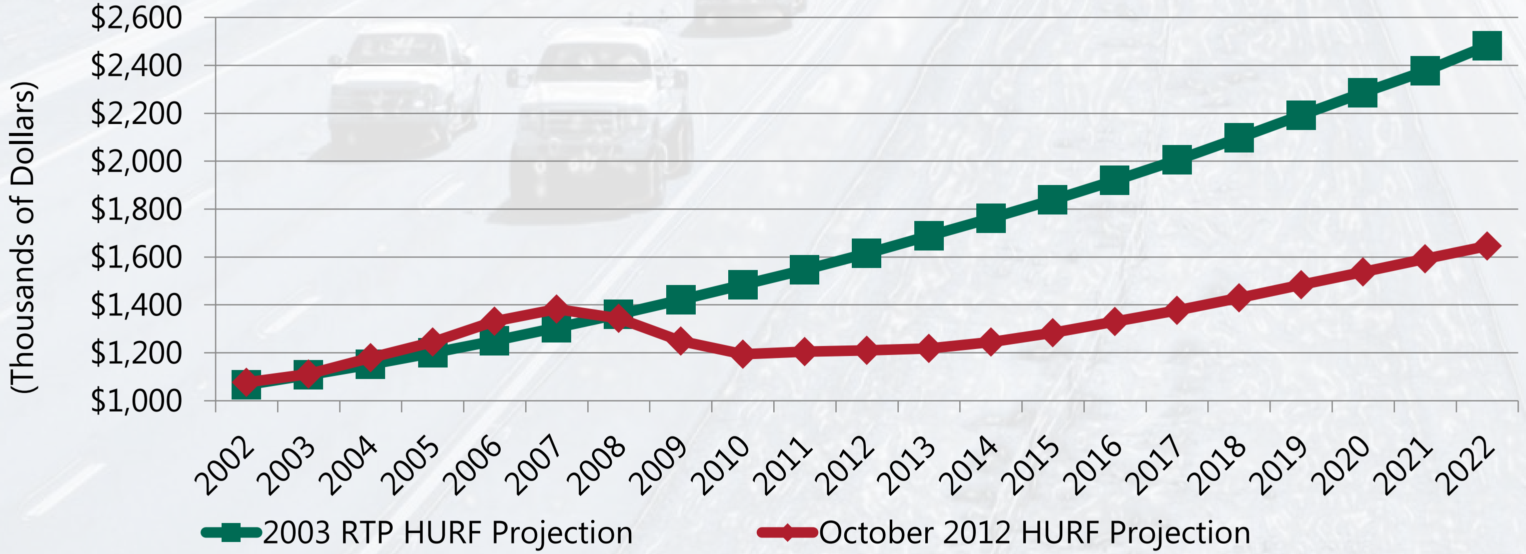
Sales tax revenues $6.0 billion below 2003 forecast





Statewide HURF revenues $7.5 billion below 2003 forecast

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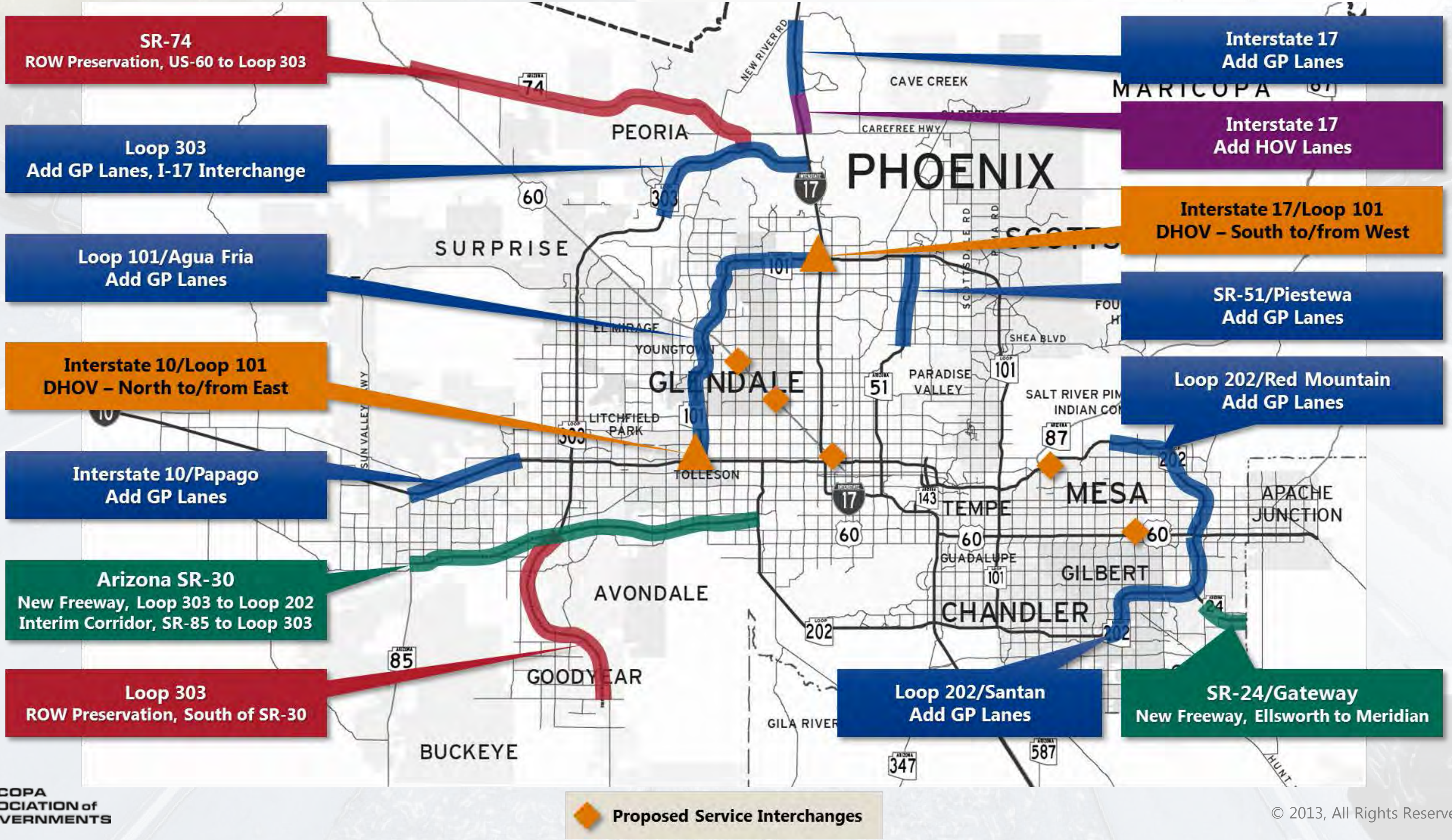
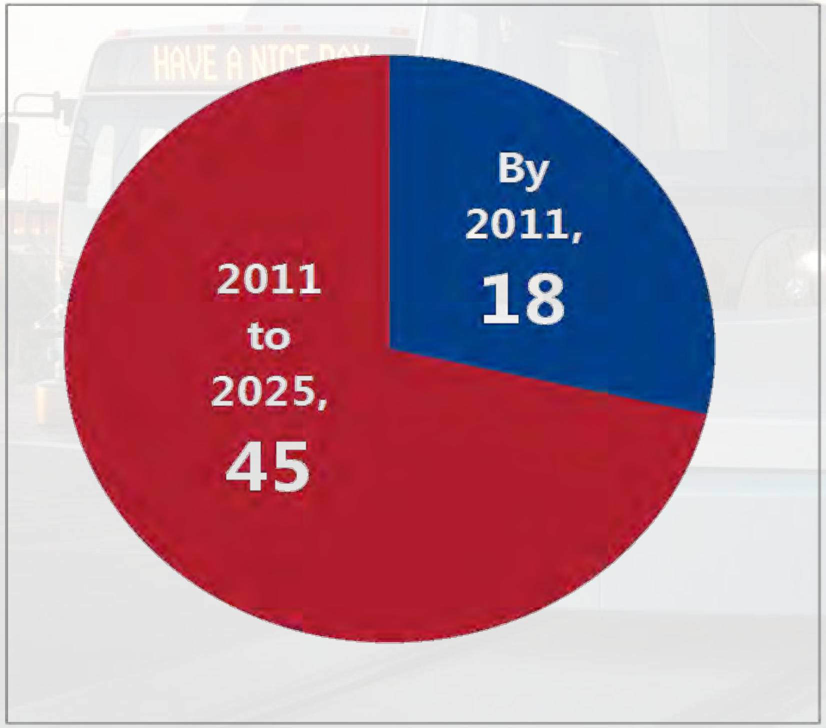
Deferred Projects

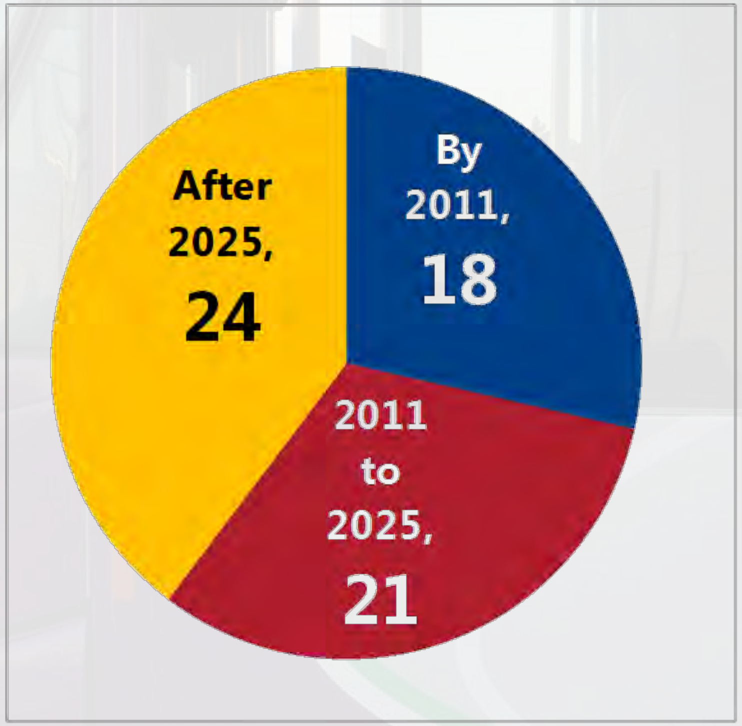
REGIONAL FREEWAY AND HIGHWAY PROGRAM



Impact of Funding Loss on BRT/Express and Grid Routes

2003 Regional Transportation Plan	Current Transit Life Cycle Program





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ADOT Roadways within MAG Region

7,000
Lane-Miles

5,300
Freeway Lane-Miles

2,700
Highway Lane-Miles

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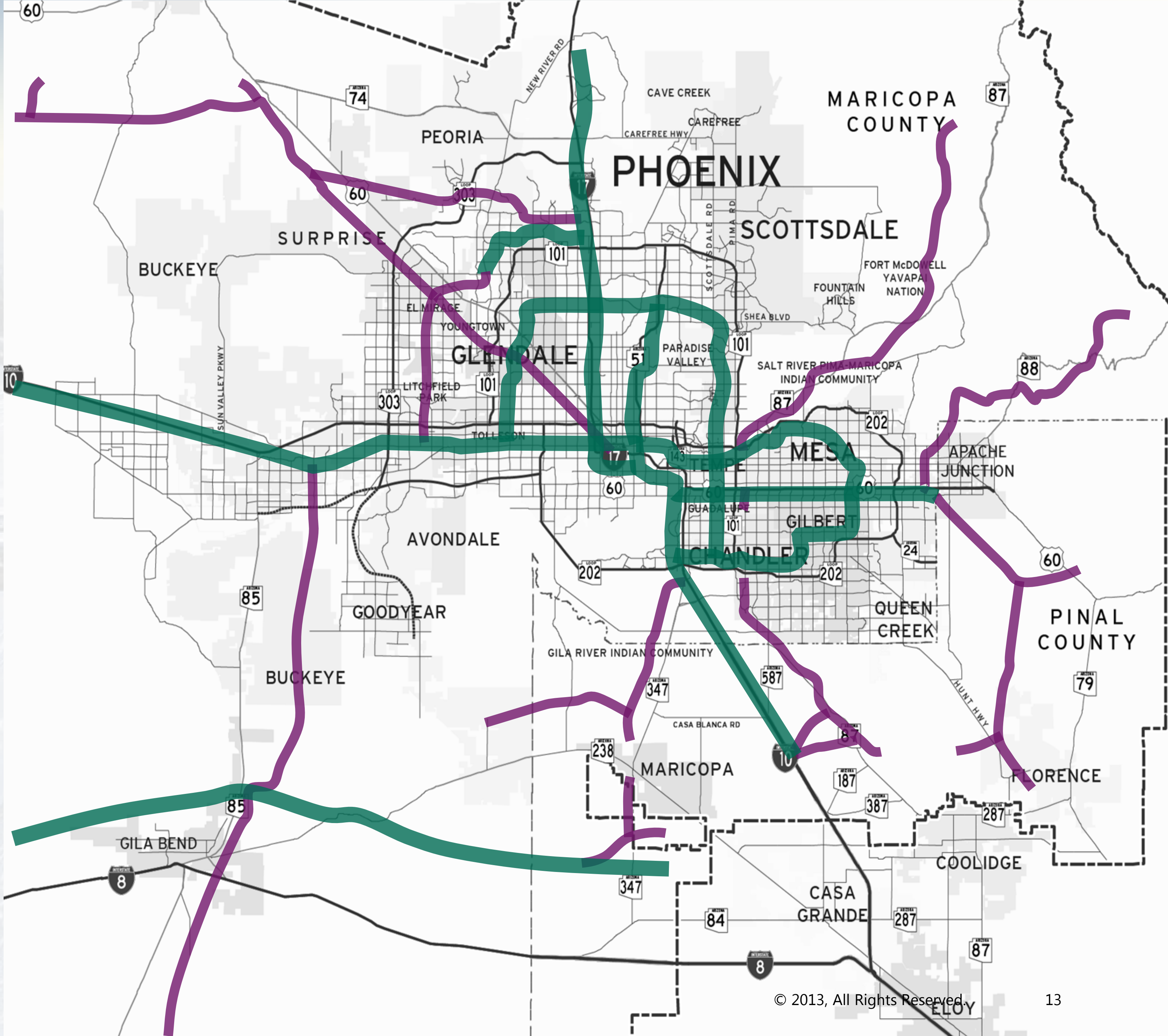
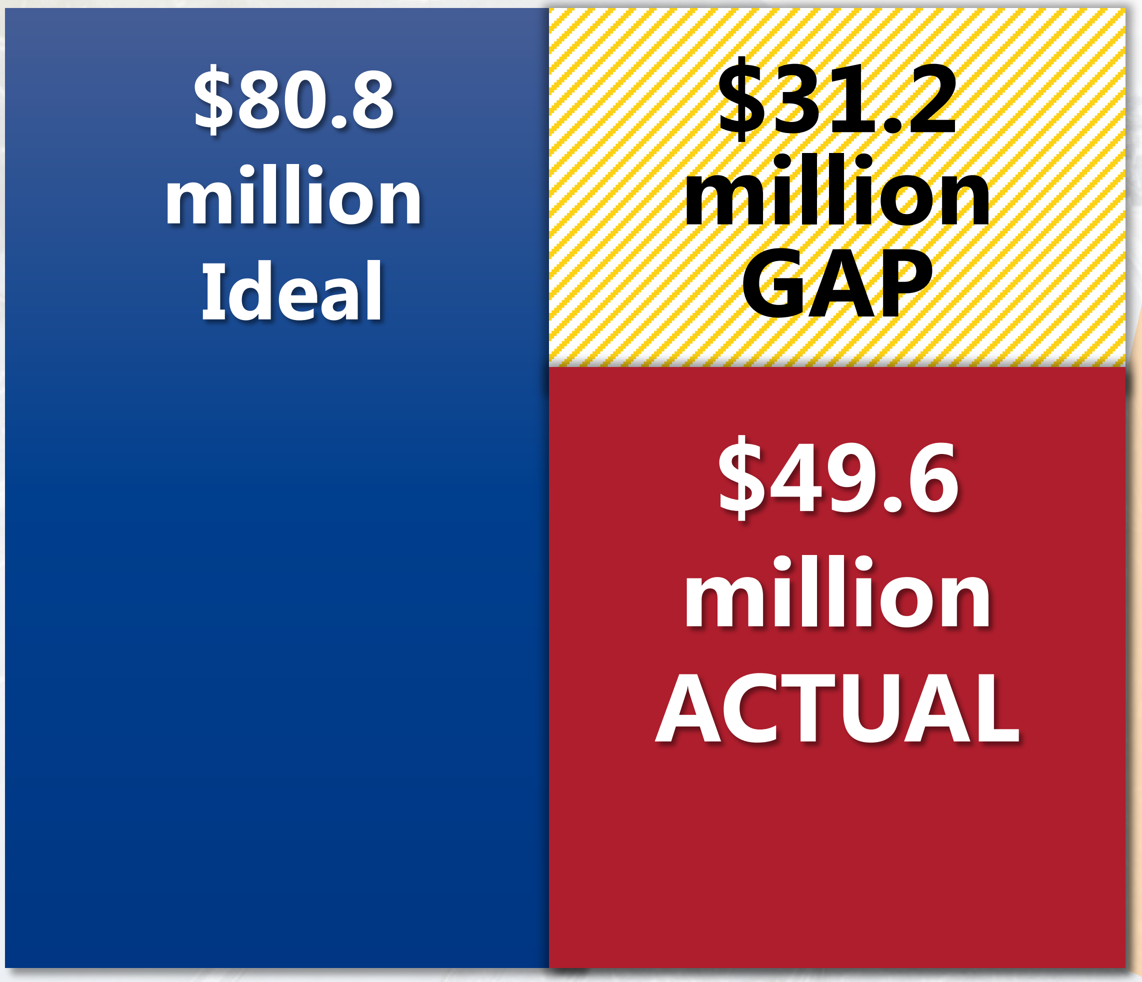


2013 Operations and Maintenance Costs



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

Source: FY2013-FY2017 State Transportation Improvement Program, ADOT, retrieved September 2013.

Operations and Maintenance Costs with New Corridors

$80.8 million

Existing System

2013

$91.6 million

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

by 2025

Total Operations and Maintenance thru 2040

$2.4 billion

“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

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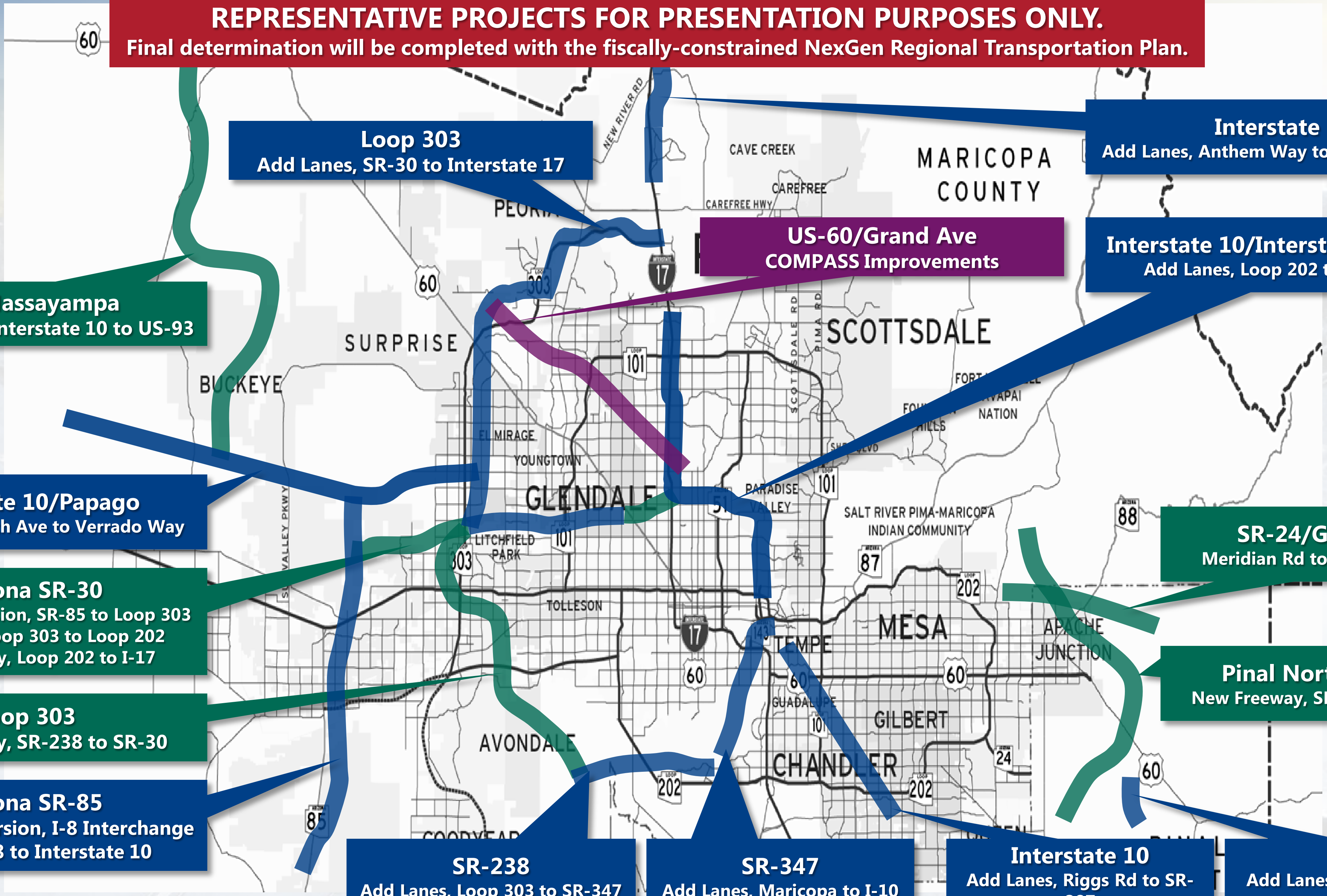
REPRESENTATIVE PROJECTS FOR PRESENTATION PURPOSES ONLY.

Final determination will be completed with the fiscally-constrained NexGen Regional Transportation Plan.



Interstate 17
Add Lanes, Anthem Way to Yavapai County

Loop 303
Add Lanes, SR-30 to Interstate 17

US-60/Grand Ave
COMPASS Improvements

Interstate 10/Interstate 17 Spine
Add Lanes, Loop 202 to Loop 101

I-11/Hassayampa
New Freeway, Interstate 10 to US-93

Interstate 10/Papago
Add Lanes, 459th Ave to Verrado Way

SR-24/Gateway
Meridian Rd to US-60/SR-79

Arizona SR-30
Freeway Conversion, SR-85 to Loop 303
Add Lanes, Loop 303 to Loop 202
New Freeway, Loop 202 to I-17

Pinal North-South
New Freeway, SR-287 to US-60

Loop 303
New Freeway, SR-238 to SR-30

Arizona SR-85
Freeway Conversion, I-8 Interchange
Interstate 8 to Interstate 10

SR-238
Add Lanes, Loop 303 to SR-347

SR-347
Add Lanes, Maricopa to I-10

Interstate 10
Add Lanes, Riggs Rd to SR-387

SR-79
Add Lanes, SR-79B (South) to Hunt Hwy

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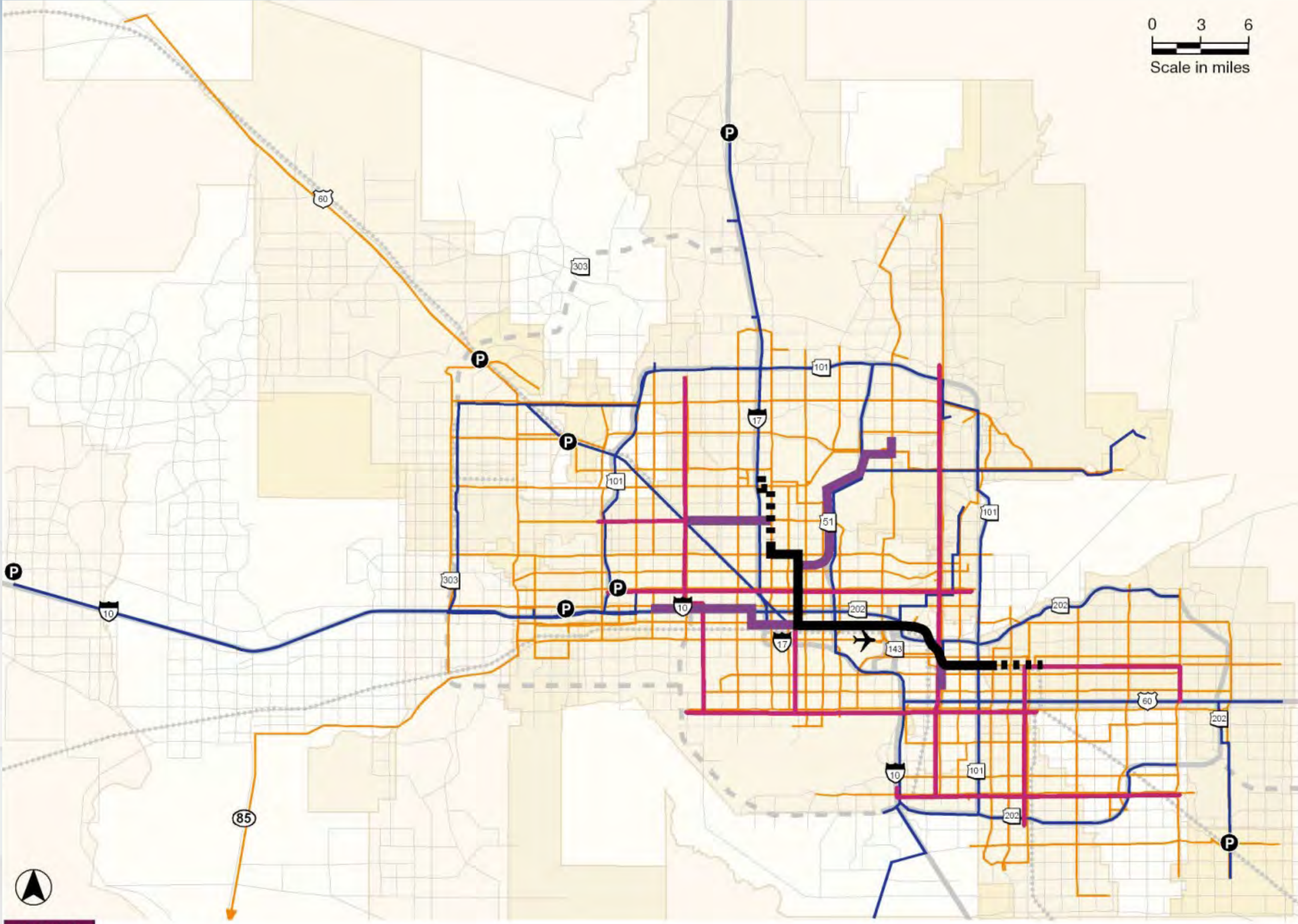
Scenario 1

- 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.



LEGEND

Existing and Planned Transit Service and Facilities
- Light Rail Line
- Light Rail Extension
- Future High Capacity Transit Corridors

Freeways/Expressways
- Existing
- Planned

- Express Bus
- Regional Supergrid Bus
- Arterial Bus Rapid Transit (New or Expanded Service Level)
- New or Expanded Park-and-Ride Facility

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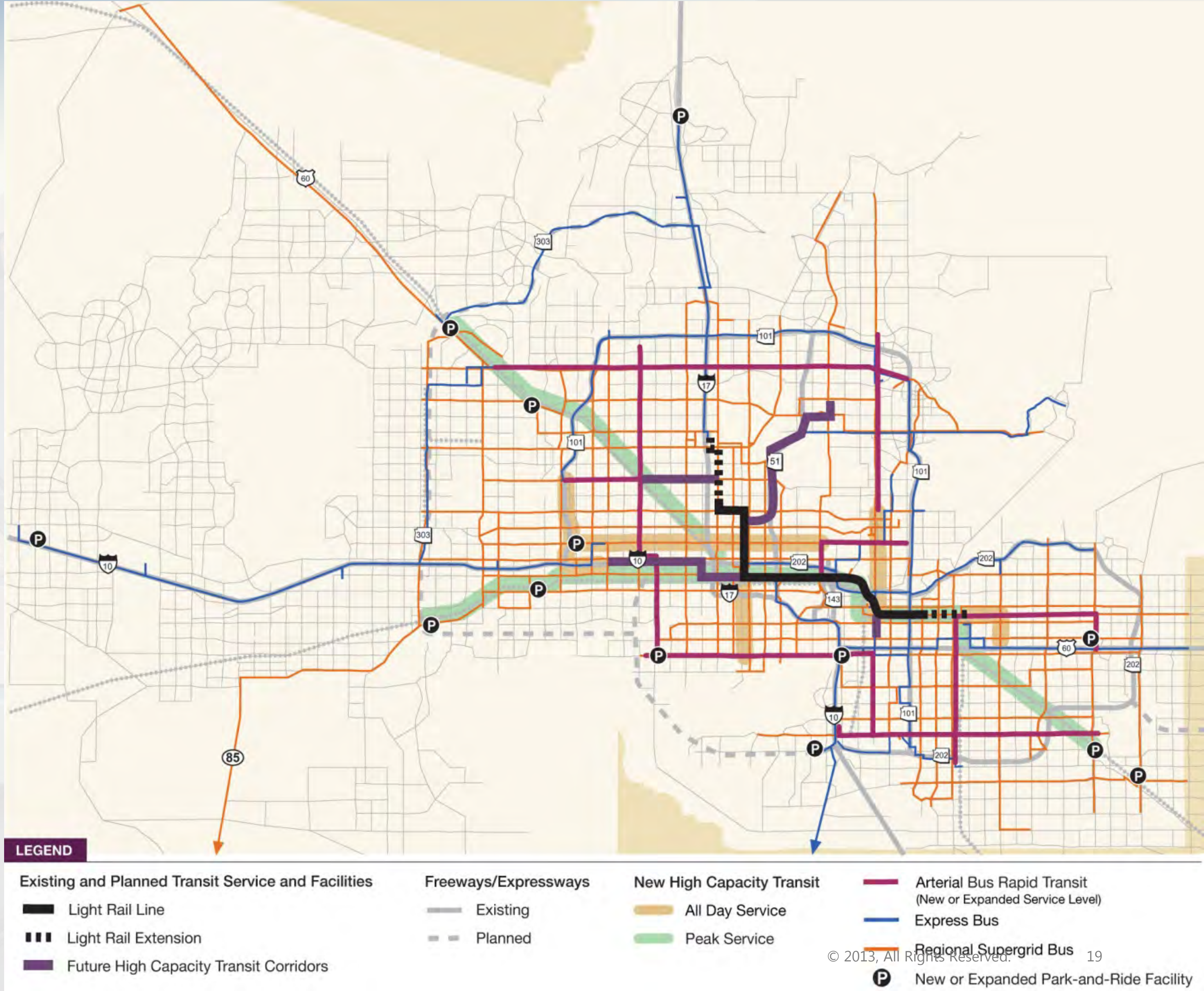
Scenario 2

- 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.



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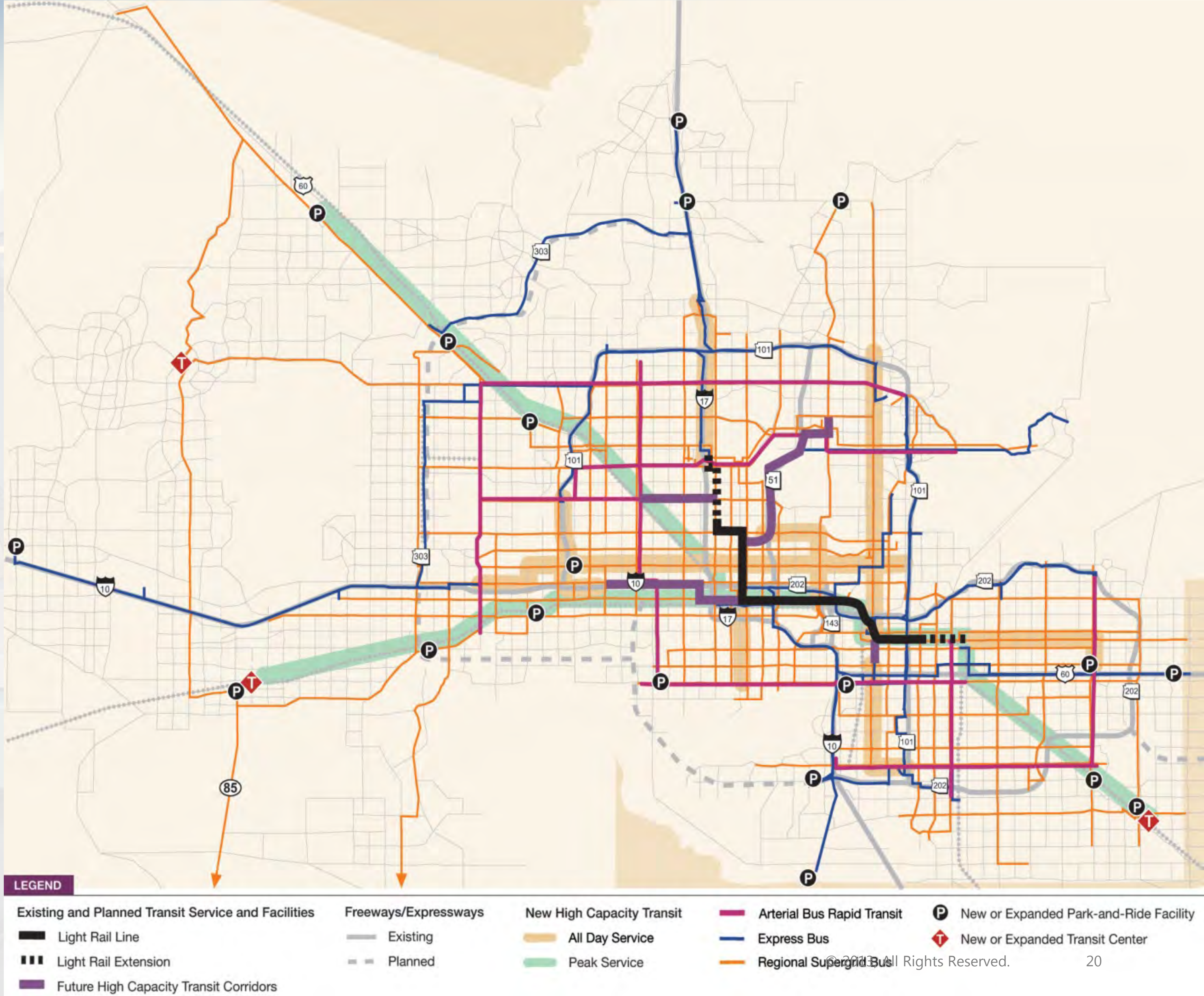
Scenario 3

- 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.



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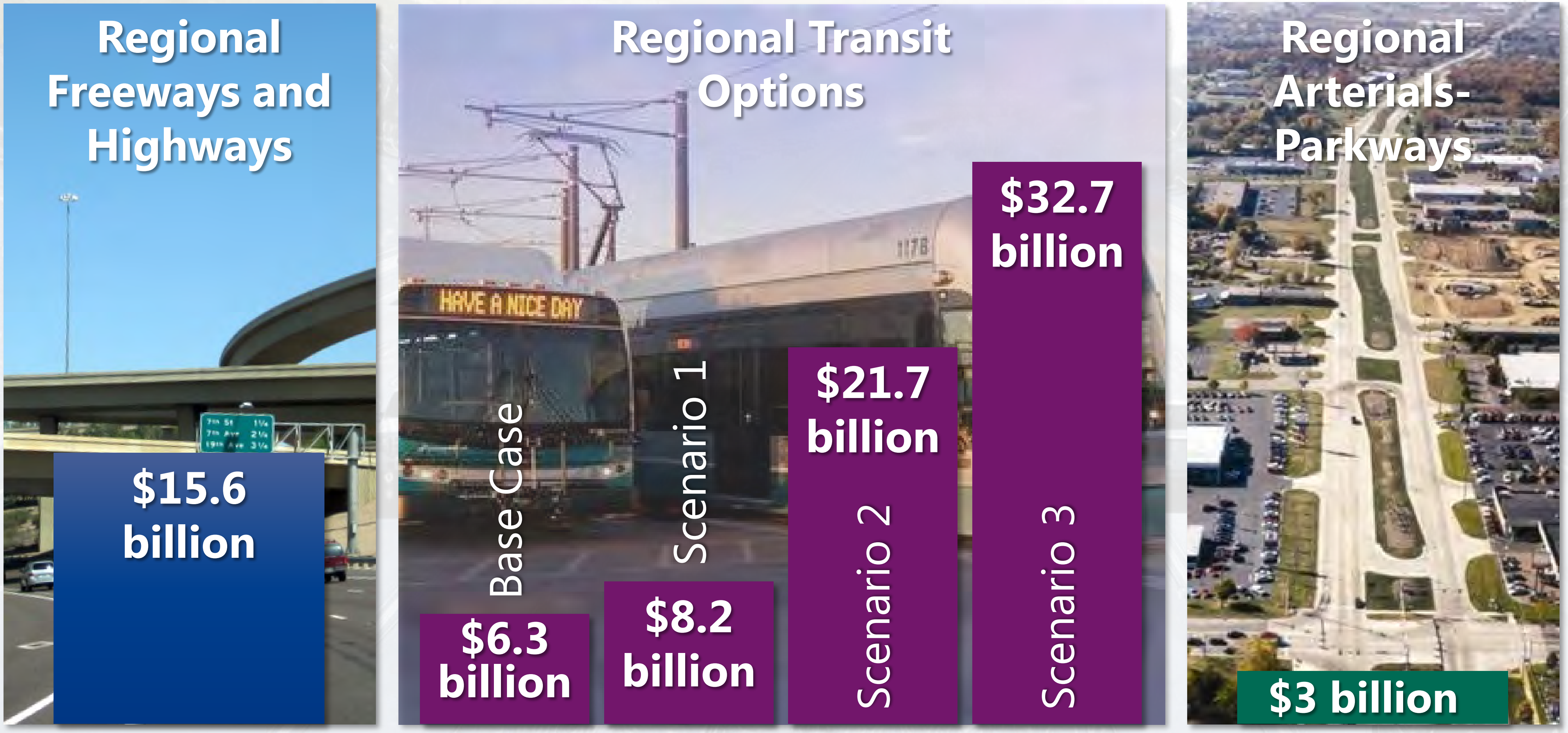
Needs Summary



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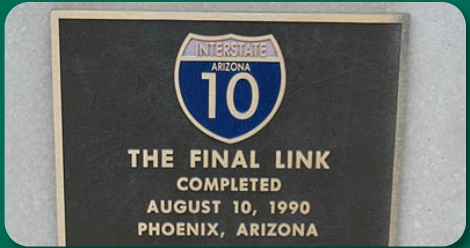
Potential Highway Revenue Sources

Projected 2025 to 2040



Federal Highway Funds

- MAG STP and MAG CMAQ

$200 million

ADOT Funds

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

$5.7 billion

Regional Area Roadway Fund (RARF)

- Half Cent Sales Tax

$7.8 billion

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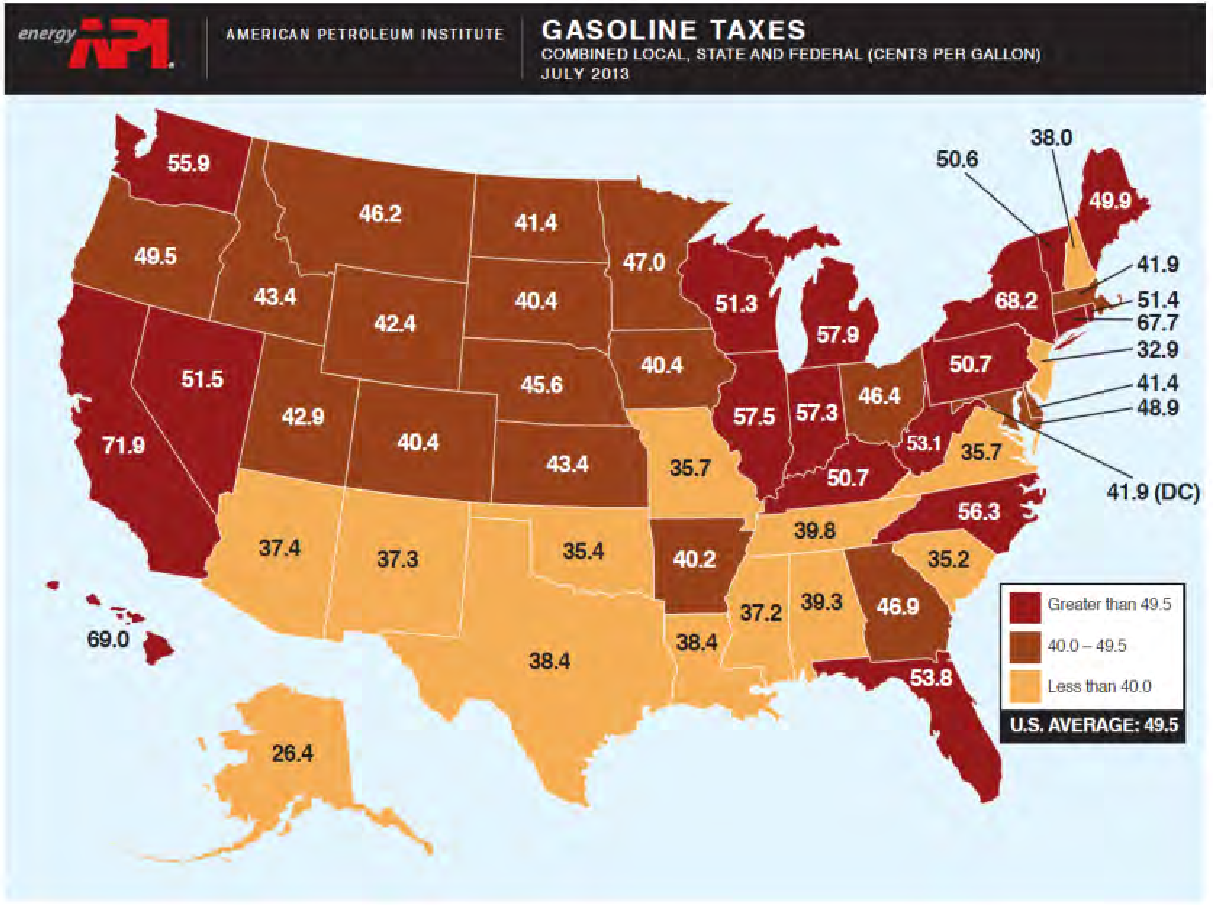
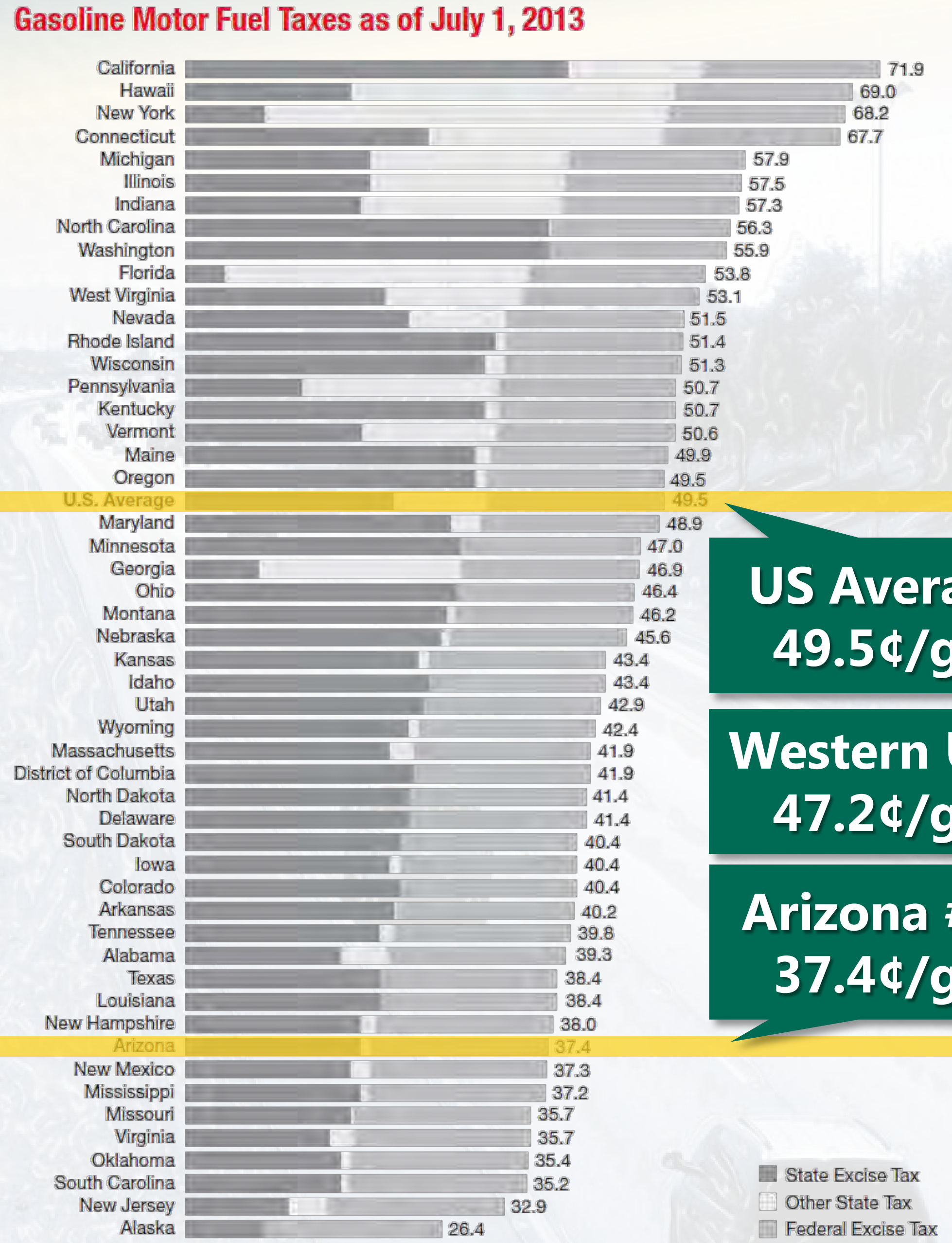
Source: MAG 2035 Regional Transportation Plan (2013 Draft), September 2013.

Federal and State Gas Rates





US Average 49.5¢/gal

Western USA 47.2¢/gal

Arizona #43 37.4¢/gal

Source: American Petroleum Institute, July 2013.

Major Components and Revenue Categories

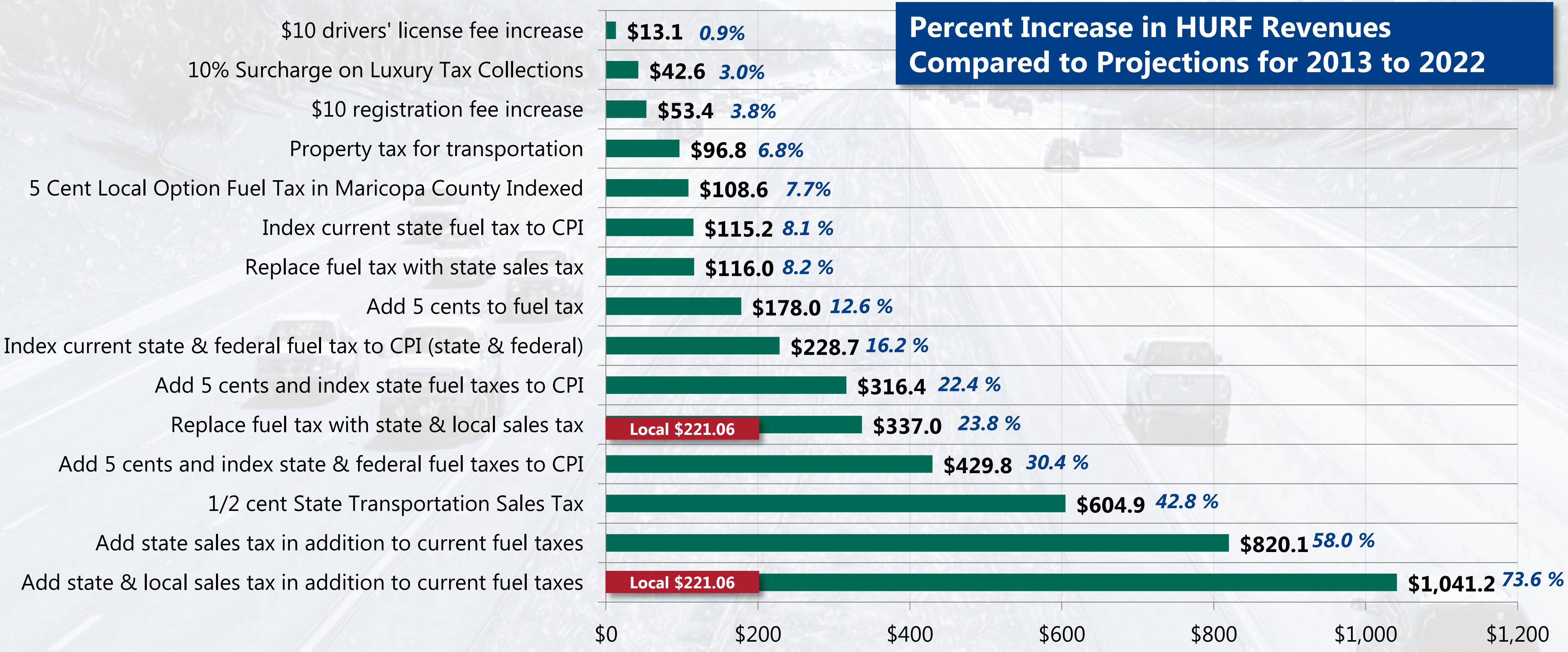
- Operations and Maintenance funding for transit, streets and highways – permanent and sustainable.
- Capital program – project specific and limited term for the tax (20-year sunset?).
- Tools – redevelopment and value capture.

Sales Tax Options
- AZ Transportation Sales Tax
- Fuel Sales Tax

Fuel Tax Options
- Increase fuel tax
- Index to inflation
- County option

Other Options
- Property tax
- Driver's license fee Registration fee
- Sin tax

Annual Average Net New Statewide Revenue
2013 to 2022 (millions of dollars)



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Source: Maricopa Association of Governments, August 2013.

Phased Fuel Tax Increase

- 7.5-cents to 10-cents per gallon increase to meet average of Western states.
- 10-cents, phased in at 2-cents per year for five years, indexed for inflation.
  - Average annual increase of **$434 million** over next **10 years**, increasing HURF by **30 percent**.
- Total new revenues: **$4.3 billion** (2013 to 2022)
  - ADOT: $2.2 billion
  - Cities: $1.3 billion
  - Counties: $0.8 billion
- Provides short-term funding to support road maintenance needs while alternatives to fuel taxes explored.

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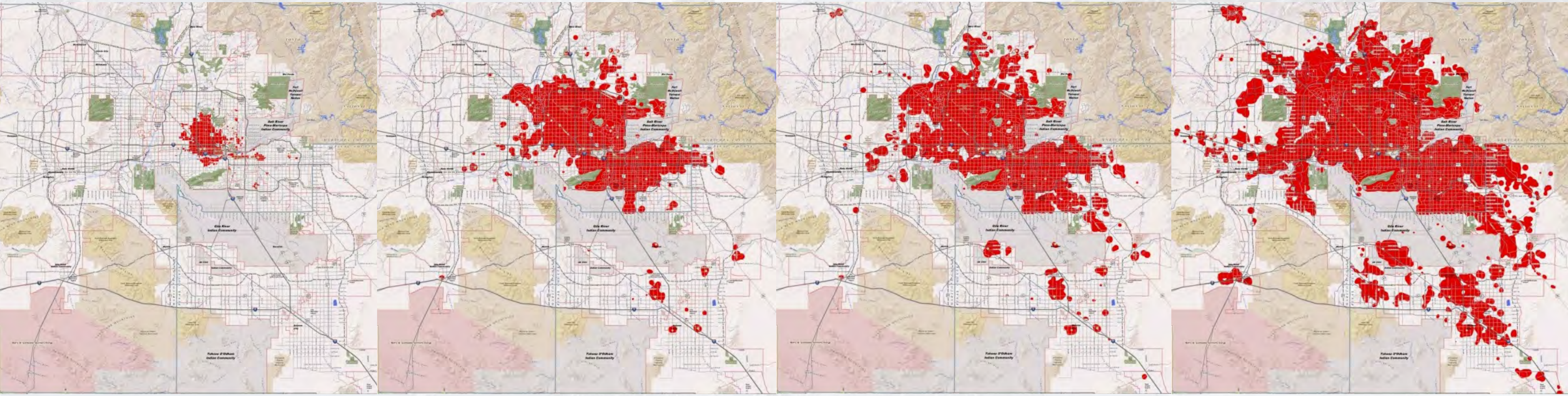
Source: Maricopa Association of Governments, September 2013.

What is the Big Picture?

1955	2000	2010	2040
551,000	3.25 Million	4.2 Million	7.1 Million



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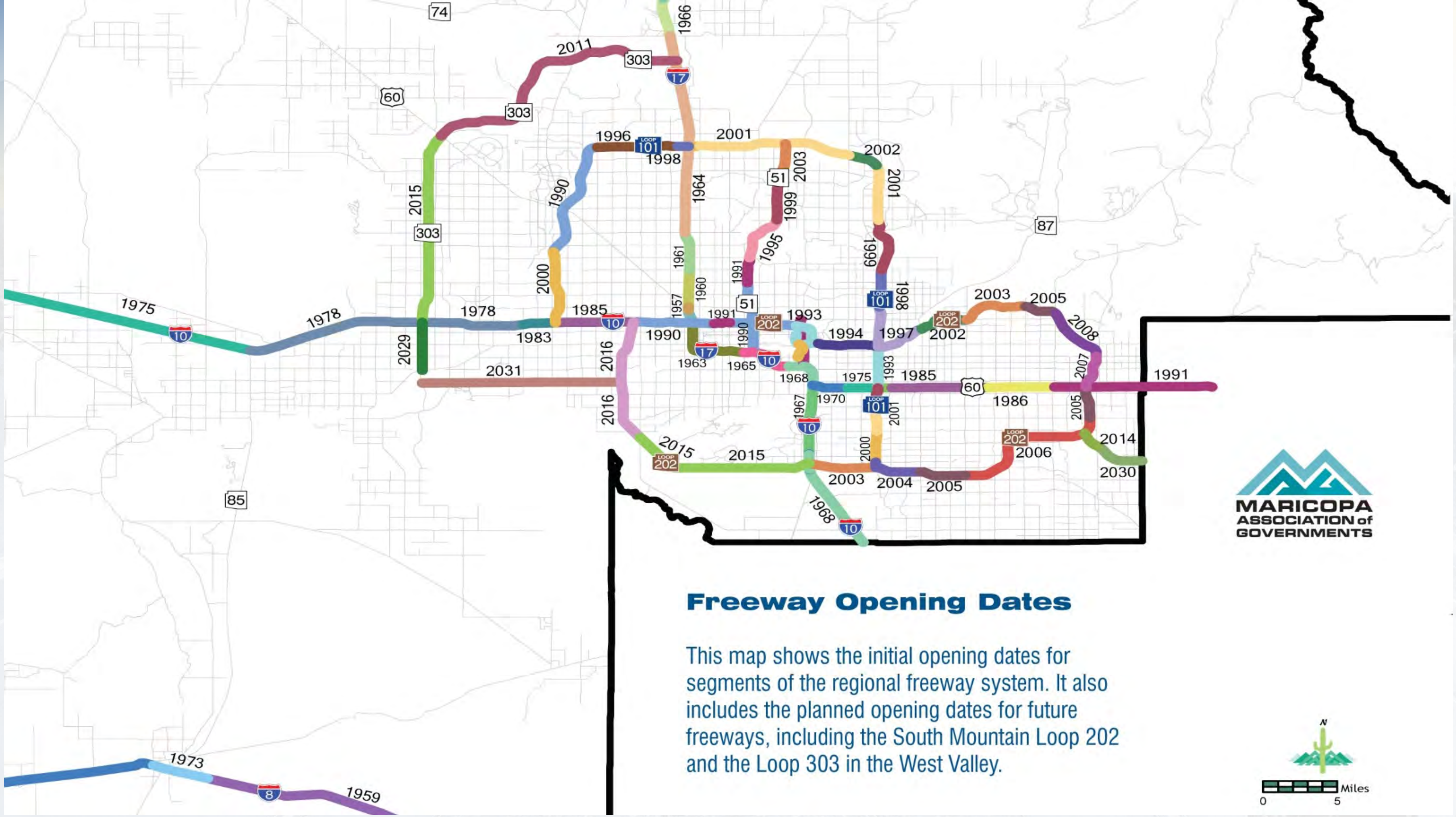


Freeway Opening Dates

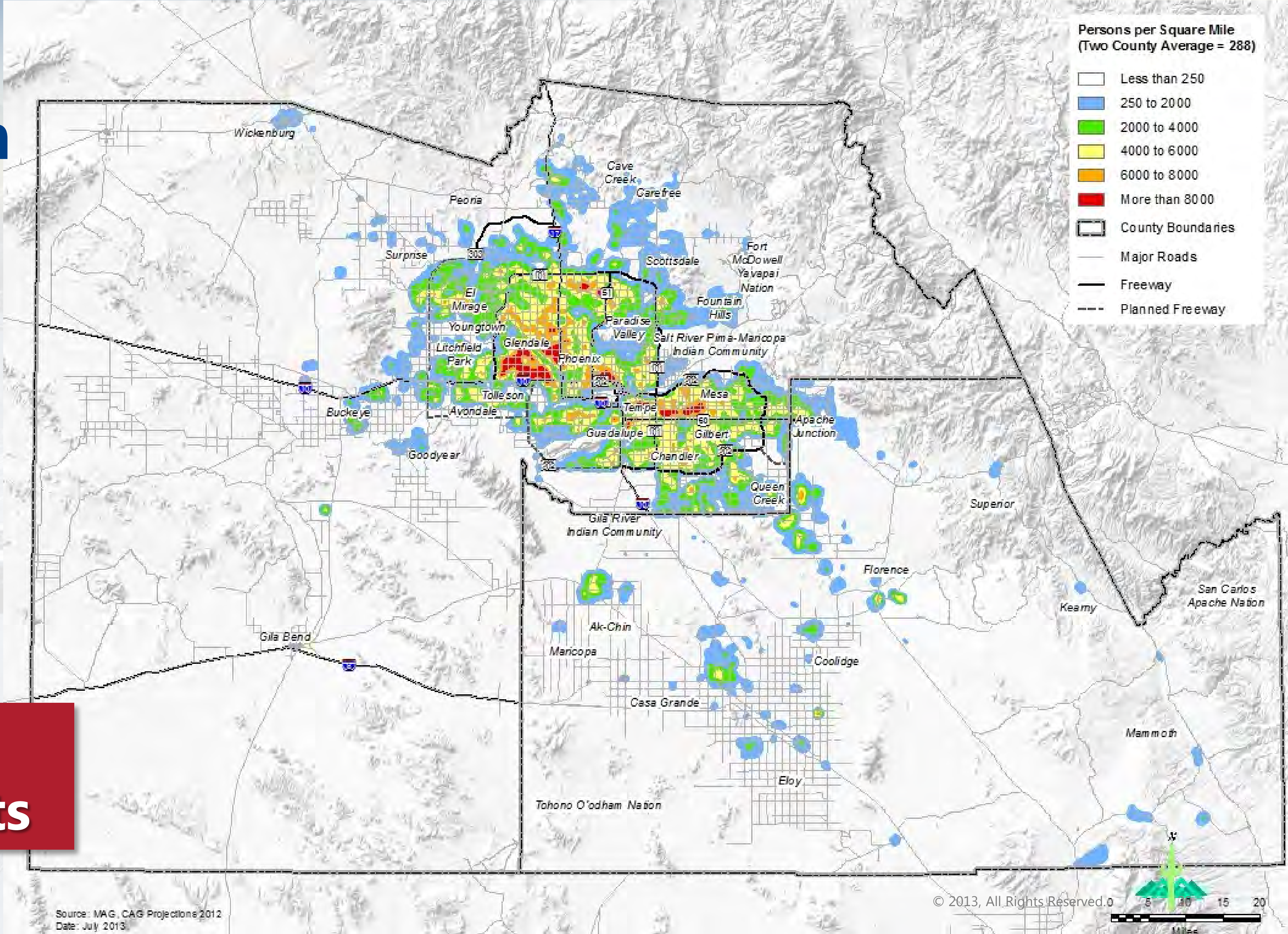
This map shows the initial opening dates for segments of the regional freeway system. It also includes the planned opening dates for future freeways, including the South Mountain Loop 202 and the Loop 303 in the West Valley.

Population 2012

Phoenix MSA
4.3 million
(66% of AZ)

Phoenix + Tucson
5.3 million
(81% of AZ)

82% of AZ Tax receipts



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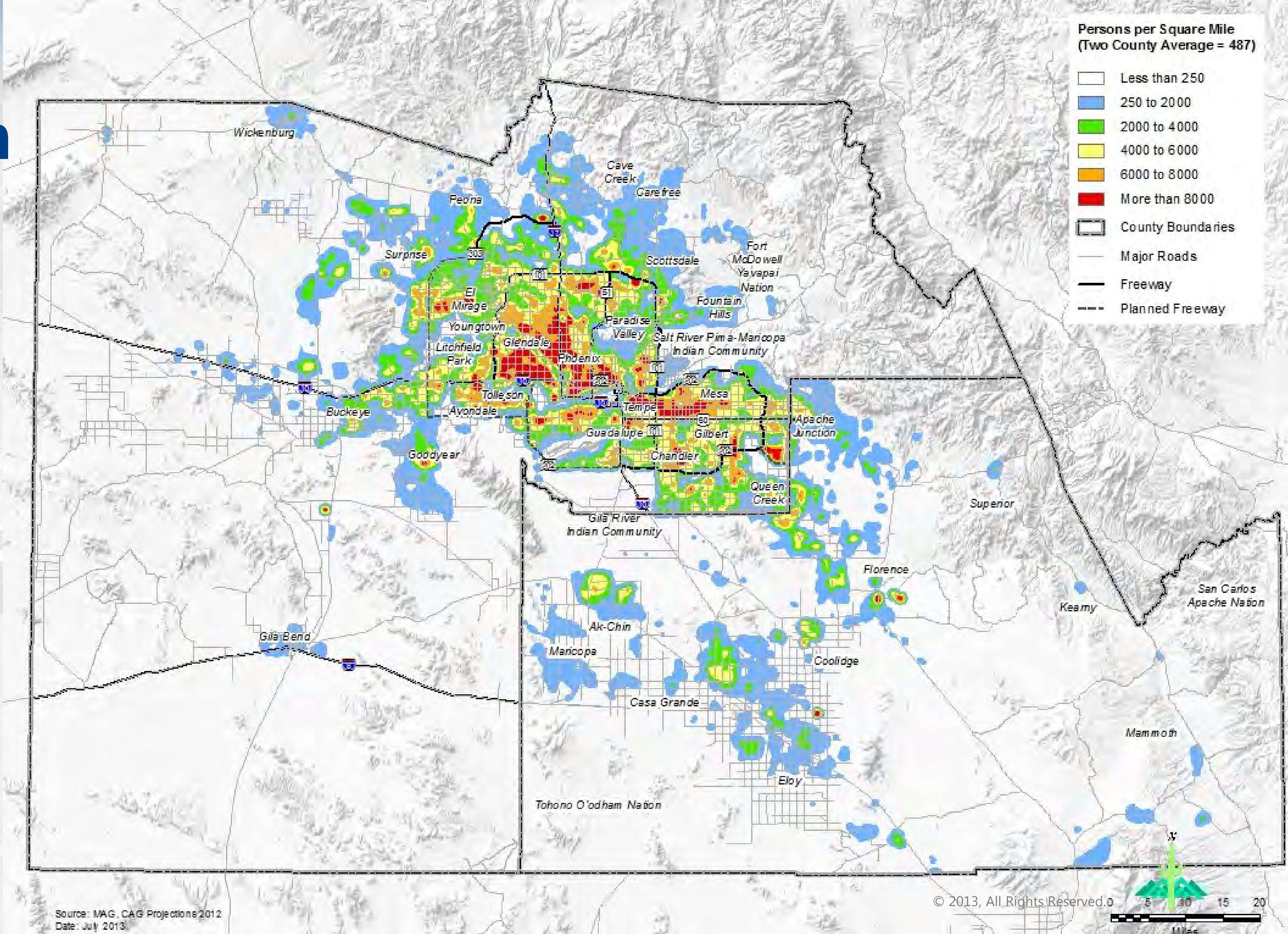
Population 2040

Phoenix MSA
7.1 million
(70% of AZ)

Phoenix + Tucson
8.4 million
(83% of AZ)



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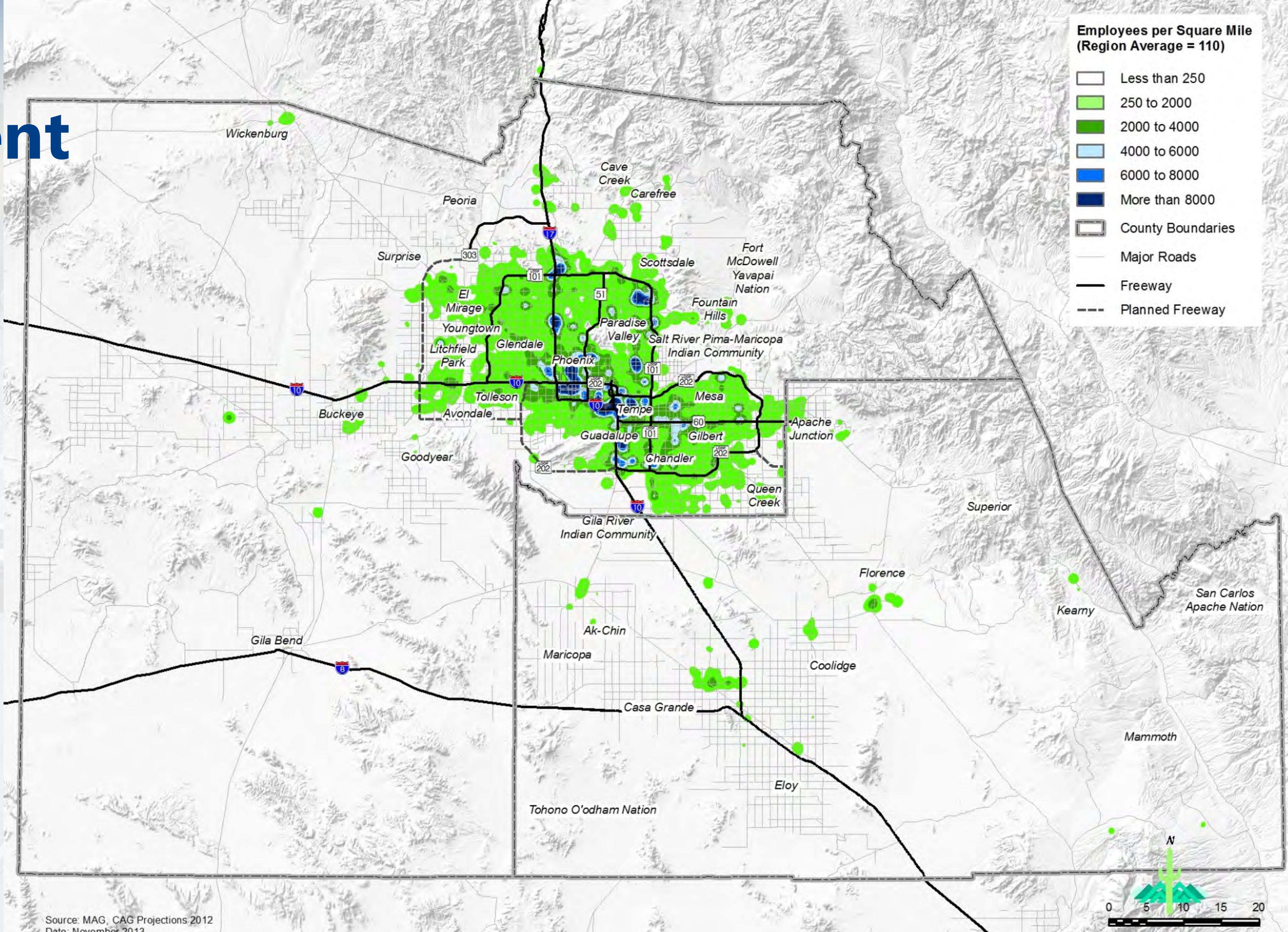
Employment 2012

Phoenix MSA
1.8 million
(71% of AZ)

Phoenix + Tucson
2.2 million
(86% of AZ)



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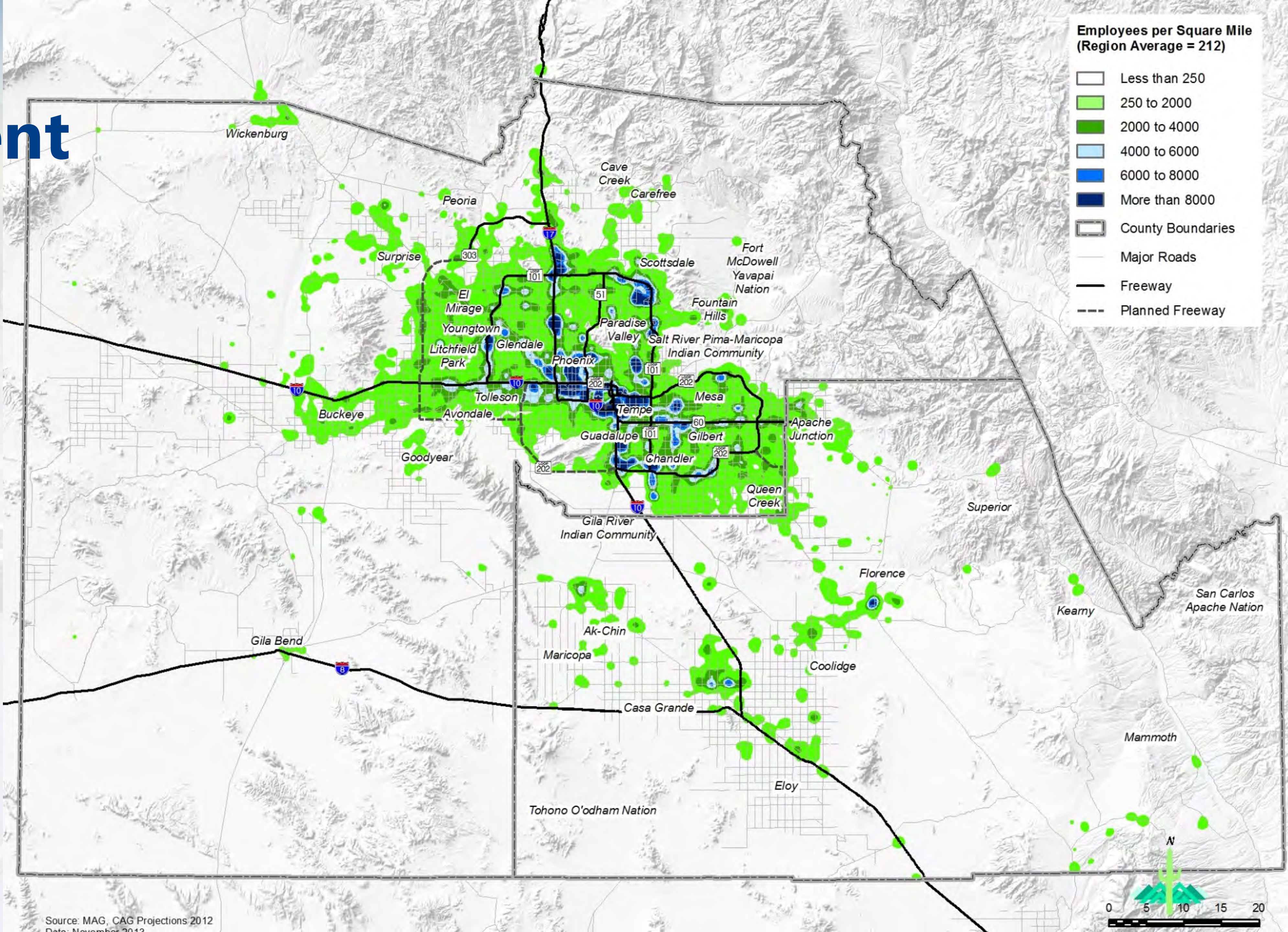
Employment 2040

Phoenix MSA
3.4 million
(75% of AZ)

Phoenix + Tucson
3.9 million
(88% of AZ)



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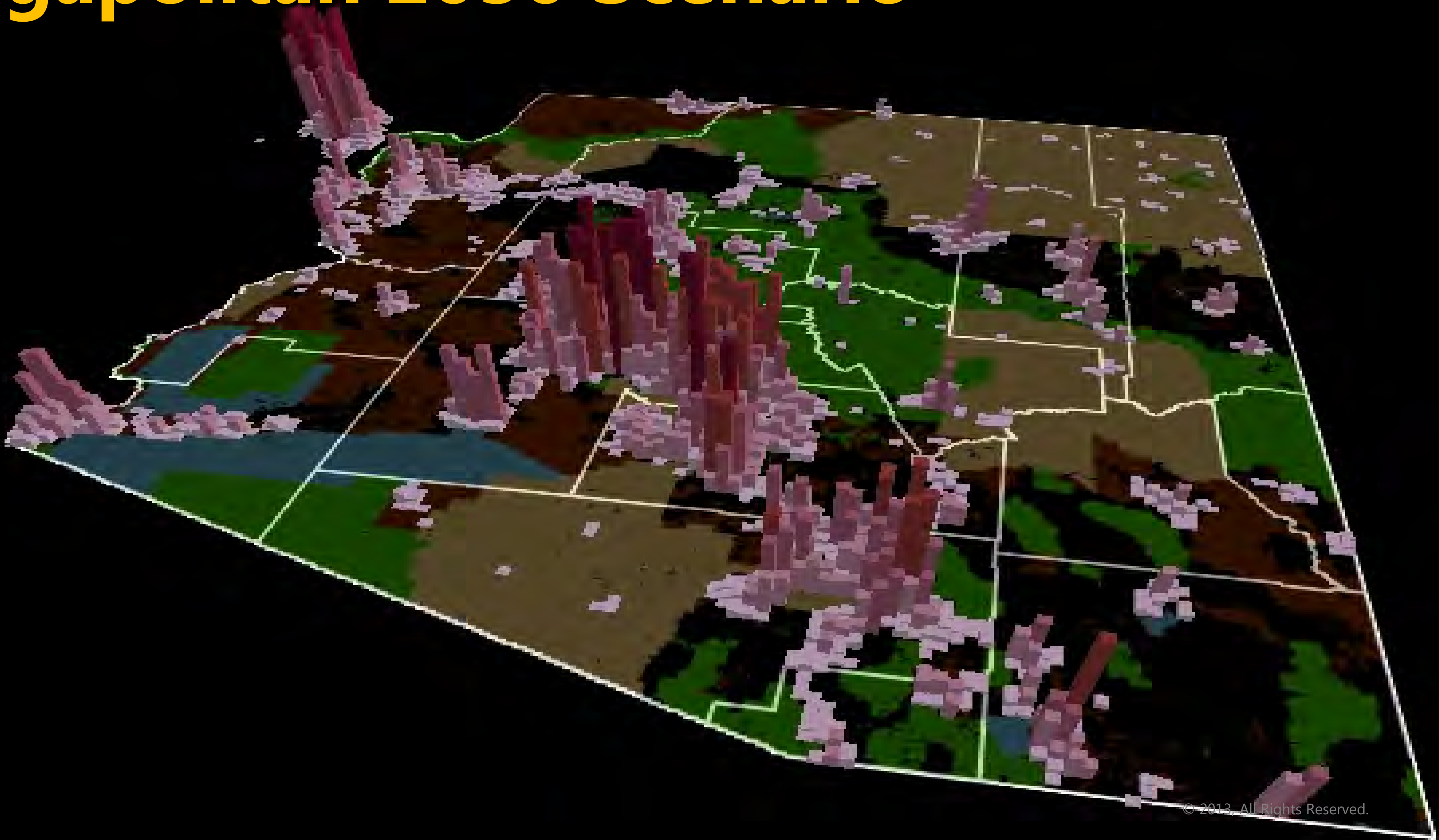
Megapolitan 2000

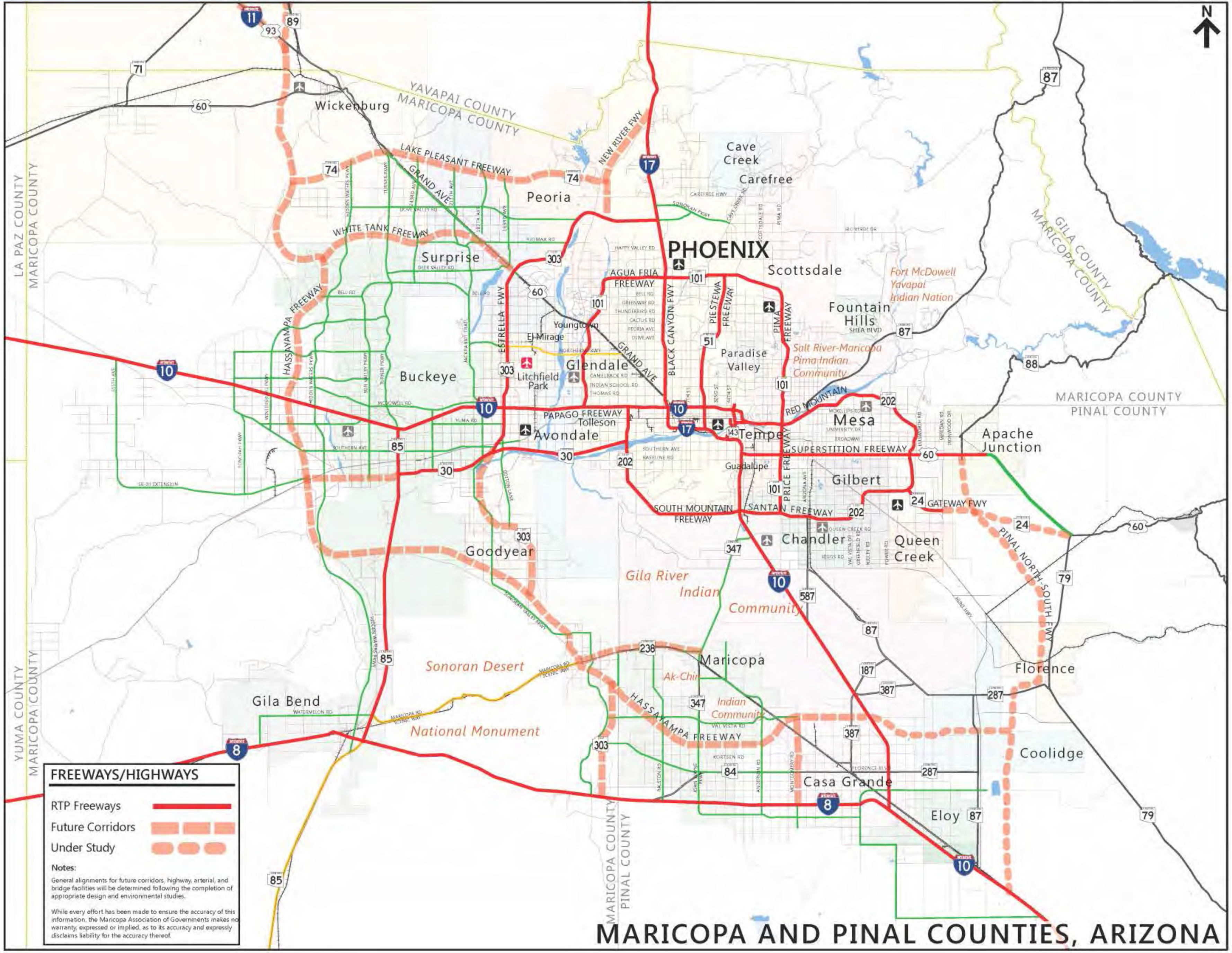
Megapolitan 2050 Scenario



Long Range Planning

Hassayampa and Hidden Valley Framework Studies

Highway and Parkways



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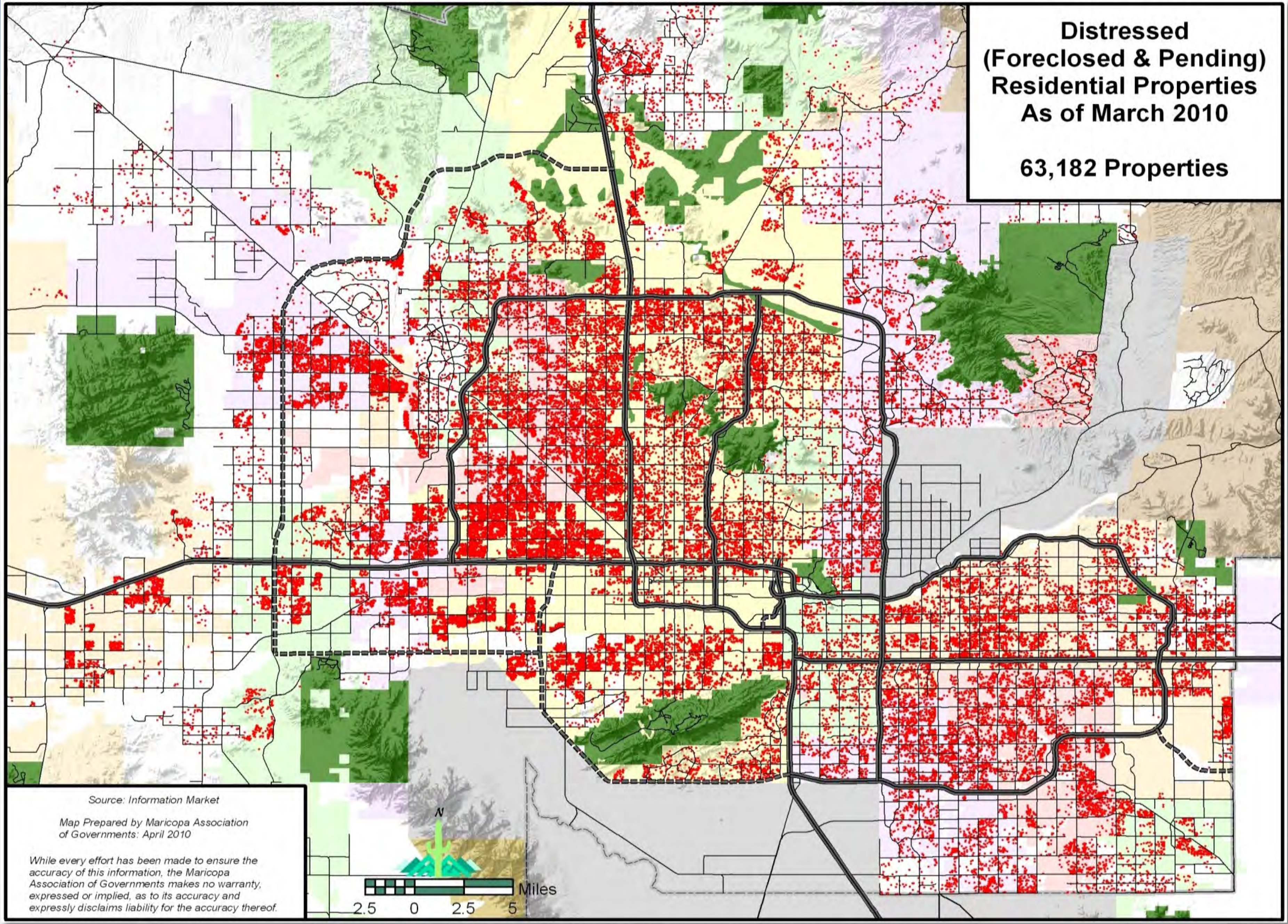

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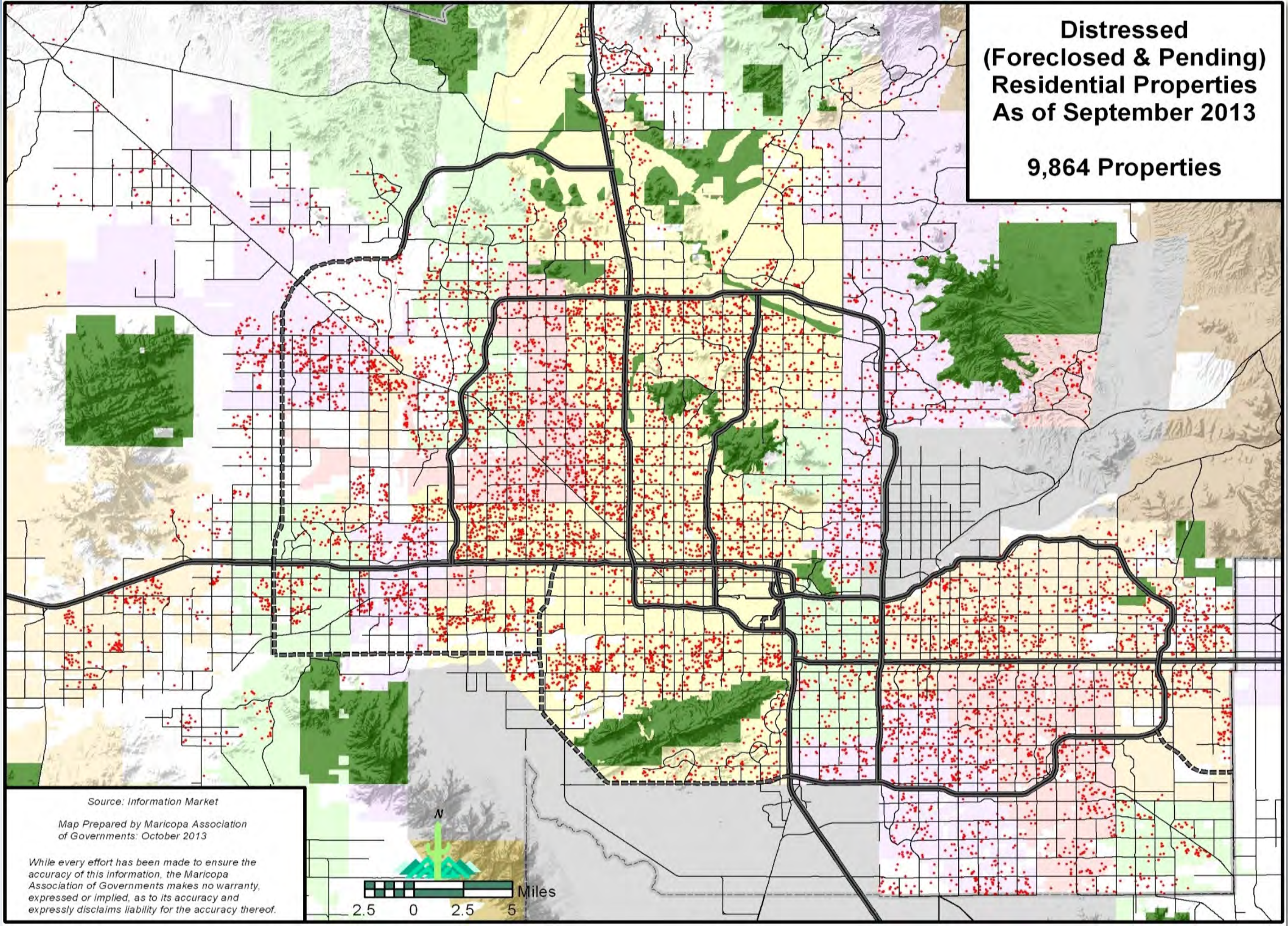

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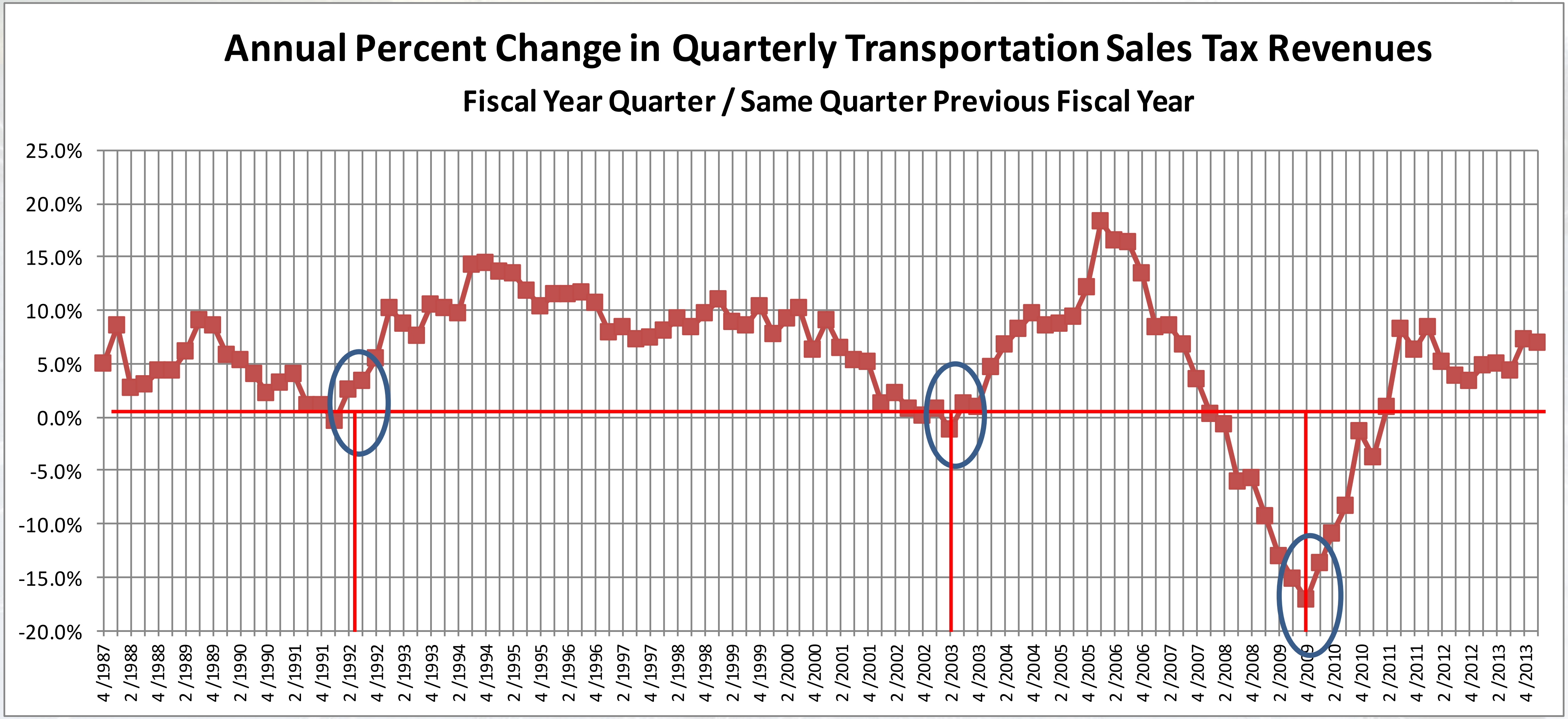
Impact of the Economy on Sales Tax Revenues



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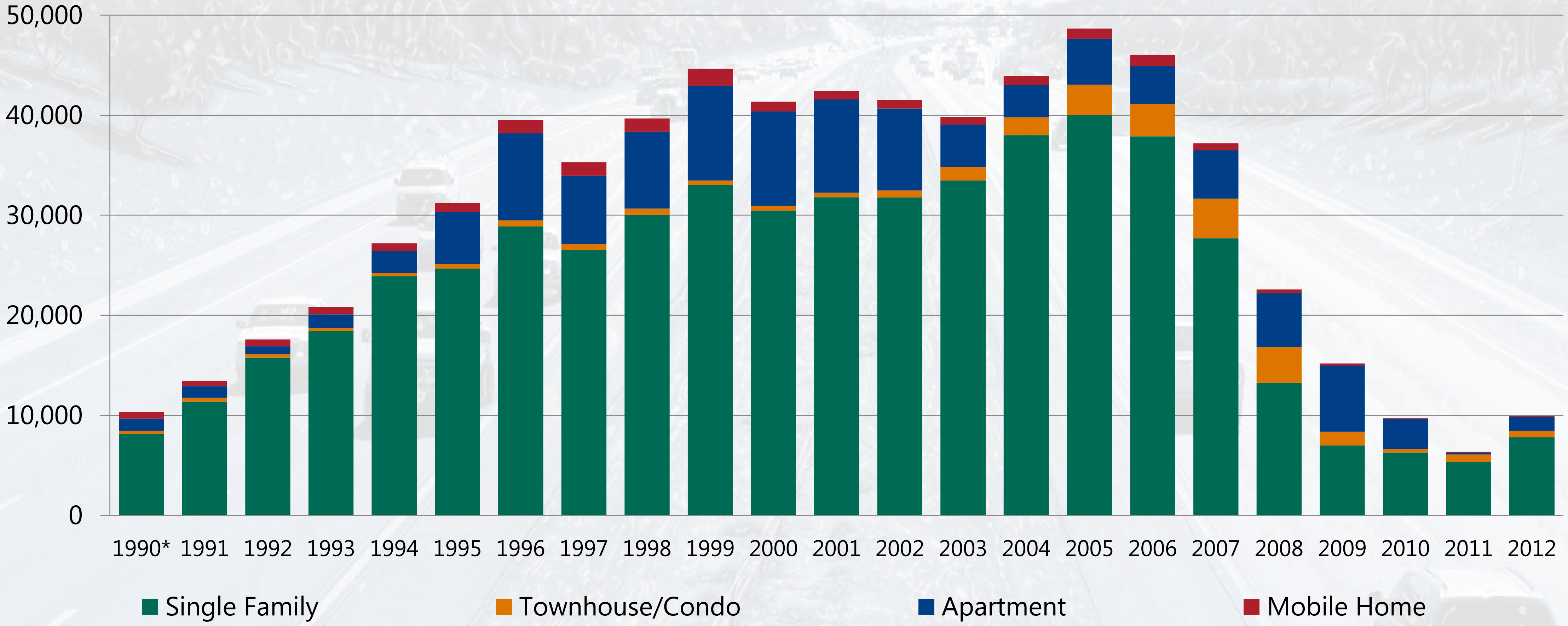
Residential Completions by Year and Unit Type



Source: MAG Analysis. *1990 Data is from April 1 to December 31.

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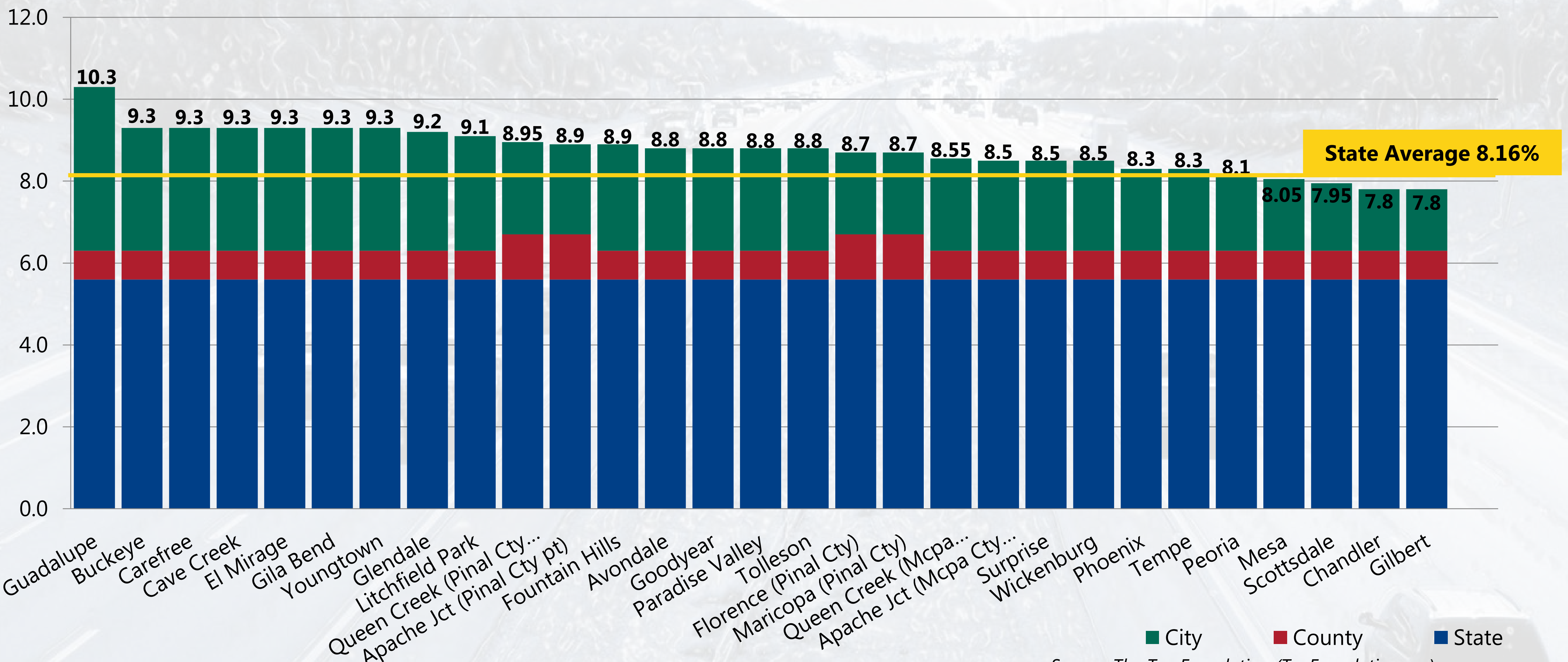
Combined (State, County, and Local) Sales Tax Rates for Cities within MAG Planning Area



Source: The Tax Foundation (TaxFoundation.org)

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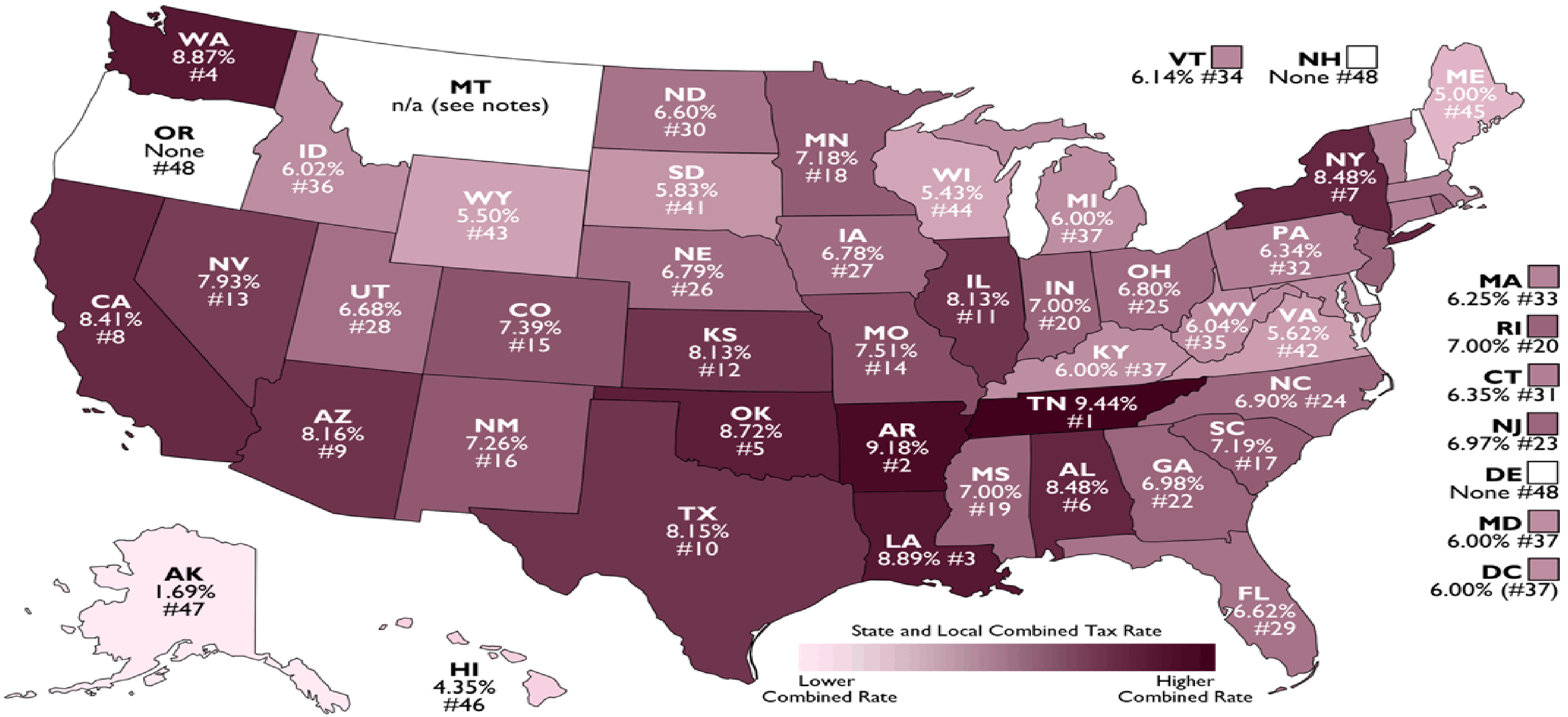
Combined State and Local Sales Tax Rates



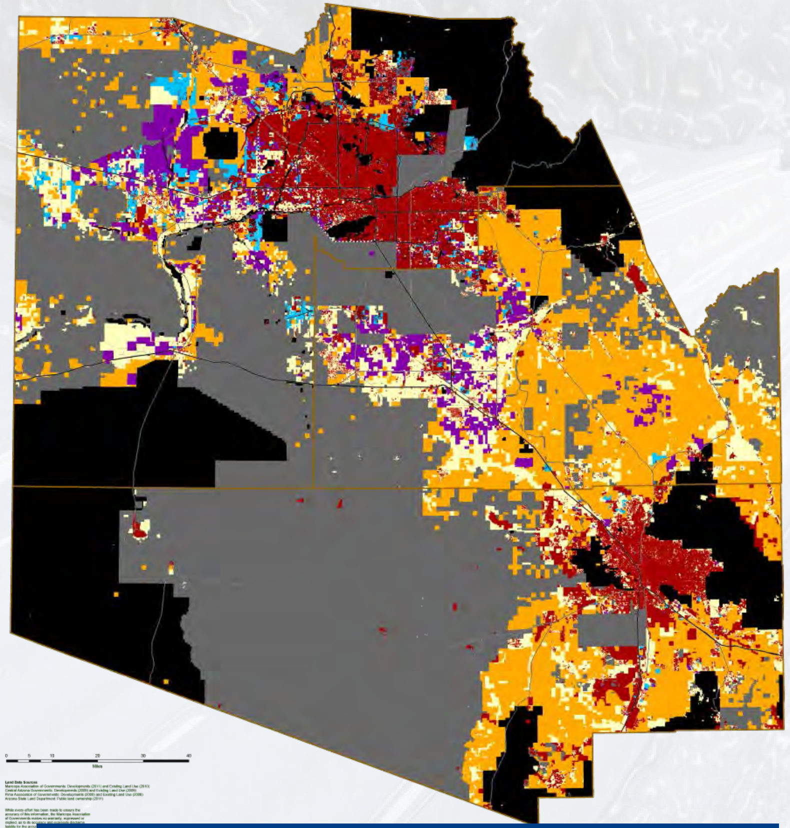
Sources: Sales Tax Clearinghouse; Tax Foundation calculations; state revenue department websites

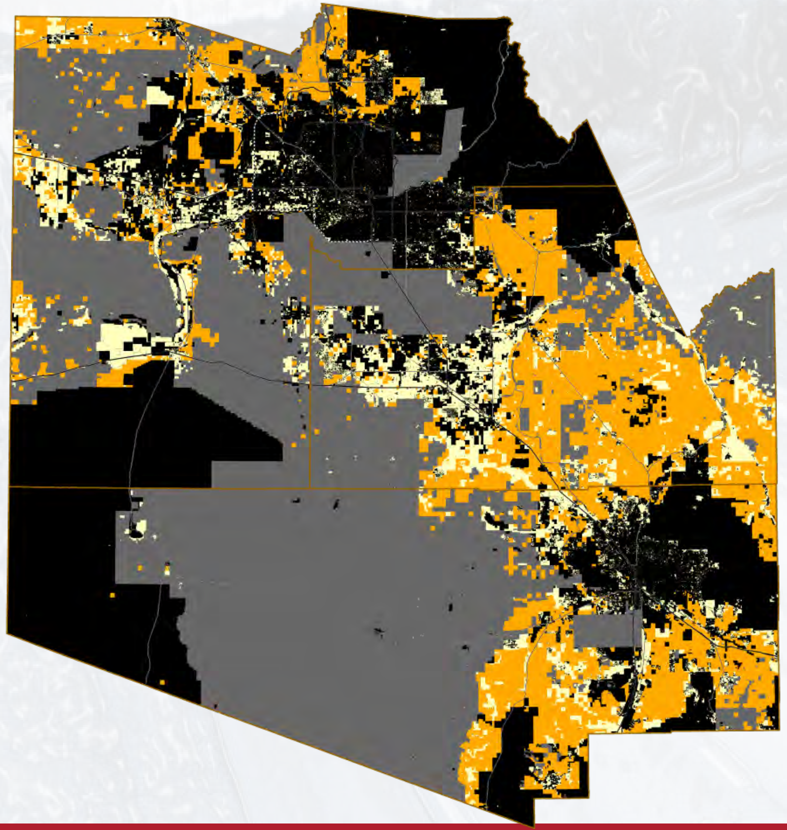
Notes: Three states levy mandatory, statewide, local add-on sales taxes at the state level: CA (1%), UT (1.25%), VA (1%). The sales taxes in Hawaii, New Mexico and South Dakota have broad bases that include many services. Due to data limitations, map does not include sales tax data for Montana. Some counties in New Jersey are not subject to statewide sales tax rates and collect a local rate of 3.5%.
Published August 26, 2013. Data updated July 1, 2013.

taxfoundation.org/maps

State Lands Will Guide Future Development

Land Development Status : Central Arizona





40% developable
26% remaining developable

State Land is
64% of remaining developable land

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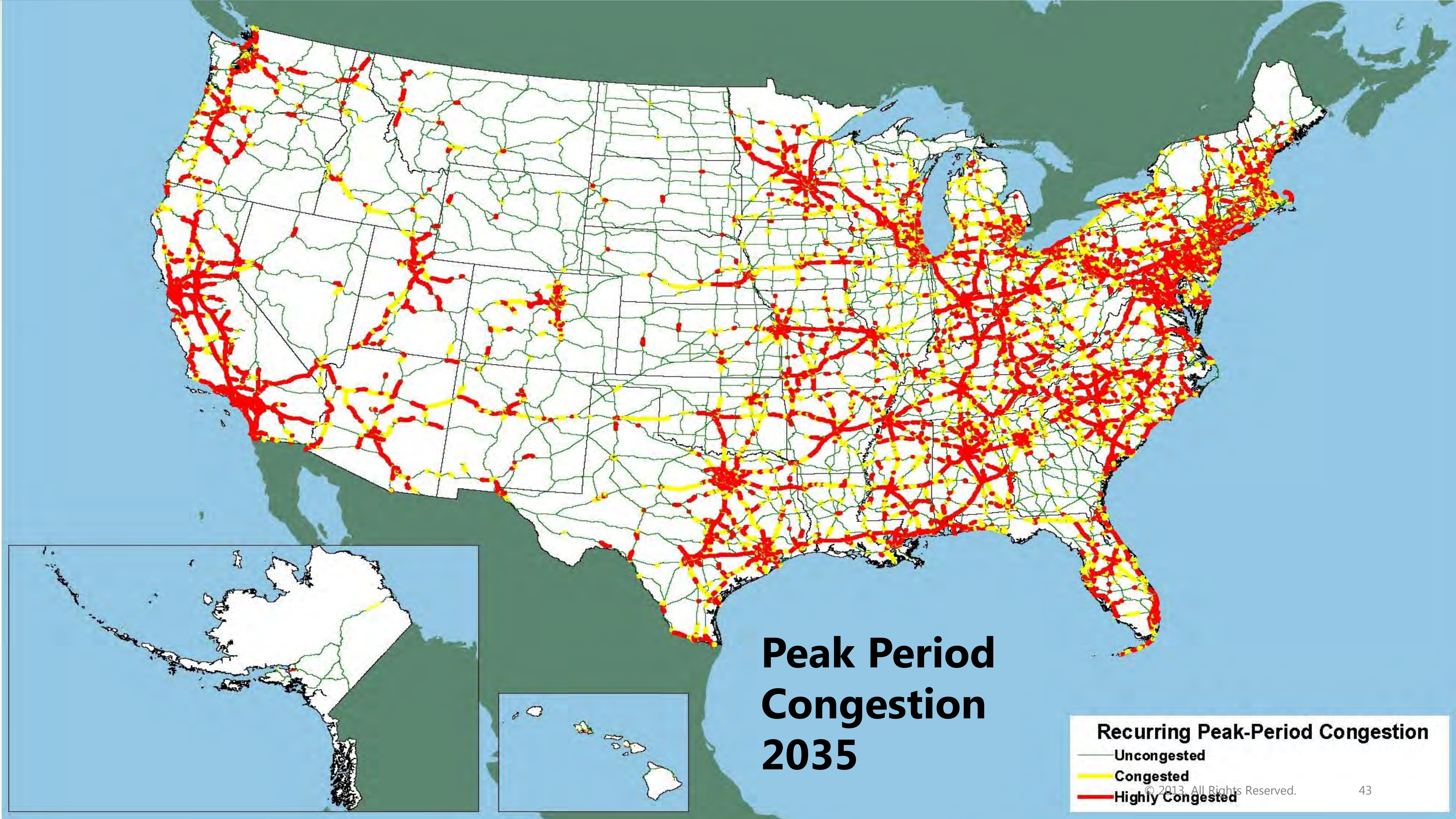

Peak Period Congestion 2035

Some Integration Movements

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America's Trade Corridor

Connecting Canada, the United States, and Mexico

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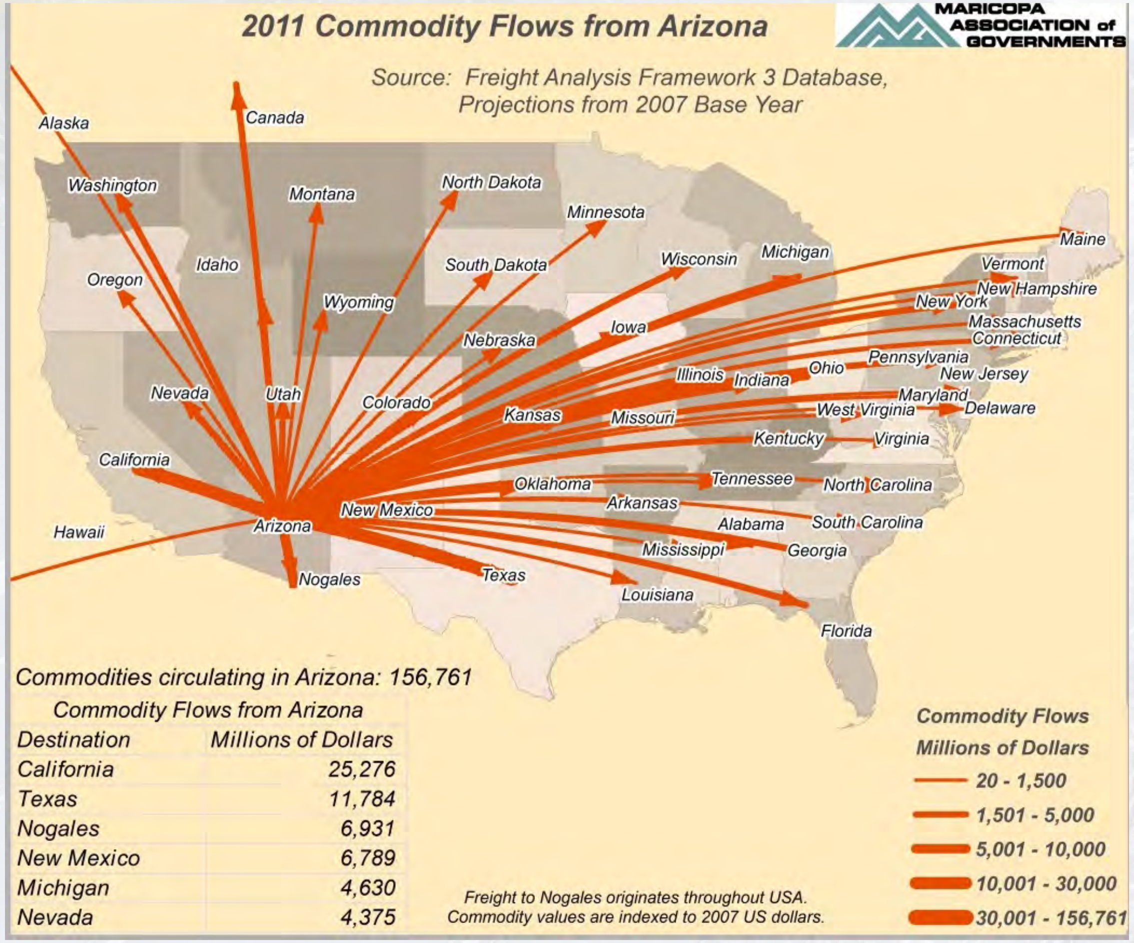
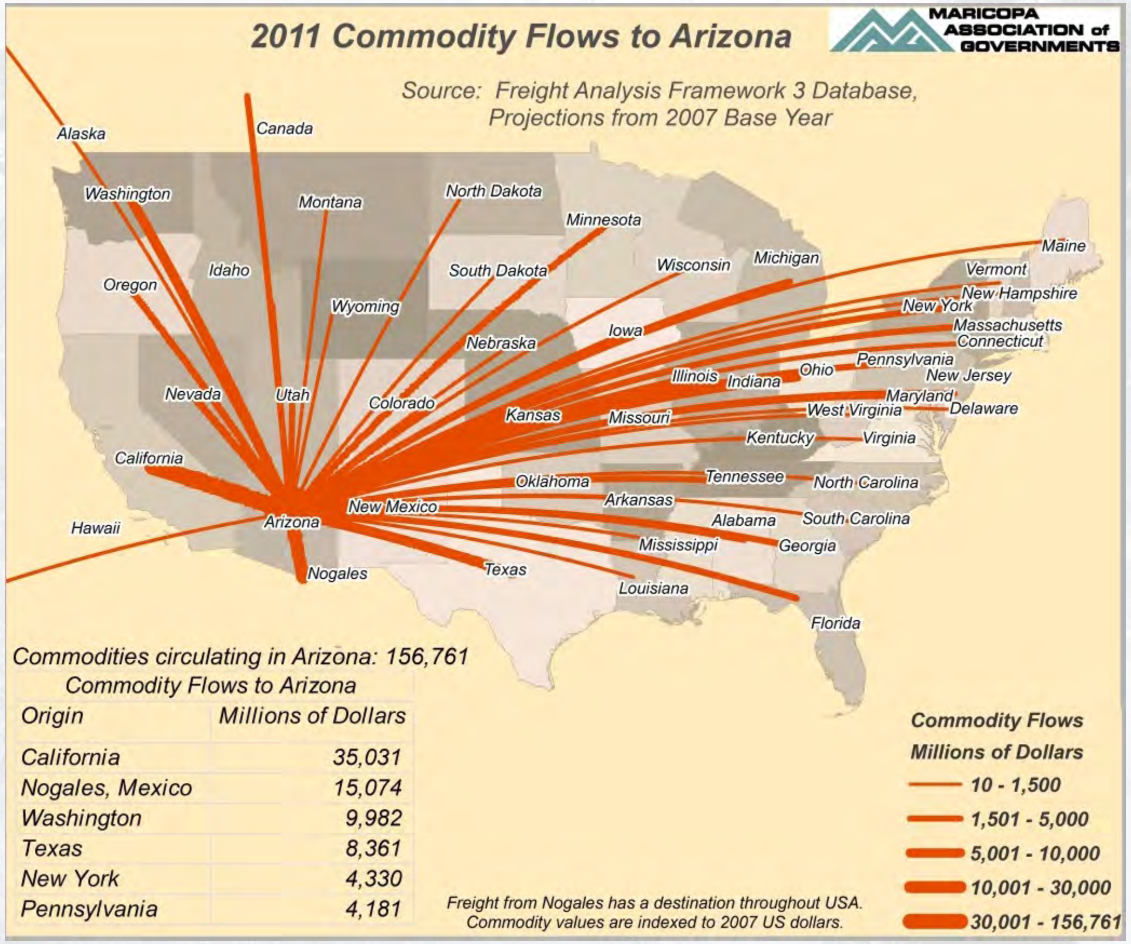
Commodity Flows to and From Arizona



Commodity Flows from Arizona

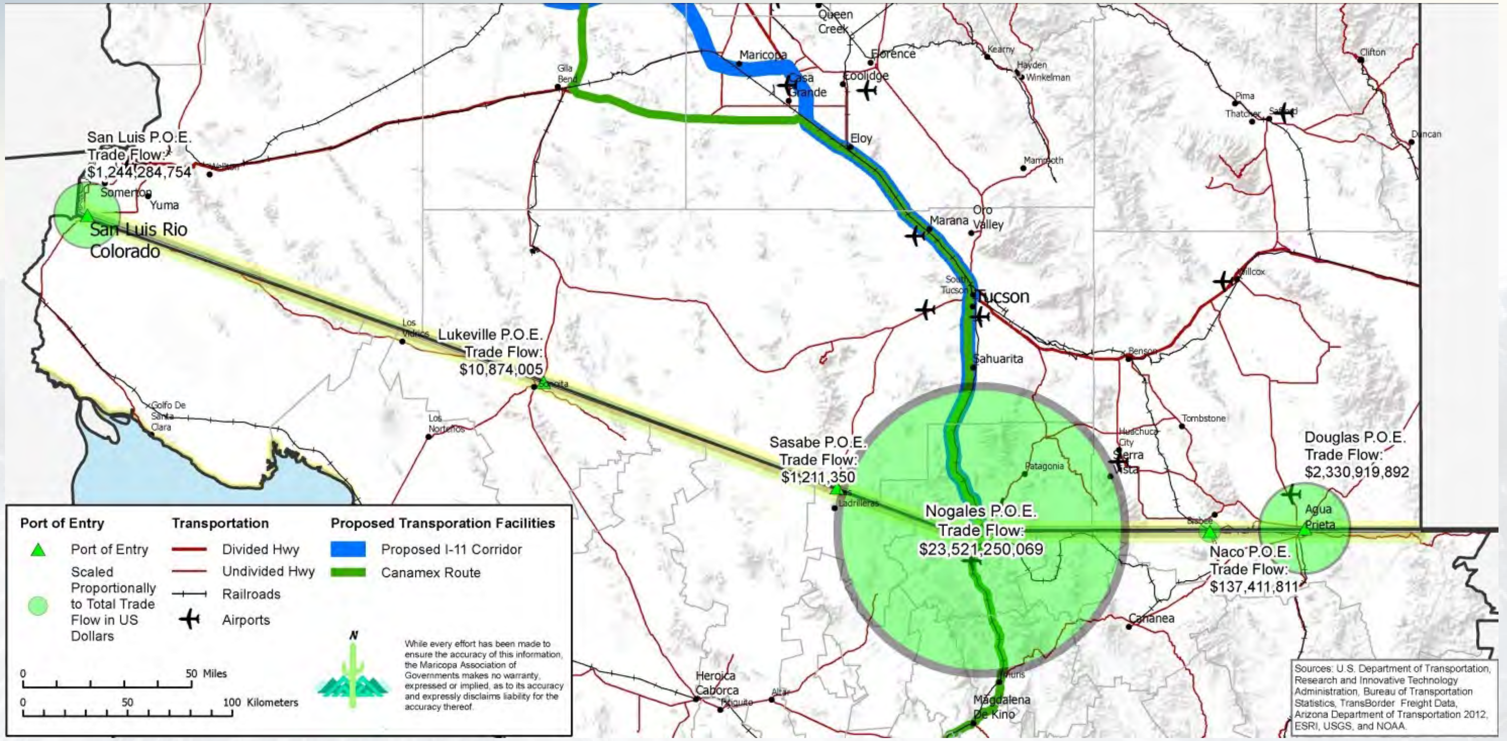
Destination	Millions of Dollars
California	25,276
Texas	11,784
Nogales	6,931
New Mexico	6,789
Michigan	4,630
Nevada	4,375

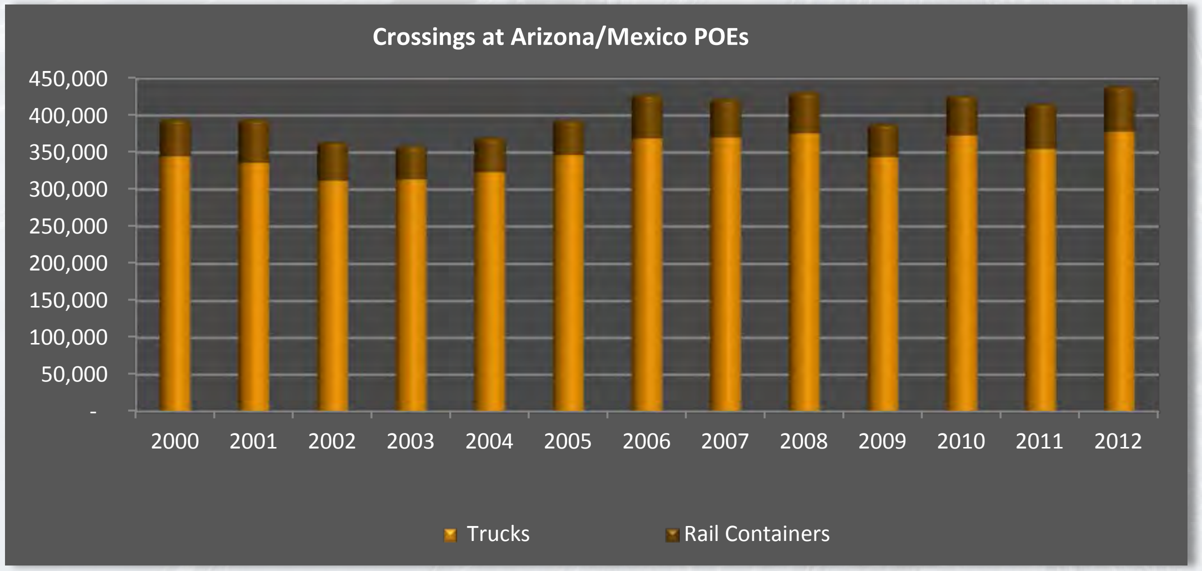


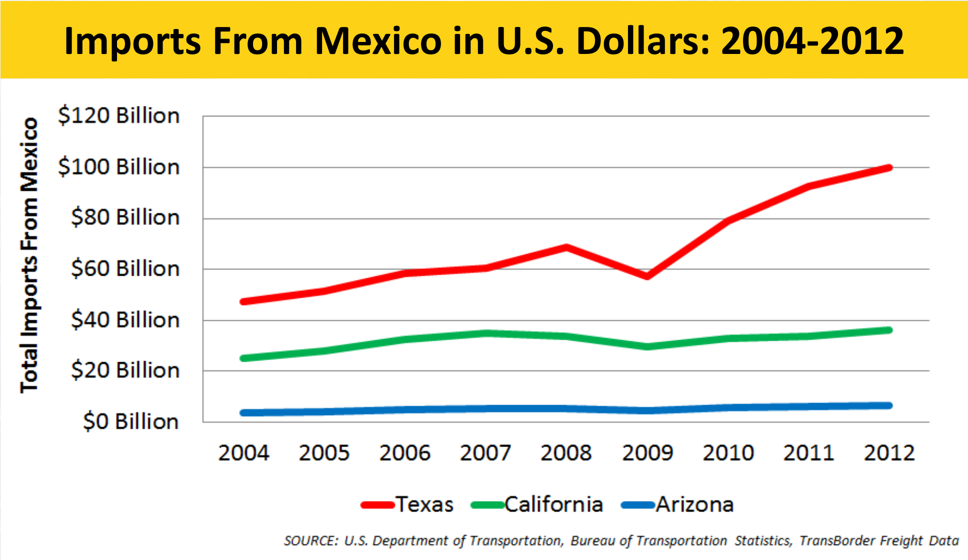
Commodity Flows to Arizona

Origin	Millions of Dollars
California	35,031
Nogales, Mexico	15,074
Washington	9,982
Texas	8,361
New York	4,330
Pennsylvania	4,181

Arizona Losing Share in Trade with Mexico's Fast-Growing Economy







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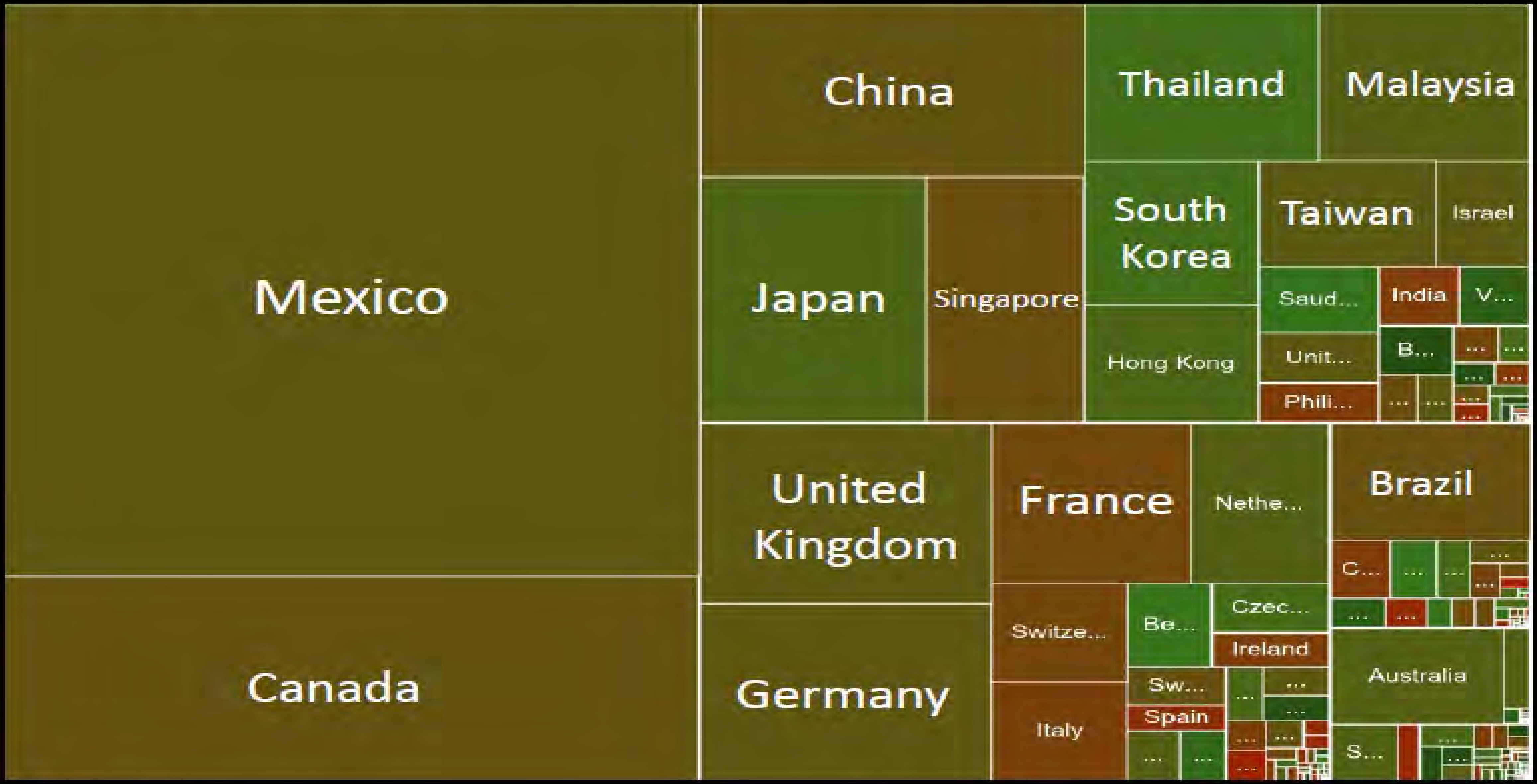
Composition of Arizona Exports



Source: Arizona State University

Color represents percentage change between 2009-11

Transportation Funding Options: Thinking Outside of the Box!

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