MARC Scenario Planning Workshop

Jan 31, 2017

Part 1 – Imagining What the Future Will Bring

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Two weaknesses shared by all the tools include limited linkages to other, more in-depth, models (econometric, travel, etc.) and a limited ability to capture stakeholder discussion and comments during tool application.

NCHRP08-36(117)_FR.pdf

We need to move beyond what we already know.....

Transcend
Connect
Integrate
Engage the new realities
Build the ecosystem

Beyond :
Speed
Being Safe
Saving time

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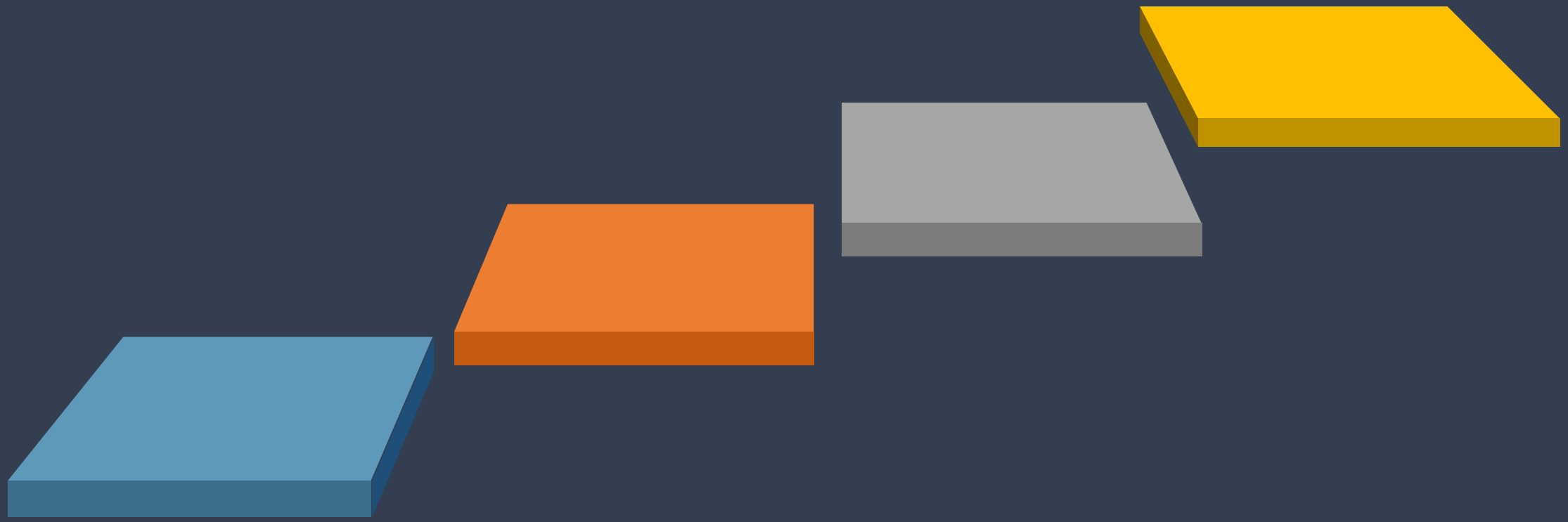
Next generation scenario planning aims "to capture a broader range of issues and challenges than previously considered in transportation and land use scenario creation and analysis."

Federal Highway Administration, "New Trends in Transportation and Land Use Scenario Planning." April 2010



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big data set

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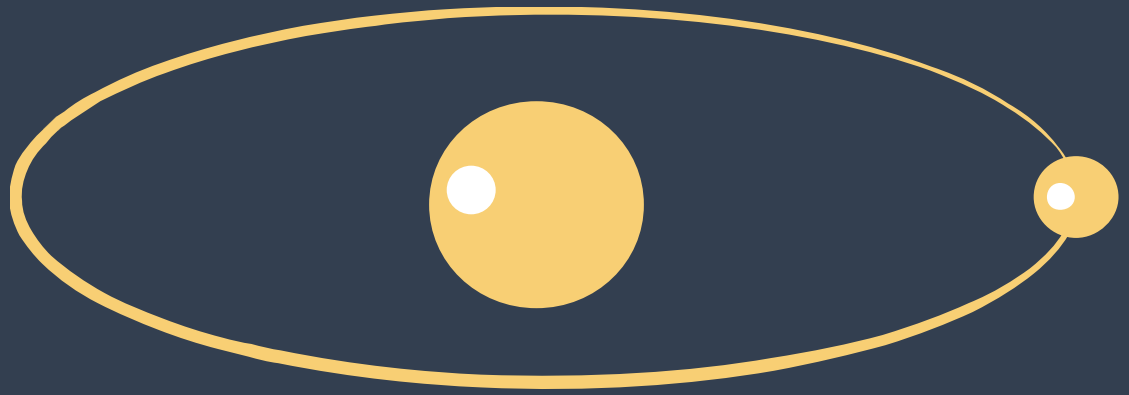

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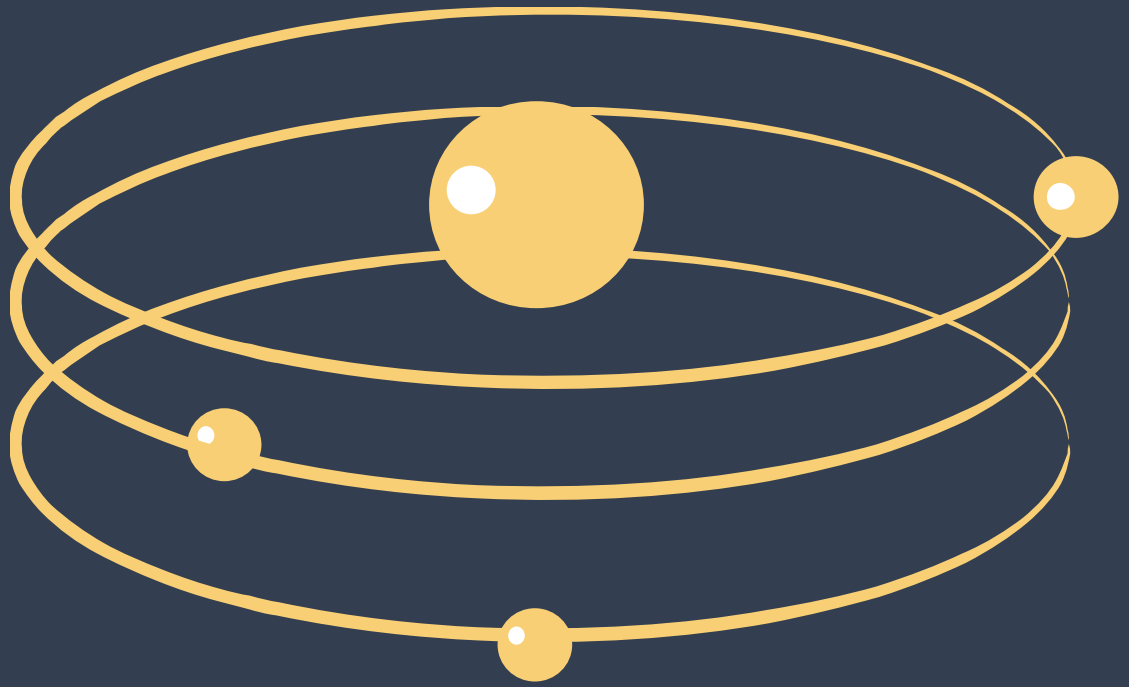

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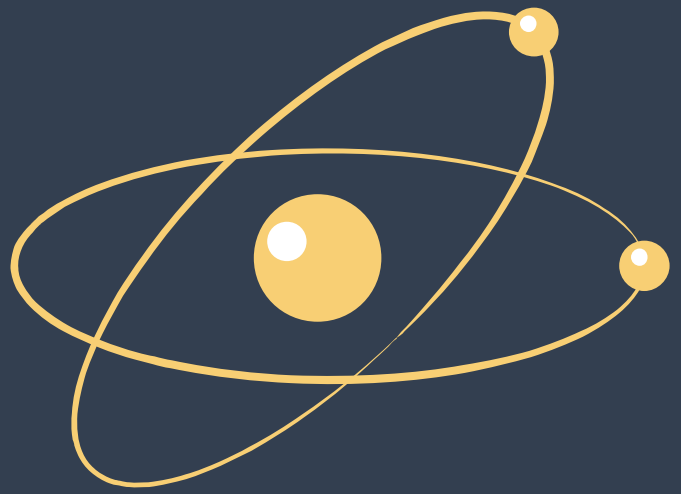
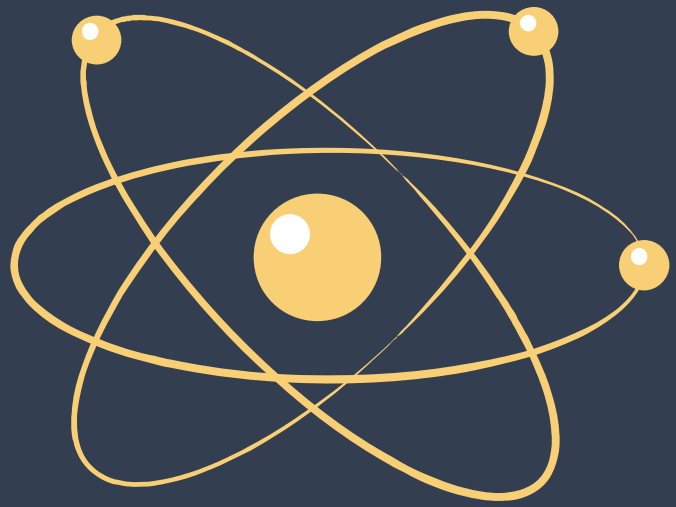
One set at a time, we are learning about the dynamic relationships and their effect on results





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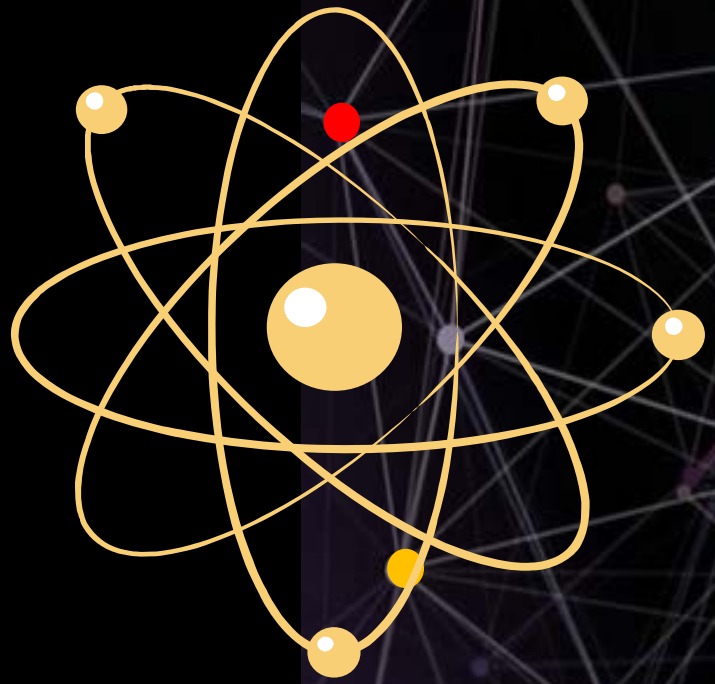
Single to multiple dimensions



integration and scalability

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The objective is to ‘move the needle’……but who sees the needle movement?

freepik.com

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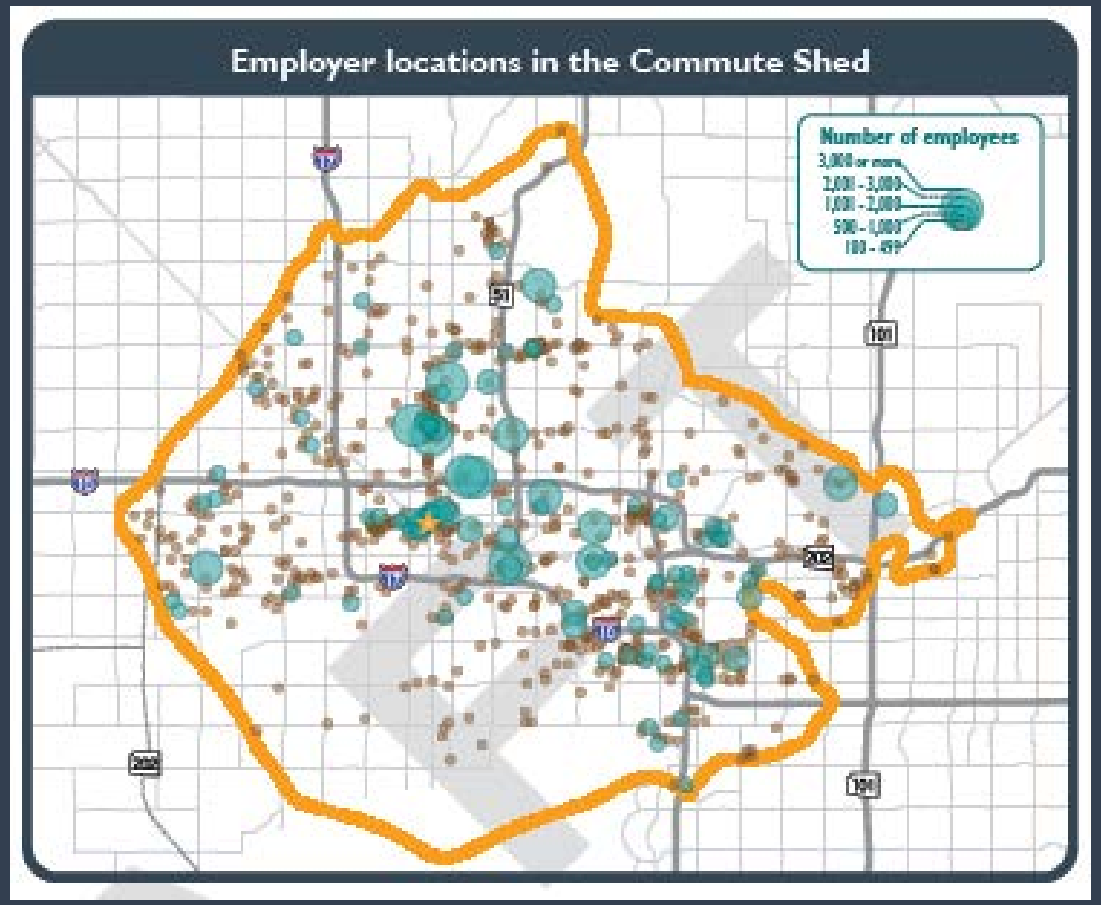
Commute Shed Analytics

30 Minute Inbound Travel Time to Central Avenue and Van Buren Street, Phoenix

draft



2015 Population

730,700 Commute Shed

4,076,900 Maricopa County

Source: Arizona Department of Administration 2015 Population Estimates

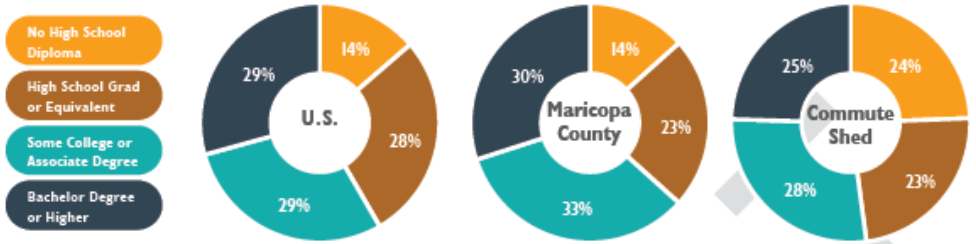
Projected Population Growth

	2015 to 2020	2020 to 2030	2030 to 2040	2040 to 2050
Commute Shed	2.3%	1.7%	0.8%	0.3%
Maricopa County	1.9%	1.7%	1.3%	1.1%

Denotes annual growth rates. Source: Maricopa Association of Governments (MAG), 2016 Population Projections

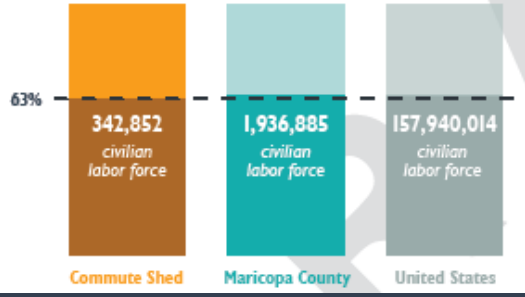
Educational Attainment

for the population age 25 years and older

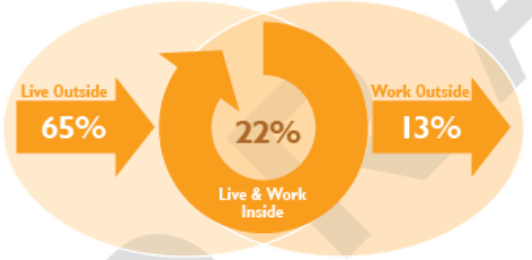


Source: U.S. Census Bureau, 2014 American Community Survey (ACS) 5-year Estimates

Labor Force



Worker Commute Flows



Source: 2015 Maricopa County Trip Reduction Program Survey
Sample size 179,063. The data only include employers with 50 or more employees.

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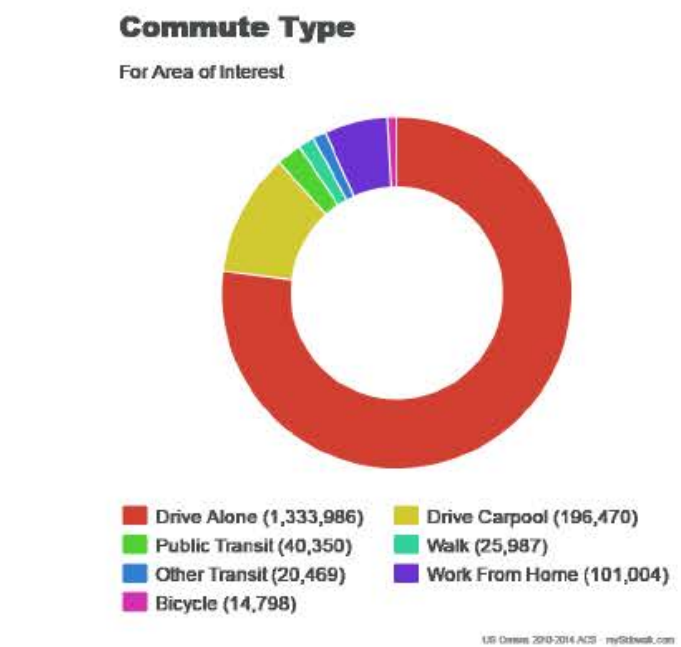
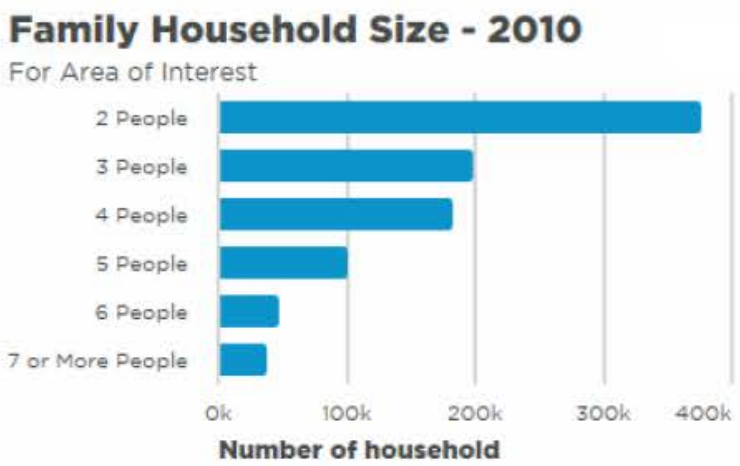
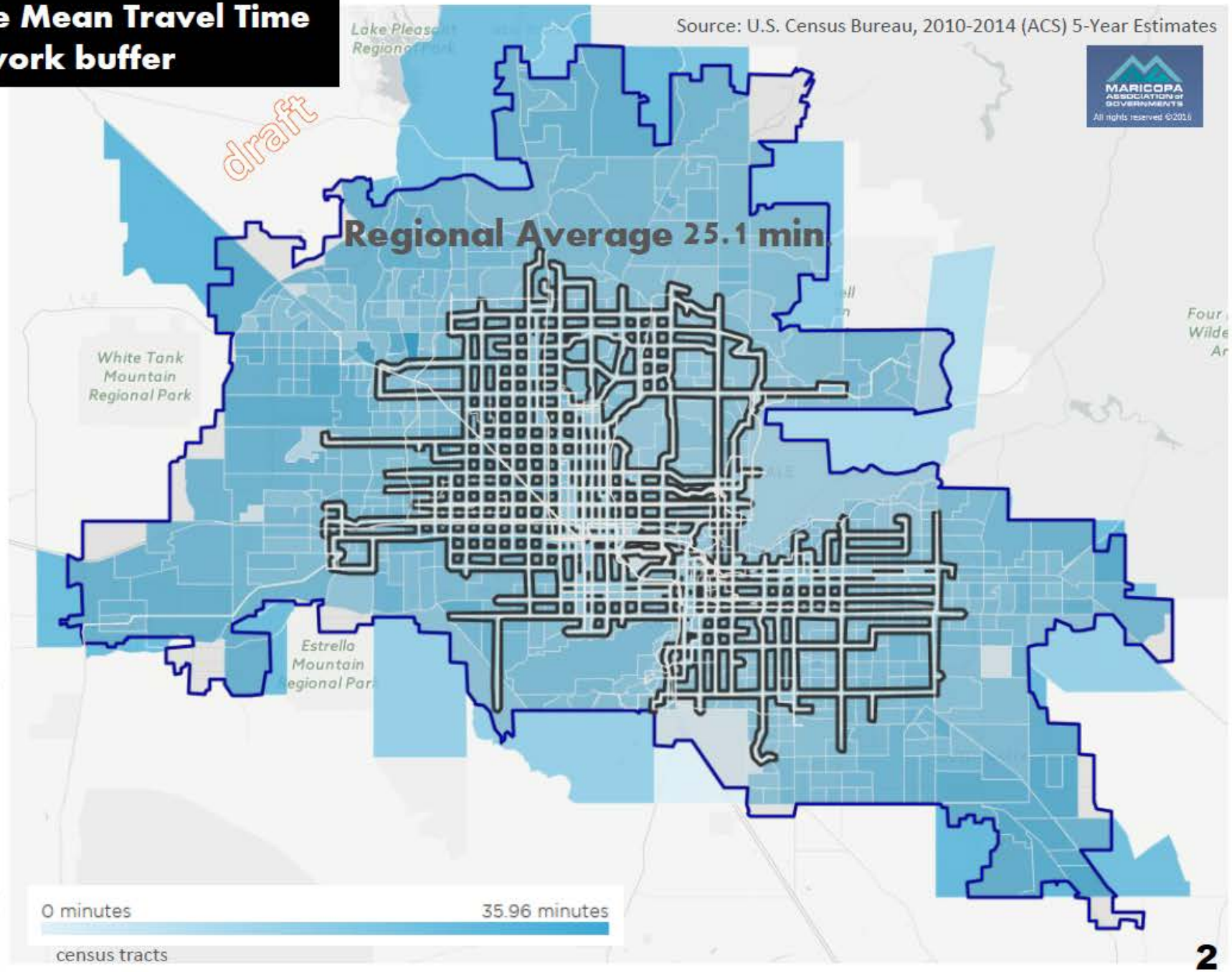
MAG INFORMAATION SYSTTEMS PROGRAM

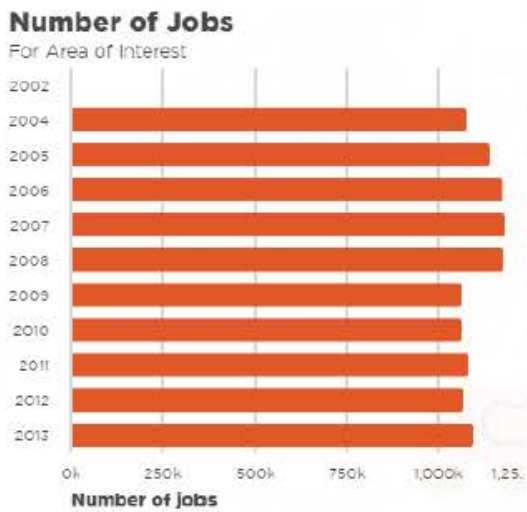
MAG Urban Region - Commute Mean Travel Time with 1/4 mile bus transit network buffer

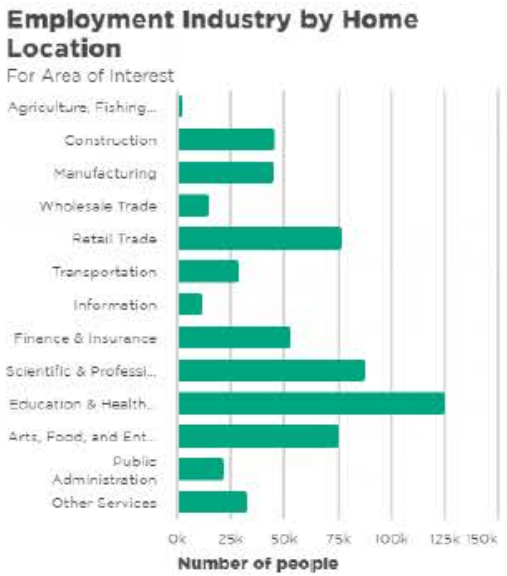


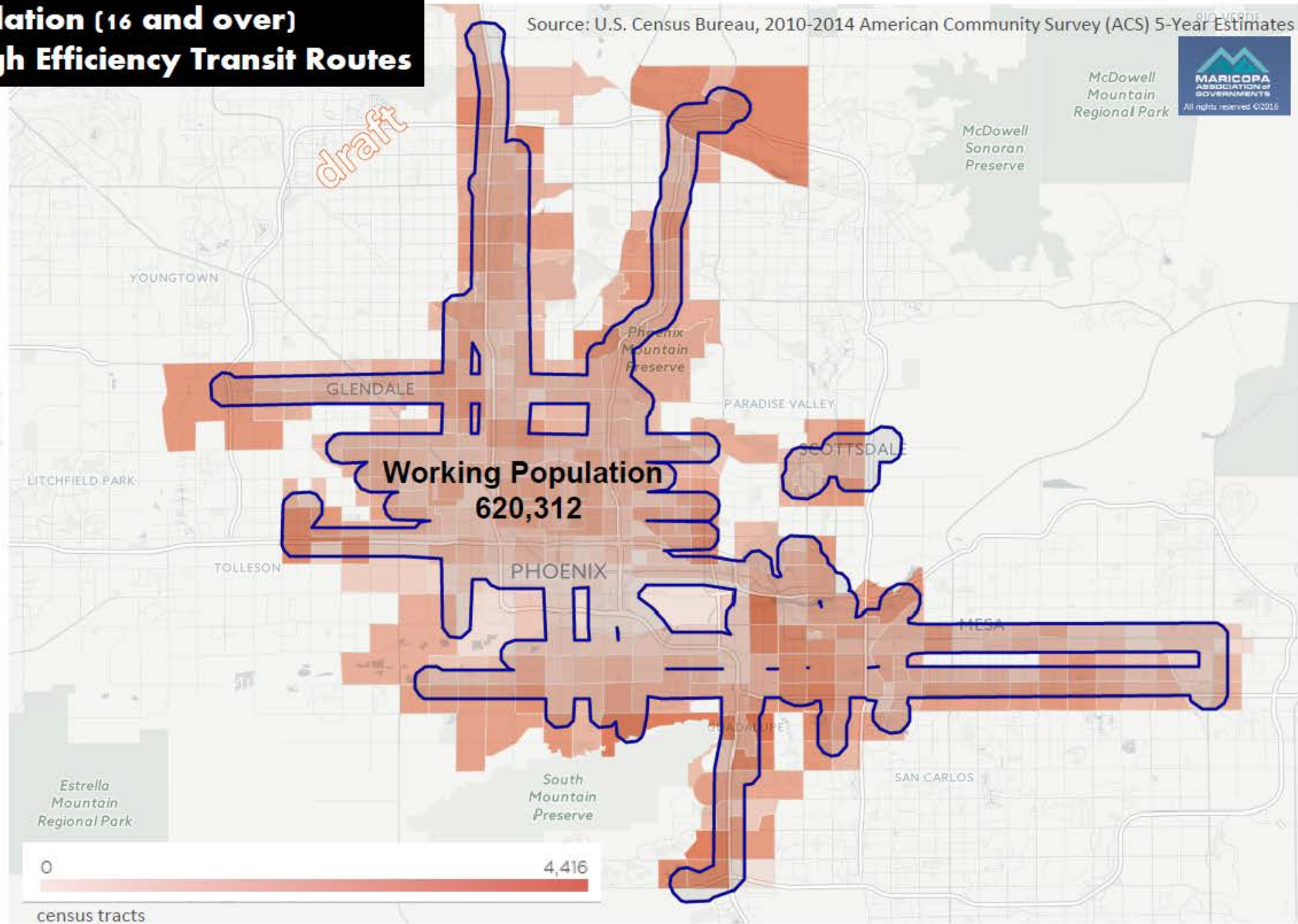




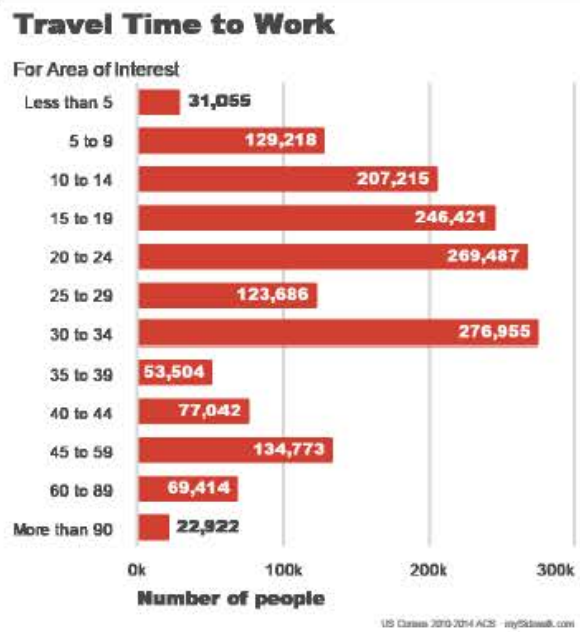
Total Working Population (16 and over) within .5 mile of High Efficiency Transit Routes

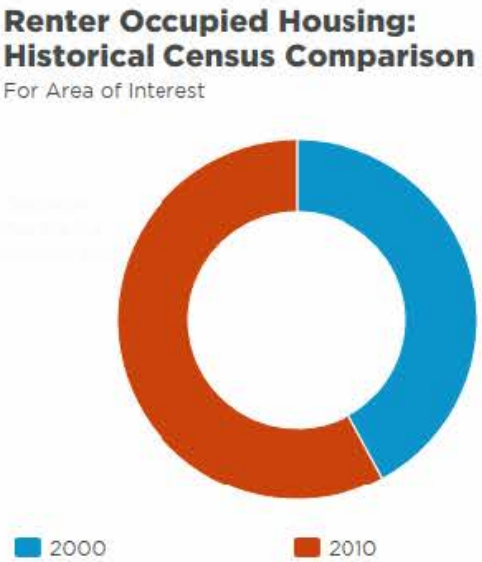


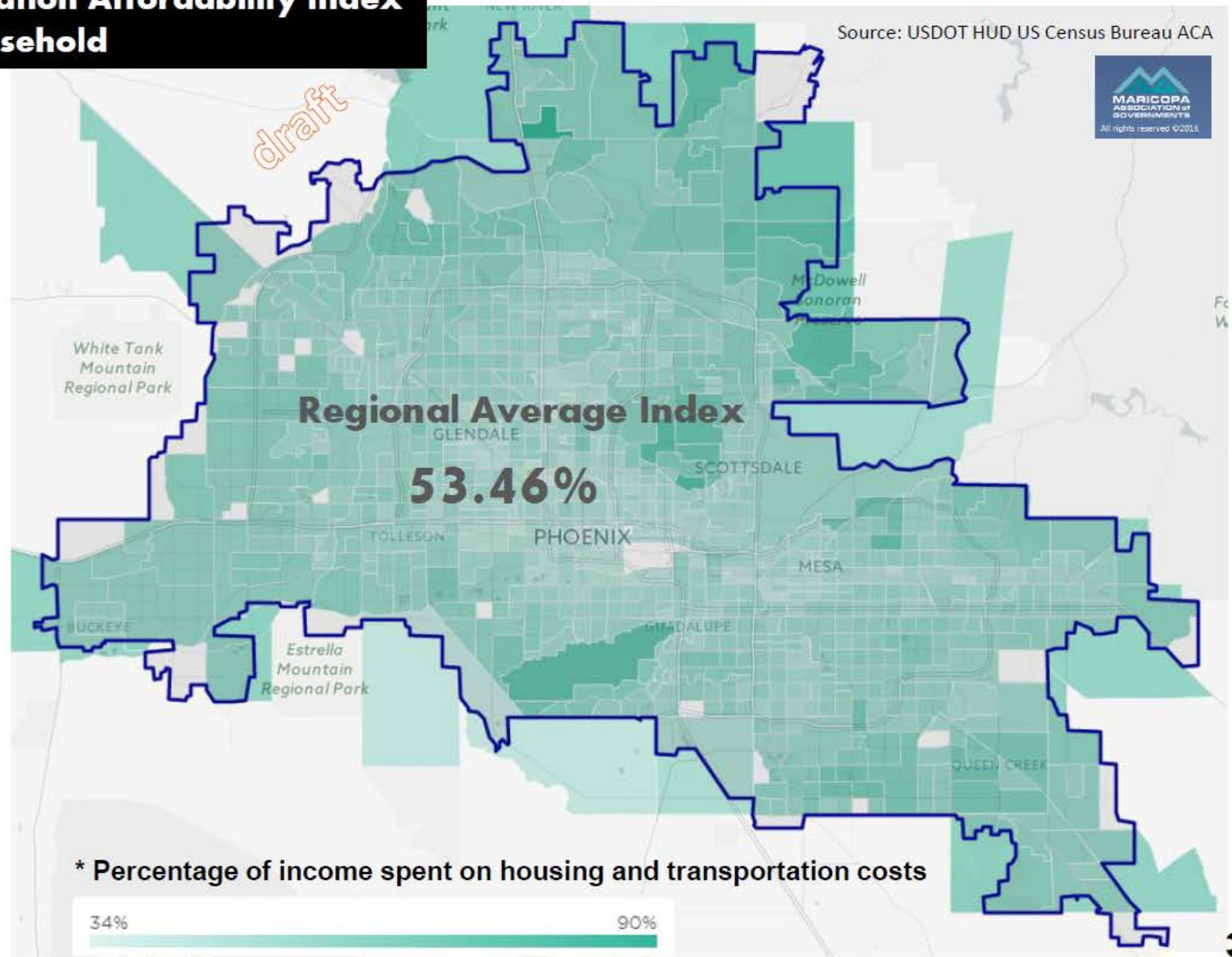




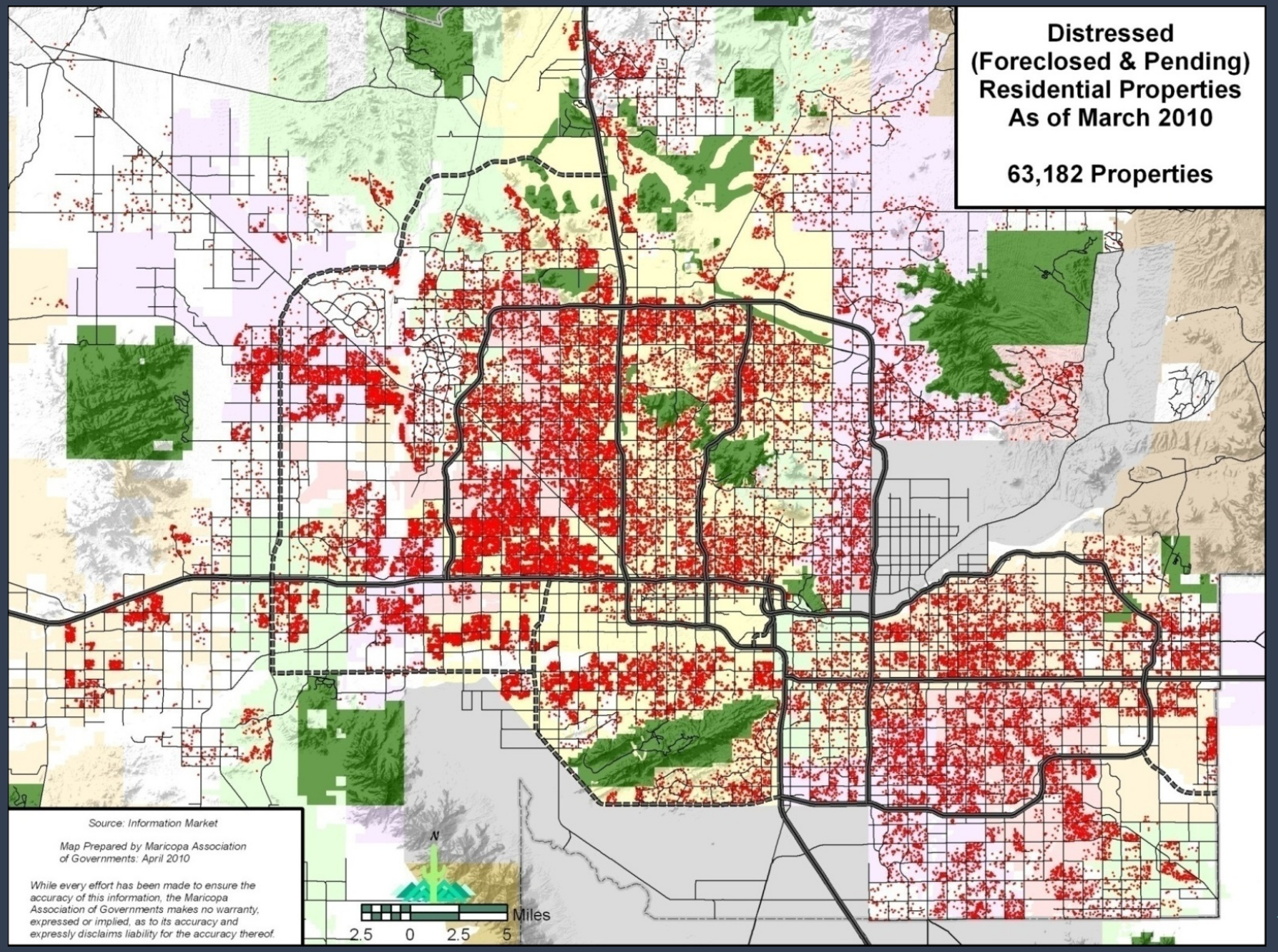
MAG Urban Region – Location Affordability Index* for a Median Income Household



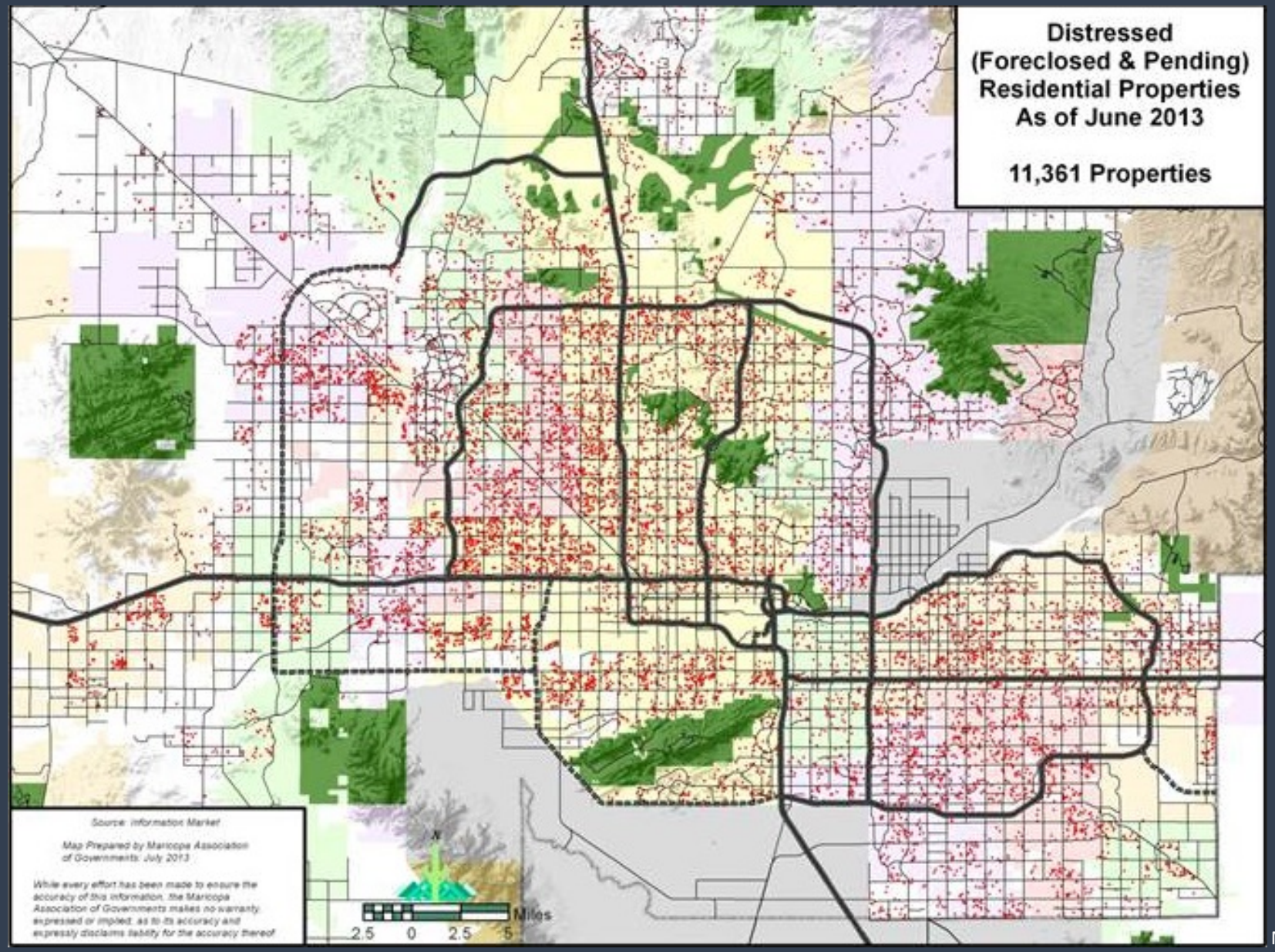




Distressed Residential Properties - March 2010

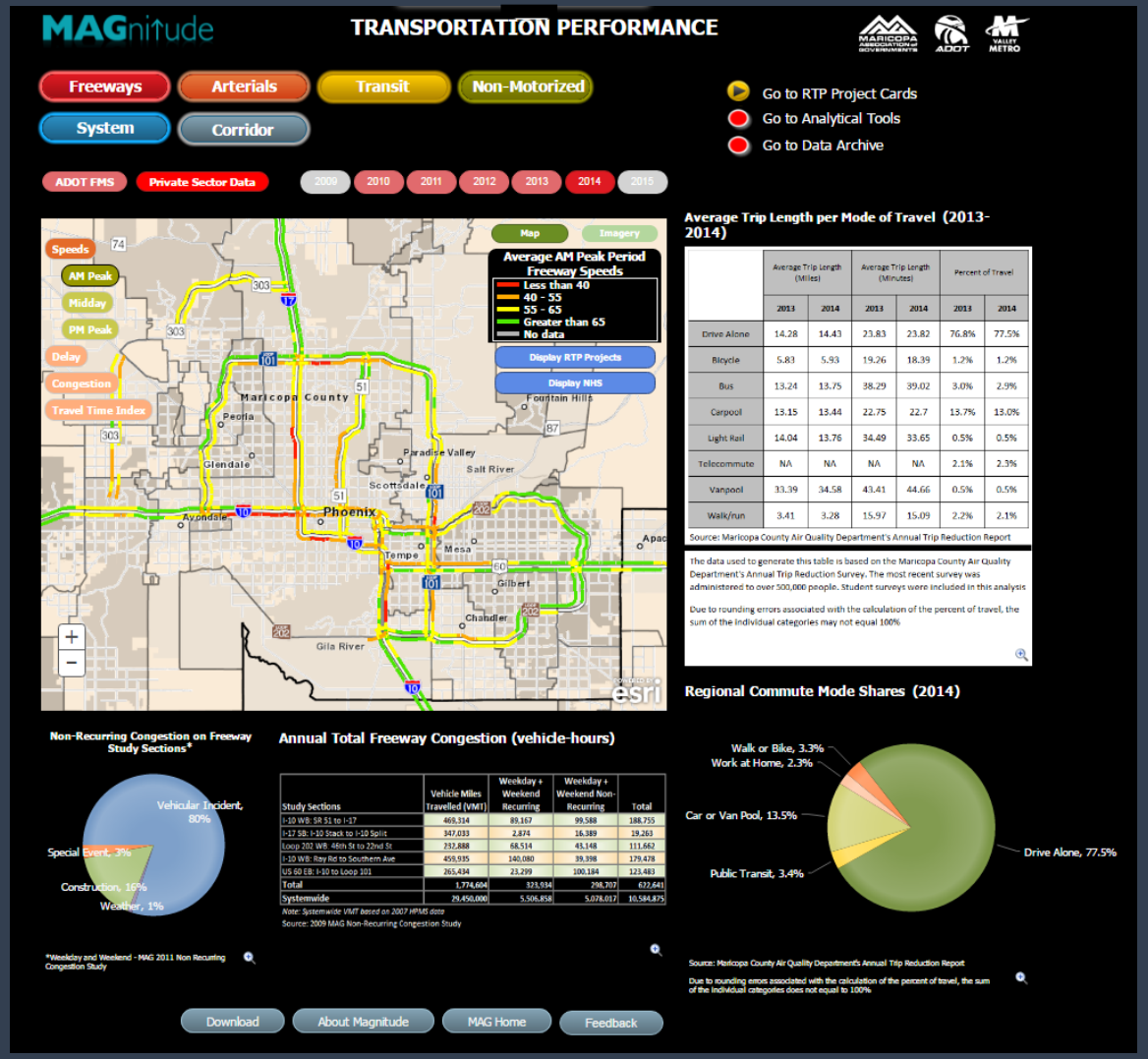


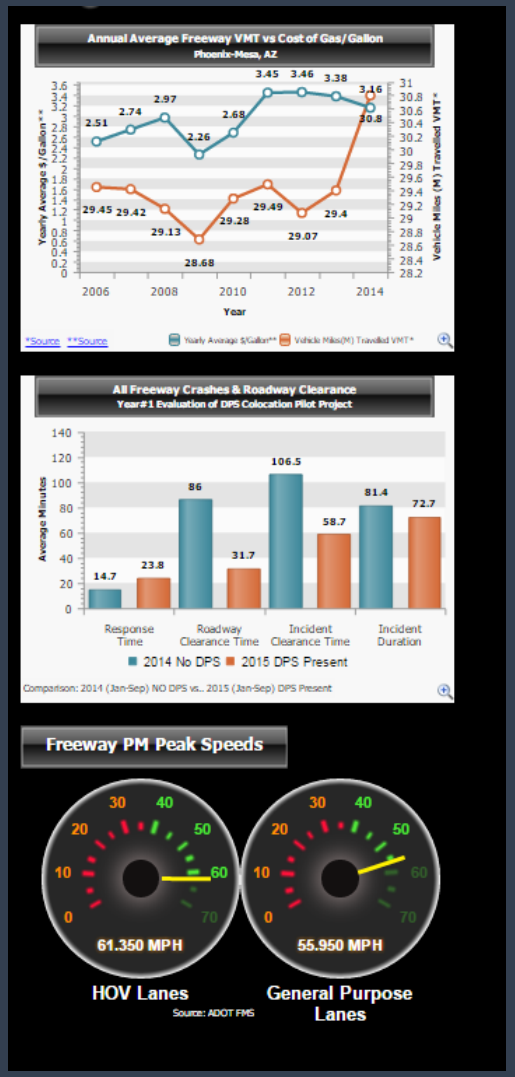
Distressed Residential Properties - June 2016



MAGnitude

http://performance.azmag.gov





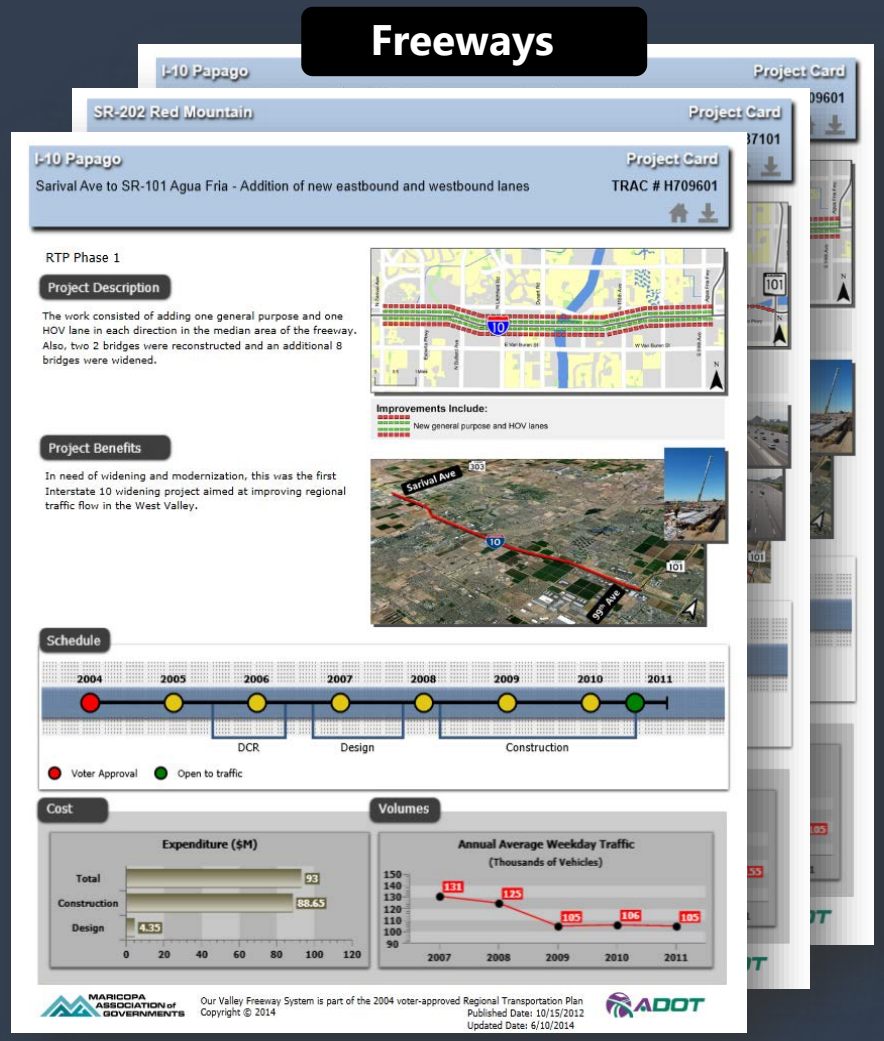
MAGnitude

MAG PERFORMANCE MANAGEMENT PROGRAM

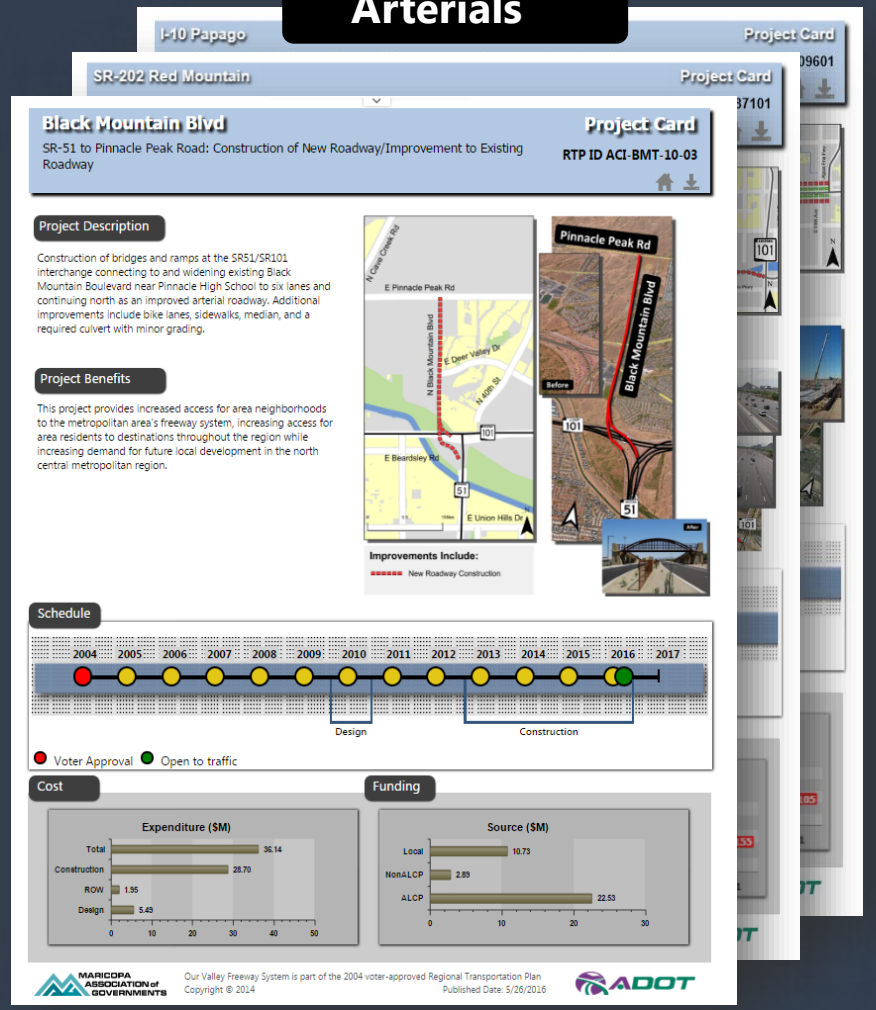
RTP Project Cards

http://projectcards.azmag.gov

Freeways



Arterials



- Location
- Imagery
- Description
- Benefits
- Schedule
- Expenditures
- Demand data
- Before /After

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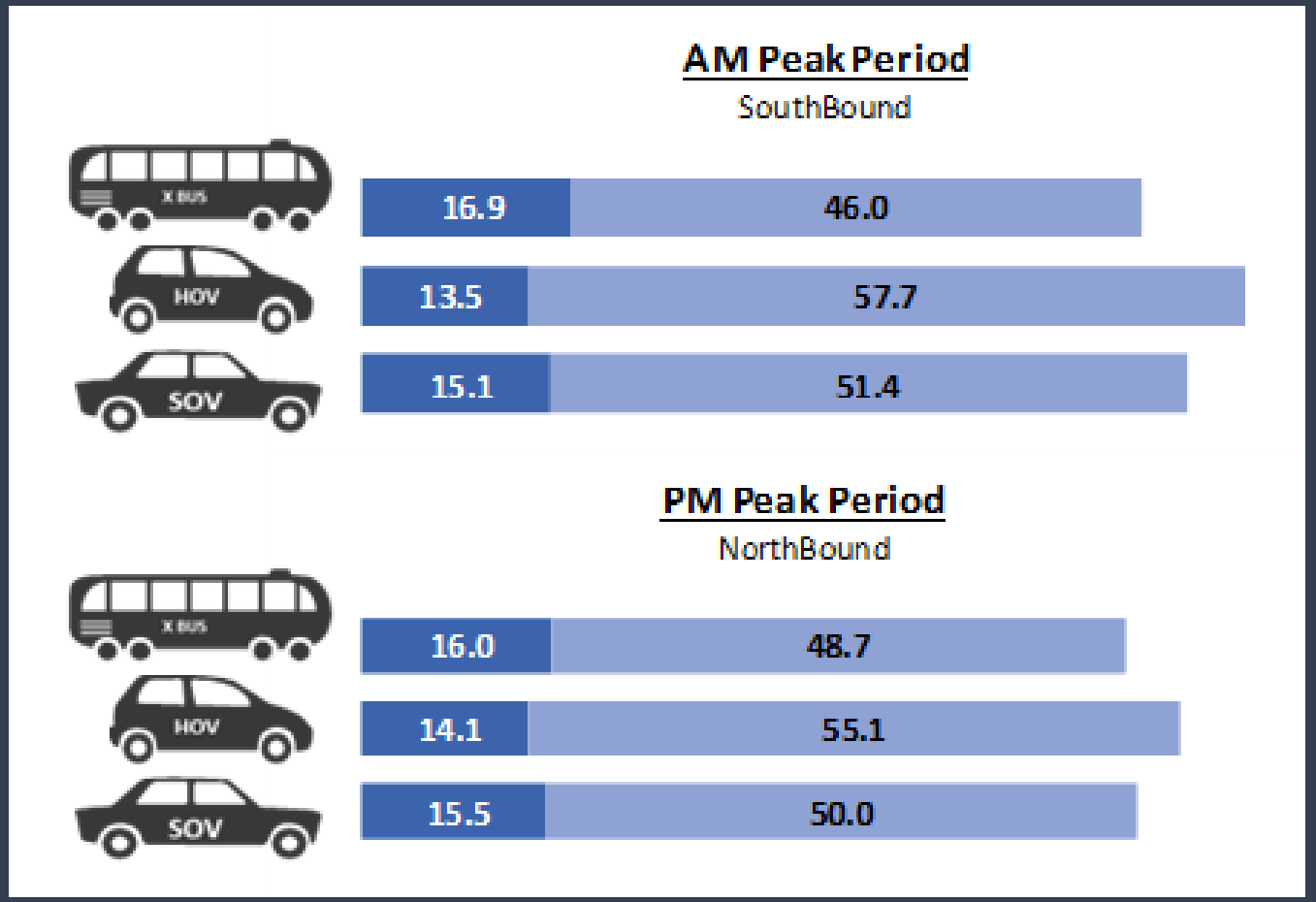
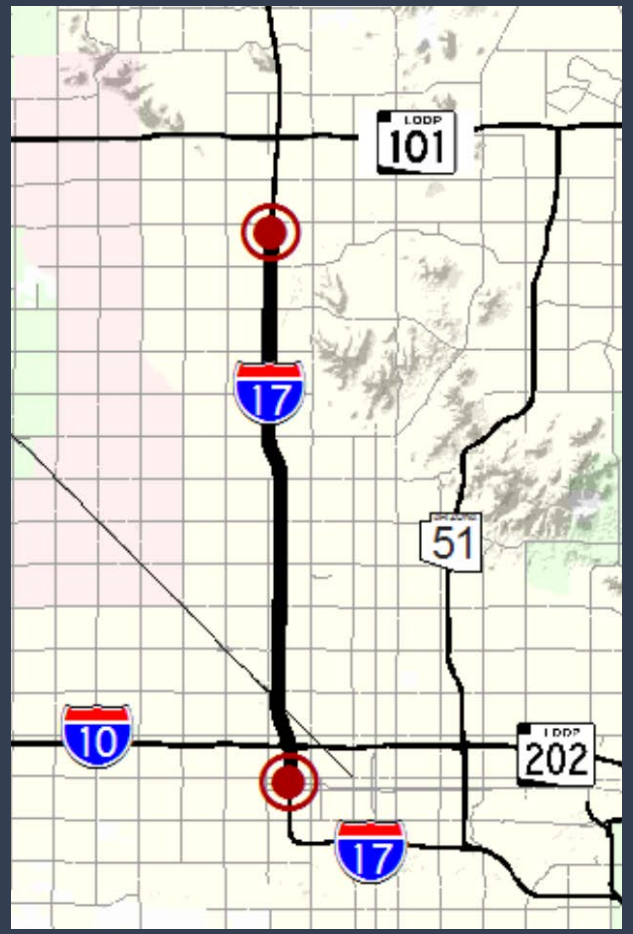
MAG PERFORMANCE MANAGEMENT PROGRAM

Commute Travel Time Comparison 2015

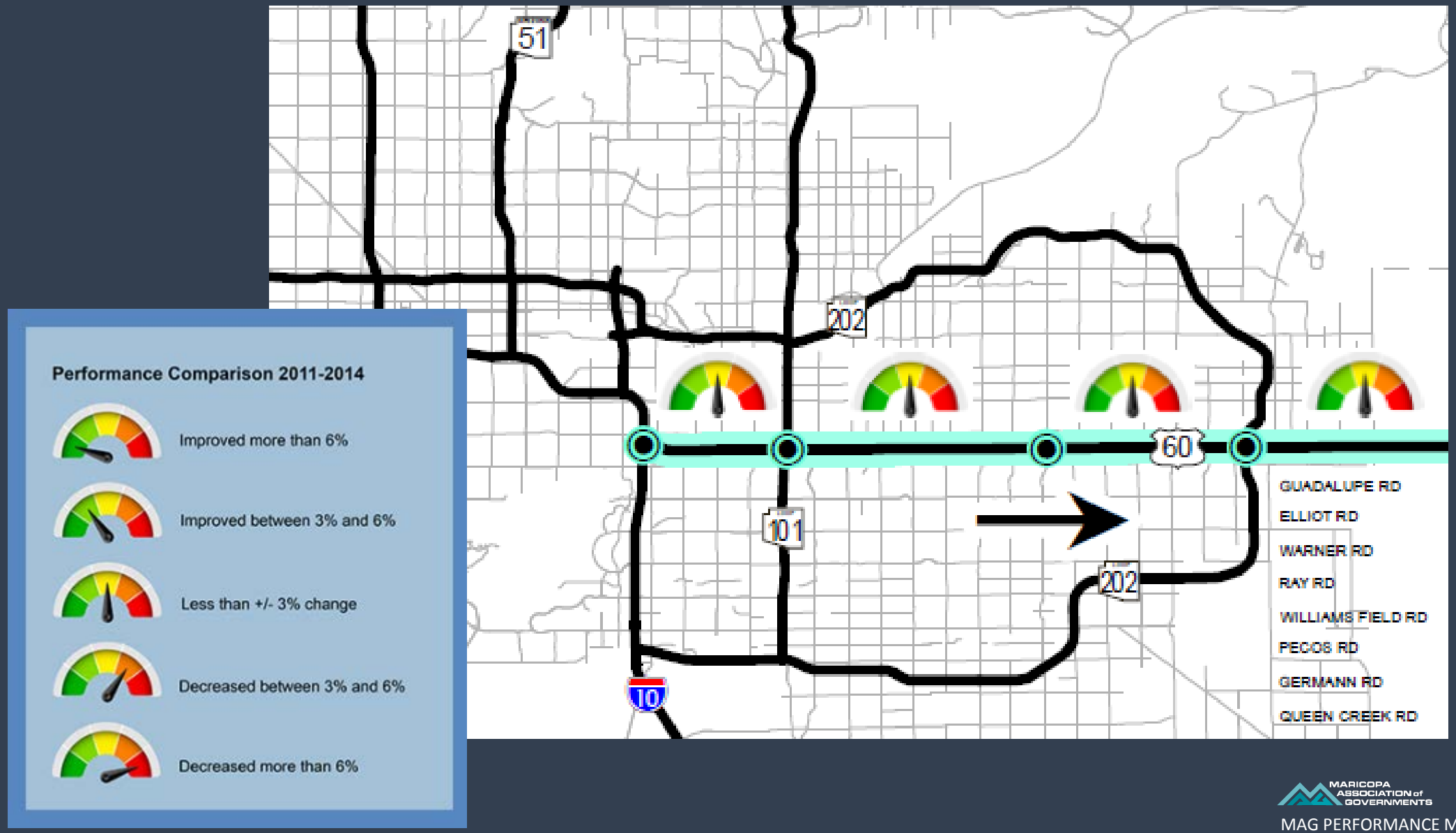




Travel Time (min)

Speed (MPH)

Before and After Corridor Performance (2011-2014)



Modal Connectivity

MAG Region Demographic Map Viewer

The Demographic Map Viewer is one of the Maricopa Association of Governments interactive mapping and analysis sites, showing selected population and housing data for the two counties in the MAG Region. Explore data from Census 2010 and American Community Survey (ACS) 2010-2014 5-year.

View Map »

State Demographic Map Viewer

The State Demographic Map Viewer is one of the Maricopa Association of Governments interactive mapping and analysis sites, showing selected population and housing data for the entire State of Arizona. Explore data from Census 2010 and American Community Survey (ACS) 2010-2014 5-year.

View Map »

Employment Map Viewer

The Employment Map Viewer is one of the Maricopa Association of Governments interactive mapping and analysis sites, showing selected employer data. Explore the 2015 Employer Database.

View Map »

Read On Arizona MapLIT Viewer

Maricopa Association of Governments is part of Read On Arizona's collaborative partnership that created MapLIT, and interactive mapping tool as a "one stop" resource to identify key data sets (census, school, health, family engagement) that impact early literacy outcomes in communities.

View Map »

Land Use Map Viewer

The Land Use Map Viewer is one of the Maricopa Association of Governments interactive mapping and analysis sites, showing land use data. Explore the MAG 2014 Existing and Future Land Use datasets.

View Map »

Bikeways Map Viewer

The Bikeways Map Viewer is one of the Maricopa Association of Governments interactive mapping sites, showing locally-designated bicycle facilities data. Explore the MAG 2014 Bikeways datasets.

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View Map »

MAG Neighborhood Explorer

The MAG Neighborhood Explorer is one of the Maricopa Association of Governments interactive mapping and analysis sites, showing landmark data. Explore the MAG 2016 Building Landmark Inventory datasets.

View Map »

Projections Map Viewer

The Projections Map Viewer is one of the Maricopa Association of Governments interactive mapping and analysis sites, showing socioeconomic projections data. Explore the MAG 2016 Socioeconomic Projections series dataset.

View Map »

Victim Services Map Viewer

The Victim Services Map Viewer is one of the Maricopa Association of Governments interactive mapping sites, showing victim advocate services data. Explore the MAG 2012 victim advocates services datasets.

View Map »

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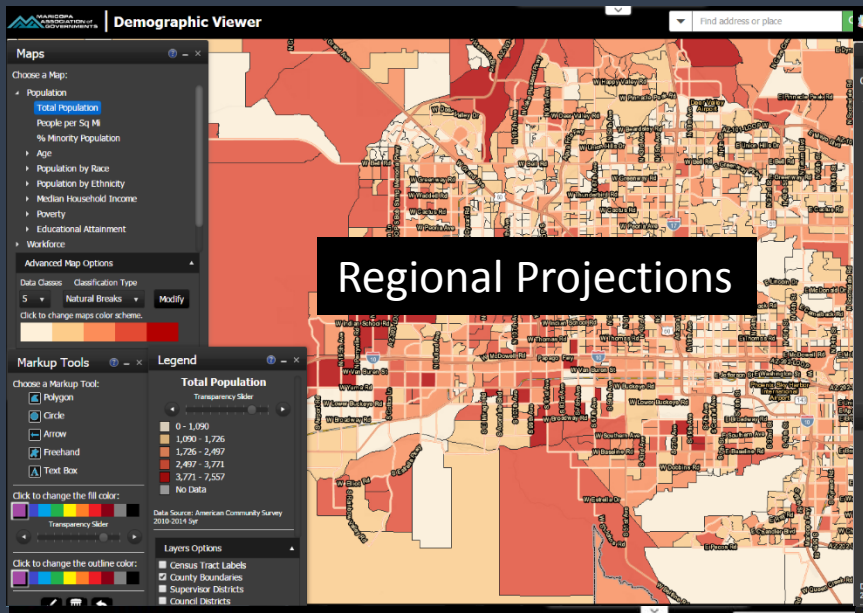
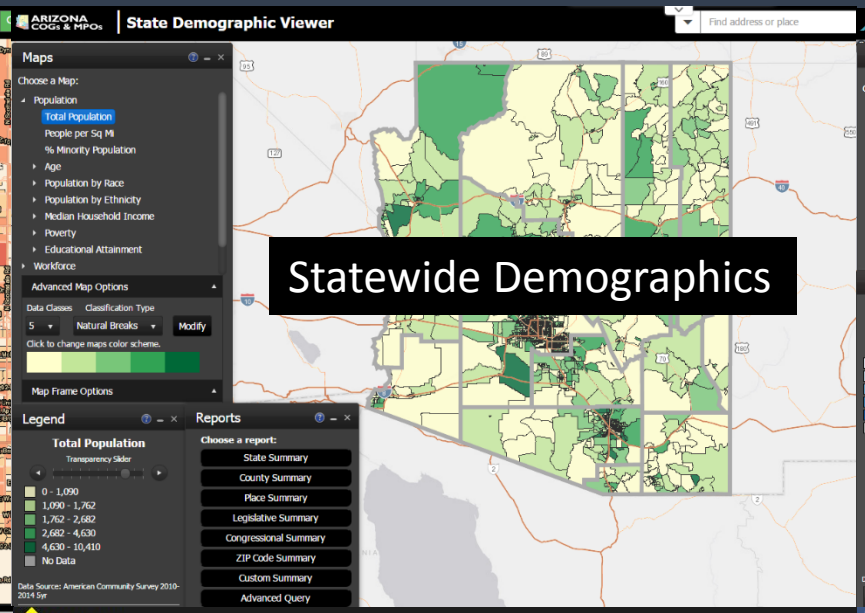
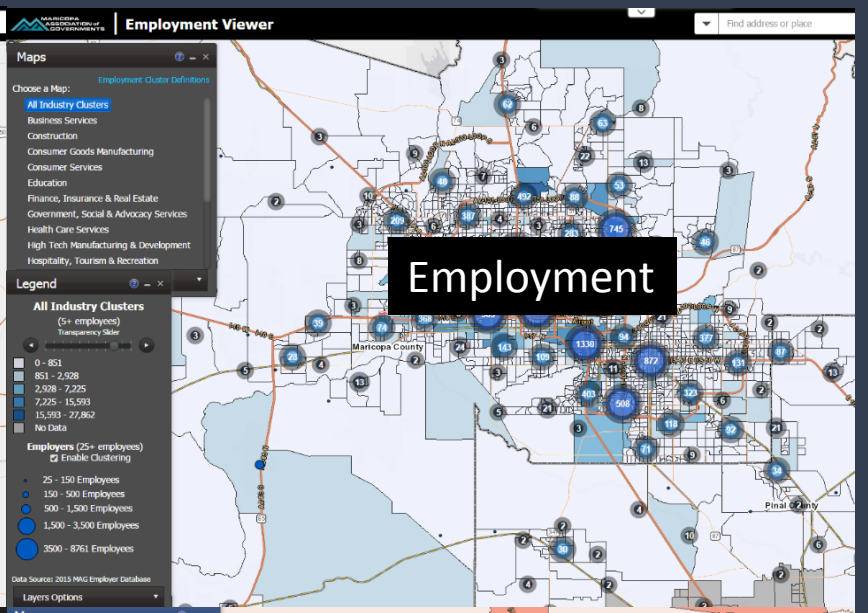
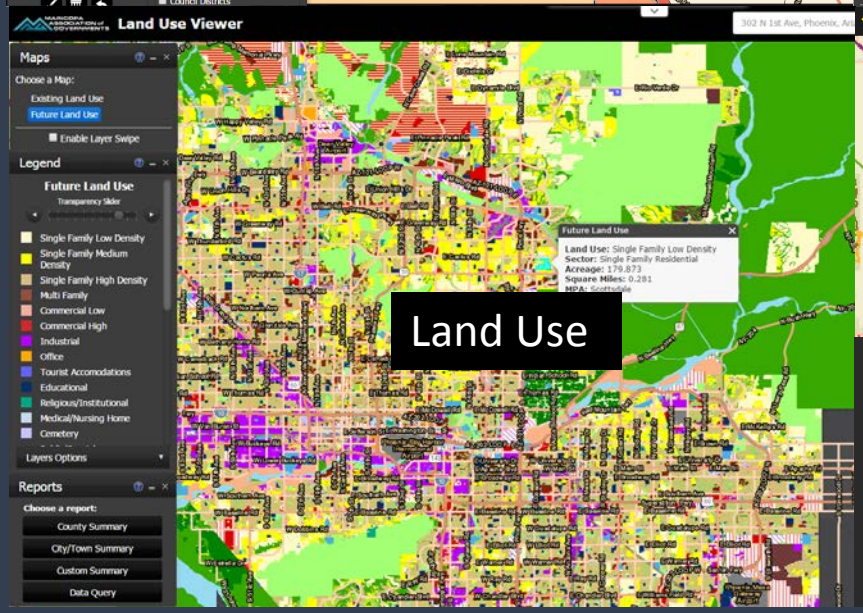
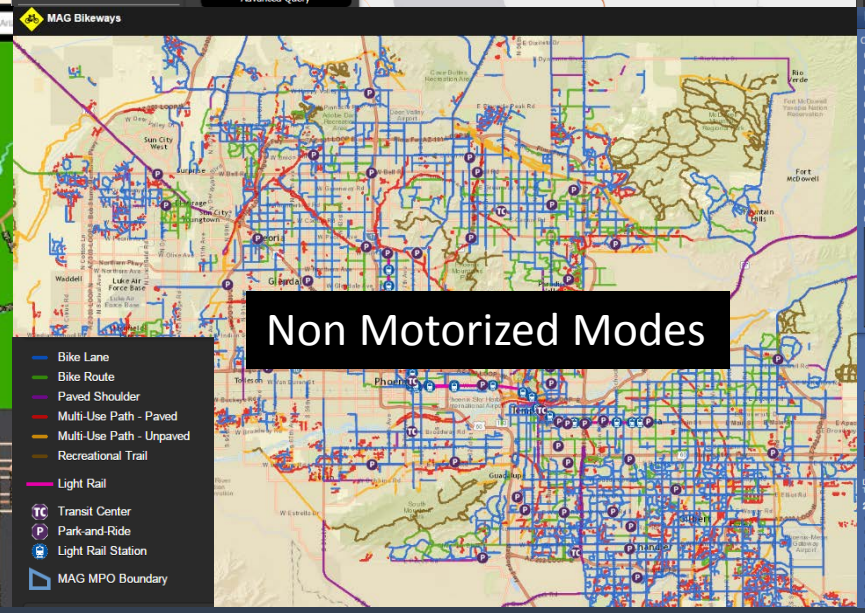
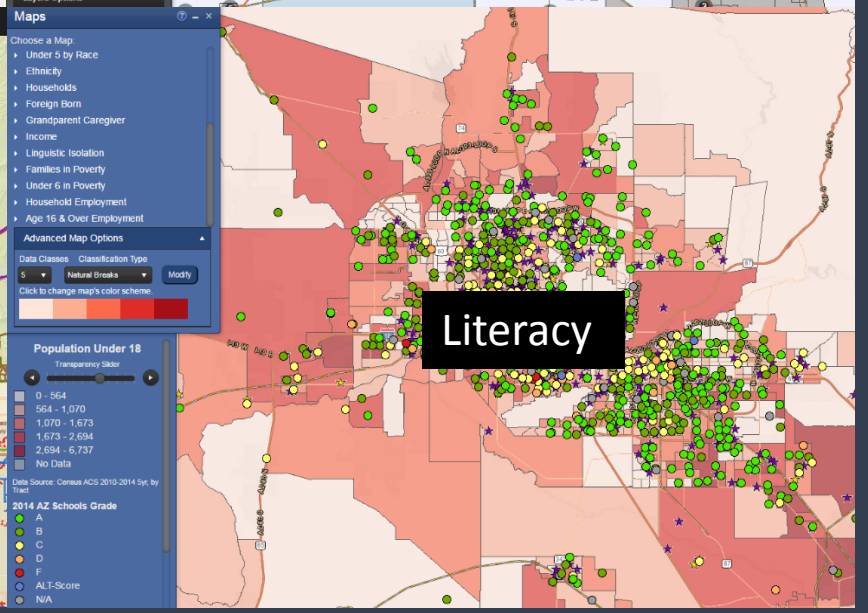

Demographic Viewer
Regional Projections

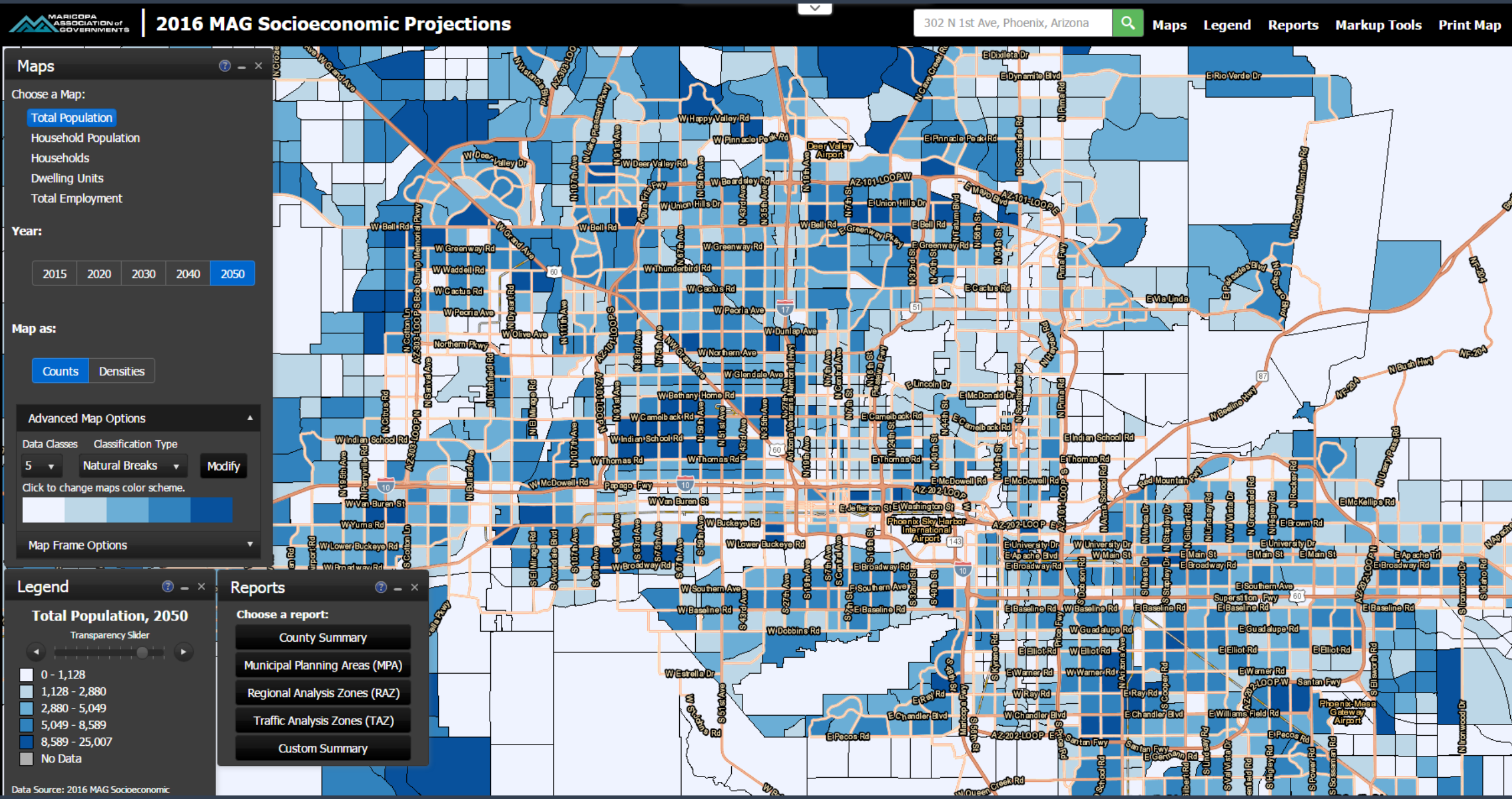

State Demographic Viewer
Statewide Demographics


Employment Viewer
Employment


Land Use Viewer
Land Use


MAG Bikeways
Non Motorized Modes


Literacy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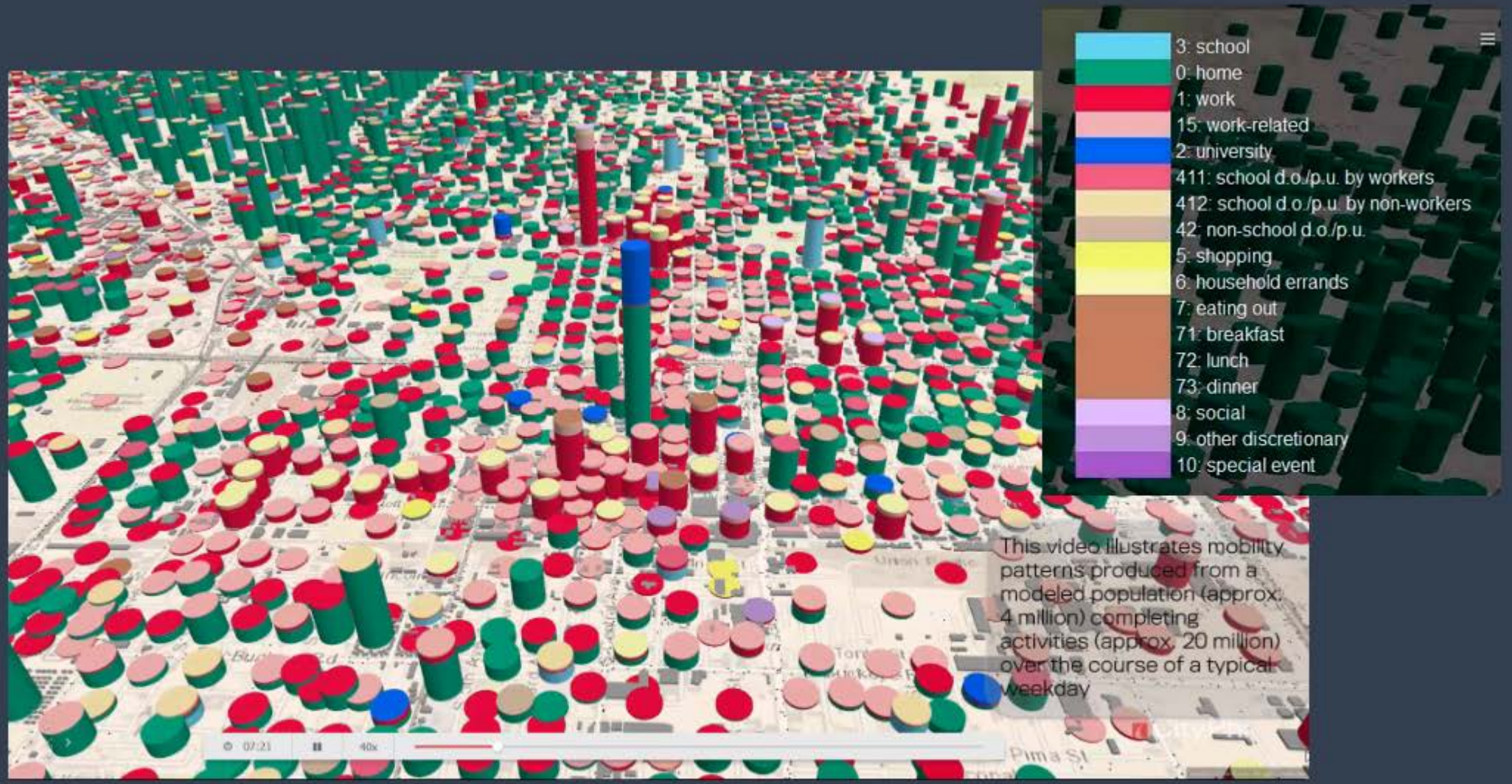
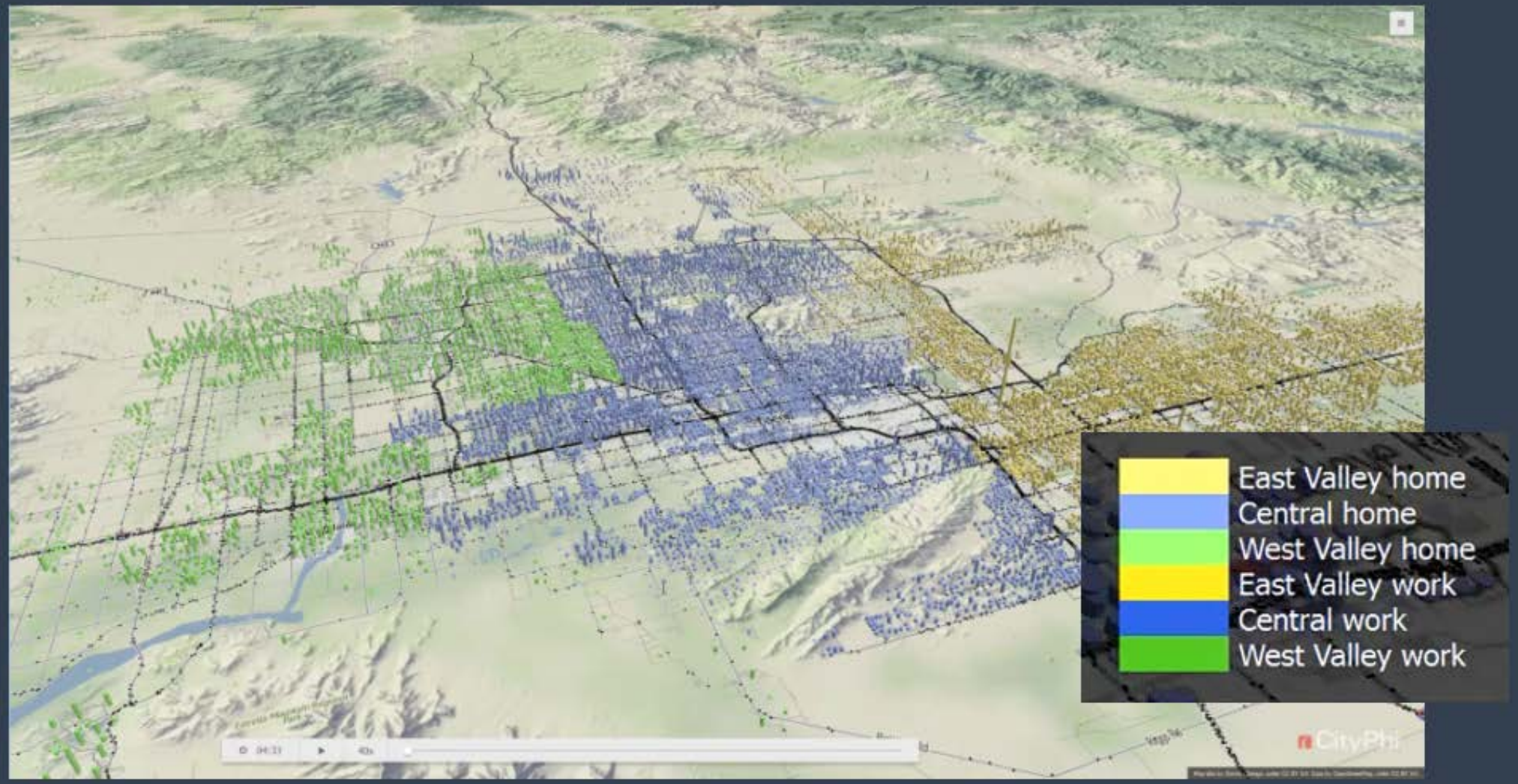
2016 MAG Socioeconomic Projections
302 N 1st Ave, Phoenix, Arizona
Maps
Legend
Reports
Markup Tools
Print Map
Maps
Choose a Map:
Total Population
Household Population
Households
Dwelling Units
Total Employment
Year:
2015
2020
2030
2040
2050
Map as:
Counts
Densities
Advanced Map Options
Data Classes
Classification Type
5
Natural Breaks
Modify
Click to change maps color scheme.
Map Frame Options
Legend
Total Population, 2050
Transparency Slider
0 - 1,128
1,128 - 2,880
2,880 - 5,049
5,049 - 8,589
8,589 - 25,007
No Data
Data Source: 2016 MAG Socioeconomic
Reports
Choose a report:
County Summary
Municipal Planning Areas (MPA)
Regional Analysis Zones (RAZ)
Traffic Analysis Zones (TAZ)
Custom Summary

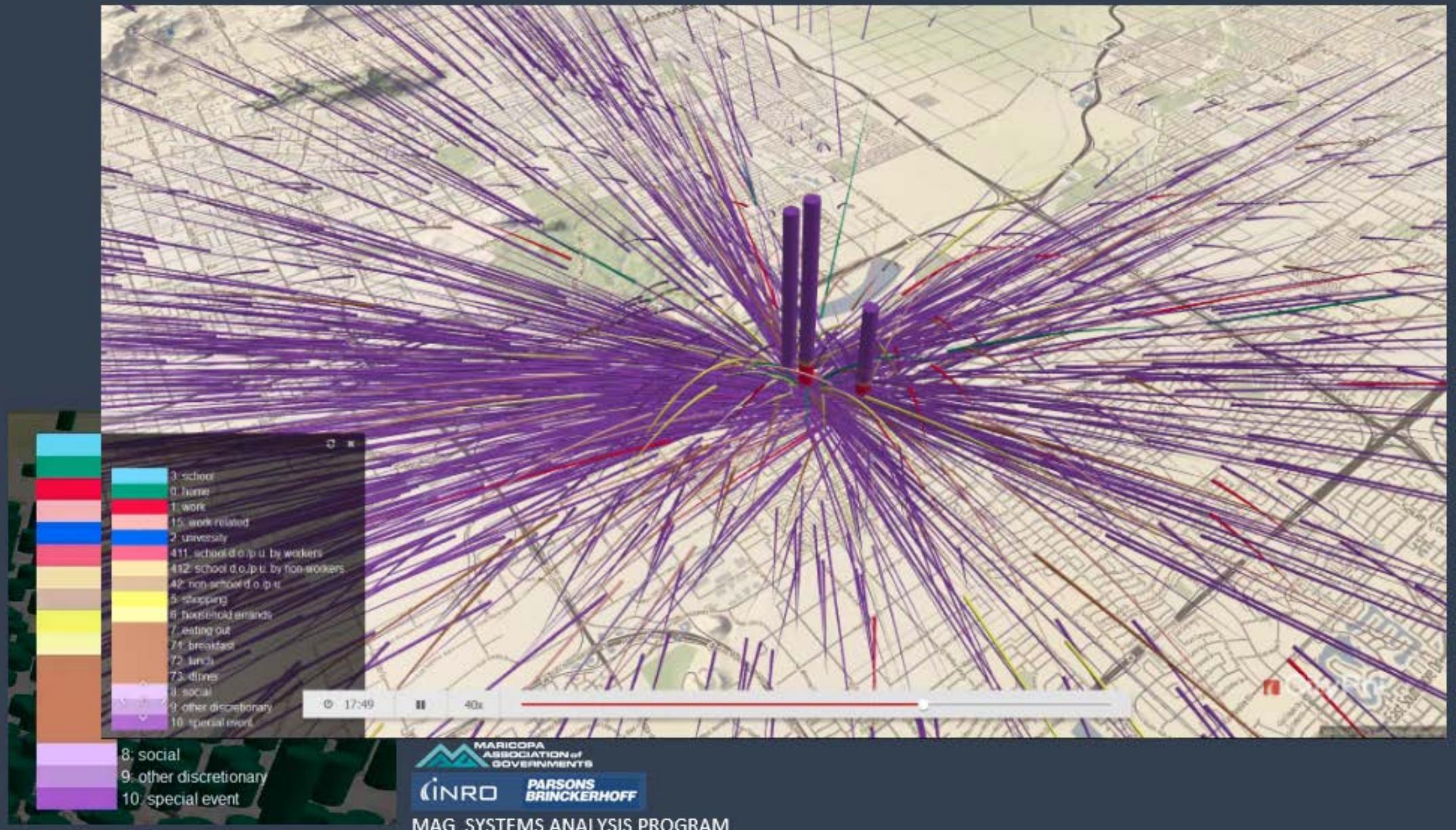
Population Movements – 4 million Scenario



Employment Patterns by District



New Years Eve Block Party Event



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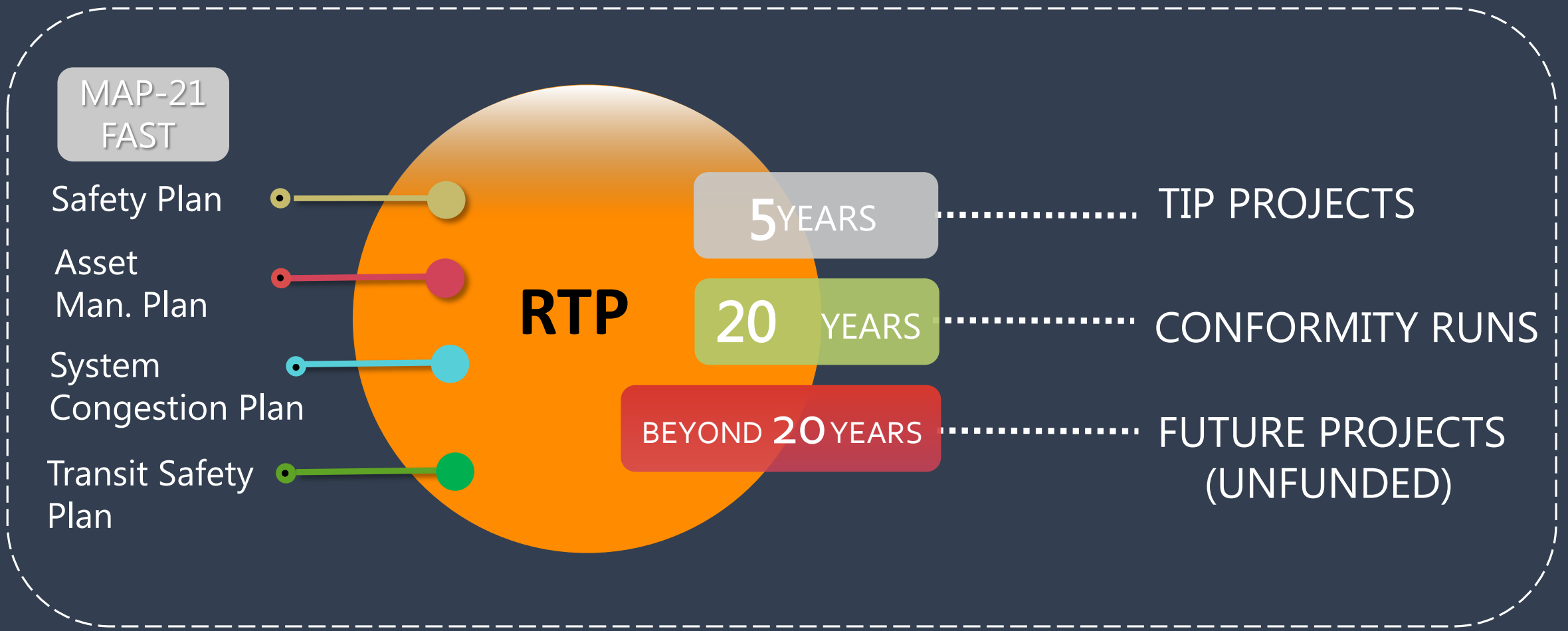
INRO PARSONS BRINCKERHOFF

MAG SYSTEMS ANALYSIS PROGRAM

MPO INVESTMENT UNIVERSE



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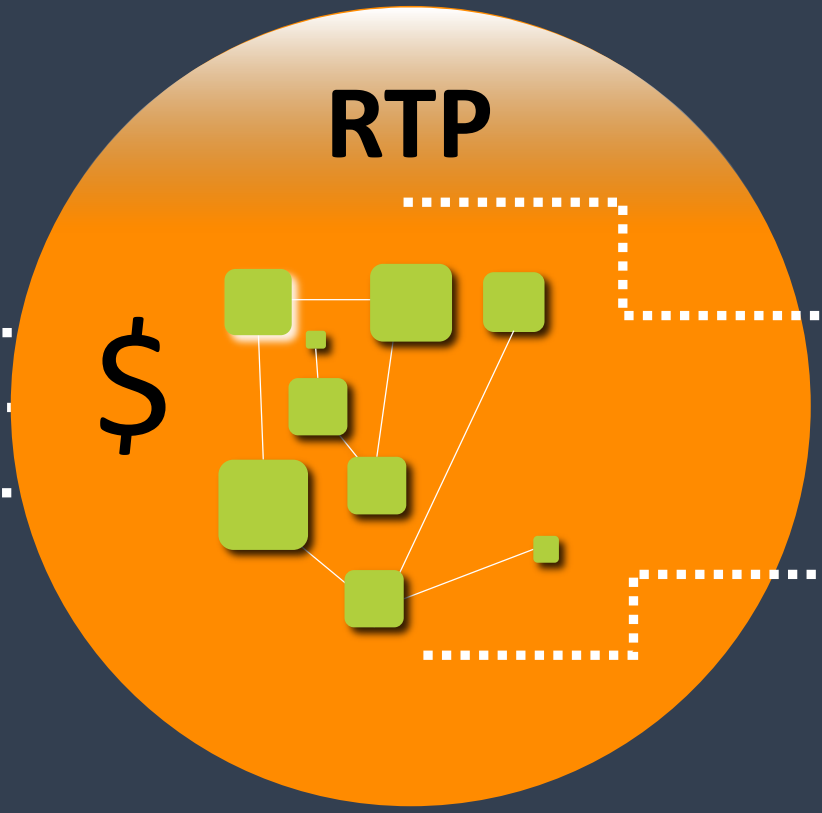
SOURCES

Federal Programs

State from HURF

Regional from tax

[Total 2014-2035 estimated $17B RTP 20 yr. Plan horizon]



LIFE CYCLE PROGRAMS

Highway

Arterial

Transit

Advance and support Regional Goals and Targets

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TOOLS

Federal Programs

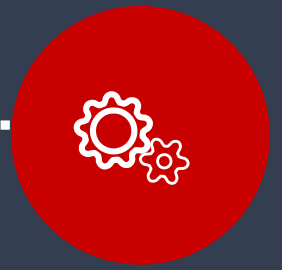
NHPP

STP

TA

CMAQ

HSIP



TIP

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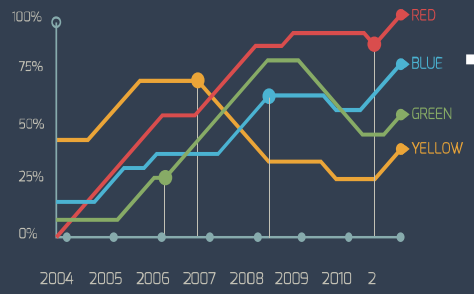

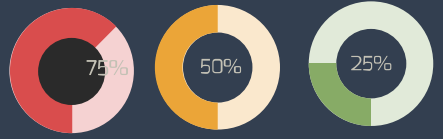

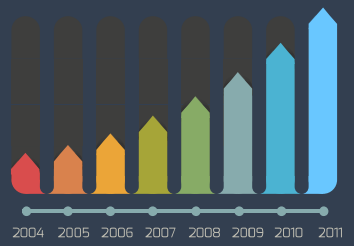

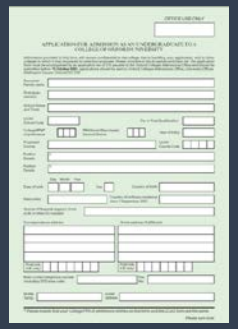

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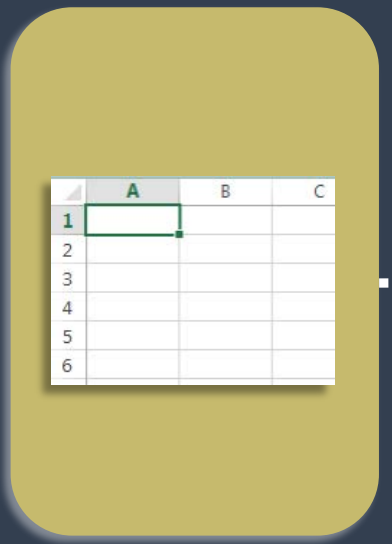
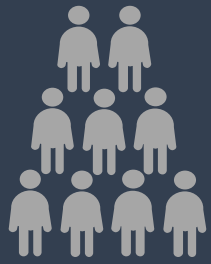


ProjID	City	Project Name	Committee Rank	Final Average	Final Rank
			30%	100%	
PHX-BikePed-6	Phoenix	Regional BikeShare Along Metro Rail Corridor Phx to Tempe	3	5.0	2.0
CVK-BikePed-1	Cave Creek	Cave Creek/Carefree Bike Lanes	2	6.1	3.0
MAA-BikePed-1	Maricopa County	5' Bike Lanes on McDowell Rd. 78th St to Usary Pass	4	6.9	4.0
MES-BikePed-1	Mesa	Rio Salado Shared Use Pathway - Segment 3	6	7.6	5.0
PHX-BikePed-1	Phoenix	Roosevelt Row Bike Lane and Sidewalk Improvement	5	7.6	6.0
AVN-BikePed-1	Avondale	Agua Fria Asphalt I-10 Underpass	7	8.4	7.0
TMP-BikePed-2	Tempe	Shared Use Path Priest Drive Underpass	1	2.7	1.0
GLN-BikePed-3	Glendale	New River North Shared Use Pathway	8	8.4	7.0
PHX-BikePed-3	Phoenix	Rio Salado 12' Shared Use Pathway 32nd Street to 40th Street	10	10.0	9.0
PHX-BikePed-2	Phoenix	32nd Street Bike Lanes: SR51 to Reach 11	11	11.3	10.0
PHX-BikePed-4	Phoenix	12' Shared Use Pathway Rio Salado Pathway - 40th Street to SR143	9	11.7	11.0



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