



MSI

MAG Freight Transportation Plan Stakeholder Meeting

May 10, 2017



Today's Agenda

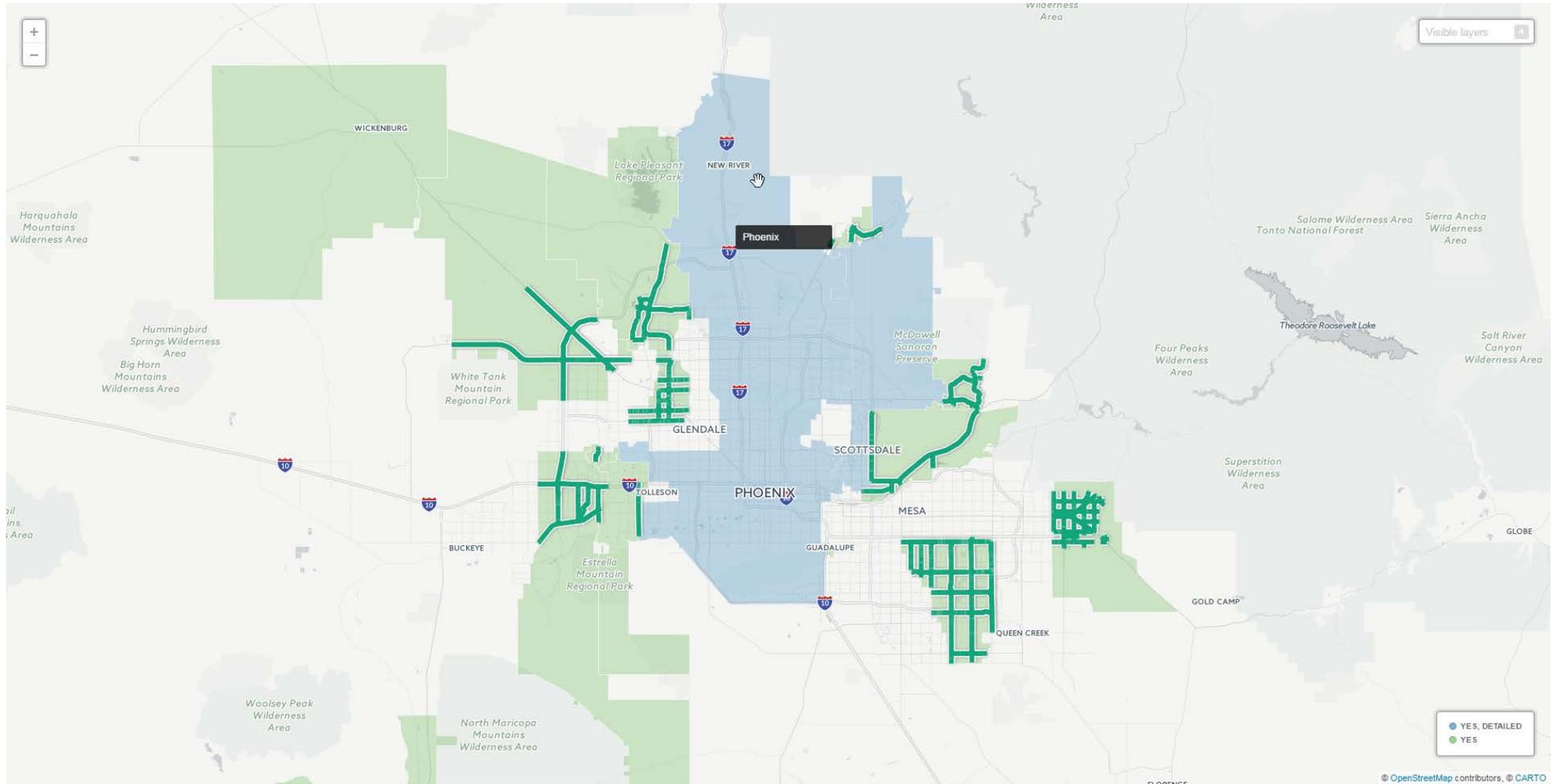
- Highlights of Technical Memo
- Draft Regional Freight Network
- FAST Act Designations
- Prioritization Methodology
- Preliminary Priorities
- Integrating with Regional Transportation Plan

Highlights of Technical Memo

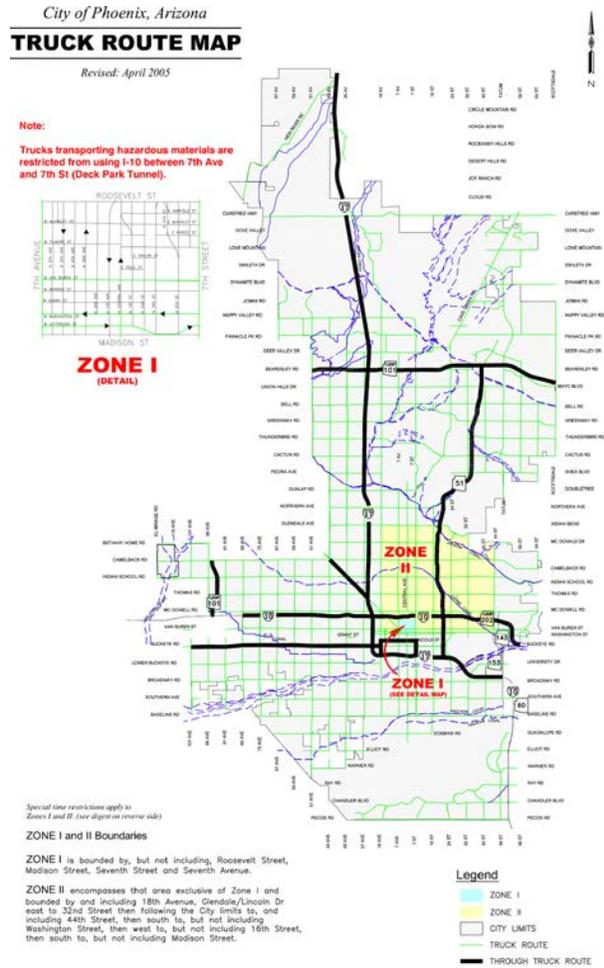
- Existing Assets
- Economic and Trade Profile
- Land Use and Major Industrial Clusters
- System Utilization and Performance
- Regional Freight Policies
- Draft Regional Freight Network

Truck Routes Today

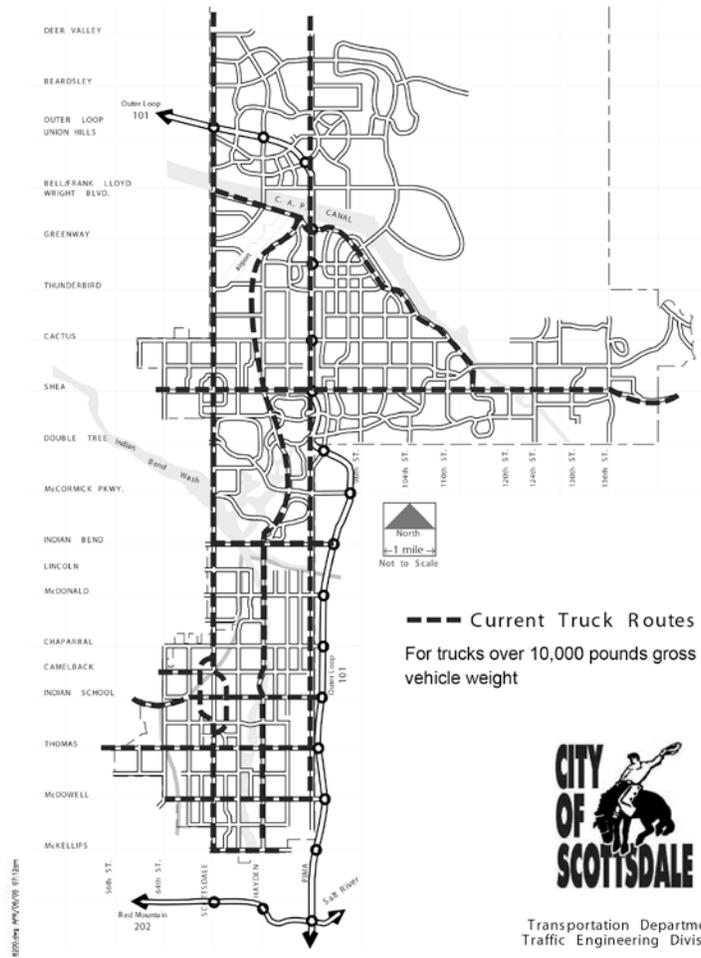
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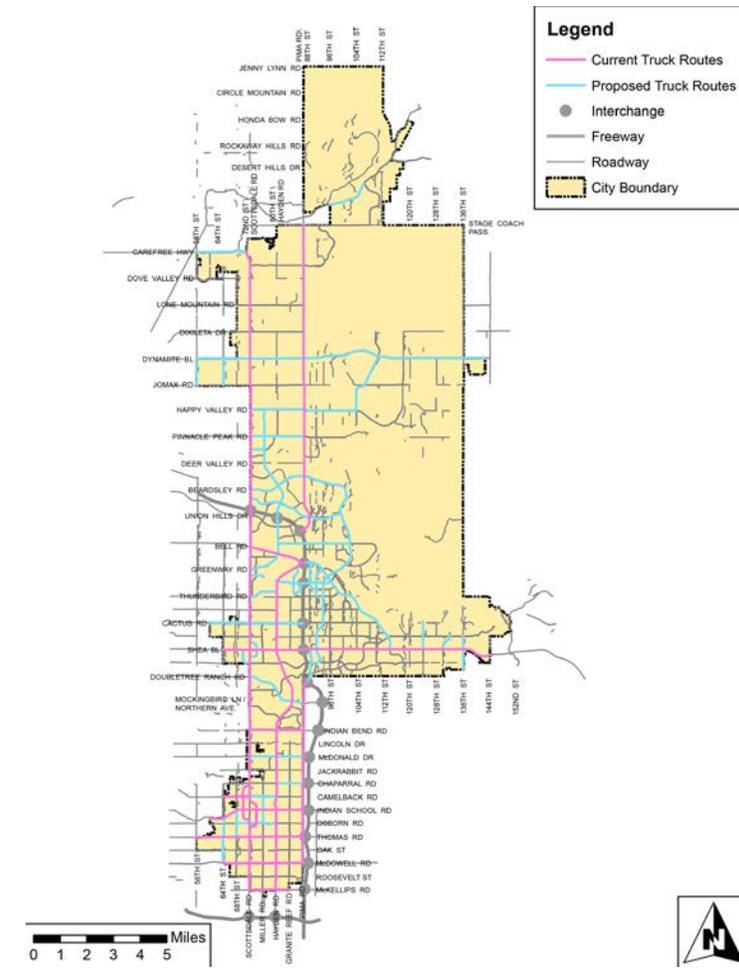
Truck Routes Today: Phoenix & Scottsdale



Phoenix, April 2005



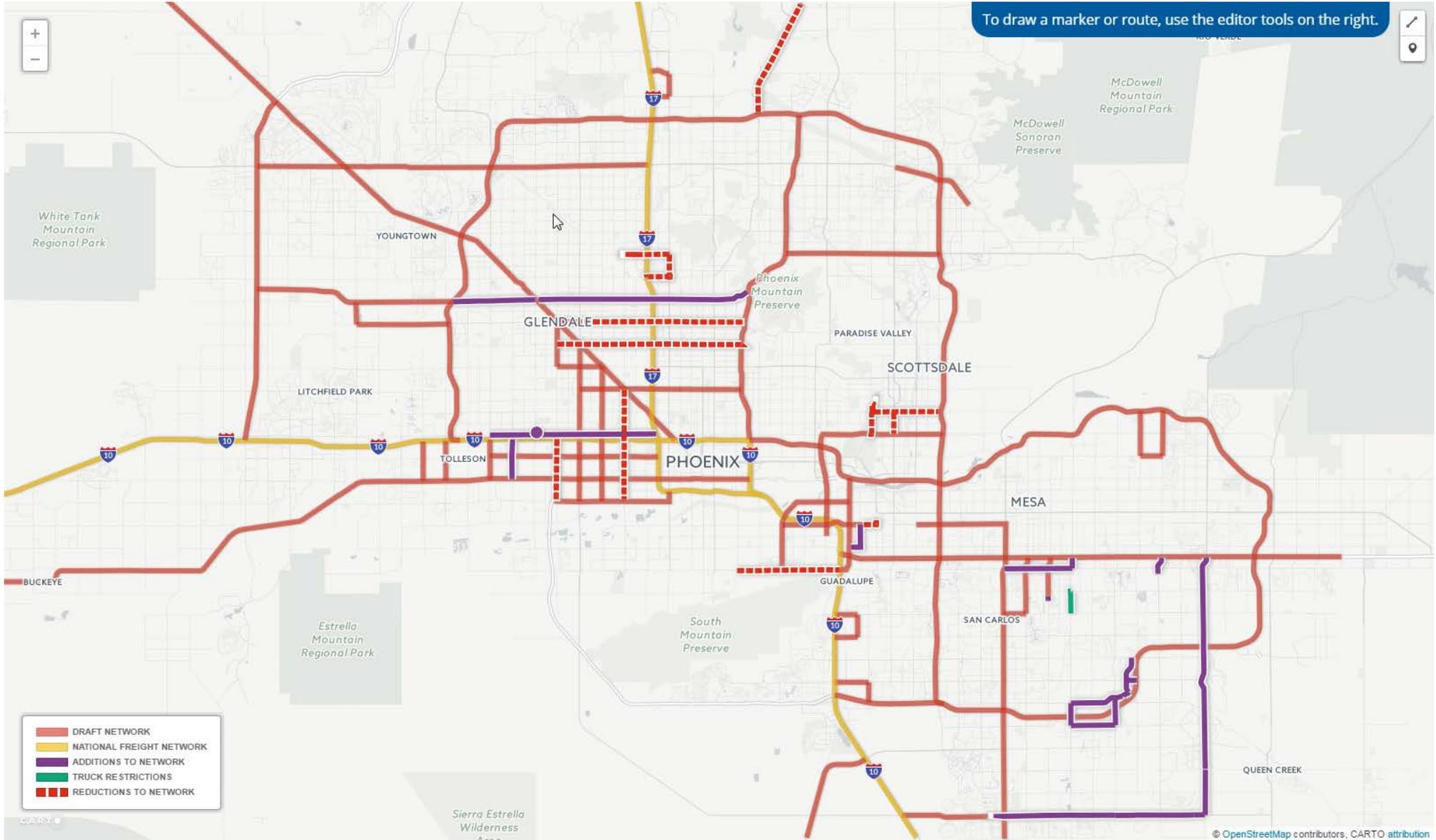
Scottsdale, September 2004



Scottsdale, June 2011
 (Proposed)

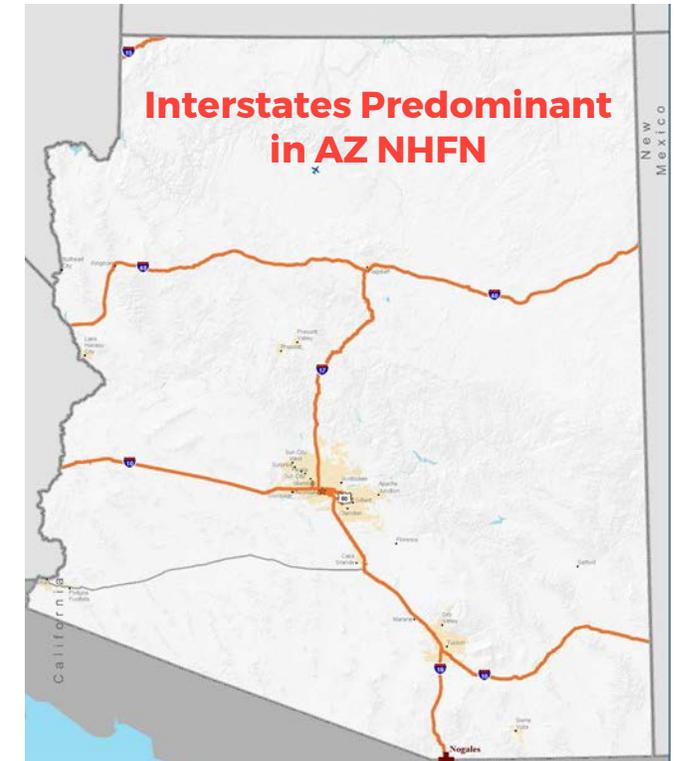
Draft Regional Freight Network

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FAST Act Funds and Freight Network Designation

- FAST Act gives Arizona an average \$23 mil. per year in freight formula funds
- Funds useable on 1,333 National Highway Freight Network (NHFN) miles statewide, of which 988 miles are interstates
- MAG can influence designation of 103 total state NHFN miles for Critical Urban Freight Corridors (CUFCs)
 - *Designation affects eligibility for FASTLANE grants as well as freight formula money*



CUFC Designation Issue and Solution

- 386 non-interstate miles of the MAG Roadway Freight Network are urban and qualify for CUFC designation
 - *Thus very many more miles qualify than can be designated*
- Solution stems from ability to change CUFC designation: it isn't permanent
- Since the value of designation is eligibility for money, designation should go to top priority Freight Network segments where improvements most needed
- Designation is then moved over time to next priority segments as improvements are completed

Leveraging Funds on the MAG Roadway Freight Network

Formula funds can be used for a wide range of freight network improvements, not just big ticket capacity projects. For example:

→ Needs

- Right turn radii are too short for trucks
- Lack of loading/ unloading areas
- Long queues and unused green time
- Access point density
- Improper, confusing, or missing signage
- Deteriorated pavement
- Roadway not aligned
- Slow left turns

→ Improvements

- Lower curbs, restripe, or widen
- Identify and sign loading zones
- Optimize signal timing
- Merge and close access points
- Conduct a signage inventory
- Repave and repair pavement
- Restripe lanes, move stop bar



Prioritization Methodology

- Goals matched to MAG Regional Transportation Planning
- Categories:
 - *Goal 1 System Preservation and Safety*
 - *Goal 2 Access and Mobility*
 - *Goal 3 Sustaining the Environment*
 - *Goal 4 Accountability and Planning*
- The MAG Freight Transportation Plan also identifies and prioritizes projects that may become part of the MAG Regional Transportation Plan. The method is based on the region's four transportation goals interpreted in terms of freight.

Application of Prioritization

- Evaluation performed for segments of the Draft Regional Freight Network
- Project priorities are a function of segment priorities
- 154 Segments
- 702 Centerline miles

	Urban	Rural	Total
Interstate	72	57	129
Non-Interstate	386	187	573
TOTAL	458	244	702

Prioritization Methodology

Goal 1

Transportation infrastructure that is properly maintained and safe, preserving past investments for the future.

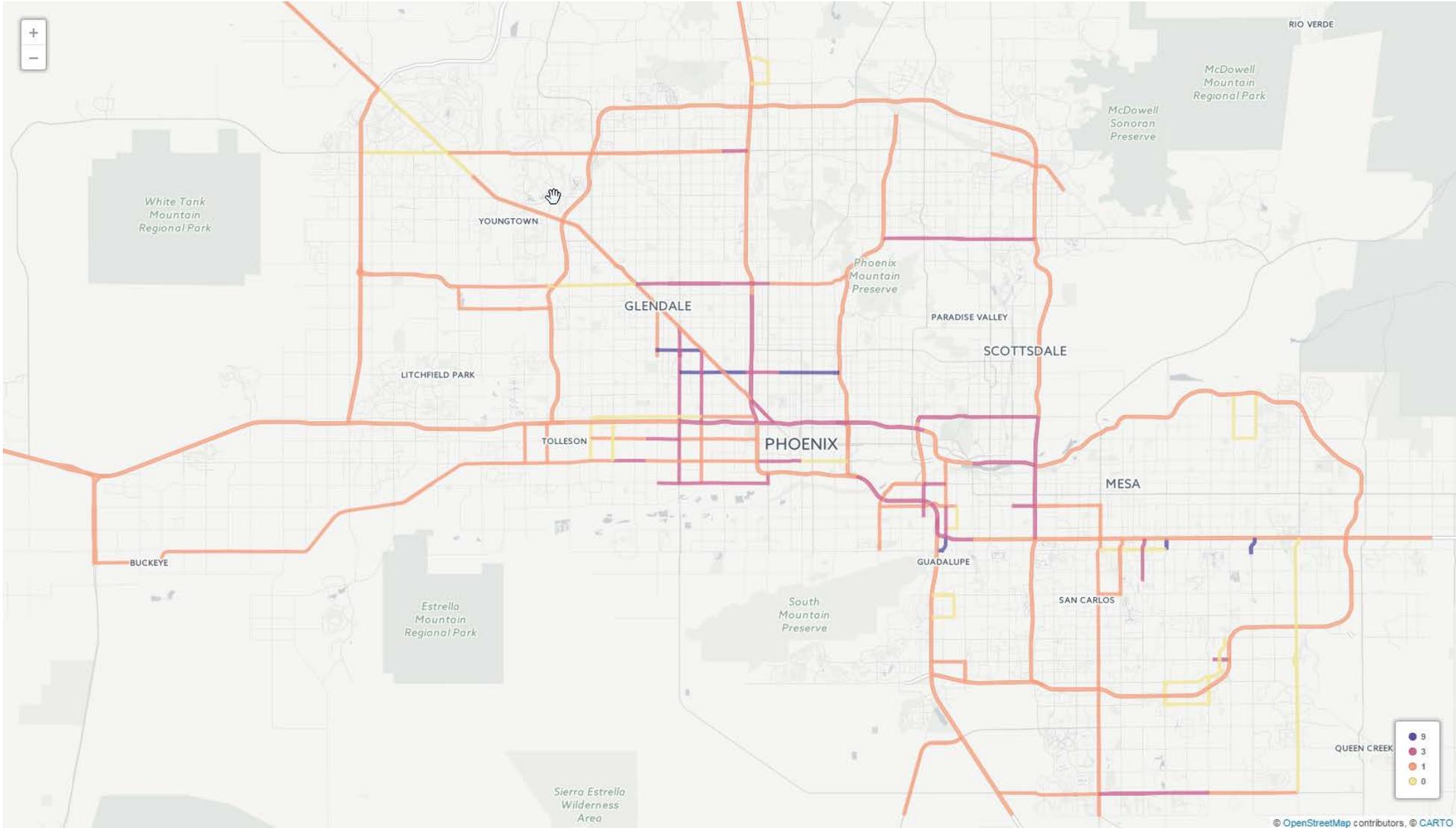
- *One truck every 20-seconds (Daily average truck counts of 4,320 or greater) OR truck proportion of all vehicle traffic at 20% or greater*
- *Signalized or stop sign controlled intersection density five or greater per mile (at least one signalized intersection or stop sign controlled intersection per quarter-mile)*
- *All vehicle, pedestrian, and property damage only crashes with frequency of 25 or greater per mile annually*

Measurement method: 9 = three criteria met; 3 = two criteria met; 1 = one criterion met; 0 = no criteria met

Prioritization Methodology

Goal 1

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Prioritization Methodology

Goal 2

Transportation systems and services that provide accessibility, mobility and modal choices for residents, businesses and the economic development of the region.

9 = In a designated freight cluster or adjacent to intermodal facility (within one mile) and containing a bus route with 30-minute or greater frequencies

3 = In a designated freight cluster or adjacent to intermodal facility (within one mile)

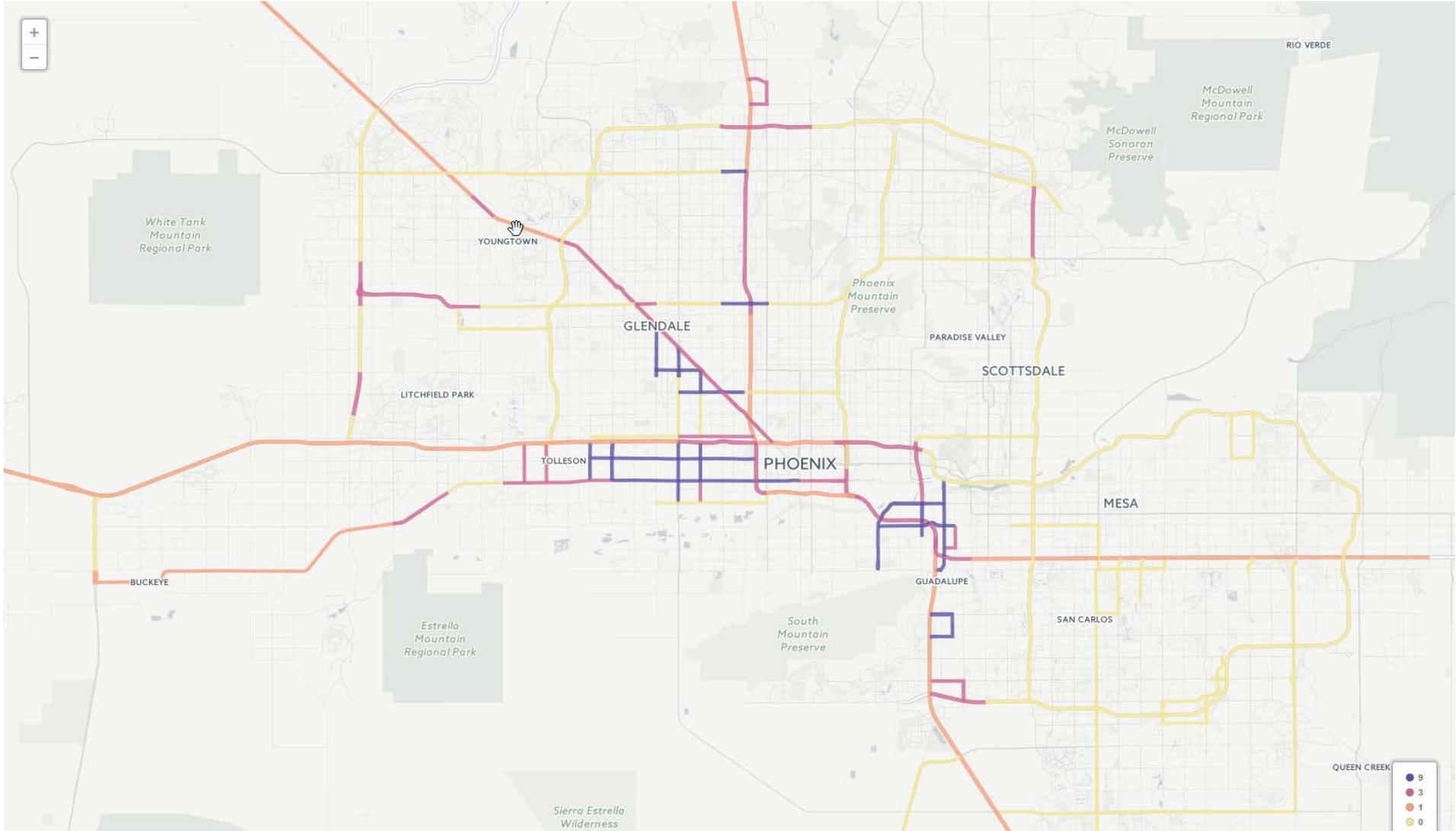
1 = Not in a designated freight cluster but provides connection to external markets

0 = no criteria met

Prioritization Methodology

Goal 2

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Prioritization Methodology

Goal 3

Transportation improvements that help sustain our environment and quality of life.

9 = Motor vehicle peak hour travel time is 3X the travel time during typical traffic (median speed) and location provides redundancy to the Primary Highway Freight System (measured as adjacency within 1 mile straight line distance)

3 = Motor vehicle peak hour travel time is 3X the travel time during typical traffic

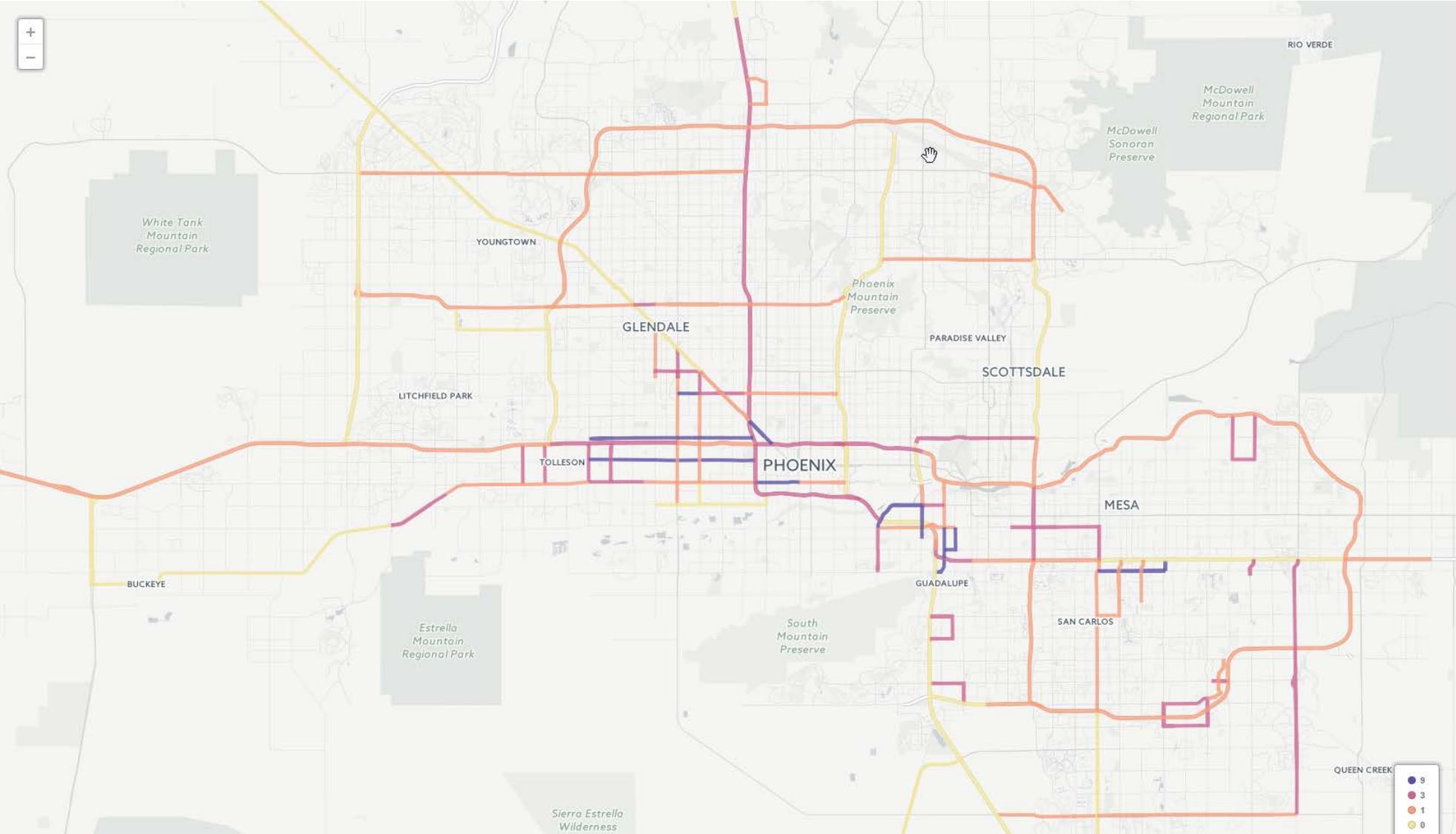
1 = Motor vehicle peak hour travel time is 2X percent higher than the travel time during typical traffic

0 = no criteria met

Prioritization Methodology

Goal 3

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Prioritization Methodology

Goal 4

Transportation decisions that result in effective and efficient use of public resources and strong public support.

9 = Carries greater than \$900M in annual product value

3 = Carries greater than \$300M in annual product value

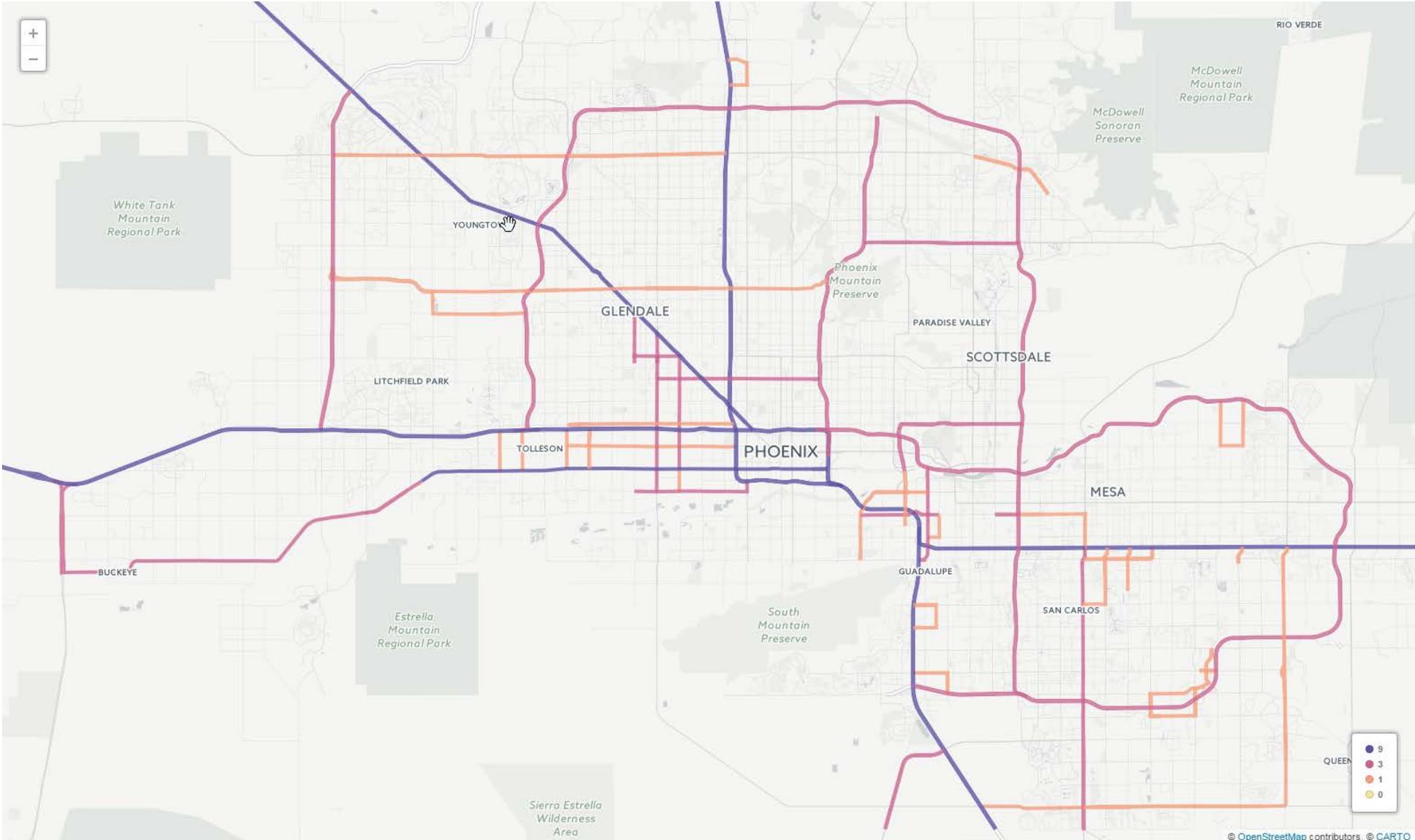
1 = Carries greater than \$100M in annual product value

0 = no criteria met

Prioritization Methodology

Goal 4

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Prioritization Methodology

Weighting

Assign weights to transportation goals according to their impact and stakeholder policy preferences.

Allow the resulting set of priorities to improve freight system performance.

35% *Goal 1: System Preservation and Safety*

30% *Goal 2: Access and Mobility*

25% *Goal 3: Sustaining the Environment*

10% *Goal 4: Accountability and Planning*

Preliminary Priorities

- Front of the class: Top 50
- Middle of the pack: Next 50
- Lower priorities: Rank 101-154

Integrating with Regional Transportation Plan

- Purpose and intent of branding
- Where does branding fit into the MAG Transportation Plan
- How does branding shape the MAG Program

Discussion

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