



Re-Cap Regional Transit Framework

October 2013





Public and Agency Involvement

Outreach Activities

- Four focus groups
 - Two with transit riders
 - Two with non-riders
- Survey of non-riders
- Public meetings
- Webinar
- On-line survey

Whale - it was the most prehistoric thing I could find. We should be more advanced from where we are. We should be moving ahead a lot faster and it should be more user friendly and we should be doing better than we are now. (Rider, 35+)

I live in Northeast Phoenix and work in East Mesa. This structure (existing transit network) doesn't work for me. The system is not there for us. (Non-rider, 35+)



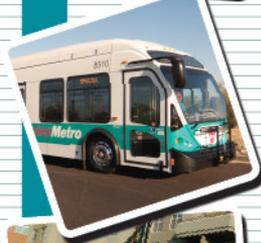
Barriers and Motivations for Using Transit

- **Barriers**

- Planning trips and substantial wait times
- Hours of operation, lack of frequency, and inadequate routes

- **Motivations**

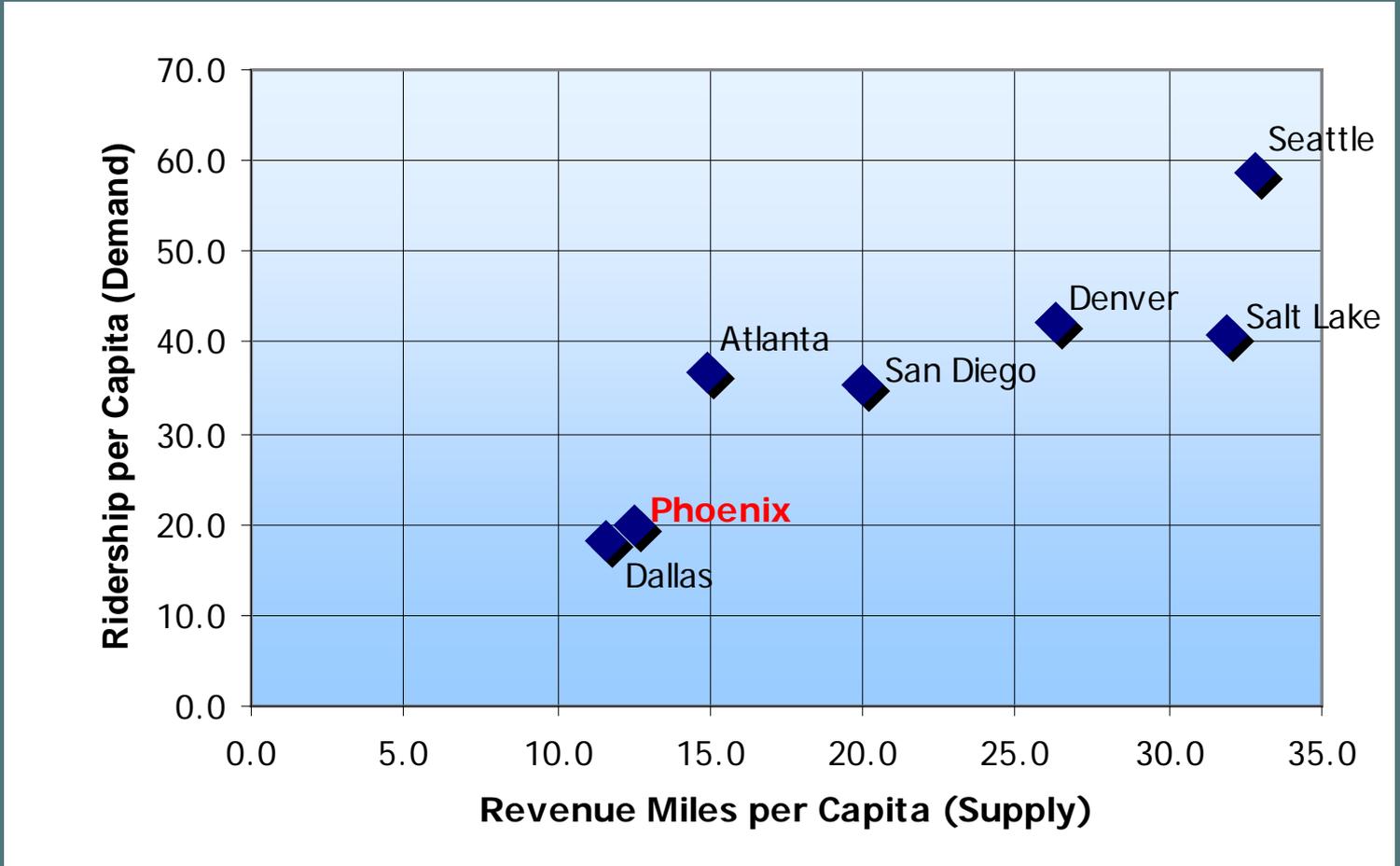
- Current riders want more buses, more routes, greater frequency, and longer service hours
- Non-riders are unlikely to consider public transit as a viable alternative until the system can offer them a benefit in relation to **convenience and time**





Peer Regions Review

2006 NTD Transit Supply & Demand



2006 Operating Investments



Region	Total Operating Expenses	Operating Expense per Capita	COLI*
Atlanta	\$331,704,840	\$81.88	96.1
Dallas	\$399,393,985	\$83.05	91.2
Denver	\$320,088,805	\$138.21	103.4
Salt Lake City	\$136,824,236	\$144.79	100.7
San Diego	\$264,244,089	\$97.08	139.5
Seattle	\$848,865,748	\$295.26	121.0
Average	\$383,520,284	\$129.87	---
MAG Region	\$229,507,781	\$71.10	100.6

* 2007 Composite Cost of Living Index



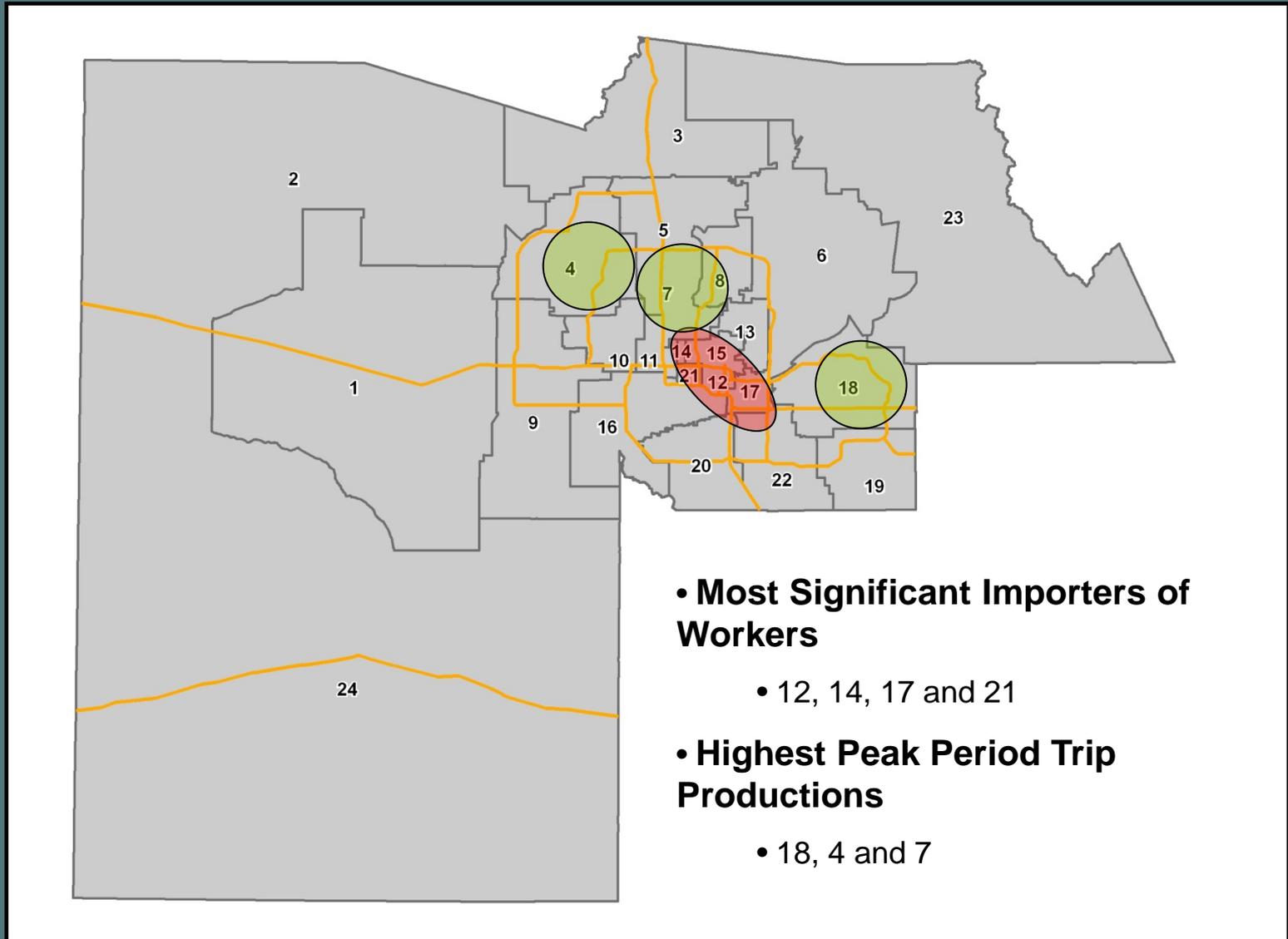
Evaluation of Needs

Regional Travel Demand

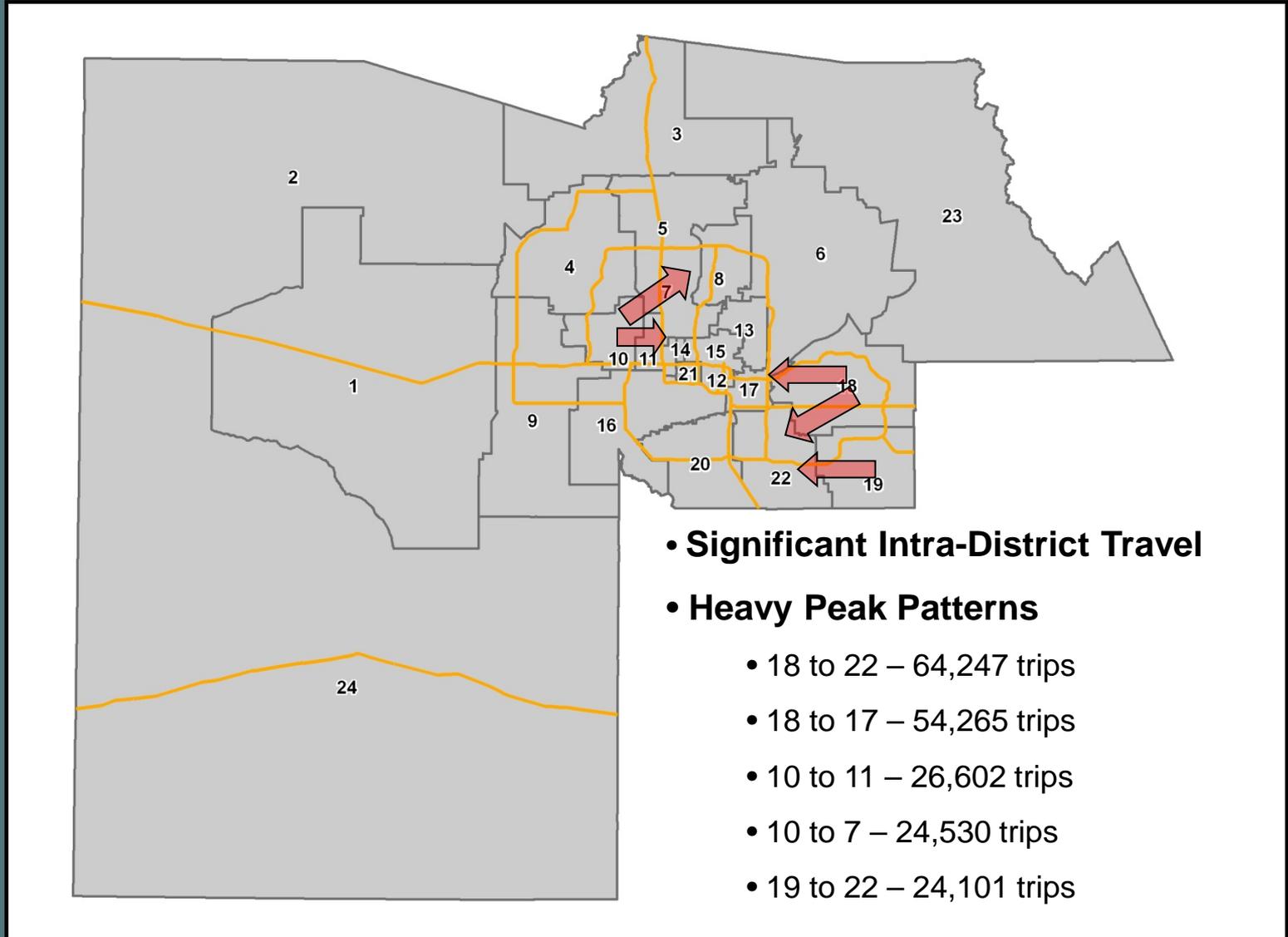
- Travel Demand Methodology
 - MAG Regional Travel Demand Model
 - Years 2006, 2019, 2030 (2050 sketch model)
 - Peak & Off-Peak Person Trips
 - Region divided into 26 transit influence zones (TIZ)
 - Based on commonly used MAG zone structure and zones used by METRO for previous travel demand analyses
 - 2 zones not in Maricopa County



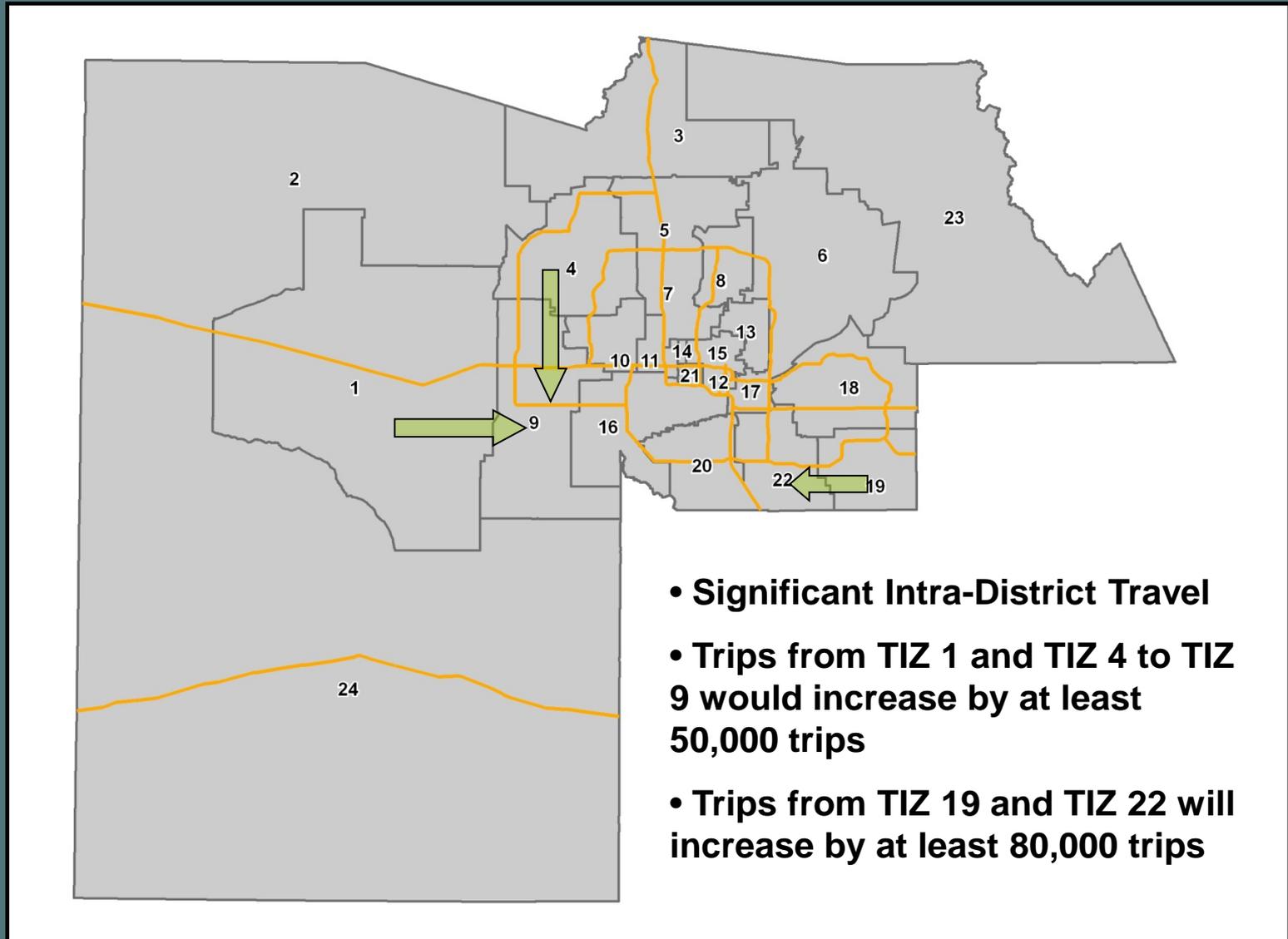
Regional Travel Demand - 2006



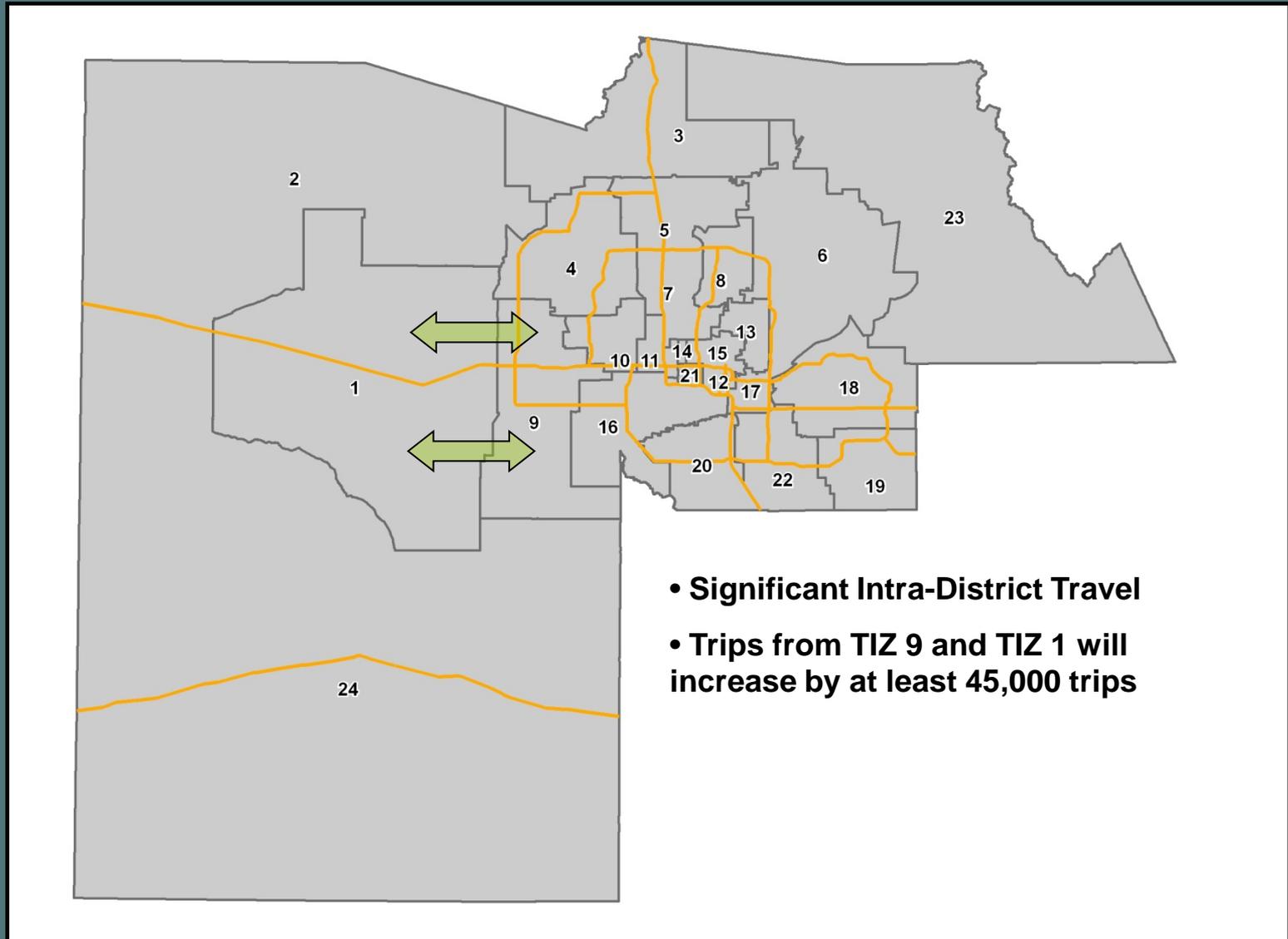
Regional Travel Demand - 2006



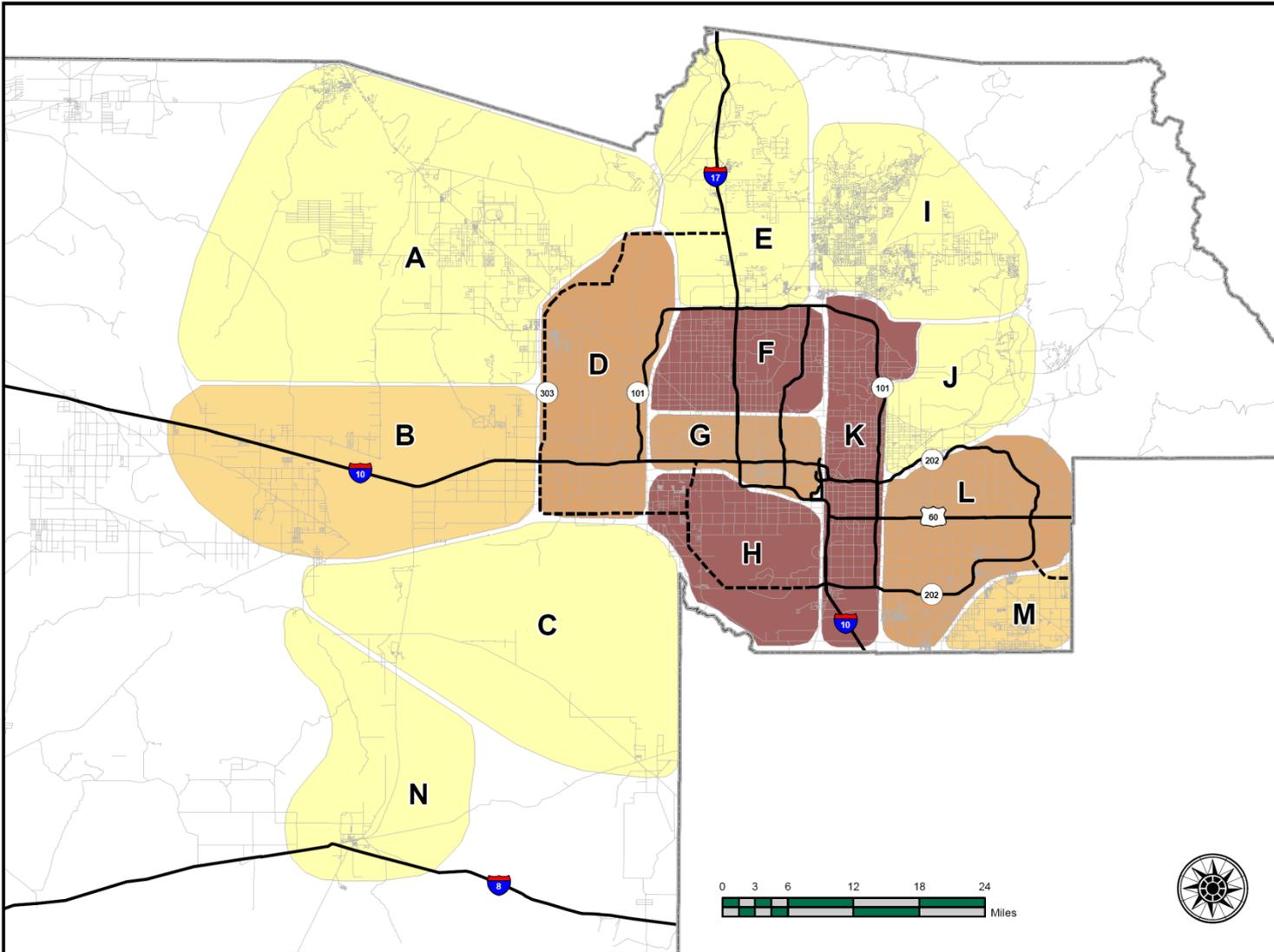
Regional Travel Demand Trends From 2006 to 2019



Regional Travel Demand Trends From 2019 to 2030



Regional Subarea Transit Deficiencies



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Regional Subareas with Transit Deficiencies

Freeways\Expressways & Major Roads

- Existing
- - - Planned
- Major Roads

Regional Subareas by Transit Deficiencies

- Includes 2 Deficiency Categories
- Includes 3 Deficiency Categories
- Includes 4 Deficiency Categories
- Includes 5 Deficiency Categories

Concepts for a Regional Transit Problem Definition

- Deficiencies
 - Transit Demand Exceeding Capacity
 - Limited Service Expansion
 - Capital Deficiencies
 - Safe & Convenient Services
 - Project Eligibility for Discretionary Funds
 - Unserved Developed Areas
 - Unserved Growth Areas
 - More Broadly Dispersed Employment
 - Congested Roadways
 - New Transit Investments Require Funding
 - Economic Competitiveness

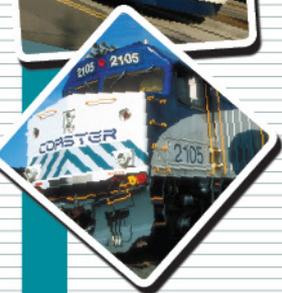
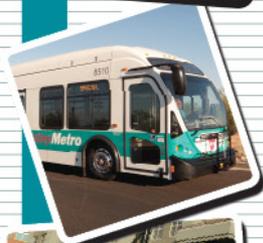


Development and Analysis of Study Alternatives

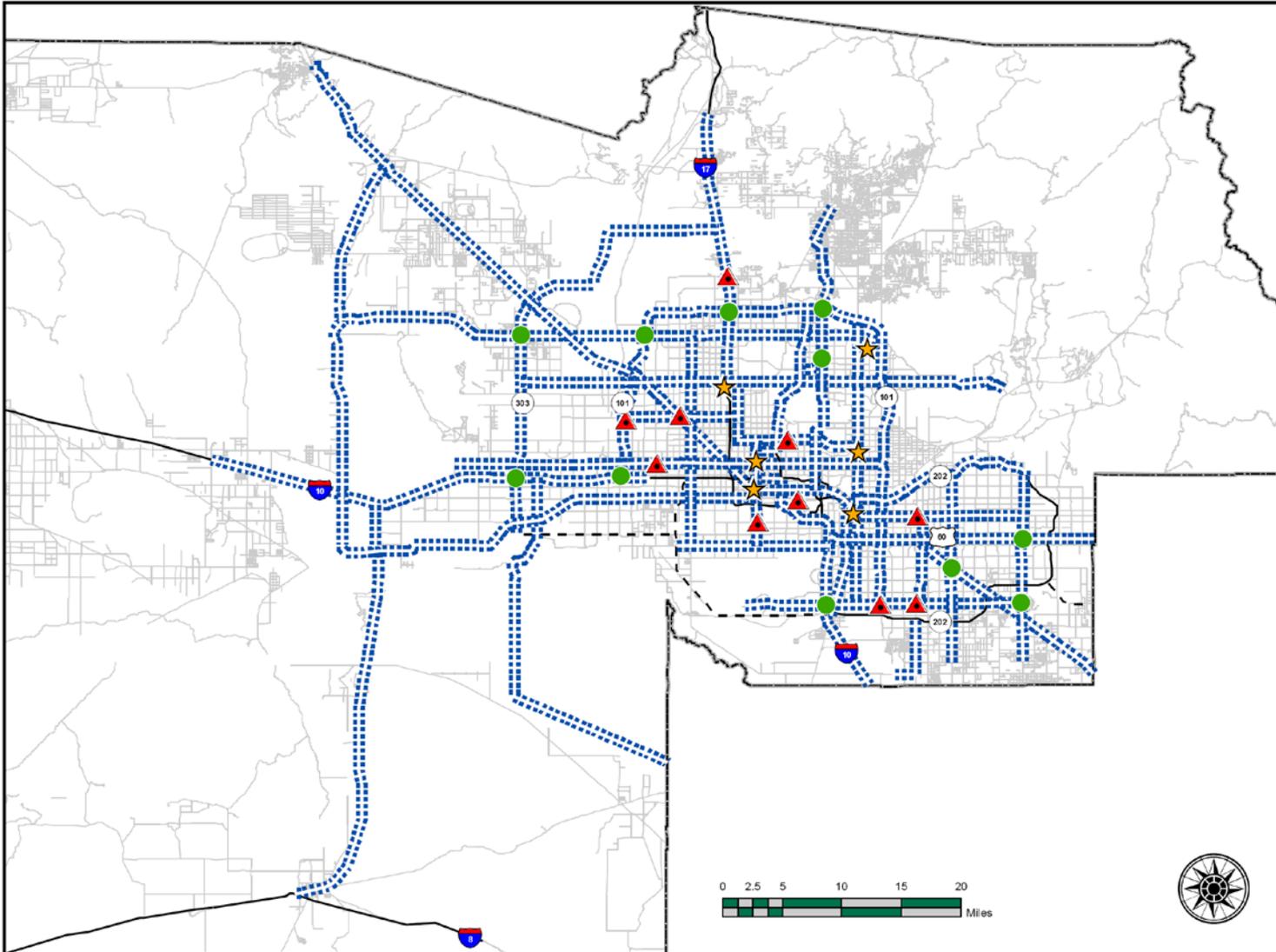


Transit Performance Standards & Indicators

- Planning Service Performance Standards & Indicators:
 - Customer Choice Centric Factors
 - Ridership
 - Flexibility and speed/travel time
 - Accessibility/availability
 - Safety & security
 - Comfort & convenience
 - System Compatibility Factors
 - Land use synergies
 - Community Values
 - Compatible with New Starts, ARS 28-505 and BQAZ



Scenario Development Initial Analysis Corridors



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Initial Analysis Corridors

Activity Centers

- ★ Regional
- ▲ Sub-Area
- Community

Analysis Corridors

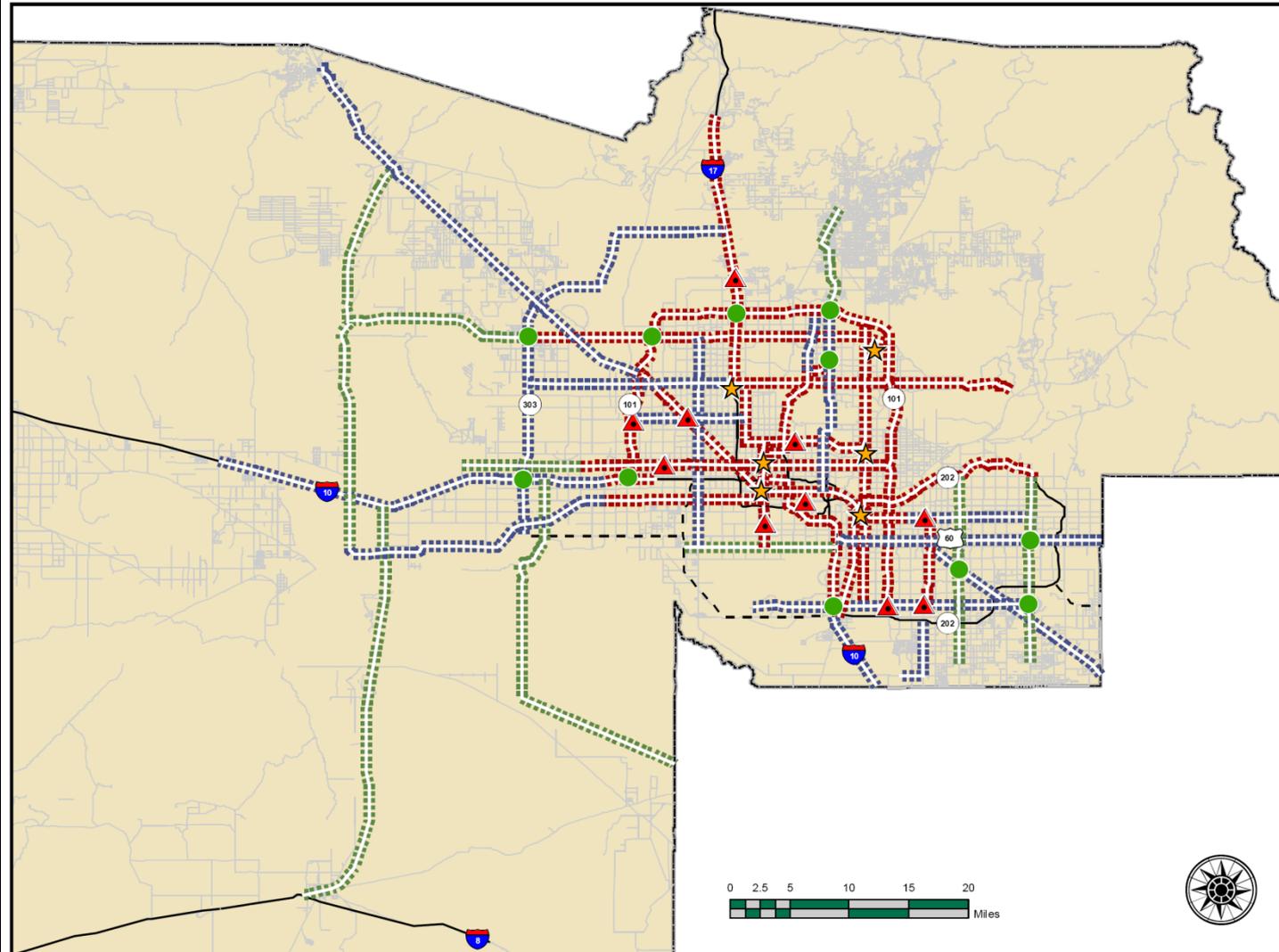


Freeways\Expressways and Major Roads

- Existing
- - - Planned
- Major Roads



Scenario Development Corridor Prioritization



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Initial Analysis Corridors Overall Potential to Increase Mobility*

Activity Centers

- ★ Regional
- ▲ Sub-Area
- Community

Analysis Corridors - Overall Potential to Increase Mobility

- Highest
- Higher
- High

Freeways/Expressways and Major Roads

- Existing
- - - Planned
- Major Roads

*Based on criteria defined in MAG Regional Transit Framework Study Draft Technical Memorandum: Transit Modeling Scenarios (1/9/09).

Transit Modeling Assumptions

Service Types



Service Type	Purpose / Market Type	Corridor Characteristics	Mode Type
Regional Connector	Regional Access	Rural or Arterial St	Bus
Supergrid	Regional and local access	Arterial St	Bus
Express	Enhanced-speed, moderate-volume commuter or regional access	Mostly Freeway	Bus
Arterial BRT	Enhanced-speed, high-demand local or regional access	Arterial St	Bus
HCT Peak Period	Higher-speed, high-demand commuter or regional access	Dedicated Guideway	Bus or Train
HCT All Day	Higher speed, high-demand regional access	Dedicated Guideway	Bus or Train



Arterial Bus Rapid Transit



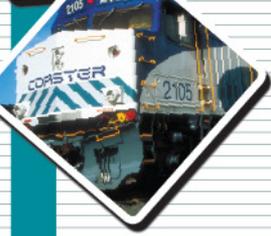
HCT Peak Period



HCT All Day

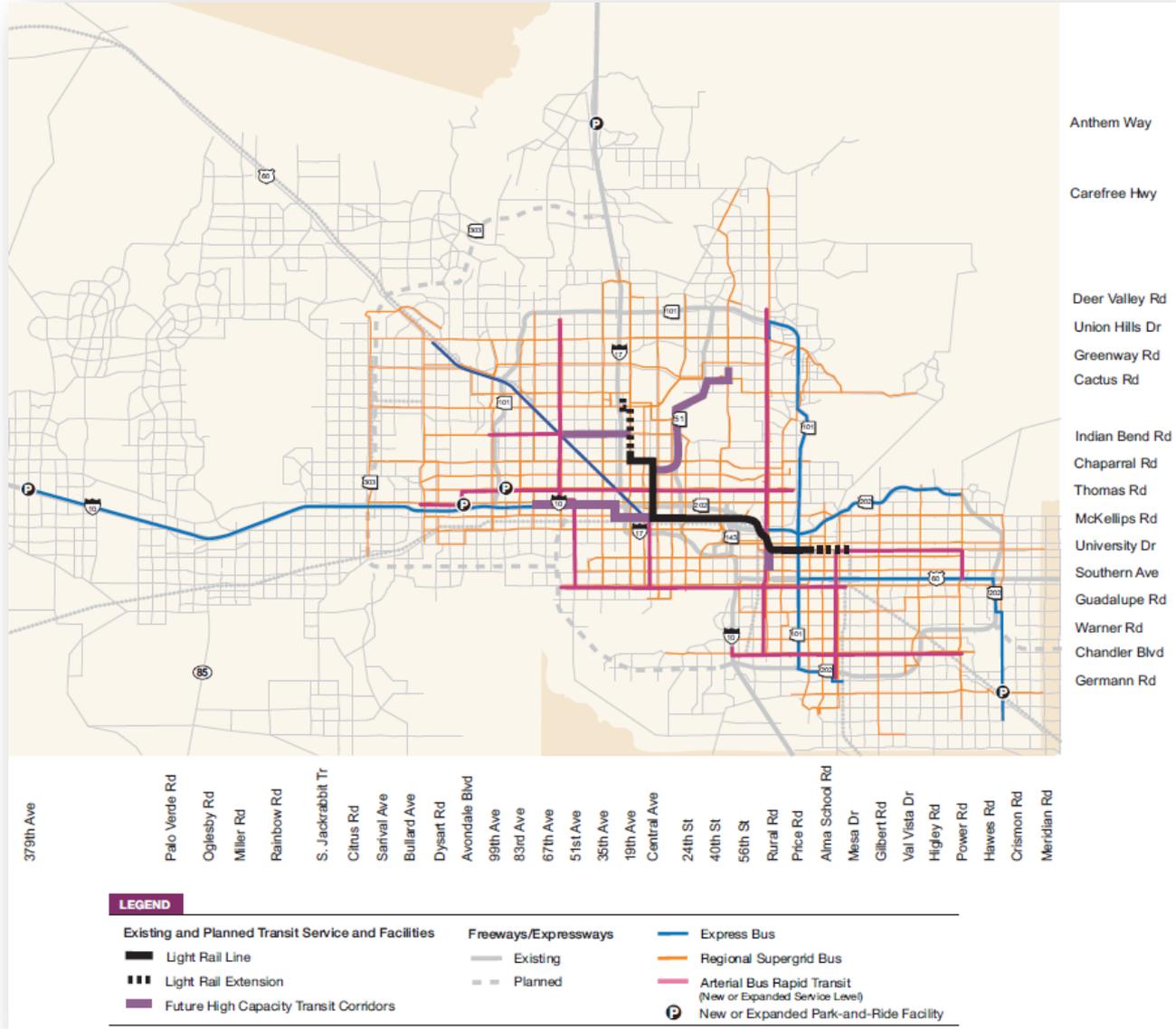
*Match headways of high capacity transit connections.

Transit Scenarios Characteristics

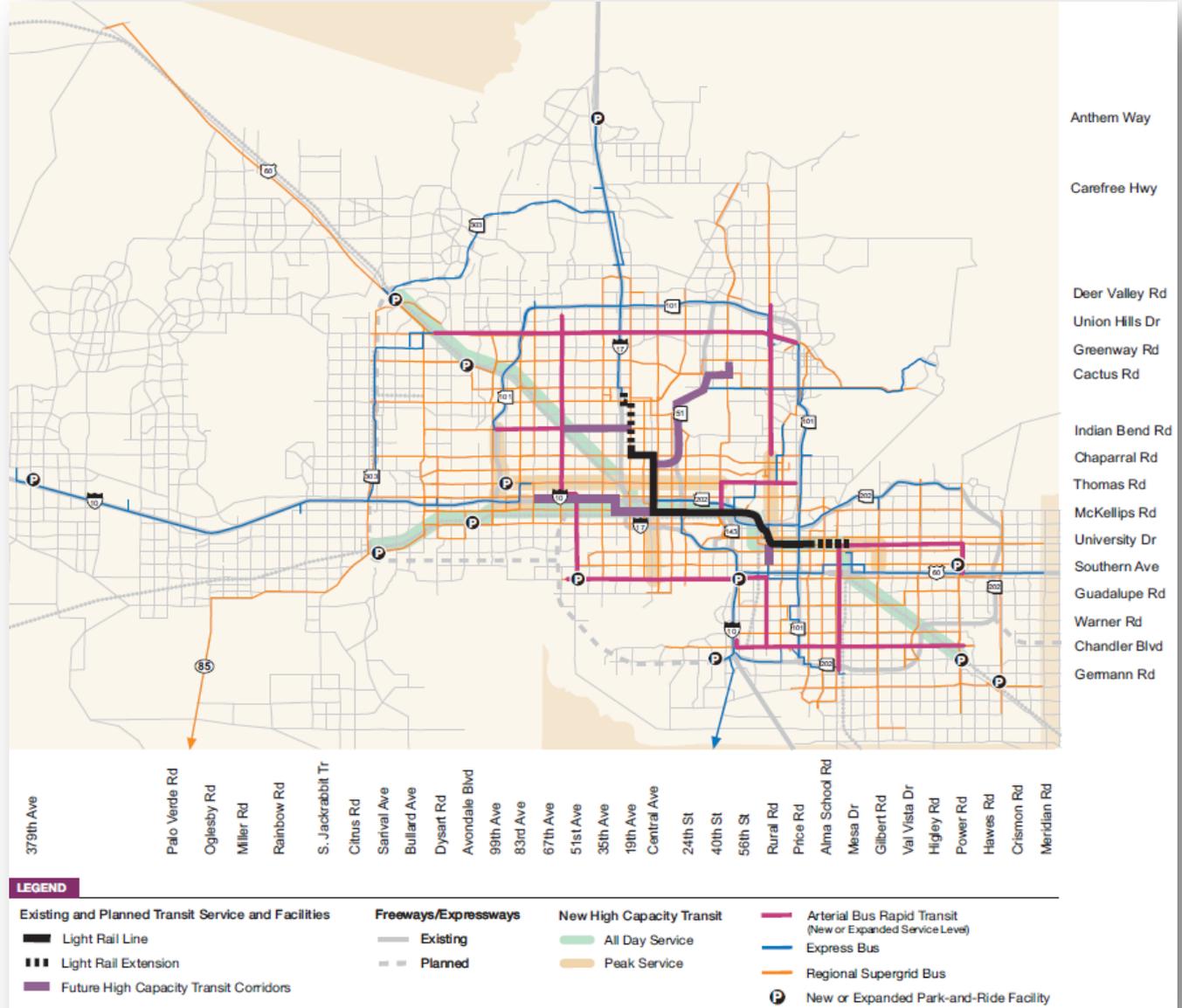


Scenario	Investment Level	Characteristics
I: Basic Mobility	Lowest <i>(extend existing sources)</i>	<ul style="list-style-type: none"> - Expands service to new areas - Improves service levels within a limited number of high demand transit corridors - Many deficiencies not addressed
II: Enhanced Mobility	Moderate <i>(comparable to peer regions level)</i>	<ul style="list-style-type: none"> - Expands regional transit service levels - Improves transit travel speeds in highest priority corridors - Existing service level deficiencies fully addressed, other deficiencies not
III: Transit Choice	Higher <i>(comparable to Seattle level)</i>	<ul style="list-style-type: none"> - Expands regional transit service levels - Provides a more comprehensive regional transit system - Improves transit travel speeds in many more corridors - Most deficiencies are addressed

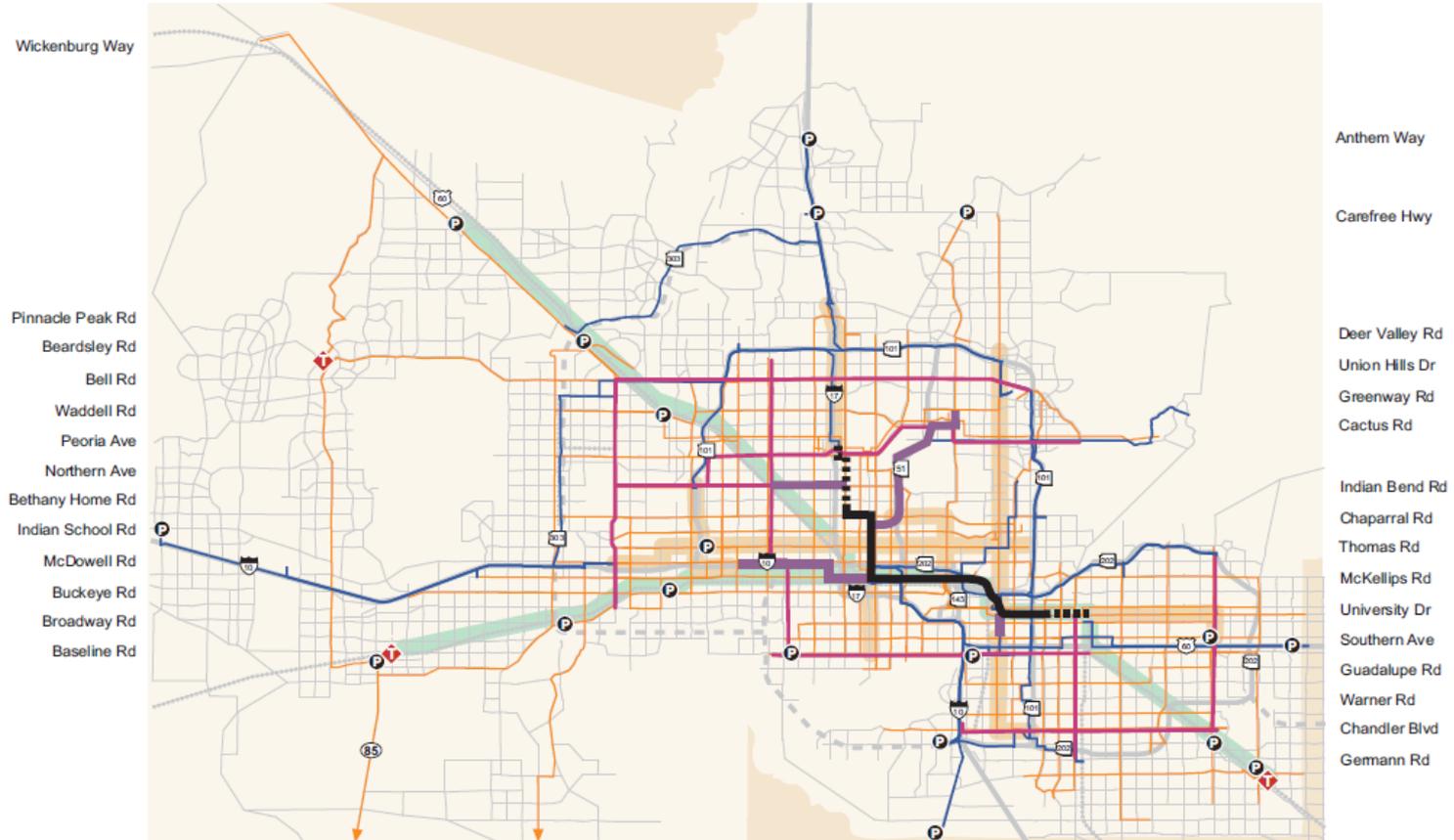
Scenario 1: Basic Mobility



Scenario 2: Enhanced Mobility



Scenario 3: Transit Choice



LEGEND	
Existing and Planned Transit Service and Facilities	Freeways/Expressways
Light Rail Line	Existing
Light Rail Extension	Planned
Future High Capacity Transit Corridors	New High Capacity Transit
Express Bus	All Day Service
Regional Supergrid Bus	Peak Service
Arterial Bus Rapid Transit	New or Expanded Park-and-Ride Facility
New or Expanded Transit Center	

Products

- Four project fact sheets
- Peer Regions Evaluation
- Non-Rider Survey, On-line Survey, Focus Group Report
- Working Papers
 - Working Paper #1: Analysis of Transit Travel Demand
 - Working Paper #2: Transit Performance Indicators and Service Standards
 - Working Paper #3: Existing Transit Services and Deficiencies
 - Working Paper #4: Problem Definition
 - Working Paper #5: Analysis of Planned Improvements, Future Deficiencies, and Additional Service Options
 - Working Paper #6: Cost analysis for Transit Capital, Operating, Maintenance and Modernization
- Executive Summary and Final Report

