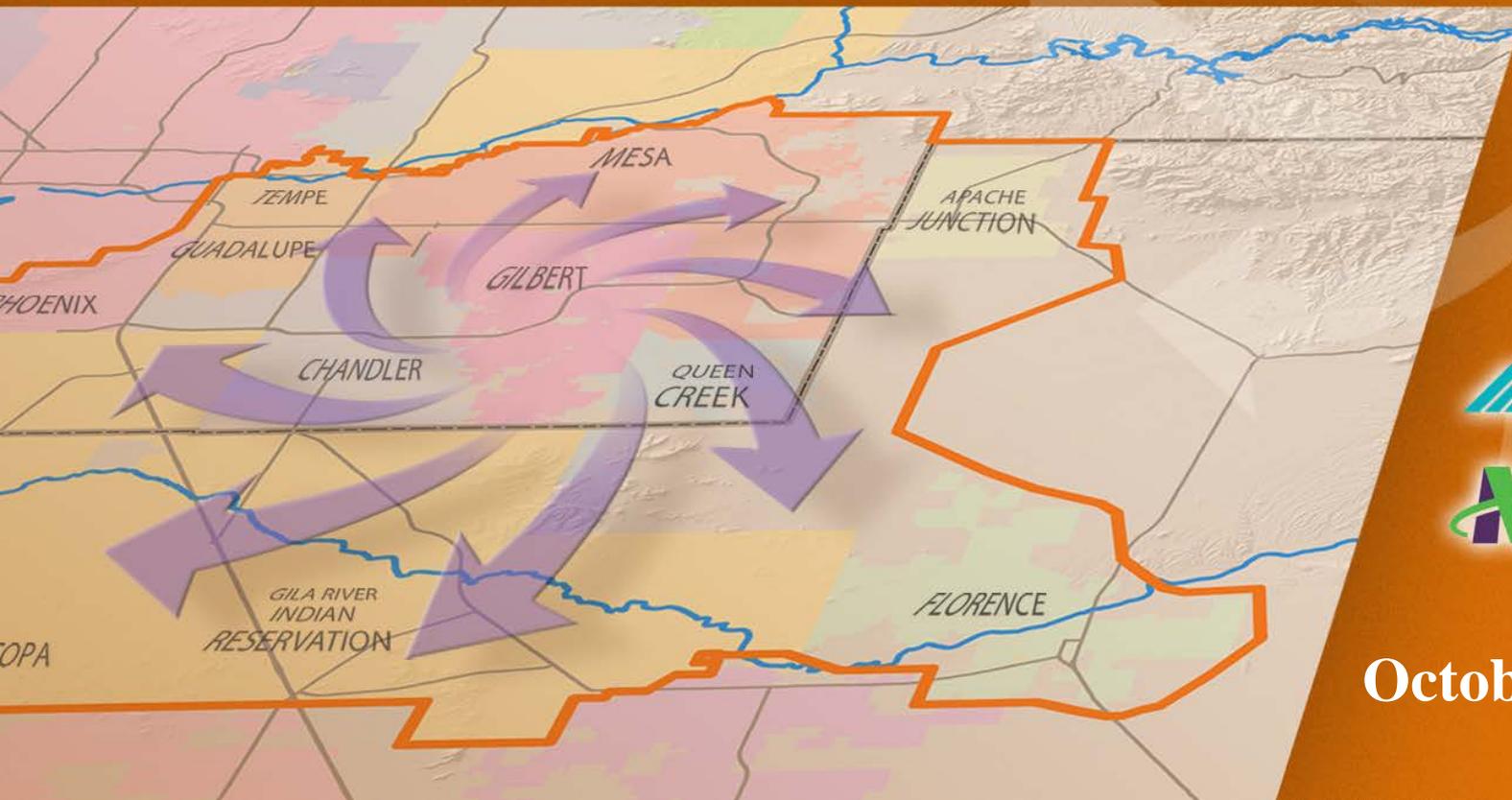


SOUTHEAST VALLEY TRANSIT SYSTEM STUDY



MAG Transportation Review Committee



October 23, 2014

Topics

- Study Purpose
- Study Team
- Community outreach
- Transit optimization task
- Travel patterns and markets
- Next steps

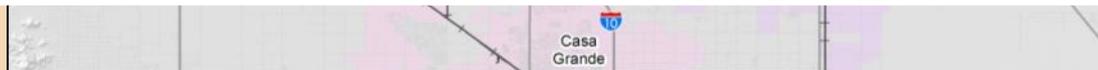


Study Purpose

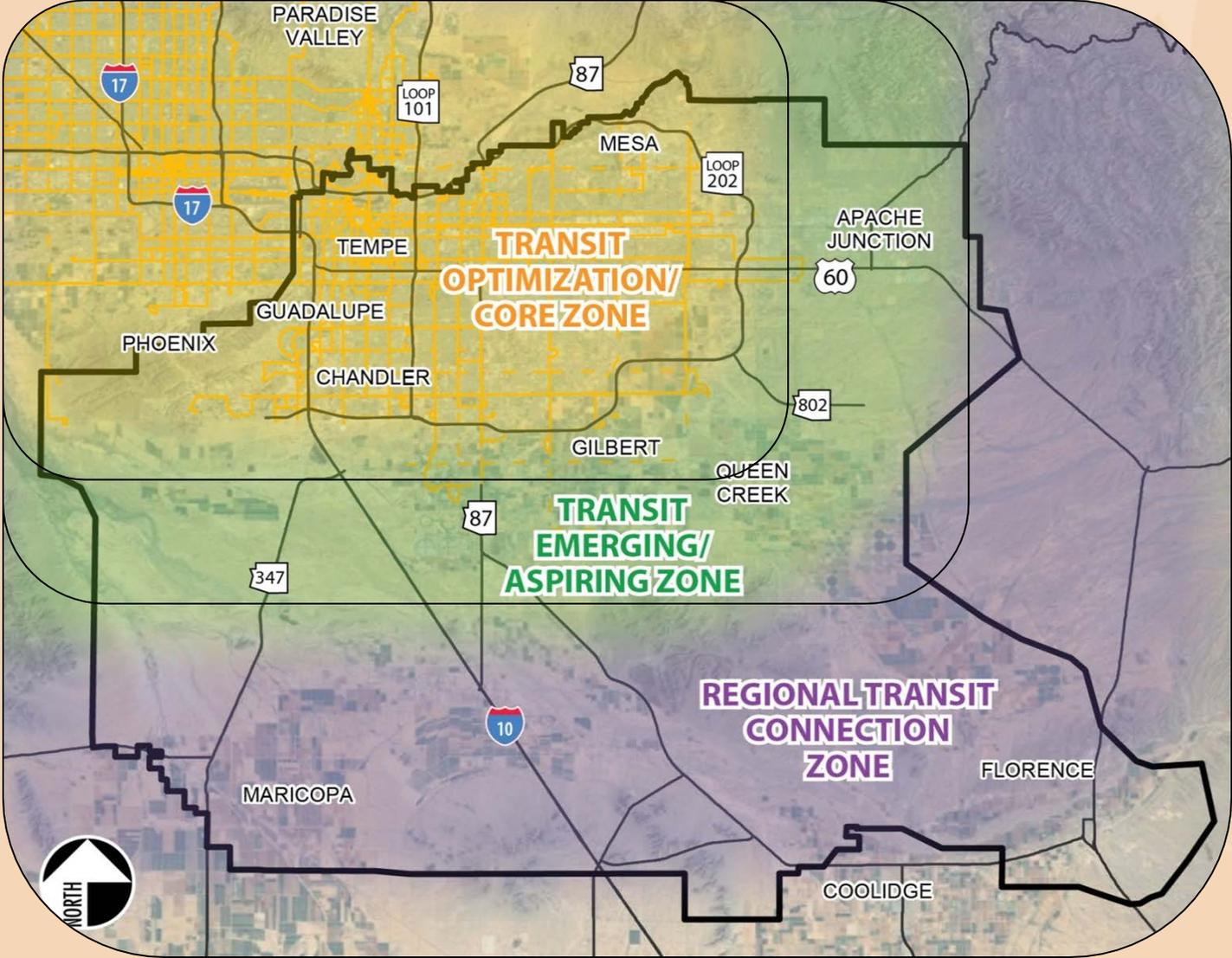
- Identify efficiencies and service gaps for existing and future transit services
 - Optimize existing services
 - Identify current unmet needs
 - Address changing study area conditions
- Develop recommendations for addressing short-, mid-, and long-term transit needs
- Investigate funding strategies and partnership opportunities



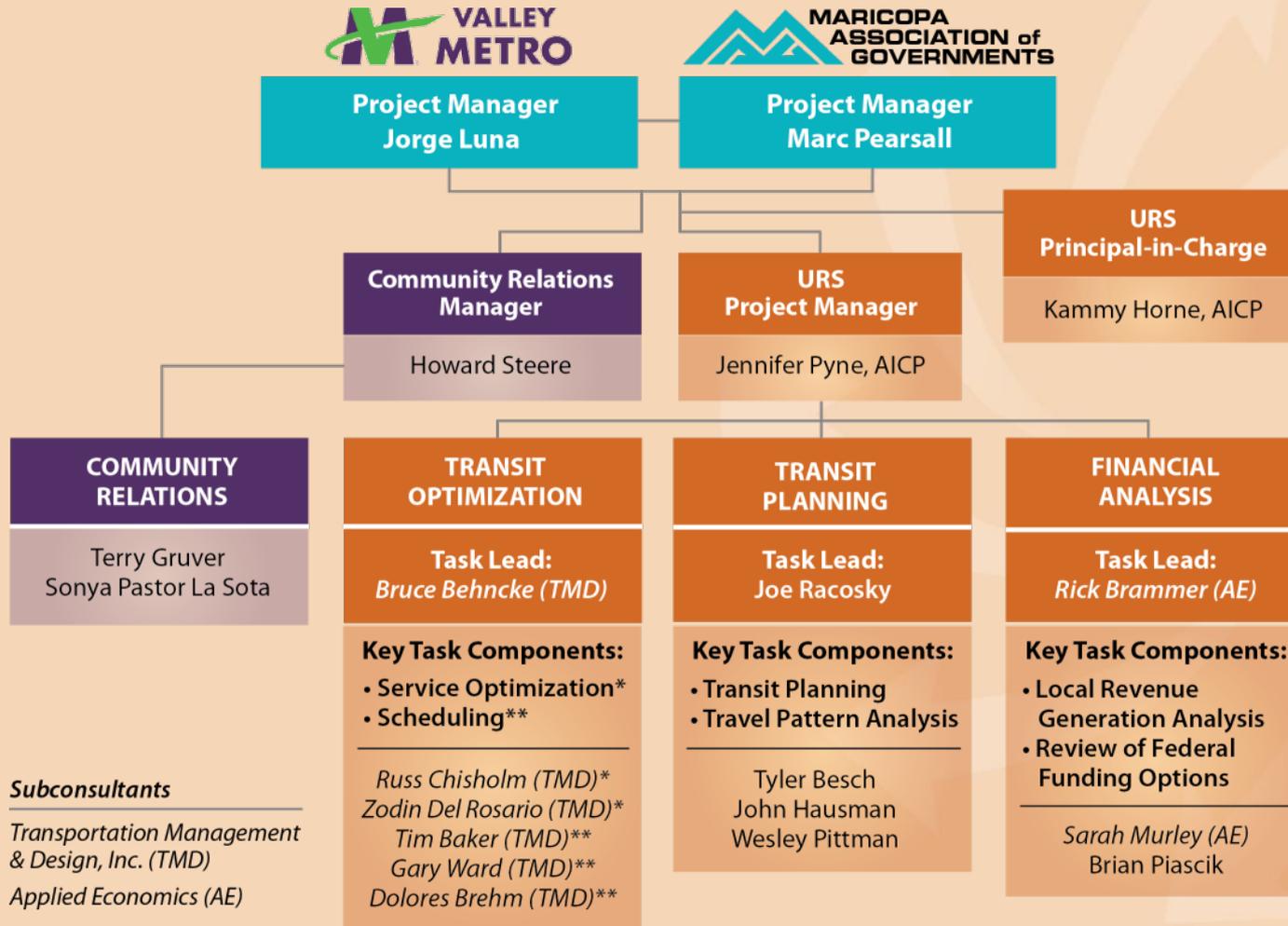
Study Area



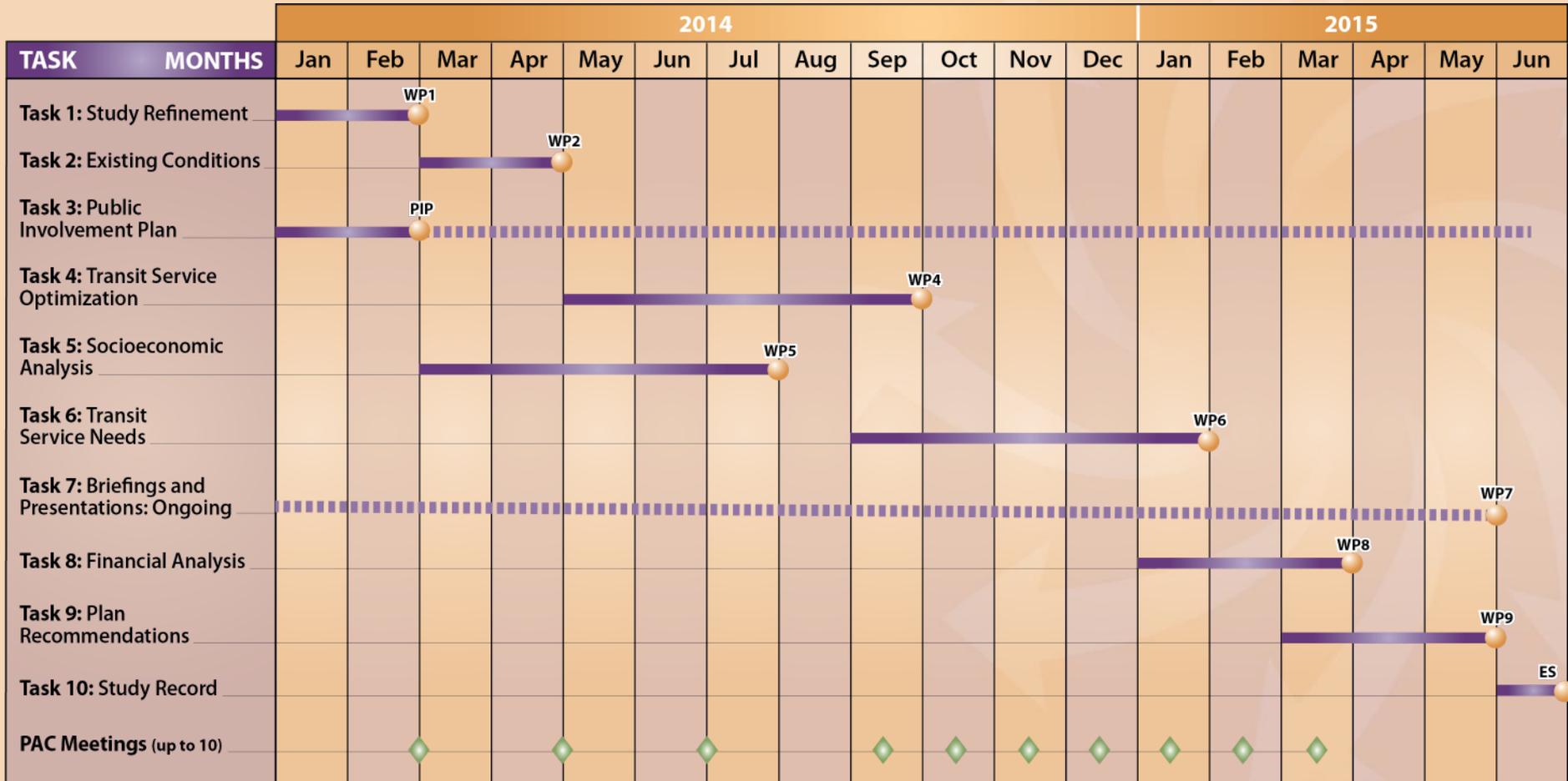
Variety of Service Areas in SEV



Study Team



Schedule



WP = Working Paper PIP = Public Involvement Plan ES = Executive Summary ● Deliverable



Community Outreach

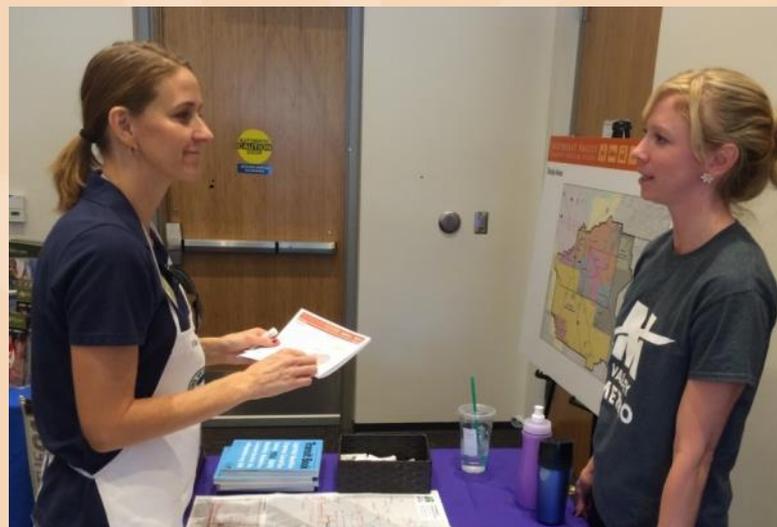
Goals and Objectives

- Develop public understanding of the Study
- Encourage public comments by providing various opportunities to participate
- Obtain input from a variety of stakeholders
- Inform and involve media outlets to maximize stakeholder participation
- Assist Study Team with identifying short-, mid-, and long-term transit needs for the Southeast Valley



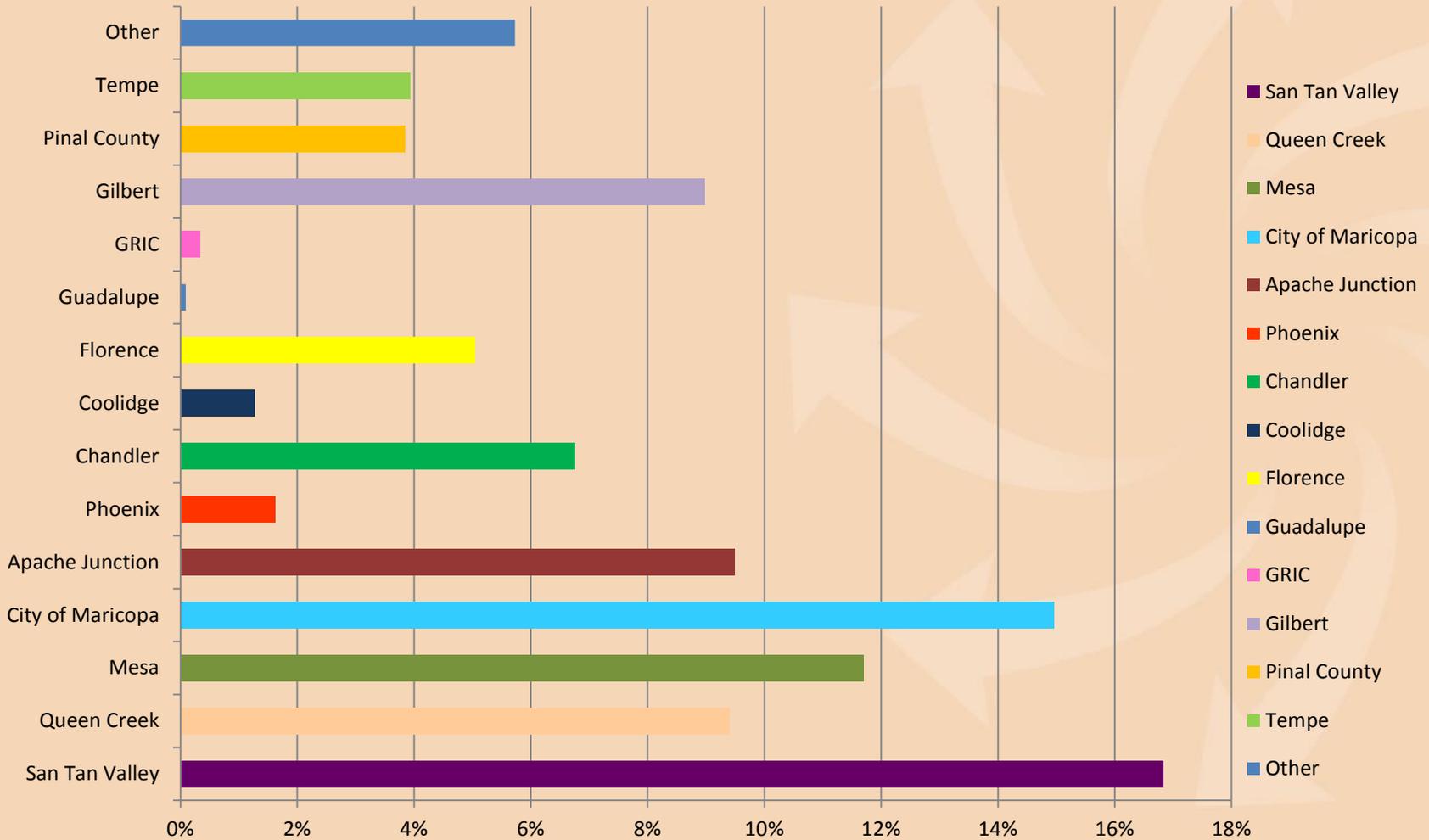
Community Outreach

- Media coverage: AZ Republic, Apache Junction/ Gold Canyon Independent, Queen Creek Santan Independent, La Voz, Prensa Hispana, arizona.newszap.com
- Valley Metro: Commute Solutions Newsletter, FaceBook, Twitter
- Attended 23 events/ presentations
- 1,170 self selected survey responses



Queen Creek Ice Cream Social

Responses by Community



Survey Results Summary

- Largest response from periphery communities
- More than 70% of responders do not work and live in same community
- Personal vehicle is the primary mode of transportation
- Majority of responders:
 - Do not use transit
 - Feel that current options **do not** meet their needs
- About half of responders would support a fare or tax increase to fund transit improvements
- Expanded service areas and hours would encourage use



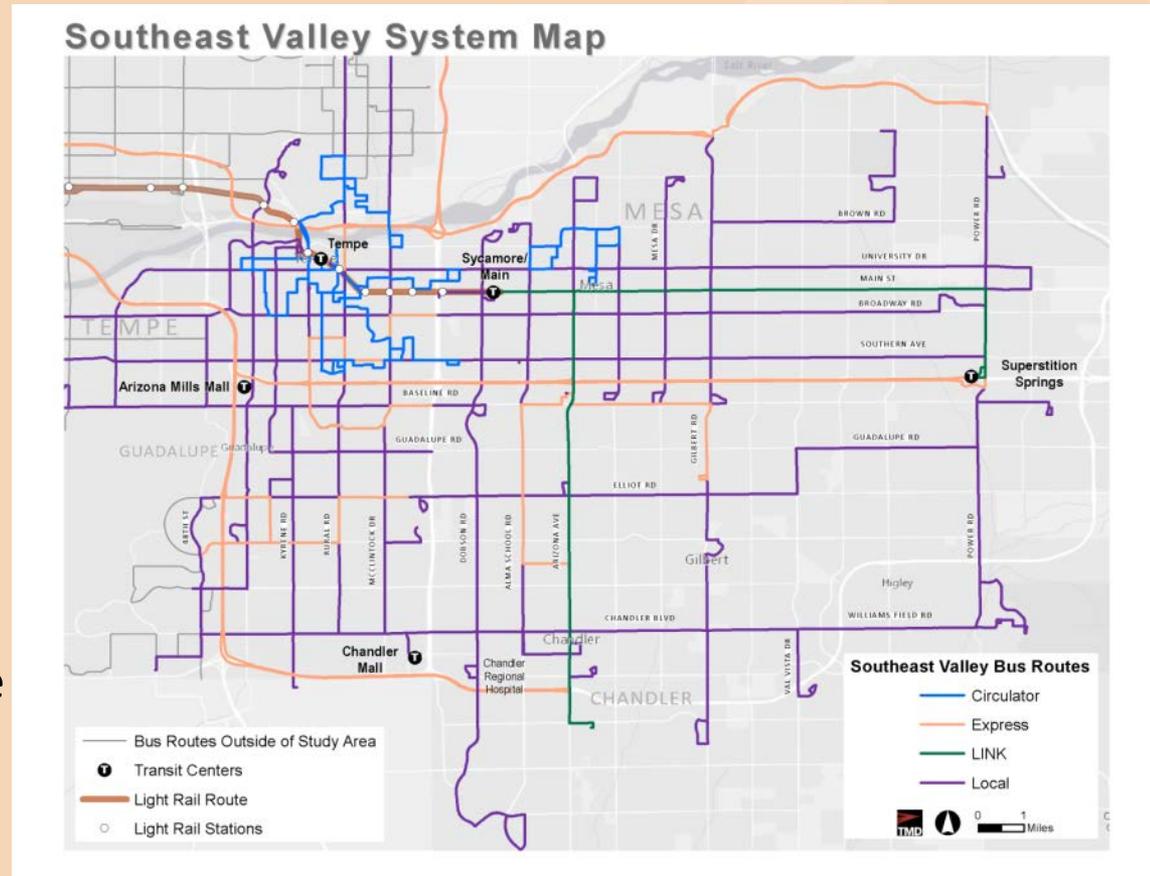
Transit Optimization Analysis (TOA)

- The TOA is a data-driven process that evaluates:
 - Current transit successes and challenges
 - Agency resource efficiencies
 - Potential service improvements
 - Ridership growth opportunities



Southeast Valley Service Structure

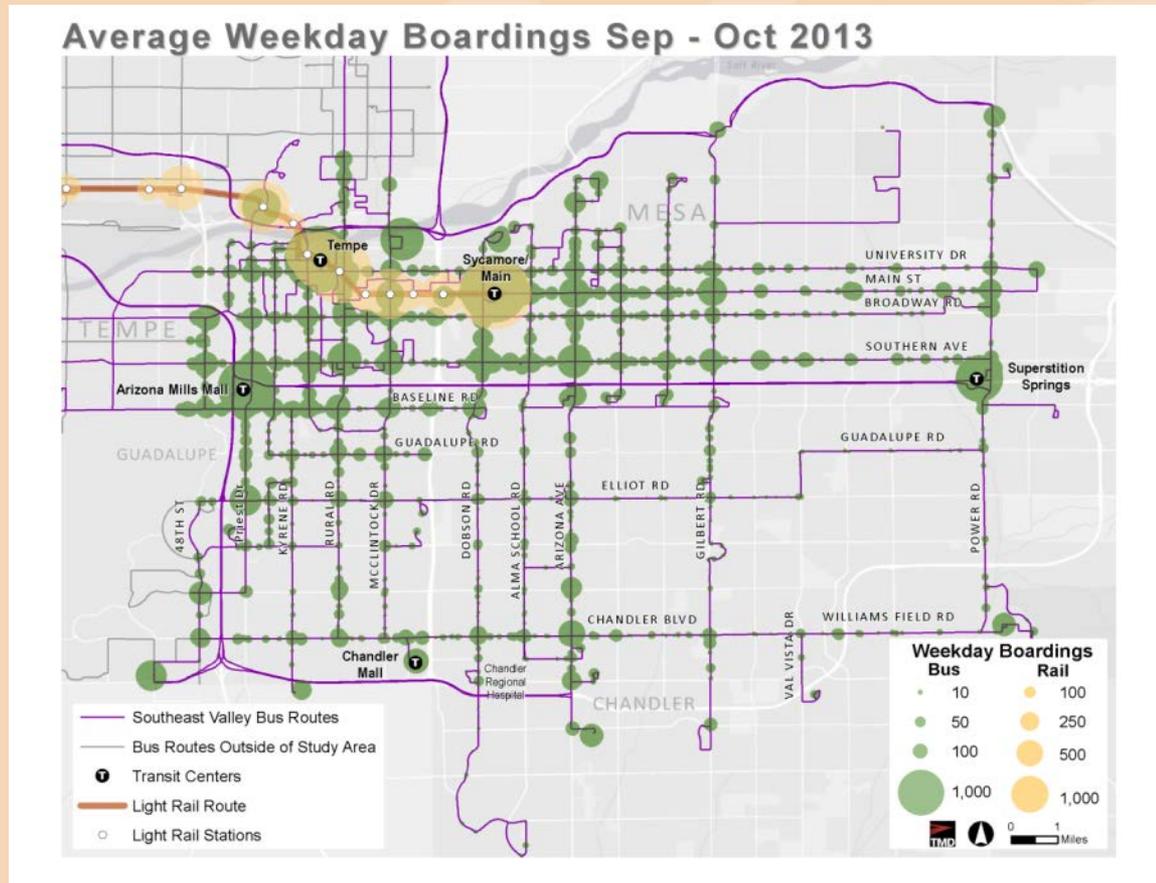
- Grid network with strong connectivity to LRT
- Service types: Local, LINK, Circulator, Express, Rapid, Light Rail, Dial-a-Ride
- Fares are the same for Local, LINK, and Light Rail service; circulators free
- Ridership and performance indicate a commute (work/school) focused transit demand today
- Market conditions rather than transit network design are having the greatest impact on service performance (performance is strongly tied to population and employment densities)



Ridership

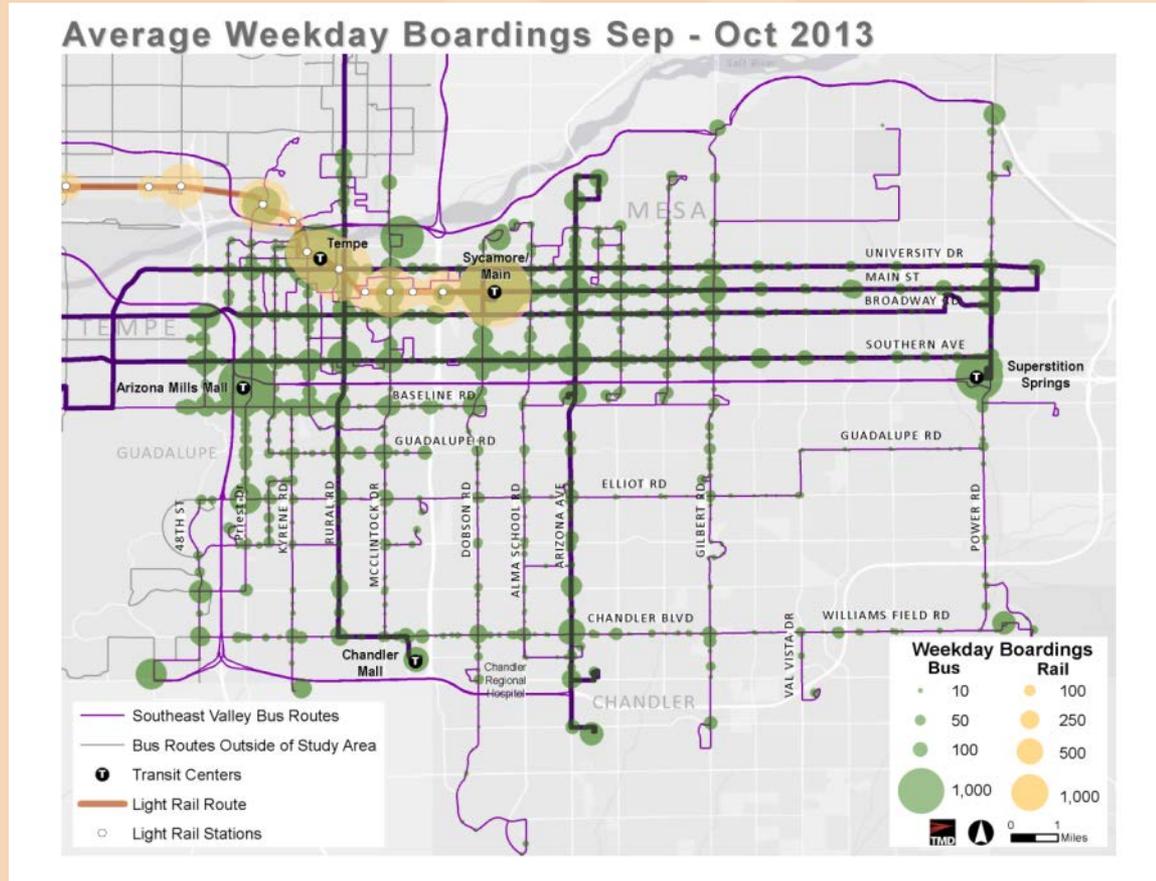
- Average daily boardings for all services in the SE Valley:
 - 81,000 weekday boardings
 - 43,000 Saturday boardings (53% of weekday)
 - 27,000 Sunday boardings (33% of weekday)

Current transit use tilted toward work and school commutes



Ridership

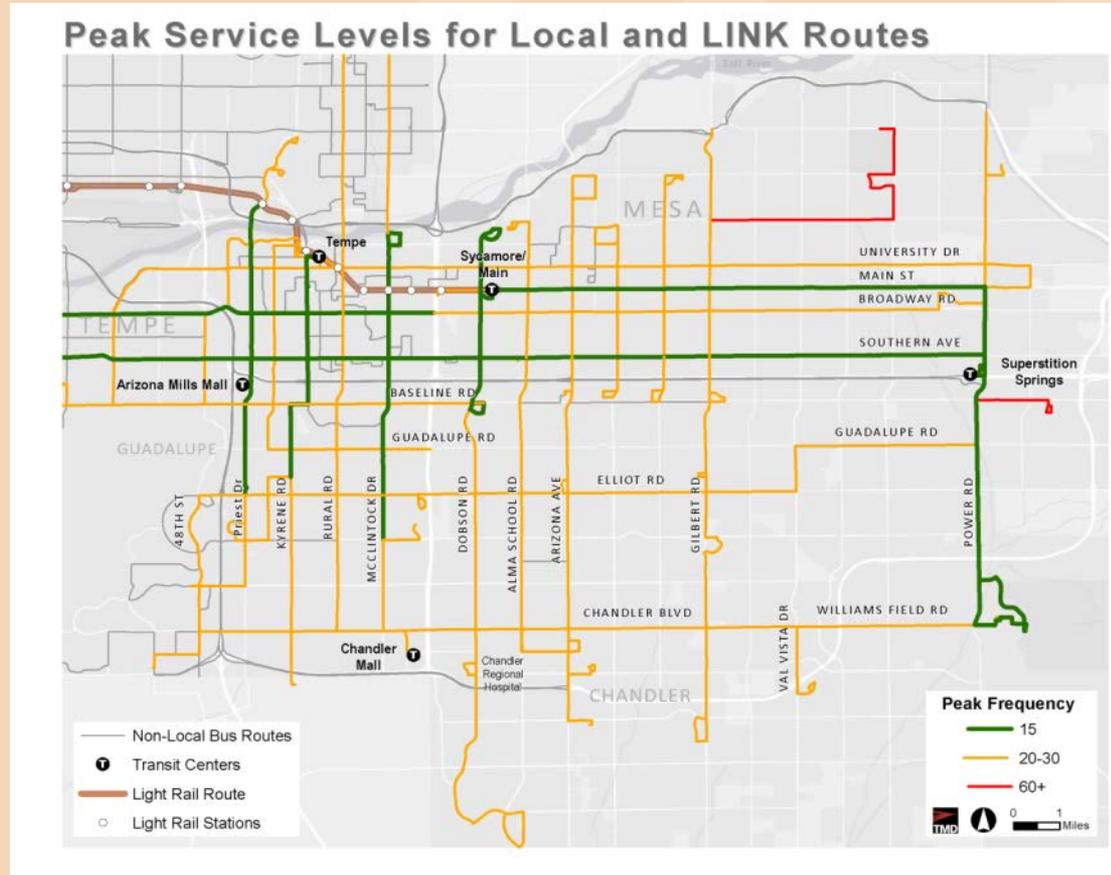
- Ridership is concentrated:
 - Top 4 routes (Routes 61,45,72,30) account for 33% of total boardings
 - Key corridors – Arizona Ave (ALNK,112) and Main St (MLNK,40) corridors account for 15% of weekday boardings



These six corridors carry 50% of all SE Valley bus ridership

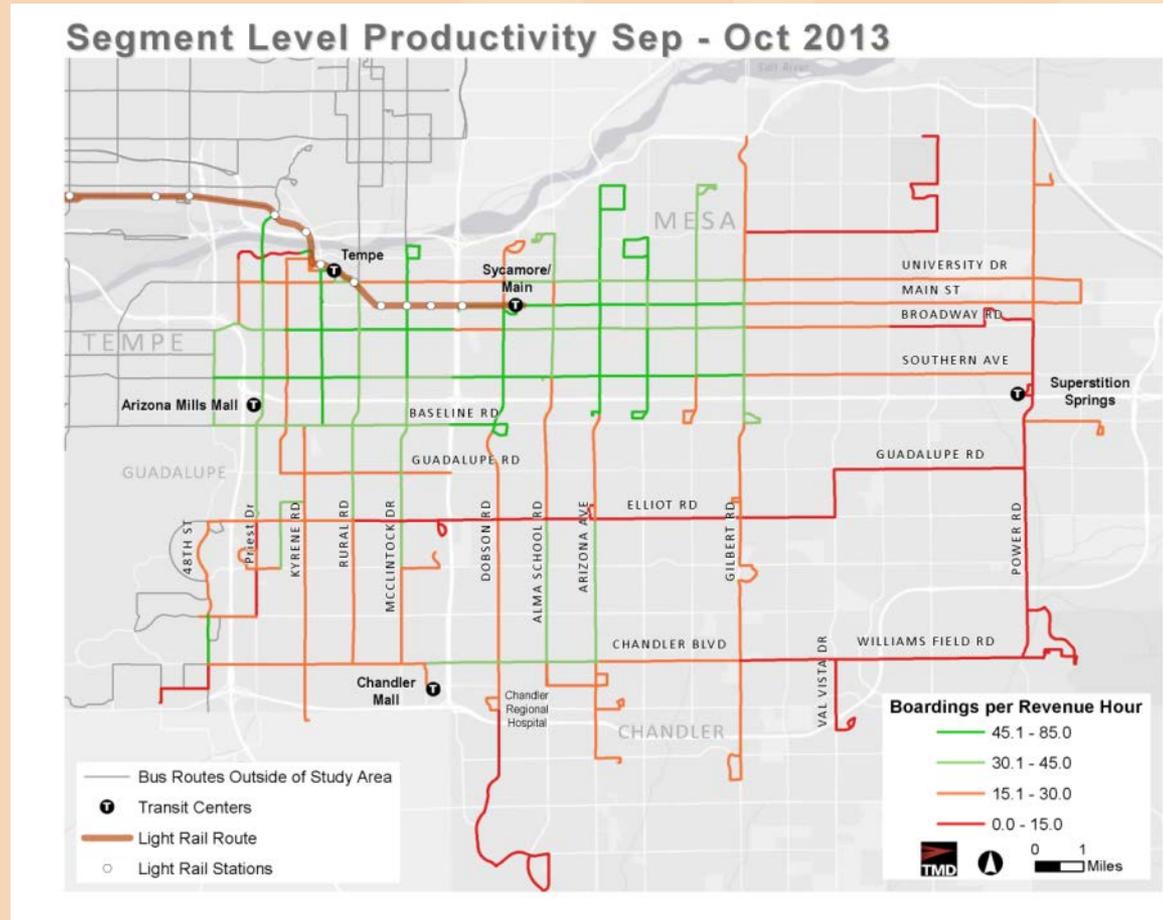
Frequency

- Most routes operate between 20 to 30 minute frequencies during the weekday with some 15 minute peak service levels
- Spontaneous-use frequency (15 minutes or better) support transit lifestyles and maximize benefits of a grid network



Performance by Geographic Area

- Significant difference in performance in service by geographic area
- Highlights impact of local land use and development patterns on transit performance



System Design - Observation

- A grid network design is appropriate for the Southeast Valley
 - Grid represents the optimal balance of effectiveness and efficiency for the prevailing road network and development patterns
 - Grid effectiveness is maximized when customers can use the network spontaneously – which requires 15 minute frequencies or better
 - Major transit corridors (fast, 10-min or better service) should be emphasized within the grid and targeted for linear TOD
 - Hub-based network elements are inefficient and ineffective and should be oriented to the periphery where service is infrequent – given that the periphery is on the move, infrastructure investment levels should recognize this lack of permanence
 - Southeast Valley Transit Plan should present a phased approach that responds to development intensification and expansion while recognizing minimum density thresholds for frequent transit



Corridor Design - Observations

- Overall corridor design is sound
 - Deviations should be reconsidered based on value added impact to network – with a grid network structure demand should orient to corridors not the other way around – consider last mile service and/or new pedestrian environment enhancements
 - Duplication to connect to transit hubs should be limited to the infrequent periphery and the “hubs” should be located to the major spines to minimize cost and passenger impacts



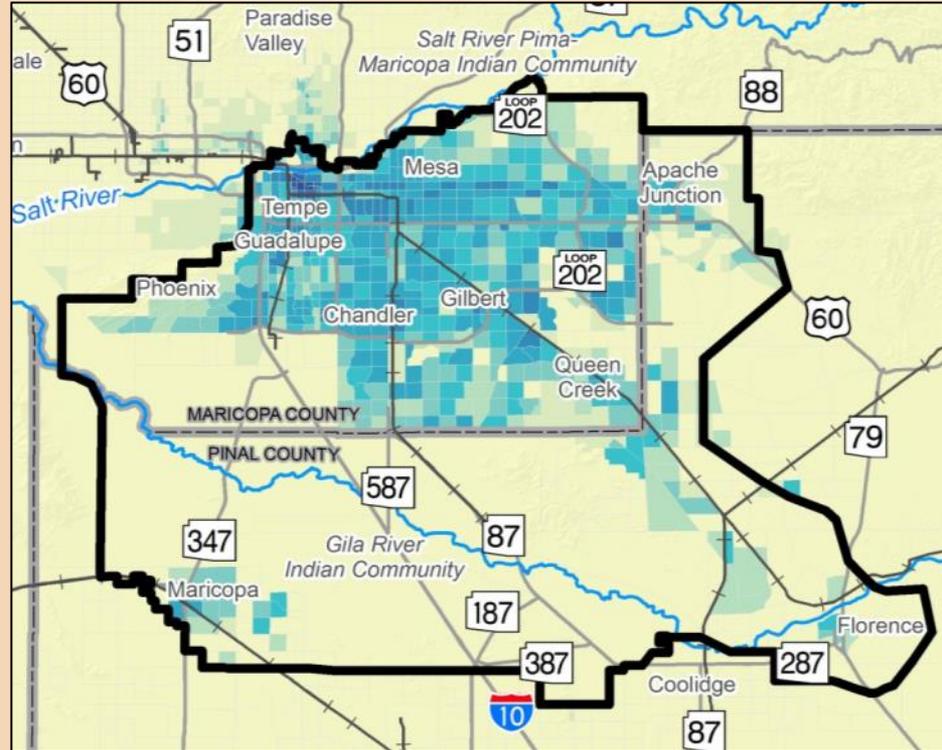
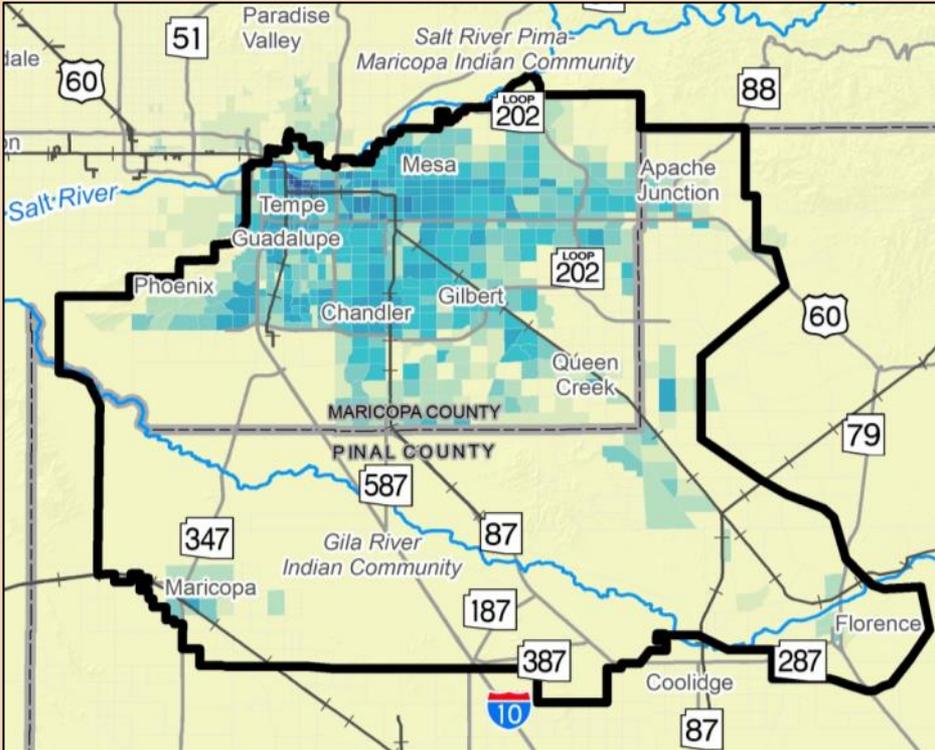
Trips Produced Anywhere to SEV Destinations

2012

5,987,000 Trips

2035

8,641,000 Trips



Model Trips per Square Mile

| | |
|-----------------|-------------------|
| 0 | 15,001 - 20,000 |
| 1 - 2,500 | 20,001 - 30,000 |
| 2,501 - 5,000 | 30,001 - 50,000 |
| 5,001 - 10,000 | 50,001 - 100,000 |
| 10,001 - 15,000 | 100,001 - 500,000 |
| | 500,001 - 550,000 |

Model Trips per Square Mile

| | |
|-----------------|-------------------|
| 0 | 15,001 - 20,000 |
| 1 - 2,500 | 20,001 - 30,000 |
| 2,501 - 5,000 | 30,001 - 50,000 |
| 5,001 - 10,000 | 50,001 - 100,000 |
| 10,001 - 15,000 | 100,001 - 500,000 |
| | 500,001 - 550,000 |

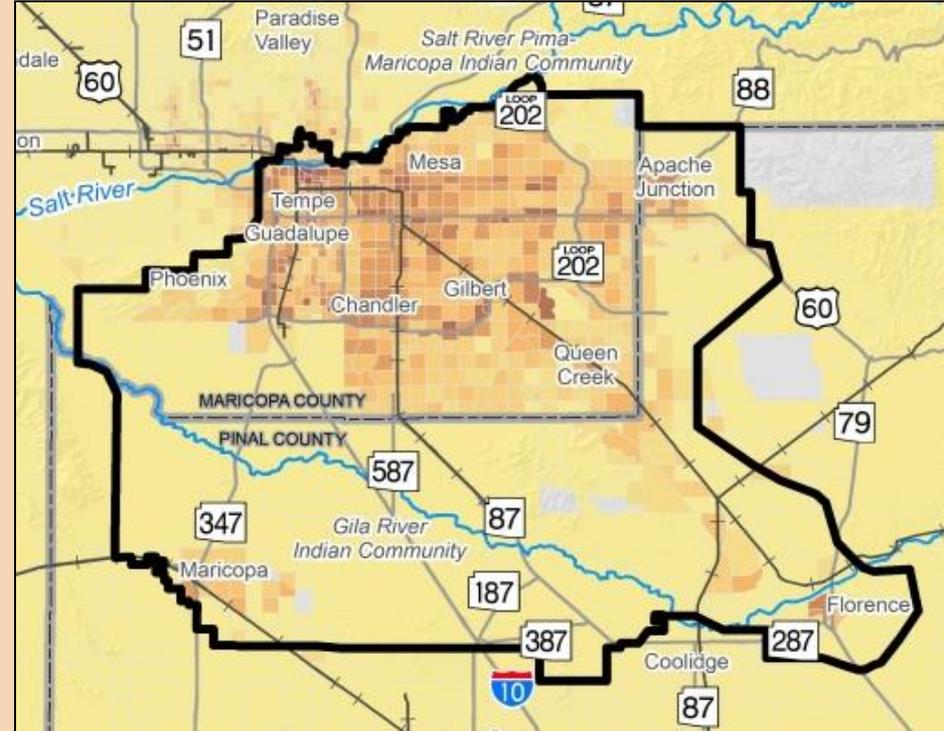
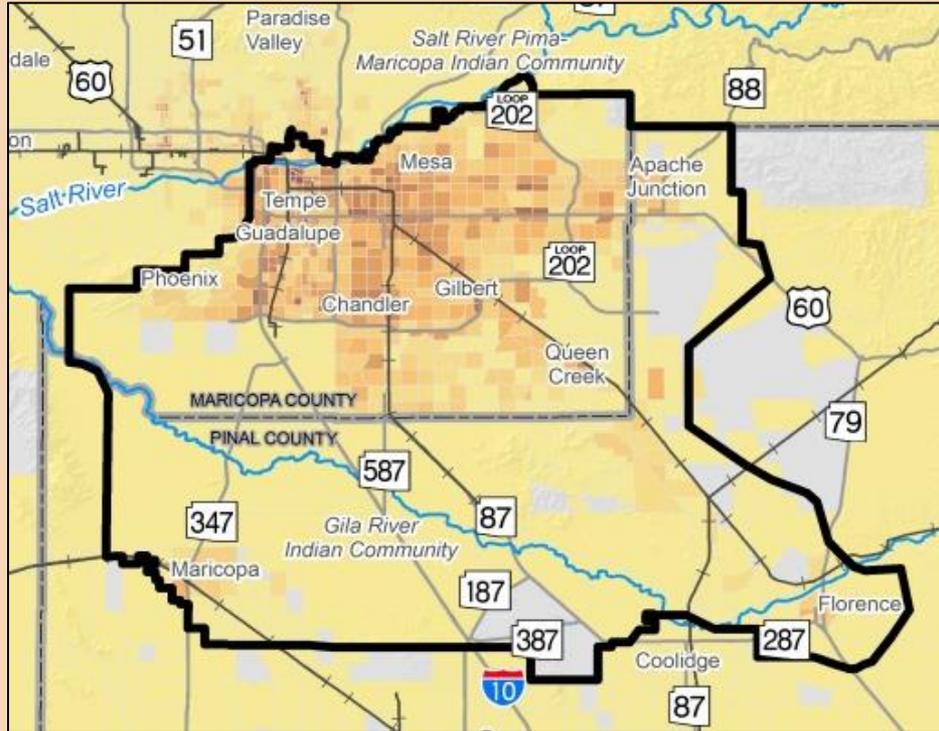
Trips Attracted Anywhere from SEV Origins

2012

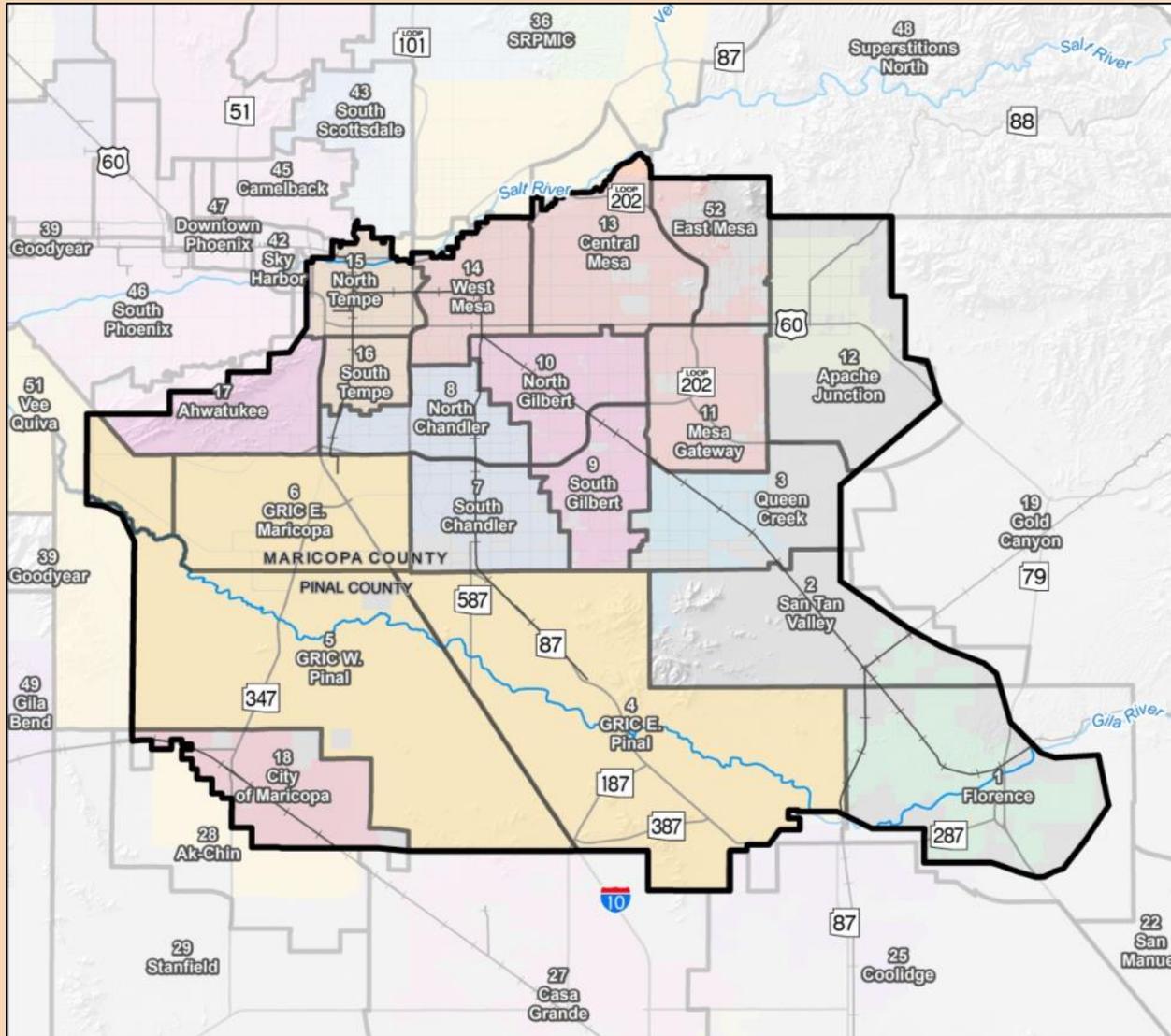
5,979,000 Trips

2035

8,507,000 Trips



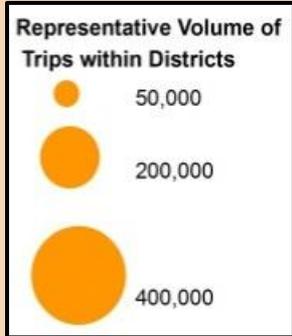
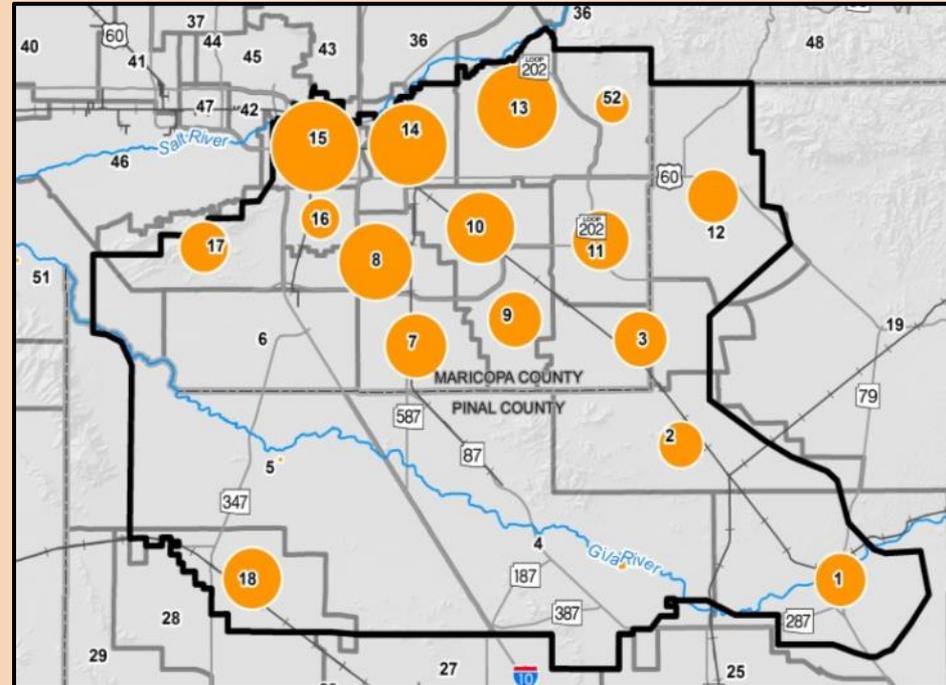
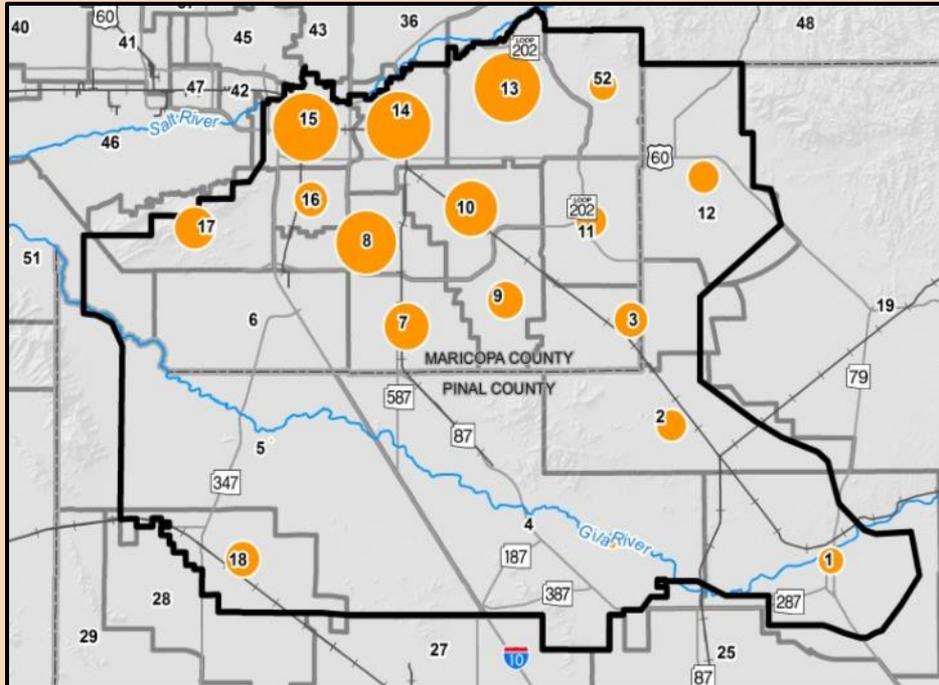
Travel Districts



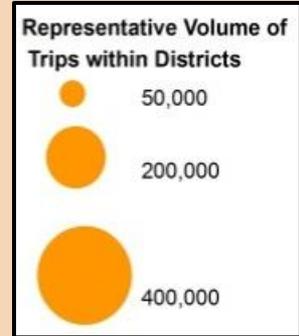
Intra-District Travel

2012

2035



Top 5 Intra-district trip generators include North Tempe, West Mesa, Central Mesa, North Chandler, and North Gilbert

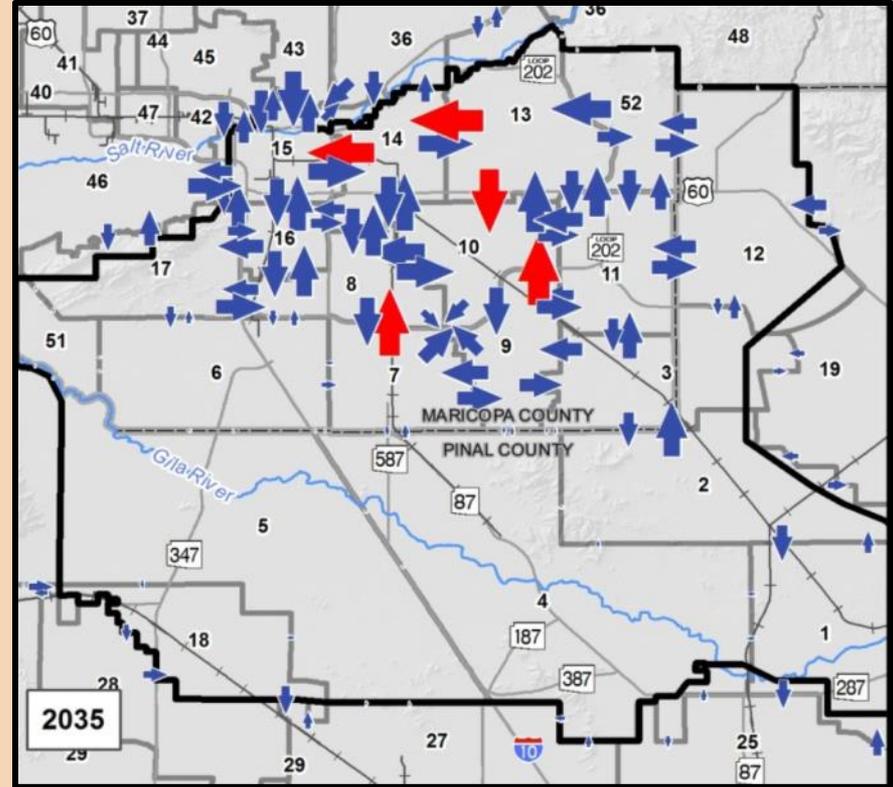
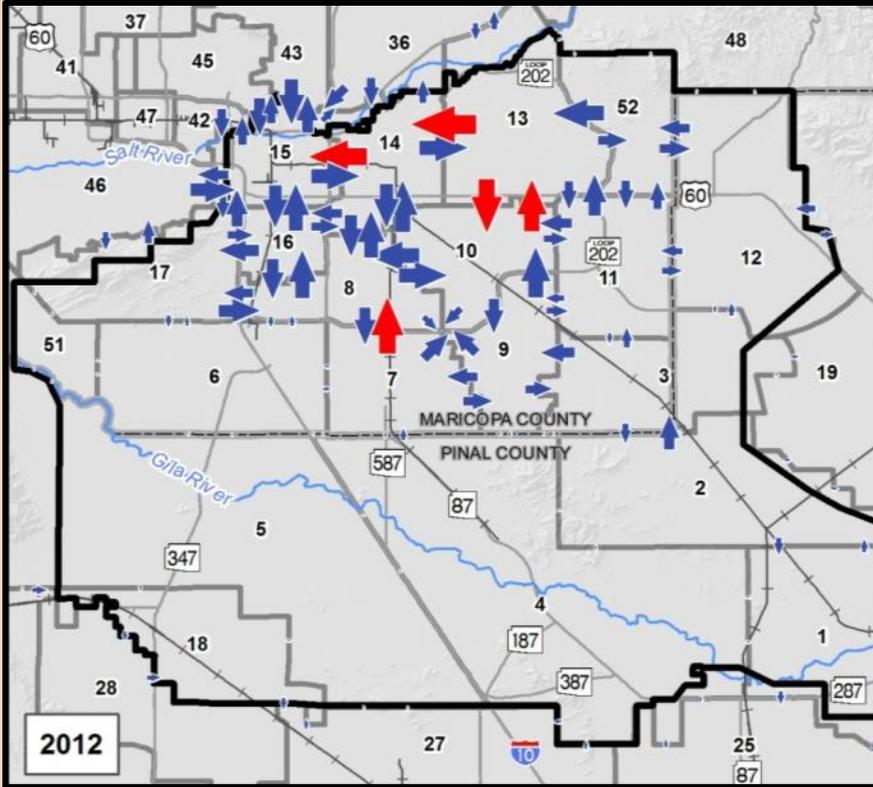


Top 5 Intra-district trip generators remain the same between 2012 and 2035

Inter-District Travel

2012

2035



Representative Volume of Trips between Districts

-  2,500
-  25,000
-  50,000

Representative Volume of Trips between Districts

-  2,500
-  25,000
-  50,000

Key Observations

- High % of study area trips are satisfied internally
- Study area has strong relationship to adjacent regional districts to the north
- By 2035 the study area will become more attraction-oriented overall
- The northern portion of the study area has districts with high inter- and intra-district travel patterns



Key Observations

- Intra-district trips will increase the most in districts on the periphery
- Mesa Gateway district will grow the most as a producer and attractor
- GRIC has different travel patterns than its neighboring districts
- Trip interaction between the City of Maricopa and Florence, Eloy, Coolidge, and Casa Grande will increase in the future.



Next Steps

- Continuing stakeholder briefings
- Transit Optimization Assessment
 - Incorporate stakeholder feedback into analysis
- Needs assessment for short- and longer term



Questions?



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