

# Utilizing Census Data for Active Transportation Planning

Applying Census Data for Transportation:  
50 Years of Transportation Planning Data Progress  
November 14-16, 2017

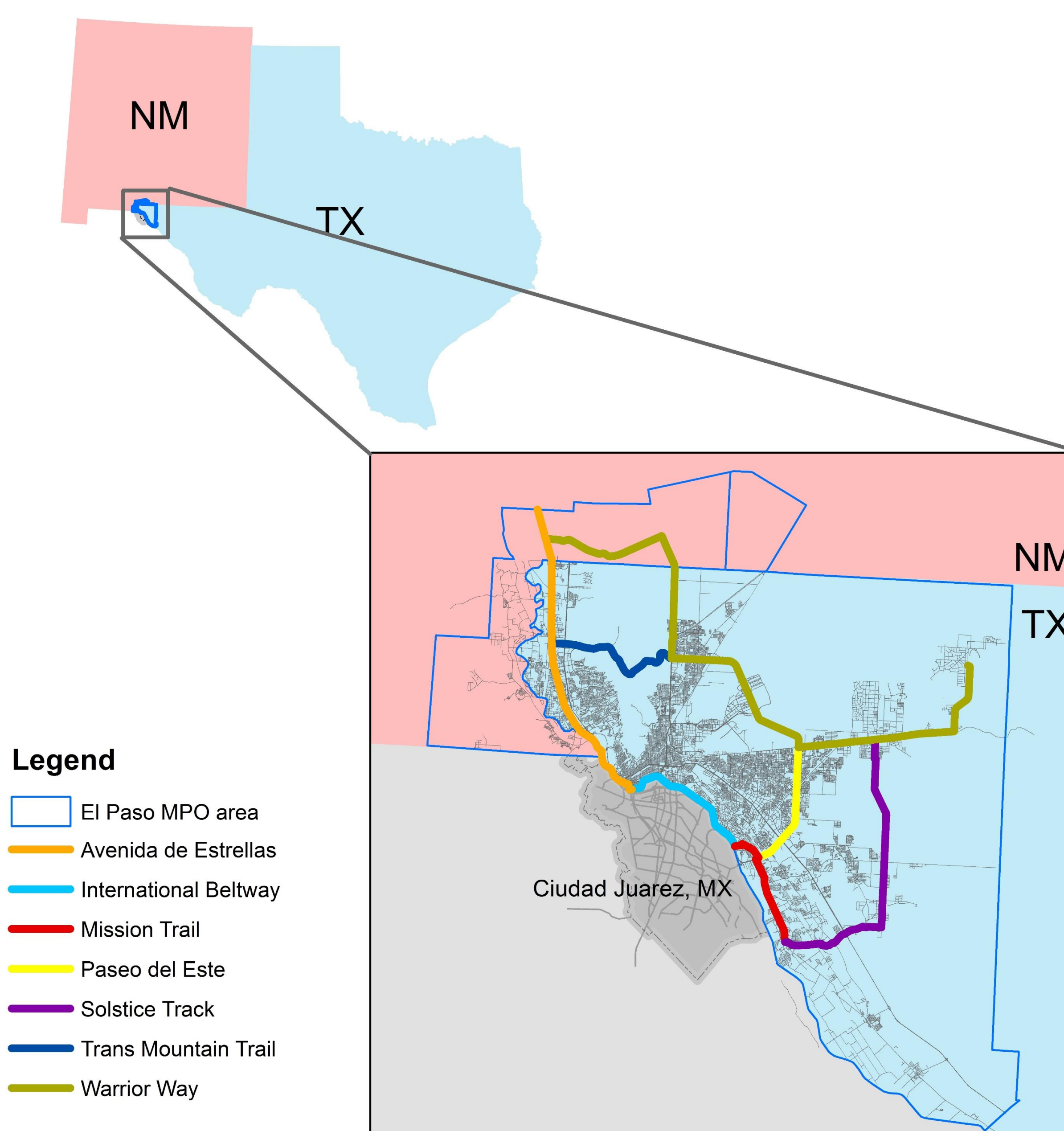
**Marketa Vavrova, Ph.D.** Post-Doctoral Researcher  
The University of Texas at El Paso  
**Michael Medina, CNU-A** Executive Director  
El Paso Metropolitan Planning Organization  
**Carlos M. Chang, Ph.D. P.E.** Associate Professor  
The University of Texas at El Paso

## Introduction

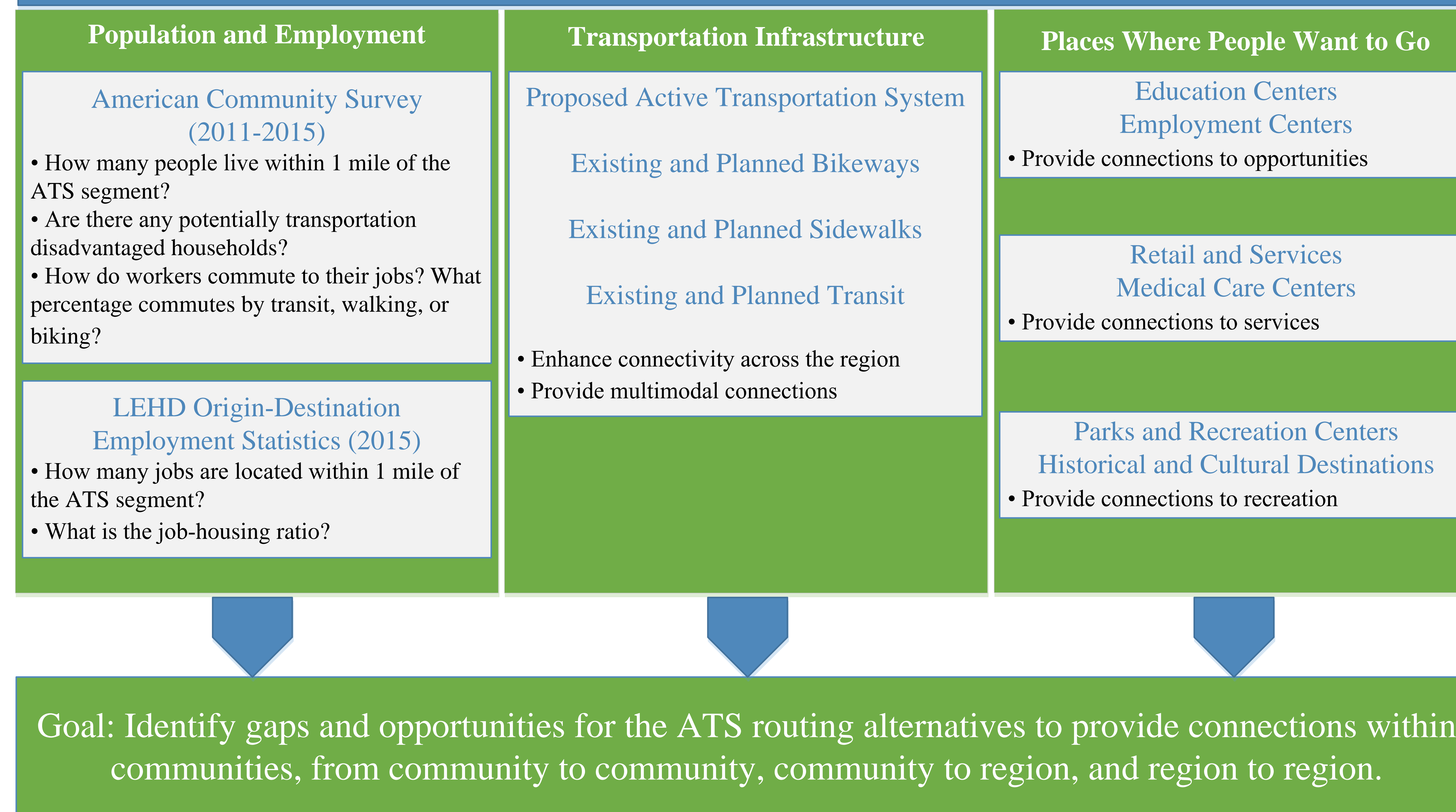
- The El Paso Metropolitan Planning Organization is currently in the process of implementing the Active Transportation System (ATS), following the recent designation of seven regionally significant segments.
- As a part of the ATS planning process, U.S. Census datasets including the 2015 Longitudinal Employer-Household Dynamics program (LEHD) Origin-Destination Employment Statistics and the 2011-2015 American Community Survey (ACS) provide insight about social and demographic characteristics along those segments with an emphasis on connecting people to opportunities and key activity areas, within communities, from community to community, community to region, and region to region.

## El Paso MPO Active Transportation System (ATS)

- Seven regionally significant segments connecting the metropolitan planning area were designated in 2016.
- One of the seven ATS segments is called the Mission Trail.
- The Mission Trail is approximately a 10-mile long segment that will provide an east-west connection across three municipalities (El Paso, Socorro, and San Elizario) in the south-east corner of the El Paso Metropolitan Planning Area.
- Block groups located within 1 mile of the Mission Trail segment were analyzed using U.S. Census datasets.



## Active Transportation Planning: Connecting People and Places



## What did the U.S. Census datasets tell us about the Mission Trail segment?

- 46,000 people live along the Mission Trail segment.
- 8,400 jobs are located within 1 mile of the Mission Trail.
- Youth of non-driving age (14 years and younger) and seniors (65 years and older) account for 38% of the population.
- Indicators of potential transportation disadvantage along the Mission Trail that are higher than in the rest of the El Paso Metropolitan Planning Area include:
  - 17% of households that are ethnic minorities,
  - 34% households that have limited English proficiency,
  - 34% of households that live in poverty.
- The median household income along this segment equals to \$29,600, which is lower than the median household income of \$41,129 in the region.
- Majority of workers who live along the future Mission Trail drive alone to work (79%), which is consistent with the trends in the rest of the region. However, compared to the mode share in the region, less workers in the Mission Trail area commute by transit (1%) and walking (1%). A higher demand for cycling is observed along the future Mission Trail segment as 0.3% of workers bike to work, compared to 0.2% regionally.

## Conclusions

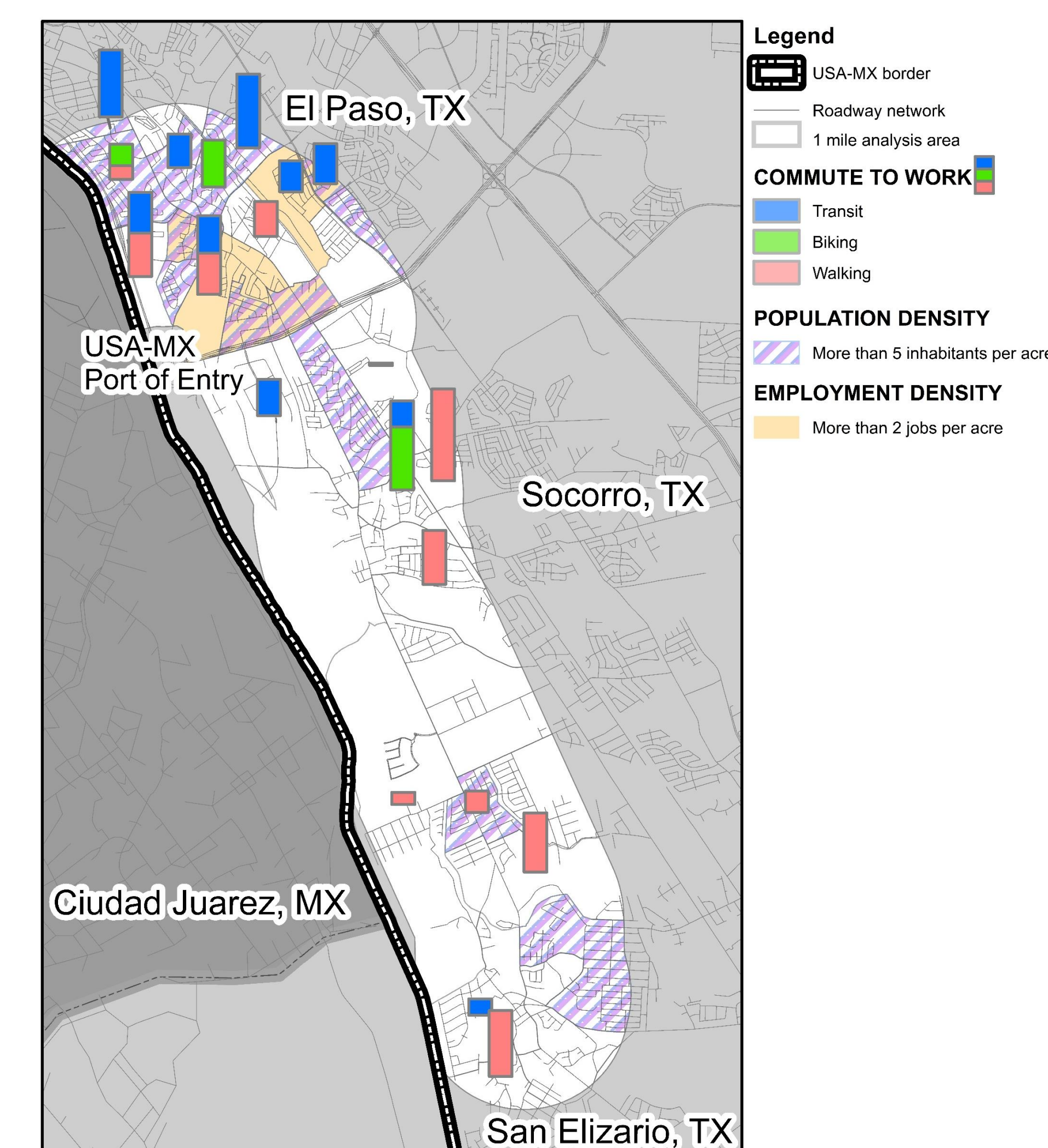
- Census datasets are a useful source of information about population, employment, and commuting habits, especially when local multimodal travel surveys are not available.
- It provides a basis for planning practices that focus on connecting people to opportunities while encouraging safe and healthy communities.

## Future Directions

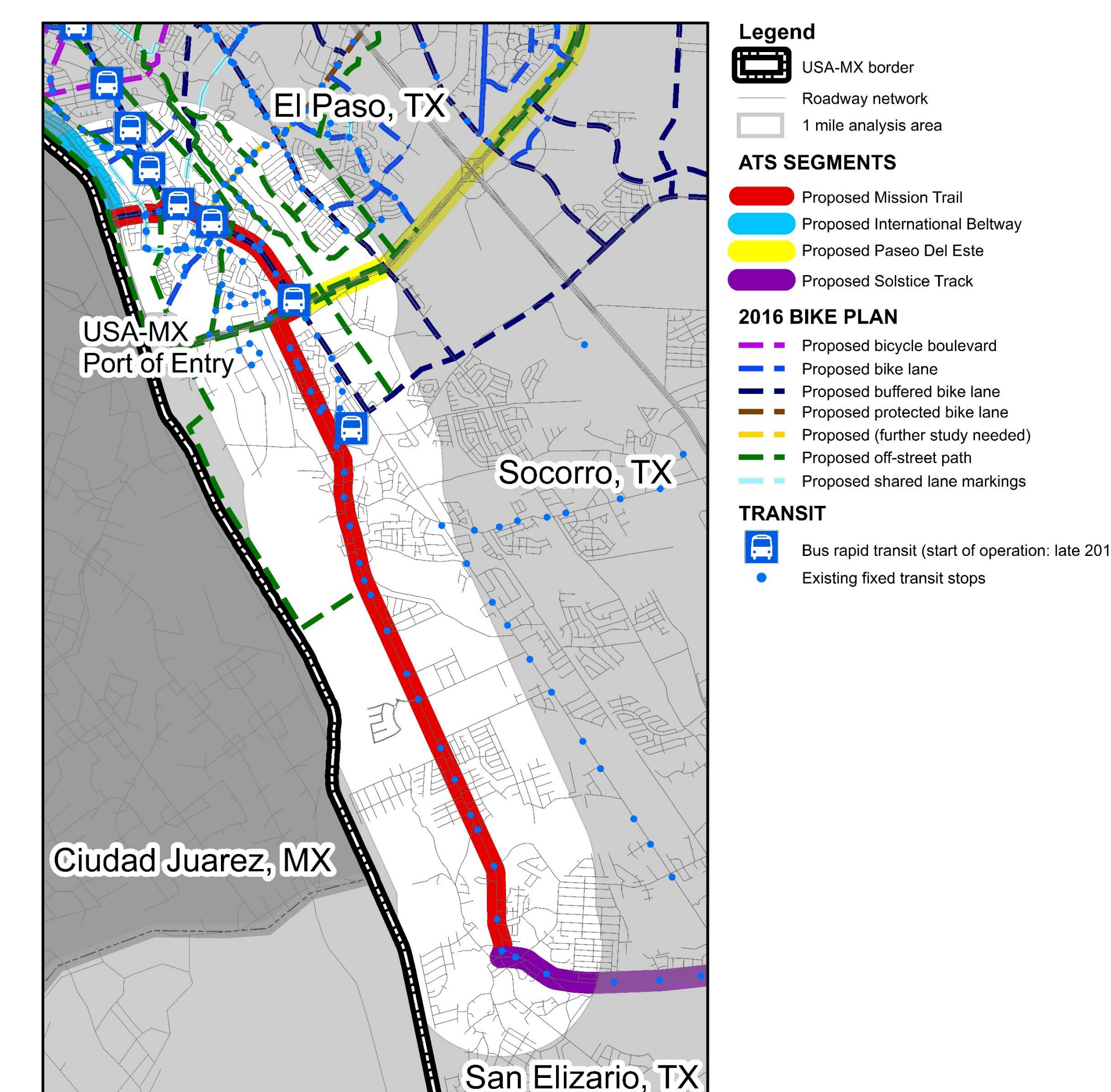
- To overlay the information about population, employment and infrastructure with education centers, retail and services, medical care, parks and recreation, historical and cultural destinations.
- To apply the methodology to remaining ATS segments.
- To provide an input to strategic metropolitan planning by indicating where potential gaps and opportunities exist for the ATS routing alternatives.
- To present the results in a web-based application.

## Acknowledgements

The authors would like to express their sincere appreciation to the El Paso Metropolitan Planning Organization (EPMP) for providing funds to conduct research project 226611060A "Development of an Active Transportation System Planning Methodology to Enhance Multimodal Connectivity in the El Paso MPO Region".



Population and Employment



Transportation Infrastructure