Spatial and Socioeconomic Analysis of Commuting Patterns in Southern California

Using LEHD Origin-Destination Employment Statistics (LODES), Census Transportation Planning Products (CTPP) and ACS Public Use Microdata Sample (PUMS)

What is SCAG?

The Southern California Association of Governments (SCAG) is the region’s most respected metropolitan planning organization, representing 191 cities, 38 counties and more than 18 million residents. SCAG undertakes a variety of planning and policy initiatives to ensure a more sustainable Southern California now and in the future.

Objective:

This study examines commuting distances by income level using multiple datasets including LEHD Origin-Destination Employment Statistics (LODES), Census Transportation Planning Products (CTPP) and ACS Public Use Microdata Sample (PUMS). Due to the difference in data source, variable and geographic detail among these three datasets, this study was different methods to examine the relationship between commuting distance and income level.

Methodology:

Using LODES dataset, this study examines the median commute distance by wage group for six counties in the region for the years 2002, 2008 and 2012. LODES provides wage level and industry information. The smallest wage group in the LODES wage distribution is ‘Less than $15,000’.

Using CTPP dataset, this study examines the median commute distance by income group for six counties in the region for the years 2008, 2010 and 2012. The Census Transportation Planning Products (CTPP) is the 2008–2012 American Community Survey 5-Year Estimates (ACS data). This data set is also available through the Federal Geographic Data Committee (FGDC) Community Data Portals and the US Census website at www.census.gov/acs/

Using PUMS dataset, this study examines the relationship between commuting pattern and socioeconomic characteristics in the Southern California region using multiple datasets.

Conclusion:

Findings from the study include:

• High-income residents work longer distances than lower-wage earners.
• The commute distance is growing in all counties between 2002 and 2012.
• The commute distance shows no trend across counties (San Diego and Orange County).
• The median commute distance has not changed over the census years, which would indicate no change in the median commute distance.
• More lower-income distributions of population and employment may result in the reduction of transportation congestion and the related travel patterns.

Public Use Microdata Sample (PUMS)

Using LEHD Origin-Destination Employment Statistics (LODES) and Census Transportation Planning Products (CTPP), this study examines commuting patterns in Southern California using multiple datasets. Compared to LODES and CTPP, the PUMS dataset includes less sample size and geographic detail. The smallest income group in the PUMS income distribution is ‘Less than $15,000’.

What is SCAG?

The Southern California Association of Governments (SCAG) is the region’s most respected metropolitan planning organization, representing 191 cities, 38 counties and more than 18 million residents. SCAG undertakes a variety of planning and policy initiatives to ensure a more sustainable Southern California now and in the future.

Objective:

This study examines commuting distances by income level using multiple datasets including LEHD Origin-Destination Employment Statistics (LODES), Census Transportation Planning Products (CTPP) and ACS Public Use Microdata Sample (PUMS). Due to the difference in data source, variable and geographic detail among these three datasets, this study was different methods to examine the relationship between commuting distance and income level.

Methodology:

Using LODES dataset, this study examines the median commute distance by wage group for six counties in the region for the years 2002, 2008 and 2012. LODES provides wage level and industry information. The smallest wage group in the LODES wage distribution is ‘Less than $15,000’.

Using CTPP dataset, this study examines the median commute distance by income group for six counties in the region for the years 2008, 2010 and 2012. The Census Transportation Planning Products (CTPP) is the 2008–2012 American Community Survey 5-Year Estimates (ACS data). This data set is also available through the Federal Geographic Data Committee (FGDC) Community Data Portals and the US Census website at www.census.gov/acs/

Using PUMS dataset, this study examines the relationship between commuting pattern and socioeconomic characteristics in the Southern California region using multiple datasets.

Conclusion:

Findings from the study include:

• High-income residents work longer distances than lower-wage earners.
• The commute distance is growing in all counties between 2002 and 2012.
• The commute distance shows no trend across counties (San Diego and Orange County).
• The median commute distance has not changed over the census years, which would indicate no change in the median commute distance.
• More lower-income distributions of population and employment may result in the reduction of transportation congestion and the related travel patterns.

Public Use Microdata Sample (PUMS)

Using LEHD Origin-Destination Employment Statistics (LODES) and Census Transportation Planning Products (CTPP), this study examines commuting patterns in Southern California using multiple datasets. Compared to LODES and CTPP, the PUMS dataset includes less sample size and geographic detail. The smallest income group in the PUMS income distribution is ‘Less than $15,000’.