

Request for Proposal

COMMUTING IN AMERICA 2020

Brief 3: Vehicle Availability Patterns and Trends including Commuting Trends for Zero Vehicle Households

INTRODUCTION

The Census Transportation Planning Products Program seeks to expand the body of research known as Commuting in America (CIA). This Request for Proposals is for single brief on the topic stated below. The brief should follow the format of the 16 CIA briefs found at <http://traveltrends.transportation.org/Pages/default.aspx#table>. These briefs followed the seminal work done in the CIA series:

- Commuting In America: A National Report on Commuting Patterns and Trends
- Commuting in America II: The Second National Report on Commuting Patterns and Trends
- Commuting in America III: The Third National Report on Commuting Patterns and Trends

PROJECT BACKGROUND

The (CIA) series has focused on data and information from a wide variety of data sets including:

- American Community Survey
- CTPP based on 2006 – 2010 ACS
- National Household Travel Survey
 - Decennial Census
 - American Housing Survey
 - Consumer Expenditure Survey
 - Longitudinal Employment Household Dynamics
 - 2012 National Population Projections
 - National Intercensal Estimates (2000-2010)
 - Current Population Survey
 - Transportation Energy Data Book
 - National Transit Database

Centered on the release of decennial census data, the CIA publications have been produced every ten years. The release of a new CTPP data set in early 2019 will create new challenges and opportunities for improved understanding of the national commutes.

The CTPP program seeks to develop Commuting in America 2020 as a new vital product seeded from previous CIA efforts.

BRIEF TOPIC AND PROBLEM DESCRIPTION

Vehicle availability patterns and trends including commuting trends for zero-vehicle households (A follow-on/deeper dive to current Brief 7 – Vehicle and Transit Availability)

CIA 2013 Brief 7 described the availability of the various travel options as a critical element in the mode choice decisions of travelers. These availability factors also influence residential location and travel destination choices of travelers and location decisions of businesses and other activities. The work trip, as one of the longer and most common trips of households, is influenced by mode availability considerations.

The variety of emerging modes is making it easier for households to decide on if and how many vehicles to own. Younger cohorts are eschewing car ownership all together while relying on ride-hailing services and other emerging modes. At the same time, lower income zero vehicle households continue to rely on transit or informal carpools to access workplaces. These two trends can raise equity issues as cities and states reduce transit funding due to lower ridership. One reason for the lower ridership can be due to emerging modes being preferred by choice riders. Therefore, understanding how vehicle availability influences the journey to work is necessary.

Objective

Understand vehicle availability patterns and travel choices for zero and one or more vehicle households.

GENERAL DESCRIPTION

- Total brief length: 15-34 pages
- Color tables and figures are encouraged. Tables and figures should have sufficient description to allow readers to understand the general ideas of the tables/figures without needing to go back to manuscripts. All graphs require title, axis names, axis units, and legend. Maps require title, scale, and legend.
- Any external sources should be clearly cited and linked.
- Documentation of the analytical procedure should be transparent and the results completely replicable.

SECTION REQUIREMENTS

SECTION 1. Problem Identification and Objective Statement

- Problem statement and the objective(s) of the brief.
- Defining analysis scope
- If the brief is a continuation/extension of a previous brief, the previous brief's method and key findings should be clearly stated.
- 1 to 3 paragraphs

SECTION 2. Key Terminology Definition and Concept Elaboration

- Clearly define and discuss key terminologies and concepts in the brief. Examples include the definition of workers, metropolitan area delineation, trip chaining, growth and development patterns, etc.
- Identify the Census products to be used to answer the question.

- Provide 1-page (maximum) write up on each terminology and / or concept. Each brief shall have at least one key terminology and / or concept.

SECTION 3. Transparent and Replicable Data Analysis

- If any, what existing literature or past CIA and other relevant studies tell us?
- Data sources should be clearly described and linked
- The results from the data analysis should be replicable based on the given data sources and methodology.
- Describe what data can tell us for the given topic in different market segmentations. Below are some examples:
 - By geographic scale (e.g., nation-wide, by state, by county, etc.)
 - By mode (e.g., by driving-alone, by ridesharing, by transit, by scooter, by bike, etc.)
 - By time period (e.g., time-of-day, day-of-week, holiday vs regular days, trend analysis, etc.)
- Data should be analyzed by user attributes such as age, gender, race, income, employment type, and trend. If a key user attribute is not explored, the reason should be stated (e.g., no available data).
- It is recommended to produce data visualizations to reach a wider audience.

SECTION 4. Advanced Discussion

- Space permitting, the discussion can include data that is out of scope with regard to the Census but must be directly relevant to the study.
- Space permitting, the finding/conclusion from Section 3 might be sensitive to broader economic condition, land use patterns, disruptive technologies, etc. Therefore, this section can specify the assumptions on which the conclusion is based. For example, Home-based work trips and activities in certain regions might be influenced by governmental policies and regulations. To be more specific, recent US foreign policy might contribute to more manufacturing and oil-production related jobs in certain regions, which, in turn, might influence computing trip percentage, trip length, and departure time distribution, etc. As other examples, future commuting pattern might be influenced by policies on interstate migration, local business investment attraction, and immigration.

SECTION 5. Summary and Conclusion

- Clearly state the key findings
- Include all deficiencies of the methodology and
- Identify and justify the need for further study and / or research
- Limit to 1-page

SECTION 6. Executive Summary

- Provide 1-2 page executive summary per 15 pages of brief.

REQUEST FOR PROPOSAL – MECHANICS

Proposers should submit a proposal 5-page maximum describing the proposed treatment of the subject matter (an abstract) including approach to analysis (expected sources) and discussion of the problem. Additional space may be used for qualifications, references, and information on other relevant work.

Final briefs should be suitable for further distillation into an infographic.

All completed briefs will be housed on internet; therefore, web-enabled product is required.

The winning proposal will be awarded \$20,000 to produce the individual brief. Proposers may propose on more than one brief.

Proposals are due by February 22, 2019 to Penelope Weinberger pweinberger@aaashto.org by email including word or pdf attachment