

# Request for Proposal

## COMMUTING IN AMERICA 2020

Brief 2: Understanding Geographic and Demographic Variation in Mode Choice and Travel Behavior

### 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

**Understanding geographic and demographic variation in mode choice and travel behavior (with reference to CIA 2013 Brief 4. – Population and Worker Dynamics)**

CIA 2013 Brief 4 describes some of the relevant trends that shaped the workforce in communities. Among the most critical aspects of population and workforce that impact commuting are the trends relating to how the national population and workforce are distributed across the

country. Individuals pursue employment opportunities and quality-of-life amenities as they determine locations to settle. This constant process of responding to employment and quality-of-life characteristics of different geographies results in continuing change in state and local population and workforce levels. As data in this brief revealed, the variation across geography is often significant relative to national averages. Since the publication of the brief in 2013, a variety of new modes like ride-hailing services, bike and scooter share have received significant adoption and usage in major metropolitan areas. While some of these modes are spreading across the country, others are more recent and at the moment, confined to specific areas of the country. Therefore, it is critical to understand traditional and new modes are being used by different market segments and geographies across the country to help policy makers develop appropriate responses.

## Objective

Understand the variation in mode use across geographies and demographics across the country.

## 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@ashto.org](mailto:pweinberger@ashto.org) by email including word or pdf attachment