NCHRP Project Summary and Status

MTMUG Meeting
May 13, 2015

Overview of NCHRP

- National Cooperative Highway Research Program (NCHRP)

- Created in 1962 as a means to conduct research to acute problem areas that affect highway planning, design, construction, operation, and maintenance nationwide.

- Administered by the Transportation Research Board (TRB)

- Sponsored by State DOTs
  - Support is voluntary
  - Funds drawn from Federal State Planning and Research (SPR) funds

- Iowa DOT active member

- For more info visit: http://www.trb.org/NCHRP/NCHRPOverview.aspx

NCHRP 08-36 Project: Research for the AASHTO Standing Committee on Planning

- ## Objective
  - ◦ The objective of this project is to establish a flexible, ongoing program of quick-response research designed to develop improvements to the analytical methods, decision-support tools, procedures, and techniques employed by practitioners to support statewide and metropolitan transportation planning, programming, and development.

- ## Resource
  - ◦ http://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=909

NCHRP 08-36/Task 127

- Project Title – *Employment Data for Planning: A Resource Guide*
- *Objective*
  - The objective of this research is to develop a resource guide for selecting and using employment data which will explain to practitioners the various types of employment and employer data that exist and can be used for transportation travel demand modeling purposes. The resource guide should explain the major differences among employment, jobs, labor force, and workers. Note, however, that this research is not a critical evaluation of vendor data.

    This research further develops both the Census Bureau's own research on the interactions between the worker estimates of American Community Survey and Current Population Survey and the information available in *NCHRP 08-36, Task 98: Improving Employment Data for Transportation Planning* report that looked at the publicly available sources - Quarterly Census of Employment and Wages (QCEW) collected by the Bureau of Labor Statistics (BLS), and two databases produced from the Census Bureau's Longitudinal Employment Household Dynamics (LEHD) Program – the Quarterly Workforce Indicators (QWI) and OnTheMap (OTM).

NCHRP 08-36/Task 128

- Project Title – *What You Get is What You See: Modern Visualization and Analysis Tools for Strengthening Transportation*

- Objective
  - The objective of this research is to evaluate Design Visualization Methods and their applicability to transportation planning and analysis. This study will produce a systematic classification of tools and techniques that can be employed for analyzing, displaying and reporting information, and it will provide guidance on how to select the most appropriate tools and techniques as a function of the desired application. This research should address relatively simple and commonly available DVMs as well as those that are more complex and/or expensive. It should not address project design and construction project visualization. The final report should be written for state and local transportation planners and analysts, and should include the following information at a minimum:
    1. A literature review and a list of external resources where appropriate.
    2. From that review, a description of the types of methods (a collection of tools and techniques) that exist and that may or may not be used in transportation.
    3. Suggested visualization methods for specific purposes that are also summarized in a matrix.
    4. Basic types of visualization methods (not specific vendors and platforms) and types of analytical results they are used to communicate.
    5. The types of information that need to be communicated, and guidance on how to select the most appropriate visualization method(s).
    6. An assessment of the types of tools that work best for analyzing, mapping, displaying, reporting, and sharing the different types of information.
    7. Examples of how others have used data visualization tools effectively to share data, along with brief descriptions of the data used, how the data were manipulated or integrated with other sources, and how the visualization was created.