

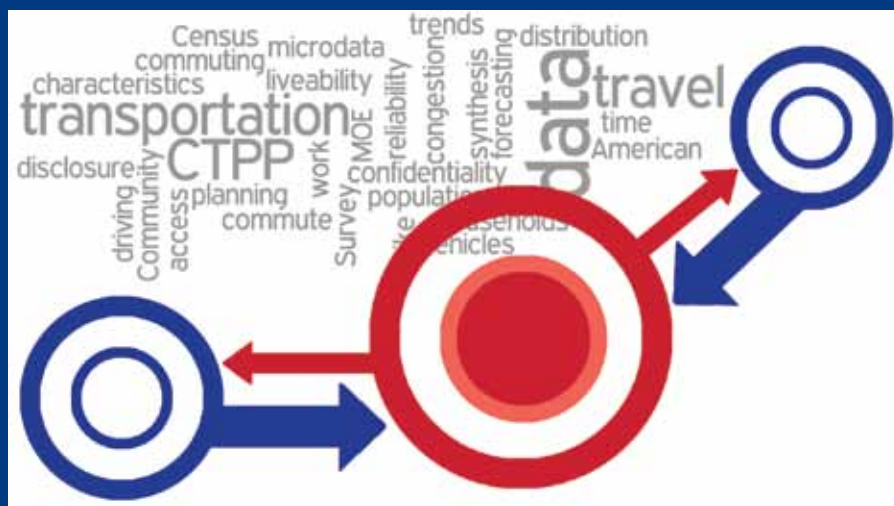
Using Census Data for Transportation

October 25–27, 2011

Arnold and Mabel Beckman Center of the National Academies
Irvine, California

Supported by
AASHTO, Census Transportation Planning Products
Federal Highway Administration, Office of Planning
Federal Transit Administration

www.trb.org/conferences/Census2011.aspx



WELCOME

Census data are critical inputs for a host of transportation planning applications. They help us understand current conditions and predict future trends. They provide household, workplace, journey-to-work, and flow data for policy and planning studies, travel demand modeling, environmental justice analyses, transit evaluations, and many other work activities.



Kreideweis

The conference planning team, working with FHWA, FTA, the U.S. Census Bureau, and the American Association of State Highway and Transportation Officials, has fashioned a strong program to provide participants with a forum to

- Share experiences on how census data are being used to meet decision-making needs;
- Discuss opportunities, limitations, and challenges associated with the transition from the census long form to the new American Community Survey; and
- Learn more about recent research to minimize the impacts of data suppression and assess alternative data sources, including QCEW and LEHD.

Breakout discussion sessions will also give participants the chance to talk about how transportation decision-making data needs are changing and what practical improvements and approaches are needed to meet longer-term needs for residence, workplace, and origin–destination flow data.

I urge you to share your experiences with your peers and identify ways to improve the data available for transportation products and services.

—Jonette Kreideweis, Conference Planning Team Chair

Conference Planning Committee

Jonette Kreideweis, Minnesota
Department of Transportation (retired),
Chair

Nathan Erlbaum, New York State
Department of Transportation

Thomas J. Kane, Thomas J. Kane Consulting

Keith Killough, Arizona Department of
Transportation

Kathleen Lindquist, Washington State
Department of Transportation

Alan E. Pisarski, Consultant

Steven E. Polzin, University of South
Florida

Kristen Rohanna, San Diego Association
of Governments

Guy Rousseau, Atlanta Regional
Commission

Robert L. Santos, The Urban Institute

Liaisons:

Ken Cervenka, Federal Transit
Administration

Elaine Murakami, Federal Highway
Administration

Penelope Weinberger, American
Association of State Highway and
Transportation Officials

Alison K. Fields, U.S. Census Bureau

TRB Staff

Tom M. Palmerlee

Nanda Srinivasan

Matthew A. Miller

Jaclyn Hubersberger

October 25–27, 2011



Tuesday, October 25

11:00 a.m.–11:45 a.m., *Boardroom*

Planning Team Meeting (invitation only)

11:45 a.m.–12:45 p.m., *Hyatt Regency Newport Beach Hotel, Lobby Entrance*

Bus Shuttle Departures to Beckman Center

Bus 1–11:45 a.m.

Bus 2–12:00 noon

Bus 3–12:30 p.m.

Bus 4–12:45 p.m.

Noon–1:00 p.m., *Dining Room and Dining Room Terrace*

Lunch

1:00 p.m.–2:00 p.m., *Auditorium*

Opening Session

Jonette Kreideweis, Minnesota Department of Transportation (retired), *presiding*

Census Data in a Dynamic Time for Transportation Planning

Jonette Kreideweis, Minnesota Department of Transportation (retired)

Census Bureau Directions

Thomas L. Mesenbourg, Deputy Director, U.S. Census Bureau

2:00 p.m.–3:00 p.m., *Auditorium*

Data User and Provider Panel

Steven E. Polzin, University of South Florida, *presiding*

Thomas Mesenbourg will join a panel of data users to explore key issues relating to use of census data by the transportation community.

Transportation Agency Needs and Uses of Census Data: A Federal Perspective

Mary Lynn Tischer, Federal Highway Administration

State and MPO Data Needs: Meeting Federal Requirements and Local Applications

Martin Tuttle, California Department of Transportation

Broad View of Census Surveys for Reliable, High-Quality Data for Small Geographic Areas

Vincent Barabba, Chairman, Market Insight Corporation

Challenges and Opportunities in Meeting Transportation Data Needs—The Role of BTS

Patricia S. Hu, Associate Administrator and Director, RITA–BTS

Panel Discussion and Charge to Conference Participants

3:00 p.m.–3:30 p.m., *Auditorium*

Census Bureau Data Delivery and Research Activities

Jonette Kreideweis, Minnesota Department of Transportation (retired), *presiding*

Tuesday, October 25, 2011



Census Bureau Update

Alison Fields, U.S. Census Bureau

3:30 p.m.–4:00 p.m., *Atrium*

Break

4:00 p.m.–5:30 p.m., *Auditorium*

Environmental and Social Equity Issues

Penelope Weinberger, AASHTO, *presiding*

Using Performance Indicators to Monitoring Growth Vision Progress in Transit-Oriented Communities

Frank Wen, Southern California Association of Governments

Income, Race, and Odds of Living Along Busy Roadways: Using Census Data to Consider Equity and Environmental Justice in Regional Transportation Planning

Gregory Gould, Natural Resources Defense Council

Demographic Analysis of HOV and General Purpose Lane Use Along I-85 Corridor in Metro Atlanta

Adnan Sheikh, Sara Khoeini, Sundaram Vedala, Vetri Venthan Elango, and Randall Guensler, Georgia Institute of Technology

4:00 p.m.–5:30 p.m., *Huntington*

Demographic and Travel Forecasting

Thomas J. Kane, Thomas J. Kane Consulting, *presiding*

Use of ACS and Decennial Census Data Products in Demographic Forecasting Process at NCTCOG

Kathleen Yu, Behruz Paschai, and Arash Mirzaei, North Central Texas Council of Governments

Adventures in ACS: Using 2005–2009 ACS Small-Area Data in Regional Transportation Planning

Mara Kaminowitz, Baltimore Metropolitan Council

Using Census Data in Development of Activity-Based Model: The San Diego Experience

Wu Sun, Ziyang Ouyang, and Eddie Janowicz, San Diego Association of Governments

Floating Car Data and Travel Forecasting

Nick Cohn, TomTom

5:30 p.m.–6:00 p.m., *Board Room*

Planning Team Meeting (invitation only)

6:00 p.m.–7:30 p.m., *Atrium*

Reception

5:45 p.m.–7:45 p.m., *Beckman Front Entrance*

Bus Shuttle Departures to Hyatt Regency Newport Beach Hotel

Bus 1–5:45 p.m.

Bus 2–6:00 p.m.

Bus 3–7:30 p.m.

Bus 4–7:45 p.m.

Tuesday, October 25, 2011



Wednesday, October 26

7:15 a.m.–8:15 a.m., *Hyatt Regency Newport Beach Hotel Lobby Entrance*

Bus Shuttle Departures to Beckman Center

Bus 1–7:15 a.m.

Bus 2–7:30 a.m.

Bus 3–8:00 a.m.

Bus 4–8:15 a.m.

7:30 a.m.–8:30 a.m., *Dining Room and Dining Room Terrace*
Breakfast

8:30 a.m.–10:00 a.m., *Auditorium*

Travel Modes: Transit, Bike, Walk

Ken Cervenka, Federal Transit Administration, *presiding*

Use of LED Data in Estimating Jobs Accessed Through Federal JARC Program

Caroline Ferris, TranSystems

Using LEHD Data to Assess Market Share of Commuter Rail Stations

Henning Eichler, Southern California Regional Rail Authority

Using Census Data to Identify Areas of High-Transit Propensity

Robert E. Bush, HDR Engineering

Sketch Planning Tool for Nonmotorized Travel

Ho-Ling Hwang, Oak Ridge National Laboratory

8:30 a.m.–10:00 a.m., *Huntington*

Data Synthesis and Evolving Tools

Keith L. Killough, Arizona Department of Transportation, *presiding*

Use of ACS PUMS Data in Demographic and Economic Forecasting

Dmitry Messen, Houston–Galveston Area Council

Integrated Transportation Land-Use Modeling: Using Publicly Available Data Sources for Advanced Modeling

Rolf Moeckel, PB Americas, Inc.

Population Synthesis for Travel Demand Modeling: Data Needs and Application Case Studies

Ram M. Pendyala, Arizona State University

10:00 a.m.–10:30 a.m., *Atrium*

Break

10:30 a.m.–noon, *Auditorium*

People Move, Jobs Change: Transportation Impacts of Population Dynamics

Jennifer Toth, Arizona Department of Transportation, *presiding*

Wednesday, October 26, 2011



Changes in Racial–Ethnic Characteristics in California’s San Francisco Bay Area and United States

Harold M. Brazil, Shimon Israel, and Charles L. Purvis, Metropolitan Transportation Commission

Latino New Urbanism: Exploring Link Between Hispanic Mode Choice and Residential Location in Hispanic Neighborhoods

Evelyn Blumenberg and Madeline Wander, University of California, Los Angeles

Preview of Small Area Transportation Data from the American Community Survey

Edward J. Spar, COPAFS, and Ken Hodges, Nielsen Claritas

10:30 a.m.–noon, *Huntington*

How Far Can You Go in This Vehicle? Exploring the Utility and Limits of Census Data for Transportation Planning and Research

Robert Santos, The Urban Institute, *presiding*

Using 2007 License Plate Study to Evaluate Census Sensitivity Between Years 2000 and 2010

Sara Khoeini, Sundaram Vedala, Vetri Venthan Elango, and Randall Guensler, Georgia Institute of Technology

Socioeconomic Data Reconciliation Procedure in Maryland Statewide Transportation Model: Challenges, Current Solutions, and Future Steps

Sabyasachee Mishra, Fred Ducca, and Xin Ye, University of Maryland, College Park; Subrat Mahapatra, Maryland State Highway Administration

Creating Land Use and Built Environment Variables in Buffers Surrounding Households: Accuracy of Geo-Coordinate Imputation

Xin Wang and Asad J. Khattak, Old Dominion University; Juyin Chen, Virginia Department of Transportation

Validation of Person-Trip Tables for Transit Forecasting

Jinghua Xu, Parsons Brinckerhoff Quade & Douglas, Inc.; Rosella Picado and Dawn McKinstry, PB Consult, Inc.

Noon–12:45 p.m., *Dining Room and Dining Room Terrace*

Lunch

12:45 p.m.–2:15 p.m., *Auditorium*

Research Activities

Elaine Murakami, Federal Highway Administration, *presiding*

Applying Statistical Disclosure Control to American Community Survey Microdata Before Generating CTPP Estimates

Tom Krenzke, Westat

Place-of-Work Allocation for Workers with Missing Employment Addresses in the ACS

Melanie Rapino and Brian McKenzie, U.S. Census Bureau

Evaluation of Data from QCEW and LEHD-OTM for Transportation Applications

Bruce D. Spear, Cambridge Systematics, Inc.

Research on ACS and Administrative Records

Ron S. Jarmin, U.S. Census Bureau

2:15 p.m.–2:45 p.m., *Atrium*

Break



2:45 p.m.–4:00 p.m., *Auditorium*

Power Users' Forum: Making Large Data Sets Useful and Usable for Transportation Agencies

Ed Christopher, Federal Highway Administration, *presiding*

Private sector representatives involved in the identification, application, and dissemination of census and other sociodemographic data for the support of transportation planning will share their insights on available and planned census and census-derived data products, alternative data sources, the state of the practice in transferring, extrapolating, and synthesizing sociodemographic and economic data, and client capabilities, needs, and aspirations regarding data.

Ken Hodges, Nielsen Claritas

Lynn Wombold, ESRI

Vincent Bernardin, Jr., Bernardin, Lochmueller and Associates, Inc.

Kevin Tierney

4:00 p.m.–5:30 p.m., *Auditorium, Huntington, Boardroom, Newport Room, Executive Dining Room*

Breakout Discussion Groups

To enhance participant interaction and synthesize conference findings, participants will select one of five breakout groups, which will meet twice (Wednesday afternoon and Thursday morning). Each breakout group will focus on different topic areas. During this session, each breakout group will (a) discuss their experience in using census data and identifying the value and importance of census data to transportation planning, and (b) identify the benefits and the challenges they foresee. A one-page summary from each group will be prepared and distributed before the Thursday breakout session.

A: Data Content Specification (Geographic Precision, Currency, Accuracy, Content),

Auditorium

Ed Christopher, Federal Highway Administration, Leader

Kristen Rohanna, San Diego Association of Governments, Coleader

B: Integration with Other Sources and Private Sector Data, *Huntington*

Guy Rousseau, Atlanta Regional Commission, Leader

Nathan Erlbaum, New York State Department of Transportation, Coleader

C: Data Dissemination, Data Access Tools, Model, *Boardroom*

Keith Killough, Arizona Department of Transportation, Leader

Kathleen Lindquist, Washington State Department of Transportation, Coleader

D: Funding and Institutional Arrangements Relating to Census and Alternative Sources,

Newport Room

Thomas J. Kane, Thomas J. Kane Consulting, Leader

Alan E. Pisarski, Consultant, Coleader

E: Research and Professional Development, *Executive Dining Room*

Elaine Murakami, Federal Highway Administration, Leader

Alison K. Fields, U.S. Census Bureau, Coleader

5:45 p.m.–6:40 p.m., *Beckman Front Entrance*

Bus Shuttle Departures to the Hyatt Regency Newport Beach Hotel

Bus 1–5:45 p.m.

Bus 2–6:00 p.m.

Bus 3–6:25 p.m.

Bus 4–6:40 p.m.

Wednesday, October 26, 2011



Thursday, October 27

7:15 a.m.–8:15 a.m., *Hyatt Regency Newport Beach Hotel Lobby Entrance*

Bus Shuttle Departures to Beckman Center

Bus 1–7:15 a.m.

Bus 2–7:30 a.m.

Bus 3–8:00 a.m.

Bus 4–8:15 a.m.

7:30 a.m.–8:30 a.m.

Breakfast

8:30 a.m.–10:30 a.m., *Auditorium, Huntington, Boardroom, Newport Room, Executive Dining Room*

Breakout Discussion Groups

Each breakout group will focus on a different topic, although there may be some overlap. This will be a forward-looking session, to discuss research and action items for both the short-term (less than 2 or 3 years) and the long-term (3 or more years) future of using census data for transportation planning.

A: Data Content Specification (Geographic Precision, Currency, Accuracy, Content), *Auditorium*

Ed Christopher, Federal Highway Administration, Leader

Kristen Rohanna, San Diego Association of Governments, Coleader

This group will focus on the technical and statistical characteristics of census data and products, including the CTPP special (or custom) tabulation and the standard ACS products, including tables and microdata samples (PUMS). Some of the topics may include data currency, accuracy and precision, use of disclosure avoidance methods as they relate to policy analysis, and planning and regulatory compliance.

B: Integration with Other Sources and Private Sector Data, *Huntington*

Guy Rousseau, Atlanta Regional Commission, Leader

Nathan Erlbaum, New York State Department of Transportation, Coleader

This group will focus on how census data are or could be integrated with other data sources from both the public and private sector. This could include combining census survey data such as ACS with administrative records, LEHD data, household travel surveys, location data from smartphones or other location-based data (e.g., Bluetooth and RFID). Issues related to standardization, consistent availability, and other obstacles to this integration will be discussed.

C: Data Dissemination, Data Access Tools, Model, *Boardroom*

Keith Killough, Arizona Department of Transportation, Leader

Kathleen Lindquist, Washington State Department of Transportation, Coleader

This group will examine how the census–ACS data are currently processed and potential processing improvements, including disclosure protection methods, updating employer referencing, estimating network travel distances, coding workplaces when insufficient address information is provided, and how the data are disseminated—particularly with web-based access tools such as American FactFinder, the CTPP Access Tool (using Beyond 2020), and BTS Bookstore.



D: Funding and Institutional Arrangements Relating to Census and Alternative Sources,
Newport Room

Thomas J. Kane, Thomas J. Kane Consulting, Leader
Alan E. Pisarski, Consultant, Coleader

This group will focus on approaches to ensure the continued availability data under current expectations of budget and staffing cuts. This will include the value and willingness to support different initiatives under funding constraints. For the 1990, 2000, and 2006–2010 CTPP, state DOTs and MPOs have funded the CTPP program as a coordinated pool, including data products and (more recently) research and technical assistance. Discussion will include how to determine stakeholder priorities, how to ensure stakeholder participation, and the value of census data compared with alternative data sources.

E: Research and Professional Development, *Executive Dining Room*

Elaine Murakami, Federal Highway Administration, Leader
Alison K. Fields, U.S. Census Bureau, Coleader

This group will focus both on prioritizing research to ensure socio-demographic and economic data to support transportation planning and policy analysis, and on how to ensure a trained professional staff that can use these data effectively. While the research topic may overlap with groups A and B, this group will include discussion on research to support synthetic data methods. On the topic of professional development, the group will discuss improving communication about these data sources, techniques for knowledge transfer, and mechanisms and methods for training such as face-to-face training, webinars, and interactive e-learning systems.

10:30 a.m.–11:00 a.m., *Atrium*

Break

11:00 a.m.–12:30 p.m., *Auditorium*

Closing Session: Improving Transportation Through Better Demographic Information

Jonette Kreideweis, Minnesota Department of Transportation (retired), *presiding*

Reports from Breakout Groups

A: Data Content–Specification (Geographic Precision, Currency, Accuracy, Content)

Ed Christopher, Federal Highway Administration, Leader
Kristen Rohanna, San Diego Association of Governments, Coleader

B: Integration with Other Sources and Private Sector Data

Guy Rousseau, Atlanta Regional Commission, Leader
Nathan Erlbaum, New York State Department of Transportation, Coleader

C: Data Dissemination, Data Access Tools, and Models

Keith Killough, Arizona Department of Transportation, Leader
Kathleen Lindquist, Washington State Department of Transportation, Coleader

D: Funding and Institutional Arrangements Relating to Census and Alternative Sources

Thomas J. Kane, Thomas J. Kane Consulting, Leader
Alan E. Pisarski, Consultant, Coleader

E: Research and Professional Development

Elaine Murakami, Federal Highway Administration, Leader
Alison K. Fields, U.S. Census Bureau, Coleader

Thursday, October 27, 2011



Observations

Steven E. Polzin, University of South Florida

Town Meeting on Priorities for Action

Summary Remarks

Jonette Kreideweis, Minnesota Department of Transportation, (retired)

12:30 p.m.–1:30 p.m., *Dining Room and Dining Room Terrace*

Lunch

12:30 p.m.–1:30 p.m., *Executive Dining Room*

Planning Committee Lunch

12:30 p.m.–2:15 p.m., *Beckman Front Entrance*

Bus Shuttle Departures to Hyatt Regency Newport Beach Hotel and John Wayne International Airport

Bus 1–12:30 p.m.

Bus 2–1:30 p.m.

Bus 3–2:15 p.m.

Contacts

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October 25–27, 2011



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