POLICY AND ORGANIZATION GROUP

Committee Triennial Strategic Plan (TSP)

For more background, see the Technical Activities Division Leadership Guide at http://onlinepubs.trb.org/Onlinepubs/dva/DivAGuide.pdf.

Note-Committees may wish to consult the Millennium Papers at http://www.trb.org/TRB/publications/MillenniumPapers.asp. To mark the approach of the new millennium, many standing committees mounted a special effort in 1999 to capture the current state of the art and practice and their perspectives on future directions in their respective areas of focus.

Committee Name and Number: Urban Transportation Data and Information Systems ABJ30

Committee Chairperson: Catherine T. Lawson

TSP Three-Year Period: April 15, 2006 to April 15, 2009

Date Prepared: 3/3/09

1. Committee Scope:

A. When did your committee last consider the scope?

At the 2008 Annual Meeting, Secretary Catherine Lawson circulated a preliminary draft of the ABJ30 Strategic Plan for the Committee to review (see Appendix A). The first paragraph in the Strategic Plan document contains the Scope for ABJ30. The Plan was again reviewed at the 2008 Midyear Meeting in August in Washington, D.C. In both meetings, Committee members and friends were instructed to review the scope and to provide comments for changes, edits, etc.

B. Does the current scope statement accurately reflect your committee's activities? Should the scope be modified?

The current scope statement accurately reflects the Committee's activities and there was been no call for change. At this time, there is no need to modify the scope.

C. What changes are proposed and why are these changes necessary?

N/A

2. Committee Strategic Planning

A. Has your committee conducted strategic planning sessions? If so, please attach results.

Our draft Strategic Plan was circulated at the 2008 Annual Meeting, at the 2008 Midyear Meeting, and through various listserv discussions (see *Appendix A*). As a starting point, the Committee has revisited the topic areas and strategies constructed in the New Millennium Paper, *Future of Urban Transportation Data*. Within our final Strategic Plan structure will be an "Action Items" section that will quantify our progress towards accomplishing our goals and objectives. This will allow the Committee to conduct a Strategic Plan analysis to determine our progress for both short and long term objectives. Going forward, the Committee plans to continue to use our listserv (abj30-friends) and upgrade our website using a wiki serve to provide outreach and feedback on our Strategic Plan and our progress.

B. If you have not done strategic planning, what are your committee's strategic directions for the future?

N/A

3. Critical and Cross-cutting Issues

The Committee participated in a "round robin" discussion at the 2008 Annual Meeting to prepare cross-cutting issues for the Data and Information Systems Section Retreat held March 19 – 20, 2008 at the NAS Beckman Center in Irvine, California (*see details below*). An outcome of the Retreat was the commitment to finding an avenue to address data quality, including a "data report" or similar self-assessment tool. This concept is now being framed by a small group being lead by Ed Christopher. This group produced an NCHRP Synthesis proposal as a first step. Data quality is a critical issue for ABJ30 and we intend to provide as much support as possible in the early attempts to tackle this cross-cutting issue.

A. What are the key long term and emerging issues that your committee is tracking?

Using the New Millennium Paper, *Future of Urban Transportation Data*, as a starting point, the Committee has identified the list below as long term issues:

- Using census data in transportation planning
- Monitoring traffic and transit systems
- Using ITS-generated data in planning
- Using household survey data in describing traveler characteristics and metropolitan travel patterns
- Combining data sources
- Studying issues of privacy and confidentiality
- Creating standards for meta-data (data about data) and meta-analysis (comparative data analyses)
- Continuous Census Data (American Community Survey)

- Continuous Personal Travel Data surveys
- Archiving IT Data for Planning and other Applications
- Use of global positioning systems and other technologies in urban transportation data
- Small Area Land Use and Socioeconomic Data
- Privacy and Data Ownership Concerns
- Information from Data

Feedback on our original list included a request to change the "Archiving IT Data for Planning and other Applications" to "Archiving Data for Planning and other Applications" to encourage good archiving practices for GPS and other household travel survey data.

At the 2008 Annual Meeting, Chair Christopher moderated a round table discussion to prepare for the Data Retreat. Committee Members and Friends were asked to provide their ideas for emerging issues listed below:

- Confidentially: How should we handle new types of data, such as GPS, that provides exact locations and may need to be made more "fuzzy" to protect survey participant's privacy?
- How will we get travel survey data in cell phone only households as they might not be part of the original sampling frame?
- Are we prepared to deal with the new forms of data created by new types of data creation equipment (i.e., second by second GPS data streams)?
- Do we need new guidelines for new types of data?
- Are we collecting VMT data correctly to understand greenhouse gases?
- Are we sharing operations data (e.g., archived ITS) is a form that makes it useful to members of the planning community?
- Do we need guidelines for air quality data that needs to focus on variation rather than averages?
- Do we need to review the rules used for "rolling up" data?
- Should there be different approaches depending on the sources and future uses of the data or would the capture of second by second data be the foundation for all users to choose their own roll-up strategies to serve their own needs?
- Will future uses, such as microsimulation, be considered now to ensure data is not prematurely truncated in an effort to save on storage space?
- What new strategies can be expected for establishing origins and destinations (i.e., cell phones)?
- Can the mantra of "data as an asset" be incorporated across the board to improve data?
- Will the use of private sector providers of transportation services make the collection and sharing of needed data problematic?
- Is there a "standard" for data quality or does it make a difference of how the data will be used and who will be using it?
- Will current attention on Travel Demand Models (e.g., Special Report Session on Wednesday night) and attention on performance measures put pressure on the research community to provide new urban transportation data and information systems knowledge?

- What impact with the aging of the population and changes in life style make on the needs for urban transportation data?
- What impact will the desire to use tolls for financing roadways have on the need for collecting urban transportation data?
- How will the continued focus on immigration and demographic factors impact urban transportation data programs?
- What new or continuing pressures will transportation planners face regarding the need for funding infrastructure maintenance and providing new infrastructure features?
- How can we support the data needs of MPOs (i.e., webinar instruction)?

These ideas were then sorted and grouped into the following major areas of critical importance to the Committee:

- Stewardship: What guidelines are needed to treat data as an asset?
- What are the urgent new needs for urban transportation data?
- Are there new ways of obtaining data and serving up data?

At the 2009 Annual Meeting, these areas were addressed by our speakers. Kim Fisher addressed the urgent new needs with her presentation on the Virtual Project. Kuo-Ann presented his efforts to develop a Transportation Planning Decision Support System (TPDSS) or an Enterprise Data Warehouse for NYMTC, a new way of serving up data. Nathan Erlbaum gave a presentation on a new tool for making the American Community Survey data more "user-friendly" and Pavithra Parthasarathi gave an informative presentation on the continuing efforts treat data like an asset by archiving and preserving travel survey data.

B. What plans do you have to address cross-cutting issues with other committees?

Our Committee participated in the Data Retreat and contributed two of our three major areas of critical importance: Data Stewardship and new ways of obtaining and disseminating data. The discussion at the Data Retreat produced three broad initiatives:

- Advancing Knowledge and Nurturing New Perspectives
- Raising Awareness of Information Gaps and Highlighting Effective Solutions
- Promoting Use of Technology

ABJ30 will contribute to all three of these efforts. First, we would like to contribute to the proposed conferences to communicate with decision makers, data providers and data users of urban data – such a conference would provide us with a strong forward movement for developing research statements (similar to the activities for Freight Data). Partners in this venture would include Statewide Data, Information Systems, and Visualization. Second, we want to participate in the "Data Report Card" concept (now being called the "Data Program Self Assessment Framework". To help with the promotion of use of technology, we have several Committee members involved in cell phone technologies and we anticipate working with other data communities to explore potential uses for transportation planning in an urban area with these data. We also see

the use of web-based data distribution strategies as a possible avenue for better dissemination of urban data.

In addition, ABJ30 plans to participate in the 2009 Midyear Meeting in Seattle to explore the role of data visualization.

4. Committee Activity Plans

A. What activities are planned next year to achieve your goals?

Our first activity to address our need to participate in the generation of research statements is to launch a new and improved website. We have appreciated our first Chair, Chuck Purvis' enthusiasm for new technologies – and his leadership with one of the first websites for a TRB Committee. He will be retiring soon and will not be able to continue this service. At our 2009 Annual Meeting, we formed a new Website/Wiki Working Group. This group has already established a working site that is being used to format our cyber space, archive the original website materials, archive Committee minutes and to function as a "worksite" for new ideas, development of Webinar ideas, and establish a permanent process for developing, tracking, and funding research statements. This has been a challenge. One of the key activities planned for the Mid-Year meeting in Seattle will be to meet with the Visualization Committee to look for opportunities to collaborate.

B. What activities are envisioned in future years?

We anticipate an increase in interest and activities for our Census Subcommittee. 2010 will be an exciting year for data collection and it will be important to plan workshops and special conferences around the development of applications for transportation planning. Several barriers regarding disclosure and accessibility to the data may become issues. In addition, we want to participate in the dissemination of the NHTS through a special conference or workshops, particularly on advancements with transferability for urban data users.

5. Committee Organization and Membership – in minutes

- A. Describe the membership gender and racial diversity.

 There are 16 male members (59%) and 11 females (41%). The racial composition includes 21 white (78%); 5 Asian (19%); and 1 other (4%).
- B. How is membership distributed geographically?

Eastern 14 (52%) Central 6 (22%)
Western 6 (22%) International 1 (4%)

C. How is membership distributed across professional affiliation?

State Government 4 (15%)

Education 6 (22%)

Local Government 5 (19%)

Federal Government 1 (4%)

Private Sector 5 (19%)

Nonprofit/Other 6 (22%)

- D. How many "friends" are associated with the committee? 55
- E. List subcommittees and their chairs.

Census Data for Transportation Planning - ABJ30(1) Co-Chairs: Clara Reschovsky and Kristen Rohanna

Archived Data Users Service – AFD30(1)

Chair: Shawn Turner

6. Interaction with Other TRB Committees, Organizations, and Customers

A. List other TRB committees which your committee maintains a formal liaison representation.

A recent scan of the membership and friends indicates representation with the following other TRB Committees:

Formal Liaison with another TRB Committee

ADC20 Transportation and Air Quality (Chris Klaus)

ADA30 Transportation Planning in Small and Medium-sized Communities (Elaine Murakami)

ABJ40 Travel Survey Methods (Elaine Murakami)

Committee Members as Chairs of other TRB Committees/Subcommitteess

ANF10 Pedestrian Committee (Shawn Turner)

AFD30(1) Archived Data Users Service Subcommittee (Shawn Turner)

Committee Member on another TRB Committee

AHB20 Freeway Ops (Karl Petty)

ADB10 Travel Behavior and Values (Vladimir Livshits, Mauren Outwater, Emily Parkany)

ABG20 Transportation Education and Training (Emily Parkany)

Committee Member as Friend on another TRB Committee

ABJ10 National Data Requirements

ADB10 Travel Behavior and Values

ADB40 Transportation Demand Forecasting

ADC20 Transportation and Air Quality

Statewide Planning

ADD30 Transportation and Land Development

ABJ90 Freight Data

ABJ95 Visualization in Transportation

AP085 Ferry Transportation

Committee Member as Friend on Subcommittee

ADC20(2) Regional Air Quality Analysis Subcommittee

ADB40 Transportation Demand Forecasting subcommittees

AFD30(1) Archived Data Users Service Subcommittee

AHB35 Committee on High-Occupancy Vehicle, High-Occupancy Toll, and Managed Lanes Subcommittees

Friends as Members of TRB Committees

ADA30 Transportation Planning in Small and Medium Sized Communities

ADB40 Transportation Demand Forecasting

ABJ10 National Transportation Data Requirements and Programs

ANF20 Bicycles

ANF30 Motorcycles and Mopeds

ABJ90 Freight Transportation Data

A0010 International Activities

Friends as Friends of TRB Committees

ABJ20 Statewide Transportation Data and Information Systems

B. List outside organizations which your committee maintains ongoing liaison representation.

Association of Public Data Users

American Association of State Highway and Transportation Officials (AASHTO)

D. List shared activities during the past year (examples should include work on cross-cutting issues, information exchange, research, etc.)

ABJ30 participated in the Data Retreat in March 2008. What we agreed to contribute to the three key areas:

Advancing Knowledge and Nurturing New Perspectives – *Conference with Invited Participants form all Types of Data Providers and Users with particular focus on understanding the data needs of our "urban data" customers.*

Raising Awareness of Information Gaps and Highlighting Effective Solutions – Development of a Data Report Card and a Guide to Managing Data as an Asset and a Research Roadmap

Promoting Use of Technology – Focus on Findability to enhance information dissemination for urban data

7.	Business	Meeting	Attendance ((information	from t	the most	recent	meeting)
				(

Α	Annual business meeting:	Members	17	Guests	37
л.	Annual business meeting.	MICHIDEIS	1/	Oucsis	ונ

B. Summer business meeting: Members _9_ Guests _14_ NA ____

8. Technology Transfer Activities for Colleagues and Customers

A. Is the committee planning to publish documents within the next two years? (proceedings, circulars, etc.)

Please list and give anticipated dates.

ABJ30 continues to support the publication of the proceedings from the 2005 Census Data for Transportation Planning: Preparing for the Future held on May 11 - 13, 2005 in Irvine, California. In 2007, an effort was made to assemble all the available information from this conference, with the expectation that it will be published (in some form) as soon as possible.

B. Workshops proposed (excluding the TRB Annual Meeting).

N/A

C. Conferences proposed.

N/A

E. Other activities (web pages, newsletters, updating of millennium paper, etc.)

Our main activity at this time is developing our new website/wiki. We anticipate this web portal to work as a strong focus for our Committee. Our listserv will continue to remain active as a method for communicating on a regular basis with members and friends, but it has not worked as a place to archive or post shared materials. We also plan to provide linkages with other Committee websites and electronic activities to facilitate the development of cross-cutting ideas. For example, we will post the website for the Visualization Committee to foster the development of a research needs statement on data visualization (currently in draft format).

9. Research Needs and Problem Statements (Of particular interest are problem statements for TRB Cooperative Research Programs, but please list related activities your committee is involved with as well.)

A. How do you determine and select research needs and problem statements? (workshops, call for ideas, etc.)

No formal process has yet been established to ensure the delivery of completed research statements for the Research Needs Statement web portal. To date, we have used our

listserv to foster dialogue, made the offer at all annual and mid-year meetings for ideas for research, and worked in small groups to prepare statements, including looking for sponsorship among state agencies.

We intend to use our new and improved website to not only develop research statements on a continuing basis, but to track, promote and monitor the funding of our research needs statements. We also see the need for workshop/conference settings to focus our Committee members and friends, communicate with other TRB Committees and reach out to our Metropolitan Planning Organizations and others.

- B. Number of Research Problem Statements currently under development? 6
- C. List Research Problem Statements funded during last three years?

The list of funded research statements include:

- 8-37 Standardized Procedures for Personal Travel Surveys: http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_571.pdf
- 8-48 Using American Community Survey Data for Transportation Planning http://trb.org/news/blurb_detail.asp?id=802
- 8-61 Travel Demand Forecasting: Parameters and Techniques http://www.trb.org/TRBNet/ProjectDisplay.asp?ProjectID=937
- 8-36 (63) Making NAICS (North American Industrial Classification System)
 Work for Transportation
 http://www.trb.org/TRBNet/ProjectDisplay.asp?ProjectID=1277
- 8-36(71) Disclosure Avoidance Techniques to Improve the American Community Survey http://www.trb.org/trbnet/ProjectDisplay.asp?ProjectID=2391

D. Are the statements available to the public (for example, in TRB Research Needs Database, http://rns.trb.org/)?

Yes, the following statement has been completed and loaded to the TRB website. Other statements are not yet complete.

Enhancing the American Community Survey (ACS) Data as a Source for Home-to-Work Flows

Committee: ABJ30, Urban Transportation Data and Information Systems

Date Posted: 07/20/2007 Date Modified: 07/23/2007

10. General Remarks and Comments Offered by the Committee

A. Should your committee continue in its present form with its present title? If no, please explain.

Yes, ABJ30 plans to continue in its present form with its present title.

- B. Should it be merged with one or more other committees?If yes, please explain.No, at this time, ABJ30 should not be merged with one or more other committees.
- F. Any other comments considered appropriate by the committee.
- 11. Annual Reports of Committee Activities (Please attach last three years of annual reports and supporting documents).

TRB POLICY AND ORGANIZATION GROUP

Annual Report of Committee Activities

Each year, TRB staff fills in items below from TRB databases for committee review and editing. The committee chair submits the Annual Report to the Section Chair by March 1 of each year.

Committee Name and Number: Urban Transportation Data and Information Systems (ABJ30)

Committee Chairperson: Dr. Catherine T. Lawson

Year: 2009

- 1. Current Committee Scope: This committee is interested in the design, collection, analysis, and reporting of transportation supply and demand data needed to support urban and metropolitan transportation planning efforts. In particular, the committee is interested in developing the data requirements of new and innovative techniques for measuring and monitoring the performance of metropolitan transportation systems; and in evaluating changes in demographic and urban travel characteristics. In terms of household and other transportation surveys, the committee is concerned with the analysis, reporting, archiving, and dissemination of results and data products. The committee is interested in the effective use of census and other federal, secondary data sources in metropolitan transportation planning. The committee is concerned with advancements in information systems and information technology for the improved dissemination and sharing of knowledge about metropolitan transportation systems and urban travel behavior.
- 2. Committee Membership (See member distribution chart attached.)
 - A. Number of members at current time.
 - 1. Total 19
 - 2. Young 3
 - 3. Emeritus 1
 - 4. International 1
- 3. Paper Review:
 - A. Number of papers reviewed during the last year 31
 - B. Number of papers recommended for publication 4
- 4. Annual Meeting Sessions Sponsored (Lists of sessions for the last year are attached.)
 - A. Number of paper or conference sessions at the last annual meeting 2
 - B. Number of workshop sessions at the last annual meeting 0
 - C. Number of poster sessions at the last annual meeting 1
 - D. Number of co-sponsored sessions at the last annual meeting 2
 - E. Number of published sessions at the last annual meeting 3
 - F. Number of unpublished sessions at the last annual meeting 0

- 5. Research Problem Statements (*Problem statements submitted in last year are attached.*)
 - A. Number of problem statements submitted last year <u>1</u>
- 6. List of Critical and Cross-Cutting Issues (Issues the committee plans to address are attached.)

ABJ30 participated in the Data Retreat in March 2008. We agreed to contribute to the following three key cross-cutting areas:

Advancing Knowledge and Nurturing New Perspectives – *Conference with Invited Participants form all Types of Data Providers and Users with particular focus on understanding the data needs of our "urban data" customers.*

Raising Awareness of Information Gaps and Highlighting Effective Solutions – Development of a Data Report Card and a Guide to Managing Data as an Asset and a Research Roadmap

Promoting Use of Technology – Focus on Findability to enhance information dissemination for urban data

- 8. Other Activities Sponsored During the Last Year:
- 9. Appendix Annual Meeting Sessions:

ABJ30 - Urban Transportation Data and Information Systems

Poster Session (P)s



Monday, January 12, 2009, 9:30am-12:00pm, Hilton, International Center

New Concepts in Urban Data

Emily Parkany, Noblis, Inc., presiding

Sponsored by Committee on Urban Transportation Data and Information Systems

Speed Distribution Profile of Traffic Data and Sample Size Estimation (09-1090)

N Nezamuddin, University of Texas, Austin

Joshua Crunkleton, URS Corporation

Philip John Tarnoff, University of Maryland, College Park

Continuing Evolution of Travel Time Data Information Collection and Processing (09-2030)

Philip John Tarnoff, University of Maryland, College Park

Darcy M. Bullock, Purdue University

Stanley E. Young, University of Maryland, College Park

James Wasson, Indiana Department of Transportation

Nicholas Ganig, University of Maryland, College Park

James R. Sturdevant, Indiana Department of Transportation

Adding Green Performance Metrics to a Transportation Data Archive (09-2462)

Alexander Y. Bigazzi, Portland State University

Robert Lawrence Bertini, Portland State University

Travel Time Estimation on Urban Networks with Mid-Link Sources and Sinks (09-2799)

Ashish Bhaskar, Ecole Polytechnique Federale de Lausanne, Switzerland

Edward Chung, EPFL

André-Gilles Dumont, EPFL

Using Smart Card Fare Payment Data to Analyze Multimodal Public Transport Journeys in London (09-3419)

Catherine Seaborn, Halcrow Group Ltd., United Kingdom

Nigel H. Wilson, Massachusetts Institute of Technology

John Attanucci, Massachusetts Institute of Technology

Workshop (W)s

126 (TPW09-007)

Sunday, January 11, 2009, 9:00am-12:00pm, Hilton, Lincoln East

Transforming Archived Intelligent Transportation System Data into Information: Emerging Archived Data User Service Applications

Rob Hranac, Berkeley Transportation Systems; Steven Parker, University of Wisconsin, Madison, presiding

Sponsored by Committee on Urban Transportation Data and Information Systems; Committee on Archived Data User Service (ADUS); Committee on Performance Measurement; Committee on Highway Traffic Monitoring

Archived data user systems (ADUS) have historically focused on solving basic data challenges, such as acquisition, storage, and imputation. As these systems have matured, agencies are beginning to focus on building applications on top of data systems. This workshop first examines some of these emerging applications and then engages workshop participants in discussion to help chart the course for future archived data systems that will increasingly do more than simply collect data.

Corridor Management Applications (P09-1747)

J.D. Margulici, University of California, Berkeley

Visualization and Application (P09-1748)

Rob Hranac, Berkeley Transportation Systems

HOV Integration (P09-1749)

Steven Parker, University of Wisconsin, Madison

Advanced Measures for Statewide Display (P09-1750)

Ted J. Trepanier, Washington State Department of Transportation

Published Meeting - Committee (M)s

TPM09-003

Monday, January 12, 2009, 1:30pm- 5:30pm, Hilton, Hemisphere

Urban Transportation Data and Information Systems Committee

Catherine Theresa Lawson, State University of New York, Albany, presiding

Sponsored by Committee on Urban Transportation Data and Information Systems

TPM09-041

Tuesday, January 13, 2009, 3:45pm- 5:30pm, Hilton, Adams

Census for Transportation Planning Subcommittee, ABJ30(1)

Clara Reschovsky, Metropolitan Washington Council of Governments; Kristen Rohanna, San Diego Association of Governments, presiding

Sponsored by Committee on Urban Transportation Data and Information Systems

ABJ30 Cosponsored Sessions (only editable by the primary committee sponsor)

TPS09-005

Tuesday, January 13, 2009, 8:00am- 9:45am, Hilton, Jefferson West

Impact of Changing Demographics on the Transportation System

Joseph F. Coughlin, Massachusetts Institute of Technology, presiding

This session highlights results from a fall conference that served as a forum for universities, government, private interests, and TRB committees on the impact of demographics on transportation.

Immigration Internally and from Abroad (P09-0092)

Evelyn Blumenberg, University of California, Los Angeles

Gender Differences (P09-0096)

Randall Crane, University of California, Los Angeles

Aging and Demographic Transition (P09-0093)

David W. Eby, University of Michigan Transportation Research Institute

Changing Racial and Ethnic Mix (P09-0094)

Heather Contrino, Federal Highway Administration

Research Agenda for Impact of Changing Demographics on the Transportation System (P09-0095) Sandra Rosenbloom, University of Arizona

TPS09-018

Wednesday, January 14, 2009, 10:15am-12:00pm, Hilton, Georgetown East

Intersecting Ripples: Propagation of Ideas in Transport Survey Research

Martin E. H. Lee-Gosselin, Laval University, Canada, presiding

Leading public and private-sector survey researchers and transport professionals from 27 countries met in May 2008 in France for the 8th International Conference on Transport Survey Methods. This session covers recommendations in five areas of critical concern for transport surveys and data: (a) sustainability and user adaptation, (b) freight and transit planning, (c) technology applications, (d) global social issues, and (e) emerging and persistent survey issues, including data harmonization.

Transport Surveys and Global Social Issues (P09-1528)

Carlos Arce, NuStats, LLC

Surveys in the Context of Sustainability and User Adaptation (P09-1529)

Peter Bonsall, University of Leeds, United Kingdom

Data and Survey Issues in Freight and Transit Planning (P09-1530)

Jacques Leonardi, University of Westminster

Technology Applications in Transport Surveys (P09-1531)

Jimmy Armoogum, Institut National de Recherche sur les Transports and leur Securite, France

Emerging and Persistent Survey Issues, Including Data Harmonization (P09-1532)

Nancy McGuckin, Consultant

Discussion: Where Next for Transport Survey Research? (P09-1533)

Patrick Bonnel, Ecole Nationale des Travaux Publics de l'Etat, France Johanna P. Zmud. NuStats. LLC

TPS09-021

Monday, January 12, 2009, 7:30pm- 9:30pm, Hilton, Lincoln East

Travel Data Users Forum: Focus on Vehicle Miles Traveled

Ed Christopher, Federal Highway Administration, presiding

VMT is one of the most widely used transportation data metrics, yet its use can bring the ire of data analyst when it is used incorrectly or out of context. But how can VMT as a performance metric be so ubiquitous yet so controversial? Attendees will gain a better understanding of where VMT comes from, when and how to use it, and why it can be so controversial. Bring your questions. This session will mark the 5th Annual Travel Data Users Forum.

Vehicle Miles Traveled 101: What Is VMT? How Is It measured? What Are the Sources? (P09-0551)

Don H. Pickrell, Volpe National Transportation Systems Center

The "Official" VMT Estimate (P09-0552)

Tianjia Tang, Federal Highway Administration

Panel Perspectives on VMT (P09-0553)

Jon D. Fricker, Purdue University

Guy Rousseau, Atlanta Regional Commission

Frank Southworth, Oak Ridge National Laboratory

James Whitty, Oregon Department of Transportation

TPS09-023

Tuesday, January 13, 2009, 1:30pm- 3:15pm, Hilton, Jefferson East

Travel Time Data for Operations

Rob Hranac, Berkeley Transportation Systems, presiding

Estimation of Segment Travel Time Based on Point Traffic Detector Measurements (09-2498)

Luou Shen, Florida International University

Mohammed A. Hadi, Florida International University

Guaranteed Bounds on Highway Travel Times Using Probe and Fixed Data (09-3616)

Christian G. Claudel, University of California, Berkeley

Aude Hofleitner, University of California, Berkeley

Nicolas Mignerey, University of California, Berkeley

Alexandre M. Bayen, University of California, Berkeley

Using Spatial Travel Time Covariance Relationships for Real-Time Estimation of Arterial Travel Times (09-2453)

William H. K. Lam, Hong Kong Polytechnic University

Using Transit Vehicles to Measure Freeway Traffic Conditions (09-2282)

Benjamin Coifman, Ohio State University

Seoungbum Kim, Ohio State University

TPW09-004

Thursday, January 15, 2009, 9:00am-12:00pm, Hilton, Monroe East

National Household Travel Survey, 2008: Add-on Applications, Data Use, and Dissemination

Heather Contrino, Federal Highway Administration, presiding

The 2008 National Household Travel Survey (NHTS) is collecting data from 150,000 households, including a national sample of 25,000 and 125,000 state and local surveys through the Add-on Program. The workshop provides details on the 2008 database structure, key variables, and NHTS user products. The workshop will help NHTS users in obtaining an early look at the 2008 data and plans for dissemination and in developing research plans for when the final data are available.

Study and Sample Design of 2008 NHTS (P09-1765)

Susan Swain, Westat Inc.

Content Changes and Applications Overview (P09-1766)

Nancy McGuckin, Consultant

Tutorial in Data Structure, Analysis and Tools (P09-1767)

Adella Santos, Federal Highway Administration

TRB POLICY AND ORGANIZATION GROUP

Annual Report of Committee Activities

Each year, TRB staff fills in items below from TRB databases for committee review and editing. The committee chair submits the Annual Report to the Section Chair by March 1 of each year.

Committee Name and Number: Urban Transportation Data and Information Systems (ABJ30)

Committee Chairperson: Edward J. Christopher

Year: 2008

- 1. Current Committee Scope: This committee is interested in the design, collection, analysis, and reporting of transportation supply and demand data needed to support urban and metropolitan transportation planning efforts. In particular, the committee is interested in developing the data requirements of new and innovative techniques for measuring and monitoring the performance of metropolitan transportation systems; and in evaluating changes in demographic and urban travel characteristics. In terms of household and other transportation surveys, the committee is concerned with the analysis, reporting, archiving, and dissemination of results and data products. The committee is interested in the effective use of census and other federal, secondary data sources in metropolitan transportation planning. The committee is concerned with advancements in information systems and information technology for the improved dissemination and sharing of knowledge about metropolitan transportation systems and urban travel behavior.
- 2. Committee Membership (See member distribution chart attached.)
 - B. Number of members at current time.
 - 1. Total 23
 - 2. Young 1
 - 3. Emeritus 1
 - 4. International 0
- 4. Paper Review:
 - C. Number of papers reviewed during the last year 33
 - D. Number of papers recommended for publication 2
- 4. Annual Meeting Sessions Sponsored (Lists of sessions for the last year are attached.)
 - A. Number of paper or conference sessions at the last annual meeting 2
 - B. Number of workshop sessions at the last annual meeting 1
 - C. Number of poster sessions at the last annual meeting 1
 - D. Number of co-sponsored sessions at the last annual meeting 2
 - E. Number of published sessions at the last annual meeting 2
 - F. Number of unpublished sessions at the last annual meeting 0

- 5. Research Problem Statements (*Problem statements submitted in last year are attached.*)
 - A. Number of problem statements submitted last year ___
- 10. List of Critical and Cross-Cutting Issues (Issues the committee plans to address are attached.)
- 11. Other Activities Sponsored During the Last Year:
- **12.** Appendix Annual Meeting Sessions:

ABJ30 - Urban Transportation Data and Information Systems

Paper or Conference Session (S)s



Wednesday, January 16, 2008, 10:15am-12:00pm, Hilton, Lincoln West

Travel Data Users Forum: How Will the Changing Cost of Energy Affect Personal Travel?

Ed Christopher, Federal Highway Administration, presiding

Sponsored by Committee on Urban Transportation Data and Information Systems; Committee on National Transportation Data Requirements and Programs; Committee on Statewide Transportation Data and Information Systems

The 4th Annual Travel Data Users Forum explores one of the most important questions facing the transportation community and examines what data are needed to answer the question. Attendees will gain information to begin to shape and refine their own answers to this most important question.

Setting the Energy Cost Stage (P08-0360)

David L. Greene, Oak Ridge National Laboratory

What is the MPO Perspective? (P08-0188)

Charles L. Purvis, Metropolitan Transportation Commission

State Department of Transportation Perspective (P08-0206)

Nathan S Erlbaum, New York State Department of Transportation

Is Transit Part of the Equation? (P08-1681)

Steven E. Polzin, University of South Florida

View form a Traffic Data Perspective (P08-1682)

David W. Gardner, Ohio Department of Transportation



Wednesday, January 16, 2008, 8:00am- 9:45am, Hilton, Lincoln West

Advances on the Urban Data Front

Ed Christopher, Federal Highway Administration; Karl Petty, Berkeley Transportation Systems, presiding Sponsored by Committee on Urban Transportation Data and Information Systems

Improving Collection and Monitoring of Urban Travel Data: an International Review (08-1244)
Anthony May, University of Leeds, United Kingdom

An Interactive Tool for Collecting Traveler Behavior Information (08-0373)

Ryan Patrick Avery, University of Washington

Wilco Burghout, Royal Institute of Technology, Sweden

Ingmar J. Andreasson, Royal Institute of Technology, Sweden

Development of a Prototype Information System for Estimating Average Vehicle Occupancies from Traffic Accident Records (08-2696)

Albert Gan, Florida International University

Kaiyu Liu, Florida International University

L David Shen, Florida International University

Rax Jung, Florida's Turnpike Enterprise

Toward Understanding and Reducing Errors in Real-Time Estimation of Travel Times (08-1023)

Sirisha Kothuri, Portland State University

Kristin A. Tufte, Portland State University

Enas Fayed, Portland State University

Robert Lawrence Bertini, Portland State University

Travel Time Reliability Model on Freeways (08-1777)

Huizhao Tu, Delft University of Technology, The Netherlands

Hans Van Lint, Technical University of Delft, Netherlands

Henk J. van Zuylen, Delft University of Technology, The Netherlands

Poster Session (P)s

252 (TPP08-003)

Monday, January 14, 2008, 9:30am-12:00pm, Hilton, International Center

Spectacular Data Mega Session

William L. Eisele, Texas Transportation Institute, presiding

Sponsored by Committee on Urban Transportation Data and Information Systems; Data and Information Systems - Section; Committee on Travel Survey Methods; Committee on Statewide Transportation Data and Information Systems; Committee on Geographic Information Science and Applications; Committee on Library and Information Science for Transportation

Sensor Locations on a Network to Predict Travel Times (08-0798)

Pitu B. Mirchandani, University of Arizona

Yang He, University of Arizona

Work and Home Location: Possible Role of Social Networks (08-3073)

Nebiyou Yonas Tilahun, University of Minnesota, Twin Cities

David Matthew Levinson, University of Minnesota, Twin Cities

Quantifying and Measuring Travel Time Reliability for In-Vehicle Navigation Systems (08-1688)

Ioannis Kaparias, Imperial College London, United Kingdom

Michael G.H. Bell, Imperial College London, United Kingdom

Heidrun Belzner, BMW Group, Germany

Identifying Spatial and Temporal Congestion Characteristics Using Passive Mobile Phone Data (08-1534)

Shlomo Bekhor, Technion - Israel Institute of Technology

Moshe Hirsh, ROM Transportation Engineering, Israel

Saleem Nimre, ITIS Traffic Services, Israel

Israel Feldman, ITIS Traffic Services, Israel

Three-Dimensional In-Vehicle Navigation Using Photorealistic Urban Model for Intelligent

Transportation System (08-0392)

Guoqing Zhou, Old Dominion University

Linbing Wang, Virginia Polytechnic Institute and State University

Effects of Controlling Parameters on Performance of a Decision-Rule Map-Matching Algorithm (08-1019)

Carola Blazquez, Universidad Nacional Andres Bello, Chile

Alan P. Vonderohe, University of Wisconsin, Madison

Aspace: An Open Source Toolkit for the Centrographic and Home-Range Estimation of Activity Spaces (08-0380)

Ron Buliung, University of Toronto, Canada

Tarmo K Remmel, York University, Canada

Use of Global Positioning System Data Collected from Bus Automatic Vehicle Location Systems to Determine Location of Bus Stops in London (08-0472)

Steve Robinson, Transport for London, United Kingdom

DEVELOPMENT AND EVALUATION OF A SOFTWARE TOOL THAT INTEGRATES GPS AND VIDEO DATA FROM A ROAD ALIGNMENT TO PERFORM ROAD CONDITION, SAFETY AUDITS AND INVENTORY SURVEYS (08-0113)

Kelvin Roberto Santiago-Chaparro, University of Puerto Rico, Mayaguez

Benjamín Colucci-Rios, University of Puerto Rico, Mayaguez

Alberto M. Figueroa Medina, University of Puerto Rico, Mayaguez

GIS-Based Travel Demand Modeling for Estimating Traffic on Low-Class Roads (08-1098)

Ming Zhong, University of New Brunswick, Canada

Using Incomplete Archived ITS Data to Calculate Annual Average Traffic Statistics: How Much Missing Data Is Too Much? (08-1146)

Shawn M. Turner, Texas Transportation Institute

Eun Sug Park, Texas Transportation Institute

Using Paratransit Global Positioning System Data to Evaluate Impacts of Emergency Vehicle Signal Preemption (P08-1117)

Hualiang Teng, University of Nevada, Las Vegas

Optimizing Archived Electronic Transportation Engineering Data (08-1904)

Laith Alfaqih, University of Alabama

Carlos Sanchez, University of Alabama

Andrew J. Graettinger, University of Alabama

David Hale, University of Alabama

Amending the Incentive for Strategic Bias in Stated-Preference Studies: Case Study on Users' Valuation of Rolling Stock (08-1678)

Hui Lu, University of Leeds, United Kingdom

Anthony Fowkes, University of Leeds, United Kingdom

Mark Wardman, University of Leeds, United Kingdom

Measuring Effects of Different Experimental Designs and Survey Administration Methods Using Atlanta Managed-Lanes Stated-Preference Survey (08-2670)

Stephane Hess, Imperial College London, United Kingdom

Colin Smith, Resource Systems Group, Inc.

C. Stacey Falzarano, Resource Systems Group, Inc.

Jevan Stubits, Resource Systems Group, Inc.

Six-Wave Odometer Panel for Evaluation of Voluntary Travel Behavior Change Programs (08-1424)

Peter R. Stopher, University of Sydney, Australia

Natalie Swann, University of Sydney, Australia

Bayesian Updating of Transferred Household Travel Data Using Markov Chain Monte Carlo Simulation with Gibbs Sampler (08-1389)

Yongping Zhang, University of Illinois, Chicago

Abolfazl Mohammadian, University of Illinois, Chicago

Approach for Collecting Internal Truck Travel Data: Lessons Learned from Maricopa Association of Government's Internal Truck Travel Study (08-2577)

Arun R. Kuppam, Cambridge Systematics, Inc.

Vladimir Livshits, Maricopa Association of Governments

Lavanya Vallabhaneni, Maricopa Association of Governments

Mia Zmud, NuStats, LLC

Julie Wilke, NuStats, LLC

Rebecca Elmore-Yalch, Northwest Research Group, Inc.

Michael J. Fischer, Cambridge Systematics, Inc.

Microsimulation of Household Travel Survey Data (08-3098)

Yongping Zhang, University of Illinois, Chicago

Abolfazl Mohammadian, University of Illinois, Chicago

Retrospective Surveys: Some Experiences in the Context of Measuring Life-Cycle Events (08-2358)

Marloes Verhoeven, Eindhoven University of Technology, Netherlands

Theo Arentze, Eindhoven University of Technology, Netherlands

Harry J.P. Timmermans, Eindhoven University of Technology, Netherlands

Peter J.H.J. Van der Waerden, Eindhoven University of Technology, Netherlands

National Data Warehouse: How the Netherlands Is Creating Reliable, Widespread, and Accessible Data Bank for Traffic Information, Monitoring, and Control of Road Networks (08-2650)

Francesco Viti, Delft University of Technology, The Netherlands

Serge Hoogendoorn, Delft University of Technology, The Netherlands

Sascha Hoogendoorn-Lanser, AVV Transport Research Centre, Netherlands

L. H. Immers, Catholic University Leuven, Belgium

Chris Tampere, Catholic University Leuven, Belgium

A comparison of GPS and travel diaries to characterize walking behavior (08-0607)

Gihyoug Cho, University of North Carolina, Chapel Hill

Daniel A. Rodriguez, University of North Carolina, Chapel Hill

Kelly J. Clifton, University of Maryland, College Park

Kelly Evenson, University of North Carolina, Chapel Hill

Examining Common Distributional Assumptions of Travel Characteristics for Data Simulation (08-1430)

Yongping Zhang, University of Illinois, Chicago

Abolfazl Mohammadian, University of Illinois, Chicago

Deciding When or If Transport Survey Data Should Be Updated (08-2146)

Nariida Carolyn Smith, Meyrick and Associates, Australia

Marcus Ramsay Wigan, Oxford Systematics, Australia

Workshop (W)s



Sunday, January 13, 2008, 1:30pm- 5:00pm, Hilton, Monroe West

Integrating Archived Traffic Operations Data into Planning Data Systems

Rob Hranac, Berkeley Transportation Systems; Shawn M. Turner, Texas Transportation Institute, presiding

Sponsored by Committee on Urban Transportation Data and Information Systems; Committee on Information Systems and Technology; Committee on Highway Traffic Monitoring

As the role of traditional data programs continues to evolve in state transportation agencies, data program managers may explore alternative data sources to supplement or improve upon existing sources. Archived operations data could be a rich source of traffic data to be integrated into planning data systems. Institutional and technical barriers may impede achieving those benefits. Speakers will talk about their experiences, their successes, and the barriers they are working to overcome.

New York State DOT Experience (P08-0674)

Todd B. Westhuis, New York State Department of Transportation

Caltrans Experience (P08-0676)

Joseph Avis, California Department of Transportation

Virginia DOT Experience (P08-0678)

Thomas O. Schinkel, Virginia Department of Transportation

Arizona DOT Experience (P08-0680)

Tomas Guerra, Oz Engineering

Published Meeting - Committee (M)s

TPM08-011

Monday, January 14, 2008, 7:30pm- 9:30pm, Hilton, State

Urban Transportation Data and Information Systems Committee

Ed Christopher, Federal Highway Administration, presiding

Sponsored by Committee on Urban Transportation Data and Information Systems

TPM08-022

Wednesday, January 16, 2008, 2:30pm- 4:00pm, Hilton, Lincoln South

Census for Transportation Planning Subcommittee, ABJ30(1)

Robert T. Sicko, Mirai Associates, presiding

Sponsored by Committee on Urban Transportation Data and Information Systems

ABJ30 Cosponsored Sessions (only editable by the primary committee sponsor)

CGS08-003

Tuesday, January 15, 2008, 7:30pm- 9:30pm, Hilton, Georgetown West

Technology Innovations in Monitoring Traffic and Air Pollution

H. Christopher Frey, North Carolina State University, presiding

Sponsored by Committee on Transportation and Air Quality; Committee on Geographic Information Science and Applications; Task Force on Traffic Monitoring Conference (NATMEC); Committee on Highway Traffic Monitoring; Committee on Urban Transportation Data and Information Systems

Overview of Types of Transportation-Related Air Quality Data That Air Quality and Transportation Agencies Need (P08-0142)

H. Christopher Frey, North Carolina State University

MESSAGE: Mobile Environmental Sensing System Across Grid Environments. (P08-0088)

Robin J. North, Imperial College London, United Kingdom

State of the Practice in Using Cell Phones to Collect Data (P08-0143)

Michael Daniel Fontaine, Virginia Transportation Research Council

Speed and Vehicle Miles of Travel Data from ITS Traffic Monitoring Systems (P08-0144)

Shawn M. Turner, Texas Transportation Institute

TPM08-013

Monday, January 14, 2008, 12:15pm- 1:15pm, Hilton, Chevy Chase

Achieved Data Users Service (ADUS) Joint Subcommittee of ABJ35, ABJ30

Shawn M. Turner, Texas Transportation Institute, presiding

ATTACHMENT – RESEARCH NEEDS STATEMENT

Enhancing the American Community Survey (ACS) Data as a Source for Home-to-Work Flows

Problem Statement:

Transportation planners and modelers need journey-to-work (JTW) flow data for a variety of purposes. Historically, this data was available through a special tabulation of the Census Long Form data produced at a Traffic Analysis Zone (TAZ) level. However, since 2005 with the advent of the ACS, the quality and level of detail of the JTW flow data is diminished. Because the ACS is a continuous survey with a small sample, the margins of error are higher than the decennial long form. Therefore, alternative sources and methods to combine ACS with alternative data sources are needed to enhance its usability. To assist in this challenge, the Census Bureau has a new dataset called the Longitudinal Employment Household Dynamics (LEHD). The LEHD merges the Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW) with other federal data sets to produce a synthetic JTW file at a block level.

Research Objective:

The purpose of this research is to examine the data and methods for merging the ACS and LEHD data. To accomplish any merger a first step is to examine the home and work combinations in both the ACS and LEHD at an aggregate level to see how they compare. The next step is to identify the individual records from ACS that are in LEHD and see what, if any, differences there are in the individual residential and workplace addresses. It is expected that not all records will match and the reasons for any mismatch will need to be documented. For example, why do differences in the home and work locations occur? Can the source of the difference be identified? Once these differences are understood and documented methods can be developed for successfully integrating the two data sets.

This research serves as the foundation for making the ACS a more robust, accurate and useable data set for transportation planning and analysis. The work will need to be conducted at the U.S. Census Bureau Suitland Office, with researchers who have "special sworn status" to access the confidential micro data.

Project Cost: \$60,000 Duration: 12 Months

Product: Report documenting what was found in the micro level analysis of the home and work locations. Recommendations on what, if any, "fixes" need to occur followed by recommendations on how best to merge the two data sets.

Sponsoring Committee: ABJ30, Urban Transportation Data and Information Systems

Source Info: This proposal was developed in part due to discussions at the TRB Midyear meeting as well as Committee Chair work with the AASHTO Census group and the CTPP Technical Working Group.

Date Posted: 07/20/2007 Date Modified: 07/23/2007

Index Terms: Public transit, Transit operating agencies, American Community Survey, Work trips, Travel time, Traffic Analysis Zones, Traffic flow, Traffic data, Home pages (Websites), U.S. Bureau of the

Census,

TRB POLICY AND ORGANIZATION GROUP

Annual Report of Committee Activities

Each year, TRB staff fills in items below from TRB databases for committee review and editing. The committee chair submits the Annual Report to the Section Chair by March 1 of each year.

Committee Name and Number: Urban Transportation Data and Information Systems (ABJ30)

Committee Chairperson: Edward J. Christopher

Year: 2007

- 1. Current Committee Scope: This committee is interested in the design, collection, analysis, and reporting of transportation supply and demand data needed to support urban and metropolitan transportation planning efforts. In particular, the committee is interested in developing the data requirements of new and innovative techniques for measuring and monitoring the performance of metropolitan transportation systems; and in evaluating changes in demographic and urban travel characteristics. In terms of household and other transportation surveys, the committee is concerned with the analysis, reporting, archiving, and dissemination of results and data products. The committee is interested in the effective use of census and other federal, secondary data sources in metropolitan transportation planning. The committee is concerned with advancements in information systems and information technology for the improved dissemination and sharing of knowledge about metropolitan transportation systems and urban travel behavior.
- 2. Committee Membership (See member distribution chart attached.)
 - C. Number of members at current time.
 - 1. Total 23
 - 2. Young 1
 - 3. Emeritus 1
 - 4. International 0
- 5. Paper Review:
 - E. Number of papers reviewed during the last year 37
 - F. Number of papers recommended for publication 0
- 4. Annual Meeting Sessions Sponsored (Lists of sessions for the last year are attached.)
 - A. Number of paper or conference sessions at the last annual meeting 2
 - B. Number of workshop sessions at the last annual meeting 0
 - C. Number of poster sessions at the last annual meeting 0
 - D. Number of co-sponsored sessions at the last annual meeting 5
 - E. Number of published sessions at the last annual meeting 2
 - F. Number of unpublished sessions at the last annual meeting 0

- 5. Research Problem Statements (*Problem statements submitted in last year are attached.*)
 - A. Number of problem statements submitted last year ___
- 13. List of Critical and Cross-Cutting Issues (Issues the committee plans to address are attached.)
- 14. Other Activities Sponsored During the Last Year:
- **15.** Appendix Annual Meeting Sessions:

ABJ30 - Urban Transportation Data and Information Systems

Paper or Conference Session (S)s



Monday, January 22, 2007, 3:45pm- 5:30pm, Hilton, Georgetown West

Showcase of Nationwide Personal Transportation Survey and National Household Travel Survey Data Analyses and Applications

Heather Contrino, Federal Highway Administration, presiding

Sponsored by Committee on Urban Transportation Data and Information Systems; Committee on National Transportation Data Requirements and Programs; Committee on Traveler Behavior and Values; Committee on Travel Survey Methods; Committee on Transportation Demand Forecasting

Road Map of 14 Showcase NPTS and NHTS Data Analyses and Applications (P07-0436)

Jonaki Bose, Bureau of Transportation Statistics

Ed Christopher, Federal Highway Administration

Housing Choices and Travel of Older Adults: Using AHS and NPTS-NHTS Data to Plan for the Future (07-1407)

Jennifer Dill, Portland State University

Tomoko Kanai, Portland State University

Investigating the Transferability of National Household Travel Survey Data (07-2030)

Abolfazl Mohammadian, University of Illinois, Chicago

Yongping Zhang, University of Illinois, Chicago

Modeling Side Stop Purpose During Long-Distance Travel Using 1995 American Travel Survey (07-3113)

Jeffrey James LaMondia, University of Texas, Austin

Chandra R. Bhat, University of Texas, Austin

Interactive Tool to Compare and Communicate Traffic Safety Risks: Traffic STATS (07-1332)

David Gerard, Carnegie Mellon University

Paul S. Fischbeck, Carnegie Mellon University

Barbara Gengler, Multidimensionality, LLC

Randy S. Weinberg, Carnegie Mellon University



Tuesday, January 23, 2007, 7:30pm- 9:30pm, Hilton, Monroe West

Advancing Urban Data

Catherine Theresa Lawson, State University of New York, Albany, presiding Sponsored by Committee on Urban Transportation Data and Information Systems

Evaluation of Roadside License Plate Data Collection Methods for Origin-Destination Studies (07-2580)

Bryan P. Guy, Albeck Gerken, Inc.

Jon D. Fricker, Purdue University

Investigation of University Students' Activity Patterns (07-2862)

Jin Ki Eom, North Carolina State University

John R. Stone, North Carolina State University

Sujit K. Ghosh, North Carolina State University

State of the Art and Practice: Cellular Probe Technology Applied in Advanced Traveler Information Systems (07-0223)

Zhijun Qiu, University of Wisconsin, Madison

Jing Jin, University of Wisconsin, Madison

Peng Cheng, Tsinghua University, China

Bin Ran, University of Wisconsin, Madison

Wireless Location Technology-Based Traffic Monitoring: Preliminary Recommendations to Transportation Agencies Based on a Synthesis of Experience and Simulation Results (07-0445)

Michael Daniel Fontaine, Old Dominion University

Brian Lee Smith, University of Virginia

Aron R. Hendricks, University of Virginia

William Scherer, University of Virginia

Published Meeting - Committee (M)s

TPM07-004

Monday, January 22, 2007, 7:30pm- 9:30pm, Hilton, State

Census for Transportation Planning Subcommittee, ABJ30(1)

Robert T. Sicko, Mirai Associates, presiding

Sponsored by Committee on Urban Transportation Data and Information Systems

TPM07-011

Tuesday, January 23, 2007, 8:00am-12:00pm, Hilton, Military

Urban Transportation Data and Information Systems Committee

Ed Christopher, Federal Highway Administration, presiding

Sponsored by Committee on Urban Transportation Data and Information Systems

State of the Practice in Using Cell Phones as Data Probes (P07-1036)

Michael Daniel Fontaine, Old Dominion University

Longitudinal Employer Household Dynamics: How is the Transportation Community Responding to this New Data Source? (P07-1037)

Elaine Murakami, FHWA

ABJ30 Cosponsored Sessions (only editable by the primary committee sponsor)

TPP07-

001

Monday, January 22, 2007, 9:30am-12:00pm, Hilton, International Center

Data and Information Technology

Robert T. Sicko, Mirai Associates, presiding

U.S. Future Traffic Congestion and Capacity Needs (07-1028)

David T. Hartgen, University of North Carolina, Charlotte

M. Gregory Fields, University of North Carolina, Charlotte

Impact of Adverse Weather on Travel Time Variability of Freeway Corridors (07-1642)

Huizhao Tu, Delft University of Technology, Netherlands

Hans van Lint, Delft University of Technology, Netherlands

H.J. Van Zuylen, Delft University of Technology, Netherlands

Impact of Traffic Flow on Travel Time Variability of Freeway Corridors (07-1662)

Huizhao Tu, Delft University of Technology, Netherlands

J. W.C. Van Lint, Delft University of Technology, Netherlands

H. J. Van Zuylen, Delft University of Technology, Netherlands

Modeling and Estimation of Travel Time Variability (07-0845)

Ruimin Li, Transurban Ltd.

Geoffrey Rose, Monash University, Australia

Sarvi Majid, Monash University, Australia

Thinking Privacy with Intelligent Transportation Systems: Policies, Tools, and Strategies for the Transportation Professional (07-2646)

Adam Eli Kokotovich, University of Minnesota, Twin Cities

Lee W. Munnich, University of Minnesota, Twin Cities

TPS07-008

Monday, January 22, 2007, 7:30pm- 9:30pm, Hilton, Lincoln East

Agile Data Standards Development: Pipe Dream or Possibility?

Jack R. Stickel, Alaska Department of Transportation and Public Facilities, presiding

Challenges and Opportunities (P07-0035)

Frances D. Harrison, Spy Pond Partners

Archived Data User Service (P07-0036)

Shawn M. Turner, Texas Transportation Institute

Traffic Management Data Dictionary (P07-0037)

Robert Rausch, TransCore

The Case for Standardizing Household Travel Surveys (P07-1337)

Chester G. Wilmot, Louisiana State University

TPS07-011

Wednesday, January 24, 2007, 10:15am-12:00pm, Hilton, Lincoln East

2007 Travel Data Users Forum: Focus on Employment and Workplace Data

Ed Christopher, Federal Highway Administration, presiding

Employment data got you depressed? Missing a key element for your transportation planning? The TRB Data and Information Systems Section may have something for you, a roundtable discussion session

with some of the top experts in the field. Come to this session with your questions and leave with answers. Share in the exchange, Participate in the discussion, Learn from others. This session will mark the third annual Travel Data Users Forum, which is designed to provide a venue for the presentation and discussion of important or emerging issues regarding passenger travel data. The forum has four objectives: to foster a dialogue among all data providers and users, to identify sources of representative and applicable local and national surveys, to serve as a venue to identify and discuss emerging issues, and to encourage interaction within the passenger travel data community.

Why Do We Even Care About Employment and Workplace Data? (P07-0437)

Nancy McGuckin, Consultant

Data Supplier Panel (P07-0883)

Richard Clayton, Bureau of Labor Statistics

James Gillula, Global Insight, Inc.

Data Users Panel (P07-0438)

Eric N. Schreffler, Consultant

Kuo-Ann Chiao, New York Metropolitan Transportation Council

Robert Todd Ashby, Snyder and Associates, Inc.

Phillip J. Mescher, Iowa Department of Transportation

Nathan S Erlbaum, New York State Department of Transportation

TPS07-023

Monday, January 22, 2007, 3:45pm- 5:30pm, Hilton, Georgetown East

Highway Performance Monitoring System Reassessment Update

David R. Winter, Federal Highway Administration, presiding

The Highway Performance Monitoring System (HPMS) is currently undergoing a reassessment to ensure that it best meets the goals of its users and customers in 2010 and beyond. The reassessment is intended to respond to current and future business needs, address new data needs in SAFETEA-LU, capitalize on changing technology, and where possible address resource constraints and institutional changes. This session highlights the recommended changes to HPMS including structure of the database, data items, data quality, and process improvement.

Federal Data User Perspective (P07-1054)

Edward Crichton, Federal Highway Administration

AASHTO Perspective (P07-1055)

Janet Oakley, American Association of State Highway and Transportation Officials **State Perspective** (P07-1056)

William R. Cloud, Montana Department of Transportation

TPW07-011

Sunday, January 21, 2007, 8:30am-12:00pm, Hilton, Monroe East

Linking Archived Data User Service, Performance Measures, and Freeway **Operations to Improve Mobility**

Karl Petty, Berkeley Transportation Systems, presiding

Effective management of the freeway system requires a long chain of properly working systems, methodologies, and institutional support structures. This chain can be thought of as a feedback control loop operating on the freeway system in order to improve mobility. The chain includes the following parts: monitoring of the freeway system with various intelligent transportation system devices; proper storage and archiving of the collected data; diagnostics and cleansing of the data; computation of the appropriate performance measures; organization and presentation of the performance measures to users; and operational control strategies based on these performance measures. A similar type of feedback loop has been fruitfully mined at longer time scales by planners. This workshop focuses on shorter time scales. Specifically, data collection, performance measures, and decisions that can be made over the course of weeks or months to improve freeway performance are considered.

APPENDIX A STRATEGIC PLAN DOCUMENT

GOALS & OBJECTIVES

TRB ABJ30

Committee Goals and Implementation Strategies January 2008

Scope:

This committee is interested in the design, collection, analysis, and reporting of transportation supply and demand data needed to support urban and metropolitan transportation planning efforts. In particular, the committee is interested in developing the data requirements of new and innovative techniques for measuring and monitoring the performance of metropolitan transportation systems; and in evaluating changes in demographic and urban travel characteristics. In terms of household and other transportation surveys, the committee is concerned with the analysis, reporting, archiving, and dissemination of results and data products. The committee is interested in the effective use of census and other federal, secondary data sources in metropolitan transportation planning. The committee is concerned with advancements in information systems and information technology for the improved dissemination and sharing of knowledge about metropolitan transportation systems and urban travel behavior.

Committee Goals:

Goal #1: Provide a national forum for the continuing identification and prioritization of research on urban and metropolitan transportation "supply and demand" data, inputs needed for and outputs created from information systems and the dissemination of research findings.

Strategies:

- a) Provide active assistance to the National Research Council in developing a prioritized listing of urban and metropolitan transportation "supply and demand" data research problem statements that address the emphasis areas identified for this Committee.
- b) Encourage the active participation of Committee members and friends on national cooperative research councils including NCHRP, TCHRP and other relevant research panels for studies of interest to the Committee.
- c) Recommend publication of significant urban and metropolitan "supply and demand" data research papers in the Transportation Research Records;
- d) Conduct at least one paper session at each annual meeting;
- e) Task each Committee member with identifying emerging urban transportation data and information systems issues, future areas of concern and opportunities for new research, and with sharing this information through the Committee's communication network;
- f) Continue to develop the Committee website devoted to Committee activities and research in topic areas.

Goal #2: Continue to prepare for and conduct relevant and valuable gatherings of the Committee members and friends. The Committee shall meet at least twice per year in association with TRB annual meeting in January and in a mid-year business meeting. These activities provide a strong focus for the Committee and should be continued.

Strategies:

- a) Strive to identify important and timely workshop and presentation topics that advance the Committee's efforts to promote areas of emphasis.
- b) Work with TRB to ensure desired paper sessions are featured in the annual meeting agenda;
- c) Form and task a mid-year Workshop Subcommittee with identifying a suitable host location and agenda for each mid-year meeting and work with other relevant committees to increase synergy across topics;
- d) To the degree possible, conduct the Committee's mid-year meeting in a different region of the country each year to gain greater national exposure and support for the work of the Committee;
- e) The Committee Chair shall be responsible for moderating all business meeting sessions or delegating this responsibility to another member of the Committee;
- f) The Chair shall assign responsibility to a Committee member or friend for recording minutes for each meeting and submitting an electronic version to the Chair as soon as possible (preferably within two weeks of completion of the meeting).
- g) The Chair shall be responsible for preparing and transmitting final business meeting reports to TRB within 45 days of the completion of each meeting. Copies of the reports shall also be sent to each member and friend of the Committee.
- h) Copies of all reports of the proceedings of the annual and mid-year business meetings shall be retained by the Section Chair for use in preparation of the ABJ30 Triennial Self Evaluation Report.

Goal #3: Maintain an active organization that supports the mission of TRB Section ABJ00 and ABJ30. The Committee shall utilize one or more subcommittees to carry out its overall functions and responsibilities. Subcommittees will be created to address ongoing or emerging issues to the Committee as a whole.

Strategies:

- a) The Committee Chair shall be responsible for creating or dissolving subcommittees with input from the members present at the annual or mid-year business meeting;
- b) The Committee Chair shall appoint a current committee member to be the chairperson to oversee the activities of each subcommittee:
- c) Each subcommittee shall be tasked with creating its own set of goals and objectives that support the overall goals of the Committee;
- d) The Committee Chair shall ensure that the Committee members conduct Committee and subcommittee business meetings at each annual and mid-year meeting;
- e) Each subcommittee shall be tasked with reporting at the annual meeting on the accomplishments made through the proceeding year and activities planning for the succeeding year.

Goal #4: Expand and formalize the Committee liaison program. Many members of ABJ30 are also members or friends of other TRB Committees (or similar communities in other organizations). The research and other activities of these groups can be of valuable assistance to ABJ30 in achieving out Committee goals and our activities may be of similar value to them. A closer liaison should be encouraged and formalized to improve on the existing communications between these groups.

Strategies:

- a) A listing of all appropriate TRB and other regional and national committees and groups shall be established and maintained:
- b) To the degree possible, one or more ABJ30 members shall be assigned as liaisons to each identified group;
- c) Liaisons shall be tasked with responsibility for reporting on important external group activities through the Committee's website or at mid-year meetings.
- d) Liaisons shall actively promote joint activities that support the Committee's areas of interest and bring these activities to the attention of the full Committee.

Goal #5: Maintain a geographically and organizationally diverse Committee membership of well-qualified, highly motivated individuals. The Committee actively seeks diversity in its organization by striving to ensure the participation of members drawn form a variety of federal, state and local government agencies, academia, public interests, private enterprises (including consultant sector), and the general public. Broad geographical distribution of members, including international participation, is an important element in achieving the desired diversity.

Strategies:

- a) Form and task a Steering Subcommittee with annually reviewing the membership roster and identifying potential problems or concerns with membership numbers, terms or levels of participation;
- b) Task the Steering Subcommittee with reporting on the status of the Committee membership at each mid-year meeting of the Committee. The report should include identification of any interest group or geographical membership gaps, term limit concerns and participation issues.
- c) Task each additional subcommittee with responsibility for identifying highly qualified potential members and forwarding names and resumes to the Steering Subcommittee;
- d) Charge each member of the Committee with volunteering a minimum of 40 hours per year toward supporting Committee activities such as reviewing or preparing technical papers, chairing or serving on a subcommittee, serving as a liaison to another TRB or similar organization committee, or actively participating in the annual and mid-year meeting programs.