

CTPP Status Report

September 2009

U.S. Department of Transportation
Federal Highway Administration
Bureau of Transportation Statistics
Federal Transit Administration
AASHTO Standing Committee on Planning
In cooperation with the TRB Census Subcommittee

Census Transportation Planning Products (CTPP) AASHTO Update

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CTPP Oversight Board Meeting

On August 4 and 5, 2009, the CTPP Oversight Board, chaired by Mary Lynn Tischer, Virginia DOT, met in Washington, D.C. The agenda included CTPP business such as budget, work plan, new members and Board vacancies; datarelated research, including NCHRP projects and a potential Census Data for Transportation Conference; technical assistance and training; and many substantive topics, including upcoming Census TAZ delineation, National Household Travel Survey, how to resolve inconsistencies in population estimates at the subcounty level in American Community Survey (ACS) data, and Workplace Allocation research and implementation. Two subcommittees were established: one on Education and Training chaired by Ed Christopher, FHWA; and one on TAZ delineation, chaired by Guy Rousseau, Atlanta Regional Council. The Board is scheduled to meet again by teleconference November 2009.

Request for CTPP Three-Year ACS Data Products

As covered in the May 2009 issue of the CTPP Status Report

(<u>http://www.fhwa.dot.gov/ctpp/status.htm</u>), the three-year table task force was reconvened to revise the rejected CTPP table request (2008),

given the DRB rules. The revised request included significantly fewer cross-tabulations with Means of Transportation to Work (five) and, therefore, the request was approved by the DRB in late April 2009. The approval included several relevant changes. The DRB approved a request for tabulations of residence-to-workplace flows in 18 categories for Means of Transportation and, due to the significantly fewer cross-tabs, removed the three unweighted records rule (three unweighted records per category of Means of Transportation to Work would have been required for any table to be released).

With the April 2009 approval of the table request, the transportation community can expect a CTPP product of ACS three-year data for 2006-2007-2008 to be released in spring of 2010.

RFP for Data Access Software

With the anticipated release of the CTPP threeyear ACS data in spring of 2010, the CTPP Board oversaw the development and release of a Data Access Software Tool Request for Proposals. The RFP was let in June 2009, with responses due in July. A Data Access Software Subcommittee is reviewing the proposals and vendor selection is expected in fall 2009. Page 2 September 2009

Important Dates for CTPP, Census 2010, and ACS (September 2009)

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	СТРР	Census 2010	ACS
Summer 2009	RFP for Data Access System issued		September 22, 2009
	and responses due		one-year ACS (2008 data)
Fall 2009	NCHRP 08-79 project meeting		October 27, 2009
	AASHTO Contract for Data		three-year ACS
	Access System		(2006, 2007, 2008 data)
Winter 2009	NCHRP 08-79 panel selects contractor, and NCHRP staff negotiates contract Develop and Test the CTPP Data Access System		
April 1, 2010		Census Day!	
	Three-Year CTPP (2006, 2007, 2008 data)	·	September 2010 one-year ACS (2009 data)
Fall 2010	TAZ software development (include which agency will handle each county)		October 2010 three-year ACS (2007-2008-2009) December 2010 five-year ACS (2005-2006-2007-2008- 2009)
Winter 2011	March 2011 TIGER file with 2010 Census tracts, block groups, and blocks		
April 1, 2011	3 · · · · · · · · · · · · · · · · · · ·	PL-94-171 block counts must be out no later than this date	
Spring 2011	TAZ delineation field work by MPOs and state DOTs NCHRP 08-79 final report due TRB Census Data for Transportation conference (tentative)	May Demographic Profiles (tentative)	
Summer 2011	TAZ submittal to CB Start NCHRP 08-79 implementation CTPP five-year product	SF 1: State files released on a rolling basis from June- August 2011 (tentative)	
Fall 2011	TAZ verification and add to TIGER	,	
Winter 2012		SF 2: State files released on a rolling basis from December 2011- April 2012 (tentative)	
Spring 2012	E: V CEDD (0.5.07.00.00.10)		
Summer/	Five-Year CTPP (06-07-08-09-10)		
Fall 2012	Data Delivery (tentative, depends on		
	implementation of synthesized data)		

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Urbanized Areas

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On Friday, June 12, 2009, FHWA CTPP staff hosted a 1.5-hour webinar on the Census Bureau plans for "new" Urbanized Areas (UA) boundaries. Mike Ratcliffe and Chris Henrie from the Census Bureau's Geography Division discussed the criteria being considered and the timeline. The 250 participants asked many questions using the telephone and web meeting chat rooms. The Census Bureau plans to release a Federal Register notice in October 2009 with the proposed criteria and seeking input.

The Urbanized Area (UA) boundaries are extremely important for transportation planning and programming because they begin to define the area and population counts used for many of the Federal funding programs. Simply put, the UA population means money. The UA boundary also is important as it begins to define the core area from which MPOs evolve.

Some of the possible changes are:

- Possibility to include employment centers, not just residential density; and
- Possibility to include impermeable land using National Land Cover Database.

Mike Ratcliffe said that they did not plan to share any software to allow analysts to estimate the urbanized area boundary, but would reconsider the idea, given the high level of interest expressed during the webinar.

The webinar was recorded and is available at http://fhwa.na3.acrobat.com/p20171907/. While replaying the webinar you also can download the PowerPoint presentations from the speakers. The presentations also are available by going to the CTPP webinar room at http://fhwa.acrobat.com/ctpp1, signing in as a guest and downloading the slides. Finally, many questions arose during the webinar. These questions have been addressed, as best possible under current conditions, and are available at: http://www.chrispy.net/pipermail/ctppnews/attachments/20090714/508c2050/CensusQ and_A_v8-0001.pdf (This is a link to TRB Census Data subcommittee CTPP listserve archive.)

The webinar room also includes links to other recorded webinars, including one from December 2, 2008 on using the three-year ACS data and another from April 16, 2009 presenting an a technical introduction to IPUMS. For information on the CTPP list serve and subscription information, go to http://trbcensus.com/maillist.html.

Joint Statistical Meetings held in Washington, D.C. August 2-6, 2009

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Joint Statistical Meetings (JSM) is to statisticians what TRB is to transportation researchers. About 6,400 participants attended the conference, held at the Walter E. Washington Convention Center. http://www.washingtonpost.com/wp-dyn/content/article/2009/08/04/AR20090804031 17.html.

I presented a paper which was written together with Ed Christopher, "Improving the Utility of Three-Year ACS Data: A Transportation Perspective."

http://www.edthefed.com/papers/JSM_ACS_for_transportation_FINAL.pdf. The paper should

be considered as the opinions of the authors, and are not necessarily those of the Federal Highway Administration, or the U.S. Department of Transportation.

Tom Krenske of Westat presented a paper, written together with Dave Hubble, entitled "Toward Quantifying Disclosure Risk for Area-Level Tables when Public Microdata Exists." This paper was based on research originally conducted for AASHTO to assist in discussions with the Census Bureau's Data Stewardship Executive Policy Committee in 2008 regarding the CTPP request for a three-year summary tabulation using ACS. The original paper

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prepared for AASHTO can be found at http://trbcensus.com/drb/westatreport.pdf.

The Census Bureau staff presented many different papers and participated in many sessions. Of particular interest to me was Keith Albright's paper, "Using Subcounty Population Estimates as Controls in Weighting for the American Community Survey." Currently, the

ACS uses only county-level estimates for controls and weights, and as analysts review the three-year ACS results, Place- and Public Use Microdata Area (PUMA)-level weighted data are raising concerns. The weighting system for ACS is becoming a topic of concern because both Tract and Block Group results using five-year data and the 2010 Census results will be available simultaneously.

NCHRP 08-36 Task 71 – Disclosure Avoidance Techniques to Improve ACS Data Availability for Transportation Planners

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Summary of Final Report

The final report for NCHRP 08-36 Task 71 was completed in May 2009. The authors were Kevin Tierney, Stephen Fienberg, and Tanzy Love.

Census Bureau rounding and disclosure thresholds to protect the confidentiality of Census participants have had a significant impact on the usability of year 2000 Census Journey-to-Work data by the transportation planning community. These disclosure limitation strategies will have an even larger effect on the usability of the smaller sample size American Community Survey (ACS) if they are not relaxed. The report lists several reasons why it would make sense for the disclosure limitation

rules to be relaxed for ACS data dissemination. But, recognizing that disclosure limitation is paramount for the Census Bureau, the report focuses instead on different potential different data synthesis approaches that could be used to provide transportation planners with complete, internally consistent data sets (without thresholds) that provide sufficient disclosure limitation. Different statistical data synthesis approaches were developed and tested, and two of the methods, the Bayesian/IPF method and the Generalized Shuttle Algorithm, were found to be promising and worthy of Census Bureau consideration. The final report is available at http://onlinepubs.trb.org/onlinepubs/archive/Not esDocs/NCHRP08-36(71) FR.pdf.

NCHRP 08-36 Task 81 – Enhancing the American Community Survey Data as a Source for Home-to-Work Flows

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Summary of Final Report

The move to the American Community Survey (ACS) will significantly affect how transportation planners access, use, and interpret Census data. Among the various issues that affect transportation planners, one of the main concerns is that the ACS samples 1 in 40 households each year as compared to the Decennial Census Long Form that sampled 1 in 6 households and the corresponding limitations on data available for public release. Therefore, synthetic data sources such as the Longitudinal Employer Household Dynamics (LEHD) need to be considered as a source of journey to work flow information. This new data source has the advantage that it already relies on data synthesis

techniques that limit the disclosure of participants. LEHD is a compilation of employment data sources assembled by states for Department of Labor reporting. The NCHRP task sought to compare LEHD and ACS data to judge whether LEHD might provide an alternative source of Journey-to-Work information. The report describes the strengths and weaknesses of the LEHD data for Journeyto-Work analyses. It then compares data summaries from LEHD and ACS at the state and county level in order to judge whether there are systematic differences. Some important differences are identified, and the quality of the data appears to be related to the state for which the data are collected. When considering trip

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length distribution for home to work, the LEHD consistently has longer trips than the ACS at the county level. However, when considering MPO areas with multiple counties, the trip length distributions are much closer with the LEHD trip length just slightly longer than the ACS in most instances. While the LEHD can be a potential

source of data for calculating journey to work flow and enhancing the ACS, further work using microdata is needed to conclusively determine whether this potential can be realized. A draft final report was submitted in June and the contractor is addressing panel comments and a final report is expected in September.

What's New with National Household Travel Survey (NHTS)

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In May 2009, the Federal Highway Office of Highway Policy Information completed data collection for the new 2008 NHTS. Westat was the contractor for the survey data collection. Over 151,000 households, 325,000 people, shared their one-day travel experiences resulting in over one million trips reported.

January 2010 will be a key month for the new dataset: a public dataset will be released, the ondemand table system will include the new dataset http://nhts.ornl.gov/tools.shtml, and a workshop is being planned for the Transportation Research Board annual meeting.

For more than four decades, the National Household Travel Survey (NHTS) has collected data on the travel demand and behavior of the American public. In addition to top line indicators of travel such as Vehicle Miles of Travel (VMT), Person Miles of Travel (PMT), and mode share, these data address who, what, where, when, how, and why people travel in the United States. To address questions of travel behavior related to congestion, tolling, and e-commerce, some of the new questions added to the 2008 NHTS include:

- Flexibility of workers to arrive at work at different times;
- Use of the interstate and payment of tolls during any of their reported trips; and
- Internet purchases delivered to their homes.

The 2008 NHTS could not have been a success without the Add-On Program. The Add-On Program Partners made the 2008 series the largest travel household survey in the world. The Add-On Partners will receive their data in October 2009, and have participated in special webinars to get ready. The overall target sample goal was achieved despite various natural and economic events that transpired during the data collection period. Some of those events include the floods in the Cedar Rapids, fires in the California area, a hurricane in Galveston, Texas, a spike in gas prices, job layoffs, and the bombardment of presidential election telephone polling. All of these events could have affected the overall completion rate goal, but the data collection efforts remained sound. The sample was balanced to reflect a roughly equal distribution across travel days of the week and months of the year.

For more information about the 2008 NHTS, visit our web site at http://nhts.ornl.gov/.

New NCHRP Project on "Producing Transportation Data Products from the American Community Survey that Comply with Disclosure Rules"

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NCHRP Project 08-79, "Producing Transportation Data Products from the American Community Survey that Comply with Disclosure Rules," aims to develop, evaluate, and test credible techniques to produce specially tabulated data products using five-year ACS data, considering that the resulting data products must satisfy U.S. Census Bureau disclosure rules and support transportation planning at small area geography (TAZ).

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The panel, chaired by Guy Rousseau of the Atlanta Regional Commission, met on July 27 and 28 to draft the Scope of Work. The RFP was issued on August 4, 2009 (available at

http://www.trb.org/NCHRP/Public/RequestsforProposals.aspx), with responses due by October 1, 2009. In order for the results to be applied to the CTPP using 2006-2010 ACS, this project is on a fast track, with results expected by July 2011.

CTPP Profiles using 2005-2007 ACS

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CTPP profiles using 2005-2007 ACS are now posted at the AASHTO page: http://ctpp.transportation.org/profiles_2005-2007/ctpp_profiles.html. These profiles are designed to give transportation planners a handy way to examine trends by including both the 2005-2007 ACS and the Census 2000 data. We have created profile sheets for U.S. Total, States, Counties, and Places. Since the Census Bureau limits the tabulation to geographic areas meeting a threshold of 20,000, these profiles do not provide complete coverage at the County or Place level. There are five profiles:

• Residence Geography:

- Part 1 Profile 1 Contains general residence characteristics and basic travel to work information.
- Part 1 Profile 2 Has two-way tables for detailed socioeconomic and travel to work information at household and worker level.
- Part 1 Profile 3 Has two tables: Mode to Work by Travel Time and Mode to Work by Time Leaving Home.

• Workplace Geography:

- Part 2 Profile 1 –Contains general workplace characteristics and basic travel to work information (forthcoming).
- Part 2 Profile 2 Has one table: Mode to Work by Industry.

There are two issues that you need to keep in mind when using the profiles. First, since the

weights for ACS data are controlled by county, some of the subcounty estimates, such as city, may be problematic. For example, for the City of Albany, New York, the ACS three-year estimate shows the population at 90,380 (plus or minus 1,674), while 95,650 from Census 2000. A similar decrease can be found in Oakland, California, which has a three-year estimated population of 372,247 (plus or minus 4,997) and shows a loss of 27,000 in population between 2005-2007 ACS and Census 2000. Local demographers have no reason to believe their area lost population in that timeframe. You may prefer to use independent city totals and use the ACS values for proportions alone.

Another issue is that the ACS questionnaire does not include "light rail" as a choice for the questions on Means of Transportation to work. Respondents are given no directions; therefore, there is no consistency in their response. For Houston, where the light rail opened in 2004, and the National Transit Database shows a robust increase in transit ridership, the profiles show the transit share staying flat but "other" means of transportation shows an increase of one percent between CTPP 2000 to 2005-2007 ACS data. This suggests that people who use light rail in Houston were most likely to select the "other" category. In San Diego, the light rail system is called "The Trolley" and, therefore, respondents did not have a similar problem of choosing a travel mode on the questionnaire.

Please let us know if these profile sheets are useful to you. Please send your comments to ctpp@dot.gov.

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CTPP Hotline – 202/366-5000 **E-mail:** ctpp@dot.gov

CTPP Listserv: http://www.chrispy.net/mailman/listinfo/ctpp-news

CTPP Web Site: http://www.dot.gov/ctpp

FHWA Web Site for Census issues: http://www.fhwa.dot.gov/planning/census

CTPP 2000 Profiles: http://ctpp.transportation.org

1990 and 2000 CTPP downloadable via Transtats: http://transtats.bts.gov/

TRB Subcommittee on census data: http://www.trbcensus.com

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CTPP Listserv

The CTPP Listserv serves as a web-forum for posting questions, and sharing information on Census and ACS. Currently, over 700 users are subscribed to the listserv. To subscribe, please register by completing a form posted at: http://www.chrispy.net/mailman/listinfo/ctpp-news

On the form, you can indicate if you want e-mails to be batched in a daily digest. The web site also includes an archive of past e-mails posted to the listserv.