



# CTPP Status Report

August 2010

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 Three-Year ACS Data Products

The Census Bureau has delivered the CTPP three-year data (2006 to 2008) to AASHTO and FHWA. AASHTO has delivered the data to Beyond 20/20 to be imported into the CTPP Access Software.

### CTPP Access Software

Access software for the CTPP based on ACS three-year data (2006 to 2008) is under development. Software developers Beyond 20/20 and Citygate have delivered a first prototype version of the software which is being reviewed. It is expected to be ready in fall 2010. (More information below.)

### CTPP Oversight Board Meeting

The CTPP Oversight Board met on May 4, chaired by new Oversight Board Chair Jennifer Finch, Colorado DOT. Jennifer Finch is the Director of the Division of Transportation Management and Planning at the Colorado DOT. She brings a wealth of knowledge and new energy to the CTPP Program and we welcome her! During the meeting the budget and work plan were approved. The next Oversight Board meeting is scheduled for August 25-26.

### CTPP Training

The training subcommittee has sponsored and held a number of webinars and workshops. Two of the webinars are archived and accessible on the AASHTO CTPP webpage: Urbanized Areas (June 11, 2010) and Introduction to CTPP (June 18, 2010). The subcommittee also has developed a framework for e-learning modules for

## Plan for TAZ delineation in Spring/Summer 2011

If you are an MPO or State DOT and want the 2006-2010 CTPP to include tabulations for Transportation Analysis Zone (TAZ) and Transportation Analysis District (TAD), you need to include a TAZ delineation task in your 2011 work plan.

TAZ delineation software developed by Caliper will be a GIS-based application and will not require purchase or license any additional software. It will be a block-equivalency program.

The TAZ field work will occur in Spring 2011 with submissions to the Census Bureau due in Summer 2011. There will be a software training session before the field work starts.

CTPP and AASHTO signed a contract with MultiMedia for development. E-learning modules are expected beginning in the fall.

### CTPP Five-Year ACS Data Products

The first CTPP using ACS with small area tabulation will use ACS records from 2006 to 2010. AASHTO has been working with the user community to develop a table request. AASHTO is now working with Westat (the contractor for the NCHRP Project 08-79, "Producing Transportation Data Products from the American Community Survey that Comply with Disclosure Rules" to generate a final request. The data are expected to be released in 2012.

(continued on page 2)

## Census Transportation Planning Products (CTPP) AASHTO Update (continued)

### CTPP Web Site:

<http://ctpp.transportation.org>

CTPP is now on Facebook!

(<http://www.facebook.com/pages/Census-Transportation-Planning-Products-CTPP/114473021912735>) While we are excited about our foray into social networking, we recognize that it is not a substitute for the CTPP

listserv. Some future directions for the CTPP web site include a searchable, thread-based, user forum and wiki. Additionally, the web site will continue to be updated with webinars, files, tables, articles, e-learning, and eventually the data and data access software for the CTPP based on three-year ACS (2006 to 2008).

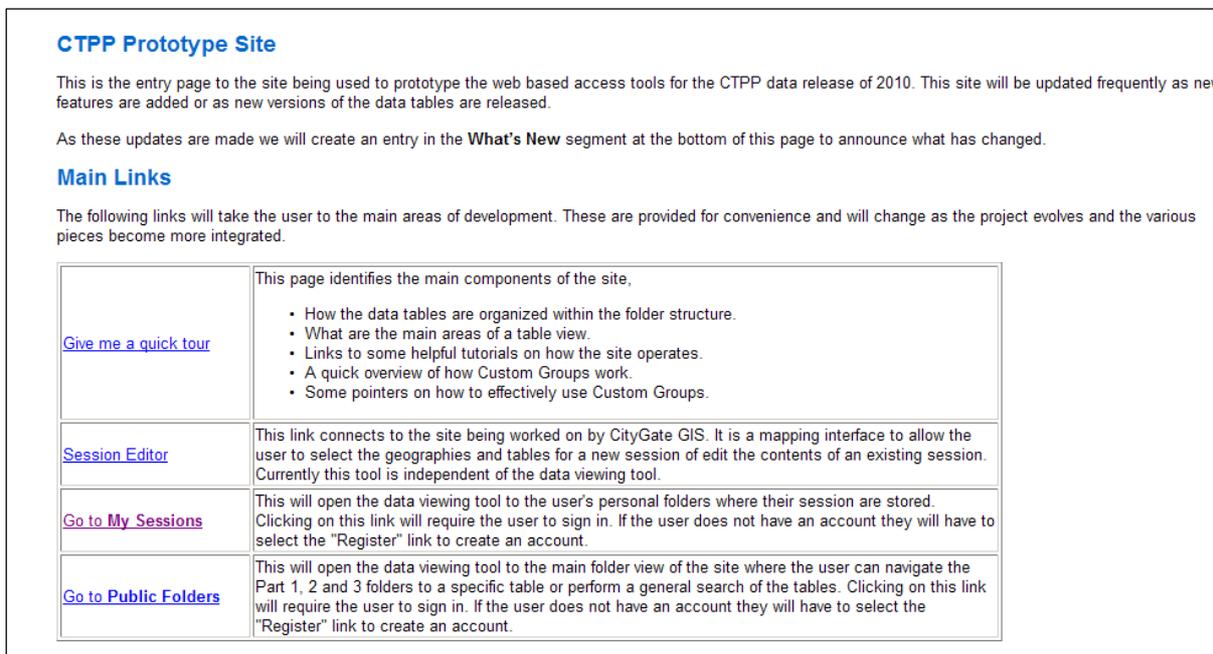
### CTPP Data Access Software

Paul Agnello, Virginia Department of Transportation, [paul.agnello@vdot.virginia.gov](mailto:paul.agnello@vdot.virginia.gov)

AASHTO has contracted with Beyond 20/20 and Citygate for the development and production of the access software for the next CTPP using American Community Survey (ACS) 2006 to 2008 data. The vendors currently are in the process of finalizing the software by linking the browser to CTPP tabulations. The final data access software with embedded CTPP data will be released in fall 2010.

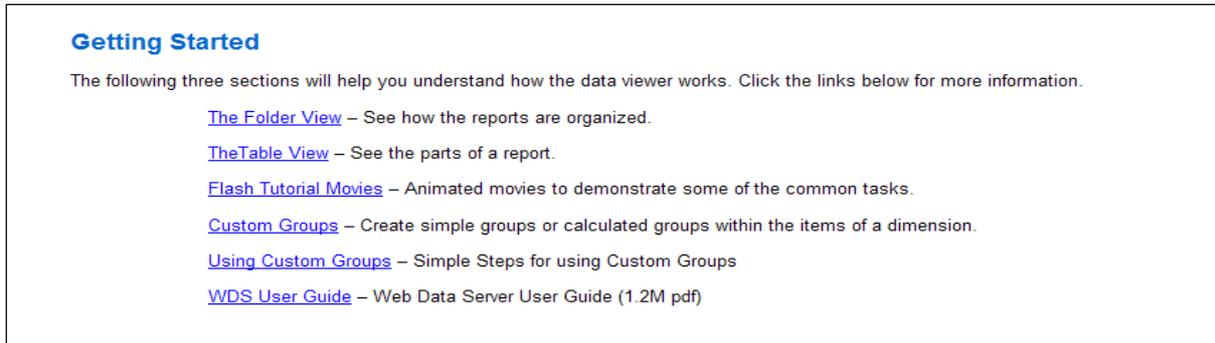
The software is primarily a web-based solution, with a desktop solution using Beyond 20/20 Professional Browser. The software web site has four essential components, including *Quick Tour*, *Session Editor*, *Go to My Session*, and *Go to Public Folders* (Figure 1).

**Figure 1. The Screenshot of the Software Home Page**



The *Quick Tour* provides a lot of valuable information and gives users basic guidance about the software.

**Figure 2. The Screenshot of the Quick Tour**



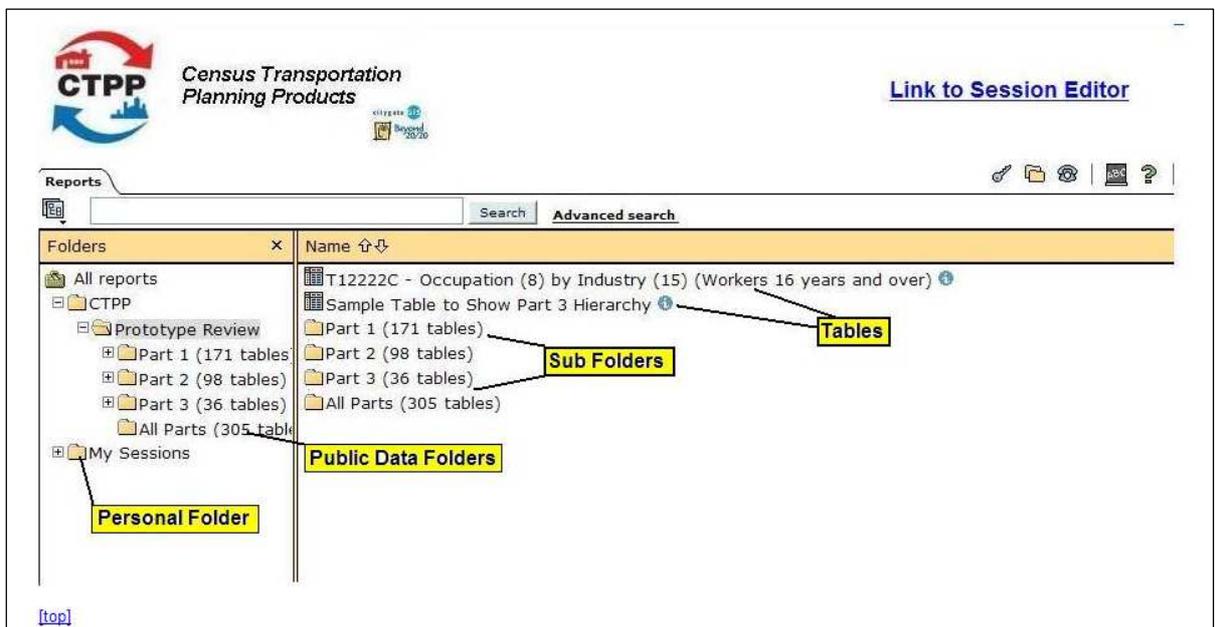
Session Editor connects to the site being developed by Citygate GIS. It is a mapping interface to allow users to select the geographies and tables for a new session or edit the contents of an existing session.

*Go to My Sessions* opens the data viewing tool for the user’s personal folders where their session are stored and *Go to Public Folders* opens the data viewing tool to the main folder view of

the site where the user can navigate the Part 1, 2, and 3 folders to a specific table or perform a general search of the tables.

The picture below is the screenshot of the folder view. The folder view lists the themes and sub-themes on the left pane. Click on a folder name to display the contents of the folder in the right pane. The search function helps users get specific tables quickly by typing the keywords.

**Figure 3. The Screenshot of the Folder View**



The picture below is the table view which identifies the component parts of a report.

**Figure 4. The Screenshot of the Table View**

MEASURE	Estimate										MOE		
	Total, 1999 (9)	Less	\$15,000-\$29,999	\$30,000-\$39,999	\$40,000-\$49,999	\$50,000-\$59,999	\$60,000-\$74,999	\$75,000-\$99,999	\$100,000 or more	Total, Household income in 1999 (9)	Less than \$15,000	\$15,000-\$29,999	\$30,000-\$39,999
HH_INC9	0												
GEOGRAPHY	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓
NJ, New Jersey State-NJ, New Jersey State	3,369,635	101,285	265,840	261,280	299,325	314,045	467,900	631,820	1,028,135	33,696.35	1,012.85	2,658.40	2,658.40
NJ, New Jersey State-NY, New York State	334,870	6,825	14,525	16,840	20,335	21,430	36,665	58,085	160,655	3,348.70	63.25	145.25	145.25
NJ, New Jersey State-NC, North Carolina State	505	0	45	25	25	30	50	80	250	5.05	0.00	0.45	0.45
NJ, New Jersey State-ND, North Dakota State	20	0	0	0	0	0	15		4	0.20	0.00	0.00	0.00
NJ, New Jersey State-OH, Ohio State	515	0	15	40	30	30	25	85	285	5.15	0.00	0.15	0.15
NJ, New Jersey State-OK, Oklahoma State	75	0	0	0	0	4	0	10	60	0.75	0.00	0.00	0.00
NJ, New Jersey State-OR, Oregon State	20	4	0	0	0	0	0	0	15	0.20	0.04	0.00	0.00
NJ, New Jersey State-PA, Pennsylvania	116,680	1,955	5,725	7,700	9,225	11,125	17,460	25,190	38,295	1,166.80	19.55	57.25	57.25

## New NCHRP Synthesis Project on ACS PUMS

Ed Christopher, FHWA Resource Center Planning Team, edc@berwyned.com

In May 2009, NCHRP synthesis project committee selected 12 new topics under the 41-00 series, among which Topic 42-02, *The Use and Application of the Census Bureau's Public Use Microdata Sample by States and Metropolitan Planning Organizations* was initiated. The purpose of this synthesis is to discover who in the transportation community is using the PUMS

data, what, why and how they are using it, and identify any data issues encountered. In July, TRB solicited letters of interest for the synthesis topics. Later in August, the Project panel will meet, and a contractor will be selected. For more information please go to: <http://144.171.11.40/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=2938>.

## Important Dates for 2010 Census

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The 2010 Census count is now complete. The 2010 Census national participation rate by mail was about 72 percent – the same rate achieved in Census 2000 and 48 million nonresponse follow-up (NRFU) households were visited as of July 7, 2010.<sup>1</sup>

Table 1 shows the important dates for Census 2010 products.<sup>2</sup>

**Table 1. Census 2010 Data Product Release Schedule**

Planned Release Date	Data Product	Data Product Explanation	Lowest-Level Geography
February 2011-March 2011	Census Redistricting Data (P.L.94-171) Summary File	Population counts for race and Hispanic or Latino categories; housing unit counts by occupancy status.	Blocks
March 2011-February 2012	2010 Census Briefs	Topics based on 2010 Census questions; similar to the Census 2000 Briefs series.	Largest Places
May 2011	Demographic Profiles	Selected population and housing characteristics.	Places/Functioning Minor Civil Divisions
June 2011-June 2013	2010 Census Special Reports	Detailed analysis of topics, including graphs, tables, and maps; similar to the Census 2000 Special Report series.	Largest Places
June 2011-August 2011	Summary File 1 (SF 1): state files released on a rolling basis from June to August 2011	Population counts for many detailed race and Hispanic or Latino categories, and American Indian and Alaska Native tribes; selected population and housing characteristics; similar to the Census 2000 SF1.	Blocks/Census Tracts
December 2011-April 2012	Summary File 2 (SF 2): state files released on a rolling basis from December 2011 to April 2012	Population and housing characteristics iterated for many detailed race and Hispanic or Latino categories, and American Indian and Alaska Native tribes.	Census Tracts
To be determined	Public Use Microdata Sample (PUMS) Files	Includes age, sex, race, Hispanic or Latino origin, household type and relationship, and tenure data with identifying information removed.	PUMAs of 100,000+ Population

1 U.S. Census Bureau: <http://2010.census.gov/2010census/take10map/>.

2 U.S. Census Bureau: <http://www.census.gov/population/www/cen2010/glance/index.html>.

## **NCHRP 08-79: Current Research Efforts to Minimize Effects of Disclosure in the CTPP**

*Tom Krenzke, Westat, krenzkt1@westat.com*

The NCHRP 08-79 research project is entitled “Producing Transportation Data Products from the American Community Survey (ACS) that Comply with Disclosure Rules.” The goal is to develop a practical approach to perturb ACS data to allow for small area CTPP tabulations. The results must satisfy the disclosure rules set by the Census Bureau’s Disclosure Review Board (DRB). The main disclosure avoidance practice that has been used on certain CTPP tabulations was cell suppression. It is clear that the data loss at finer geographic areas, such as planned Transportation Analysis Zones (TAZ) will be substantial on five-year ACS data if the same disclosure avoidance rules are applied, because there are fewer underlying data records than in the Census 2000 long-form data. For this reason, efforts are now focused on ways to generate a complete set of data consisting of perturbed values that strive to retain the usability of the CTPP tabulations.

The project began in January 2010 and is to be completed by July 2011. We began the research by holding discussions with transportation planners, as well as the Census DRB, and Census operations staff. These discussions resulted in an initial set of research tables and variables, involvement of Metropolitan Planning Organizations (MPO) as test sites, clarification on DRB disclosure threshold rules, and identification of source data, including ACS imputation flags, and swapping flags and other data needs. After reviewing several data perturbation approaches, three techniques were selected for testing. The three approaches include parametric unit-level modeling, semiparametric model-assisted approach, and controlled random swapping.

In our work so far, we now recommend splitting the set of CTPP tables into two. The Set A tables are tables that do not have DRB threshold rules and will be constructed using the ACS weights and variables, and the usual rounding

rules will apply to the cell estimates. The Set B tables are tables where DRB threshold rules apply and will be constructed using CTPP adjusted weights (from this research’s weight adjustment procedure) and the perturbed variables. Since the Set B tables use the disclosure protected microdata, the current plan is that the DRB threshold rules will be lifted.

An initial risk assessment has identified records and variables at most risk of disclosure. The risk analysis shows that for some variables (those involved in cell means or aggregates, and those in Part 3 flow tables), about 40 to 50 percent of records would be impacted by a violation of a DRB rule. The perturbation approaches will target records and variables identified as being at most risk.

Currently, we are in the development and evaluation phase. We are testing the process in four locations: Atlanta, Iowa, Madison, and St. Louis. The tests include two different amounts of perturbation: full replacement of all data values, and partial replacement. The resulting perturbed datasets will be compared to the ACS data for cell means, standard errors, weighted counts in two-way tables, and multivariate associations. We are requesting travel demand model data from the MPO and state DOT test sites. Once collected, a comparison will be done on the perturbed and ACS data with travel model outputs. Also, to balance data utility with disclosure risk, plans for disclosure risk measures have been developed. The evaluation results will be used to determine the best approach for moving forward.

This fall, the selected approach will undergo a validation phase, where it will be processed using preliminary five-year ACS data on four new test sites. Once the validation is completed, work will begin to prepare for the full nationwide implementation on the ACS 2006 to 2010 data.

## Urban Areas

*Ed Christopher, FHWA Resource Center Planning Team, edc@berwyned.com*

The areas designated as Urban by the Census Bureau are important to the transportation community for several reasons. First, they set the population count for many of the Federally funded programs. Second, they set the population count for determining which areas will need to designate a Metropolitan Planning Organization (MPO) and which areas will be designated Transportation Management Areas (TMA). An MPO must be designated for each urban area with a population of more than 50,000 people. The MPO boundary must include the urbanized area as a minimum, plus the area that is expected to be urbanized in the 20-year (minimum) horizon. A TMA is an area designated by the Secretary of Transportation, having an urbanized area population of over 200,000, or upon special request from the Governor and the MPO designated for the area. For more information on what the Census Defined Urban Area boundary means to the transportation community refer to <http://www.fhwa.dot.gov/planning/census/faq2cdt.htm>.

Urban Areas are defined by the Census Bureau based on population density. The term Urban Area (UA) refers collectively to the Urbanized Areas (UZA), areas over 50,000 people, and Urban Clusters (UC) with a population between 2,500 and 49,999 people. The Census Bureau will redefine the Urban Areas using the 2010 decennial Census. A Federal Register notice soliciting comments on the criteria is expected in August 2010. The Census Bureau will define Urban Areas starting in spring 2011 and publish them in spring 2012.

On June 12, 2010, FHWA Resource Center and CTPP team hosted a webinar on “CTPP – Census Bureau’s Planning for Urbanized Areas.” The webinar featured a presentation and discussion on the Census Bureau’s plans for the delineation of 2010 Urban Area (UA) boundaries as well as staff from FHWA who brought the transportation perspective. The recorded webinars and Q and As are posted on the AASHTO CTPP web site: <http://ctpp.transportation.org/pages/webinars.aspx>.

### **“State of Metropolitan America” Report by Brookings Institution** <http://www.brookings.edu/metro/StateOfMetroAmerica.aspx>.

Brookings Institution released their report of “State of Metropolitan America,” which focuses on the 100 largest metropolitan areas. One chapter is devoted to commuting.

Driving alone remains the primary commuting mode in America, representing 75.5 percent of all commuters. For the first time in 40 years, transit increased as a share, from 4.6 percent in 2000 to 5.0 percent in 2008. Carpooling continued to decline, and walking also continued to decline. Given all these trends, the incremental changes in commuting patterns evident in the 2000s means more must be done to reach any meaningful reductions in carbon emissions.

Only 14 metro areas have transit commuting rates higher than the national rate of five percent. Both the New York-Newark, New York-New Jersey-Pennsylvania, and the Washington-Arlington-Alexandria, D.C.-Virginia-Maryland-West Virginia metropolitan areas had an increase of over two percent in the share of workers commuting by public transit between 2000 and 2008.

The report also points out that regional differences distinguish metropolitan commuting modes, and residents of cities and older, high-density suburbs are more likely to use transit than commuters in other parts of metro areas. Foreign-born workers are very likely to use public transit whether they live in primary cities or in suburbs.

Areas with large Hispanic population, continue to report the highest carpooling rates. As carpooling declined nationally in the 2000s, only Dayton, Ohio among the 100 largest metro areas showed an increase of two percent in carpooling.

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**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>

2005 to 2007 ACS Profiles: [http://ctpp.transportation.org/profiles\\_2005-2007/ctpp\\_profiles.html](http://ctpp.transportation.org/profiles_2005-2007/ctpp_profiles.html)

AASHTO Web Site for CTPP: <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 website also includes an archive of past e-mails posted to the listserv.