CTPP Status Report

TAZ Delineation for Use in CTPP

Shonin Anacker, Census Bureau Geography,
Shonin.Anacker@censu.gov
Penelope Weinberger, AASHTO,
Pweinberger@aashto.org

TAZ Delineation Schedule
The TAZ project officially began on March 18th and all invitation e-mails were sent out by March 29th. TAZ participants are reminded that their delineations are due back 90 business days from the date on which they received the initial invitation e-mail. **This means all deadlines are between June 17th and June 30th**, depending on the date of the original e-mail. This deadline is a strict one due to the tight schedule the Census Bureau has for getting these updates into the fall benchmark TIGER file.

TAZ Webinars
FHWA and the Census Bureau conducted two web-based software TAZ participant training sessions (webinars) on February 25th and 28th. The webinars were recorded and are available with their supporting material on the AAHSTO CTPP TAZ page:
http://ctpp.transportation.org/Pages/taz.aspx

TAZ Program Dropouts and AASHTO TAD Delineation
The TAZ program is a voluntary program. Agencies are not required to delineate TAZs or TADs for the CTPP. If an agency chooses not to delineate TAZs for a county, the 2010 census tracts will become the default 2010 TAZs for that county. If an agency wishes to delineate neither TAZs nor TADs in a county, AASHTO will delineate TADs for that county using 2010 census tracts or block groups as building blocks.

TAZ questions?
E-mail geo.taz.list@census.gov
Or
Call 301-763-1099
and ask for help from the GEO TAZ Team

Note that if a participant drops out of the program, that participant will have no opportunity to review the TAD work done by AASHTO for their area. Agencies that wish to completely drop out of the program (i.e., not delineate TAZs or TADs) should contact the Census Bureau as soon as possible, so that AASHTO can begin their TAD delineation work for the area.

Keeping 2000 TAZs
Several agencies have inquired about whether they can keep their 2000 TAZ plan as-is for 2010. The answer is "yes" with one caveat. The 2000 TAZs do not match the new 2010 block geography perfectly. Participants who want to maintain their 2000 TAZs for 2010 will still have to review their TAZ geography in the MAF/TIGER Partnership Software (MTPS), run the validations, and clean up areas where the Census Bureau could not assign a 2000 TAZ code to a 2010 block. The cleaned-up TAZs will then have to be reported back to the Census Bureau using the standard MTPS "Report Changes" function.

2006-2008 CTPP Data Access Software

Christopher Bonyun, Beyond 20/20, Cbonyun@beyond2020.com
Liang Long, Cambridge Systematics, Liang.long@dot.gov

The 2006-2008 CTPP data are currently available at the AASHTO page with on-line access software (http://ctpp.transportation.org/Pages/3yrdas.aspx). This article introduces two basic functions of the software and walks through important icons available in the software. These features will be most helpful to you when manipulating the data. A CTPP on-line tutorial is also available at: http://data.ctpp.transportation.org/CTPP/Common/Help/help.aspx.

After logging in to the software, you will see a page similar to Figure 1. This is the software main page, which is the "Reports" tab. Under "Reports" tab, users can explore the data within the "CTPP Full Data Release" folder or create/edit their own sessions. The session is defined as a set of tabulations which have a common geography. Under "Table" tab, users are given rights to customize tables including switching table dimensions, creating custom groups and calculating percentages.
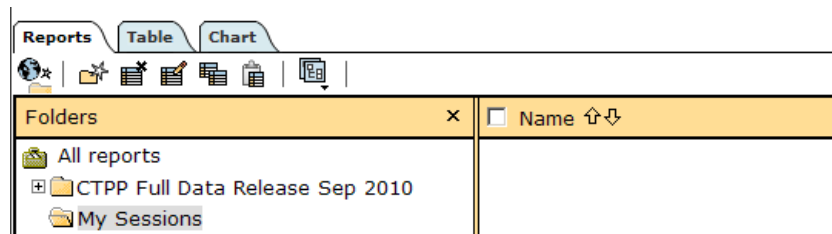

Figure 1.   The Software "Reports" Tab View

Figure 2.   The Software "Table" Tab View – Example of Household Income by Means of Transportation table

Figure 3 lists important icons that are available for customizing tables. For example, if you hit ⊕ "Set Dimension Order," it will lead you to a page similar to Figure 4. You can use arrows shown in Figure 4 to change row and column dimensions for a specific table. Clicking "Select items to view" will bring you to the item selection page (Figure 5). The dimension,

HOUSEHOLD INCOME, appears shaded in the list on the left to show that it is the active dimension. The list area on the right shows all the possible item selections. In the default view of this report, everything is selected. You can remove or add items in the item selection page. You can also create custom groups by hitting the icon in the tool bar.

Table Tools	Does this……
Set Dimension Order	Switch row and column positions for current table
Select items to view	Select a table dimension and go to item selection page
Global settings	Activate global settings (will be applied to current table and any others that you open), deactivate global settings (no effect on current table, but will not be applied to others you open) or delete global settings.
Reset Default view	Go back to default table view, which is how it was last saved (when session created, or when public report was published).
Download	Download selected tables to your local drive
Custom Groups	Create compound group or calculated group

Figure 3. Table Toolbox List
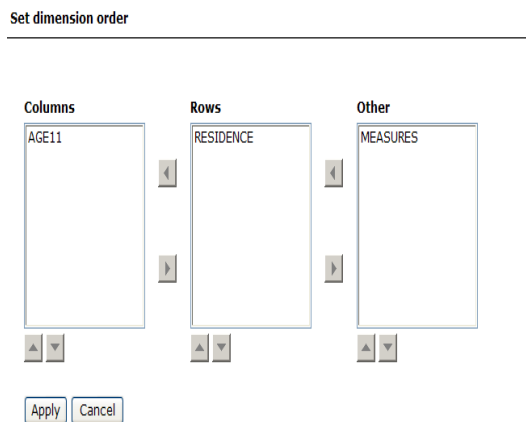
Figure 4. Set Dimension Order

Many analysts already have tools and databases for analyzing data. If you are equipped with such tools, you may wish to receive all the data of interest in Comma-separated Value (CSV) files so you can easily load it into your tools. The data has been packaged by state and by part so that you can download it in a single operation. The data can be found in the data access software in the "Source Files by State" folder within the "CTPP Full Data Release" folder (Figure 6). There is a separate folder for each state, and within each folder, there are three files, one for each part. The files for download are in compressed data folders (Zip files), so you can expand these on your own machine. Within each Zip file, there is a separate file for each table and each table contains entries for each geography with the state. There is also a labels file that contains the label associated with each GEOID in the files. At this time, there is no published documentation on how to parse these files, but they are relatively simple and self-explanatory once you view them.

Figure 5. Item Selection Page

Figure 6. Raw Data in the Software

CTPP Training Activities
Penelope Weinberger, AASHTO, Pweinberger@aashto.org
Ed Christopher, FHWA Resource Center Planning Team, Edc@berwyned.com

CTPP In-Person Training
Since AASHTO released the 2006-2008 CTPP data product access software in January 2011, there has been an increased demand for CTPP training. In response, Ed Christopher and Liang Long have conducted several one-day hands-on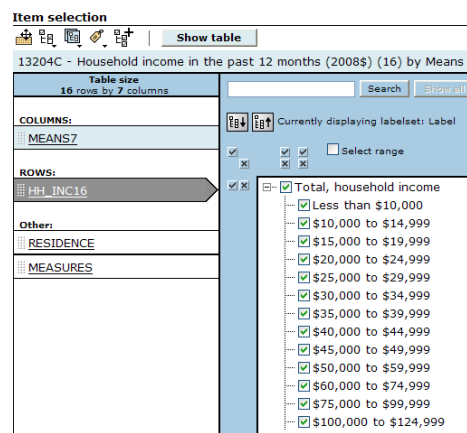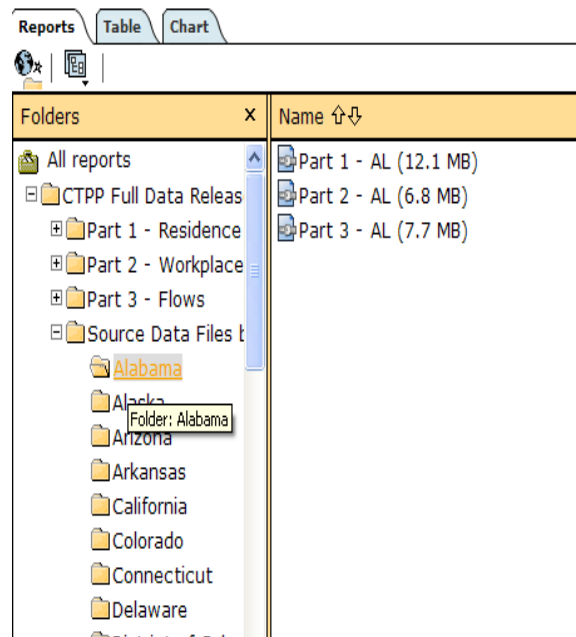 training sessions. The one-day training is specifically designed for transportation planners and modelers from state DOTs and MPOs. To date, three sessions have been held. For the state of Michigan, the training focused on Census data and CTPP-related data issues. For Arizona and Florida, the classes focused on the three-year CTPP data product, its on-line access software and the TAZ delineation software.

For in-person CTPP training including computer exercises, a minimum of 1.5 days is recommended.

AASHTO and FHWA are also participating in several conferences and conducting workshops on CTPP.

CTPP Data Access Software Web Training
On-line training in basic use of the CTPP Data Access Software is available. These one-hour "webinar" sessions are offered for live inter-active participation and recorded for viewing. CTPP Basic, a basic introduction to the CTPP software, including how to create a user profile, and how to access and manipulate data will be offered several times a month on a first come, first served registration basis. A recorded session of CTPP Basic is now available at: http://ctpp.transportation.org/Pages/webinardirectory.aspx.

The next live webinars for CTPP Basic are:

- Monday May 16th at 3:30 p.m. Eastern; and
- Thursday June 2nd at 2:00 p.m. Eastern.

Notice of available registration will be made by message to the CTPP and TMIP list serves, or e-mail Penelope Weinberger at pweinberger@aashto.org to receive notification. Additionally, the CTPP program is working hard to develop an intermediate to advanced CTPP Software Webinar course. Users should attend the basic course and/or submit a transportation analysis problem as preparation. Both webinars will be offered until demand is met.

Electronic Training
Five webinars are archived and accessible on the AASHTO CTPP webpage: http://ctpp.transportation.org/Pages/webinardirectory.aspx. Five eLearning modules are under development and will be made available at: http://ctpp.transportation.org/Pages/elearningmodules.aspx.

The five eLearning topics are:

1. Census Transportation Planning Products (CTPP) Based on American Community Survey (ACS) Data;
2. The American Community Survey (ACS) as it relates to CTPP;
3. What makes ACS CTPP tables different from Long Form CTPP tables;
4. Geography; and
5. Margins Of Error and Standard Error.

The CTPP program team is always interested in increasing data users' capacity to use CTPP products. Please contact Penelope Weinberger to discuss your training needs.

Using 2006-2008 CTPP and CTPP 2000 Data to Evaluate the Reliability of Travel Forecast Assumptions

Wade L. White, Whitehouse Group Inc. Wwhite@wgianalytics.com
Viplav Putta, Indian Nations Council of Governments, Vputta@incog.com

In 2010, the Indian Nations Council of Governments, the MPO for the Tulsa, Oklahoma urbanized area, started an update of their regional travel model for application in a transit system plan and eventually, New Starts Alternative analysis. Many of the data underpinning the model were built on data released as part of the 2000 Census including the origin/destination of workers. The question arose during the model review process as to how much the travel patterns of workers had changed over the previous decade. It is a simple enough question but not one that is readily answered without a more contemporary dataset.

In early 2011, the 2006-2008 CTPP web-based tool was released by AASHTO.[1] This provided the first and most obvious way to see what changes had occurred in the region and how those changes may validate or invalidate the assumptions regarding the stability of travel patterns in the region. A further benefit of this comparison is that, though the CTPP 2000 and 2006-2008 CTPP use very different methods to "fill in the blanks," understanding the resulting differences in reported travel could provide some insight into the suitability of the ACS-based CTPP as a basis to update key model parameters, if necessary.

The analysis started by summarizing county-level worker flows in the region as described in the 2006-2008 CTPP. This is the first dataset released on the AASHTO website and was selected for ease of use and the hope that a comparison might reflect any impacts from the recent economic downturn experienced nationwide (albeit not witnessed as strongly in the Tulsa region) and highlight differences. While these data are not 100 percent compatible with INCOG's study area,[2] they do capture all of the major travel markets that would impact interpretation of the forecasting model's reliability. Using the county-level data as the basis of the initial comparison provides the benefits of a larger dataset (for both the 2006-2008 data as well as the 2000 data), increased reliability and the ability to shed light on how the area is growing outside the "modeled" study area. The summary of the 2006-2008 CTPP dataset is provided in **Table 1.** The 2006-2008 CTPP data shows that Tulsa County is the largest "attractor" of workers and is a net importer of work trips from other counties in the region with a little more than 280,000 workers residing in Tulsa County and almost 345,000 workers destined for Tulsa County.

Next, the analysis focused on summarizing data in the same way but using the CTPP 2000. Shown in **Table 2**, the CTPP 2000 also reaches a similar conclusion that Tulsa County is a net importer of workers and the largest employment center in the region. This lent credibility to the 2006-2008 datasets and the expansion methodology used at this level of geography. The next question was one of magnitude. Did the new CTPP reflect the appropriate "scale" of workers in the region? Over the decade, despite the economic downturn, the 2006-2008 CTPP shows a net gain of more than 30,000 workers in the region (**Table 3)** representing a 7.4 percent increase in total workers (**Table 4**). This is consistent with local observation and lent additional credibility to the 2006-2008 CTPP data. Further review of the cell-by-cell values in magnitude and ranked importance by county of residence (**Table 5** and **Table 6)** reinforced the conclusion that the 2006-2008 CTPP trip distribution pattern is consistent with expectations and the CTPP 2000 for county-level interchanges greater than 500 workers.

---

[1] http://ctpp.transportation.org/Pages/3yrdas.aspx.

[2] The INCOG travel model area has been expanded since the Census 2000 and includes urbanized portions of Creek, Osage, Rogers and Wagoner Counties in addition to the entirety of Tulsa County.

Table 1. 2006-2008 CTPP Journey to Work – Absolute Workers by Place of Residence and Work*

Place of Residence	Place of Work						Total
	Creek	**Osage**	**Rogers**	**Tulsa**	**Wagoner**	**Other**	
Creek	13,135	90	300	14,270	165	2,102	**30,062**
Osage	340	6,895	240	8,755	60	3,258	**19,548**
Rogers	205	30	17,170	19,650	185	2,008	**39,248**
Tulsa	4,555	1,135	6,545	259,690	2,140	6,535	**280,600**
Wagoner	300	50	1,165	20,290	8,390	3,135	**33,330**
Other	3,125	1,850	3,090	22,180	1,350	–	**31,595**
Total	**21,660**	**10,050**	**28,510**	**344,835**	**12,290**	**17,038**	**434,383**

*Source: AASHTO 2006-2008 CTPP Software data (http://ctpp.transportation.org/Pages/3yrdas.aspx).

Table 2. CTPP 2000 Journey to Work – Absolute Workers by Place of Residence and Work*

Place of Residence	Place of Work						Total
	Creek	**Osage**	**Rogers**	**Tulsa**	**Wagoner**	**Other**	
Creek	12,945	69	254	14,145	73	1,123	**28,609**
Osage	224	6,505	224	8,395	45	3,333	**18,726**
Rogers	204	49	14,479	16,555	162	1,161	**32,610**
Tulsa	3,945	810	3,940	255,235	1,324	4,634	**269,888**
Wagoner	141	–	654	16,815	6,605	2,482	**26,697**
Other	2,411	1,342	2,371	20,132	1,494	–	**27,750**
Total	**19,870**	**8,775**	**21,922**	**331,277**	**9,703**	**12,733**	**404,280**

*Source: CTPP 2000 Data Tables (http://www.bea.gov/regional/reis/jtw/).

Table 3. Absolute Difference In Workers (Year 2006-2008 - Year 2000)

Place of Residence	Place of Work						Total
	Creek	**Osage**	**Rogers**	**Tulsa**	**Wagoner**	**Other**	
Creek	190	21	46	125	92	979	**1,453**
Osage	116	390	16	360	15	(75)	**822**
Rogers	1	(19)	2,691	3,095	23	847	**6,638**
Tulsa	610	325	2,605	4,455	816	1,901	**10,712**
Wagoner	159	50	511	3,475	1,785	653	**6,633**
Other	714	508	719	2,048	(144)	–	**3,845**
Total	**1,790**	**1,275**	**6,588**	**13,558**	**2,587**	**4,305**	**30,103**

*Source: Derived.

Table 4. Percent Change In Workers (Year 2006-2008/Year 2000)-1

Place of Residence	Place of Work						Total
	Creek	**Osage**	**Rogers**	**Tulsa**	**Wagoner**	**Other**	
Creek	1.5%	30.4%	18.1%	0.9%	126.0%	87.2%	**5.1%**
Osage	51.8%	6.0%	7.1%	4.3%	33.3%	-2.3%	**4.4%**
Rogers	0.5%	-38.8%	18.6%	18.7%	14.2%	73.0%	**20.4%**
Tulsa	15.5%	40.1%	66.1%	1.7%	61.6%	41.0%	**4.0%**
Wagoner	112.8%	0.0%	78.1%	20.7%	27.0%	26.3%	**24.8%**
Other	29.6%	37.9%	30.3%	10.2%	-9.6%	0.0%	**13.9%**
Total	**9.0%**	**14.5%**	**30.1%**	**4.1%**	**26.7%**	**33.8%**	**7.4%**

*Source: Derived.

Table 5. 2006-2008 County of Work Ranked by County of Residence

Place of Residence	Place of Work					
	Creek	**Osage**	**Rogers**	**Tulsa**	**Wagoner**	**Other**
Creek	2	6	4	1	5	3
Osage	4	2	5	1	6	3
Rogers	4	6	2	1	5	3
Tulsa	4	6	2	1	5	3
Wagoner	5	6	4	1	2	3
Other	2	4	3	1	5	6
Total	**3**	**6**	**2**	**1**	**5**	**4**

*Source: Derived.

Table 6. 2000 County of Work Ranked by County of Residence

Place of Residence	Place of Work					
	Creek	**Osage**	**Rogers**	**Tulsa**	**Wagoner**	**Other**
Creek	2	6	4	1	5	3
Osage	4	2	4	1	6	3
Rogers	4	6	2	1	5	3
Tulsa	3	6	4	1	5	2
Wagoner	5	6	4	1	2	3
Other	2	5	3	1	4	6
Total	**3**	**6**	**2**	**1**	**5**	**4**

*Source: Derived.

While detailed data from the 2006-2008 CTPP are not available at a traffic analysis zone level, the comparisons between the 2006-2008 CTPP data and the CTPP 2000 provide an early indicator that the county-to-county patterns reflected in the 2006-2008 CTPP data are consistent with those observed in the CTPP 2000. This analysis and comparison process raised no "red flags." Furthermore, as the travel demand model was built on Census 2000 data, including the CTPP, the commonalities and differences between these datasets provide a reliable "high-level" means to identify where changes are "reasonable" and where they are questionable as the travel demand model is updated for use in the transit system plan and subsequent New Starts applications.

With the assurance that the county-to-county flow data observed in the 2006-2008 CTPP are reasonable, subsequent efforts will focus on mining additional variables and comparisons at finer levels of geography to see where differences occur and if those differences are consistent with local observations and other datasets that serve as the foundation of the Tulsa travel forecasting model.

TRB Conference on Census Data in Transportation Planning: October 25-27, 2011
http://www.cvent.com/events/using-census-data-for-transportation-applications-conference/event-summary-fecf178bb83a468d86c4d85de1a3bcbf.aspx

CTPP Hotline – 202/366-5000

E-mail: ctpp@dot.gov

CTPP Listserv: http://www.chrispy.net/mailman/listinfo/ctpp-news
CTPP Website: http://www.dot.gov/ctpp
FHWA Website for Census issues: http://www.fhwa.dot.gov/planning/census
2005-2007 ACS Profiles: http://ctpp.transportation.org/profiles_2005-2007/ctpp_profiles.html
AASHTO Website for CTPP: http://ctpp.transportation.org
1990 and 2000 CTPP data downloadable via Transtats: http://transtats.bts.gov/
TRB Subcommittee on census data: http://www.trbcensus.com

AASHTO
Penelope Weinberger
PH: 202/624-3556
E-mail: pweinberger@aashto.org

Jennifer Finch,
Chair, CTPP Oversight Board
PH: 303/757-9525
E-mail: jennifer.finch@dot.state.co.us

Jonette Kreideweis, MN DOT
Vice Chair, CTPP Oversight Board
PH: 651/366-3854
E-mail: jonette.kreideweis@dot.state.mn.us

**Census Bureau: Social, Economic and
Housing Statistics Division**
Alison Fields
PH: 301/763-2456
E-mail: alison.k.fields@census.gov

Brian McKenzie
PH: 301/763-6532
E-mail: brian.mckenzie@census.gov

FTA
Ken Cervenka
PH: 202/493-0512
E-mail: ken.cervenka@dot.gov

BTS
Li Leung
PH: 202/366-0634
E-mail: li.leung@dot.gov

FHWA
Elaine Murakami
PH: 206/220-4460
E-mail: elaine.murakami@dot.gov

Ed Christopher
PH: 708/283-3534
E-mail: edc@berwyned.com

Liang Long
PH: 202/366-6971
E-mail: liang.long@dot.gov

TRB Committees
Catherine Lawson
Urban Data Committee Chair
PH: 518/442-4773
E-mail: lawsonc@albany.edu

Clara Reschovsky
Census Subcommittee Co-Chair
PH: 202/962-3332
E-mail: creschovsky@mwcog.org

Kristen Rohanna
Census Subcommittee Co-Chair
PH: 619/699-6918
E-mail: kroh@sandag.org

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.