

# CTPP Data

## Census Transportation Planning Products program

*Penelope Z. Weinberger*  
*CTPP Program Manager*  
*AASHTO*  
*9/12/2016*  
*Tools of the Trade*



# What is the CTPP?

**An AASHTO sponsored data program funded by member State transportation agencies**

**Operates with support from FHWA, OST-R, FTA, Census Bureau, MPOs and TRB**

**The program includes:**

**Data products**

**Training and technical assistance**

**Research**

**Designed for the transportation community**

# Guided by an AASHTO Oversight Board

## ***MPOs***

Shimon Israel, MTC  
Brian Lasagna, BCAG  
Arash Mirzaei, NCTCOG  
Ben Gruswitz, DVRPC  
Tom Faella, LAPC  
MaryAnn Waldinger, COMPASS  
Jim Hubbell, MARC

**Chair:** Tracy Larkin-Thomason, NV (Region IV)  
**Vice Chair:** Guy Rousseau, ARC  
**AASHTO Liaison:** Penelope Weinberger

**17 voting members: 9 states and 8 MPOs**

## ***States***

Laine Heltebride, PA (Region I)  
Greg Slater, MD (Region I)  
Regina Colson, FL (Region II)  
Jessie Jones, AR (Region II)  
Phillip Mescher, IA (Region III)  
Soheila Khoii, CA (Region IV)  
Erik Sabina, CO (Region IV)

## ***Non-voting Members***

Ken Cervenka, FTA  
Ed Christopher, Consultant  
Bill Keyrouze, AMPO  
Alison Fields, Census Bureau  
Matt Hardy, AASHTO  
Brian McKenzie, Census Bureau  
Clara Reschovsky, BTS  
Alan Pisarski, Consultant  
Steven Polzin, USF. CUTR  
Erich Zimmermann, NARC  
and  
JJ Zang – Cambridge Systematics

# CTPP Data Products

**CTPP data products use data from the US Census Bureau American Community Survey (ACS)**

**The CTPP is a special tabulation of ACS data, it is different from the ACS in that it contains more workplace based table and flows from home to work.**

**The CTPP Program also produces demographic profiles and trend analyses from ACS and CTPP data sets**

# Applications of CTPP Data Products

- **Long Range Planning/TIP**
- **Performance measurement**
- **Modal share analysis**
- **FTA New Starts/Small Starts**
- **Travel Demand Modeling and Forecasting**
- **Policy Impact Analysis**
- **Livability analysis**
- **Corridor planning**
- **Air quality modeling**
- **Trend analysis**
- **Descriptive statistics**
- **Title IV**
- **Environmental justice**
- **Factoring/Adjusting surveys**

23 USC 134; 49 USC 5303; and 23 CFR 450.316-322.  
MPO mandates

# CTPP Data Concepts

**Summarized data by**  
**Place of Residence**  
**Place of Work**  
**Flows from Home to Work**



**Custom Geography (Local TAZs)**

**Unique Universes (e.g. workers in HHs)**

# Some Key Data Items Include

- Data on **Households**
  - Size, income, vehicles per household
- Data on **Workers**
  - Age and gender, occupations, earnings
- Data on **Journey to Work**
  - Usual mode to work, commuting time, work departure time
- Data on **Workplaces**
  - Work locations, times of arrival at work

# 5-year Geography and Flows

FROM / Residence	TO / Workplace
State	State
State-County	State-County
State-County-MCD	State-County-MCD
State-County-Place	State-County-Place
MSA	MSA
State-County	State-Place
State-County-MCD	State-Place
State PUMA (2000)	State-Place
PUMA (2000)	POW PUMA (2000)
Tract	Tract
TAD	TAD
Locally Defined Small Area	Locally Defined Small Area
TAD	Locally Defined Small Area
Locally Defined Small Area	TAD
State-Place	Locally Defined Small Area
Locally Defined Small Area	State-Place

- **Asymmetrical Flows (in red)**
- **Small Areas defined by MPOs in MPO areas and States Elsewhere**
- **Tracts are Defaults for Small Areas**
- **Default TADs defined by AASHTO**
- **UZA tables for Part 1 ONLY**
- **MCD Only States**







CT	ME	MA
MI	MN	NH
NJ	NY	PA
RI	VT	WI



## **Eight Variables crossed with Means of Transportation to work (MOT)**

- **Age of Worker**
- **Class of Worker**
- **Disability Status**
- **Earnings**
- **Household Income**
- **Poverty Status**
- **Industry**
- **Occupation**
- **Length of U.S. Residence**
- **Minority Status y/n**
- **Time Leaving Home**
- **Time Arriving (workplace)**
- **Travel Time**
- **Vehicle Availability**
- **Workers in Household**
- **Age of Youngest Child**

# Table Summary using 5-year Table list

	TAZ/BG	Tract	TAD	Place	County	PUMA	State
<b>Part 1</b>							
<b>Regular</b>	<b>111</b>						
<b>Perturbed</b>	<b>77</b>						
<b>Part 2</b>							
<b>Regular</b>	<b>50</b>						
<b>Perturbed</b>	<b>65</b>						
<b>Part 3</b>							
<b>Regular</b>	<b>2</b>						
<b>Perturbed</b>	<b>38</b>						

## Tables Using Perturbed Data Set

Means of transportation    Aggregate Vehicles Used  
 Aggregate Travel Time    Mean HH Income  
 Aggregate HH Income    Aggregate Carpools  
 Almost all Part 3 Tables    All Aggregate/Means Tbls

***Also lost average household size***

# CTPP Table List

## Tabulations -- Part 1, Residence-Based Tables

CTPP Part	CTPP Table Number	Content	Universe	# of Cells
1	A102210	Minority Status (3) by Earnings in the past 12 months (2010\$) (11)	Workers 16 years and over	33
1	A102211	Minority Status (3) by Industry (15)	Workers 16 years and over	45
1	A102212	Minority Status (3) by Occupation (25)	Workers 16 years and over	75
1	A102213	Minority Status (3) by Travel time (18)	Workers 16 years and over	54
1	A102214	Occupation (25) by Industry (15)	Workers 16 years and over	375
1	A102214C	Occupation (8) by Industry (15)	Workers 16 years and over	120
1	A102215	Occupation (25) by Time leaving home (17)	Workers 16 years and over	425
1	A102215C	Occupation (8) by Time leaving home (10)	Workers 16 years and over	80
1	B102216**	Time leaving home (17) by Means of transportation (11)	Workers 16 years and over	187
1	B102216C	Time leaving home (10) by Means of transportation (7)	Workers 16 years and over	70
1	B102216C2	Time leaving home (10) by Means of transportation (6)	Workers 16 years and over	60
1	B102216C3	Time leaving home (10) by Means of transportation (4)	Workers 16 years and over	40
1	B102217	Travel time (12) by Means of transportation (11)	Workers 16 years and over	132
1	B102217C	Travel time (12) by Means of transportation (7)	Workers 16 years and over	84
1	B102217C2	Travel time (12) by Means of transportation (6)	Workers 16 years and over	72
1	B102217C3	Travel time (12) by Means of transportation (4)	Workers 16 years and over	48
1	A103100	Total Workers in households (1)	Workers 16 years and over in households	1

# Variable List

## Variable Definitions

Found in Which CTPP Part	Variable Name in Tabulations Tables	Coded Name	Category Number	Category Labels
x x 3	Age of worker (6)	AGEWKR6	1	Total, all ages 16 years and over
			2	16 to 24 years
			3	25 to 44 years
			4	45 to 59 years
			5	60 to 64 years
			6	65 years and over
1 2 3	Age of worker (8)	AGEWKR8	1	Total, all ages 16 years and over
			2	16 and 17 years
			3	18 to 24 years
			4	25 to 44 years
			5	45 to 59 years
			6	60 to 64 years
			7	65 to 74 years
			8	75 years and over
1 x x	Age (9)	AGE9	1	Total, all ages
			2	Under 16 years
			3	16 and 17 years
			4	18 to 24 years
			5	25 to 44 years
			6	45 to 59 years
			7	60 to 64 years
			8	65 to 74 years
			9	75 years and over

# SOFTWARE!

- <http://ctpp.transportation.org/Pages/5-Year-Data.aspx>
- Free
- No log in required (but useful and recommended)
- 350GB of data!
- Produced inexpensively...
- Alright, let's go.

# CTPP List Serve

## Census Data for Transportation Planning

TRB Subcommittee on Census Data for Transportation Planning, ABJ30(1)

*Encouraging Research and Innovation in Transportation Since 1920*



### Site Navigation

[Home](#)

[Calendar](#)

[Notes & News](#)

[CTPP Data Products](#)

[Internet Mailing List](#)

[Newsletters](#)

[AASHTO Oversight](#)

[Links](#)

[TRB Publications](#)

[TAZUP / WORKUP](#)

Welcome to our web site. We hope you find this site fun, informative and above all useful. We are organized under the [Committee on Urban Transportation Data and Information Systems](#) of the Transportation Research Board. We are very interested in census data matters as they relate to transportation planning. As a result, our focus spans the entire spectrum of census related activities including applied uses of the data, the content of censuses, collection procedures and dissemination programs all within the context of past, present and future censuses. This site was developed to help provide a forum for those with an interest in transportation planning and census data.

### What's New

- [Most recent CTPP Newsletter \(PDF only\)](#) [01-May-2013]
- [Presentations from 2013 Annual Meeting](#) [27-January-2013]

<http://trbcensus.com>

# “Status Report” newsletter

Census Transportation Planning Products (CTPP)
<ul style="list-style-type: none"><li>• Data Products</li><li>• Training</li><li>• Articles</li><li>• CTPP Status Report</li><li>• FAQ</li><li>• Contacts</li><li>• Related Links</li><li>• Archives</li></ul>
Environmental Justice
Longitudinal Employment and Household Dynamics (LEHD)
Census Urbanized Areas and MPO/TMA Designation
Standard Decennial Census Products
Archives
<b>Contacts</b>
For more information.

## CTPP Status Report

The "Status Report" is a newsletter developed by the CTPP Planning Group, friends and anyone else wishing to write about the Census Transportation Planning Products, its use or any other census data for transportation planning issues. Its purpose is to inform the transportation planning community on matters relating to the developments of the CTPP and other census data issues of relevance to their needs.

PDF files can be viewed with the [Acrobat® Reader®](#)


### [Index of Articles in the Previous Status Reports](#)

- Current (April 2015) in [HTML](#) or [PDF](#) (427 KB)
- December 2014 in [HTML](#) or [PDF](#) (857 KB)
- September 2014 in [HTML](#) or [PDF](#) (280 KB)
- May 2014 in [HTML](#) or [PDF](#) (454 KB)
- December 2013 in [HTML](#) or [PDF](#) (2 MB)
- October 2013 in [HTML](#) or [PDF](#) (159 KB)
- May 2013 in [HTML](#) or [PDF](#) (202 KB)
- January 2013 in [HTML](#) or [PDF](#) (389 KB)
- September 2012 in [HTML](#) or [PDF](#) (137 KB)
- May 2012 in [HTML](#) or [PDF](#) (951 KB)
- January 2012 in [HTML](#) or [PDF](#) (375 KB)

[http://www.fhwa.dot.gov/planning/census\\_issues/ctpp/status\\_report/](http://www.fhwa.dot.gov/planning/census_issues/ctpp/status_report/)

<http://www.trbcensus.com/newsletters.html>

# FHWA website



## Census Transportation Planning Products

American Community Survey

Census Transportation Planning Products (CTPP)

- Data Products
- Training
- Articles
- CTPP Status Report
- FAQ
- Contacts
- Related Links
- Archives

Environmental Justice

Longitudinal Employment and Household Dynamics (LEHD)

Census Urbanized

FHWA → Planning → Census Issues → CTPP → Data Products

### Census Transportation Planning Products (CTPP) 5-Year ACS 2006-2010

Excel files can be viewed with the [Excel Viewer](#)

- [MS Excel 110 KB](#)
- [Read Me File](#)
- [Tabulations -- Part 1, Residence-Based Tables](#)
- [Tabulations -- Part 2, Workplace-Based Tables](#)
- [Tabulations -- Part 3, Worker Home-to-Work Flow Tables](#)
- [GEOGRAPHY Summary Levels and Geo-Components Definitions](#)
- [Universe Definitions](#)
- [Variable Recode Definitions](#)

[http://www.fhwa.dot.gov/planning/census\\_issues/ctpp/](http://www.fhwa.dot.gov/planning/census_issues/ctpp/)



# AASHTO website

The screenshot shows the AASHTO website's CTPP section. At the top, there is a banner with the AASHTO logo (THE VOICE OF TRANSPORTATION), the CTPP logo (Census of Transportation Planning Products), and the text "Census Transportation Planning Products". Below the banner is a navigation menu with "CTPP" selected, showing a list of links such as "CTPP Oversight Board Roster", "5-Year-Data", "5-Year-Info", "Commuting in America", "Transportation Profiles", "2005 TRB Conference Census Data", "Training Resources", "E-Learning Modules", "Transportation Analysis Zones (TAZ)", "CTPP Oversight Board", and "CTPP Board Subcommittee Business". The main content area is titled "WELCOME TO THE CENSUS TRANSPORTATION PLANNING PRODUCTS PROGRAM CTPP" and includes a "Find us on Facebook" button. Below this, there is a paragraph of text and a list of links for further information.

**AASHTO**  
THE VOICE OF TRANSPORTATION

**CTPP**

## Census Transportation Planning Products

**CTPP**

- CTPP Oversight Board Roster
- 5-Year-Data
- 5-Year-Info
- Commuting in America
- Transportation Profiles ▶
- 2005 TRB Conference Census Data
- Training Resources ▶
- E-Learning Modules
- Transportation Analysis Zones (TAZ) ▶
- CTPP Oversight Board ▶
- CTPP Board Subcommittee Business

Home

AASHTO > CTPP > Home

Print Email Twitter Facebook

### WELCOME TO THE CENSUS TRANSPORTATION PLANNING PRODUCTS PROGRAM CTPP

Find us on Facebook

Census data on demographic characteristics, home and work locations and journey to work travel flows are key inputs to a variety of state, regional and local transportation policy and planning efforts. They also support corridor and project studies, environmental analyses and emergency operations management.

In 1990, 2000, and again in 2006, AASHTO partnered with all of the states on pooled fund projects to support the development of special census products and data tabulations for transportation. These census transportation data packages have proved invaluable in understanding characteristics about where people live and work, their journey to work commuting patterns and the modes they use for getting to work.

- [5-year Info](#)
- [2006 - 2010 Transportation Profiles](#)
- [CTPP e-Learning Modules](#)
- [TAZ Delineation Webinar](#) from February 25, 2011
- [CTPP 3-Year Data Based On 2006 - 2008 ACS](#)
- [CTPP Mid Program Report](#)
- [Transportation Profiles](#)
- [TAZ FAQs and other TAZ Information](#)
- [2005 TRB Conference Census Data for Transportation Planning](#)
- [CTPP2000 Training Materials](#)
- [Census Transportation Planning Products \(CTPP\) from the American Community Survey - FHWA Transportation](#)

<http://ctpp.transportation.org/>

# Training Materials

## AASHTO CTPP Website

<http://ctpp.transportation.org/Pages/trainingresources.aspx>

## E-Learning

<http://ctpp.transportation.org/Pages/elearningmodules.aspx>

## Recorded Webinars

<http://ctpp.transportation.org/Pages/webinardirectory.aspx>

# CTPP websites



[http://www.fhwa.dot.gov/planning/census\\_issues/ctpp/](http://www.fhwa.dot.gov/planning/census_issues/ctpp/)

<http://www.TRBcensus.com>

<http://ctpp.transportation.org>