

CTPP Census 2010

Not a bad website



http://www.census.gov/

Census 2010

2010 Timeline

2010 Census Timeline: Key Dates

Fall 2008	Recruitment begins for local census jobs for early census operations.
Spring 2009	Census employees go door-to-door to update address list nationwide.
Fall 2009	Recruitment begins for census takers needed for peak workload in 2010.
February - March 2010	Census questionnaires are mailed or delivered to households.
April 1, 2010	Census Day
April - July 2010	Census takers visit households that did not return a questionnaire by mail.
December 2010	By law, Census Bureau delivers population counts to President for apportionment.
March 2011	By law, Census Bureau completes delivery of redistricting data to states.

For more information about the 2010 Census, please go to www.census.gov/2010census.

U.S. Department of Commerce Economics and Statistics Administration U.S. CENSUS BUREAU Issued March 2008 Form D-3206

What is the CTPP?

The Census Transportation Planning Package is a set of special tabulations from the long form of the decennial census designed by transportation planners for transportation planners



It summarizes the data





What is CTPP?

- CTPP is a set of special tabulations from decennial census demographic surveys designed for transportation planners.
- From 1970 to 2000, the CTPP and its predecessor, UTPP, used data from the decennial census long form.
- Because of the large sample size, the data are reliable and accurate.

What is CTPP?

- The CTPP 2000 is divided into three parts.
 - Part 1 contains residence end data summarizing worker and household characteristics
 - Part 2 contains place of work data summarizing worker characteristics
 - Part 3 contains contains journey-to-work flow data

Enter the ACS era...

Census Transportation Planning Products



The CTPP embodies a collection of Census Data used for Transportation Planning. With changing data needs and the ACS, there will be a variety of different products useful for transportation planning emanating from Census Data. There will be Special Tabulations, Standard Tables and even Value Added-products. The CTPP captures all of these.

Think of CTPP as a place to look for Census Data products to help with your Transportation needs

The Transportation Side "Long Form" to ACS



1960 OMB Journey-to-Work Tables

1970 and 1980 Urban Transportation Planning Package (UTPP)

1990 and 2000 Census Transportation Planning Package (CTPP)



Do we all know what the ACS is?



Remember The Long Form is Dead Nada, History, Kaput!











COMMUNITY SURVEY

America is changing, and so is the census.

AMERICAN

A detailed look at how our communities are changing every year---not just once every ten years. That's what the powerful new American Community Survey provides. Your community needs current information about its residents' education, employment, income, housing and more in order to plan and fund local services that are important to you.

> Your response is important and completely confidential.

For more information, please visit www.census.gov/acs

Or call the Census Bureau's ACS toll-free number at

888-346-9682

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Census 2010

Decennial Census

- In Census 2000, the census used 2 forms
 - 1. "short" form asked for basic demographic and housing information, such as age, sex, race, how many people lived in the housing unit, and if the housing unit was owned or rented by the resident
 - 2. "long" form collected the same information as the short form but also collected more in-depth information such as income, education, and language spoken at home
- Only a small portion of the population, called a sample, received the long form.

American Community Survey

- Is a replacement for the Census Long Form
- is an on-going survey
- is sent to a sample of the population
- tells us what the population looks like and how it lives
- helps communities determine where to locate services and allocate resources





2010 Census and American Community Survey

- 2010 Census will focus on counting the U.S. population
- The sample data are now collected in the ACS
- Puerto Rico is the <u>only</u> U.S. territory where the ACS is conducted
- 2010 Census will have a long form for U.S. territories such as Guam and U.S. Virgin Islands
- Same "short form" questions on the ACS

American Community Survey Period Estimates

- ACS estimates are period estimates, describing the average characteristics over a specified period
- Contrast with point-in-time estimates that describe the characteristics of an area on a specific date
- 1-year, 3-year, and 5-year estimates will be released for geographic areas that meet specific population thresholds

American Community Survey Data Products Release Schedule

Population Size		Data released in:						
of Area	2006	2007	2008	2009	2010	2011	2012	2013
65,000+	2005	2006	2007	2008	2009	2010	2011	2012
20,000+			2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
All Areas*					2005-2009	2006-2010	2007-2011	2008-2012
	of Area 65,000+ 20,000+	of Area 2006 65,000+ 2005 20,000+	of Area 2006 2007 65,000+ 2005 2006 20,000+ 20,000+	of Area 2006 2007 2008 65,000+ 2005 2006 2007 20,000+ 2005-2007	of Area 2006 2007 2008 2009 65,000+ 2005 2006 2007 2008 20,000+ 2005-2007 2006-2008	of Area 2006 2007 2008 2009 2010 65,000+ 2005 2006 2007 2008 2009 20,000+ 2005-2007 2006-2008 2007-2009	of Area 2006 2007 2008 2009 2010 2011 65,000+ 2005 2006 2007 2008 2009 2010 20,000+ 2005-2007 2006-2008 2007-2009 2008-2010	of Area 2006 2007 2008 2009 2010 2011 2012 65,000+ 2005 2006 2007 2008 2009 2010 2011 20,000+ 2005-2007 2006-2008 2007-2009 2008-2010 2009-2011

* Five-year estimates will be available for areas as small as census tracts and block groups. Source: US Census Bureau

American Community Survey Similarities with Census 2000

- Same questions and many of the same basic statistics
- 5-year estimates will be produced for same broad set of geographic areas including census tracts and block groups

American Community Survey Key Differences from Census 2000

- Beginning in 2010, data for small geographic areas will be produced every year versus once every 10 years
- Data for larger areas are available now and data for mid sized were released in December 2008
- Census 2000 data described the population and housing as of April 1, 2000 while ACS data describe a period of time and require data for 12 months, 36 months, or 60 months

American Community Survey Key Differences from Census 2000

- The goal of ACS is to produce data comparable to the Census 2000 long form data
- These estimates will cover the same small areas as Census 2000 but with smaller sample sizes
- Smaller sample sizes for 5-year ACS estimates results in reductions in the reliability of estimates

American Community Survey

- As the Census Bureau has replaced the decennial census long form with the American Community Survey (ACS), future CTPP will now be based on the ACS.
- In late 2006 (AASHTO) committed to a new multi-year Census Transportation Planning Products (CTPP) consolidated purchase to begin incorporating of ACS data into transportation planning practices.

CTPP Pooled Fund

Census Transportation CTPP Planning Products (CTPP)

Pooled Fund Project Proposal

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 and again in 2000, AASHTO partnered with all of the states on pooled fund projects to support the development of special census products and data tabulations for transportation.

Census Data Uses

- · Planning & policy studies
- Travel demand modeling
- Air quality conformity
- Congestion management
- Security & emergency preparedness
- Transit planning
- Trends analyses

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.

To address current and future needs for census data, AASHTO's Standing Committee

"CTPP is the only source of journey to work data for many mid-size and small MPOs."

Tom Kane, Executive Director, Des Moines MPO

The CTPP pooled fund will be designed to meet the needs of State and MPO transportation users and facilitate the transition from the census long-form to the new American Community Survey.

CTPP partners include state DOTs, MPOs, AASHTO, US DOT, US Census Bureau and several TRB Committees.

Costs for the new CTPP would be allocated among the 50 states, the District of Columbia and Puerto Rico on a per capita basis using 2010 population estimates.

Proposed CTPP Pooled Fund Costs Payments equal \$0.0189 cents per person				
Alabama	\$86,952	Montana	\$18,324	
Alaska	\$13,131	Nebraska	\$33,465	
Arizona	\$125,564	Nevada	\$50,898	
Arkansas	\$54,389	New Hampshire	\$26,212	
California	\$720,140	New Jersey	\$170,604	
Colorado	\$91,402	New Mexico	\$37,461	
Connecticut	\$67,678	New York	\$367,828	
Delaware	\$16,730	North Carolina	\$176,801	
District of Columbia	\$10,022	North Dakota	\$12,043	
Florida	\$364,196	Ohio	\$218,994	
Georgia	\$181,403	Oklahoma	\$67,943	
Hawaii	\$25,362	Oregon	\$71,717	
Idaho	\$28,704	Pennsylvania	\$238,069	
Illinois	\$244,357	Rhode Island	\$21,124	
Indiana	\$120,924	South Carolina	\$84,121	
lowa	\$56,940	South Dakota	\$14,877	

Consolidated (ACS era) CTPP Purchase

AASHTO Led Oversight Board Five Year period ~ 2011

On-Demand Technical Assistance	\$930,000
Training	\$625,000
Research	\$920,000
Data Products	\$2,980,000
Oversight Activities	\$465,000
TOTAL	\$5,920,003

Federal Technical Advisory Group TRB Subcommittee -- List Serve (700 strong) Quarterly Newsletter -- Outreach Several Websites

CTPP Oversight Board

- Established under the auspices of the AASHTO Standing Committee on Planning (SCOP).
- The CTPP Oversight Board will provide strategic direction, overall guidance, and monitoring of on-going tasks and activities related to the Census Transportation Planning Products (CTPP) consolidated purchase.

AASHTO Oversight Board

MPOs

Kuo-Ann Chiao, NYMTC Jerry Duke, RTC Vegas Steven Gayle, BMTS Mell Henderson MARC Arash Mirzaei, NCTCOG Guy Rousseau, ARC Chair: Kent Cooper, NV (Region IV) Vice Chair: Jonette Kreideweis, MN (Region III) AASHTO Liaison: Ronald McCready

17 voting members: 9 states and 8 MPOs

States

Mel Adams, VT (Region I) Nathan Erlbaum, NY (Region I) Hui Wei Shen, FL (Region II) Mike Thomas, GA (Region II) Phillip Mescher, IA (Region III) Ahmad Jaber, UT (Region IV) Ayalew Adamu, CA (Region IV) *Ex Officio Members* Ed Christopher, FHWA Alison Fields, Census Bureau DeLania Hardy, AMPO Elaine Murakami, FHWA Robert Padgette, APTA Alan Pisarski, Consultant Steven Polzin, USF. CUTR Nanda Srinivasan, TRB

Consensus Decision Making

AASHTO Oversight Board First meeting August 5-6, 2008

Approved Work Program

Program Management--Hire Person

Census Data Tabulations 3- and 5-year data products TAZ creation

Training and Technical Assistance

Research

Approved FHWA-CB IAA for \$1.19 million

CTPP Oversight Board

- Key Tasks:
- 1. Recommend a five-year (2008-2012) CTPP work plan and budget to SCOP that identifies emphasis areas and estimated uses of consolidated purchase funds;
- 2. Oversee, guide and direct the implementation of specific CTPP work plan activities and tasks;
- 3. Authorize, monitor, and track expenditures for tasks undertaken as part of the CTPP work plan; and
- 4. Review and approve contracts negotiated with the Census Bureau for specific census data products.

CTPP Oversight Board

- Recent Activities
 - Identified work program goals and objectives
 - Identified a list of priority tables for the CTPP using the first 3-years of the ACS
 - Worked to understand impacts of the DRB rules and requirements

Census Data Tabulations 3- and 5-year data products TAZ creation

3-year Product

June 2009 Possibly '06-'07-'08 ? '05-'06-'07

20,000 people Zones (County, Place, PUMA)

2000 Geography

Actual(?) Flows

5-year Product

June 2011 (2012)

'06-'07-'08-'09-'10

Small Areas

(Tract, TAZ, BG)

New TAZs

Synthetic Flows

Disclosure Review Board



Basics of DRB Restrictions

- Census Bureau DRB does not want individuals identified by manipulation of the data tables.
- Tables with cross-tabulation using variable "means of transportation to work" need to have 3 or more unweighted records for each category of travel mode, or the table will be suppressed.
- Since CTPP has many tables cross tabulated using this variable creates many possibilities for this to happen.
- Thus making a large portion of the data useless for our transportation planning activities.

3-year Product Hits Snag Disclosure Review Board

All Tables rounded like 2000

3-year Product June 2009 '05-'06-'07 20,000 people Zones (County, Place, PUMA) 2000 Geography

Actual(?) Flows

No thresholds on Univariate Mode tables

Cell thresholds on all Mode by "X" tables Tables with failing cells will be suppressed Includes all Resident and Workplace tables

Worker flows by Total Workers and Flows by Mode [7] no thresholds

DRB Says...

"Too many" cross-tabulations by Means of Transportation (Mode)

- Age
- 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 (Part 2)
- Travel Time
- Vehicle Availability
- Workers in Household
- Age of Youngest Child

...makes for micro data record

Census Bureau Data Stewardship Executive Policy (DSEP)

- DSEP has noted that because the CTPP had many tables cross tabulated using the variable "Means of Transportation to work" that a pseudo-microdata could be created from the tabular results, and there was some small probability that a record could then be matched to an ACS Public User Microdata Sample record.
- Thus, an individual record could be tied to a geographic unit (e.g. County or Place) with 20,000 population threshold, rather than a unit with a 100,000 population threshold, and thus, increasing the risk of disclosing an individual.

Are the rules necessary?

We say NO^{*} DRB Says yes

* ..and so does the Committee on National Statistics as well as Westat, a national survey firm

"The Census Bureau should undertake research to develop confidentiality protection rules and procedures for tabulations from the ACS that recognize the protection afforded to respondents by pooling the data over many months." ----CNSTAT, 2007

The data is already protected

Administratively: Swapping, Imputation, complex weighting

Methodologically: Period estimate not point in time, very large weights and small sample sizes, MOEs at 90% confidence and addressed based sampling

Statistically: Estimated values change over time, data is cohorted, income and age adjustments

5-year data product

Hinges on DRB posture and appeal to Data Stewardship Executive Policy Committee

Likely to be all synthetic

Needs some key research to be done

What else can be said?



NCHRP 08-36/Task 71 Disclosure Avoidance Techniques to Improve ACS Data Availability

 The objective of this research is to provide methods and techniques to develop a high quality synthetic database for potential use as a special product from the American Community Survey (ACS).

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

 The purpose of this research is to examine the data and methods for merging the ACS and Longitudinal Employer Household Dynamics (LEHD) data.

A Guidebook for Using ACS data for Transportation Planning

• NCHRP Report 588 "A Guidebook Using American Community Survey Data for Transportation Planning"

evaluates ACS data and products and demonstrates their uses within a wide range of transportation planning applications.

Census Data Tabulations 3- and 5-year data products TAZ creation

Will th TAZs?	ere will be	
Base	Traditional	 Developed in early 2009 All zones would nest within
TAZ	Size	Counties and Base TAZs
Medium	20,000	with in Medium and Medium
TAZ	population	with in Large
Large TAZ	65,000 population	 GIS development approach Funded under Consolidated Purchase

What we were planning a year ago

TAZ Issues, Questions and Options

Work Though contract with the CB Geography to developed TAZs in 2009, have them put into TIGER and yield to yet another last minute CB cost increase

Develop a block to TAZ equivalency process after 2010 blocks are defined that is independent of CB Geography at a potentially reduced cost

> Will there be TAZs? What size will they be? What will the process be? When will it start?

TAZ Delineation (TAZ-UP)

- In early 2008, State DOTs and MPOs were advised to plan for TAZ delineation for inclusion in the Census Bureau's TIGER files database in calendar 2009.
- A decision by the CTPP Oversight Board was made on November 3, 2008 to delay the effort until 2011.
- Using current information in the TIGER database would be increasingly complex and expensive.
- Decision to wait and use 2010 census block equivalencies such as was done in 1990.

Advantages

 Small area (like tracts and TAZs) tabulations for CTPP are not expected until 2012, with the plan to use 5 years of ACS records from 2006 through 2010. By waiting until 2011, the tabulations can include 2010 Census geographic units like census tracts and block groups, and can include 2010 Census population counts at the block level, and we hope it also means that 2010 Census results will be used in the ACS weights.

Advantages

 Since MPOs and State DOTs update their TAZs at different times, waiting until 2011 allows TAZ delineation for CTPP the greatest opportunity for incorporating local changes to the time of CTPP data delivery.

Advantages

 The CB Geography Division says that defining TAZs using block equivalencies is a simpler and more efficient methodology than defining based on features in the TIGER database. This results in lower software costs, and especially, less staff time necessary for verification and inclusion into TIGER.

TAZ Delineation

The new TAZ schedule:

Software development, testing	Completed by Early 2011
Distribution of materials (software, TIGER files)	Spring 2011
State DOTs and MPOs submit TAZs to CB	Summer 2011
CB verification	Fall 2011