



CTPP 2000 Status Report

July 2000

U.S. Department of Transportation
Federal Highway Administration
Bureau of Transportation Statistics
Federal Transit Administration
In cooperation with the TRB Census Subcommittee

Draft CTPP 2000 Content Ready for Review

By Sherry Riklin, Federal Transit Administration

The CTPP standard tabulations are a unique source of data for transportation planning. Thorough specification of the individual tables is crucial. Over the last year, a working group of staff from the Federal Highway Administration, the Bureau of Transportation Statistics, the Federal Transit Administration, AASHTO and the Census Bureau have been meeting biweekly to develop the content for CTPP 2000. The working group used the contents of special tabulations from previous Censuses and input from staff of several state and local transportation agencies to develop a draft of the standard tabulations.

We have posted the proposed tabulations in Adobe pdf format to the CTPP Website. We encourage your comments on the proposal. To access the documents, please visit: <http://www.mcs.com/~berwyned/census/content.html>.

The website contains

1. A listing of the proposed tables.
2. A summary of the rationale we used to identify specific tables.
3. A description of the variables that are included in the tables.

Several improvements to CTPP are being proposed. The three sets of standard tables: Home End tables, Work End tables and Worker Flow tables, will be organized by topical content. New tables have been added to help planners address such issues as jobs access and environmental justice. In addition, we are also considering the possibility of providing custom tabulations.

The questions on the Census long form utilized in the CTPP cover topics such as household size, auto-ownership, income, work place location, means of transportation to work, carpool occupancy, time leaving home to go to work, and travel time to work. Data from these questions and the general questions on race, Hispanic origin, occupation and industry comprise the characteristics for the tables in the package.

Your suggestions are very important to us. To send your comments, please contact Nanda Srinivasan by calling 202-366-5021 (e-mail ctpp@fhwa.dot.gov) by August 15, 2000.

Public Use Microdata Sample for 2000 Census: Some Transportation Planning Related Issues

By Elaine Murakami, Federal Highway Administration

Public Use Microdata Sample (PUMS)

PUMS contains records for a sample of housing units with information on the characteristics of each unit and each person in it. While preserving confidentiality (by removing personal identifiers and detailed geographic codes), these microdata files permit users with special needs to prepare virtually any tabulation.

The Census Bureau is considering several changes to the decennial census PUMS. The proposed changes are designed to reduce the potential for disclosing individual information, i.e., to protect confidentiality.

The Disclosure Review Board (DRB) within the Census Bureau has determined that only a "6 percent file" can be released in the PUMS. Six percent of the population in PUMS translates into approximately one-third of long form records.

The Census Bureau's current proposal is to provide grouped or rounded values instead of individual answers for age over 75, occupation, industry, ancestry, place of birth, language, income, earnings, travel time to work, and departure time to work. The potential concern to transportation planners is that the proposal is for travel time to work to be rounded to five-minute intervals, and departure time to work to be rounded to 15-minute intervals. For more information on the Census Bureau proposals, please visit the IPUMS website at <http://www.ipums.umn.edu/~census2000/classifications.html>.

Public Use Microdata Area (PUMA) definition

The Census Bureau proposal includes maintaining 100,000 as the population threshold for PUMAs in the state-level PUMS. This is a very important decision and is strongly supported by the transportation community. The timeframe for designating the state-level PUMAs will be after the release of the population counts at the block level from the PL 94-171 data (after April 1, 2001). The process for defining PUMAs will be through the Census Bureau State Data Centers.

Issues that affect transportation planning

Several transportation programs use PUMS data. For example, TRANSIMS is a microsimulation project being developed by DOT, EPA, with technical work conducted by the DOE Los Alamos National Laboratory. This is a multi-year \$40 million effort to replace the 40-year old four-step travel demand system. Because it is a microsimulation, it relies on microdata at the front end to populate household characteristics along street segments. For such micro-simulation purposes, we need to have as many records in PUMS to use as possible. Once the street segments are populated with persons in households, then personal travel activities are simulated and then the appropriate trips are simulated through the transportation network. Ultimately, traffic congestion and vehicle emissions are estimated. It is critical that a large microdata file is available that includes age, gender, earnings, household income and number of vehicles, travel mode to work, travel time and departure time.

The census will make decisions on PUMS within the next two to three months. It is important for transportation planners to voice their concerns to the Census Bureau on this valuable data source. The CTPP Working Group is planning to have letters regarding PUMS sent to the Census Bureau from the Director of the Bureau of Transportation Statistics (BTS), and from the AASHTO Standing Committee on Planning.

A copy of the BTS letter on PUMS can be found on the CTPP Website at:
<http://www.mcs.com/~berwyned/census/notes/pumsltr.html>

To submit input to the Census Bureau, please write to:
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Also, the Task Force on the 2000 PUMS would like to receive copies of any relevant PUMS correspondence:
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Use of CTPP for Transportation Planning and Modeling in the Salem-Keizer (Oregon) MPO

By Mike Jaffe, Salem-Keizer MPO

The CTPP has been used in several generations of the Salem transportation demand model. In its earlier stages, the data were used to calibrate a gravity-based distribution model for Home-Based Work trips. In the current model, CTPP has been used for calibrating the Household Size and Number of Workers cross tabulation (used for trip generation) and calibrating the Auto-Ownership submodel (used for trip generation and mode choice). The data have also been used for checking the results of the mode choice model for Home-Based Work trips.

CTPP data have also been used for examining inter-city flows between Salem and surrounding cities. Salem is the state capital and the regional economic center,

and about thirty percent of all workers commute from outside the metropolitan area to jobs located in Salem. The CTPP data were particularly useful in a recent bridge study which called for examining commuting patterns across the bridges into downtown Salem. Planners and elected officials wanted to know the residence characteristics of commuters who used the bridges and worked in the Capitol Mall area. The CTPP data was used to provide answers for the bridge study. The bridge study can be found in the publication entitled "Willamette River Crossing Capacity Study, Draft Phase I Report, Salem-Keizer Area Transportation Study, March 1999."

The modeling and the bridge study were both done in-house. For more questions on the bridge study or the use of CTPP data in Salem, please contact:
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American Community Survey and the Transportation Planning Community: What do we need to do?

By Nanda Srinivasan, Cambridge Systematics Inc.

What is the American Community Survey (ACS)?

The ACS is a continuous survey performed by the Census Bureau. The ACS data constitute a paradigm shift from a "snapshot" approach to one of continuous collection across time. When implemented fully, it will provide information on demographic, economic, and housing profiles of America's communities every year. The ACS has the same questionnaire content as the decennial long form and is expected to replace the long form in 2010. Between 1999 and 2001, the ACS is being conducted in thirty-one sites to compare ACS results with those from the Census 2000 long form. Full implementation of the ACS is planned to begin in 2003 for every county in the country.

When will nation-wide data from ACS be available?

The table below lists data availability for different areas. The ACS data from the test sites will be available from the middle of July this year. The earliest

data from the fully implemented ACS is expected to be available in 2004 for areas of population greater than 65,000.

Census Bureau Sponsored Conference on ACS – June 6-7, 2000

The Census Bureau sponsored a conference on "Developing Public Policy Applications with Community Administrative Records and the American Community Survey" in Baltimore, Maryland on June 6-7, 2000.

There were roundtable discussions with the data user community on several broad-ranging topics including:

1. Data Integration Strategies.
2. Predictive Modeling.
3. How to integrate the ACS and decennial Census data into time series modeling.
4. A web-based interactive system for rural America.
5. Development of GIS to enhance community information systems.

Some of the issues raised were:

1. Confidentiality issues.

Attendees felt that cutting geographic or tabular detail may not be the only way to maintain confidentiality.

Area Characteristics	Expected date of release of ACS data	What will be released?
Population greater than or equal to 65,000	2004	Yearly data
Population between 20,000 and 65,000	2006	Three year average
Population below 20,000 (e.g.: census tracts or block groups)	2008	Five year average

The Census Bureau should investigate other methods such as data swapping, introducing noise, development of a “synthetic” database, etc. as other means of disseminating useful data at lower levels of geography.

2. Administrative records.

On the issue of aggregating local administrative files to the same geographic units as census and combining variables to calculate rates, attendees felt that:

- a. There is a lack of consistency in data definitions by state and local governments.
- b. Data sharing may be difficult and may breach confidentiality protocols.
- c. The data may not be reliable or timely.

3. Communication.

Attendees felt the Census Bureau should evaluate various applications of decennial and ACS data and develop a database of the ACS user community. This would allow better understanding of user needs. An ACS listserv should be considered in addition to the existing ACS website.

4. Data access and documentation.

Data dissemination should contain data dictionaries indicating what kind of analyses are possible with the data in terms of spatial and temporal accuracy, difference between counts and estimates, mapping uncertainties, and error propagation.

5. Education and Training.

The Census Bureau needs to develop and disseminate training materials to the user

community on applications and uses of ACS data.

6. Methods and Tools.

Census Bureau should develop and share methods and tools especially with respect to spatial analysis of ACS data.

What are the issues for the transportation planning community?

1. Workplace/Employer coding.

In the test cases, ACS data has been coded only to county/place. The workplace data from ACS needs to be geocoded to census block and TAZ geography using a current employer location file. Since this will need to be done on a continuous basis, Census Bureau will need to develop a mechanism for this process and determine whether a mechanism for local participation can be included.

2. Effect of seasonal variation

Since the ACS is a continuous survey, there needs to be research on the impact of seasonal differences on travel characteristics. Typically, household travel surveys are conducted in Spring/Fall. April 1 for decennial census matched well with “Spring” data collection efforts.

3. Reporting of travel characteristics.

The transportation planning community faces several issues. The following are a few of the issues that need to be studied:

- a. How should travel time, income, etc. be reported in a special transportation planning package with ACS. Should there be an annual CTPP for large geographic units?

- Should there be a system for access to microdata?
- b. How can five/three year aggregates be used in the travel forecasting and other transportation planning processes?
 - c. How can annual data for large geographic units be combined with aggregate data for small areas?

The ACS data for the test sites offers a unique opportunity to examine and compare ACS with CTPP 2000 for comparative time periods. The test site data need to be examined more closely. The ACS data for the 1996, 1997, and 1998 sites have been released (1999 data

is due in the middle of July). For more information on ACS please visit the Census Bureau website at <http://www.census.gov/acs/www>

In 1996, the Bureau of Transportation Statistics conducted a study entitled "*Implications of Continuous Measurement for the Uses of Census Data in Transportation Planning*". This report presents the findings of an expert panel on the utility of data obtained from continuous measurement for transportation planning. Copies of the printed report can be obtained by sending an e-mail to statistics@bts.gov.

TRB Subcommittee: Message from the Chair

In the last issue of the *Status Report*, I reported that the subcommittee had prepared an ACS related research proposal for consideration under the National Cooperative Highway Research Program (NCHRP). At that time, we were looking for states to submit the proposal to NCHRP for consideration. I received interest from several states and want to thank those who included it with their state projects. A copy of the proposal can be found at: <http://www.mcs.com/~berwyned/census/notes/nchrp012000.html>

On a related front, in May the subcommittee submitted a proposal to the Transit Cooperative Research Program (TCRP) for consideration. This proposal called for the development of training materials to assist transit planners in the use of census and other federal statistical data. The proposal focused on the use of CTPP, PUMS and ACS for transit planning applications. A copy of this proposal can be found at <http://www.mcs.com/~berwyned/census/notes/tcrp052000.html>

(At press time I learned that the project was not funded. Needless to say this was quite a disappointment.)

On a brighter note, the subcommittee has requested a timeslot at 2001 TRB annual meeting for a presentation session. At the session we plan to cover PUMS, ACS, AHS and the CTPP with a focus on applications. This will allow time at the subcommittee meeting to discuss data and research needs. Although the TCRP proposal was not selected during this funding cycle, using Census data for transit planning applications is still important.

If anyone is working on any research or has a planning application that uses Census data, please pass the information along. The subcommittee is always looking for planning applications and current research.

On a final note, I have now become a "real" federal employee. On May 8, 2000, I accepted a full time position with the Bureau of Transportation Statistics within the US DOT. After almost 20 years at the MPO in Chicago (CATS), I decided to see the world

from a different perspective. My duties include state and MPO outreach so I plan to be involved in local and state data issues as much as ever. My contact information can be found elsewhere in this *Status Report*.

Ed Christopher,
Chair, TRB Subcommittee on Census Data
for Transportation Planning

Subscribe to the CTPP Listserv

The CTPP listserv is an important source of information on CTPP 2000 and other decennial Census data products that you may be interested in following.

To subscribe to the CTPP Listserv, send an e-mail to majordomo@chrispy.net with “**Subscribe ctp-news**” as the body of the message.

You can also find up-to-date information on CTPP 2000 on the Internet at:
<http://www.mcs.com/~berwyned/census>

Milestones for CTPP 2000

CTPP 2000 Milestones		
2000	March	Start Work-Up
	April	April 1 was Census Day
	May-July	Complete TAZ Verification
		Complete Work-up Process
	September	Finalize CTPP Standard tables
		Begin CTPP Programming
2001	April	Census Bureau release of PL 94-171: redistricting data at block level.
	Fall	Start CTPP Course work development
2002	Fall	Census Bureau release of SSF3 (Sample Summary File) data at block group level.
2002	Fall	Begin CTPP Distribution

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