

The CTPP--Historical Perspective

The history of the census Journey-to-Work (JTW) statistics and the supporting data package is a history of organizational cooperation between the agencies and entities that rely on it. In 1960, the Office of Management and the Budget (OMB) first sponsored the tabulation and packaging of the Census Journey-to-Work (JTW) data at Census Bureau-defined geographies. However, this sponsorship was short lived as the transportation community assumed ownership of the JTW questions. This ownership manifested itself in the transportation community's willingness to pay for a set of special tabulations at a geography conducive to transportation planning.

What is an MPO?

A Metropolitan Planning Organization is a regional planning entity required by federal law for all areas over 50,000 people. The purpose of the MPO is to plan the regions' transportation systems and, for areas over 200,000 people, program the construction projects in the region. The governing boards of the MPO's are comprised mostly of the locally elected officials in the region. Of the 281.4 million people in the Country, approximately 76% reside in MPO regions.

Ever since the first JTW tabulation, the Census Bureau has approached the data as a cost-reimbursable product that was beyond the scope of the Bureau. Historically, the JTW tabulations have been the largest cost-reimbursable product (dollar-wise) of all the census special tabulations.

Direct Costs for Transportation Planning Packages

	1970	1980	1990	2000
Buyers/Users	112	152	All States/MPOs	
Cost	\$0.6 M	\$2.0 M	\$2.5M	\$3.0M
Tables	43	82	120	203

In 1970, there were 112 separate buyers, most of which were Metropolitan Planning Organizations (MPOs). MPOs came into "official" existence as the result of the Federal-Aid Highway Act of

1972. By 1980, there were 152 purchasers. For 1990, and again in 2000, a national "pooled-fund" process was developed by the states to allow all the states and MPO's access to the data. The availability of the data for 1990 was further enhanced by a special grant from the Bureau of Transportation Statistics (BTS) to distribute the data to literally "the world". Over 55,000 CDs were produced and distributed. A similar program is anticipated for 2000.

In addition to the direct charges to the states and MPOs for the production of the data tables, there has been a tradition of indirect contributions by the various members of the community. Tabulation geographies have needed to be defined, data access software written and training materials developed.

In 1970, the entities that contracted with the Census Bureau for the data, prepared the specifications for the tabulations. For 1980, an ad-hoc committee of transportation planners under the auspices of the Transportation Research Board developed the specifications. A special grant from DOT of \$260K paid Census Bureau staff to write

the computer programs. This was in addition to the money each user paid for the package.

Coming into the 1990 decennial census, the ad-hoc committee worked with the American Association of State Highway Transportation Officials (AASHTO) to develop a “pooled fund” purchase whereby each state (or its MPOs) contributed an amount based on its total population. Under this arrangement data became available for every MPO and State. Partnering in this process, MPOs, through the Federal Highway Administration (FHWA), were given financial matching incentives to help them with the cost of defining their tabulation geography. At the Federal level FHWA, the Federal Transit Administration (FTA) and BTS chipped in various dollar amounts to cover outreach, training and the sponsorship of two conferences in addition to technical support. BTS also paid the cost of packaging the data on a CD with custom extraction software.

CTPP Working Group

U.S. Department of Transportation
Federal Highway Administration
Federal Transit Administration
Bureau of Transportation Statistics
Office of the Secretary
Census Bureau
Population Division JTW Branch
Geography Division
Amer. Assoc. of State Highway Trans. Officials
Assoc. of Metropolitan Planning Organizations
Individual MPOs and States
TRB Subcommittee on Census Data
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The development of the 2000 data package has been coordinated by the Census Transportation Planning Package (CTPP) Working Group--a multi-organizational team that began meeting monthly in 1999. Just like the 1990 data, the states and MPOs paid the Census Bureau for the tabulations using the AASHTO pooled fund process. Each state was assessed approximately 1.1 cents per person for a total of \$3 million. The DOT agencies invested another three-quarters of a million dollars for technical support, coordination and software used by the MPOs to define their local tabulation geography known as Traffic Analysis Zones (TAZs). The staff time to develop the TAZs was provided by the MPOs for an untold cost as well as the federal staff time for coordination, outreach and guidance.

The transportation community's interest in the JTW data stems from a combination of the data collected and the geography at which it is aggregated. The JTW tables have three specific areas of interest. First, the data is tabulated at the home or residence location much like regular Census products. Unlike the regular Census products, the JTW data packages are designed for use by the MPO planning models and contain many more two-, three-, and even four-way tables than are found in regular Census tabulations.

What's In a Name --It's All the Same

JTW Journey-to-Work Data 1960
UTPP Urban Trans. Planning Package 1970-1980
CTPP Census Trans. Planning Package 1990-2000

Second, it is the only census product that contains summary data on workers at their place of work. A third and most unique feature of the JTW data are the tabulation of the

worker flows between home and work, all at a custom geographic level. The worker flow tables also include some demographic characteristics of the workers.

Probably the most attractive reason why the JTW packages have gained such widespread support within the transportation community is due to the level of data aggregation--the TAZ. The TAZs are similar in size to block groups but are specifically designed to fit the local planning needs. For 2000, of the 340 MPOs, 282 defined their own TAZs.

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 by:

- Home Location
- Work Location
- Worker Flows Between Home and Work

The specific uses of this data for transportation planning have been well documented and the subject of four national conferences. These conferences have been held to review the journey to work products, share analytical and technical practices and focus on improvements for the next cycle. During the 1990s, two conferences were held. A critical issue that emerged at the 1994 conference and was confirmed in 1996 was a real threat that the 2000 long form would be eliminated and replaced with a continuous measurement methodology.

Major Conferences and References

Date	Location	Report Title	Reference
August 1973	Albuquerque, New Mexico	Census Data and Urban Transportation Planning	TRB Special Report 145 (1974)
Dec. 1984	Orlando, Florida	Proceedings of the National Conference on Decennial Census Data for Transportation Planning	TRB Special Report 206 (1985)
March 1994	Irvine, California	Decennial Census Data for Transportation Planning	TRB Conference Proceedings 4 (1995)
April 1996	Irvine, California	Decennial Census Data for Transportation Planning: Case Studies and Strategies for 2000	TRB Conference Proceedings 13: Vols 1 and 2 (1997)

These conferences have provided a mechanism to bring the transportation planning community together. Over the years, the transportation planning community has banded together to work on improvements to the data collection, processing and tabulation. For the last two decennial censuses, the transportation community has been front and center in the congressional discussions to retain the long form and the transportation questions. This same community has been very watchful of the developments of the long form replacement--the American Community Survey (ACS).

In 1996, BTS funded an investigation to look at the implications of the emerging continuous measurement methodology on the transportation community. This work led to the recommendation that the ACS be implemented on a test basis in 2000 along side the traditional long form. Currently, the states through the National Cooperative Highway Research program are embarking on a \$300K study to look at using the ACS

data for transportation planning. FHWA has several smaller research efforts underway to look at coding and seasonality issues while BTS is working to place a staff person at the Census Bureau to look at statistical quality concerns. In addition to this the Transportation Research Board's Subcommittee on Census Data for Transportation Planning has sponsored several workshops and sessions to keep the transportation community aware of the emerging developments.

The JTW questions asked on the long form have a long history of use by the transportation community. While there are no federal laws that mandate the Census Bureau to collect and provide the data used, the Census Bureau data has evolved into the best and in many cases the only source of information for meeting federal planning requirements. This information, specifically the JTW questions, has become the backbone of the transportation planning and programming processes that must meet congressional mandates and federal regulations. The importance of the JTW data in these processes cannot be stressed enough.

What are the JTW Key Variables?

Household

- Income
- Vehicles Available
- Size, Number of workers

Person

- Worker Status
- Age, Sex, Race, Hispanic Origin, Disability

Journey-to-Work

- Work location
- Mode to Work
- Departure Time and Arrival Time
- Travel Time to Work

Within the context of the Federal transportation program there are hundreds of decisions on how and where federal money is spent. Of the \$217 billion authorized by the Transportation Efficiency Act for the 21 Century (TEA21, PL 105-178), approximately 79 percent is targeted for the Federal-Aid Highway program that is programmed by and through the states and local agencies. For the states and local agencies to program these funds, they must satisfy specific laws and regulations.

To satisfy the laws, agencies must have technical planning processes. These processes are built upon sound data for small geographic areas. The JTW questions provide the

How Do We Use JTW Data?

- Descriptive Reporting
- Special Studies
- Survey Support
- Model Development
- Model Validation

small area data elements that are critical building blocks in this process. Thus, the JTW data provides unparalleled inputs that support "transportation, and advancing America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation."

(From TEA 21 summary

<http://www.fhwa.dot.gov/tea21/sumover.htm>)

As we begin the 21st Century, there is a great deal of concern over the continuation of the mechanism that brought the transportation community the JTW data for the last 40 years. It is unlikely that the planning needs and requirements for this type of data will cease. Given this the transportation community must be ready to respond to whatever policy decisions are made.