

# Main Issues For Census Bureau in 1980, 1990, and 2000 Transportation Planning Packages

50 Years of Transportation Planning Data Progress

Session: The Greybeards

Presenter: Phillip Salopek

In this presentation I will speak briefly about each of the three Planning Packages I've been involved with, and highlight the main issues the Census Bureau was trying to address in each census cycle. This will provide an historical overview of the project, and will also show the evolution that has occurred over time in the CTPP.

- **1980 Census**

- In 1980 the JTW Branch's main issue was to improve the accuracy of place-of-work data. This issue was primarily the result of feedback from the transportation agencies who received the 1980 package and also comments voiced at the Albuquerque Conference.
- The coding process in 1980 was completely manual, so we revised and rewrote the coding procedures clerks used to convert written responses into census codes.
- We also provided more and improved reference materials, including telephone books, ZIP code directories, commercial maps, and major employer lists.
- We had a headquarters staff person permanently assigned to each processing office to serve as an expert resource for any coding questions or problems that came up.
- For the UTPP we developed and implemented the first-ever Place-of-Work Allocation System to fill in missing data and provide a better set of employment locations.

- **1990 Census**

- In 1990 the first major issue that the JTW Branch addressed (with GEO DIV) was the creation of a computer coding system.
- Using the manual coding procedures from 1980 as a guide, programmers from GEO and staff from the JTW branch created, tested, revised, and finalized computer coding algorithms to be used as a first step in the processing.
- In addition, software and processes for the clerks also had to be created, as the previously manual clerical coding was now computer-assisted.
- Each clerk worked at a split-screen terminal showing both the response and the result of searches of the reference materials (TIGER address files, major employer files, etc.) resident on the mini and mainframe computers.

- **1990 Census (Cont'd.)**

- The next major issue addressed in 1990 was the move to a nationwide CTPP.
- Previously, each MPO (or sometimes a State DOT) contracted separately with the Census Bureau for a package for their area. In 1990 the CTPP covered every State, county, and place, and each metro area within each State.
- Thus, the number of customers for the CTPP increased dramatically. This increase created a need to simplify and standardize many of the program's processes.
- For example, the JTW Branch distributed a pc-based program for customers to use to create a list-based TAZ equivalency file.
- In addition, CTPP data were distributed for the first time on CD-ROMs, with accompanying TRANS-VU software, thanks to support and financing by BTS.

- **2000 Census**

- For the 2000 CTPP our main focus was to improve access to the data for the wide range of participants in the program, and to take advantage of more modern data processing and analysis technologies.
- The first step in this process was to contract with two companies to create software to accompany the distribution of the 2000 CTPP data on CD.
- Beyond 2020 and its data browser were chosen as the vehicle for displaying and extracting CTPP data.
- Digital Engineering Corporation was selected to team with Beyond 2020 to create mapping software for data selection and data analysis.
- More modern methods were also provided for agencies to create their TAZ equivalency files and for examining and updating the Workplace Files (Major Employer Lists) used in Place-of-Work coding.

- **2000 Census (Cont'd.)**

- The Federal Highway Administration, along with GEO DIV, sponsored an ArcView application using TIGER-Line files which CTPP 2000 customers used to define Traffic Analysis Zones (TAZ-UP).
- The JTW Branch contracted with ESRI to create an ArcView application called the Workplace Update Extension (Work-UP).
- This was a tool that MPOs could use to verify, correct, and add entries for employers in their area to ensure more accurate and complete workplace data.
- An extended Place-of-Work allocation system was also developed and implemented in the 2000 Census.
- Extended allocation went beyond that used in the main Census and resulted in a greater number of records containing codes all the way down to the block level.
- Ed Limoges, retired from the Southeast Michigan COG and under contract with the Census Bureau, was the leading architect for this work.