

The New York Metropolitan Transportation Council's Experience with the 1980 Urban Transportation Planning Package

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ABSTRACT

The experience of the New York Metropolitan Transportation Council with the 1980 Urban Transportation Planning Package is described. Problems encountered are outlined and solutions are given. Suggestions for improvement of the package are made.

Many still think of Tri-State Regional Planning Commission as the metropolitan planning organization (MPO) for the New York area rather than the New York Metropolitan Transportation Council (NYMTC). That was the case in 1980 and through part of 1982. Tri-State had made plans to acquire the Urban Transportation Planning Package (UTPP) for its 8,000-mile² region. However, Tri-State was dissolved and 10 separate MPOs evolved: 1 in New Jersey, 6 in Connecticut, and 3 in New York, of which NYMTC is the largest, covering 10 counties and 60 percent of the population of the former Tri-State region (10,881,000 out of 17,925,000). The governing board of NYMTC is composed of elected county officials and transportation agencies and operators, including the New York State Department of Transportation, the Metropolitan Transportation Authority (MTA), the Port Authority of New York and New Jersey (PANYNJ), and federal agencies. The central staff of NYMTC is administered by the state.

USES OF UTPP DATA

NYMTC purchased the six-part UTPP for three Standard Metropolitan Statistical Areas (SMSAs): New York, N.Y.; Nassau-Suffolk, and Poughkeepsie-Dutchess County. The package was purchased at the tract level because NYMTC uses square-mile geography rather than traditional traffic zones. It was elected to convert tract-level data to the square-mile base on the in-house mainframe computer. Connecticut Department of Transportation (ConnDOT) purchased a statewide package, and data files have been exchanged with them. New Jersey is purchasing the package but has not received it yet; a similar exchange with them has been proposed.

NYMTC has in general been pleased with the UTPP. The data have been in use since September 1983 with very positive results. Because NYMTC has been so radically restructured from Tri-State, its application of the package is perhaps unique. Its prime concern has been to make the data available to its members, most of whom are transit operating agencies. Most of NYMTC's members wanted hard copies of selected files, although the magnitude of the data led NYMTC to provide tape copies of the trip tables. Some of the data provided by NYMTC include the following:

1. Origin-destination (OD) tables for MTA for its Queens Subway Alternatives Study. Tract-level tables were provided of travel by Queens residents to Manhattan and a later request for data on trips from Queens to elsewhere. The MTA also wished to study characteristics of users of express bus to the Manhattan central business district (CBD), which were developed from the UTPP.
2. Tract-level OD tables and income characteristics tables were developed for Metro-North Commuter Railroad for its electrification extension project and its associated new time schedules. In addition, NYMTC is in the process of building a computerized data base for this new operating agency using the UTPP and the 1980 census Summary Tape Files. The UTPP was acquired from ConnDOT to complete this project because one of the agency's rail lines extends into Connecticut.
3. The New York City Transit Authority used information from Part II of the package to study trip generation in evaluating its January 1 fare increase.
4. Travel tables to New York's secondary CBD in downtown Brooklyn were prepared for the New York City Department of Transportation.
5. The three UTPPs, were merged to obtain a file of New York City residents and workers in the city, including those who live in the two adjacent SMSAs. This file was provided to the New York City Planning Commission, another council member, for its general planning purposes.
6. The council also processed the UTPP in support of an UMTA Section 8 technical study of work travel changes on Long Island by another council member.
7. PANYNJ, another member, obtained tables from Part VI of the package for use in support of its regional economic development activities and as an operator of bridges, tunnels, and a rail rapid transit line.
8. The travel demands of Rockland County residents were assessed and OD tables were developed for use by that county's transit coordinator.
9. The traffic department of Yonkers, the second largest city in NYMTC, received selected tabulations for analysis in serving work travel needs.
10. Copies of previously run UTPP tables have also been provided to the Long Island Rail Road; New Jersey Transit; Westchester County Department of Transportation, which is a bus operator; and two neighboring MPOs.
11. Last, the council provided the worksite locations of resident and nonresident workers in New York City to the Off-Track Betting Corporation (OTB) to assist in locating additional betting parlors.

Practically all of the council members have received processed data from the UTPP files. As is evident from the OTB request, nontransportation agencies and the private sector are approaching the council for the UTPP. The staff provides council members with processing free of charge and requests

a minimal charge from nonmembers. The council is not selling the UTPP for profit; however, neither is it making the entire package available for subsequent use by a service bureau or other profit-making company.

The central staff of the council has also begun to use the UTPP data, especially in its analysis of the change in journey-to-work travel patterns and mode choice between 1970 and 1980. The staff is in the process of inputting the data into a multimodal person-trip model. In-depth analyses are planned of worker characteristics at the worksite by transit use, carpooling, industry occupation, and number of workers as a surrogate for employment. Data from the UTPP will be employed in the council's forthcoming Trans-Hudson Corridor Study.

NYMTC has begun to release 1980 census data in the form of publications as well. Information Compendia are tabular in format with little text and are designed to disseminate information to council members and associated agencies in as rapid a manner as possible; NYMTC has been releasing one such publication each month. Staff Reports are analyses of census data that can affect policy; these are less frequent because considerable time is required to make the analyses.

The UTPP files have already been put to considerable use in the New York area. The sample size (which is approximately 8 percent in New York) has been adequate; this provides about the same number of records as the 1963-1964 Home Interview Survey.

PROBLEMS

The staff has noted problems with the three UTPP files, although these have not been major ones. The chief difficulty was in the misassignment of work trips in three large minor civil divisions (MCDs) in one county. For some undetermined reason only about 1 percent of the worksites were coded to the tract level and the remaining 99 percent were allocated based on that 1 percent. Consequently, tract-level data are unreliable in these three MCDs, although place-level data are correct.

In comparing 1970 and 1980 travel to the tract containing Wall Street in Manhattan, the UTPP measured only 45 percent of the work trips that a 1970 Worker File had found. Although the solution to this

problem is not clear, it appears that some blocks may not have been included in the Master Area Reference File (MARF) and thus were thrown into a county remainder category. Tracts adjacent to Wall Street contained reasonable 1980 totals.

Areas such as the World Trade Center in Manhattan are without conventional street addresses. These were to have been given special treatment: manual coding to the tract and block group. Apparently some were inadequately handled at the block-group level, although tract totals appear correct.

Some unusual trip interchanges between counties have been observed, especially those involving railroad trips. But these are more of an annoyance than a problem.

The Display Program has been modified in order to use it on NYMTC's IBM 4341 system. The modifications are available to those interested. Part IV of the package has no geographic selection provision, so CENSPAC was used to access the data. CENSPAC worked for Parts IV, V, and VI but not for Parts I, II, and III because these are segmented files.

Finally, some of the derived values in Part V are incorrect due to a programming error in the UTPP. This has not affected NYMTC's use, because the block-group level data are below the geography level for which plans had been made.

These difficulties are really quite minor, and excellent cooperation has been received from the Census Bureau.

IMPROVEMENTS

There are two aspects for which transit operator council members would have found it useful to have data, had they been available. The first involves age statistics in Part VI, specifically those for the elderly and handicapped. The second involves collapsing the several individual transit modes into the public transportation category. This procedure severely limits the usefulness of many tables in a multimodal metropolitan area such as NYMTC's.

It has been asked whether anything could be dropped in 1990. No one wishes to lose data, but block-group data have not been especially useful. If good block-group data cannot be developed in 1990, any effort that is saved should be used to further improve tract-level data.