

Editorial

This week's survey results reveal that the total resources spent in the U.S. on travel demand modeling in smaller (population less than 500,000) metropolitan areas which do their modeling in-house is only \$115,000 per year. This is an extraordinarily small amount.

Why is this much too low?

In smaller metropolitan areas, critical decisions are made that affect the future efficiency and effectiveness of the transportation network in the area. Decisions such as land development and how it can and should be coordinated with both private and public transportation, reservation of future rights-of-way for public transportation, the overall role and form of the transportation network, to name a few, are all important and can drastically influence how well the metropolitan area operates in the future. It is in metropolitan areas of this smaller size where good planning can make a huge difference. It is essential therefore to analyze many options, modes and strategies on a continuous basis to ensure that the best decisions are made. Travel demand modeling forms the foundation upon which many important quantitative transportation analyses rest. Working with sound, reliable and accurate forecasts of travel as well as with an accurate representation of present travel is essential to reach some optimum level of functioning.

Travel demand modeling results play an important day-to-day role in traffic impact analyses (TIAs). The recommendations made in these TIAs are based on present and future travel. These recommendations should not be made on an ad-hoc basis but should be part of a larger transportation/land use plan.

It is impossible to provide reliable travel volume estimates on a budget of \$115,000 per year. Surely it is the responsibility of the transportation community to get this message across to elected officials.

Daniel B. Rathbone, Ph.D., P.E.
 Publisher

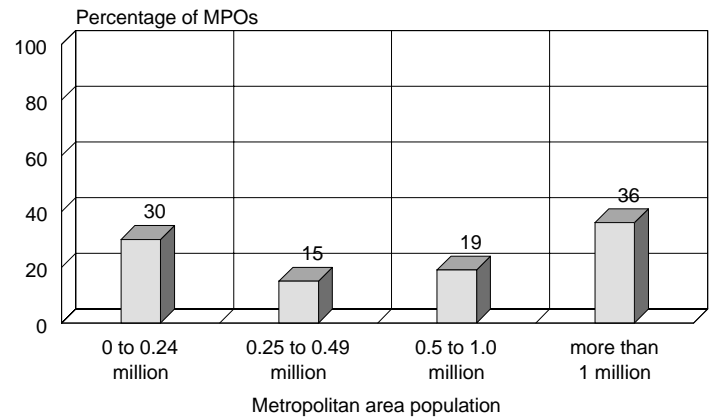
This Week's Survey Results

Travel Demand Modeling, Part I

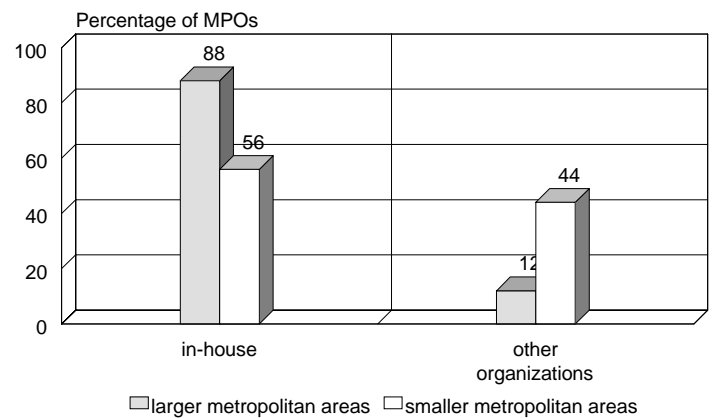
Last month, *The Urban Transportation Monitor* conducted a nationwide survey to obtain information and opinions from Metropolitan Planning Organizations (MPOs) on Travel Demand Modeling. Questionnaires were faxed to approximately 260 MPOs. A total of 63 usable surveys were received for a response rate of 24%.

The results of the survey are published in two parts. Part I is published here and Part II will be published in the next issue.

What is the present population of your metropolitan area?



Do you conduct travel demand modeling in-house or do you use another organization (e.g. state DOT, consultant)?



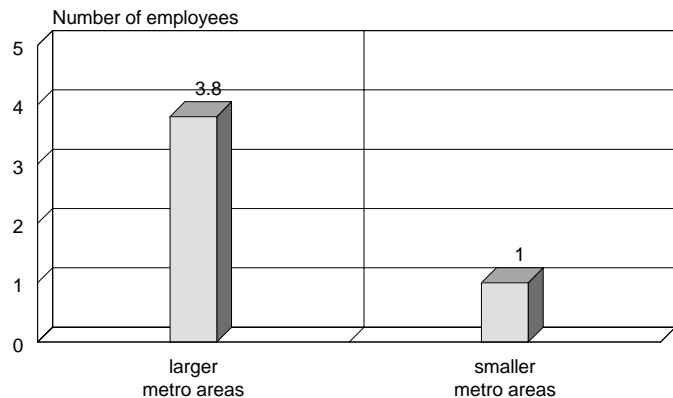
Notes:

For larger MPOs, those that used other organizations, 66% used consultants and 33% received travel demand information from state DOTs. For smaller MPOs, 36% used consultants and 64% received travel demand information from state DOTs.

Note:

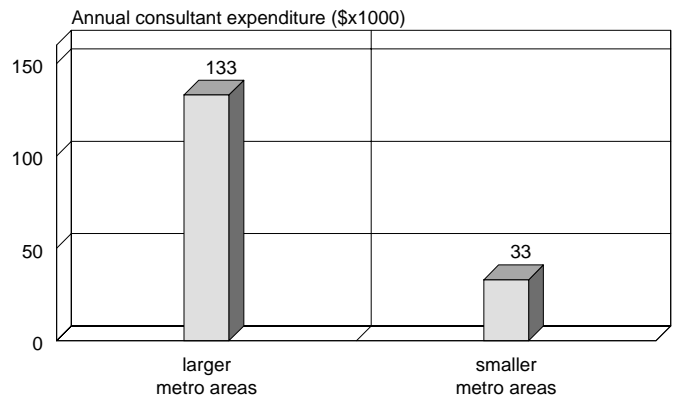
Larger metropolitan areas are defined as metropolitan areas that have a population equal to or greater than 500,000. Smaller metropolitan areas have a population less than 500,000.

How many full-time equivalent employees of your MPO work on travel demand modeling?



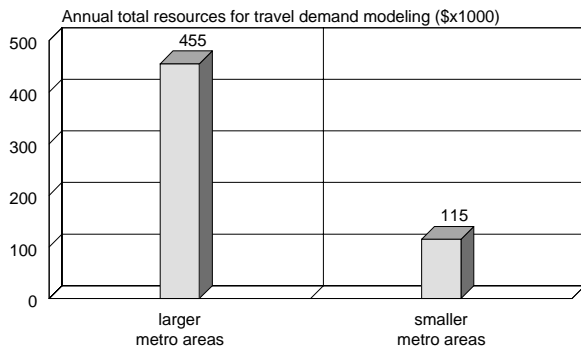
Notes:
Information is shown for MPOs that do travel demand modeling in-house. Larger metropolitan areas are defined as metropolitan areas that have a population equal to or greater than 500,000. Smaller metropolitan areas have a population less than 500,000.

What is your approximate average yearly consultant expenditure for travel demand modeling. Average for past two years is reported.



Notes:
Information is shown for MPOs that do travel demand modeling in-house and that use consultants. Larger metropolitan areas are defined as metropolitan areas that have a population equal to or greater than 500,000. Smaller metropolitan areas have a population less than 500,000.

Total amount of resources used by MPOs to do travel demand modeling, for MPOs that do travel demand modeling in-house. Average for past two years is reported.



Notes:
To determine the total amount of resources used, each employee involved full-time in travel demand modeling was assumed to cost \$100,000 per year (salary, benefits, overhead). This was added to direct consultant expenses. Larger metropolitan areas are defined as metropolitan areas that have a population equal to or greater than 500,000. Smaller metropolitan areas have a population less than 500,000.

What type of surveys has your MPO conducted over the past two years to obtain data to use for travel demand modeling? Responses are listed in order of frequency. Only surveys listed by at least two respondents are shown.

- Household travel survey
- External-Internal / Cordon O-D survey
- Transit on-board survey
- License plate survey
- Commercial vehicle survey
- Special generator survey

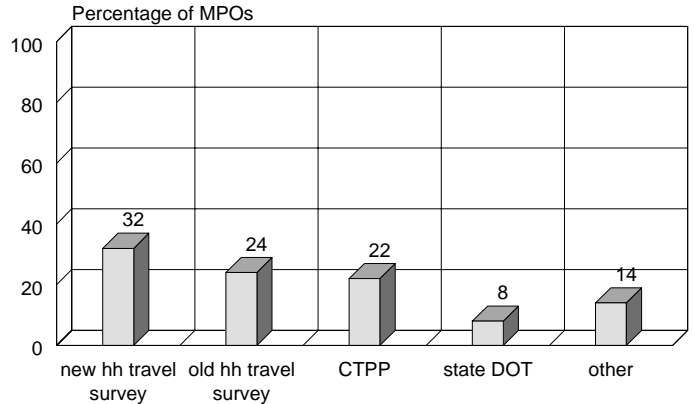
Details of surveys reported by respondents

Type of Survey	Number of Completed Questionnaires/Records	Cost of Survey and Data Preparation/Analysis for Use in Demand Modeling
Household travel survey	8,000	\$1,250,000
Household travel survey	5,700	\$1,000,000
Household travel survey	5,500	\$500,000
Household travel survey	4,000	\$379,000
Household travel survey	1,500	\$225,000
Transit on-board survey	25,000	\$400,000
Transit on-board survey	1,200	\$25,000
External-internal survey	25,000	\$400,000

What type of surveys are you planning to conduct in the next two years, mainly for your travel demand modeling effort? Responses are listed in order of frequency. Only surveys listed by at least two respondents are shown.

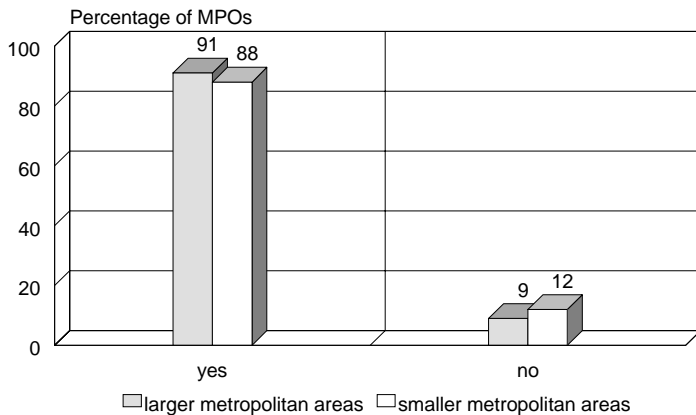
- Household travel surveys
- On-board transit surveys
- Speed and delay surveys
- External cordon roadside surveys
- Parking surveys
- Commercial vehicle surveys

What has been your main origin-destination data source to calibrate your travel demand modeling effort?

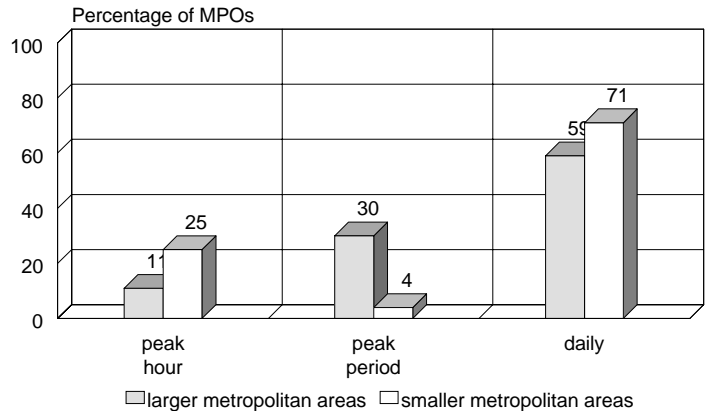


Notes:
"Old household (hh) travel survey" are sources that are at least 25 years old.

Are you planning to use the 2000 CTPP for calibration of your travel demand modeling effort?



For what time periods do you conduct travel demand modeling?



Present and future travel demand modeling software use by MPOs as reported by respondents

Name of software	Percentage of MPOs that use software presently	Average number of years software has been used by MPOs	Percentage of MPOs that indicated that they plan to change software within the next two years	Software that MPOs plan to acquire (indicated by those who plan to change software)
TRANSCAD	23%	2.1 yrs.	0%	Not applicable
T-MODEL	8%	7.5 yrs.	50%	EMME/2
EMME/2	9%	9.2 yrs.	20%	TRANSIMS
TRANPLAN	49%	7.1 yrs.	62%	TRANSCAD, TP+/VIPER
TP+/VIPER	11%	2.0 yrs.	0%	Not applicable
MINUTP	6%	8.5 yrs.	100%	TRANSCAD, TP+/VIPER
FSUTMS	2%	18.0 yrs.	0%	Not applicable
TRIPS	2%	10.0 yrs.	0%	Not applicable