



CAIT

Center for Advanced Infrastructure & Transportation
Rutgers, The State University of New Jersey

NJDOT Bureau of Research
QUARTERLY PROGRESS REPORT

Project Title:	The Future of Transportation Modeling		
RFP NUMBER: NJDOT 2001-19	NJDOT RESEARCH PROJECT MANAGER: Nazhat Aboobaker		
TASK ORDER NUMBER: 117 / 4-26856	PRINCIPAL INVESTIGATOR: Maria Boilé		
Project Starting Date: 01/01/2002 Original Project Ending Date: 12/31/2003 Modified Completion Date: 12/31/2004	Period Covered: 4 th Quarter 2004		

Task	% of Total	% of Task this quarter	% of Task to date	% of Total Complete
Literature Search				
1. Model comparison and summary matrix	25%	0%	100%	25%
2. Conduct survey	25%	0%	100%	25%
3. Plan to be followed by the Bureau of Technical Analysis	20%	10%	100%	20%
4. Implementation and Training	15%	20%	100%	15%
Final Report	15%	20%	100%	15%
TOTAL	100%			100%

Project Objectives:

The objectives of this study are to

- (1) Determine the future trends and directions of practical travel demand models and processes over the next five years.
- (2) Compare the next generation alternatives with the traditional modeling processes and programs in order to recommend which models and processes are likely to become the next standards.
- (3) Provide staff training for the Bureau of Technical Analysis on the capabilities of the models which will be identified as the future industry standards and the requirements for transition to the new standards, from models currently used by the Bureau.

Project Abstract:

Careful planning will help avoid problems with severe traffic congestion, dangerous travel patterns, undesirable land use patterns, adverse environmental impact and wasteful use of money and resources. Planners need to implement the appropriate set of tools, which will help create high quality transportation services at a reasonable cost with minimal environmental impact and meet the requirements of ISTE, TEA-21 and the CAAA. The scope of this project is to identify and assess the new trends in transportation modeling and assist the NJDOT Technical Analysis Bureau in making educated decisions regarding their future transportation modeling needs. For this purpose, a comparative evaluation of the available and under development transportation modeling tools will be performed and the advantages and disadvantages of each one will be discussed in detail and summarized in an easy to read matrix. Projections of future transportation modeling needs will be made and the capability of existing and under development tools to address these needs will be assessed. A comparative analysis of existing models will include among other, information on model capabilities, data requirements, user friendliness, cost, hardware, software and maintenance requirements.

1. Progress this quarter by task:

Task 3: The interactive decision support tool has been developed and has been modified to better adjust to the new modeling developments in the Bureau of Technical Analysis. The Bureau has recently purchased a new tool



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for transportation planning applications. The ability of tools used for other applications to integrate with this new acquired tool has been considered in the revised decision support tool.

Task 4: The decision support tool discussed under task 3 has been developed and is available to download over the Internet. The Bureau of Technical Analysis deemed that it was not necessary to organize a meeting with potential users during the early development stages of the tool, as the Bureau would be the only primary user.

Final Report: The final report and the decision support tool are currently under review by the NJDOT.

2. Proposed activities for next quarter by task:

Any suggested revisions on the final report or the decision support tool will be made.

3. List of deliverables provided in this quarter by task (product date):

Project web site including final report and a downloadable version of the decision support tool became available during this last quarter.

4. Progress on Implementation and Training Activities:

The decision support tool has been finalized. Its use and applicability will be demonstrated during the next quarterly meeting.

5. Problems/Proposed Solutions:

None

Total Project Budget	\$125,111
Modified Contract Amount:	
Total Project Expenditure to date	\$108,063
% of Total Project Budget Expended	86%

* These are approximate expended amounts for the project; these estimates are for reference only and should not be used for official accounting purposes. For a more accurate project accounting please review the quarterly invoice for this project.