



QUARTERLY PROGRESS REPORT

Project Title:	Estimation of Truck Volume and Flows		
RFP NUMBER: NJDOT 2001-18	NJDOT RESEARCH PROJECT MANAGER: Nicholas Vitillo		
TASK ORDER NUMBER/Study Number: 116 / 4-26855	PRINCIPAL INVESTIGATOR: Maria Boilé		
Study Start Date: 01/01/2002 Study End Date: 8/31/2004	Period Covered: 4 th Quarter 2003		

Task	% of Total	% of Task this quarter	% of Task to date	% of Total Complete
Literature Search	6%	-	100%	6%
Task 1 Data collection	8%	-	100%	8%
Task 2 List of major truck generating facilities	8%	-	100%	8%
Task 3 Criteria or factors that influence changes in truck flow	10%	-	100%	10%
Task 4 Relationships between ADT and truck volumes	33%	20%	85%	28%
Task 5 Methods to estimate truck flow and truck percentages	-	-	-	-
Task 6 Validate the estimation method on a selection of 12 routes	17%	10%	35%	6%
Task 7 Apply methodology on a statewide basis	8%	0%	0%	0%
Task 8 Quarterly progress and final reports	10%	5%	55%	5.5%
TOTAL	100%			71.5%

1. Progress this quarter by task:

Task 4 – Additional models were tested to account for the effect of population density on truck volume estimates. It was determined that statistically, population density is not an important factor. The final models to be used were thus selected and preliminary sensitivity analysis has been performed based on these models. As it was decided during the August 22 meeting at NJDOT, the use of the O-D matrix estimation method will not be pursued any further. Thus, the planned effort for task 5 was re-allocated. The research team is now working on the implementation of the Task 4 analysis within a GIS environment. The team is planning to produce a GIS based tool to perform the truck volume and flow estimation analysis. Development of such a tool was not included in the proposal, it seems however that it will facilitate the proposed analysis, thus it is being pursued further by the research team.

Task 6 – A method for assessing the accuracy and validity of the results to be produced under task 4 is being developed and will be implemented within a GIS environment.

Task 7 – The use of GIS to model the procedures under tasks 4 and 6 will facilitate the statewide implementation of the methodology.

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2. Proposed activities for next quarter by task

Task 4 will be finalized with models used to predict truck volumes and flows being implemented within a GIS environment, results of the sensitivity analysis and traffic volume and percentage profiles being produced for each of the selected highways.

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

N/A

4. Progress on Implementation and Training Activities

A GIS framework is being used to model the procedures for truck volume and flow estimation and for traffic volume and percentage profile development. This framework will be used in the development of the training material.

5. Problems/Proposed Solutions

N/A

6. Budget Summary*

Total Project Budget(# of years)	2 Years	\$ 198,508.00
Total Project Expenditure to date		\$133,077
% of Total Project Budget Expended		67%
Task Order Number/Study Number:		116 / 4-26855
Current Task Order Budget (# of years)	Year 1 and 2	\$ 198,508.00
Actual Expenditure to date against current task order		\$133,077
% of current task order budget expended		67%

* 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.