

NJDOT Bureau of Research
QUARTERLY PROGRESS REPORT

This page summarizes all of the open tasks under the Cambridge Systematics contract with the research bureau.

Task	Project Budget	Budget Expended	% of Budget Expended	% of Work Complete
TO #26 – Title VI Agency Policy Examination and Best Practice Review	\$59,620.00	\$59,620.00	100%	100%
TO #28 – NJDOT Analysis of Maintenance Titles	\$49,450.00	\$45,220.00	91%	91%
TO #29 – NJDOT Analysis of Genesis Rapid Dewatering System (RDs) Technology	\$34,130.00	\$27,159.00	80%	80%
TO #30 – Oversize/Overweight Public Documentation Benchmarking and Effectiveness Study	\$54,040.00	\$9,690.00	18%	18%

NJDOT Bureau of Research
QUARTERLY PROGRESS REPORT

Project Title:	Title VI Agency Policy Examination and Best Practice Review		
RFP NUMBER: 7935596	NJDOT RESEARCH PROJECT MANAGER: Paul Thomas		
TASK ORDER NUMBER: 26	PRINCIPAL INVESTIGATOR: Christopher Titze and Whitney Faron		
Project Starting Date: 4/4/2014 Project Ending Date: 12/31/2014	Period Starting Date: 10/1/2014 Period Ending Date: 12/31/2014		

Task	% of Total Project Budget	Total Budget	% of Task This Quarter	Cost This Quarter	% of Task to Date	Total Cost to Date
1. Literature Review & Research	25%	\$15,080	0%	\$0	100%	\$15,080
2. NJDOT Title VI Practices Review	25%	\$15,080	0%	\$0	100%	\$15,080
3. Interviews	25%	\$15,080	10%	\$1,508	100%	\$15,080
4. Final Report	25%	\$14,380	65%	\$9,347	100%	\$14,380
TOTAL	100%	\$59,620	18%	\$10,855	100%	\$59,620

Project Objectives:

The purpose of this project is to help NJDOT's Title VI Unit remain in compliance with FHWA's Title VI requirements. The research will inform the Civil Rights Unit on how best to achieve compliance, by:

- Examining existing Title VI regulations and best practices for achieving compliance based upon the body of transportation planning literature, policies, and procedures of other states and federal agencies;
- Reviewing NJDOT's current Title VI practices;
- Gathering information on how other DOT's, MPO's, and agencies are achieving Title VI compliance; and
- Summarizing recommendations for Title VI compliance.

Project Abstract:

In order to meet MAP-21 guideline and remain in compliance with FHWA's Title VI requirements, the New Jersey Department of Transportation (DOT) Title VI Unit was instructed to re-examine their existing Title VI policies and regulations. Through this process they were charged with identifying the strengths and weaknesses of the Department's existing Title VI practices, in addition to the strengths and weakness of Title VI practices when coordinating with sub-recipients. Since each Federal recipient is charged with developing their own plans, policies, and requirements that assist in achieving Title VI compliance; no specific or consistent guidance or best practices are available as a resource.

1. Progress this Quarter by Task

Task 1:

- Task Complete

Task 2:

- Task Complete

Task 3:

- The consultant summarized data collected from interviews, questionnaires, and supplemental materials provided by stakeholders in Draft Task – Technical Memorandum.
- The consultant team submitted the Draft Task 3 – Technical Memorandum for review and comment.
- The consultant team reviewed Draft Task 3 findings with NJDOT personnel at project management meeting.
- The consultant team addressed comments to the Draft Task 3 – Technical Memorandum.
- The consultant team submitted the Final Task 3 – Technical Memorandum as a project deliverable.
- The consultant team completed the Interviews Task.

Task 4:

- The consultant team discussed the Final Report approach with NJDOT staff at in-person meeting.
- The consultant team drafted and submitted the Draft Final Report for review and comment.
- The consultant team discussed Draft Final Report findings with NJDOT personnel via telephone.
- The consultant team addressed comments to the Draft Final Report.
- The consultant team submitted the Final Report as a project deliverable.
- The consultant completed the Final Report Task.

2. Proposed activities for next quarter by task

Task 1:

- Task Complete

Task 2:

- Task Complete

Task 3:

- Task Complete

Task 4:

- Task Complete

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

Task 1:

- No deliverables this quarter.

Task 2:

- No deliverables this quarter.

Task 3:

- Draft Task 3 – Technical Memorandum: Interviews (10/8/14)
- Final Task 3 – Technical Memorandum: Interviews (11/13/14)

Task 4:

- Draft Task 4 – Technical Memorandum: Final Report (11/21/14)
- Final Task 4 – Technical Memorandum: Final Report (12/26/14)

4. Progress on Implementation and Training Activities:

- No work on implementation or training in this period

5. Problems/Proposed Solutions:

- No problems to report during this period.

Total Project Budget	\$59,620.00
Contract Amount:	\$59,620.00
Total Project Expenditure to date	\$59,620.00
% of Total Project Budget Expended	100%

NJDOT Bureau of Research
QUARTERLY PROGRESS REPORT

Project Title:	NJDOT Analysis of Maintenance Titles		
RFP NUMBER: 7995471	NJDOT RESEARCH PROJECT MANAGER: Paul Thomas		
TASK ORDER NUMBER: 28	PRINCIPAL INVESTIGATOR: Christopher Titze and Whitney Faron		
Project Starting Date: 8/11/2014 Project Ending Date: 3/31/2015	Period Starting Date: 10/1/2014 Period Ending Date: 12/31/2014		

Task	% of Total Project Budget	Total Budget	% of Task This Quarter	Cost This Quarter	% of Task to Date	Total Cost to Date
1. New Jersey Civil Service Commission (NJCSC) Maintenance Personnel Structure and Title Review	30%	\$14,820	11%	\$1,615	100%	\$14,820
2. Gather Information from other State DOTs	21%	\$10,300	90%	\$9,300	100%	\$10,300
3. Conduct Interviews of Select State DOTs	32%	\$15,870	100%	\$15,870	100%	\$15,870
4. Final Report	17%	\$8,460	50%	\$4,230	50%	\$4,230
TOTAL	100%	\$49,450	63%	\$31,015	91%	\$45,220

Project Objectives:

The purpose of this project is to provide NJDOT with an understanding of the number, structure, and categories of titles for maintenance workers used by other State Departments of Transportation (DOT). The goal of the research is to provide the NJDOT with information on current practices to inform the DOT's effort to consolidate its existing titles. To accomplish these goals, CS proposes a scope that:

- Reviews NJDOT's and NJCSC's current maintenance personnel structure, titles, and the in the field application of these titles in maintenance crews throughout the State's three regions;
- Gathers information on how other DOT's and/or civil service agencies classify DOT maintenance personnel, the titles utilized, hierarchical structures, promotional pathways, and education/training schedules; and
- Summarizes all work steps, lessons learned, and recommendations for consolidating NJDOT/NJCSC maintenance personnel titles into those that are more encompassing and reflective of the roles and responsibilities being performed today.

Project Abstract:

The Department is currently beginning the process with the CSC and the unions to consolidate the titles within the maintenance crew ranks (Budget Centers MRA and MLA), in order to reduce to overall title structure to two or three levels. This is being examined as an opportunity to provide a more effective tool for managing NJDOT maintenance crews and add flexibility and versatility to the organizational hierarchy; while creating a more level playing field and concise process for promotional advancement.

1. Progress this Quarter by Task

Task 1:

- Completed a review of New Jersey Civil Service Commission's (CSC) existing maintenance personnel structure and the titles utilized by the Department
- Developed maintenance worker factsheets summarizing existing NJDOT maintenance titles and their respective roles, responsibilities, and promotional pathways
- Submitted draft maintenance worker factsheets (technical memorandum)
- Submitted developing Maintenance Title Comparison Matrix
- Made requested revisions/edits to the NJDOT maintenance worker factsheets.
- Submitted final factsheets to NJDOT (Task 1 technical memorandum deliverable).
- Task completed.

Task 2:

- Completed scan of the structure and titles for maintenance works of other State DOTs; including CalTrans, DelDOT, PennDOT, NYSDOT, Illinois DOT, and Michigan DOT.
- Consultant team drafted questionnaire for data gathering and interviews with peer agencies.
- Consultant team created online survey tool.
- Creating state-level peer agency factsheets.
- Organizing information on maintenance worker titles for each peer state in to factsheets.
- Submitted draft state-level peer agency factsheets.
- Submitted draft maintenance worker titles for each peer state in to factsheets.
- Updated final state-level peer agency factsheets (based upon interview findings).
- Updated maintenance worker titles for each peer state in to factsheets (based upon interview findings).
- Submitted final state-level peer agency factsheets.
- Submitted final maintenance worker titles for each peer state in to factsheets.
- Task completed.

Task 3:

- Complete online survey instrument.
- Scheduled phone interviews with peer agencies.
- Conducted phone surveys with representatives from CalTrans, DelDOT, Illinois DOT, Michigan DOT, and NYSDOT.
- Created draft summary findings notes from phone interview.
- Submitted final online survey findings and summary notes documentation from phone interviews.
- Task completed.

Task 4:

- Began organizing final report structure.
- Began writing draft final report introduction and literature review sections.

2. Proposed activities for next quarter by task

Task 1:

- None.

Task 2:

- None.

Task 3:

- None.

Task 4:

- The consultant team will complete and submit Draft Final Report for review and comment.
- The consultant team will address comments to the Draft Final Report and submit the Final Report as a project deliverable.
- The consultant team will complete Task 4.

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

Task 1:

- Final Task 1 – Technical Memorandum: Literature Review Summary (10/21/14)
- Final NJDOT Maintenance Worker Title Comparison Matrix (10/21/14)

Task 2:

- Draft Survey Questionnaire (10/21/14)
- Final Survey Questionnaire (10/27/14)
- Draft Task 2 – Technical Memorandum: State-Level Peer Agency Factsheets (11/18/14)
- Draft Task 2 – Technical Memorandum: State-Level Peer Agency Maintenance Worker Title Sheets (11/18/14)
- Final Task 2 – Technical Memorandum: State-Level Peer Agency Factsheets (12/26/14)
- Final Task 2 – Technical Memorandum: State-Level Peer Agency Maintenance Worker Title Sheets (12/26/14)

Task 3:

- Online survey responses from peer agencies – CalTrans, DelDOT, Illinois DOT, Michigan DOT, NYSDOT, and PennDOT (11/7/14 – 12/1/14)
- Conducted phone interviews with peer agencies – CalTrans, DelDOT, Illinois DOT, Michigan DOT, and NYSDOT (11/7/14 – 12/12/14)
- Phone interview summaries for peer agencies – CalTrans, DelDOT, Illinois DOT, Michigan DOT, and NYSDOT (12/26/14)

Task 4:

- No deliverables this quarter.

4. Progress on Implementation and Training Activities:

- No work on implementation or training in this period

5. Problems/Proposed Solutions:

- The originally proposed period of performance will not adequately allow for work to be thoroughly completed and reviewed. The recommended solution is to extend the tasks period of performance to conclude on March 31, 2015.

Total Project Budget	\$49,450.00
Contract Amount:	\$49,450.00
Total Project Expenditure to date	\$45,220.00
% of Total Project Budget Expended	91%

NJDOT Bureau of Research
QUARTERLY PROGRESS REPORT

Project Title:	NJDOT Analysis of Genesis Rapid Dewatering System (RDs) Technology		
RFP NUMBER: 7988526	NJDOT RESEARCH PROJECT MANAGER: Paul Thomas		
TASK ORDER NUMBER: 29	PRINCIPAL INVESTIGATOR: Christopher Titze and Liam Gallagher		
Project Starting Date: 7/2/2014 Project Ending Date: 2/28/2015	Period Starting Date: 10/1/2014 Period Ending Date: 12/31/2014		

Task	% of Total Project Budget	Total Budget	% of Task This Quarter	Cost This Quarter	% of Task to Date	Total Cost to Date
1. Literature Review and Comparison of Dewatering Technologies	42%	\$14,300	2%	\$300	100%	\$14,300
2. Potential Application of Dewatering Technologies in New Jersey	30%	\$10,160	22%	\$2,235	98%	\$9,955
3. Final Report	28%	\$9,680	30%	\$2,904	30%	\$2,904
TOTAL	100%	\$34,140	16%	\$5,439	80%	\$27,159

Project Objectives:

The purpose of this project is to provide NJDOT with an understanding of Genesis Rapid Dewatering System (RDs), general dewatering technologies, and their potential application within the State. The goal of the research to answer the following questions:

- Is the Genesis Rapid Dewatering System (RDs) technology unique and/or do comparable technologies exist in the US?
- If this technology is not unique, what other states are using a similar technology?
- What are the costs associated with that technology and what are the performance details of the systems (if any)?
- What is the possibility of bringing an existing system like this to New Jersey?

To answer these questions, the research team will:

- Review the Genesis Rapid Dewatering System and other comparable technologies through a literature review;
- Gather information on and research the potential applicability of dewatering technologies in New Jersey; and
- Summarize all work steps, lessons learned, and recommendations.

Project Abstract:

In response to vendor presentations and marketing materials, the New Jersey Department of Transportation requested Cambridge Systematics and First Environment conduct an independent and unbiased examination of the Genesis Rapid Dewatering System and related dewatering technologies and their potential application within the State.

1. Progress this Quarter by Task

Task 1:

- Completed and submitted Final Task 1 – Technical Memorandum.
- Completed and submitted Final Dewatering Technology Comparison Summary Table (contained within Task 1 – Technical Memorandum).

Task 2:

- Developed scenario channels for feasibility analyses.
- Conducted limited feasibility analysis on whether or not the most promising technologies can be effectively employed in the State of New Jersey.
- Complete feasibility analysis research.
- Summarize the information gathered and research conducted from this task into Task 2 – Technical memorandum.
- Submit draft Task 2 – Technical Memorandum for review and comment.
- Addressed comments and edits to Task 2 – Technical Memorandum.

Task 3:

- Began organizing final report structure.
- Began drafting final report introduction, background, and literature review sections.

2. Proposed activities for next quarter by task

Task 1:

- None.

Task 2:

- Submit final Task 2 – Technical Memorandum.

Task 3:

- The consultant team will complete draft of the Draft Final Report for review and comment.
- The consultant team will address comments to the Draft Final Report and submit the Final Report as a project deliverable.
- The consultant team will complete the Final Report Task

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

Task 1:

- Final Task 1 – Technical Memorandum: Literature Review and Comparison of Dewatering Technologies (10/24/14)

Task 2:

- Draft Task 2 – Technical Memorandum: Potential Application of Dewatering Technologies in New Jersey (10/31/14)

Task 3:

- No deliverables this quarter.

4. Progress on Implementation and Training Activities:

- No work on implementation or training in this period

5. Problems/Proposed Solutions:

- The originally proposed period of performance will not adequately allow for work to be thoroughly completed and reviewed. The recommended solution is to extend the tasks period of performance to conclude on February 28, 2015.

Total Project Budget	\$34,140.00
Contract Amount:	\$34,140.00
Total Project Expenditure to date	\$27,159.00
% of Total Project Budget Expended	80%

NJDOT Bureau of Research
QUARTERLY PROGRESS REPORT

Project Title:	Oversize/Overweight Public Documentation Benchmarking and Effectiveness Study		
RFP NUMBER: 8020415	NJDOT RESEARCH PROJECT MANAGER: Dan LiSanti		
TASK ORDER NUMBER: 30	PRINCIPAL INVESTIGATOR: Christopher Titze and Brandon Rivenburg		
Project Starting Date: 10/1/2014 Project Ending Date: 7/31/2015	Period Starting Date: 10/1/2014 Period Ending Date: 12/31/2014		

Task	% of Total Project Budget	Total Budget	% of Task This Quarter	Cost This Quarter	% of Task to Date	Total Cost to Date
1. Literature Review and Cataloging of State DOT OS/OW Informational Resources	17%	\$9,120	80%	\$7,296	80%	\$7,296
2. OS/OW Informational Resource Examination	23%	\$12,600	19%	\$2,394	19%	\$2,394
3. Industry Outreach	20%	\$10,920	0%	\$0	0%	\$0
4. Gap Analysis	22%	\$11,600	0%	\$0	0%	\$0
5. Final Report	18%	\$9,800	0%	\$0	0%	\$0
TOTAL	100%	\$54,040	18%	\$9,690	18%	\$9,690

Project Objectives:

The purpose of this project will be to benchmark the current practices and tools utilized by State DOTs in disseminating commercial oversize/overweight statutes and regulations to commercial carriers and the public as a whole, and assess their effectiveness in increasing regulatory compliance. Additionally, research finding will be used to enhance the language of rules and regulations surrounding commercial vehicle operations in New Jersey, and improve the methods and resources used by NJDOT to educate the commercial vehicle industry on the commercial size and weight regulations.

To answer these questions, the research team will:

- Perform a literature review of the informational resources used by states to provide the commercial vehicle industry with information on size and weight rules and regulations;
- Examine the collected data and analyze the method by which each state provides size and weight rules and regulation information to the commercial vehicle industry;
- Reach out to the commercial vehicle industry to get feedback on the effectiveness of the various methods employed by the study states;

- Identify any gaps in expectations between the methods employed by the states to provide size and weight information to the commercial vehicle industry and what the industry views as adequate; and
- Summarize all work steps, lessons learned, and recommendations in a Final Report.

Project Abstract:

Every state has specific regulations controlling the commercial movement of oversize and overweight (OS/OW) shipments. These regulations are necessary to protect both physical infrastructure and other road users. While there is some collaboration and overlap, regulations often differ between states, and at times between specific parts of a state. The ability of operators to find and understand this information is a critical component in the education and enforcement of OS/OW limits.

1. Progress this Quarter by Task

Task 1:

- Participated in kick-off meeting.
- Began literature review and interviews to identify State DOTs who are leaders in disseminating OS/OW regulatory information effectively and/or have note-worthy publications or public information documents.
- Developed list of State DOTs for inclusion in data gathering and analyses.
- Catalog collected informational resources in matrix for analyses.
- Began draft Task 1 – Technical Memorandum

Task 2:

- Began analyzing the method by which each state provides size and weight rules and regulation information to the commercial vehicle industry.

Task 3:

- No work completed this quarter.

Task 4:

- No work completed this quarter.

Task 5:

- No work completed this quarter.

2. Proposed activities for next quarter by task

Task 1:

- Continue performing literature review and interviews to identify State DOTs who are leaders in disseminating OS/OW regulatory information effectively and/or have note-worthy publications or public information documents.
- Complete list of State DOTs for inclusion in data gathering and analyses.
- Contact selected agencies and gather publications and public documentation.
- Complete cataloging collected informational resources in matrix for analyses.
- Submit Task 1 Technical Memorandum for review and comment.
- Submit initial Matrix of Informational Resources.

Task 2:

- Analyze the method by which each state provides size and weight rules and regulation information to the commercial vehicle industry.
- Updated Matrix of Informational Resources
- Submit Task 2 – Technical Memorandum for review and comment.

Task 3:

- Develop industry outreach survey.
- Begin contacting members of the commercial vehicle industry to get feedback on the effectiveness of the various methods employed by the study states.
- Begin conducting industry outreach activities.

Task 4:

- No proposed work to be completed next quarter.

Task 5:

- No proposed work to be completed next quarter.

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

Task 1:

- No deliverables this quarter.

Task 2:

- No deliverables this quarter.

Task 3:

- No deliverables this quarter.

Task 4:

- No deliverables this quarter.

Task 5:

- No deliverables this quarter.

4. Progress on Implementation and Training Activities:

- No work on implementation or training in this period

5. Problems/Proposed Solutions:

- No problems to report during this period.

Total Project Budget	\$54,040.00
Contract Amount:	\$54,040.00

Total Project Expenditure to date	\$9,690.00
% of Total Project Budget Expended	18%