

NTC Program Progress Performance Report (PPPR) Information Form

For P.I.'s Use

On a semi-annual basis the NTC sponsored P.I. must report Program Progress Performance Report (PPPR) using the format specified in this PPPR Information Form. The form must be submitted electronically to the corresponding NTC Associate Director by 9/15/2014.

Cover Period: 4/1/2014 – 9/15/2014

NTC Funded Project Information (Round/Year 1, 2013-2014)	
University Name	Louisiana State University
Project Title	Quantifying the effects of manual traffic control on evacuation corridors
Principal Investigator	Brian Wolshon
PI Contact Information	phone: 225-578-5247 fax: 225-578-8652 email: brian@rsip.lsu.edu

The form includes the following six parts:

- Part I – Performance Indicators
- Part II – Accomplishments: What was done? What was learned?
- Part III – Products: What has the program produced?
- Part IV – Participants & Collaborating Organizations: Who has been involved?
- Part V – Impact: What is the impact of the program? How has it contributed to transportation education, research and technology transfer?
- Part VI – Changes/Problems

Supplementary documents/materials can be attached to this form with the submission.

Part I – Performance Indicators	
Reporting Period	4/1/2014 – 9/15/2014
1. Transportation-related courses offered during the reporting period that were taught by faculty and/or teaching assistants who are associated with the UTC	N/A
Undergraduate courses	CE 4600 Geometric Design of Highways and Airports
Graduate courses	
2. Students supported by this grant	N/A
Undergraduate students	Andrew Toups Aidan Eymard
Masters students	Jose Rodriguez
Doctoral students	Scott Parr Siavash Shojaat
3. Students participating in transportation research projects funded by this grant (but not supported by this grant)	N/A
Undergraduate students	[Student Name] [Supervisor]
Graduate students	[Student Name] [Supervisor]
4. Students supported by this grant who received degrees	N/A
Undergraduate degrees	[Student Name]
Masters degrees	Jose Rodriguez
Doctoral degrees	[Student Name]

Part II – Accomplishments: What was done? What was learned?	
The information provided in this section allows the OST-R grants official to assess whether satisfactory progress has been made during the reporting period.	
Reporting Period	4/1/2014 – 9/15/2014
1. What are the major goals of the program?	<p>The National UTC aims to promote strategic transportation policies, investment, and decisions that bring lasting and equitable economic benefits to the U.S. and its citizens. The Center is concerned with the integrated operations and planning of all modes serving the nation’s passenger and freight transportation system, including the institutional issues associated with their management and investments. A balanced multi-modal approach will be used that considers freight and passenger travel mobility, reliability, and sustainability, as well as system operations during periods of both recurring and non-recurring incidents, including response to major emergencies. The modes in this theme include highway, transit, rail, and inter-modal interfaces including ports, terminals and airports. In particular, the center focuses on research, education, and technology transfer activities that can lead to (1) Freight efficiency for domestic shipping and for our international land, air, and sea ports; (2) Highway congestion mitigation with multi-modal strategies; and (3) Smart investments in intercity passenger travel facilities such as high speed rail. Major center activities are as following:</p> <ul style="list-style-type: none"> • Advanced & Applied Research Promoting Economic Competitiveness: Our research activities are multimodal/intermodal and multidisciplinary in scope, with the aims of addressing nationally and regionally significant transportation issues pertinent to economic competitiveness and providing practice-ready solutions. • Education, Workforce Development, Technology Transfer, & Diversity The consortium is committed to providing high-quality transportation education and workforce development programs for a broad and diverse audience. Center’s efforts will support the development of a critical transportation knowledge base and a transportation workforce that is prepared to design, deploy, operate, and maintain the complex transportation systems of the future.

<p>2. What was accomplished under these goals?</p>	<p>The major activities completed during this reporting period was the completion of a literature review and the completion of the video data processing stage. Progress has been made toward developing the decision choice model and the traffic simulation models need for project completion.</p>
<p>3. How have the results been disseminated?</p>	<p>Results should be coming in the next reporting period.</p>
<p>4. What do you plan to do during the next reporting period to accomplish the goals? (10/1/2014 – 3/31/2015)</p>	<p>Over the next few weeks and months the decision choice model will be completed as well as the traffic simulation models. The calibration and validation of these models these models will require significant time but should be completed by the end of the next reporting period. Preliminary results should also be available.</p>

Part III – Products: What has the program produced?	
<p>Publications are the characteristic product of research projects funded by the UTC Program. OST-R may evaluate what the publications demonstrate about the excellence and significance of the research and the efficacy with which the results are being communicated to colleagues, potential users, and the public, not the number of publications. Many research projects (though not all) develop significant products other than publications. OST-R may assess and report both publications and other products to Congress, communities of interest, and the public.</p>	
Reporting Period	4/1/2014 – 9/15/2014
1. Journal publications:	None at this time
2. Books or other non-periodical, one-time publications	None at this time
3. Other publications, conference papers and presentations	None at this time
4. Website(s) or other Internet site(s)	None at this time
5. Technologies or techniques	None at this time
6. Outreach activities	<p>Recruiting into Engineering High Achieving Multi-Cultural Students (REHAMS) - June 19, 2014</p> <p>The Gulf Coast Center for Evacuation and Transportation Resiliency;</p>

	<p>a United States Department of Transportation sponsored University Transportation Center and part of the University of Maryland Natation University Transportation Center hosted the 2014 REHAMS Summer Camp. Recruiting into Engineering High Ability Multi-Cultural Students (REHAMS) gives multi-cultural students an opportunity to explore the various disciplines offered by the College of Engineering (CoE), including biological, chemical, petroleum, industrial, civil, electrical and computer engineering, computer science and construction management.</p> <p>The first REHAMS program was held at LSU in 1977, and it was one of the first programs in the country to target minorities and recruit and retain them in STEM disciplines. Since then, REHAMS has provided pre-college students an opportunity to explore CoE disciplines through a holistic overview of the field by presenting both the academic structure and career possibilities.</p> <p>“The most valuable part was seeing how hard works pays off,” said George Tullock-Harris, an 11th grade student from Chicago, Ill. “No matter how big of a challenge the students and professors knew engineering was going to be, they all went the extra mile and succeeded. Everyone has a passion for what they’re doing. Throughout the program, they sugar-coated nothing, and I liked that. They made sure I knew everything about engineering, even the things I thought I wouldn't need to know. Overall, it was fantastic.”</p>
<p>7. Courses and workshops</p>	<p>None at this time</p>
<p>8. Inventions, patent applications, and/or licenses</p>	<p>None at this time</p>
<p>9. Other products</p>	<p>None at this time</p>

Part IV – Participants & Collaborating Organizations: Who has been involved?

OST-R needs to know who has worked on the project to gauge and report performance in promoting partnerships and collaborations.

Reporting Period	4/1/2014 – 9/15/2014
1. What organizations have been involved as partners?	None at this time
2. Have other collaborators or contacts been involved?	None at this time

Part V – Impact: What is the impact of the program? How has it contributed to transportation education, research and technology transfer?

- DOT uses this information to assess how the research and education programs:**
- increase the body of knowledge and techniques;
 - enlarge the pool of people trained to develop that knowledge and techniques or
 - put it to use; and,
 - improve the physical, institutional, and information resources that enable those people to get their training and perform their functions.

Reporting Period	4/1/2014 – 9/15/2014
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1. What is the impact on the development of the principal discipline(s) of the program?	<p>The results of this research are expected to lead to innovative ways to manage evacuation corridors. If found to be promising, the results are planned to be presented to emergency management officials in Louisiana’s Governor’s Office of Homeland Security and Emergency Preparedness. It is also anticipated the finding of this research will provide new insight in directing emergency traffic. Potentially leading to new policies and procedures for police. Again if found to show potential, these results will be presented to police agencies at conferences such as the IACP and TCIPC within the State of Louisiana and elsewhere.</p> <p>Over the long term it is expected that this will incrementally advance the state of practice in improving the movement of traffic with evacuation corridors. Historically, improvements in emergency management and traffic operations have occurred through an evolutionary process with incremental changes made over long periods of time. The impact and benefits of this research to the management and operation of evacuation corridors will advance the state-of-knowledge making it possible to improve traffic management practices in the future.</p>
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2. What is the impact on other disciplines?	<p>This research may have a significant impact in the disciplines of Disaster Management, as it can be used to update existing emergency traffic management plans or used in the development of new plans.</p>
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3. What is the impact on the development of	<p>In addition to education and development of the undergraduate, master’s and Ph.D. students involved in the project, the research</p>
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transportation workforce development?	may also be used to update training manual and workshops for training police officer on how to direct traffic more safely and efficiently.
4. What is the impact on physical, institutional, and information resources at the university or other partner institutions?	None at this time
5. What is the impact on technology transfer?	This research may lead to planning agencies adopting some portion of this research in the development/updating of their emergency traffic management plans.
6. What is the impact on society beyond science and technology?	This research could lead to decreased emergency evacuation times resulting in fewer fatalities associated with major disasters such as wild fires, flash floods, hurricanes, etc.
7. Additional impacts	None at this time

Part VI – Changes/Problems	
If not previously reported in writing to OST-R through other mechanisms, provide the following additional information or state, “Nothing to Report, if applicable:	
Reporting Period	4/1/2014 – 9/15/2014
1. Changes in approach and reasons for change	Nothing to report
2. Actual or anticipated problems or delays and actions or plans to resolve them	Nothing to report
3. Changes that have a significant impact on expenditures	Nothing to report
4. Significant changes in use or care of human subjects, vertebrate animals, and/or biohazards	Nothing to report
5. Change of primary performance site location from that originally proposed	Nothing to report