Research at a Glance

Technical Brief

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Technology Transfer Program 2017-2020

The NJDOT Technology Transfer (T2) Program, 2017-2020 focused on the development and implementation of a program to increase the level of awareness concerning transportation-related issues within New Jersey, promote an ongoing exchange of ideas, translate the latest state-of-the-art trends and technology practices, showcase innovation, and promote and disseminate research results in a form that can be readily applied to current transportation problems.

Research Problem Statement

The NJDOT T2 Program seeks to bridge the gap between the information needs of practicing transportation professionals and the tight budgets of transportation agencies, while engaging other interested stakeholders such as academia, trade and professional organizations, consulting professionals, local public agency decision makers, advocacy and community groups, students and the interested public. Recognized activities leading to the adoption of innovations can include knowledge transfer, training and education, demonstrations and showcases, communications and marketing efforts, technical assistance and more.

The NJDOT T2 Program is a collaborative effort with the NJDOT Bureau of Research client in the identification of technology transfer needs, the conduct of communications outreach and engagement processes, and priority-setting among the recognized activities leading to the deployment of innovations.

Research Objectives

- 1. Document best practices in technology transfer in use at other state DOTs.
- 2. Conduct a survey of NJDOT subject matter experts to determine technology transfer needs.
- 3. Develop a technology transfer program with training and other events and peer exchange program.
- 4. Develop a knowledge capture program.
- 5. Create a tool for solicitation of research ideas.
- 6. Establish a competition for ideas in innovation.
- 7. Provide support for attendance of NJDOT staff at TRB Annual Meeting and other research events.
- 8. Plan, organize and administer an annual TRB field visit to NJDOT.
- 9. Design a process to share NJDOT research.
- 10. Prepare an annual Implementation Status Report

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Methodology

The T2 Program involved the development and implementation of a program of activities, tools and processes to address identified technology transfer and knowledge management needs. Literature review of best practices, surveys and interviews with NJDOT subject matter experts and representatives of local public agencies, and feedback from stakeholders informed needs identification and program priorities. Tech Talk! Events, articles, and videos highlighted research and innovation initiatives being advanced in New Jersey to improve safety and mobility, and to enhance the quality and cost effectiveness of the policies, practices, standards and specifications used in planning, building, operating and maintaining New Jersey's transportation infrastructure.

Resources and tools were made available to the public through the development of the Technology Transfer (T2) website, including the NJDOT Knowledge Management Toolbox that presents strategies for knowledge sharing within the agency. Research ideas are solicited through the NJ Transportation Research Ideas portal, the Build a Better Mousetrap competition seeks out innovative solutions to everyday problems, and the Annual Research Implementation Status Report reviews the state of research implementation on NJDOT-funded projects. Technical assistance and other support for the NJ State Transportation Innovation Council (NJ STIC) promoted FHWA's Every Day Counts Innovations.

Results

The T2 Program addressed the priority objectives established by NJDOT Bureau of Research over the life of the project. The need for technical assistance and communications strategies to support the NJ STIC and staffing for the Research Library grew over the project period. The T2 Program laid the groundwork for future efforts to promote research, highlight implementable innovations, identify knowledge management needs and target strategies to encourage innovation in the NJ transportation community. The Final Report reflects on the accomplishments, benefits, lessons and challenges in the implementation of the T2 Program and makes recommendations for future T2 Program activities.



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