Review of NCHRP Study Implementation at the New Jersey Department of Transportation

The research assesses whether NCHRP projects respond to the practical needs of NJDOT, NJMVC, and NJ Transit. This is accomplished through a survey of research “customers” of the NJDOT Bureau of Research. The research confirmed that overall, NCHRP research was successful in applying the outputs of the research projects; however, recommendations were made to increase the usefulness of NCHRP research findings for practical applications in the transportation field.

Background

The NCHRP is a unique contract research effort designed to respond to the practical needs of the state departments of transportation (or equivalent agencies) across the United States. It is an applied research program with the goal to solve problems that are common in highway planning, design, construction, operation, and maintenance across the nation. At the NJDOT, the liaison with TRB and NCHRP is the Bureau of Research which is also the focal point of transportation research efforts at the NJDOT.

Research Objectives and Approach

The study investigated the implementation of NCHRP research results at NJDOT and estimate the usefulness of the projects’ results in New Jersey. The research team designed a web-based survey of potential and actual users of NCHRP research in NJDOT’s Divisions and Bureaus, as well as research partners at New Jersey Transit and New Jersey Motor Vehicle Commission. The survey identified current criteria and procedures that were used in implementation of NCHRP project results, and the key factors that contribute to the success of the reviewed projects. The study also investigated any NCHRP project considered for application, but not implemented and examine the reasons for not implementing it.

Findings

The study determined that the best way of assessing the benefits of participating in TRB activities for NJDOT is to relate them to the improvements in technology and business processes that were achieved at NJDOT. In that respect, the results of the survey and subsequent interviews provide information about the types of benefits and importance the participation in the TRB activities has for the NDOT. The findings of the survey were as follows:

- 122 respondents accessed the survey website,
• 14 of those gave a complete response.
• 29 NCHRP publications were identified as being implemented to some degree.
• Only 20.7% of the publications were fully implemented, 48% of the publications were partially implemented, while 31% of the publications (were found to be not implemented at all.

The study results confirmed that overall, NCHRP research was successful in applying the outputs of the research projects; however, there were several areas within the findings where improvements to the process are needed to improve:

• Due to the number of projects that failed to be implemented (either partially or fully), it is recommended that all projects which were classified as not implemented undergo a second review.
• After making the determination that fully 48% of the reviewed case studies were classified as only partially implemented, the research team strongly recommends that NJDOT uncover possible solutions to this problem.
• A point-person(s) from the NJDOT Bureau of Research should be assigned to review the contents of the TRB newsletter on a regular basis and disseminate the more relevant findings to the appropriate NJDOT/NJ Transit/MVC units and personnel.

The results of all reviewed survey activities found that DOT staff participation in TRB committees, conferences, and attendance during TRB annual meetings was deemed to be very useful.

For More Information Contact:

<table>
<thead>
<tr>
<th>NJDOT Project Manager:</th>
<th>Priscilla Ukpah</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>609-530-5157</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:Priscilla.Ukpah@dot.nj.gov">Priscilla.Ukpah@dot.nj.gov</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Principal Investigator:</th>
<th>Lazar N. Spasovic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New Jersey Institute of Technology</td>
</tr>
<tr>
<td></td>
<td>973 642-7214</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:lazar.spasovic@njit.edu">lazar.spasovic@njit.edu</a></td>
</tr>
</tbody>
</table>

A final report is available online at: [http://www.state.nj.us/transportation/refdata/research/](http://www.state.nj.us/transportation/refdata/research/).
If you would like a copy of the full report, send an e-mail to: Research.Bureau@dot.state.nj.us.

Review of NCHRP Study Implementation at the New Jersey Department of Transportation

**NJDOT Research Report No: FHWA-NJ-2017-014**