

# NCHRP Research Report 980

## Implementation of Research Findings and Products

National Cooperative Highway Research Program (NCHRP) project 08-125, “Attracting, Retaining, and Developing the Transportation Workforce: Transportation Planners” represents a new way of thinking about and assessing a transportation agency’s planning staff capabilities. As such, one of the major products of the research—the talent management tool—represents a different way of conducting what is usually a very well-defined human resources process. Indeed, during the pilot study case studies, the human resource (HR) staff present in the discussions viewed the tool as a means of augmenting the thinking about desired talents and capabilities of planning staff, but that the recruiting, professional development, and retention of planning staff had to follow established HR procedures. The established HR process could be a challenge for the application of the research products (discussed further below).

***Recommendations to Implement Research Findings/Products:*** A recommended implementation strategy for the research findings/products consists of three major opportunities: professional/research associations, marketing/communicating research products, and NCHRP’s Implementation Support Program.

Professional/Research Associations and Groups – The research design included outreach to several different associations that expressed interest in the research. The most important from the perspective of application is the American Association of State Highway and Transportation Officials (AASHTO). In particular, two of AASHTO’s committees, the Committee on Planning (COP) and the Committee on Human Resources, would be appropriate venues for discussing the research results and demonstrating the tool. In fact, the research team presented the interim research results and a draft tool at a COP meeting. Several of the COP members expressed interest in knowing about the results once the project ended. Presenting and demonstrating the research products at a COP meeting is a good initial step towards implementation.

Other associations that might find the research products of interest include the Association of Metropolitan Planning Organizations (AMPO), National Association of Regional Councils (NARC), Conference of Minority Transportation Officials (COMTO) (who had expressed interest during their participation in the focus group to hear about the final products), and possibly the American Public Transportation Association (APTA). As with the AASHTO committees, the first step would be to contact the respective staff members from each and explore the possibility of presentations at upcoming committee meetings.

The Transportation Research Board (TRB) itself consists of several committees where members might be interested in the research results. Two presentations of early research results were made, including the 2019 TRB Annual Meeting session/workshop where very lively interaction occurred with session participants. Implementing the research results should include working with TRB staff members responsible for relevant committees to see if presentations could occur at mid-year meetings or at any appropriate national conference.

The final association represents the nation's transportation universities—the Council of University Transportation Centers (CUTC). Every CUTC member has a TRB liaison and thus there is a ready outreach mechanism for conveying the results of the research. University researchers, teachers, and trainers would find the results of the research of great interest in terms of future research and academic/training curriculum. Outreach to this group could occur via a targeted email announcement or including a university component in the marketing material discussed below.

Marketing/Communicating Research Products – TRB has several ways of marketing/communicating the results of its research. TRB's webinar program invites research teams/panels to submit applications for a TRB-sponsored webinar. This should be one of the first strategies for disseminating the results of this research. A webinar on the research topic would not only be appealing to state DOTs, but could also attract attention of transportation planners in regional, city, and local agencies, along with the academic/ research community. Again, because a tool was developed, which can be easily demonstrated in approximately 15 to 20 minutes, a webinar would provide an excellent medium for showing the benefits of its application.

TRB also has a newsletter that highlights research results. TRB staff should be asked to place a story on the research results into the newsletter.

NCHRP's Implementation Support Program – NCHRP has created a competitive program to fund implementation efforts relating to the products of NCHRP research. The tool and guidebook developed as part of this project would be an ideal proposal for this program in that the talent management tool developed for the project could be the focus of state DOT outreach efforts. One of the states that participated in the pilot studies, for example, noted that the tool would be very useful in its periodic strategic positioning assessment of the agency's planning program. The proposal to the Implementation Support Program would focus on the pilot application of the tool and guidebook in 4 to 5 state DOTs.

Lessons learned from the pilot studies/case studies conducted for this research suggest the following recommended practices:

- The research team coordinated the pilot studies through the planning unit in the state DOT. This was found to be very effective in gathering the right people to be part of the interaction.
- The types of staff participating in the pilot study were planning directors, senior (supervisors) and junior planning staff, district planning staff, and human resource staff. The pilot study for this project was done via distance due to COVID-19; hopefully, if funds are available to conduct further pilot studies, in-person site visits could occur. If such is the case, it would likely take about 1 day to conduct the site visit. Unlike the distance meetings for this project where everyone was on one call, the site visit would spend time with key individuals to gather input. Some time should be spent with the younger members of the planning staff to verify that the concepts presented in the guidebook are valid for their context.
- The tool and guidebook should be sent beforehand and perhaps a webinar should be conducted prior to the visit to explain the tool.

The concept of focusing on pilot study states is that they can then become “ambassadors” for the research products to other states. The budgets for implementation proposals usually range from \$25,000 to \$200,000 depending on what is proposed. Proposals to this program must originate with the NCHRP project 08-125 panel, state DOT employees, or members of AASHTO Committees and Councils (it is a

better strategy to have an AASHTO committee be the sponsor).

***Possible Institutions to take Leadership in Applying the Research Findings/Products:***

As noted above, AASHTO is a critical group in fostering the implementation of research products. This is particularly true given at least two committees that would be interested in the results. Obtaining sponsorship from one or two AASHTO committees for a proposal to the Implementation Support Program would lend considerable weight to the proposal. Also as noted, AMPO, NARC, COMTO, APTA, and CUTC could each play a leadership role in their respective audiences.

It is not clear what leadership role the National Highway Institute (NHI) or National Transit Institute (NTI) might play. In discussing the research with representatives of both, it is clear that the development of new training courses and/or updating existing courses follows a well-established process, and usually depends on outreach to their respective constituencies. While the research findings would likely be of interest, neither group should be considered in a leadership role.

***Issues Affecting Potential Implementation and Possible Actions for Addressing Them:***

As was noted before, one of the key issues affecting the implementation of the research products and in particular the Talent Management Tool is that the recommended approach does not reflect exactly the HR and, in some cases, union rules governing the hiring, promoting, and professional development of employees. In an environment where such rules are strictly followed to avoid challenges, adopting a different approach could be viewed as too risky. The approach followed in the final report and guidebook was to suggest a more strategic use for the tool. In the pilot studies it was made clear that the tool was not intended to supplant any HR requirements but rather could be used by transportation planning managers to think about the types of KSAs that their unit or individual positions should have as part of their repertoire to address both current and expected future issues. This is the “marketing” strategy that should be used in disseminating the research products.

As was also mentioned above that a good strategy in highlighting the use and benefits of the research products will be to identify a group of states (or other transportation agencies) that could pilot the tool and guidebook as part of the implementation program. Experience has shown that having peers discussing the usefulness of a particular product is much more successful than having others do so.

***Methods for Identifying and Measuring the Impacts of the Research Products:***

It will be difficult to measure the impacts of the research products in that they are focused on enhancing the planning staff capabilities of transportation agencies. The ultimate benefit of this process will not likely occur for many years, and even then it might be difficult to measure. For those states who actually use the research products, follow up contact such as interviews, could be used to explore changes due to using the tool and related research. Also in the short term, measuring how many participants there are in a webinar provides some indication in interest, but not impact.