

**NCHRP 23-13(01): Telecommuting, Remote Work, and Hybrid  
Schedules: Managing the Shift to a Flexible Work Future**

**Implementation Memorandum**

**Prepared for  
National Cooperative Highway Research Program  
Transportation Research Board  
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The findings of this research resulted in a Telework Suitability Tool to analyze the suitability of an employee or position for telework, a Tracking Tool to document all established telework arrangements within state Departments of Transportation (DOT), and an associated Guide. The Guide helps state DOTs understand different telework and Flexible Work Arrangement (FWA) options and the benefits and challenges of telework; explains how to determine if their organization is ready to implement a telework program, how to measure performance and productivity of an employee who is teleworking, and how to measure telework program effectiveness; and provides instructions for putting the provided tools into use. These tools and guidance can be implemented by state DOTs through incorporating the recommended guidance or through other agencies and organizations promoting the use of the tools and Guide. While the deliverables have a strong focus on determining organization and employee suitability for telework, this Implementation Memorandum calls out important success factors for implementation of the research and deliverables, as well as suggested institutions to lead the application of findings, issues affecting implementation, and methods for identifying and measuring impacts of implementation.

**Recommendations for Putting the Research Findings/Products Into Practice**

The first requirement for promoting implementation of the deliverables is ensuring industry-wide awareness and successful dissemination of the products. As a first step, the tools and Guide will be included in the Transport Research International Documentation (TRID) Database and made available to state DOTs and the overall industry.

*Sharing and Promotion of the Deliverables*

The deliverables should be shared and promoted within and across state DOTs to increase awareness and buy-in. In addition to them being listed in TRID and made available to all state DOTs, they should be actively distributed to appropriate points of contact within state DOTs (e.g., Human Resources) so that they can be used or further distributed as appropriate.

State DOTs or other industry organizations, such as the ones described in the next section, can encourage the use of the research findings and deliverables by sharing them through publication materials, blogs, webinars, and at conferences. Promoting them through these kinds of methods can help increase awareness throughout the industry and improve the likelihood that state DOTs will leverage the deliverables as valuable resources.

**Institutions to Lead Application of Research Findings and Products**

It is essential to identify leading organizations and individuals who will be champions of the results of this research. Those who participated in this research through interviews and focus groups and their associated organization would be ideal champions of the tools and Guide, as they would have already invested in its development. Once the deliverables have been published, we recommend conducting outreach to those who participated in the research and encourage those participants to use, promote, and share the deliverables with their agency and industry peers.

*American Association of State Highway and Transportation Officials (AASHTO)*

AASHTO would be an effective advocate for the application of the tools and Guide because the organization can spread awareness by highlighting relevant research findings and practices

from the deliverables during annual, regional, and committee meetings. Specifically, the Committee of Human Resources would be a target champion as they share, research, and recommend processes, best practices, and policies that enable the human resource functions of state transportation agencies to continuously become stronger, innovative, and more efficient. The committee collaborates with appropriate AASHTO committees, Federal agencies, institutions of higher learning, and organizations in the development of human resource activities, in which the deliverables would be considered.

### **Issues Affecting Implementation and Recommended Actions**

There are likely to be challenges for agencies seeking to implement the deliverables, associated guidance, and telework program overall. The following is a brief summary of the challenges and likely remedies.

#### *Unions*

As mentioned in the Guide, union rules may impact the implementation of the Telework Suitability Tool, as their focus is on equity for all, and not all employees may be suitable for a telework arrangement. In the Guide, we provided recommendations on including the union in the development of a telework policy to ensure their concerns are heard and feedback is incorporated.

#### *Buy-In*

While the purpose of the Guide and tools are to help state DOT agency leadership implement telework agency-wide, there may be parts of the agency or certain managers or leaders who are less supportive or comfortable with telework than others. This can create a challenge because for a telework program to be successful, it needs to be implemented consistently and equitably across the agency. Gaining buy-in, delivering training, and providing resources such as this Guide can help the agency get widespread support. The information contained in the Guide can be used to provide the rationale and anticipated benefits of implementation, and clearly articulating the details and the expected improvements can help with gaining buy-in.

#### *Consistent Application Across Employees*

The labor market is becoming a multigenerational talent pool, and culture clashes between generations can surface for state DOTs not adequately prepared to implement telework. Additionally, selling the idea of a telework program can be challenging due to generational differences in work styles. Additionally, while it may be important for the younger generation of employees to feel supported, trusted, and that they have flexibility, employees later in their career may not deem telework as critical or necessary for their work. As stated above, leveraging the information contained in the guidance around providing the rationale and anticipated benefits of implementation can help with buy-in.

Additionally, there can be a challenge in that not all employees will be suitable for telework. The Guide presents potential remedies for this including offering other types of FWAs (e.g., compressed schedules, part-time) to those not suitable for telework that still allow flexibility and show the agency respects their needs and trusts them.

### **Recommended Methods of Identifying and Measuring Impacts of Implementation**

Measuring the impacts of implementation can be done at both the telework program level as well as the deliverable level. Each is explained below.

*Measuring Impacts of Telework Program*

Chapter III of the Guide goes into thorough detail on measuring the impact and success of a telework program overall, and includes recommended metrics related to recruitment, turnover, employee engagement and morale, and meeting program delivery. Evaluating a telework program can measure its success, including return on investment (ROI), and identify areas that could be improved. Evaluating the telework program can allow agencies to decrease the risk of making changes based on anecdotal information that may be skewed and misrepresents the experiences of all employees. Further, change initiatives can fade or even fail if leadership does not monitor progress and encourage the continuation of efforts to maintain change.

*Measuring Impacts of Deliverable Implementation*

An institution such as TRB (and NCHRP) could have a role in tracking and measuring the impact of the deliverables across the industry. One simple metric to track is downloads of the final report; however, this does not necessarily measure implementation or impact, but rather could just measure interest level. To help gain more information, follow-up research could include surveying state DOTs on use of the tools and Guide and experienced results, as well as more informally gathering feedback from agencies on their use of the research products.