

TECHSUMMARY December 2020

State Project No. DOTLT1000286 / LTRC Project No. 19-1PF

Synthesis on Documentation and Tracking Research Implementation

INTRODUCTION

In general, research funding departs from short-term objectives if the research results are not implementable. Planned and documented technology transfer efforts work to incorporate research findings and evidence-based interventions into real life. However, many research studies in different areas and fields were completed successfully without a real impact on society or undocumented and untracked implementation efforts. Documentation and tracking the technology transfer efforts of research studies is essential throughout the life-cycle of any project. Considering this issue, there is a need for formal guidelines for documenting and tracking the technology transfer efforts to be used by the Southeast Transportation Consortium (STC) and other state highway agencies (SHAs).

METHODOLOGY

The review of literature of this project (Task 1) primarily documented the different practices by several agencies for tracking and documenting the technology transfer efforts. Then, an online survey was developed to identify successful examples of guidelines for documentation and tracking of research implementation efforts currently developed/used in different state departments of

transportation (DOTs), agencies, organizations, and institutions. The reviewed literature and the online survey results provided the research team with valuable information and a list of the best practices by SHAs and other agencies for documenting and tracking research implementation (or T2) efforts/activities. The overall technology transfer process of research findings encompasses different interacting domains. The review of the literature indicated that these domains are

Tracker (Tracking System)

Research Phase
Submission of Initial T2
Plan

Reviewing Initial T2 Plan

Submission of Final T2
Plan & Revised Pl
Questionnaire
PRC Meeting & TRL
Assessment

Submission of T2
Report
Cutcomes

FRC Meeting & TRL
Assessment

Initial T2 Plan

Initial T2 Plan

Initial T2 Plan

PROMeeting & TRL
Assessment

Initial T2 Plan

Initial T2 Plan

PROMeeting & TRL
Assessment

Initial T2 Plan

Initial T2 Plan

Report any impact
Implementing the Project
Cutcomes

Submission of T2
Report
Cutcomes

Submission of T2
Report
Cutcomes

Implementation
Phase

Report any impact
Implementing the Project
Cutcomes

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Report
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Initial T2 Plan

Report any impact
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Figure 1
Overview of the proposed guidelines for documenting and tracking research implemntation

categorized differently based on the nature of the research itself.

CONCLUSIONS

As an outcome of this project, the research team has developed formal guidelines to guide any funding agency tracking and monitoring their projects and the technology transfer (T2) efforts. Figure 1 presents an overview of the different stages of the proposed guidelines. As shown in Figure 1, the developed guidelines outline four main stages for tracking

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FUNDING:

SPR: Pooled Fund: TT-Fed

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and documenting technology transfer and research implementation activities of each funded research project. The main stages of the developed guidelines are briefly outlined next.

RECOMMENDATIONS

Proposal Phase

- Submission of an initial T2 Plan with the proposal by the research team of the project.
- Review of the initial T2 Plan by the funding agency and the PRC members.
- Submission of the revised initial T₂ Plan by the research team for awarding.

Research Phase

- Submission of the PI questionnaire by the research team for a PRC Meeting and TRL assessment at the beginning of the research phase.
- If the research phase is more than 12 months, the research team needs to submit a revised T2 plan after the completion of 50% of the research phase.
- Submission of the Final T2 Plan and the revised PI questionnaire for a second PRC meeting and TRL assessment at the end of the research phase.

Technology Transfer (T2) Phase

- Submission of the T2 Report by the research team at the end of the T2 phase.
- If the T2 phase is more than six months, a Progress T2 Report should be submitted by the research team in the middle of the T2 phase.
- Submission of dissemination documents (e.g., project highlights, project brief, materials for social media or newsletter, etc.) by the research team.

Implementation Phase

- The impact of the project implementation on the reduction in cost;
- The environmental impacts; and
- The percentage of increase in service life.