



# RESEARCH NEED STATEMENT

Call for Projects 2015

Project Research Title: Erosion Prevention and Sediment Control (EPSC) Device Inspector Handbook

TDOT Sponsor Director: Jennifer Lloyd

List TDOT Research Team Lead: Ali Hangul

List TDOT Research Team Members:

Darrell Bost, Construction HQ, Specifications Office

Greg Russell, Environmental Division, Comprehensive Inspection Office

Danny Lane, Research Office, Materials and Test Division HQ

1. Define the problem or research requested. What is the goal/objective of the research?

The Roadway Design Division documents provide guidance to design and installation of EPSC Devices for roadway projects. The current inspector handbook in use by the Environmental Division needs to be updated to reflect the current products and industry applications.

2. Is this research a continuation of a past or present project?

No  Yes

If yes, provide current research project title, RES # and reason for the project continuation.

3. Describe anticipated benefits/expected deliverables.

The roadway Design Division's Drainage Manual Chapter 10 provides extensive guidance on how and where to apply EPSC devices. There is a need for an inspector hand book consisting of correct installation details of EPSC details.

4. What is your timeline for completion of the research?

1 year

5. List the anticipated tasks for this research.

Review current products

Evaluate installation and product benefits per the roadway standard drawings

Include new details as required and update the existing field guide representing field conditions including typical installation pictures.

6. Describe how the project results will be implemented?

Operation field engineers will use the field guide to verify if the EPSC devices are installed correctly.

7. Will this study produce software, web page or other technology that will involve the Information Technology Division?

No  Yes, please describe:

8. Will training be provided to employees as a result of this research?

No  Yes, please describe:

9. Will this research involve equipment or materials purchase?

No  Yes, please describe:

10. Research must support the Long Range Transportation Plan Policy Recommendations **and/or** TDOT Operational Goals and/or Strategic Initiative. (*See attachments for additional information*)

Please indicate which categories the research will support:

Transportation Long Range Plan Policy Recommendations

(A) Accessibility

(B) Safety, Security, and Transportation Resilience

(C) Coordination, Cooperation, and Consultation

(D) Demographic and Employment Changes and Trends

(E) Freight Logistics and Planning

(F) Financial

(G) Mobility

(H) Travel Trends and System Performance

TDOT Operational Goals and/or Strategic Initiative

(A) Deliver transportation projects on schedule and within budget

(B) Maintain the state transportation system to protect the long term investment in our infrastructure assets

(C) Operate and manage Tennessee's transportation system to provide a high level of safety and service to our customers and workers

(D) Expanding mobility choices to maximize access

(E) Dramatically change the paradigm for delivery of transportation products and service to improve the efficiency and effectiveness of Tennessee's transportation network

11. Please explain how the research supports the Long Range Transportation Plan Policy Recommendations **and/or** TDOT Operational Goals and/or Strategic Initiative selected above:

This research will provide an accurate guidance to the Operation Division's field inspectors in regards to EPSC devices as designed and intended by the Design Division. The field guide will accelerate project delivery without confusion and additional cost.

For additional information, please contact:

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