

Status Report for STIC Incentive Projects

October 1st, 2025

State: (NC)

State TIP #: M-0482Q (WBS #: 50145.1.17)

Federal #: GRD-5014 (117)

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STIC Incentive Projects

Project Name	State Champion	Federal Fiscal Year	Federal Funds - Amount Allocated	Federal Funds - Amount Obligated	Federal Funds - Amount Expended
Development of Data Governance for Rail Division's Crossing Data	Todd Meyer	2024	\$34,320	\$34,320	\$34,320

Overall Project Summary

The outcome of this project includes a final report that outlines a comprehensive framework initiated by the North Carolina Department of Transportation (NCDOT) Rail Division, in partnership with Arora Engineers, Mott MacDonald, and supported by FHWA funding, to improve the management of railroad crossing data. Here's a summary of the key activities documented in the report:

- A series of onsite and virtual meetings were conducted to define workflows, identify stakeholder inputs, and align data integration and reporting processes.
- The workflow includes a three-year inspection cycle, mobile data collection, quality control, and integration with the NCDOT's Rail crossing database (SARAH) and FRA databases for compliance
- The initiative is organized into Data, Technology, and Governance tracks to centralize data, implement technical infrastructure, and enforce standardized workflows and policies.
- The project established a sustainable data governance framework to manage railroad crossing data for improved safety, planning, and compliance.
- Specific roles such as Data Analysis Engineer and GIS Specialist are assigned to ensure accountability, consistency, and collaboration in managing crossing data.
- Key stakeholders were presented with findings, future initiatives and plans for increased collaboration regarding their data represented in Rail Division's crossing data.
- The final report lays the foundation for broader data governance at NCDOT, with future initiatives for API integration, mobile tools, stakeholder engagement, and public GIS access.

STIC Project Timeline:

Description of Proposed Work:

Review and recommend enhancements to the Rail Division's current processes and procedures regarding data collection, management, reporting, and publication/distribution for rail crossing data.

Final Progress Report #: 4 – 10/01/2025

Status:

After receiving feedback from our stake holder meeting held on April 24th, 2025, a final draft of the Data Governance Report was submitted to our team. We internally provided feedback on the final document and received the final report, including supporting documents on July 17th, 2025. Currently, I (Todd Meyer) will present this project for the NC Transportation Innovation Council (NC-TIC) Technical Coordination Committee (TCC) meeting currently scheduled on November 12th, 2025.

Progress Report #: 3 – 05/01/2025

Status:

Since our last report we have attended 5 meetings with Mott MacDonald and Arora Engineers, LLC surrounding our data governance framework:

December 12, 2024 – Completed overview of workflow documentation, discussed processes surrounding how we publish data, collect data for the inventory record, complete QA/QC and reconcile data discrepancies.

January 15, 2025 – Initial discussion of business processes surrounding rail crossing workflows.

February 5, 2025 – Detail Discussion of workflow processes and demonstrated crossing record additions and modifications. Reviewed documented outlines since previous meeting and discussed challenges syncing data with FRA database.

February 20, 2025 – Discussed the GIS portion of rail data including quarterly submittals to GIS for publishing updated data layers.

February 25, 2025 – Collaborated with NCDOT Traffic Engineering and Structures management about their databases and how we can integrate with their data.

April 24, 2025 - Held a stakeholder meeting to discuss our draft data governance framework and the importance of integrating with stakeholders' authoritative data sets to support the quality and validity of our rail crossing data.

Progress Report #: 2 – 11/06/2024

Status:

Executed agreement with consultant and provided notice to proceed. Shared content and documentation surrounding crossing inventory procedures, references and workflows. Held an initial discovery workshop with the consultant and our data analysis team to review and provide feedback on the documentation provided. Reviewed and finalized minutes from the workshop. Held a follow-up meeting to discuss additional input sources for rail crossing data. Completed meeting minutes and action items.

Progress Report #: 1 – 05/22/2024

Status:

Finalizing the fee for scope of work to complete project. Notice to Proceed (NTP) planned to be sent by the end of June 2024. Expected duration of work to be 4 – 6 months after the project kickoff meeting is held.