

**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
FY 23-24 CONSOLIDATED RAIL INFRASTRUCTURE AND SAFETY
IMPROVEMENTS “CRISI”
GRANT APPLICATION**

**Driving Maine's Rural Economy through
Freight Rail Efficiency Project**

STATEMENT OF WORK

ARTICLE IV. STATEMENT OF WORK

4.1. General Project Description

The *Driving Maine's Rural Economy through Freight Rail Efficiency Project* (the "Project") calls for railroad track improvements to two Eastern Maine Railway (EMR) mainlines in Penobscot, Aroostook, Washington, and Piscataquis counties in Maine, as well as improvements to a branch line serving a bio-industrial park. Improvements will significantly enhance the operating speed, reliability, and safety conditions of over 140 miles of existing active or dormant track, including upgrading or replacement of over 97.3 miles of rail, installing 86,375 crossties/108,357 tons of ballast, replacing jointed with continuously welded rail (CWR), installing Equipment Defect Detectors (EDDs), and making at-grade crossing upgrades to seven highway grade crossings. The northern portion of the Project includes rehabilitating the currently dormant track approaching and inside the One North Bio-Industrial Park. Improvements inside the Park include rehabilitating yard tracks, reinstalling a passing siding, and making other rail infrastructure improvements to support new, sustainable industries and the family-wage jobs they will create. ***The Project will improve safety and resilience to climate change-related events; provide jobs to support families in a rural area decimated by macroeconomic shifts in the paper industry; and create new rail capacity and efficiencies for sustainable material manufacturing and distribution.***

The Project's objectives and related performance measures associated with the Project include enhanced safety at crossings and along the length of the track, faster operating speeds that contribute to the economic attractiveness to rail-based industry, lower emissions, and reduced operating and maintenance costs.

4.2. Project Location

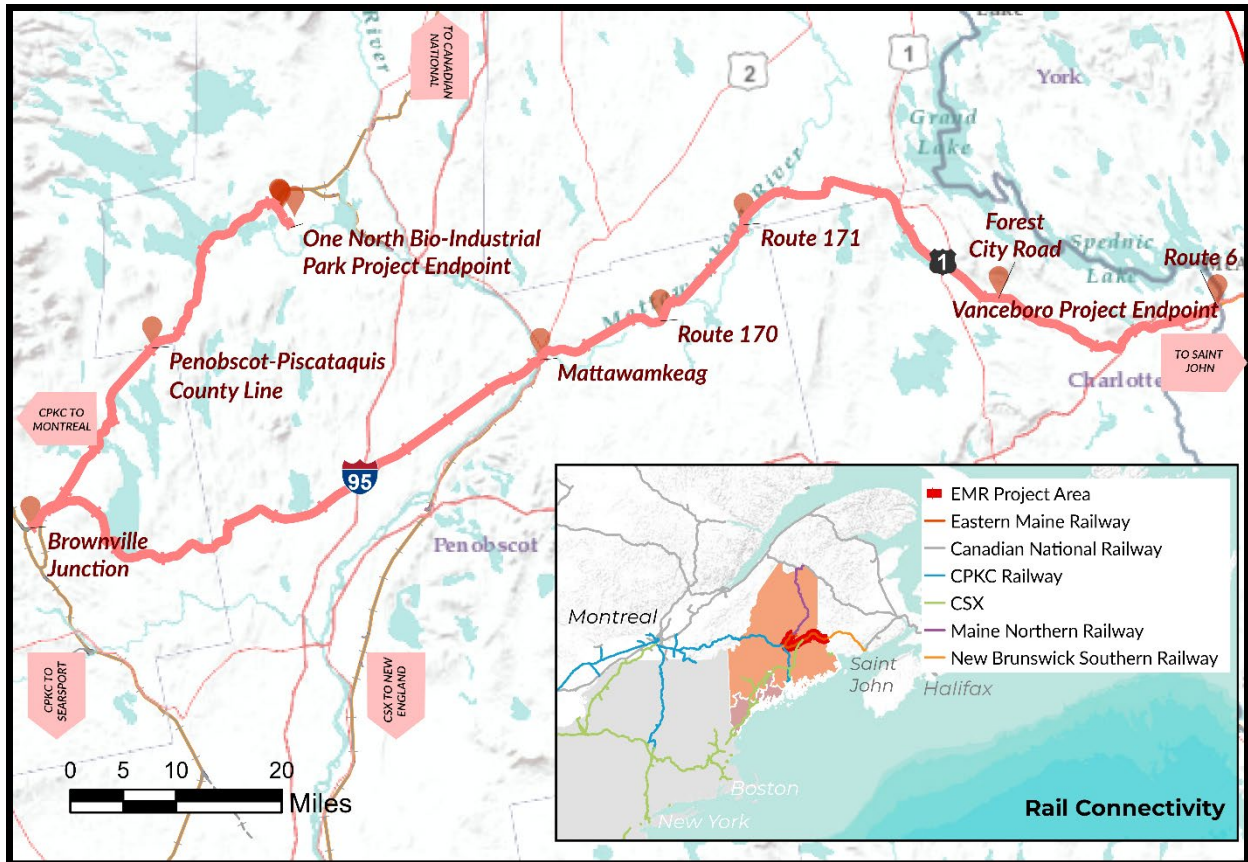
The Project stretches from Millinocket to Vanceboro and runs through the following counties: Penobscot, Piscataquis, Washington, and Aroostook. The Project is 100 percent located in a rural area. The Project begins in the freight yard in Millinocket, Maine with improvements to the One North Bio-Industrial Park site; mainline track upgrades from Millinocket yard to Brownville, Maine; and mainline track and structure improvements from Brownville to Vanceboro, ME. The area is remote and rural, leading to a classification by FRA CRISI as a Rural Area (*source: BTS Rural Funding Eligibility Tool*), although the Town of Millinocket was designated as an Urban Cluster in the 2020 Census. The Project is a rural freight rail Project. According to the U.S. Census Bureau's Population Estimates Program, the population of Maine was 1,395,722 as of July 2023, a 1.2% increase from 2020.

The project boundaries and waypoints are described in [Table 1](#) and [Figure 1](#) on the next page.

Table 1. Site and Waypoint Locations

Site or Waypoint Description (refer to Figure 1)	Latitude (N) / Longitude (W)	Milepost
One North Bio-Industrial Park, Project Endpoint	45.639091 / -68.696194	109
At-Grade Intersection #1: Elm Street	45.652003 / -68.709474	104.77
At-Grade Intersection #2: Poplar Street	45.653669 / -68.710758	104.77
At-Grade Intersection #3: Spruce Street	45.654930 / -68.712095	104.77
Penobscot-Piscataquis County Line	45.523044 / -68.885755	90.18
Brownville Junction	45.350505 / -69.052079	72.43
I-95 Crossing (separated)	45.394764 / -68.601692	77.00
Mattawamkeag (Town)	45.511941 / -68.355001	62.00
Route 170	45.549036 / -68.190721	53.20
Route 171	45.641053 / -68.076918	44.39
U.S. Highway 1 Crossing	45.605590 / -67.804840	26.99
Forest City Road	45.571100 / -67.728327	22.40
Route 6	45.563250 / -67.429540	5.72
Vanceboro, Project Endpoint	45.563988 / -67.427424	5.72

Figure 1. Project Boundaries and Waypoints



4.3. Project Scope

This Project will restore and expand Eastern Maine Railway's (EMR) access to a strategically located industrial site in Northern Maine combined with improving safety, capacity, efficiency, and reliability along the EMR mainline between Millinocket and Brownville Junction (Millinocket subdivision) as well as Brownville Junction to Vanceboro (Mattawamkeag subdivision). The Project is inclusive of the following tasks.

- Rehabilitation of 1.88 miles of mainline track infrastructure between EMR's Millinocket yard and the end of the One North Bio-Industrial Park. This work will consist of new crossties, a new 115lb rail, ballast and surfacing throughout, and a new mainline turnout.
- Rehabilitation of 1.51 miles of One North sidings utilizing new ties, existing relay rail as applicable, ten new turnouts, and ballast and surfacing throughout.
- Restoration of crossing signals and safety upgrades to grade crossing protection devices at seven highway/rail grade crossing locations to include flashers and crossing gates.
- Track structure upgrades and safety improvements on 32 miles of Eastern Maine Railway's Millinocket subdivision. Work includes replacing 15,000 ties, upgrading 12 lineal miles from worn 100lb rail to new 115lb rail, upgrading two mainline turnouts, and new ballast and surfacing.
- Upgrades to rail infrastructure and safety improvements on the 100 miles of Eastern Maine Railway's Mattawamkeag subdivision. Work includes replacing 62,400 ties, upgrading 80 lineal miles from worn 100lb rail to new, continuously welded 115lb rail, transposing main line worthy relay rail, upgrading four mainline turnouts, and installing new ballast and surfacing.
- Installing three new Equipment Defect Detectors (EDDs, sometimes known as "Hot Box" detectors) with dragging equipment detection and Automatic Equipment Identification Detectors (AEIs) located near mileposts 13.0, 62.0, and 85.0 on the Mattawamkeag subdivision, as well as the upgrades to the four public road crossings within this subdivision. The EDD equipment would supplement existing detectors with the objective being 15-mile spacing.

The Project will enhance the safety and performance of the existing rail infrastructure and improve capacity to serve new growth markets in forest and aquaculture products locally and connect them to markets nationally and internationally. The Recipient will notify FRA in writing of any requested changes in Project Scope and will not proceed with the changed scope unless approved by FRA in writing. If approved, changes to Project Scope may require additional environmental review or an amendment to this Agreement.

Task 1: Project Administration and Management

Subtask 1.1: Project Administration

The Recipient (Maine DOT) will perform all tasks required for the Project through a coordinated process, which will involve affected railroad owners, operators, and funding partners, including:

- Eastern Maine Railway (EMR);
- One North/Our Katahdin; and
- FRA.

The Recipient will facilitate the coordination of all activities necessary for the implementation of the Project. The Recipient will:

- If not held prior to award, MaineDOT will participate in a Project kickoff meeting with FRA following the award;
- complete necessary steps to hire a qualified consultant/contractor to perform required Project work, as necessary;
- hold regularly scheduled Project meetings with FRA;
- inspect and approve work as it is completed; and
- participate in other coordination, as needed.

During the final design and project scheduling, MaineDOT will work with its partners, Eastern Maine Railway (cash match and railroad owner), and One North/Our Katahdin (cash match and operator of the One North Bio-Industrial Park), to finalize any needed design work, environmental approvals, and coordination that will be completed prior to execution of the CRISI grant agreement. The project management, construction engineering, and inspection during the construction phase will be completed by EMR or its consultant. In addition, all required reporting to FRA will be completed by MaineDOT.

As part of the Project Management approach, the Grantee will ensure the Project stays on schedule and within budget. The Grantee will develop a detailed Project Work Plan that contains the work tasks necessary for completing the scope of work. The Project Work Plan will include information on the Project team organization, team decision-making, roles and responsibilities, and interaction with FRA. In further detail, the plan will include communication standards, invoicing and progress reporting methods/procedures, and the scope of work. The Grantee will prepare and submit a Project Management Plan (PMP) outlining Project management and quality control. The Grantee will submit quarterly progress reports and invoices to include tracking of budgets and schedules. The Grantee will also perform Quality Assurance and Quality Control (QA/QC) of all deliverables prior to submission to FRA for approval, including the following communication protocols:

- *Quarterly Progress Reports and Monthly Invoices.* The Grantee will prepare detailed quarterly progress reports and invoices, and will submit them to FRA for approval within 30 days of each period completed.
- *Bi-weekly Project Progress Meetings.* The Grantee will meet with its consultant team and Project partners on a bi-weekly basis, either in person or via conference call, to monitor progress and review upcoming tasks. In addition, the Grantee and Project partners will meet with FRA regularly, either bi-weekly or monthly, either in person or via conference call, to report progress, provide status updates on milestones achieved, outline work to be accomplished, and review the schedule and budget. The Grantee shall submit Progress Reports and Meeting Minutes of Progress Meetings to FRA for review.

Subtask 1.2: Project Management Plan

The Recipient will prepare a Project Management Plan (PMP), that describes how the Project will be implemented and monitored to ensure effective, efficient, and safe delivery of the Project on time and within budget. The PMP will describe, in detail, the activities and steps necessary to complete the tasks outlined in this Statement of Work.

The PMP will include a Project Schedule and Project Budget for the work to be performed under this Agreement. The Project Schedule will be consistent with the Estimated Project Schedule in Section 5.2 of this Attachment 2, and will provide a greater level of detail. Similarly, the Project Budget will be consistent with the Approved Project Budget in Section 6.5 of this Attachment 2 and provide a greater level of detail.

The Recipient will submit the PMP to FRA for review and approval. The Recipient will implement the Project as described in the approved PMP. The Recipient will not begin work on subsequent tasks until FRA has provided written approval of the PMP, unless FRA has provided pre-award authority for such work under Section 6.6 of this Attachment 2. FRA will not reimburse the Recipient for costs incurred in contravention of this requirement.

FRA may require the Recipient to update the PMP. The Recipient will submit any such updates to FRA for review and approval, and FRA will determine if updates to the PMP require an amendment to this Agreement. The Project Budget and Project Schedule may be revised consistent with Article 5 of Attachment 1 of this Agreement without amending this Agreement.

The Recipient will identify agreements governing the construction, operation, and maintenance of the Project in the PMP. If requested by FRA, the Recipient will provide FRA with the final, executed copies of any agreements within ten business days of the request.

The PMP will be consistent with the FRA Guidance on Development and Implementation of Railroad Capital Projects (Railroad Capital Projects Guidance) and 49 U.S.C. § 22903, as applicable. As identified in the Railroad Capital Projects Guidance, the Project Budget for a capital project should be based on a Capital Cost Estimate for the Project. The level of effort required to prepare a Capital Cost Estimate varies based on Project cost, scope, and complexity.

For Major Projects and for Non-Major Projects where FRA determines it is appropriate based on Project cost, scope, and complexity, FRA will work with the Recipient prior to obligation to develop and document expectations and requirements for preparing a Capital Cost Estimate and Financial Plan. These may be included under Task 1 of Section 4.3 of Attachment 2 as separate subtasks and/or deliverables.

The Grantee shall submit a detailed Project Work Plan to FRA for review and acceptance. The Grantee acknowledges that work on subsequent tasks will not commence until the Detailed Project Work Plan, Budget, and Schedule have been completed and submitted to FRA, and the Grantee has received approval in writing from FRA. The FRA will not reimburse the Grantee for costs incurred in contravention of this requirement.

Subtask 1.3: Project Closeout

The Recipient will submit a Final Performance Report as required by Section 7.2 of Attachment 1 of this Agreement, which should describe the cumulative activities of the Project, including a complete description of the Recipient’s achievements with respect to the Project objectives and milestones. MaineDOT will comply with Chapter 2 CFR §200.328(b)(1), which requires all grant recipients to submit a final performance report detailing the cumulative activities completed during the life of the Project, including a complete description of the recipient’s achievements with respect to the project objectives and milestones.

Task 1 Deliverables:

Deliverable ID	Subtask	Deliverable Name
1.1	1.2	Project Management Plan
1.2	1.3	Project Closeout/Final Performance Report

Task 2: Rehabilitate Millinocket Branch Line

Task 2 Deliverables:

Deliverable ID	Subtasks	Deliverable Name
2.1	Improve 1.88 miles of Millinocket Branch Line track, including vegetation removal, upgrades to existing ballast/ties/rail, and switches and grade crossing signal upgrades	Millinocket Branch Line Rehabilitation

Task 3: Rehabilitate One North Customer Sidings on Millinocket Branch Line

Task 3 Deliverables:

Deliverable ID	Subtasks	Deliverable Name
3.1	Rehabilitation of 1.51 miles of yard track. Work includes new ties, rail, ballast, and switches	One North Customer Sidings Rehabilitation

Task 4: Upgrades to Eastern Maine Railway's Millinocket Subdivision

Task 4 Deliverables:

Deliverable ID	Subtasks	Deliverable Name
4.1	Upgrade crossties, rail, mainline switches, and ballast throughout the subdivision.	EMR Millinocket Subdivision Upgrades
4.2	Upgrade Crossings/Equipment Defect Detector/Automatic Equipment Identification wayside scanner	EMR Millinocket Safety Upgrades

Task 5: Upgrades to Eastern Maine Railway's Mattawamkeag Subdivision

Task 5 Deliverables:

Deliverable ID	Subtasks	Deliverable Name
5.1	Upgrade crossties, mainline switches, and ballast throughout the subdivision.	EMR Mattawamkeag Subdivision Upgrades
5.2	Railway surfacing	EMR Mattawamkeag Surfacing Program
5.3	Upgrade Crossings/Equipment Defect Detector/Automatic Equipment Identification wayside scanner	EMR Mattawamkeag Safety Upgrades

Task 6: Contingency

Task 6 Deliverables:

Deliverable ID	Subtasks	Deliverable Name
6.1	Materials over-runs in the event of supply shortages or inflationary effects.	Contingency (5% of Project Cost)

Additional Tasks include the following:

None.

4.4. Implement Required Environmental Commitments

The Recipient will implement the Project consistent with the documents and environmental commitments identified below.

Instructions: To be completed in coordination with an FRA environmental protection specialist. If there are environmental commitments in the National Environmental Policy Act (NEPA) decision document, Section 106 Programmatic Agreement (PA), or Memorandum of Agreement (MOA), or in other documents or correspondence associated with the environmental review for the Project, include and complete Table 4-A.

Table 4-A: Environmental Commitments

Document Type	Commitment Reference	Document Date
[Categorical Exclusion, Finding of No Significant Impact, Record of Decision]	[insert reference to section(s) of decision where commitment(s) are identified]	[insert date of decision]
[insert title of MOA, PA, or other document or correspondence that contains environmental commitment(s)]	[insert reference to section(s) of document where commitment(s) are identified]	[insert date of MOA/correspondence]

MaineDOT has prepared a draft Categorical Exclusion Worksheet as part of this application for the areas of improvements encompassing the existing track. This work is all inside existing railroad rights-of-way. While the proposed greenfield track improvements have been delineated for wetland impacts and evaluation of vernal pools, further investigation and permitting work under NEPA will be required after the submission of the Project application. MaineDOT has already completed preliminary investigations, described in detail in the Project Narrative.

ARTICLE V. AWARD DATES AND ESTIMATED PROJECT SCHEDULE

5.1. Award Dates

Budget Period End Date: Estimate for end of Project is 29 months from Notice of Award (reference next section).

Period of Performance End Date: Per performance measurements is 32 months after receipt of Notice of Award.

5.2. Estimated Project Schedule

Milestones associated with this Agreement are identified in Table 5-A: Estimated Project Schedule. The Recipient will complete these milestones to FRA’s satisfaction by the Schedule Date, subject to Article 5 of Attachment 1 of this Agreement. The Recipient will notify FRA in writing when it believes it has achieved the milestone.

Section 5.3 of Attachment 1 of this Agreement provides that the Recipient will request an amendment to update the Estimated Project Schedule if the Recipient’s estimate for a milestone changes to a date that is more than six months after the date listed.

Illustrative milestones are identified in the table below. Provide additional or alternative milestones as appropriate for the Project.

Table 5-A: Estimated Project Schedule

Milestone	Schedule Date
NEPA Completion	4 months from notice of award
Task 1: Project Administration and Management	3 months from notice of award (<i>project coordination and reporting are ongoing for the life of the Project</i>)
Task 2: Rehabilitate Millinocket Branch Line	26 months from notice of award
Task 3: Rehabilitate One North Customer Sidings on Millinocket Branch Line	26 months from notice of award
Task 4: Upgrades to Eastern Maine Railway’s Millinocket Subdivision	26 months from notice of award
Task 5: Upgrades to Eastern Maine Railway’s Mattawamkeag Subdivision	26 months from notice of award
Construction Substantial Completion	26 months from notice of award
Final Performance Report	90 days after construction is completed

ARTICLE VI. AWARD AND PROJECT FINANCIAL INFORMATION

6.1. Award Amount

Agreement Federal Funds: \$53,313,091

Contingent Commitment: N/A

6.2. Federal Obligation Information

Federal Obligation Type: Single

6.3. Federal Authorization and Funding Source.

Authorizing Statute: Section 11301 of the Fixing America's Surface Transportation (FAST) Act, Pub. L. 114-94 (2015); 49 U.S.C. § 22907

Appropriation: Consolidated Appropriations Act, 2023, Div. L Tit. I, Pub. L. 117-328 (2023 Appropriation, December 29, 2022), Consolidated Appropriations Act, 2024, Div. F. Tit. I, Pub. L. 118-42 (2024 Appropriation, March 9, 2023), FY 2023, and FY 2024 advance appropriations provided by Division J of the Infrastructure Investment and Jobs Act (IIJA), Pub. L. No. 117-58 (November 15, 2021)

6.4. Funding Availability

Program funding that is obligated under this Agreement remains available until expended.

6.5. Approved Project Budget

The estimated total Project cost under this Agreement is \$66,641,364.

FRA will contribute a maximum of 80% percent of the total Project cost, not to exceed the Agreement Federal Funds in Section 6.1 of this Attachment 2. FRA will fund the Project at the lesser amount of the Agreement Federal Funds or the FRA maximum contribution percentage of total Project costs.

The MaineDOT (Recipient) will manage and administer the Project. EMR will contribute \$11,713,340 (17.6%), and One North/Our Katahdin will contribute \$1,614,933 (2.4%) in cash contributions.

The MaineDOT will complete the Project to FRA's satisfaction within the Approved Project Budget, subject to Article 5 of Attachment 1 of this Agreement.

Table 6-A: Approved Project Budget by Task

Task #	Task Title	Agreement Federal Funds	Agreement Non-Federal Funds	[Other Federal Funds]	[Other Non-Federal Funds]	Total
1	Project Administration and Management					
2	Rehabilitate Millinocket Branch Line	\$3,254,716	\$813,679			\$4,068,395
3	Rehabilitate One North Customer Sidings on Millinocket Branch Line	\$3,205,016	\$801,254			\$4,006,270
4	Upgrades to Eastern Maine Railway's Millinocket Subdivision	\$7,558,664	\$1,889,666			\$9,448,330
5	Upgrades to Eastern Maine Railway's Mattawamkeag Subdivision	\$36,755,977	\$9,188,994			\$45,944,971
6	Contingency (5% of Project Cost)	\$2,538,719	\$634,680			\$3,173,398
Total		\$53,313,091	\$13,328,273			Total Project Cost: \$66,641,364

Table 6-B: Approved Project Budget by Source

Funding Source	Total Amount	Percentage of Total Project Cost
Federal Share	\$53,313,091	80%
Agreement Federal Funds: FY 2023-FY 2024 Consolidated Rail Infrastructure and Safety Improvements Program	\$53,313,091	80%
Agreement Non-Federal Funds	\$13,328,273	20%
Eastern Maine Railway	\$11,713,340	17.6%
One North	\$1,614,933	2.4%

6.6. Pre-Award Costs

None. Consistent with 2 C.F.R. part 200, costs incurred before the date of this Agreement are not allowable costs under this award. FRA will neither reimburse those costs under this award nor consider them as a non-Federal cost-sharing contribution to this award.

6.7. Phased Funding Agreement

Not applicable.

Pursuant to 49 U.S.C. § 24911(g)(2)(C), if the Recipient does not carry out the Project for reasons within control of the Recipient, the Recipient will repay all Federal grant funds awarded for the Project from all Federal funding sources, for all Project activities, facilities, and equipment, plus reasonable interest and penalty charges allowable by law or established in this Agreement. For the avoidance of doubt, this clause does not restrict or otherwise limit FRA's ability to act under Article 9 or 10 of Attachment 1 of this Agreement.

ARTICLE VII. PERFORMANCE MEASUREMENT INFORMATION

Table 7-A: Performance Measurement Table identifies the performance measures that this Project is expected to achieve. These performance measures will enable FRA to assess the Recipient’s progress in achieving grant program goals and objectives. The Recipient will report on these performance measures in accordance with the frequency and duration specified in Table 7-A.

Upon Project completion, the Recipient will submit reports comparing the actual Project performance of the new and or improved asset(s) against the pre-Project (baseline) performance and expected post-Project performance as described in Table 7-A. The Recipient will submit the performance measures report to the Project Manager in accordance with Table 7-A.

Table 7-A: Performance Measurement Table

Rail Measure	Unit Measure	Measurement Period	Measurement Frequency	Primary Administration Priorities	Secondary Administration Priorities	Description and Goal
Freight Rail Volumes	Carload	Post-Construction	Quarterly	Workforce Development, Job Quality & Wealth Creation	Climate Change & Sustainability	Increase of 25% indicate more employment
Slow Order Miles	Mile	Post-Construction	Annual	Workforce Development, Job Quality & Wealth Creation	Climate Change & Sustainability	Miles with temporary speed reductions decrease by 90%

The Recipient will prepare a Project Outcomes Report pursuant to Section 8.3 of Attachment 1 of this Agreement.