

**MEMORANDUM OF UNDERSTANDING  
BETWEEN  
THE UNITED STATES DEPARTMENT OF TRANSPORTATION (USDOT)  
AND THE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)**

To Coordinate and Cooperate on Activities to Support  
Climate Smart Transportation

Agreement Number:

**Article I. Background and Purpose**

Climate change and extreme weather events such as heat waves and flooding present a significant and growing risk to the safety, effectiveness, equity and sustainability of our transportation infrastructure and the communities it serves. There is a need to accelerate reductions in greenhouse gas emissions and make our transportation infrastructure, including U.S. government fleets, more resilient to the impacts of climate change and extreme weather events now and in the future. The Bipartisan Infrastructure Law (BIL) and the Inflation Reduction Act (IRA) are supporting unprecedented improvements in resilience across our transportation system. Improving climate resilience when planning, designing, maintaining, and repairing transportation assets is essential for protecting the integrity of the transportation system and the people that depend on it. Resilience investments result in cost savings over time through reduced repair costs, improved safety, and reduced travel and supply chain disruption. In recognition of the urgency of action needed, the Agencies undertake this Memorandum of Understanding (MOU) to work towards the highest level of collaboration and coordination across our Agencies.

Through this close partnership, the National Oceanic and Atmospheric Administration (NOAA) and the United States Department of Transportation (USDOT) (individually, “an Agency” and collectively, “the Agencies”) will work together to provide climate and environmental information and technical assistance to the transportation sector. This MOU will work to ensure that federal stakeholders (e.g. USDOT staff) and non-federal stakeholders (State, local, Tribal, and territorial governments or commercial entities) have the climate and environmental data, tools, and technical expertise needed to incorporate climate change resilience into their decision making on transportation.

This partnership builds on many years of collaboration between NOAA and USDOT, and the agencies look forward to productive collaboration well into the future.

**Article II. Goals**

The Agencies are committed to working together towards the following high-level goals:

- Through iterative and collaborative engagement between transportation stakeholders and NOAA climate scientists and communication specialists, work to expand and improve tools and technical assistance available to the transportation sector to better ensure that transportation agencies have the climate data, environmental information, tools, and technical expertise needed to incorporate climate change resilience and emission reduction into their decisions on transportation infrastructure planning, design, construction, operations, technology application, maintenance, preservation, and emergency recovery.
- Prioritize helping people, communities, and infrastructure authorities that are most vulnerable to climate impacts—this includes addressing issues of inequality and environmental justice associated with climate change impacts and adaptation.

### **Article III. Planned Actions**

Recognizing the mutual interest across the Agencies in improving access and delivery of climate information, technical assistance, and workforce training, the Agencies agree to work toward the following actions:

1. Precipitation Frequency Projections: Incorporate nonstationary methods and climate model projections into the generation of authoritative precipitation frequency data.
2. Climate Data and Visualization Tools: Deliver climate data and visualization tools responsive to the unique needs of policy makers and transportation engineers and planners for information on extreme heat, precipitation, sea level rise, and other climate change impacts.
3. Grants: USDOT consults with NOAA to integrate climate change and emission reduction considerations into transportation grants.
4. Nature-Based Solutions: Enhance and expand technical assistance and partnerships on nature-based solutions to reduce flooding and damage to transportation infrastructure.
5. Technical Assistance Partnerships: Enhance partnerships between transportation stakeholders and NOAA supported technical assistance providers.
6. Education: Deliver educational products for transportation agency employees and transportation stakeholders.
7. National Conferences and International Fora: NOAA and USDOT will collaborate to leverage national conferences for delivery of climate services to transportation professionals and international fora to share information and progress in policy and regulatory discussions among transportation sector representatives.
8. Evaluation: Evaluate the performance of projects to improve transportation resilience.

Additional actions that advance the goals specified in Article II could be added in the future, after deliberations.

Specific activities, milestones and points of contact for the above actions will be detailed in a NOAA-USDOT Work Plan, updated annually to reflect activities completed and additional activities planned.

**Intellectual Property**: The Parties do not expect the activities carried out under this Agreement to result in the creation of intellectual property. However, in the unusual case where intellectual

property is created, the Parties agree to negotiate an appropriate agreement addressing their respective use of, and rights to, such intellectual property.

#### **Article IV. Financial Arrangements**

This MOU is neither a fiscal nor funds obligation document. Any activities involving reimbursement or contribution of funds between the parties of this MOU will be handled in accordance with applicable laws, regulations, and procedures. Such activities will be documented in separate agreements, with specific projects between the Agencies set forth. The separate agreements will reference this MOU. This MOU does not establish authority for noncompetitive award between the Agencies for any contract or other form of agreement.

This MOU defines in general terms the basis on which the Agencies will cooperate and, as such, does not constitute a financial obligation to serve as a basis for expenditures. Expenditures of funds, human resources, equipment, supplies, facilities, training, public information, and expertise will be provided by each signatory to the extent that their participation is required and resources are available.

This MOU in no way restricts the Agencies from participating in similar activities or arrangements with other public or private agencies, organizations, or individuals.

This MOU does not obligate the Agencies to expend appropriations on any particular project or purpose or to enter into any agreements, contracts, or other obligations, even if funds are available.

All activities under this MOU are subject to the availability of appropriated funds.

#### **Article V. Terms of Understanding**

Effective date: This MOU shall take effect upon the date of the last signature affixed.

Modification: This MOU may be renegotiated, amended, or modified at any time by mutual agreement of the Agencies.

Period of Performance: This MOU takes effect upon the signature of the parties and will remain in effect for **5 years from the date of execution**, unless extended by mutual agreement of the parties or unless earlier terminated as provided herein.

Termination: This MOU may be terminated by either Agency by providing written notice and explanation to the other agency at least 90 calendar days in advance of the effective date of termination.

Review: This MOU and its accompanying work plan shall be reviewed annually at one of the regularly scheduled USDOT/NOAA Coordination Committee meetings.

This MOU is not intended to, and does not create, any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity, by a party against the United States, its agencies, its officers, or any person.

This MOU is subject to the laws of the United States of America, as applicable.

## **Article VI. Authorities**

The authorities of the USDOT to enter into this MOU include:

- (1) 23 U.S.C. § 503(b)(3)(B)(viii). Requires that “...the Secretary [of Transportation] shall carry out research and development activities ... to study vulnerabilities of the transportation system to ... extreme events and methods to reduce those vulnerabilities.”
- (2) The Infrastructure Investment and Jobs Act (Pub. L. 117–58, div. B, title V, §25007, Nov. 15, 2021, 135 Stat. 849), directed the Secretary of Transportation to consult with “appropriate Federal, State, and local agencies, [to] develop a process for quantifying annual risk in order to increase system resilience with respect to the surface transportation system of the United States by measuring—(1) resilience to threat probabilities by type of hazard and geographical location; (2) resilience to asset vulnerabilities with respect to each applicable threat; and (3) anticipated consequences from each applicable threat to each asset.”

The authorities of NOAA to enter into this MOU include:

- (1) 15 U.S.C. § 313, which authorizes the Secretary to collect and disseminate weather and climate observations.
- (2) 33 U.S.C. § 883d, which authorizes the Secretary of Commerce to conduct investigations and research in geophysical sciences.
- (3) 33 U.S.C. § 883e, which authorizes the Secretary of Commerce to establish the terms and enter into agreements with any State or subdivision thereof, any Federal agency, or any public or private organization for authorized investigations, performance of related surveying and mapping activities, and preparation and publication of the results.

## **Article VII. Publications and Release of Information**

Publications documenting cooperative efforts may be prepared by either Agency, or jointly, provided that both Agencies have an opportunity to review manuscripts prior to publication. To the extent possible, decisions involving authorship, review of reports, and other conditions and circumstances will be addressed during the preparation of Interagency Agreements referencing this MOU.

Should disagreements arise on the interpretation of the provisions of this agreement that cannot be resolved at the operating level, the areas(s) of disagreement shall be stated in writing by each Agency and presented to the other Agency for consideration. If agreement or interpretation is not reached within 30 days, the parties shall forward the written presentation of the disagreement to respective higher officials for appropriate resolution.

The Agencies agree that sharing credit is mutually beneficial and will make every effort to ensure that appropriate citation and attribution, including the use of official agency visual identifiers, is given for work performed under this MOU.

Publicity and public information products, including news releases, reports, briefing papers, or other information products released publicly, are subject to the same terms and conditions as other publications as stated above.

Any commitment of either Agencies to preserve the confidentiality of information is subject to applicable United States laws and regulations.

**Article VIII. AGENCY CONTACTS** (*Subject to change*)

**NOAA**

- NOAA Executive Lead: Amanda McCarty, Director, NOAA Climate-Ready Nation
- NOAA Co-Coordinator: Bhaskar Subramanian (Program Manager, AdSci) and Trevor Meckley (Program Manager, ESLR) in partnership with the NOAA Service Delivery Team (Ellen Mecray and Miki Schmidt) and the NOAA Climate Team (Roger Griffis, *Acting Lead*).

**USDOT**

- USDOT Executive Lead: April Marchese, Director, Environmental Policy, Office of the Secretary of Transportation
- USDOT Co-Coordinator: Tina Hodges, Heather Holsinger, and Rebecca Beavers, Environmental Protection Specialists, Office of the Secretary of Transportation; In partnership with USDOT Climate Change Center.

**IX. SIGNATURES**

This agreement is effective upon acceptance by both agencies as indicated by the signatures below.



Christopher Coes  
Acting Under Secretary of  
Transportation for Policy  
Date: *August 23, 2024*



Dr. Richard W. Spinrad  
Under Secretary of Commerce  
for Oceans and Atmosphere  
and NOAA Administrator  
Date: *11/14/2024*