



MEMORANDUM

Resolution 23-073, A Resolution of the City Council of Homer, Alaska Expressing Support for the Homer Spit Climate Resiliency Project and Endorsing the City's Application to the U.S. Department of Transportation for Planning Grant under the FY23 Promoting Resilient Operations for Transformative, Efficient and Cost Effective Transportation (PROTECT) Grant Program. City Manager.

Item Type: Backup Memorandum
Prepared For: Mayor and Homer City Council
Date: July 19, 2023
From: Jenny Carroll, Special Projects and Communications Coordinator
Through: Rob Dumouchel, City Manager

I. Issue: The purpose of this Memorandum is to request City Council support for a FY23 Federal PROTECT grant application via Resolution 23-073. A Resolution of support from the governing body is required to be included in the application, which is due August 18, 2023.

II. Background:

The Spit has been undergoing a period of accelerated shoreline erosion due to changes in climate, storm patterns and uneven shoreline hardening. Without a long-term erosion mitigation and maintenance plan, the State owned and maintained Spit Road and other critical infrastructure on the Spit is at risk.

For years, the City, US Army Corps of Engineers (USACE) and the Alaska Department of Transportation and Public Facilities (AK DOT&PF) have collaborated to address the issue. AK DOT&PF collaborated to install revetments along the west side of the Spit. USACE conducted two extensive studies that provided detailed erosion information and a dredged materials management plan. In 2019, a Coastal Erosion Assessment considered concept design alternatives for improving resilience of roadway embankment. These actions and studies lay a strong foundation to complete planning and secure multi-agency coordination to protect the Spit.

The Homer Spit Road Erosion Mitigation project has long been identified as a priority transportation project in the City's Capital Improvement Plan. It is currently included as a Legislative Priority project. As such, City staff have been advocating for the project at the State and Federal level.

At a recent meeting, AK DOT&PF Commissioner Anderson and his planning staff communicated that they would like to partner with the City to seek discretionary grant funds from the Federal Highway Administration's PROTECT program to complete planning and other pre-development design work for erosion mitigation on the Homer Spit.

By taking the lead on the PROTECT grant effort, AK DOT&PF is prioritizing the Homer Spit erosion mitigation in their planning portfolio. This is an opportunity for the State to resume an active partnership with the City and the US Army Corps of Engineers, as solutions will truly take a multi-agency and multi-year effort. Planning is an important first step!

The Homer Spit Climate Resiliency Project is a planning project that will build upon previous studies to complete both planning and significant pre-development actions, ideally readying the project for implementation. The scope of activities is still being developed, but initially it includes developing a data-driven, climate-sensitive roadway repair plan and long-term nature-based design solutions (such as beach re-nourishment) based on short and long-term climate impacts to the roadway facility. The project includes

- an assessment of Nature based solutions
- a beach sediment investigation and sediment management plan
- analysis of preliminary design alternatives versus anticipated performance
- cost estimation and development of a funding plan
- public and agency involvement
- identifying phasing of projects for Spit highway resilience and erosion mitigation measures.

Grant application roles and responsibilities are proposed as follows:

- AK DOT&PF will provide coordination and management support for the grant application process.
- AK DOT&PF is contracting with Alaska Municipal League and HDR to provide and write content for the grant sections (scope, schedule and budget), contribute to merit criteria, especially program alignment and climate related research and data to support the narrative) and perform technical and quality control review.
- City of Homer will provide background materials and content for the grant sections, review the grant application, be project sponsor and complete final submittal via [Grants.gov](https://www.grants.gov).
- AK DOT&PF will provide a draft partnership letter that outlines project roles and responsibilities through a Memorandum of Agreement (MOA) should the project receiving notice of funding.

The grant does not require matching funds.

DOT&PF staff are knowledgeable about federal requirements, including Build America stipulations and have jurisdiction over the Spit Road and right-of-ways. If awarded, the City of Homer and DOT&PF will enter into a MOA with AK DOT&PF agreeing that AK DOT&PF will manage the project and administer the funding, meet grant reporting requirements, collaborate on multi-agency project implementation, and provide planning services related to the Highway.

The City of Homer will support project implementation and agency coordination with the US Army Corps of Engineers and other key partners, including on planning, identification of permits required and other environmental coordination, and design concept considerations.

Included is a synopsis of the PROTECT grant program.

RECOMMENDATION:

Adopt Resolution 23-072



FHWA Grants Opportunity

Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Grant Program

PROTECT is a competitive discretionary grant program authorized under the Bipartisan Infrastructure Law. It funds projects that make transportation infrastructure more resilient to natural hazards and the effects of climate change, including severe storms, flooding, drought, levee and dam failures, wildfire, rockslides, mudslides, sea level rise, extreme temperatures, and earthquakes. The program will award up to \$848 million in a 2023 solicitation combining funds from Fiscal Year 2022 and FY 2023. The program is administered by the Federal Highway Administration (FHWA).

An April 21, 2023 [Notice of Funding Opportunity \(NOFO\)](#) for this program addresses funds available, qualifications and application requirements.

Grant Program Categories

The PROTECT competitive grant program is divided into four sub-categories: planning grants and three categories of implementation grants. Applicants must select which category they are applying to, but FHWA may choose to award funds from a different category.

- **Planning Grants** provide funding for various transportation resilience planning activities, including vulnerability assessments and evacuation planning. Up to \$45 million is available.

The three implementation grant categories include the following:

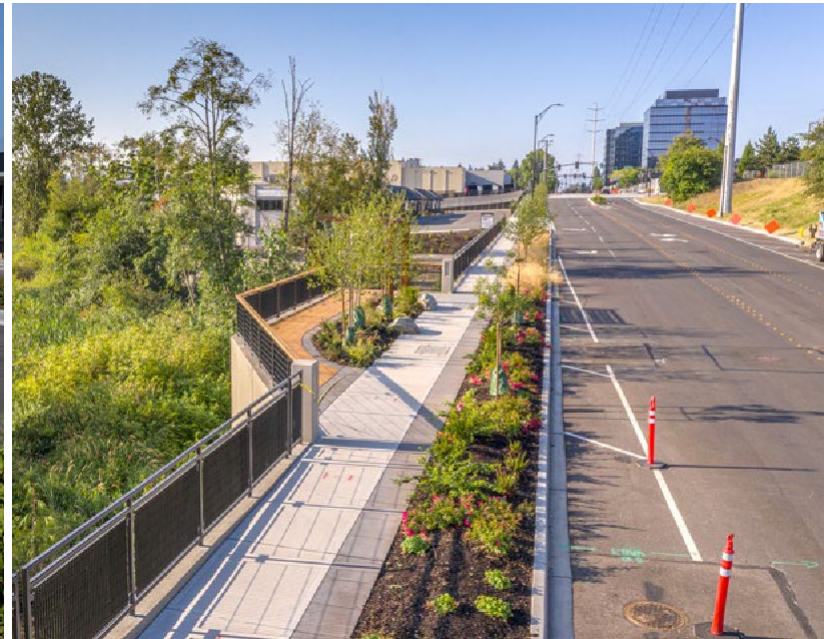
- **Resilience Improvement Grants** are the largest category, with up to \$638 million of total funding available. These grants are for improving the resilience of existing surface transportation assets to natural disasters and changing conditions.
- **Community Resilience and Evacuation Route Grants** focus on strengthening and protecting evacuation routes for emergency events, including improving evacuation route resilience, acquiring evacuation route equipment or signage, and constructing new evacuation routes. Up to \$45 million is available.
- **At-Risk Coastal Infrastructure Grants** provide funding to enhance the resilience of coastal infrastructure such as bridges, roads, pedestrian walkways and bicycle lanes against weather events and natural disasters caused by coastal flooding, erosion and sea level rise. Up to \$120 million is available.



APPLICATION DEADLINE:

All applications are to be received no later than:

August 18, 2023
11:59 p.m. EDT



Eligible Projects

Planning grants are focused on assessment of hazard risk and response planning. Generally, this does not include specific capital project development activities. Eligible planning project categories are defined by statute and include the following:

- Development of a Resilience Improvement Plan, for states or metropolitan planning organizations
- Resilience planning, predesign, design, or data tools to simulate transportation disruption scenarios, including vulnerability assessments
- Technical capacity building to facilitate the ability of the eligible entity to assess the vulnerabilities of the surface transportation assets and community response strategies
- Evacuation planning and preparation

The three **implementation grant** categories can fund all project phases, from project development through construction/implementation, including public engagement, property acquisition and environmental mitigation. However, no more than 10% of any PROTECT implementation grant can be applied to pre-construction activities.

Eligible project types for the three implementation grants include a wide range of mitigation measures designed to create more resilient transportation infrastructure and respond to the effects of climate change. One way to evaluate whether a given project is a good fit with the

program is to consider the following questions, which are adapted from the NOFO's Design Elements Merit Criterion:

- Will the project increase the ability of the infrastructure to continue to serve its primary function during and after weather events and natural disasters, and/or support emergency evacuation and post disaster relief?
- Does the project site or relocate a facility outside of an area with a current or projected future hazard or climate impact?
- Does the project take into account future conditions resulting from climate change, such as increases in sea levels or stormwater flows?
- Does the project add redundancy to the transportation system, especially in the event of an emergency?
- Will the project use a nature-based solution (*e.g., wetland buffers, marsh breakwaters, reefs, sea grass plantings, dune restoration, adding stream sinuosity, etc.*)?
- Does the project employ the use of innovative or novel approaches to resiliency, such as improved roadway subgrades, heat-resistant pavement mixes, natural infrastructure or permeable pavement?

The specific project activities eligible under each of the three implementation grant categories are as described on the following page.

Resilience Improvement Grants

Including, but not limited to:

- Improvements or replacement of an existing surface transportation facility, including relocation to avoid future hazards
- Incorporation of natural infrastructure
- Upgrades to and installation of structural stormwater controls
- Stabilizing slide areas or slope
- Erosion control, including riprap installation
- Adding seismic retrofitting or scour protection at bridges
- Vegetation management practices
- Other resilience projects, especially those identified in a Resilience Improvement Plan

Community Resilience and Evacuation Route Grants

- Restoration or replacement of existing evacuation routes that are in poor condition or not designed to meet the anticipated demand during an emergency event
- Expansion of evacuation route capacity through operational improvements, such as intelligent transportation system (ITS) equipment, conterflow measures or shoulders*
- Construction of new or redundant evacuation routes*
- Acquisition of evacuation route equipment or signage
- Ensuring access to critical destinations such as hospitals, ports, and federal facilities

**Capacity increases require data-driven documentation that existing routes are not sufficient to adequately facilitate evacuations. No more than 40% of PROTECT grant funds may be used for the construction of new capacity.*

At-Risk Coastal Infrastructure Grants

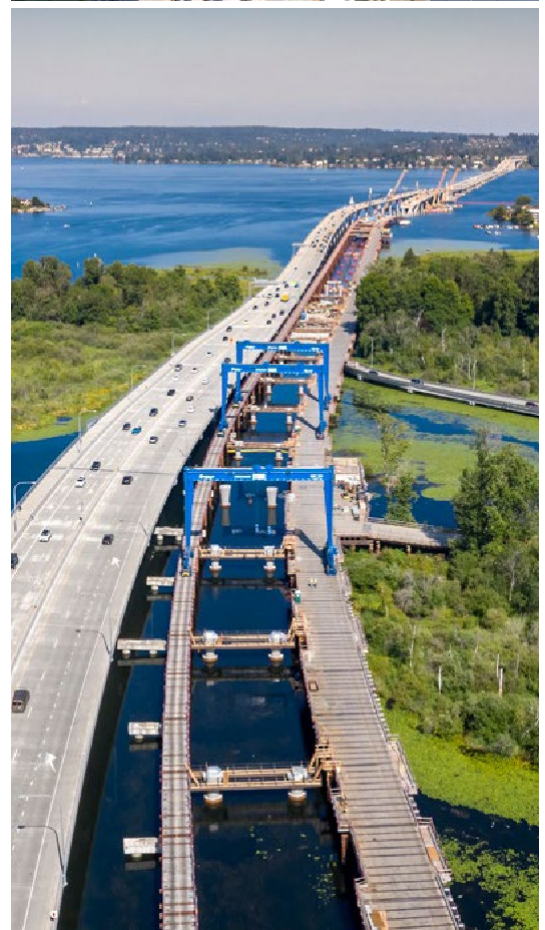
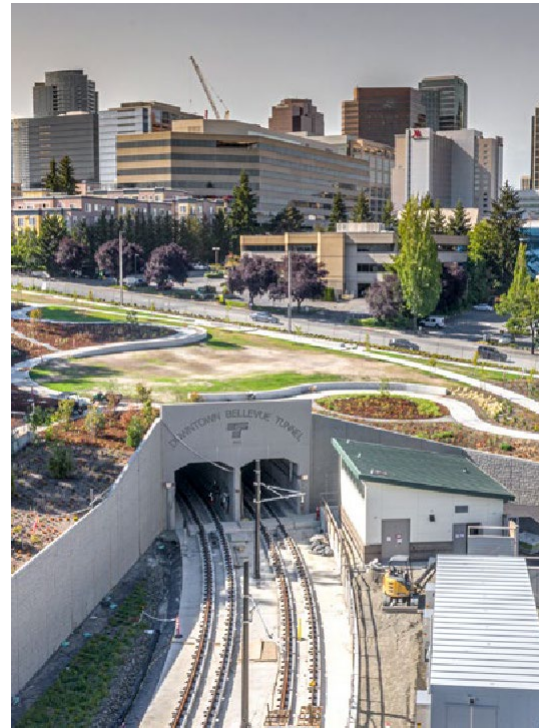
Includes any project to protect roadways that face hazards such as coastal flooding, coastal erosion, wave action, storm surge, or sea level rise.

This includes strengthening, stabilizing, hardening, elevating, relocating, or otherwise enhancing the resilience of roadway infrastructure itself, as well as other related or integrated facilities including bridges, roads, pedestrian walkways, bicycle lanes, culverts and tide gates. Rail infrastructure is not eligible under this category.

System Resilience

PROTECT grants in any of the three implementation categories may also be applied to system resilience projects that are functionally connected to an eligible transportation facility. Examples include:

- Increasing marsh health and total area adjacent to a highway right-of-way to promote additional flood storage
- Upgrades/installation of culverts designed to withstand 100-year flood events
- Upgrades/installation of tide gates to protect highways
- Upgrades/installation of flood gates to protect tunnel entrances



Eligible Facilities

The program funds projects serving a wide range of surface transportation infrastructure facilities. These include:

- Roadways
- Public transportation facilities or services
- Intercity rail passenger transportation facilities or services
- Port facilities and connected infrastructure

PROTECT grants may fund projects that support or are functionally related to these facilities, in addition to improvements to the facilities themselves.

Eligible Applicants

- States or state agencies
- Metropolitan planning organizations
- Local governments, including cities and counties
- Special purpose districts or public authorities
- Native/Indigenous Tribes
- Federal land management agencies applying jointly with states

At-Risk Coastal Infrastructure Grants are available to any of the above entities in states that border the Atlantic, Pacific, or Arctic Ocean, the Gulf of Mexico, Long Island Sound, or one or more of the Great Lakes.

Economic Analysis

For most implementation project types, the PROTECT program requires a benefit-cost analysis similar to other USDOT discretionary grant programs. However, FHWA has designed the economic analysis review to account for the difficulty of quantifying all potential resilience benefits (*such as those associated with nature-based design solutions or emergency evacuations*). For this reason, the evaluation process explicitly considers factors beyond the quantified benefit-cost ratio, as determined in the BCA. This includes detail provided in the narrative, especially as it relates to the Vulnerability and Risk and Criticality to Community merit categories.

The Economic Analysis Review Team will make a determination of the extent to which a project's benefits will exceed its costs. In order to receive a "High" rating, the benefit-cost ratio must be at least 1.5.

Additionally, a BCA is not required for the Resilience Improvements projects that are included in a Resilience Improvement Plan. A BCA is also not required for At-Risk Coastal Infrastructure projects, however the application must demonstrate that the proposed project will reduce long-term infrastructure costs by avoiding larger future maintenance or rebuilding costs. This must be detailed through costs associated with a build and no-build case scenario, as in a life-cycle cost analysis (LCCA).



Federal Award Information

For Planning Grants, the minimum award size is \$100,000, and there is no maximum award size. For Resilience Improvement, Community Resilience and Evacuation Routes, and At-Risk Coast Infrastructure Grants, the minimum award size is \$500,000 and there is no maximum award size. FHWA anticipates awarding between 30 to 40 grants across the three implementation project categories.

Selected projects will be funded with either FY 2022 or FY 2023 funds. Awards funded with FY 2022 funds must be obligated by September 30, 2025. Awards funded with FY 2023 funds must be obligated by September 30, 2026.

Cost Sharing or Matching

For planning grants, PROTECT covers 100% of project costs. For the three implementation grant categories, the program requires at least 20% matching funds. A unique statutory feature of the PROTECT program is that the matching funds can also be from a federal source. USDOT may elect to fund 100% of project costs for awards given to Native/Indigenous Tribes. The NOFO includes a cost sharing or matching equation recommended by USDOT to determine the cost share.

Match Reduction: For the three implementation grant programs, the non-federal match can be reduced by up to 10% (*allowing the grant to pay 90% of the project cost*) if the project is identified in a state or MPO Resilience Improvement Plan. To receive the full 10% match reduction, the plan must be included in the regional or statewide long-range transportation plan; if the resilience plan is a stand-alone plan, the match requirement is reduced by only 7%.



Merit Criteria

For Planning Grants, the merit criteria are:

- Program Alignment
- Schedule and Budget
- Public Engagement, Partnerships and Collaboration.
- Innovation

For the three implementation grant categories, the merit criteria are:

- Vulnerability and Risk
- Criticality to Community
- Design Elements
- Public Engagement, Partnerships and Collaboration
- Equity and Justice40
- Climate Change and Sustainability
- Schedule and Budget
- Innovation

FHWA FY 2022 and FY 2023 Grant Priority Considerations

FHWA will prioritize projects of similar merit that demonstrate the following:

Planning Grants:

- Exceptional benefits under merit criteria #3 (*Public Engagement, Partnerships and Collaboration*)
- Strong need for funding from the PROTECT program

Implementation Grants:

- Exceptional benefits under merit criteria #5 (*Equity and Justice40*)
- Workforce Development, Job Quality and Wealth Creation
- Construction Readiness (*ready to proceed to construction within 10 months of selection*)
- Strong need for funding from the PROTECT program

Applications are due August 18, 2023, by 11:59 PM Eastern Time on Grants.gov.

Your Infrastructure Finance Sustainability and Resiliency, and grant writing professionals stand by ready to support project sponsors applying for funding from Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Grant Program.

If you need any assistance or have questions, please contact:

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