COPPER RIVER HIGHWAY TRANSPORTATION MASTER PLAN







Prepared for



The Alaska Department of Transportation and Public Facilities

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Contents

ntroduction/Executive Summary	1
Vision for the Copper River Highway	2
Plan Purpose	2
Roles and Responsibilities	3
Project Area and History	4
Economy	6
Land Transportation	7
Marine Transportation and Aviation	7
Previous Planning Efforts	7
Planning Process	8
Public Involvement	9
Vision, Goals, and Evaluation Criteria	11
Vision, Goals, and Evaluation Criteria Cont.	12
Existing Conditions	13
dentified Needs and Proposed Investment	15
Project Evaluation	15
Ranked Alternatives	17
Project #1 Improve Parking at Ibeck Creek	17
Project #2 Multi-use Pathway to Connect Cordova Ferry Terminal to Merle K (Mudhole) Smith A	irport. 20
Project #3: Replace Bridges NBI #339 and NBI #340 with a New Single Span Bridge	22
Project #4: Reinstate Access to Subsistence and Recreational Areas Past MP 51	24
Project #5: Replace Failing Culverts and Culverts Inhibiting Fish Passage	26

Next Steps/Recommendations29
Funding Resources
Appendix A: Planning Resources
Appendix B: Public Involvement
Appendix C: Identified Projects and Needs
Appendix D: All Project Suggestions Mean Score Ranking
Figures
Figure 1. Copper River Highway Transportation Master Plan Study Corridor and Landowners4
Figure 2. CRH TMP Planning Process
Figure 2. CRH TMP Planning Process
Figure 3. Extent of CRH TMP Considerations14
Figure 3. Extent of CRH TMP Considerations
Figure 3. Extent of CRH TMP Considerations
Figure 3. Extent of CRH TMP Considerations

Photo

Photo 1. Washout, CRH MP 44-45	2
Photo 2. Aerial view of Cordova	7
Photo 3. Public Open House, January 2022	10
Photo 4. Segment of the CRH, between MP 38 through MP 43.5 that is threatened by erosion fr Copper River	
Photo 5. Looking west towards Bridge #348 with Ibeck Creek behind	18
Photo 6. Intersection of Whitshed Rd and Copper River Highway at MP 2 near Eyak Lake	21
Photo 7. (Left) Culvert along CRH – Before Replacement Photo 8. (Right) Culvert along CRH – After Replacement	26
Tables	
Table 1. SAC – Invited Participants	9
Table 2. Top 5 Evaluation MEAN Scores and Overall Ranking, Summarized	16
Table 3. Summary of CRWP Priority for Replacement of Culverts on the CRH	27
Table 4. Planning Level Cost Estimates for Each Phase of Project #5	28
Table 5. Potential Funding Sources – Apportioned or Allocated Funds	30
Table 6. Potential Funding Sources – Competitive Grants	31
Table 7. Potential Funding Sources - State of Alaska Funds	32

Acronyms

%	percent
ADF&G	Alaska Department of Fish and Game
City	City of Cordova
CRH	Copper River Highway
CRH TMP	Copper River Highway Transportation Master Plan
CRWP	Copper River Watershed Project
DNR	Alaska Department of Natural Resources
DOT&PF	Alaska Department of Transportation and Public Facilities
EVOSTC	Exxon Valdez Oil Spill Trustee Council
FHWA	Federal Highway Administration
GIS	Geographic Information System(s)
HSIP	Highway Safety Improvements Program
LRTP	Long Range Transportation Plan
MDB	Million Dollar Bridge
MP	Mile Post
NBI	National Bridge Inventory
NEPA	National Environmental Policy Act
NSFLTP	Nationally Significant Federal Lands and Tribal Projects Program
NVE	Native Village of Eyak
PEL	Planning and Environmental Linkages
PIP	Public Involvement Plan
PWS	Prince William Sound
ROW	Right-of-Way
SAC	Stakeholder Advisory Committee
STBG	Surface Transportation Block Grant
STIP	Statewide Transportation Improvement Program
TMP	Transportation Master Plan
USCG	United States Coast Guard
USFS	United States Forest Service

Introduction/Executive Summary

What does the future of the Copper River Highway (CRH) look like?

The CRH is a historic transportation link for the residents of Cordova, the Prince William Sound (PWS) region, and the Copper River Valley basin. Over time, however, the highway's bridge and roadway infrastructure has succumbed to natural and environmental challenges and is currently impassible beyond milepost (MP) 36. Yet, the highway remains an iconic and critical lifeline to the area's economic, environmental, and social future.

In 2018, the Alaska Department of Transportation and Public Facilities (DOT&PF) initiated a Planning and Environmental Linkages (PEL) study for the CRH to explore what it would take to reconstruct, repair, and replace transportation infrastructure between MP 27 and 51 that had been damaged by scouring and erosion by the Copper River. During the PEL process, the Federal Highway Administration (FHWA) — Western Federal Lands requested DOT&PF develop a transportation master plan to envision the transportation and land use needs of the CRH Corridor throughout this extent.

In 2021, DOT&PF initiated the CRH Transportation Master Plan (CRH TMP) process to guide future decisions on transportation and land use development for the entire highway corridor, from the Alaska Ferry Terminal at MP 0 to Abercrombie Creek at MP 51, just past the Million Dollar Bridge (MDB).

Working with a Stakeholder Advisory Committee (SAC)¹ and with public input, more than 80 individual projects were identified to support the region's long-term vision for the highway:

The Copper River Highway will be a safe, reliable, multi-modal transportation corridor that provides access to recreational, economic, and cultural activities for community members and visitors alike while sustaining the area's scenic, cultural, and ecological attributes.

The projects were consolidated into similar themes and ranked by the SAC to identify the highest short and long-term priorities based on the overarching goals of sustainability, safety, system preservation, connectivity, economic and environmental health, and "other" as identified by the SAC.

Ultimately, this document and its evaluation of high priority projects provides a roadmap for DOT&PF and other entities who share a responsibility for supporting a safe, efficient, and effective future for the CRH.

¹ The SAC invited participants from the Native Village of Eyak, City of Cordova, United States Forest Service, Alaska Department of Fish and Game, Alaska Department of Natural resources, Copper River Watershed Project, Chugach Alaska Native Corporation, The Eyak Corporation, Prince William Sound Economic Development District, Cordova Chamber of Commerce and Local Businesses, University of Alaska, Recreational Users, and Cordova Elected Officials.



Vision for the Copper River Highway



The CRH will be a safe, reliable, multi-modal transportation corridor that provides access to recreational, economic, and cultural activities for community members and visitors alike while sustaining the area's scenic, cultural, and ecological attributes.

Plan Purpose

A master plan is high-level planning tool used to guide future decisions on transportation and land use development. It details existing conditions, analyzes needs, and develops recommendations based on community vision and input. The document serves as a foundation for future project planning, environmental review, and funding. It sets the stage for everything that comes next.

In 2021, the DOT&PF initiated the master plan process for a 51-mile-long highway corridor between Cordova, Alaska, and Abercrombie Creek with a simple question:

What does the future look like for the CRH corridor?

The CRH (Alaska Route 10) as it exists today spans more than

50 miles, from the ferry terminal near downtown Cordova and past the airport into the vast Copper River Delta. Prior to August 2011, the CRH provided access to recreational and subsistence resources from Cordova to Abercrombie Creek and the MDB, passing through world class scenic wilderness; this changed with the closure at the MP 36 bridge over the Copper River, National Bridge Inventory (NBI) #339. Further, shifting of river channels have eroded portions of the CRH between MP 44 and 45 (Photo 1) and caused a significant washout over the highway. Additionally, damage to one of the icebreakers protecting the MDB (MP 49) threatens this historic structure and tourist attraction. DOT&PF and NVE recognized a critical need to develop a master plan for the CRH corridor and identify a vision for the corridor's future use.

The purpose of the CRH TMP is to document existing conditions along the CRH between MP 0 and MP 51 (the Planning Study Area/corridor), including the MDB and recreational and resource monitoring sites within the study area; conduct stakeholder and public outreach to develop a vision statement and goals for the CRH; and identify potential transportation needs and issues through 2047. The master plan prioritizes project needs and provides a high-level planning context for the CRH PEL study, a report focused on developing potential alternatives to address damaged infrastructure between MP 27 and 51.



Photo 1. Washout, CRH MP 44-45

The CRH TMP is multi-modal², considering transportation needs within the larger highway corridor, focusing on roadway, aviation, riverine, recreational, and other surface improvements. Ultimately, this document can be used by DOT&PF, NVE, the City of Cordova (City), and other organizations to secure funding for critical infrastructure projects, supporting the area's economic, social, and cultural needs.

Roles and Responsibilities

Alaska Department of Transportation and Public Facilities

DOT&PF's mission is to keep Alaska moving through service and infrastructure. It is responsible for providing safe and efficient transportation systems and supporting economic opportunities through access. As the lead agency for both the CRH TMP and PEL, DOT&PF is responsible for decision-making and for designing, constructing, and maintaining transportation infrastructure within the DOT&PF Right-of-Way (ROW) for safe and efficient travel³.

Native Village of Eyak

Cordova and the Copper River Delta are traditional lands of the Eyak, Alutiiq, Tlingit, and Ahtna peoples. NVE is the federally recognized Tribe that provides economic development, cultural preservation, and other services within PWS, Copper River, and Gulf of Alaska region. NVE's Transportation Program works with state and federal agencies to enhance and maintain access to subsistence and traditional use areas as well as areas used for recreation. As a Tribal government, NVE is eligible to receive federal transportation funds.

City of Cordova

Incorporated in 1909, the City is a home rule city with power for planning, platting, and land-use regulation. The City maintains local roads and is eligible for federal funding to support housing, economic development, transportation, and other services.

Master Plan or PEL?

Master Plans are planning documents that consider modal or area needs over a span of years, based on community-driven vision and goals.

PEL studies evaluate a large study area to identify and prioritize smaller independent projects and produce decisions and analysis that can be used in a National Environmental Policy Act document. The PEL typically references goals identified in a master plan and other planning-level documents.

While there is overlap between the CRH TMP and the CRH PEL, there are differences. The CRH TMP assesses broad level conceptual ideas about what the public would like to see as long-term transportation infrastructure improvements, but it does not provide specific analysis of what that would entail. The CRH PEL addresses those questions and provides detailed analysis of the actions that would be required to reconstruct, repair, or replace the damaged highway infrastructure within the CRH PEL study area (MP 27 through MP 51).

³ DOT&PF ROW along the CRH is typically 150 feet measured from the highway's center line.



² While the plan is multi-modal in nature, Alaska Marine Highway System ferry and air elements are considered under separate planning processes.

NVE and the City are key partners in this planning effort, with potential responsibility for funding and implementation of projects identified during the planning process.

Project Area and History

The CRH TMP study corridor and landowners are presented in Figure 1. The Copper River Delta and its surrounding lands are the past and present traditional lands of the Eyak, Alutiiq, Tlingit, and Ahtna peoples who traded, hunted, and fished throughout the area. The Eyak People had four main villages near what is present day Cordova⁴, and their descendants continue to promote the self-determination of Tribal members.

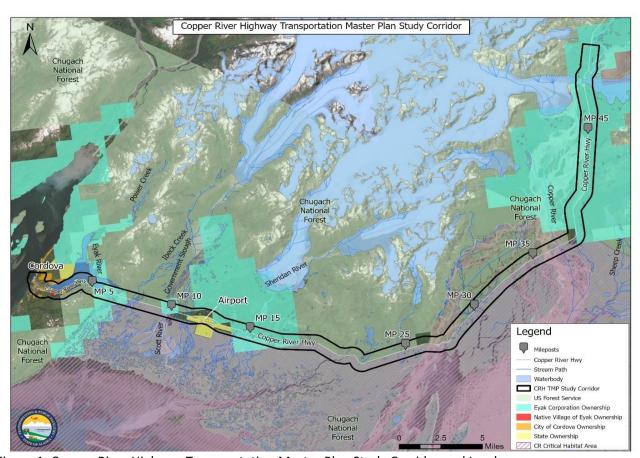


Figure 1. Copper River Highway Transportation Master Plan Study Corridor and Landowners

The City of Cordova, population 2,545, is located at the southeastern end of PWS's coastal rainforest in the Gulf of Alaska, 150 air-miles from Anchorage, Alaska's largest city. It is within the gulf coast maritime climate zone, characterized by a rainy atmosphere, long, cold winters, and mild summers. Cordova is only accessed by plane or boat; there is no direct road access to the area. The State of Alaska owns and maintains the ferry terminal at MP 0 of the CRH as well as the Merle K. "Mudhole" Smith Airport at Mile

⁴ Eyak, the last of the four villages, was annexed by the City of Cordova in 1972.

13⁵. Uses within DOT&PF's ROW include foot paths, bike paths, frontage roads, pullouts, parking areas, placement of utilities, and other public uses as DOT&PF deems necessary for the welfare of the public.

The roots of the current city began in 1905 when the initial townsite grew significantly during construction of the Copper River & Northwestern Railway, stretching 196 miles between the City's harbor and the Kennecott copper mines. Mining production flourished and produced \$200 million worth of copper until the late 1930's when the ore began to dry up⁶. Soon after, the ROW was donated to the United States with the intention of converting the railbed to a regional highway connecting Cordova to Chitina. Construction on the CRH began in 1945, however construction progressed only to MP 59, a few miles beyond the MDB, when it was halted after the Good Friday Earthquake of 1964.⁷

Today, the CRH follows the path of the lower 52 miles of the former rail line and is listed as an Alaska Scenic Byway.

The Copper River Region has always relied on natural resources for its economic fortune; from the copper mines in Kennecott, to one of the first producing oilfields in Alaska at Katalla, 8 to commercial fishing, and even tourism.

The Copper River Delta is considered a critical habitat for shorebirds and salmon, and its vast wetland ecosystem draws millions of shorebirds each spring. The delta is shaped by the braided channels of the Copper River and its highly variable water flows.

Natural and man-made disasters also shaped the region.

In 1964, the epicenter of the 9.2 magnitude Good Friday earthquake was 70 miles east-southeast of Cordova. The initial event and its aftershocks uplifted land nearly 7.5 feet⁹, and the quake and subsequent tsunami significantly damaged infrastructure throughout the region – including

The Good Friday Earthquake, March 27, 1964

On the Copper River Highway, damage was severe. The Cordova Times (April 2, 1964) reported that between Eyak River (4 or 5 miles east of Cordova) and Mile 13 there were "cracks 6 to 8 inches wide across the road at intervals of about 75 feet." Locally, some spots sank several feet and "most of the roadway sank about 2 feet, leaving all bridges that amount higher than the roadway." The Times also states that a Department of Highways Engineer, Mr. Arlan Davis, reported that "it appears that serious damage was inflicted on every bridge, including the famous Million Dollar Bridge, which has one end of the northern span in the river [Copper River]." The abandoned railroad bridge near Abercombie Rapids on the Copper River, about 15 miles north of the Million Dollar Bridge, has been damaged. This bridge was to be part of the highway system.

Alaska's Good Friday Earthquake,
March 27, 1964: A Preliminary
Geologic Evaluation,
US Geological Survey

Alaska's Good Friday Earthquake, March 27, 1964: A Preliminary Geologic Evaluation, US Geological Survey, page
 5.



⁵ State of Alaska Community Database

⁶ Janson, Lone (1975). *The Copper Spike*. Alaska Northwest Publishing Co.

⁷ Quinn, Alfredo O. (1995). *Iron Rails to Alaskan Copper*. D'Aloguin Publishing Co.

⁸ The Katalla Oil Field is 47 miles southeast of Cordova and operated from 1902 until 1933.

the loss of Cordova's deep-water port. The earthquake rendered the MDB unusable, and it was not fully reconstructed and opened again until 2005.

On March 24, 1989, the Exxon Valdez spilled 11 million gallons of oil into Prince William Sound, devastating sensitive marine and terrestrial environments. Important commercial fisheries were severely impacted and the effects of this caused an economic depression in Cordova. Although much of the PWS has since recovered, the oil spill showed the need for better spill response practices. In 2022, NVE received a grant from the FHWA to improve land access to a "to-be-developed" Shepard Point Marine Tribal Transportation Oil Spill and Marine Casualty Response Facility¹⁰ west of Cordova.

The river and natural systems continue to shape the community.

The CRH currently has 11 bridges crossing the river delta and accessing U.S. Forest Service (USFS)-managed Chugach National Forest lands. In 2011, bridge abutment erosion of NBI #339 at MP 36 resulted in closure of the bridge and eventually led to more than 1,000 feet of the highway being washed out, leaving the CRH inaccessible to vehicle traffic beyond that point. A project to reconstruct NBI #339 was closed due to lack of funding for design and construction. As a result, two of the most popular scenic destinations are no longer accessible by road, reducing seasonal use at the MDB and Childs Glacier from 8,000 to 1,000 visitor use days¹¹.

Economy

Cordova's largest economic sectors are local government, trade, transportation, utilities, and manufacturing (which includes seafood processing)¹². Its immediate proximity to the seafood rich waters of the eastern PWS make fishing, fish processing, and trade a significant portion of the city's economy. The City of Cordova estimates that nearly half of all households have someone working in the fishing industry, and Trident Seafoods, Inc. is a major employer. The U.S. Census describes fishing (along with forestry, agriculture, hunting, and mining) as 21.9 percent (%) of Cordova's industry. Retail trade follows at 17.1%, then public administration at 15.4%, and lastly educational, healthcare, and social assistance services are close behind at 14.4%. The Cordova School District, Cordova Community Medical Center, and City also rank as some of the largest employers in town. Cordova also has a DOT&PF maintenance facility, a U.S. Coast Guard (USCG) facility, is home port to a USCG buoy tender, and provides access to parts of Chugach National Forest.

¹² Cordova Comprehensive Plan https://www.cityofcordova.net/wp-content/uploads/2022/08/Cordova-Comprehensive-Plan-Appendix-6-Economic-Development-Background.pdf



¹⁰ https://www.shepardpointoilspillresponse.com/news,

https://www.poa.usace.army.mil/Missions/Regulatory/Public-Notices/Article/478791/poa-1994-1014-orca-inlet/

¹¹ Chugach National Forest Land Management Plan, Page 122

Cordova (Photo 2) has a median household income of \$77,667, only slightly under the statewide median of \$77,845 but has a poverty rate well beneath the state average: 1.7% compared to 10.5%. In 2020, according to the United States Census Bureau, Cordova possessed a 64.3% employment rate. Forty-five percent (45%) of workers were employed in a private company, while 21.9% were employed in either local, state, or federal government; 27.9% were self-employed.

Photo 2. Aerial view of Cordova



Land Transportation

The CRH is classified as a Major Collector roadway up to NBI #339 at MP 36, which means it supports moderate traffic capacity with a maximum posted speed of 55 mph. The CRH connects to the City, at its most westerly terminus, with the Merle K "Mudhole" Smith Airport at MP 13, and the lands to the east and northeast that make up part of the Copper River Delta. The eastern portion of the highway, originally built as a railroad for transporting mineral ore has, since the 1950s, been used as a means of accessing hunting, subsistence, and recreational lands as well as native allotments. The highway has no other connections and, since 2011, has only been usable for the first 36 miles due to road washouts from heavy scouring and river erosion. Prior to the washouts the road accessed the Childs Glacier and the MDB at its most easterly and northerly terminus, which served as tourist attractions. There are also access points to USFS trailheads, campgrounds, and boat launches along the length of the highway, although several are now inaccessible.

Marine Transportation and Aviation

The CRH connects the City and the Cordova Ferry Terminal with the Merle K "Mudhole" Smith Airport. Because the CRH is not connected to the primary Alaska road network, the city and region rely critically on the ferry terminal and airport for outside transportation needs. The CRH, therefore, serves as a connection between the two and the rest of the Copper River Delta, and is of significant importance for regional transportation availability. The development of both the Cordova Merle K. "Mudhole" Smith Airport Master Plan¹³ and the Alaska Marine Highway System Long-Range Plan¹⁴ should be taken into consideration for future developments within the CRH.

Previous Planning Efforts

Through previous regional and local planning efforts, DOT&PF recognizes that residents of the City – as well as its visitors – value the city's sense of community and small-town feel, access to outdoor recreation and subsistence opportunities, and its natural resources and beautiful landscapes. The City's

¹⁴ https://dot.alaska.gov/amhs/operations/



¹³ https://cdvairport.com/

location also provides uniquely Alaskan transportation challenges such as limited infrastructure, lack of economic diversity, and limited resources to operate, maintain, and replace public facilities.

DOT&PF looked at previous planning documents such as the City of Cordova Comprehensive Plan, Cordova Airport Master Plan, and Prince William Sound Economic Development District Comprehensive Economic Development Strategy to confirm the CRH TMP supports previously stated agency and community goals and needs (see Appendix A: Planning Resources). This plan also considered state and federal highway planning goals and requirements addressing safety, resiliency, system management, economic vitality, and system performance, recreational priorities, as well as other strategic investment areas outlined in the Statewide Transportation Improvement Program (STIP).

Planning Process

As mentioned, the need for a CRH TMP was identified during the PEL development process, as a result the PEL and CRH TMP processes are happening concurrently.

Typically, the planning process begins with a long-range plan, which identifies corridor-level visions, goals, strategies, and actions that support multimodal transportation. These plans look at a 25-year timeframe and are updated every five years to reflect current conditions. In addition to identifying transportation issues and concerns, these plans support long range planning and land use decisions based on community values.

In the case of the CRH TMP, critical projects identified first in the PEL – as well as other projects identified by the community and other stakeholders – have been carried forward as part of this plan. The two efforts are closely linked and complement each other.

Working closely with community stakeholders and user groups, DOT&PF identified a vision and goals for long-range functionality and transportation needs of the CRH. DOT&PF looked at existing conditions and sought input on what projects or activities could support that vision based on the community's economic and land use goals. Working with the Stakeholder Advisory Committee (SAC), DOT&PF

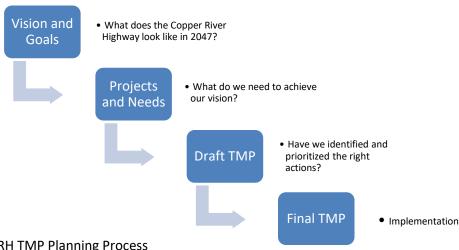


Figure 2. CRH TMP Planning Process

prioritized projects using goal-driven criteria and developed planning level cost estimates for the five highest ranking projects which can be used for future planning, design, and construction funding requests.

Public Involvement

Planning efforts are most successful when stakeholders understand how and why long-term goals and project needs are identified, how they benefit their community, and have a voice in the decision-making process. This understanding has been the heart of both the PEL and CRH TMP processes.

PEL Outreach

Public involvement activities related to corridor improvements began in December 2019 when DOT&PF hosted a public meeting for the PEL. Cordova residents were invited to share their ideas on what it would take to reconstruct, repair, and replace damaged transportation infrastructure in the PEL project area, MP 27 to MP 51 (Abercrombie Creek). DOT&PF also submitted consultation requests to Alaska Native Tribes, government agencies, and Alaska Native Corporations in January 2022 and met with the NVE Tribal Council, The Eyak Corporation, the USFS, and City in May 2022. DOT&PF's PEL team members also actively participated in the CRH TMP public outreach efforts.

CRH TMP Outreach

When the CRH TMP effort began in 2022, DOT&PF developed a broader Public Involvement Plan that outlined the goals and framework for public participation in the CRH TMP development, including:

- Developing a strong, collaborative working relationship between the project team and project stakeholders.
- Keeping the public informed on the CRH TMP process and issues, listening to and acknowledging concerns, and providing feedback on how public input has influenced project decisions.
- Communicating CRH TMP milestones and opportunities for stakeholders to provide meaningful input through a variety of communication methods.
- Utilizing visualizations and illustrations to convey alternatives effectively.

Table 1. SAC – Invited Participants
Native Village of Eyak
City of Cordova
United States Forest Service
Alaska Department of Fish and Game
Alaska Department of Natural Resources,
Division of Mining, Land, and Water
Copper River Watershed Project
Chugach Alaska Native Corporation
The Eyak Corporation
Prince William Sound Economic
Development District
Cordova Chamber of Commerce
Local Businesses
University of Alaska Land Management
Recreation Users
City Elected Officials

• Responding to inquiries and comments received during the project, informing stakeholders how their input is reflected (or not reflected) in the draft and final CRH TMP document.

As part of its public involvement efforts, DOT&PF established the SAC, representing economic, community, environmental, recreational, and social interests. SAC representatives including the city of Cordova, NVE, and user groups, such as the Cordova Chamber of Commerce, USFS, and Copper River Watershed Project (CRWP). The SAC met during the planning process to identify existing conditions and needs; provided input on corridor vision, goals, and priorities; provided comment on proposed project ranking criteria, and then ranked identified projects using an online platform.

DOT&PF also hosted public meetings and invited community members to provide input on the draft

vision for the corridor and identify specific project needs. More than 25 people attended the kick-off meeting in January 2022 (see Photo 3) to help answer key questions such as:

- How can the CRH serve the community of Cordova in 2047 and beyond?
- What needs can the highway corridor address (e.g., support economic development, improve access to outdoor recreation and subsistence activities, etc.)?
- What projects could help meet those needs?



The January 2022 public meeting was advertised in emailed newsletters, post cards, and the Cordova Times newspaper.

In addition to a <u>project website</u>, DOT&PF utilized an online survey to gather input from individuals who were unable to attend the in-person open house. The survey ran from January 14, 2022, to August 31, 2022; more than 85 individual comments were received in categories ranging from recreation infrastructure, access, commercial development, bike/pedestrian infrastructure, fish/wildlife passage, and other improvements.

Upon completion of the draft CRH TMP, the SAC was invited to an online meeting to comment, and a second public meeting was held in Cordova on September 29, 2023 seeking comments on the draft document. This was supplemented with an online comment form that ran from September 15, 2023 to October 14, 2023. This meeting was advertised in emailed newsletters, post cards, and the Cordova Times newspaper. Between these medium approximately 50 comments were received on the draft TMP, providing vital feedback for ensuring the plan reflects stakeholder and community interests.

Copies and examples of public outreach materials for the PEL and CRH TMP are included in Appendix B: Public Involvement.

Vision, Goals, and Evaluation Criteria

The public and SAC provided the contextual framework for the long-range plan with the following vision for the highway corridor:

The CRH will be a safe, reliable, multi-modal transportation corridor that provides access to recreational, economic, and cultural activities for community members and visitors alike while sustaining the area's scenic, cultural, and ecological attributes.

The vision became the foundation for identifying goals, needs, and evaluation criteria, which were developed by DOT&PF with SAC input. Once a range of projects had been identified, the SAC used the goals and criteria to rank identified projects and needs.

Goal 1: Sustainability: Supports fiscal responsibility.



- Reduces long-term operations and maintenance costs.
- Leverages multiple funding sources and partnerships.
- Has a long-term cost benefit.
- Limits long-term negative environmental or human impacts.
- Supports long-term economic development.
- Supports resiliency.

Goal 2: Safety: Improves safety, security, and access.



- Addresses critical needs with immediate consequences for health and safety.
- Improves long-term health and safety through improved transportation conditions.
- Meets FHWA/Federal Aviation Administration health and safety design criteria.
- Provides safe multi-modal transportation access options.
- Improves multi-modal transportation safety.

Goal 3: System Preservation: Preserves and maintains the existing transportation system.



- Improves the existing system or facility.
- Supports preventive maintenance.
- Supports other state and/or federal investments in infrastructure.
- Maintains established ROW and/or eliminates encroachments.

Vision, Goals, and Evaluation Criteria Cont.

Goal 4: Connectivity: Improves intermodal connections.



- Improves access to existing intermodal facilities.
- Creates new infrastructure in support of other transportation systems or land uses.
- Supports multi-modal transportation options.

Goal 5: Economic and Environmental Health: Supports economic, environmental, and social well-being.



- Supports connectivity of fish and wildlife habitat.
- Improves access to recreational, cultural, and historic sites and subsistence opportunities.
- Improves quality of life (e.g., dust control, access to health and sanitation facilities)
- Creates opportunities for economic development.
- Is identified in existing plans (e.g., City Comprehensive Plan, Long Range Transportation Plan (LRTP), etc.)

Goal 6: Other

Evaluation Criteria

- Has community support.
- Protects scenic qualities.
- Minimizes impact on minority and disadvantaged populations.
- Potential for future expandability.

Existing Conditions

Photo 4. Segment of the CRH, between MP 38 through MP 43.5 that is threatened by erosion from the Copper River. View looking south, photograph taken by DOT&PF on June 22, 2021. Streamflow throughout main Copper River Channel and streams have likely continued to shift eastward closer to the CRH since photo was taken.



The CRH extends from the ferry terminal (MP 0) to Abercrombie Creek (MP 51), beyond the MDB (MP 49). See Figure 3 for full extent of CRH TMP. The highway connects Cordova's downtown to the airport, to recreational and subsistence resources within the Chugach National Forest, and to privately held or Native-owned properties that provide opportunities for economic development, housing, and community development. While Cordova relies on marine and air service for external travel, travel and commerce within the community depends on well-maintained, functional transportation linkages within the CRH corridor. Erosion, high water, and aging infrastructure have forced DOT&PF to close portions of the CRH – including access to the MDB, one of the region's biggest scenic attractions.

The CRH is classified as a Major Collector roadway up to NBI #339 at MP 36 and supports moderate traffic capacity with a maximum speed of 55 mph. Between MP 36 and 51, the highway does not have a classified service level. DOT&PF's ROW varies from 100 to 150 feet along either side of the CRH (150' typical). Uses of the ROW include foot paths, bike paths, frontage roads, pullouts, parking areas, placement of utilities, and other public uses as DOT&PF deems necessary for the welfare of the public, although much of this ROW is not extensively developed.

Significant portions of the highway are threatened by fluvial erosion, the most notable examples include:

- The segment of land between NBI #339 and NBI #340 (MP 36) has completely eroded away. As
 of September 2021, the river's eastward migration had completely eroded about 1,000 linear
 feet along this segment.
- Segments of the highway from MP 38-45 are being threatened by river erosion, with the segment between MP 44-45 having already washed out.
- The ice breaker protecting Pier 1 on the MDB has moved downstream and is no longer providing adequate protection to Pier 1.
- DOT&PF's Bridge Section has recommended the ice breaker at Pier 2 on the MDB be repaired or replaced.
- Many culverts along the CRH no longer provide adequate fish passage and need to be replaced, especially beyond MP 38. Many of these are also generally undersized and do not provide the necessary hydraulic capacity to convey flood flows and associated sediments and debris.
- The area surrounding NBI #230 may be under threat due to insufficient capacity for peak flows. Additional hydraulic analyses are needed and should be prioritized.

The first 13 miles of the CRH are paved, to approximately the Merle K "Mudhole" Smith Airport, and the road is primarily gravel fill thereafter with paved sections at bridges and bridge approaches. While not included in this masterplan, several members of the community have advocated for additional paving approximately half a mile past MP 13 to the roadway that leads to the city Landfill.



Figure 3. Extent of CRH TMP Considerations

Identified Needs and Proposed Investment

Project Evaluation

More than 85 projects, ideas, and needs were suggested by the SAC, during public meetings, and via the online survey. Comments ranged from improving bike and pedestrian access between downtown and the airport to completing highway access past the MDB to Chitina. Many suggestions were similar or overlapped significantly, and after review were eventually consolidated into 31 distinct projects.

After consolidation, the SAC utilized an online tool (see Figure 4) to evaluate each project based on plan goals and objectives on a scale from 0 to 3, where 0 indicated No Applicability, 1 indicated Low Applicability, 2 indicated Moderate Applicability, and 3 indicated High Applicability.

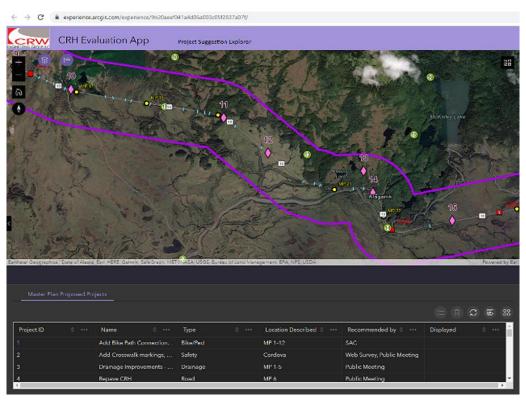


Figure 4. Proposed Projects Evaluation Tool.

Following SAC review, mean scores were generated for each individual criterion. Because each goal had a different number of underlying review criteria, the overall MEAN score for each Goal area was weighted to distribute each series equally and produce a finalized MEAN score for each project. DOT&PF reviewed the results and a list of the top 5 projects was generated. Table 2 includes the top 5 projects identified for consideration, ordered by associated scoring and ranking. See Appendix D for full list of projects ranked by mean scores and additional evaluation information. For the practical purposes of scope definition and estimation, project descriptions may have been reworded slightly for development of alternatives.

Table 2. Top 5 Evaluation MEAN Scores and Overall Ranking, Summarized.

Project No.	Project Description	Mean Score Total	Rank
5	Improve parking at Ibeck Creek and at heavily used fishing locations or widen existing narrow shoulder	12.063	1
6	Widen shoulder/separate bike path and safety improvements from MP 0 - MP 13 (Cordova Airport)	11.782	2
19	Replace and maintain 36-Mile Bridge (Bridge 339), clear brush, snow, and repair washout; provide access to land beyond MP 36	11.542	3
23	Repair and maintain access to the MDB and subsistence and recreational areas past MP 51	11.493	4
22	Replace failing culverts and culverts inhibiting fish passage	11.312	5

Ranked Alternatives

The top five ranked projects were further evaluated to provide a more detailed scope and rough order of magnitude cost estimate for future capital projects programming purposes.

Project #1 Improve Parking at Ibeck Creek

Location

Ibeck Creek is located at MP 7.5 on the Copper River Highway and is one of the most popular and accessible fishing areas on the Cordova road system (US Forest Service, 2023). The highest use of this area for fishing is in mid-August when the coho salmon are running, but fishing activities occur in mid-April for Dolly Varden and late May for the Eulachon (Hooligan) run. Fishing activities take place on both banks of Ibeck Creek (see pink shaded area in Figure 5).



Figure 5. Ibeck Creek Existing Conditions and Parking/Fishing Areas

Existing Conditions

There are approximately 21 parallel parking spaces within 500 feet of Ibeck Creek, none of which provide a buffer from the highway for safely entering and exiting vehicles. Cars currently parallel park alongside both sides of the road on gravel pullouts, and on a paved pullout 100-feet east of the creek.

The paved pullout is on the south side of the road and is 250 feet long by 10 feet wide. This pullout can accommodate approximately 9 vehicles (cars and trucks) parked parallel to the road¹⁵. This pullout is managed by the USFS. On the west bank of Ibeck Creek informal gravel parallel parking on both sides of the road accommodates a maximum of 12 vehicles (approximately 170 feet long and 10 feet wide). A paved pullout that is buffered from the highway is located a quarter of a mile to the west. This pullout is used infrequently as it is the furthest from the fishing area.

Photo 5. Looking west towards Bridge #348 with Ibeck Creek behind. This gravel shoulder is frequently used for parking and fishing access. This shoulder would be paved as part of Project #1.



Scope

This project will make improvements to existing parking within 500 feet of Ibeck Creek to provide durable, paved surfaces, and a buffer from the highway to increase safe access to the fishing area. The existing 250-ft long, paved pullout on the east bank of Ibeck Creek will be widened to 50-feet to allow for perpendicular parking. This new perpendicular parking area will accommodate approximately 25 vehicles¹⁶. See Figure 6 for a planning-level layout.

This project will also pave and widen the informal pullouts on either side of the road on the west bank of Ibeck Creek so that they are each approximately 20-feet wide by 170-feet long. This will accommodate

¹⁶ This calculation assumes 10-ft wide perpendicular parking spaces.



¹⁵ This calculation allows for four cars (20-ft long) and five trucks (34-ft long).

approximately six¹⁷ parallel parking spaces on either side of the road (12 in total) and create a buffer between the parked cars and the highway.

This project will increase parking spaces within 500 feet of Ibeck Creek from 21 to 37; increase the buffer between the parked cars and the highway to increase safety of pedestrians; and provide a more durable, paved surface for the 12 parking spaces on the west bank of Ibeck Creek.

It is assumed that pedestrians will access Ibeck Creek from the side of the creek where their vehicle is parked. Foot-traffic on the bridge is not safe and should be discouraged. This design will accommodate the development of Project #2 of this masterplan, a multi-use pathway that would be constructed along the south side of the highway between the parked cars and the road.

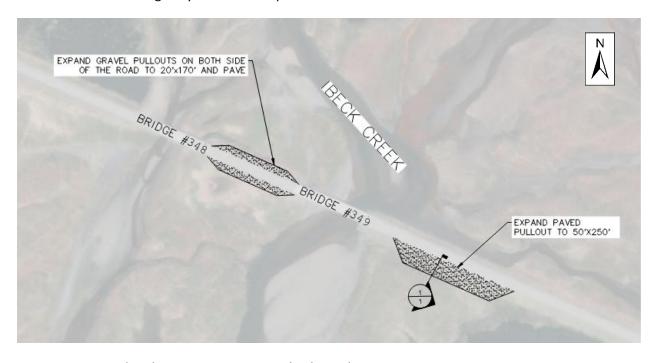


Figure 6. Proposed Parking Improvements at Ibeck Creek, MP 7.5.

Status

This project has not yet begun and is funding dependent. For scoping purposes, specific design on this project should keep in mind design considerations for project #2 – Multi-use Pathway to Connect Cordova Ferry Terminal to Merle K. (Mudhole) Smith Airport. In the interim, enforcing parking in designated areas and adding additional safety measures (further lowered speed zone, better lighting, etc.) would also be beneficial.

Planning Estimate

The planning-level cost estimate for this project is \$2,500,000. Details are included in Appendix C.

¹⁷ This calculation assumes three cars (20-ft long) and three trucks (34-ft long) on each side of the road.



Project #2 Multi-use Pathway to Connect Cordova Ferry Terminal to Merle K (Mudhole) Smith Airport

Location

This project is located along twelve miles of the road corridor from the Cordova Ferry Terminal to the Merle K (Mudhole) Smith Airport at MP 13 of the CRH (Figure 7).

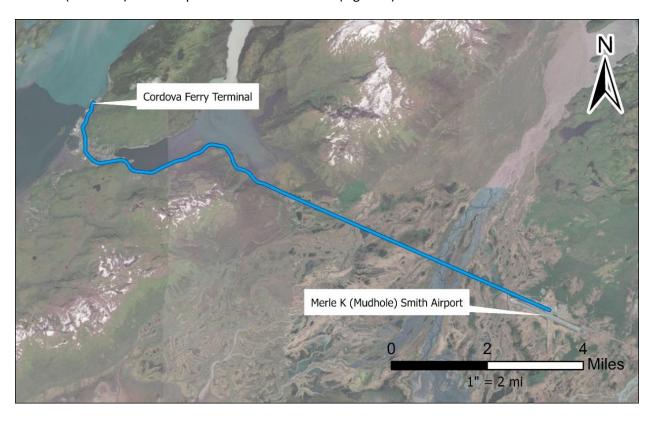


Figure 7. Project #2 Multi-use pathway connecting the Ferry Terminal and the Airport.

Existing Conditions

The Copper River Highway has a narrow highway shoulder and as such cyclists and pedestrians are offered very little protection from vehicles when they use the road. In addition, much of the highway has a speed limit of 55 miles per hour, making the side of the road an unsafe location for pedestrians and cyclists. Most of the community live within the first six miles of the Copper River Highway, and those living near Lake Eyak report that there is no safe route for cyclists or pedestrians to get to school or work. A multiuse pathway would greatly improve options for residents' transportation and recreation.

Photo 6. Intersection of Whitshed Rd and Copper River Highway at MP 2 near Eyak Lake



Scope

The scope of this project is to design and construct a multi-use pathway along the road corridor from the Cordova Ferry Terminal to the Merle K (Mudhole) Smith Airport. This journey takes approximately one hour by bicycle. The multi-use pathway would be 12 miles long and would be located on the south side of the roadway only. This project would increase access to recreational resources and support muti-modal transportation opportunities. It would include 12 separate multi-use bridges. For planning purposes, this masterplan has assumed that the multi-use pathway will be a standard 10-foot width with 2-foot shoulders, and bridges will be 12 feet wide.

Status

This project has not yet begun and is funding dependent. For funding purposes, this project may be better scoped in multiple phases with natural geographic break points (notably rivers and developments), such as from downtown Cordova to MP 5, MP 5 to MP 9, and MP 9 to the Airport. From downtown Cordova to MP 5 should have the highest priority based on community safety and access concerns, especially with regard to accessibility of The Cordova School. Any improvements should be designed with consideration of the possibility of Project #1, and existing transportation safety improvements within Cordova such as existing covered spaces projects and city lighting initiatives.

Planning Estimate

The planning level cost estimate for this project is \$72,000,000. Details are included in Appendix C.

Project #3: Replace Bridges NBI #339 and NBI #340 with a New Single Span Bridge.

Location

NBI #339 is located at MP 36.2 and NBI #340 is located at MP 36.6 (Figure 8).

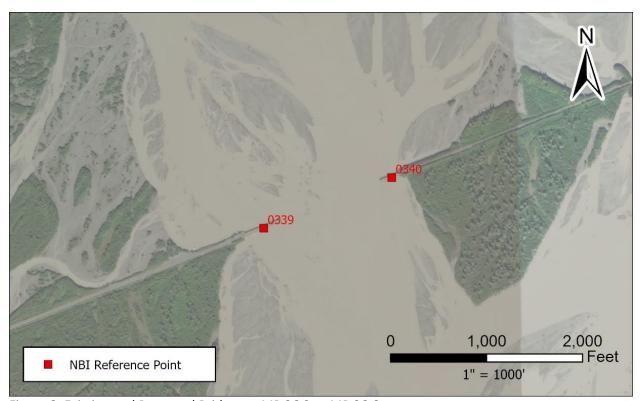


Figure 8. Existing and Proposed Bridges at MP 36.2 to MP 36.6.

Existing Conditions

NBI #339 has been closed since August 2011 due to safety concerns because deep scouring in the river channel had undermined the bridge support piers. Subsequent erosion from this river channel has completely washed away the land segment of the highway that had previously connected NBI #339 with NBI #340 (ADOT, 2019). The road is currently closed at Flag Point at MP 27 for traffic safety.

Scope

The scope of this project is to remove and replace failed bridges NBI #339 and NBI #340 with one new 30-ft wide bridge, 1,600 feet long.

The bridge will have 14 pile units using two, 4-foot-wide piles driven to 150 feet below ground surface, and two abutments. Spans would be composed of 100' precast concrete box girders having dimensions of 3.5 feet wide by 5 feet deep atop concrete pile caps and decked with a concrete surface and guardrails. Banks and abutments would be armored to protect against erosion and geotextile would be used in select areas. Existing remnants of NBI #339 and NBI #340 would be demolished.

With the construction of a new bridge over the previous span of NBI #339 and NBI #340, 20 miles of roadway and 70,000 acres of land would be opened to recreational and industrial use, including possible foot or bike access to the MDB.

Status

This project has not yet begun and is funding dependent.

Planning Estimate

The planning-level cost estimate for this project is \$65,000,000. Details are included in Appendix C.

Project #4: Reinstate Access to Subsistence and Recreational Areas Past MP 51

This project concept, identified in 2019 during the CRH PEL, includes repairing the Copper River Highway at multiple locations to provide access to recreation and subsistence-use areas beyond MP 51. Project #4 includes the replacement of bridges NBI #339 and #340 that are detailed in Project #3 of this masterplan.

Location

This project includes work in three separate areas as follows:

- 1. At MP 36 where bridges NBI #339 and #340 need replacement,
- 2. Between MP 38 and 45 where the Copper River has damaged the highway,
- 3. At MP 48 at the Million Dollar Bridge (MDB).

Existing Conditions

Bridges NBI #339 and NBI #340 need replacement. This work is described in more detail under Project #3 of this masterplan.

The highway is in a compromised condition between mileposts 38 and 43, and completely washed out between MP 43 and 45. The road has been damaged by Copper River flows that have changed course over time.

The Million Dollar Bridge has incurred damage to its two icebreakers structures which stand upstream of the bridge in the Copper River. The icebreakers will need replacement or repair before the bridge can be safely traversed. The Million Dollar Bridge also requires repairs to some other bridge components including chords, laterals, bolts, tie rods, and corbels.

Scope

This project's scope and cost estimate include replacing NBI #339 and NBI #340 as described in Project #3 of this masterplan.

Between MP 38 and 43 the existing roadway will be raised 5 feet from its current elevation. Between MP 43 and MP 45, the highway will be re-routed away from the river channel, staying within existing DOT&PF ROW wherever possible. The new road will be designed as a 'pioneer road' with a 15-foot-wide driving surface and 2 to 1 side slopes. Class III riprap and geotextile will protect against erosion in compromised areas. Nine culverts will be replaced with 'fish friendly' culverts along this stretch of highway (see the description of 'fish friendly' culverts in Project #5)¹⁸.

¹⁸ Although we are considering all nine culverts mentioned for replacement for the purposes of this scope and planning level estimate, there exists possibility (given current flow and gradient moving across the ROW) that full restoration of fish passage across the corridor may not be possible without bridges. The issues of fish passage and specific impacts to salmon population and other ecological concerns should be further addressed as project alternatives are developed.



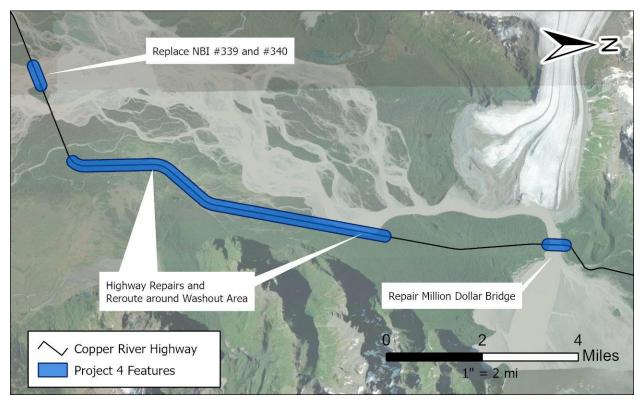


Figure 9. Project #4 Features

The MDB at MP 48 will be repaired. This work includes replacing Ice Breaker Number 1 and upgrading Ice Breaker Number 2. Piers 1 and 2 will undergo seismic upgrades and their caissons will be grouted. Cracking and spalling of Abutment 1 will be repaired. Damaged chords, laterals, bolts, tie rods, and corbels will be replaced. Lead-based paint on the bridge will be abated, and the bridge will be repainted.

Establishing a driving surface to the MDB would reinstate tourism opportunities that had been lost, such as access to the Childs Glacier Recreation Area and Campground managed by the U.S. Forest Service. Foot-traffic would be able to access land to the north of the MDB for hunting, fishing, and recreation.

Status

This project has not yet begun and is dependent on funding. This project could be broken into three distinct phases based on location; the replacement of NBI #339 and #340 at MP 36; road improvements between MP 38 and MP 45; and the renovation of the MDB at MP 48.

Planning Estimate

The planning-level cost estimate for this project is \$325,000,000. Details are included in Appendix C.

Project #5: Replace Failing Culverts and Culverts Inhibiting Fish Passage

Access to healthy spawning and rearing habitats are important for maintaining high fish productivity in salmonoid and other species. Therefore, unimpeded movement through culverts is critical at all life stages to allow access to all habitat types (Copper River Watershed Project, 2023). Poorly designed, installed, maintained, and/or failed culverts can impede fish passage and limit connectivity of habitat, as well as decrease the quality and quantity of fish habitat for salmon and resident species alike.

Fish passage restoration seeks to remove culverts identified as barriers to fish passage and replace them with 'fish friendly', or 'stream simulation' culverts (Photo 7 and Photo 8). Fish friendly culverts are constructed so that the channel inside the culvert is virtually indistinguishable to the natural stream channel up and downstream. This allows fish and other aquatic organisms to freely pass up and downstream (Alaska Department of Fish and Game, 2023).

Photo 7. (Left) Culvert along CRH – Before Replacement.

Photo 8. (Right) Culvert along CRH – After Replacement.



Location

There are 78 culverts located between MP 0 and MP 51 of the CRH.

Existing Conditions

The Copper River Watershed Project (CRWP) keeps detailed public records of the existing condition of culverts along the Copper River Highway in an online database¹⁹. The CRWP's system for prioritizing culverts that need replacement is based on the culvert's physical condition (constriction, perch, velocity) and ecological conditions (quantity and quality of fish habitat, and fish presence). The CRWP assigns a numerical value from I to IV to each culvert that represents its priority for replacement. Priority I culverts are the highest priority and Priority IV culverts are the lowest priority. Table 3 shows the

¹⁹ Copper River Watershed Project's <u>CRWP Culvert Mapper 2.0</u> website was viewed in May and June of 2023 for this project.



number of culverts along the CRH in each of the CRWP priority tiers. All Priority I culverts along the Copper River Highway have already been replaced.

Table 3. Summary of CRWP Priority for Replacement of Culverts on the CRH²⁰

Priority	Number of Culverts
1	0
²¹	8
III	2
IV ²²	48

Scope

This project will have two phases matching the CRWP priority tiers II and III (see Table 3). All Tier I culverts have already been replaced. Replacement culverts are assumed to be box culverts or arch culverts that are sized for fish passage and installed with sufficient habitat considerations to allow for successful fish passage. The assumed design and costs will allow for the Copper River Watershed Project's preferred designs. Bid tabs and estimates from three culvert replacement projects done in 2022 and 2023 along the Copper River Highway were used in the development of these estimates.

This scope assumes replacement of culverts sized to match the stream width stated in the public databases to maximize fish passage. The culverts will be designed and installed with sufficient habitat considerations, and the assumed design and costs will allow for the agency-preferred designs.

In total 10 culverts will be replaced. The total cumulative length of culvert to be replaced is approximately 900 feet. Existing culverts to be replaced range in width from 3-ft to 10-ft. New culverts will range in width from 10-ft to more than 30-ft, depending on the stream width and required conditions for adequate fish passage.

Status

Thirteen (13) of the 78 culverts along the CRH from MP 0 to MP 51 have recently been identified as restoration priorities and evaluated for replacement or removal. CRWP received funding from the Exxon Valdez Oil Spill Trustee Council (EVOSTC) in 2018 to improve fish passage at these sites on the Copper River Delta. The 13 culverts modified by this project are shown in Figure 10.

²² Six of these culverts are east of the road closure at NBI #339. Fish migration channels are frequently blocked and cause total barriers to fish from these unmaintained culverts.



²⁰ The Alaska Department of Fish and Game also maintains an online database of culvert conditions and has a system for prioritizing culverts for replacement. During the development of this masterplan multiple stakeholders, including ADF&G, indicated that the CRWP raking system should be used to prioritize culvert projects along the Copper River Highway as it more fully considers existing fish habitat at each culvert.

²¹ 18 culverts were designated as priority "II" in the CRWP database but 10 of these have been replaced since 2020 or are funded and being constructed in summer of 2023.

The CRWP is currently (2023) working on preliminary investigations with The Eyak Corporation for the following four culverts on the CRH: Cop0, Cop36, Cop9, Cop3. Construction for these four culvert replacements is not funded at the time of publication of this Masterplan.

For funding purposes, further consultation between DOT&PF Hydrologists, ADF&G, and the CRWP to determine which culverts are the highest priority for replacement, and scoping project efforts from that ranking could be beneficial.

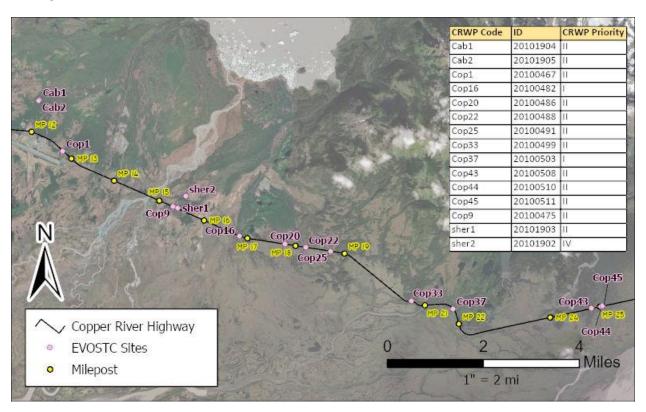


Figure 10. CRWP Culverts Identified for replacement/removal with EVOSTC funding.

Planning Estimate

The planning-level cost estimate for this project is \$21,000,000. The cost of each phase of work is shown in Table 4. Details are included in Appendix C.

Table 4. Planning Level Cost Estimates for Each Phase of Project #5.

Phase	Culverts Replaced	Planning Level Cost Estimate
1	8	\$16,200,000
П	2	\$2,400,000
Total	10	\$21,000,000

Next Steps/Recommendations

The CRH TMP is a guiding document that can be used by DOT&PF, NVE, and the City, as well as agencies and organizations, to advocate for project development and funding.

It is recommended that the SAC continue to follow up and begin to seek funding in coordination with DOT&PF. Additionally, it is recommended that the projects pursued originate west to east along the project corridor to reduce overall costs. Lastly, it is recommended that this master plan is reviewed and updated every five years.

With these sentiments in mind, a proposed concept-level sequence for project funding and implementation is as follows:

- 1. Begin to seek funding for Projects 1, 2, and 3 (Ibeck Creek, Multi-use pathway, Bridge 339), Potentially combining Projects 1 and 2 together as "Copper River Highway improvements MP 0-13", as proposed Ibeck Creek improvements should be designed with considerations for the proposed multi-use pathway in mind.
- When funding is secured, develop scope and issue requests for proposals for design and
 construction services. Select winning proposals and enter contracts. Any of these 3 projects
 should be feasible to design and construct concurrently depending on available funding and
 department priorities.
- 3. Design Improvements for Projects 1 and 2 and begin construction. Begin seeking funding for Project 5 (Culvert Replacements) through accessible portions of highway.
- 4. As construction continues for Projects 1 and 2, begin construction of Project 3. Develop scope and issue proposal/award for Project 5. Begin seeking funding for Project 4 (Access through MP 51).
- 5. Complete construction for Projects 1 and 2, Continue construction of Project 3. Begin construction for Project 5. Develop scope and issue proposal/award for Project 4.
- Complete remaining construction of projects 3 and 5. Proceed with construction of project 4 to completion.

Funding Resources

In addition to providing the planning context for the CRH PEL study, the CRH TMP can support NVE, the City, and DOT&PF and other agencies and organizations as they seek funding for infrastructure projects within the study area. The following tables include potential – but not all – funding opportunities available to improve surface transportation in the CRH corridor.

Formula Funding

Potential funding sources and apportioned or allocated funds are presented in Table 5.

Table 5. Potential Funding Sources – Apportioned or Allocated Funds

Fund	Purpose	Eligible Recipients
Alaska Federal Lands Access Program	Supports improving facilities and access to, through, or within Federal or Tribal lands	Apportioned to States
Bridge Formula Program (see Community Bridge Investment Program, below)	Supports bridge replacement, rehabilitation, preservation, protection, and construction.	Apportioned to States
Highway Safety Improvement Program	Supports projects to reduce traffic fatalities and serious injuries on public roads.	Apportioned to States
National Highway Freight Program	Supports the efficient movement of freight.	Apportioned to States
National Highway Performance Program	Supports condition and performance of the National Highway System, including supporting activities to increase resiliency related to extreme weather and natural disaster.	Apportioned to States
Surface Transportation Block Grant (STBG)	Supports projects that preserve and improve conditions and performance on Federal-aid highways and bridges.	Apportioned to States
Tribal Transportation Program	Supports safe and adequate transportation and public road access.	Allocated to Tribes

Competitive Grants

 $Competitive \ Grant \ potential \ funding \ sources \ are \ presented \ in \ Table \ 6.$

Table 6. Potential Funding Sources – Competitive Grants

Fund	Purpose	Eligible Recipients
Bridge Investment Program	Focuses on existing bridges in poor condition	States, local governments, Tribes, Federal agencies
Denali Commission Transportation Program Grants	Supports basic road improvement projects that connect rural communities and the state highway system as well as provide enhancements to rural economic development.	Non-profits, local governments, Tribes, Tribal organizations, State
National Culvert Removal, Replacement, and Restoration Grants	Supports improving or restoring fish passage for anadromous fish.	Tribes, states, local governments
National Scenic Byways Program	Supports facility improvements, safety upgrades, and interpretive information for scenic byways.	States and Tribes
Nationally Significant Federal Lands and Tribal Projects Program	Supports construction-related funding for projects within, adjacent to, or accessing Federal and Tribal lands.	
Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Program	Supports strengthening surface transportation to be more resilient to natural hazards, including climate change, sea level rise, flooding, extreme weather events, and other natural disasters.	States, local governments, Tribes
Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grants	Supports capital improvements for surface transportation that has a significant local or regional impact.	Tribes, states, local governments
Rural Surface Transportation Grant Program	Supports projects to improve and expand surface infrastructure to increase connectivity and improve the safety and reliability of moving people and freight.	State, local governments, Tribes
Tribal High Priority Projects Program	Supports completion of highest priority projects for facilities listed on the National Tribal Transportation Facility Inventory list.	Federally recognized tribes or governmental subdivision
Tribal Transportation Program Bridge Program	Supports improvement of Tribally owned and non-Tribally owned bridges in poor condition that have been identified as a Tribal transportation facility	Federally recognized Tribes

Table 6. Continued.

Tribal Transportation Safety Fund	Addresses transportation safety issues identified by Tribes	Federally recognized Tribes
U.S. Economic Development Administration Public Works Program	Supports distressed communities to revitalize, expand, and upgrade physical infrastructure.	Non-profits, local governments, Tribes, Tribal organizations, State

State of Alaska

Potential funding sources utilizing State of Alaska Funds is presented in Table 7.

Table 7. Potential Funding Sources - State of Alaska Funds

Fund	Purpose	Eligible Recipients
Community Bridge Investment Program	Supports replacing, repairing, or protecting NBI bridges or culverts	Local governments
Department of Commerce Community and Economic Community Development Block Grants	Supports planning and project grants to address issues detrimental to health and safety of community residents and reduce costs of services.	Local governments
State of Alaska Capital and Operating <u>Budgets</u>	Supports DOT&PF operations and special projects	State Agencies
Transportation Alternatives Program	Supports smaller-scale transportation projects including bike and pedestrian facilities, turnouts and viewing areas, environmental mitigation related to habitat connectivity, and recreational trails	Set aside under STBG Program

Appendix A: Planning Resources

Amanay	Diam	Durmana
Agency	Plan	Purpose
DOT&PF	Copper River Highway Planning and Environmental Linkage Study (2019)	A planning document that supports environmental review requirements focused on alternatives to reconstruct, repair, and replace the damaged transportation infrastructure along a segment of the CRH, from approximately MP 27 through approximate MP 51. Projects considered within the CRH PEL include restoring access across NBI #339, reestablishing access between MP 44 and 45, repairing the icebreaker at Pier 1 of the MDB, replacing culverts, and expanding and developing material sites.
DOT&PF	Statewide Long Range Transportation Plan Update – draft (2022)	A long-range plan that explores highways, aviation, transit, rail, marine, bicycle, and non-motorized transportation and freight needs statewide through 2050.
DOT&PF	Prince William Sound Transportation Plan (2001)	A multi-modal plan addressing ferry, surface transportation, ports and harbors, and aviation improvements, focused on year-round mobility within the region, including improvements to the ferry system to link communities within PWS and the rest of the state.
DOT&PF	Cordova Merle K. "Mudhole" Smith Airport Master Plan	A site-specific plan focused on short-term and long-range improvements to runway and other facilities within the airport's existing footprint.
City of Cordova	City of Cordova Comprehensive Plan (2019)	A land use plan including land use policies, housing, and economic development and ways to maintain the area's natural and community values. The Comp Plan recognized transportation issues such as limited access, lack of pedestrian and bike connectivity, and aging road infrastructure. Key goals included securing reliable and affordable air and ferry service, maintaining a safe and functional transportation network, and providing improved pedestrian and bike facilities.
City of Cordova	City of Cordova Historic Buildings Survey Plan and Historic Properties Roster (2020)	An inventory of historic properties based on historic themes including industry, commerce/trade, recreation and culture, transportation, and architecture. Trails, roads, objects (i.e. boats), and archaeological sites were not reviewed as part of the survey, and a recommendation was made to prepare a separate survey and inventory for the CRH.

PWS Economic Development District	Prince William Sound Comprehensive Economic Development Strategy (2021-2025)	A strategic plan focused on economic development, including 16 priority areas related to infrastructure, workforce development, and diversifying the economy.
Alaska Department of Natural Resources	Prince William Sound Area Plan (1988)	A land use plan for state-owned lands, including uplands and submerged lands. It determines land-use classifications, land disposal locations, and other guidelines for use of state land. It makes sure there will be reasonable access across state lands for resource development.
National Park Service	Alaska Federal Lands Long Range Transportation Plan	A multi-agency LRTP for Federal lands in Alaska which identifies and prioritizes transportation infrastructure and systems, focusing on connectivity of public access to and through Federal lands.
USFS	Chugach National Forest Land Management Plan (2020)	A land management plan that provides guidance for projects and decision-making.
NVE	Long Range Transportation Plan (2022)	A plan identifying the Tribe's high-priority transportation needs including access to areas for housing, subsistence, recreation, and oil spill response.