

# Turnagain Pass Master Plan

## Technical Memorandum 4: Proposed Projects and Prioritization

June 2024



U.S. Department of Transportation  
**Federal Highway  
Administration**

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# ACRONYMS & PHRASES

|                |   |
|----------------|---|
| ADA .....      | Americans with Disabilities Act                           |
| ADNR .....     | Alaska Department of Natural Resources                    |
| DOT&PF .....   | Alaska Department of Transportation and Public Facilities |
| MP .....       | Mile Point  |
| memo .....     | Memorandum  |
| Moto Lot ..... | Motorized Lot   |
| RVs .....      | Recreational Vehicles                                     |
| The Pass ..... | Turnagain Pass  |
| TPMP .....     | Turnagain Pass Master Plan                                |
| USFS .....     | United States Forest Service                              |
| WFLHD .....    | Western Federal Lands, Highway Division                   |



# EXECUTIVE SUMMARY

The Turnagain Pass Master Plan will provide a long-term guide for future area improvements with a focus on safety and recreational access along the transportation corridor and surrounding areas. The master plan is a collaborative effort between the United States Forest Service, Alaska Department of Transportation and Public Facilities, and the Western Federal Lands Highway Division for all existing recreational facilities in the Chugach National Forest with access to Seward Highway (MP 56-75).

Phase Two of the Turnagain Pass Master Plan includes:

- Proposed projects and prioritization (this memorandum)
- Conceptual designs and cost estimates
- Public and stakeholder outreach
- Management and maintenance strategy
- The final Turnagain Pass Master Plan

This memorandum presents the identification and prioritization of the proposed projects within Turnagain Pass.

This memorandum informs the next steps in the master planning process which includes:

- Creating conceptual designs and planning level cost estimates of the priority projects
- Creating detailed project descriptions for the proposed projects not requiring conceptual designs and cost estimates
- A series of public open houses to share project and cost information and receive feedback

The results of the work will be documented in a final Master Plan.



# 1. Introduction

The Turnagain Pass Master Plan (TPMP) provides a long-term guide for future corridor improvements with a focus on safety and recreational access. The TPMP is a collaborative planning effort between the United States Forest Service (USFS), Alaska Department of Transportation & Public Facilities (DOT&PF), and the Western Federal Lands Highway Division (WFLHD) for all existing recreational facilities in the Chugach National Forest accessed from Seward Highway (Mile Point 56-75). The TPMP effort is comprised of two phases. Phase One included:

- Existing conditions
- Public and stakeholder outreach
- Demand management analysis and strategies
- Needs assessment

This memorandum (Technical Memorandum 4) sets out proposed projects to address needs identified in Phase One, and associated evaluation and prioritization. It will inform the remaining Phase Two tasks, including:

- Conceptual designs and cost estimates (Technical Memorandum 5)
- Management and maintenance strategy (Technical Memorandum 6)
- Final Turnagain Pass Master Plan

The TPMP area covers approximately 98,000 acres of the Chugach National Forest within the Glacier Ranger District and includes the Seward Highway Corridor Mile Point (MP) 56-76 (Turnagain Pass). Existing land and facilities within this area are owned by the USFS, Alaska Department of Natural Resources (ADNR), and DOT&PF. The identification and condition of all facilities within the study area was discussed in the Phase One Summary – Existing Conditions, including parking areas, roadside pullouts, trailheads, and campgrounds. A summary of these facilities is in **Table 1**.

**Table 1: Existing Facilities Conditions**

| Facility                      | Location/Extents   | Existing Features   | Owner/Maintenance |
|-------------------------------|--|---|-------------------|
| Canyon Creek Rest Area        | MP 56<br>(West of the highway)<br>MP 56.1<br>(East of the highway) | Parking<br>Toilets (2)<br>Dumpster Access<br>Paved Trail Access (limited) | DOT&PF            |
| Gravel Pit                    | MP 61.1  | Parking (2-4 vehicles)  | DOT&PF            |
| Cornbiscuit Pullout           | MP 65.1  | Parking   |                   |
| Sunburst Pullout              | MP 65.9 and 66   | Parking (paved)   |                   |
| Motorized Vehicle Area Access | MP 67.4 and 67.6   | Restroom<br>Picnic Tables<br>Snowmachine Access                           | USFS/DOT&PF       |



| Facility   | Location/Extents                 | Existing Features   | Owner/Maintenance |
|--|----------------------------------|---|-------------------|
|  |                                  | Skiing Access   |                   |
| Snowstake Lot                                    | MP 68.9                          | Parking   |                   |
| Base of Pass                                     | MP 74.5                          | Parking   | DOT&PF            |
| Recreational Infrastructure                      | Various                          | Public Use Cabins (41)<br>Motorized User Access<br>Trails (500 miles)<br>Roads (90 miles) | USFS              |
| Motorized Use Access (Winter)                    | West Side of Seward Highway      | Access for use of motorized vehicles (snowmachines) during winter months                  |                   |
| Granite Creek Campground                         | MP 65.4                          | Camp Sites (19)   | USFS              |
| Bertha Creek Campground                          | MP 68                            | Camp Sites (12)   | USFS              |
| Iditarod National Historic Trail – Southern Trek | 180 miles                        | Hiking Trail  |                   |
| Turnagain Pass Trail                             | 12 miles                         | Multi-Use Trail (Non-Motorized)<br>Camping  |                   |
| Gulch Creek ATV and Pedestrian Bridge Access     | MP 56.7<br>(West of the Highway) | Viewing Area<br>Hiking Trail<br>Parking (2-4 vehicles)                                    |                   |
| Raft Launch                                      | MP 58.3                          | Raft Launching<br>Parking   | DOT&PF            |
| Johnson Pass North Trailhead                     | MP 62.9                          | Parking<br>Multi-Use Trail<br>Restroom  |                   |
| Center Ridge Trailhead                           | MP 68.3                          | Parking<br>Restroom<br>Multi-Use Trail (Non-Motorized)                                    |                   |
| Tincan Trailhead                                 | MP 68.2<br>(East of Highway)     | Parking<br>Skiing Access  |                   |
| Upper Ingram Trailhead                           | MP 72.5                          | Parking<br>Skiing Access  | DOT&PF            |



## 2. Identified Gaps and Areas for Improvement

The gaps identified for the Turnagain Pass corridor include issues of perceived road safety for all user types, maintenance both year-round and specific gaps during the winter months, limitations associated with parking and access, limited wayfinding, and disjointed connections of trails and pathways. The overall needs for the area have previously been identified in the Turnagain Pass Master Plan Needs Assessment Technical Memorandum. The table containing the identified needs is attached as Appendix 1.

Potential improvements have been identified for the gaps, which will inform the recommended projects throughout the corridor.

### 2.1 Roadway Safety

Public engagement during Phase One of the master plan highlighted concerns about road safety throughout Turnagain Pass. This is particularly perceived at the Tincan Pull Out/Parking area at MP 68.2, associated with the location's primary use during the winter season for backcountry skiing. Pass users park head in against the existing guardrail as if there is angled parking. Due to the type of winter activity and need assemble equipment, users spend extended periods of time at the tail end of their vehicles, which are closest to traffic traveling on the Seward Highway, while they put on or take off winter gear. Once they are ready to leave, typically once the early dusk of an Alaskan winter sets, users then reverse into oncoming traffic on the Seward Highway.

One incident occurred in January 2023, when a commercial semi-truck sideswiped and totaled five vehicles parked at the pullout, narrowly missing pedestrians. Instances like these are hard to quantify when looking at safety as crash data will reflect a single car sideswipe crash, rather than including all parked vehicles included.

Other areas throughout the Pass have perceived safety concerns due to the prescribed speed limit throughout the corridor, coupled with the limited acceleration and deceleration lanes when making turns. The entirety of the Seward Highway has been identified as a Highway Safety Corridor owing to historically elevated crash rates.

Potential areas for improvement include:

- Creating a new parking area for Tincan Pull Out and moving the guardrail to deter any future parking at location.
- Adding high friction surface treatment.
- Reducing the speed through the corridor.



- Adding safety signage, such as “slippery conditions”, “vehicles entering/exiting roadway”, “animal crossing, and/or “curve ahead” warning signs.

## 2.2 Maintenance

Additional gaps have been identified for maintenance throughout Turnagain Pass, both year-round and during the winter months of mid-October to mid-May. These maintenance gaps are not limited to a single agency acting within the corridor but apply to all agencies responsible for or acting in any capacity for maintenance. These gaps are due to limits in funding, shortage of qualified staff, poor design limiting quick and easy maintenance and disjointed interagency collaboration.

### 2.2.1 Year-Round

Year-round maintenance gaps have been identified for the following locations:

- Multiuse pathway along Seward Highway
- Restroom facilities

The multiuse pathway along the Seward Highway requires regular maintenance ranging from pavement improvements to gravel sweeping.

There are seven locations providing restroom facilities, some are owned and maintained by DOT&PF and others owned by the USFS. Ownership and maintenance responsibility are not clear for users of these facilities, resulting in confusion on which agency to notify when services are needed. The DOT&PF and USFS are interested in promoting and increasing clarity for all users.

These facilities and their owner/maintainer are:

- Canyon Creek East – DOT&PF
- Canyon Creek West – DOT&PF
- Johnson Pass Trailhead – USFS
- Granite Creek Campground – USFS
- Bertha Creek Campground – USFS
- Center Ridge Trailhead – USFS
- Moto Lot – USFS

The facilities located at Canyon Creek East and West are regarded as the official rest areas for the corridor and are owned and maintained by DOT&PF. They are seasonal locations and are only open during the summer months (approximately May through September each year).

The USFS facilities located at Johnson Pass Trailhead, Granite Creek Campground, Center Ridge Trailhead, and the Moto Lot are all maintained year-round. Although these facilities are intended for use by those who are actively and meaningfully engaging with the forest, which would mean their required maintenance would be manageable by the small staff of the USFS, their location close to the road and





their easy accessibility makes them a prime stopping location for through travelers as they proceed to destinations not within the Pass. This is exacerbated during the months the Canyon Creek rest areas are closed, as these facilities then become some of the few stopping areas available for travelers.

Bertha Creek Campground is an additional summer-only facility maintained by USFS. As the facility is seasonal and less visible, it experiences less of the pressure than the other year-round, highly visible rest areas.

Potential areas for improvement include:

- Moving USFS restroom facilities away from the highway to reduce their visibility to pass-through traffic
- Create a maintenance coordination plan between agencies
- Provide the official DOT&PF rest area facilities at Canyon Creek year-round
- Identify additional funding opportunities to support restroom maintenance

## 2.2.2 Winter

Winter maintenance throughout the corridor is carried out from and by the DOT&PF Silvertip Maintenance Facility located south of the Canyon Creek Rest Areas. Funding for maintenance has been an ongoing issue for the State, and in the winter of 2019 the DOT&PF made the decision to close the Silvertip Station due to a dwindling budget and relied on the stations surrounding the Turnagain Pass Corridor to complete maintenance activities.

In response to the shutdown of the Silvertip Maintenance Station, travelers through the Pass and local political representatives advocated for the reinstatement of the Silvertip Station. A petition campaign also argued for better plowing throughout the pass. The petition received over 2,000 signatures. In 2020, the state made the decision to reopen the maintenance station with the promise to restore plowing and maintenance to their full capacity.

Potential areas for improvement include:

- Adding in and out entry allowing for maintenance vehicles to be able to enter a lot to plow and exit without having to turn around or use additional equipment
- Adding appropriate turning radii in lots only have a single point of entry

## 2.3 Parking and Access

The current parking facilities in the Pass are both paved and unpaved. Paved parking facilities can be striped to demarcate spaces for specific uses. With paved parking facilities, Americans with Disabilities Act (ADA) requirements must be followed, which means including a set number of spaces based on the surface area of the parking facility. ADA spaces provided added benefits of increased accessibility to and within the forest. Striping paved parking facilities has limitations during winter conditions due to snow



and ice disguising markings. Increased time is needed to maintain these facilities and plowing wears away paint, increasing the maintenance burden of seasonally having to restripe pavement markings.

Unpaved parking facilities are low-cost options and can have parking spaces marked with indicators such as a log. This limits the ability to demarcate spaces for certain vehicle types or to locate disabled parking. This can result in uncontrolled parking conditions, particularly at lots where there is high demand, resulting in inefficient parking arrangements and potential for vehicles and accesses to be blocked.

Potential areas for improvement include:

- Paving parking facilities where practicable and including ADA parking facilities
- Striping parking lots to provide stalls for Recreational Vehicles (RVs) and trailers

## 2.4 Wayfinding

Engagement with the DOT&PF, USFS, and the public identified a lack of signage or misidentified signage throughout the Pass which promotes poor wayfinding for users. This lack of wayfinding/signage is seen when approaching the pullouts identified as Sunburst Parking Area and Cornbiscuit as well as for the trailheads at Center Ridge and Upper Ingram.

A lack of wayfinding and identification of trails, areas of importance, locations for education and information, and opportunities for short day hikes means travelers miss important landmarks and opportunities when traveling through the Pass. This means travelers rely on finding out about recreation opportunities prior to planning a trip and may miss recreation opportunities because they are not aware they are nearby. Potential areas for improvement include:

- Provide wayfinding for trailheads, picnic areas, scenic views, educational opportunities, and other opportunities throughout Turnagain Pass

## 2.5 Pathways/Trails

The multiuse path adjacent to the Seward Highway through the Pass provides a long, continuous non-motorized connection, but it does not connect either of the campgrounds to the trailheads. This is a gap as it precludes visitors who choose to stay overnight in the Pass from the opportunity to walk, bike, or hike safely and easily to a trailhead for recreation opportunities.

Potential areas for improvement include:

- Provide trail connections from Granite Creek Campground to Johnson Pass Trailhead
- Provide trail connections from Bertha Creek Campground to Turnagain Pass Trailhead



# 3. Proposed Projects

Many potential projects were suggested through the planning process and public input. The potential projects were categorized based on the following needs:

- Interpretive signage and recreation
- Trails/trails wayfinding
- Pathways
- Parking
- Roadway safety/marketing/safety wayfinding
- Program(s)

Many of the projects in the Turnagain Pass corridor are to address safety, parking, and trail/ trail wayfinding. A more in-depth look at the proposed projects and their identified needs can be found in the tables included in Appendix 1.

## 3.1 Proposed Project Categories

Using the categorized needs, proposed projects are divided into the following categories:

- Parking Areas
- Paths and Trails
- Programs

### 3.1.1 Parking Areas

Five (5) existing parking areas have been identified for improvements:

1. Tincan Pullout/Parking Area
2. Motorized (Moto) Lot
3. Center Ridge Trailhead
4. Johnson Pass Trailhead
5. Raft Launch Parking Area

In addition to these existing parking locations, a new parking facility is recommended between MP 65 and MP 66 at either the Sunburst Peak Parking Area or Cornbiscuit Pullout.



### 3.1.2 Paths and Trails

The paths and trails section includes the multiuse path following the route of the Seward Highway, as well as any desired hiking, biking, and ski trail improvements or additions. Many of the identified needs include quality improvements or extensions to existing facilities, new facilities to provide connections between high-use sites such as campgrounds and trailheads and establishing new types of trails to cater to additional user groups.

### 3.1.3 Programs

Two (2) programs have been identified for consideration within the Turnagain Pass corridor. These programs are designed to address year-round and winter maintenance gaps. The development of a Facility/Winter Maintenance Management Plan is proposed to assist in coordinating among organizations operating within the Pass. The Management Plan would address quality and capacity issues, support adequate upkeep of facilities, and provide safe facilities for all user groups during all season. A program similar to the Vail Pass for users in Vail Colorado is proposed to increase funding for maintenance activities within the Pass.



# 4. Project/Program Prioritization

Project/program prioritization was conducted using an Impact and Effort Matrix. This matrix assists in sorting and identifying projects into four quadrants of “quick wins”, “major projects”, “fill ins”, and “thankless tasks”. This method promotes objective decision-making based on data-driven evaluations and helps to highlight tasks with the most significant impact/value. The Impact and Effort Matrix and the categorization tables are both included in Appendix 2.

## 4.1 Categorization

Each project was categorized initially focusing on the level of effort (high or low), and then the likely impact of the project once complete (*Figure 2*).

### Project/Program Effort:

- **High Effort:** Recommended project/program requires a project description, cost estimate, AND concept design.
- **Low Effort:** Recommended project/program requires a project description and/or a cost estimate.

### Project/Program Impact:

- **High Impact:** Recommended project/program is likely to have a significant positive impact on the Master Plan area while meeting the needs established by the stakeholders and project team.
- **Low Impact:** Recommended project/program has low-level positive or neutral impact on the Master Plan area while still meeting the needs established by the stakeholder’s and project team.



## 4.2 Prioritization

All identified projects/programs were presented in a table to enable the project team to assign the project's effort and impact level. Once assigned levels were determined, the projects/programs were sorted into four categories: quick wins, major projects, fill ins, and thankless tasks. The assignment of these categories is based on the following level assignments:

- **Quick Wins:** Projects/programs requiring minimal design and engineering work but provide a large impact for the study area. These projects receive rankings of high impact and low effort.
- **Major Projects:** Projects/programs requiring major design concepts and engineering efforts while also providing a large impact for the study area. These projects receive rankings of high impact and high effort.
- **Fill-Ins:** Projects/programs requiring minimal design and engineering work and provide low impact for the study area. These projects receive rankings of low impact and low effort.
- **For Future Consideration:** Projects/programs requiring major design concepts and engineering work yet provide low impact for the study area. These projects receive rankings of low impact and high effort.

The prioritization matrix is included in Appendix 2. The matrix yielded seven priority projects to move forward with conceptual designs as cost estimates. These priority projects are identified in section 4.3 Priority Projects. In addition to the eight priority projects identified, eight "Quick Wins" have been identified. These proposed projects falling within the "Quick Wins" category, are projects having been identified as providing a large impact for the study area, the eight identified will receive project descriptions.



## 4.3 Priority Projects

The priority projects identified using the Impact/Effort Matrix are detailed below. Each of the identified priority project includes the location/extent, the project category, and their identified need/s with detailed descriptions.

### Johnson Pass Trailhead Parking Improvements

Parking improvements for Johnson Pass Trailhead address the needs included in **Table 2**. These needs focus on the addition of striping for parking, live parking lot cameras, an emergency phone station, pet waste station, and ADA accessibility and includes the improvement and update of interpretive trail information and parking lot design.

**Table 2: Priority Project – Johnson Pass Trailhead Parking Improvements**

| Priority Project       | Category     | Location/ Extents | Need   | Need Description   |
|------------------------|--------------|-------------------|--|--|
| Johnson Pass Trailhead | Parking Area | MP 62.9           | Addition of striping for parking, including parking for trailers (equestrian)                    | Provide striping for parking, including parking for oversized vehicles including trailers (specifically equestrian), RVs.  |
|                        |              |                   | Addition of live parking lot cameras   | Users seek information to view parking lot capacity and pass conditions prior to traveling. Information includes 511 cameras.  |
|                        |              |                   | Addition of emergency phone station  | Due to the nature of activities done at this location, the addition of an emergency phone station would be beneficial for users.   |
|                        |              |                   | Improvement and update of interpretive trail information   | Update interpretive signage and kiosks at Johnson Pass Trailhead parking area. Information sought at locations includes weather conditions, cultural interpretation and history, and geological history. |
|                        |              |                   | Pet waste station  | Provide pet waste stations.  |
|                        |              |                   | ADA accessibility  | Ensure updates to parking facility and the increased access to the forest allow for and promote ADA accessibility.   |
|                        |              |                   | Parking lot design improvement, including increased parking and designing for winter maintenance | Redesign parking lot to improve quality and access, including ability to provide improved winter maintenance.  |



## Moto Lot Parking Area Improvements

Parking area improvements for the Moto Lot address the needs included in **Table 3**. These needs focus on the addition of interpretive trail information, live parking lot cameras, warming structures and additional amenities. These needs also include the redesign of the existing rescue cache and providing ADA accessibility.

**Table 3: Priority Project – Moto Lot Parking Area Improvements**

| Priority Project | Category     | Location/ Extents | Need                                       | Need Description  |
|------------------|--------------|-------------------|--|---|
| Moto Lot         | Parking Area | MP 67.4 and 67.6  | Addition of interpretive trail information | Provide interpretive signage and kiosks at Moto Lot parking area. Information sought at locations includes weather conditions, cultural interpretation and history, and geological history. |
|                  |              |                   | Addition of live parking lot cameras       | Users seek information to view parking lot capacity and pass conditions prior to traveling. Information includes 511 cameras.   |
|                  |              |                   | Redesign of rescue cache                   | Redesign current rescue cache. The current location requires extensive digging in heavy snow, which hinders access and response.  |
|                  |              |                   | Pet waste station                          | Provide pet waste stations.   |
|                  |              |                   | ADA accessibility                          | Ensure updates to parking facility and the increased access to the forest allow for and promote ADA accessibility.  |
|                  |              |                   | Addition of warming structures             | Provide semi-permanent warming structures for recreation users.   |
|                  |              |                   | Addition of amenities                      | Provide additional amenities, such as, picnic areas, pavilions, grills, facility/shelter for youth outdoor education.   |





## Center Ridge Trailhead Parking Area Improvements

Parking area improvements at Center Ridge Trailhead address the needs in **Table 4** and work as an addition to planned and funded projects already tailored to Center Ridge Trailhead. These needs focus on the addition of striping for parking, ADA accessibility, and additional amenities. These needs also include the improvement of summer trails and parking lot design.

**Table 4: Priority Project – Center Ridge Trailhead Parking Area Improvements**

| Priority Project       | Category     | Location/ Extents | Need  | Need Description  |
|------------------------|--------------|-------------------|---|---|
| Center Ridge Trailhead | Parking Area | MP 68.3           | Addition of striping for parking, including parking for trailers (equestrian) | Provide striping for parking, including parking for oversized vehicles including trailers (specifically equestrian), RVs. |
|                        |              |                   | Pet waste station   | Provide pet waste stations.   |
|                        |              |                   | ADA accessibility   | Ensure updates to parking facility and the increased access to the forest allow for and promote ADA accessibility.        |
|                        |              |                   | Addition of amenities   | Provide additional amenities, such as picnic areas, pavilions, grills, facility/shelter for youth outdoor education.      |
|                        |              |                   | Parking lot design improvement, including designing for winter maintenance    | Redesign parking lot to improve quality and access, including ability to provide improved winter maintenance.             |
|                        |              |                   | Improvement of summer trails, particularly summer trails near parking areas   | Promote and improve the summer trail system by using trails near existing parking lots.                                   |



## Tincan Pullout/Parking Area Improvements

Parking area improvements for Tincan Pullout addresses the needs in **Table 5**. These needs focus on the addition of interpretive trail information, live parking lot cameras, new parking facilities and amenities, and an emergency phone station. These needs also include improvement for parking lot design, ADA accessibility, and the improvement of road geometry and safety.

**Table 5: Priority Project Tincan Pullout/Parking Area Improvements**

| Priority Project            | Category     | Location/ Extent             | Need   | Need Description   |
|-----------------------------|--------------|------------------------------|--|--|
| Tincan Pullout/Parking Area | Parking Area | MP 68.2<br>(East of Highway) | Addition of interpretive trail information   | Provide interpretive signage and kiosks at Tincan parking area. Information sought at locations includes weather conditions, cultural interpretation and history, and geological history.  |
|                             |              |                              | Addition of live parking lot cameras   | Users seek information to view parking lot capacity and Pass conditions prior to traveling. Information includes 511 cameras.  |
|                             |              |                              | Addition of parking facilities and amenities   | Parking at Tincan is currently not a formal parking facility nor does it have any amenities. This need includes increasing parking, improving access, providing restroom facilities, and providing parking for guided tours and associated client parking (who hold permits to operate in the Pass). Additional amenities beneficial to this location include: <ul style="list-style-type: none"> <li>• Rescue Cache</li> <li>• Pavilion</li> <li>• Picnic Tables</li> </ul> |
|                             |              |                              | Parking lot design improvement, including increased parking and designing for winter maintenance | Parking lot design improvements include the addition of increased parking and designing parking areas for winter maintenance. Winter maintenance designs include areas with two entry points and an ample turning radius.  |
|                             |              |                              | ADA accessibility  | Designing all paved parking areas to comply with ADA standards and improve accessibility to the National Forest.   |
|                             |              |                              | Addition of emergency phone station  | Due to the nature of activities at this location, the addition of an emergency phone station would be beneficial for users.  |
|                             |              |                              | Improvement of road geometry   | Improve access approach to enhance safety and visibility, particularly during the winter months  |
|                             |              |                              | Improvement of roadway safety  | Focus on ways to improve safety for all user groups  |



## River Access Parking Area Improvements

Parking area improvements for the River Access Area, located on the banks of Sixmile Creek, address the needs in **Table 6**. These needs include upgrades to the current packrafting facilities and river entry, improvement and update of interpretive trail information, and the addition of warming structures. These needs also include the improvement to roadway safety and parking lot design including ADA accessibility.

**Table 6: Priority Project – River Access Parking Area Improvements**

| Priority Project | Category     | Location/ Extents | Need   | Need Description   |
|------------------|--------------|-------------------|--|--|
| Raft Launch      | Parking Area | MP 58.3           | Upgrades to packrafting facilities   | Provide upgrades to current packrafting facility and river entry.  |
|                  |              |                   | Pet waste station  | Provide pet waste stations.  |
|                  |              |                   | Improvement and update of interpretive trail information   | Install interpretive signage and kiosks at the raft launch parking area. Information sought at locations includes weather conditions, cultural interpretation and history, and geological history. |
|                  |              |                   | Addition of warming structures   | Provide semi-permanent warming structures for recreation users.  |
|                  |              |                   | ADA accessibility  | Ensure updates to parking facility and the increased access to the forest allow for and promote ADA accessibility.   |
|                  |              |                   | Improved roadway safety  | Focus on ways to improve safety for all user groups  |
|                  |              |                   | Parking lot design improvement, including increased parking and designing for winter maintenance | Redesign parking lot to improve quality and access, including ability to provide improved winter maintenance.  |



## Standard Design for New Parking Facility

Additional parking facilities within the Pass has been identified as a high priority need, to address this need a standard design containing the elements included in **Table 7** is being included as a priority project. This standard design contains all elements desired as upgrades and improvements for the existing parking areas within the Pass. This standard design is intended to accommodate either the Sun Burst Parking Area or Cornbiscuit Pull out, both located between MP 65 and MP 66.

**Table 7: Priority Project – Standard Design for New Parking Facility**

| Priority Project                         | Category     | Location/ Extent   | Need   | Need Description  |
|--|--------------|--|--|---|
| Standard Design for New Parking Facility | Parking Area | Between MP 65 and MP 66 (Sun Burst Parking Area or Cornbiscuit Pull Out) | Addition of interpretive trail information   | Provide interpretive signage and kiosks at a new parking area within The Pass. Information sought at locations includes weather conditions, cultural interpretation and history, and geological history.  |
|  |              |  | Addition of live parking lot cameras   | Users seek information to view parking lot capacity and Pass conditions prior to traveling. Information includes 511 cameras.   |
|  |              |  | Addition of parking facilities and amenities   | Design a parking facility for a location in The Pass that currently does not have formal parking or any amenities. This need includes increasing parking, improving access, and providing parking for guided tours and associated client parking (who hold permits to operate in the Pass). Additional amenities beneficial to this location include: <ul style="list-style-type: none"> <li>• Rescue Cache</li> <li>• Picnic Tables</li> </ul> |
|  |              |  | Parking lot design improvement, including increased parking and designing for winter maintenance | Parking lot design improvements include the addition of increased parking and designing parking areas for winter maintenance. Winter maintenance designs include areas with two entry points and an ample turning radius.   |
|  |              |  | ADA accessibility  | Designing all paved parking areas to comply with ADA standards and improve accessibility to the National Forest.  |
|  |              |  | Addition of emergency phone station  | Due to the nature of activities at this location, the addition of an emergency phone station would be beneficial for users.   |
|  |              |  | Improvement of road geometry   | Improve access approach to enhance safety and visibility, particularly during the winter months   |
|  |              |  | Improvement of roadway safety  | Focus on ways to improve safety for all user groups   |



## Multiuse Pathway Addition and Extension

Improvements for the multiuse path along the entire corridor includes providing new facilities while improving the existing facilities. This project focuses on connecting existing gaps linking new connections between campgrounds and trailheads.

**Table 8: Priority Project – New Bike Path Facility**

| Priority Project         | Category   | Location/ Extents    | Need   | Need Description   |
|--------------------------|------------|----------------------|--|--|
| Continuous Multiuse Path | Path/Trail | Entirety of Corridor | Quality improvements to existing paved paths.  | Provide improvements in quality of existing paved paths and connect gaps to create continuous paved paths.                           |
|                          |            |                      | Provide a continuous bike/multiuse path along the Seward Highway through Turnagain Pass. | Construct new segments of path to connect gaps in the existing path for a continuous pathway.  |
|                          |            |                      | Connections between existing campgrounds and trailheads.                                 | Provide connections for non-motorized users between trails and campgrounds. This includes walkers, bicyclists, and equestrian users. |
|                          |            |                      | New bike path.   | Provide a new bike path facility connecting Granite Creek to Bertha Creek (Twenty-Mile Valley).                                      |



## **APPENDIX 1: ALL PROPOSED PROJECTS**

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**Table 9: Turnagain Pass All Proposed Projects**

| Proposed Project       | Category     | Location/ Extents | Need   | Need Description   |
|------------------------|--------------|-------------------|--|--|
| Johnson Pass Trailhead | Parking Area | MP 62.9           | Addition of striping for parking, including parking for trailers (equestrian)                    | Provide striping for parking, including parking for oversized vehicles including trailers (specifically equestrian), RVs.  |
|                        |              |                   | Addition of live parking lot cameras   | Users seek information to view parking lot capacity and pass conditions prior to traveling. Information includes 511 cameras.  |
|                        |              |                   | Addition of emergency phone station  | Due to the nature of activities done at this location, the addition of an emergency phone station would be beneficial for users.   |
|                        |              |                   | Improvement and update of interpretive trail information   | Update interpretive signage and kiosks at Johnson Pass Trailhead parking area. Information sought at locations includes weather conditions, cultural interpretation and history, and geological history. |
|                        |              |                   | Pet waste station  | Provide pet waste stations.  |
|                        |              |                   | ADA accessibility  | Ensure updates to parking facility and the increased access to the forest allow for and promote ADA accessibility.   |
|                        |              |                   | Parking lot design improvement, including increased parking and designing for winter maintenance | Redesign parking lot to improve quality and access, including ability to provide improved winter maintenance.  |
| Moto Lot               | Parking Area | MP 67.4 and 67.6  | Addition of interpretive trail information   | Provide interpretive signage and kiosks at Moto Lot parking area. Information sought at locations includes weather conditions, cultural interpretation and history, and geological history.              |
|                        |              |                   | Addition of live parking lot cameras   | Users seek information to view parking lot capacity and pass conditions prior to traveling. Information includes 511 cameras.  |
|                        |              |                   | Redesign of rescue cache   | Redesign current rescue cache. The current location requires extensive digging in heavy snow, which hinders access and response.   |



| Proposed Project                   | Category     | Location/ Extents         | Need  | Need Description  |
|------------------------------------|--------------|---------------------------|---|---|
|                                    |              |                           | Pet waste station   | Provide pet waste stations.   |
|                                    |              |                           | ADA accessibility   | Ensure updates to parking facility and the increased access to the forest allow for and promote ADA accessibility.  |
|                                    |              |                           | Addition of warming structures  | Provide semi-permanent warming structures for recreation users.   |
|                                    |              |                           | Addition of amenities   | Provide additional amenities, such as, picnic areas, pavilions, grills, facility/shelter for youth outdoor education.   |
| <b>Center Ridge Trailhead</b>      | Parking Area | MP 68.3                   | Addition of striping for parking, including parking for trailers (equestrian) | Provide striping for parking, including parking for oversized vehicles including trailers (specifically equestrian), RVs.   |
|                                    |              |                           | Pet waste station   | Provide pet waste stations.   |
|                                    |              |                           | ADA accessibility   | Ensure updates to parking facility and the increased access to the forest allow for and promote ADA accessibility.  |
|                                    |              |                           | Addition of amenities   | Provide additional amenities, such as picnic areas, pavilions, grills, facility/shelter for youth outdoor education.  |
|                                    |              |                           | Parking lot design improvement, including designing for winter maintenance    | Redesign parking lot to improve quality and access, including ability to provide improved winter maintenance.   |
|                                    |              |                           | Improvement of summer trails, particularly summer trails near parking areas   | Promote and improve the summer trail system by using trails near existing parking lots.   |
| <b>Tincan Pullout/Parking Area</b> | Parking Area | MP 68.2 (East of Highway) | Addition of interpretive trail information                                    | Provide interpretive signage and kiosks at Tincan parking area. Information sought at locations includes weather conditions, cultural interpretation and history, and geological history. |
|                                    |              |                           | Addition of live parking lot cameras  | Users seek information to view parking lot capacity and Pass conditions prior to traveling. Information includes 511 cameras.   |





| Proposed Project | Category     | Location/ Extents | Need   | Need Description  |
|------------------|--------------|-------------------|--|---|
|                  |              |                   | Addition of parking facilities and amenities   | <p>Parking at Tincan is currently not a formal parking facility nor does it have any amenities. This need includes increasing parking, improving access, providing restroom facilities, and providing parking for guided tours and associated client parking (who hold permits to operate in the Pass). Additional amenities beneficial to this location include:</p> <ul style="list-style-type: none"> <li>▪ Rescue Cache</li> <li>▪ Pavilion</li> <li>▪ Picnic Tables</li> </ul> |
|                  |              |                   | Parking lot design improvement, including increased parking and designing for winter maintenance | Parking lot design improvements include the addition of increased parking and designing parking areas for winter maintenance. Winter maintenance designs include areas with two entry points and an ample turning radius.   |
|                  |              |                   | ADA accessibility  | Designing all paved parking areas to comply with ADA standards and improve accessibility to the National Forest.  |
|                  |              |                   | Addition of emergency phone station  | Due to the nature of activities at this location, the addition of an emergency phone station would be beneficial for users.   |
|                  |              |                   | Improvement of road geometry   | Improve access approach to enhance safety and visibility, particularly during the winter months   |
|                  |              |                   | Improvement of roadway safety  | Focus on ways to improve safety for all user groups   |
| Raft Launch      | Parking Area | MP 58.3           | Upgrades to packrafting facilities   | Provide upgrades to current packrafting facility and river entry.   |
|                  |              |                   | Pet waste station  | Provide pet waste stations.   |
|                  |              |                   | Improvement and update of interpretive trail information   | Install interpretive signage and kiosks at the raft launch parking area. Information sought at locations includes weather conditions, cultural interpretation and history, and geological history.  |



| Proposed Project                                | Category     | Location/ Extents  | Need   | Need Description  |
|---|--------------|--|--|---|
|   |              |  | Addition of warming structures   | Provide semi-permanent warming structures for recreation users.   |
|   |              |  | ADA accessibility  | Ensure updates to parking facility and the increased access to the forest allow for and promote ADA accessibility.  |
|   |              |  | Improved roadway safety  | Focus on ways to improve safety for all user groups   |
|   |              |  | Parking lot design improvement, including increased parking and designing for winter maintenance | Redesign parking lot to improve quality and access, including ability to provide improved winter maintenance.   |
| <b>Standard Design for New Parking Facility</b> | Parking Area | Between MP 65 and MP 66 (Sun Burst Parking Area or Cornbiscuit Pull Out) | Addition of interpretive trail information   | Provide interpretive signage and kiosks at a new parking area within The Pass. Information sought at locations includes weather conditions, cultural interpretation and history, and geological history.  |
|   |              |  | Addition of live parking lot cameras   | Users seek information to view parking lot capacity and Pass conditions prior to traveling. Information includes 511 cameras.   |
|   |              |  | Addition of parking facilities and amenities   | Design a parking facility for a location in The Pass that currently does not have formal parking or any amenities. This need includes increasing parking, improving access, and providing parking for guided tours and associated client parking (who hold permits to operate in the Pass). Additional amenities beneficial to this location include: <ul style="list-style-type: none"> <li>▪ Rescue Cache</li> <li>▪ Picnic Tables</li> </ul> |
|   |              |  | Parking lot design improvement, including increased parking and designing for winter maintenance | Parking lot design improvements include the addition of increased parking and designing parking areas for winter maintenance. Winter maintenance designs include areas with two entry points and an ample turning radius.   |
|   |              |  | ADA accessibility  | Designing all paved parking areas to comply with ADA standards and improve accessibility to the National Forest.  |



| Proposed Project                             | Category   | Location/ Extents  | Need   | Need Description   |
|--|------------|--|--|--|
|  |            |  | Addition of emergency phone station  | Due to the nature of activities at this location, the addition of an emergency phone station would be beneficial for users.          |
|  |            |  | Improvement of road geometry   | Improve access approach to enhance safety and visibility, particularly during the winter months                                      |
|  |            |  | Improvement of roadway safety  | Focus on ways to improve safety for all user groups  |
| <b>Paved Path</b>                            | Path/Trail | Throughout the Corridor  | Quality improvements to existing paved paths.  | Provide improvements in quality of existing paved paths and connect gaps to create continuous paved paths.                           |
| <b>Bike/Multiuse Path Extension (Paved)</b>  | Path/Trail | Throughout the Corridor  | Extend existing bike path and connect gaps.  | Construct new segments of path to connect gaps in the existing path for a continuous pathway.  |
| <b>Multiuse Pathway</b>                      | Path/Trail | Throughout the Corridor  | Provide a continuous bike/multiuse path along the Seward Highway through Turnagain Pass. | Construct new segments of path to connect gaps in the existing path for a continuous pathway.  |
| <b>Bike Path</b>                             | Path/Trail | Granite Creek to Bertha Creek (Twenty-Mile Valley)   | New bike path.   | Provide a new bike path facility connecting Granite Creek to Bertha Creek (Twenty-Mile Valley).                                      |
| <b>Campground and Trailhead Connectivity</b> | Path/Trail | Existing campgrounds: Granite Creek Campground and Bertha Creek Campground to the primary locations of: Johnson Pass Trailhead, Center Ridge Trailhead, and the Raft Launch. | Connections between existing campgrounds and trailheads.                                 | Provide connections for non-motorized users between trails and campgrounds. This includes walkers, bicyclists, and equestrian users. |



| Proposed Project          | Category   | Location/ Extents   | Need   | Need Description  |
|---------------------------|------------|---|--|---|
| Mountain Bike Trails      | Path/Trail | From Center Ridge Trailhead to loop around Center Ridge Peak<br>Through Seattle Ridge and Pyramid Peak connecting to the ATV trails in God's Country<br>A connection to the Iditarod National Historic Trail  | Provide mountain bike trails in the Turnagain Pass corridor.                                       | Establish mountain bike trails in the Turnagain Pass corridor at Center Ridge Trailhead, Seattle Ridge, and a connection to the Iditarod National Historic Trail.   |
| New Trails                | Path/Trail | Turnagain Pass Trail to the Mountain Range: <ul style="list-style-type: none"> <li>▪ <b>Option 1</b> – Near MP 63 to the Ridgeline</li> <li>▪ <b>Option 2</b> – Near MP 69 to the Ridgeline</li> </ul> Iditarod National Historic Trail to Mountain Range: <ul style="list-style-type: none"> <li>▪ <b>Option 1</b> – Muskeg Meadows to the Ridgeline</li> <li>▪ <b>Option 2</b> – Center Ridge to the Ridgeline</li> </ul> | Provide new trails or trail connections.   | Provide new trails or trail connections from the Turnagain Pass Trail and the Iditarod National Historic Trail to the Ridgelines.   |
| User Fees for Maintenance | Program    | Entirety of corridor  | User fees to assist in funding for winter maintenance, trail maintenance, and roadway maintenance. | Introduce a user fee during peak user periods, currently winter months, to support winter maintenance.<br><br>Implement a parking fee along with the user fee, suggested to be similar to the Vail Pass, which is a current program set up in Vail, Colorado - \$10/Person/Day OR \$65/Person/Season Pass.<br><br>Intended to increase funding for trail grooming, promote the installation of trail markers and signage for historic trails.<br><br>Use funding to improve striping throughout the corridor, improve drainage to prevent pooling/icing on the roadway, and improve wayfinding. |



| Proposed Project                            | Category | Location/<br>Extents | Need  | Need Description   |
|---|----------|----------------------|---|--|
| Facility/Winter Maintenance Management Plan | Program  | Entirety of Corridor | Develop a plan for facility and winter maintenance within the corridor. | <p>Coordinate among organizations operating within the corridor to create a facility and winter maintenance management plan. This plan would address the capacity and quality of facility management to support adequate upkeep of restroom facilities and any other existing or new facilities desired.</p> <p>Winter maintenance would be coordinated among participating organizations to help improve visibility, prevent narrowing of access points, and provide safe facilities for all user groups. This includes wayfinding to direct users to parking areas maintained during winter.</p> |



## **APPENDIX 2: IMPACT AND EFFORT MATRIX**

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|             | LOW EFFORT   | HIGH EFFORT   |
|-------------|--|---|
| HIGH IMPACT | <ul style="list-style-type: none"> <li>Connect trails and campgrounds for transportation users of various modes</li> <li>Quality improvements to existing paved paths</li> <li>Mountain bike trail (Center Ridge Trailhead to loop around Center Ridge Peak)</li> <li>Mountain bike trail (through Seattle Ridge and Pyramid Peak, connecting to ATV trails in God’s Country)</li> <li>Mountain bike trail (Iditarod National Historic Trail)</li> <li>New trail (Turnagain Pass to the) ridgeline</li> <li>New trail (Iditarod National Historic Trail to the ridgeline)</li> <li>Facility/Winter Maintenance Management Plan</li> </ul> <p style="text-align: center;"><b>QUICK WINS</b></p> | <ul style="list-style-type: none"> <li>Johnson Pass Trailhead parking area improvements</li> <li>Motorized Lot parking area improvements</li> <li>Center Ridge Trailhead parking area improvements</li> <li>Tincan Pullout/Parking area improvements</li> <li>River Access parking area improvements</li> <li>Standard design for new parking facility</li> <li>New bike path (Granite Creek to Bertha Creek)</li> <li>Continuous multiuse pathway along entire corridor and extend existing path</li> </ul> <p style="text-align: center;"><b>MAJOR PROJECTS</b></p> |
| LOW IMPACT  | <ul style="list-style-type: none"> <li>User fees for maintenance</li> </ul> <p style="text-align: center;"><b>FILL-INS</b></p>   | <p style="text-align: center;"><b>FOR FUTURE CONSIDERATION</b></p>  |

**Figure 1. Turnagain Pass Proposed Projects Impact and Effort Matrix**



| PROPOSED PROJECTS  |        |        |
|--|--------|--------|
| PROJECT  | IMPACT | EFFORT |
| Johnson Pass parking area improvements   | HIGH   | HIGH   |
| Moto Lot parking area improvements   | HIGH   | HIGH   |
| Center Ridge Trailhead parking area improvements   | HIGH   | HIGH   |
| Tincan Pullout/Parking area improvements   | HIGH   | HIGH   |
| Standard design for new parking facility   | HIGH   | HIGH   |
| New bike path from Granite Creek to Bertha Creek   | HIGH   | HIGH   |
| Connect trails and campgrounds for transportation users of various modes                               | HIGH   | LOW    |
| Continuous multiuse pathway along entire corridor and extend existing path                             | HIGH   | HIGH   |
| Quality improvements to existing paved paths   | HIGH   | LOW    |
| Mountain bike trail (Center Ridge Trailhead to loop around Center Ridge Peak)                          | HIGH   | LOW    |
| Mountain bike trail (through Seattle Ridge and Pyramid Peak connecting to ATV trails in God's Country) | HIGH   | LOW    |
| Mountain bike trail (Iditarod National Historic Trail)   | HIGH   | LOW    |
| New trail (Turnagain Pass to the ridgeline)  | HIGH   | LOW    |
| New trail (Iditarod National Historic Trail to the ridgeline)  | HIGH   | LOW    |
| Facility/Winter maintenance management plan  | HIGH   | LOW    |
| User fees for maintenance  | LOW    | LOW    |

**Figure 2. Turnagain Pass Proposed Projects Impact and Effort Rankings**

