2025

KPB Safe Streets and Roads for All Comprehensive Safety Action Plan

Because everyone deserves to get home safely

COMPREHENSIVE SAFETY ACTION PLAN SS4A

July 2025

Prepared for
KENAI PENINSULA BOROUGH

Prepared by
R&M CONSULTANTS, INC

In cooperation with
MICHAEL BAKER INTERNATIONAL
FEHR & PEERS

2025 KPB Safe Streets and Roads for All Comprehensive Safety Action Plan

ADOPTED BY ORDINANCE

KPB Municipal Codes

Acknowledgments

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A special thank you to those who took the safety survey, attended in-person and virtual open houses, focus group meetings, safety forum, and reached out to the project team with questions, comments, and suggestions. Your participation, input and contributions are invaluable.

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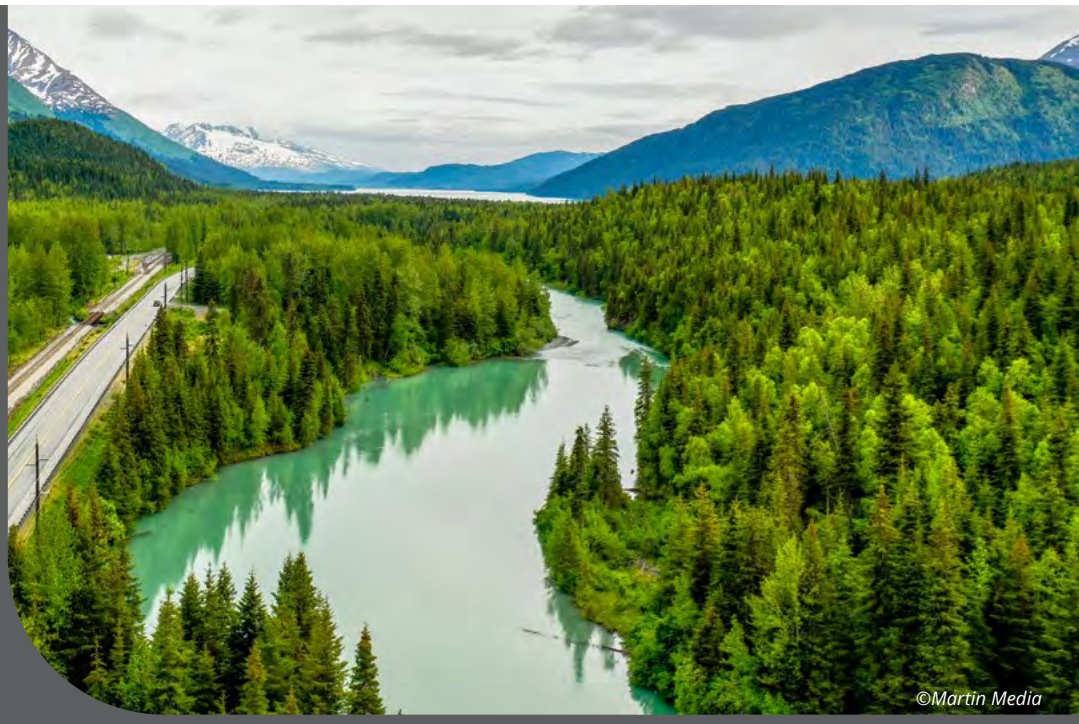
Figures & Tables

Acronyms

ADA	Americans with Disabilities Act
BAC	blood alcohol count
BUILD	Better Utilizing Investments to Leverage Development
CARTS	Central Area Rural Transit System
CEJST	Climate and Economic Justice Screening Tool
CSAP	Comprehensive Safety Action Plan
CTP	Community Transportation Projects
ADOT&PF	Alaska Department of Transportation and Public Facilities
EMS	Emergency Medical Services
ESA	Emergency Service Area
ETC	Equitable Transportation Community
FARS	Fatality Analysis Reporting System
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
HART	Homer Accelerated Roads and Trails Program
HIN	High Injury Network
HMP	Hazard Mitigation Plan
HSIP	Highway Safety Improvement Program
HVE	high visibility enforcement
KPB	Kenai Peninsula Borough
KPBSD	Kenai Peninsula Borough School District
KSI	Killed or Serious Injury
MP	milepost
mph	miles per hour
MPO	Metropolitan Planning Organization
PILT	payment in lieu of taxes
RCP	Reconnecting Communities Pilot
RIAD	Road Improvement Assessment District
RRFB	Rectangular Rapid Flashing Beacon
RSA	Road Service Area
SC	Steering Committee
SRTS	Safe Routes to School
SSA	Safe System Approach
SS4A	Safe Streets and Roads for All
STBG	Surface Transportation Block Grant
STIP	Statewide Transportation Improvement Program
TAP	Transportation Alternatives Program
USDOT	United States Department of Transportation

Executive Summary



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> **The CSAP is a Borough-wide safety plan to reduce fatalities and serious injuries on all public roads.**

THE COMPREHENSIVE SAFETY ACTION PLAN

The Kenai Peninsula Borough (KPB) Safe Streets and Roads for All Comprehensive Safety Action Plan (CSAP) is a Borough-wide safety plan to reduce fatalities and serious injuries on all public roads (city, borough, and state). The KPB and their community partners, the cities of Homer, Kenai, Seldovia, Seward, and Soldotna, were awarded a FFY22 Safe Streets and Roads for All (SS4A) grant from the United States Department of Transportation (USDOT) to complete the CSAP. The CSAP is structured around the Safe System Approach (SSA) National Roadway Safety Strategy developed by the USDOT and in accord with the SS4A grant program objectives.

The Comprehensive Safety Action Plan:

- Focuses on all users (pedestrians, bicyclists, disabled persons, public transportation users, motorists, micro-mobility and personal conveyance users, and commercial vehicle operators).
- Establishes a long-term strategy for enhancing the safety of the Borough's roads.
- Provides a framework for identifying, analyzing, and prioritizing roadway safety improvements.
- Analyzes past crash data, current risk factors that are commonly associated with serious injuries and fatal crashes, and experiences of community members.
- Provides a prioritized list of issues, risks, actions, and improvements that can be used to work towards reducing fatalities and serious injury crashes.
- Situates the Borough, and partner cities, to apply for future grant funds for projects and strategies identified in the plan to address roadway safety problems.
- Establishes a goal to eliminate all serious injury and fatal crashes by 2050 (to align with the State of Alaska), with a 50% reduction by 2035 and re-evaluation of progress made every five years.
- Provides measures to track progress towards the goal over time.
- Provides a tool for the KPB and partner cities to use to support funding requests for future transportation planning, demonstration and implementation projects and other transportation safety projects.

PLAN ORGANIZATION

Chapter 1

Moving Towards a Safer System in the Kenai Peninsula Borough (KPB)

This chapter establishes a vision and guiding principles for safe streets in the KPB, using the SSA. It also defines the KPB's goal to commit to eliminate all serious injury and fatal crashes by 2050 (to align with the State of Alaska), with a 50% reduction by 2035 and re-evaluation of progress made every five years.

Chapter 2

SSA

This chapter explains the SSA and its guiding principles, which is the foundation of the CSAP.

Chapter 3

Plan Process, Engagement and Collaboration

This chapter explains the planning process, local oversight, and documents the robust public engagement throughout the plan's development to gather information and input from the public, transportation agencies, and other stakeholders.

Chapter 4

Kenai Peninsula Borough's Safety Story

This chapter includes a crash data summary and key trends analysis within the KPB from 2018-2022.

Chapter 5

Safe Roads for All

This chapter describes the plan's comprehensive equity analysis to identify historically disadvantaged populations within the KPB. It illustrates the correlation between demographics and safety risk. It provides an equity-specific lens to help prioritize projects for implementation.

Chapter 6

Polices, Processes and Tools

This chapter provides an assessment of existing KPB and partner cities' transportation safety-related plans, policies, and programs. It identifies policy changes, and strategies, and offers proven countermeasures to help create a safe transportation network.

Chapter 7

Road Map to Safer Streets

This chapter describes the methodology used to determine the 20 priority locations, and the projects recommended for the 20 priority locations.

Chapter 8

Moving Ahead

The Action Plan This chapter outlines an implementation strategy for the plan, including actionable steps; safety report card; an implementation matrix; and a process for updating the plan.

Chapter 1

Moving Towards a Safer System in the Kenai Peninsula Borough

WHY A COMPREHENSIVE SAFETY ACTION PLAN

By implementing a "safety first" approach to intentionally and proactively reduce, and ultimately prevent, transportation-related fatalities and serious injuries, the Kenai Peninsula Borough (KPB) Safe Streets and Roads for All Comprehensive Safety Action Plan (CSAP) is a commitment to transform how the Borough, and their partner cities, prioritize safety, aiming to build a community where everyone gets home safely.

The CSAP is a Borough-wide safety plan to reduce fatalities and serious injuries on all public roads (city, borough, and state). The CSAP provides a long-term strategy for enhancing the safety of the Borough's roads by identifying opportunities to improve policies to prioritize transportation safety, and by identifying priority projects, strategies, and countermeasures to allocate resources effectively. The CSAP focuses on all users (pedestrians, bicyclists, public transportation users, motorists, micromobility and personal conveyance users, and commercial vehicle operators) to provide a holistic approach to roadway safety by following the Safe System Approach (SSA, Chapter 2). The CSAP will help the KPB and their partner cities to understand the causes and contributing factors, and recommend countermeasures, creating redundancy and reducing risk with the long-term goal of zero traffic related fatalities. The CSAP can be used to apply for future Safe Streets and Roads for All (SS4A) funding for supplemental planning activities, demonstration, and implementation projects. The CSAP will also support funding requests from the Alaska Department of Transportation and Public Facilities (ADOT&PF).

The CSAP was developed with funding from the United States Department of Transportation (USDOT) in accord with the SS4A grant program objectives.

Vision for Safe Streets in the KPB

Motor vehicle crashes are a leading cause of death nationwide and kill over 120 people every day. Deaths on the transportation network are important because they result in significant costs in addition to the lost lives. In the KPB more than 3,700 crashes occurred between 2018-2022. Of these crashes, 44 were fatal and 157 resulted in serious injury. Motorcyclists were involved with 10% of the killed or serious injury crashes, and 4% of the serious injury or fatal crashes involved pedestrians. Everyone deserves to get home safely. The vision for creating a safer transportation network in the KPB comes from the knowledge that all crashes are preventable and all people, regardless of age, ability, race, gender, and mode choice, should be able to get home safely every day.

KEY COMPONENTS OF AN ELIGIBLE SS4A CSAP

The SS4A program establishes eight key components for a CSAP. This plan is structured around those key components ensuring this plan meets the grant requirements and situates the Borough and the partner cities to successfully complete the Self-Certification Eligibility Worksheet needed to apply for Implementation or Planning and Demonstration Grants.

SS4A

SAFE STREETS AND ROADS FOR ALL

EIGHT KEY COMPONENTS

1. Leadership Commitment and Goal Setting
2. Planning Structure
3. Safety Analysis
4. Engagement and Collaboration
5. Equity
6. Policy and Process Changes
7. Strategy and Project Selections
8. Progress and Transparency

Leadership Commitment and Goal Setting

An official public commitment (e.g., resolution, policy, ordinance, etc.) by a high-ranking official and/or governing body (e.g., Assembly, Mayor, City Council, Tribal Council, Metropolitan Planning Organization (MPO) Policy Board, etc.) with an eventual goal and timeline for eliminating roadway fatalities and serious injuries. The commitment must include a goal and timeline for eliminating roadway fatalities and serious injuries achieved through one, or both, of the following:

- A target date for achieving zero roadway fatalities and serious injuries.
- An ambitious percentage reduction of fatalities and serious injuries by a specific date with an eventual goal of eliminating roadway fatalities and serious injuries.

Planning Structure

A committee, task force, implementation group, or similar body charged with oversight of the CSAP development, implementation, and monitoring.

Safety Analysis

An analysis of existing conditions and historical trends that provides a baseline level of crashes involving fatalities and serious injuries across a jurisdiction, locality, Tribe, or region. Includes:

- Analysis of locations where there are crashes and severity of the crashes.
- Contributing factors and crash types by relevant road users (motorists, people walking, transit users, etc.).
- Analysis of systemic and specific needs (e.g., high-risk road features, specific safety needs of relevant road users, public health approaches).
- Analysis of the built environment, demographic, and structural issues, etc.
- Crash data is required, including historical crash trends, crash types, and contributing factors.

To the extent practical, the analysis should include all roadways within the jurisdiction, without regard for ownership. Based on the analysis, a "high injury" network (HIN) has been developed.

Engagement and Collaboration

Robust engagement with the public and relevant stakeholders, including the private sector and community groups, which allows for both community representation and feedback. Information received from engagement and collaboration is analyzed and incorporated into the CSAP. Overlapping jurisdictions are included in the process. Plans and processes are coordinated and aligned with other governmental plans and planning processes to the extent practical.

Equity

Plan development using inclusive and representative processes. Underserved communities are identified through data and other analyses in collaboration with appropriate partners. Analysis includes both population characteristics and initial equity impact assessments of the proposed projects and strategies.

Policy and Process Changes

Assessment of current policies, plans, guidelines, and/or standards (e.g., manuals) to identify opportunities to improve how processes prioritized transportation safety. The CSAP discusses implementation through the adoption of revised or new policies, guidelines, and/or standards, as appropriate.

Strategy and Project Selections

Identification of a comprehensive set of projects and strategies, shaped by data, the best available evidence and noteworthy practices, as well as stakeholder input and equity considerations, which will address the safety problems described in the CSAP. These strategies and countermeasures focus on a SSA, effective interventions, and consider multidisciplinary activities. To the extent practical, data limitations are identified and mitigated. Once identified, the list of projects and strategies is prioritized in a list that provides time ranges for when the strategies and countermeasures will be deployed (e.g., short-, mid-, and long-term timeframes). The list includes specific projects and strategies, or descriptions of programs of projects and strategies, and explains prioritization criteria used. The list includes interventions focused on infrastructure, behavioral, and/or operational safety.

Public Workshop.

Progress and Transparency

Method to measure progress over time after the CSAP is developed or updated, including outcome data. Means to ensure ongoing transparency is established with residents and other relevant stakeholders. Must include, at a minimum, annual public and accessible reporting on progress toward reducing roadway fatalities and serious injuries, and public posting of the CSAP online.

COMMITMENT TO SAFE STREETS

In 2022, the KPB, in partnership with the cities of Homer, Kenai, Seldovia, Seward and Soldotna, applied for, and received a USDOT SS4A grant for the development of an Action Plan.

With adoption of this CSAP, the KPB Assembly will affirm its commitment to eliminate all serious injury and fatal crashes by 2050 (to align with the State of Alaska), with a 50% reduction by 2035 and re-evaluation of progress made every five years.

Chapter 2

Safe Systems Approach

> **“This approach shifts the focus towards both human mistakes and human vulnerability to develop a road system designed to anticipate and accommodate human mistakes.”**

SSA

The KPB CSAP is structured around the SSA (safe roads, safe road users, safe speeds, post-crash care, safe vehicles, equity, and culture) a national roadway safety strategy developed by the USDOT. Every year, an average of 40 KPB residents are seriously injured or killed on the transportation network. Crashes change lives forever, affecting victims, their families and friends, and the entire community. The SSA provides a decision-making framework to help us be more intentional about addressing the five elements and six principles to achieve the goal of zero roadway fatalities and serious injuries Borough-wide.

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Guiding Principles

The SSA is centered on five core elements and six core principles that work together to form a safe system that protects all road users.

The following principles of the SSA work together to create safer people, safer vehicles, safer speeds, safer roads, and engage in post-crash care.

- Death and serious injuries are unacceptable.
- Humans make mistakes, and a safe system is designed and operated to accommodate mistakes.
- Humans are vulnerable to the forces of a crash.
- Responsibility for a safe transportation network is shared between road users and transportation system managers and vehicle manufacturers.
- Safety is proactive, using tools to identify and mitigate latent risks in the transportation system.
- Redundancy is crucial for the success of a safe transportation network.

Figure 1: The Safe System Approach

Traditional Approach to Traffic Safety vs. Safe System Approach

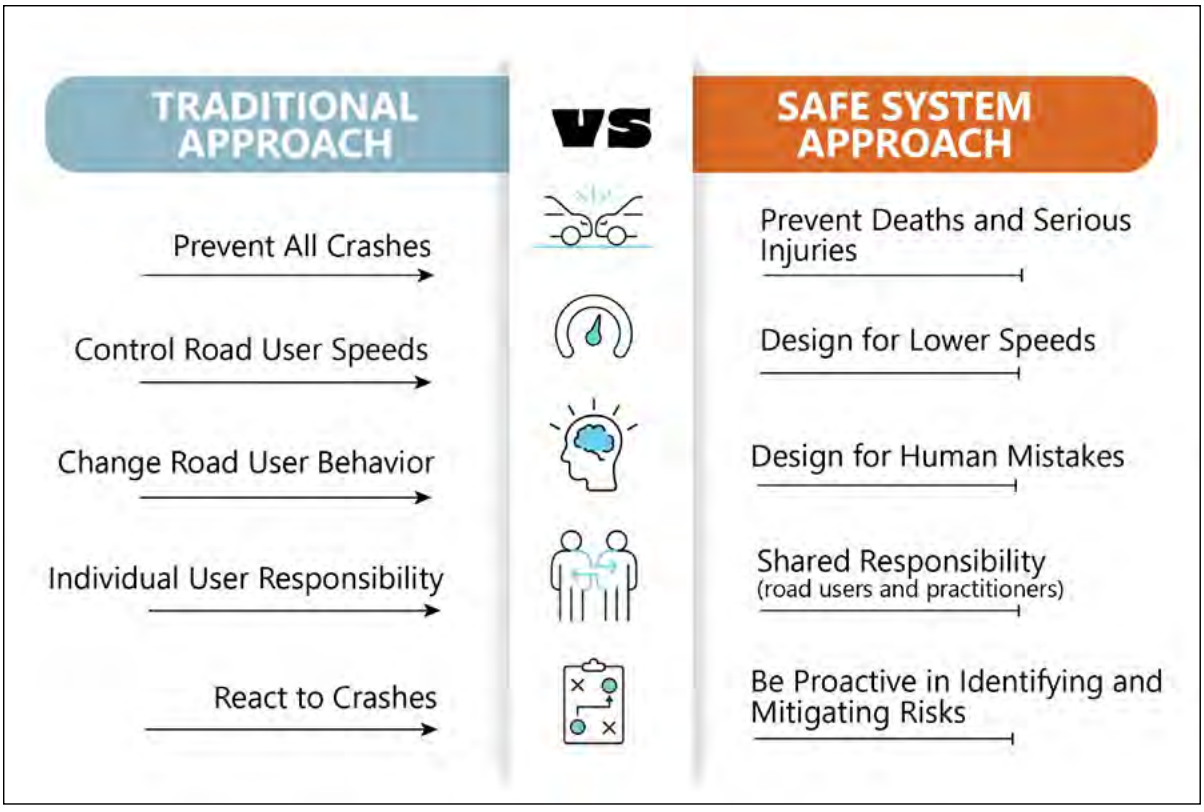


Figure 2: Traditional Approach vs. SSA

Chapter 3

Plan Process, Engagement and Collaboration

> “... people who live and work in the Borough have been involved in the plan’s development.”

PROCESS TO DEVELOP THE CSAP

The KPB CSAP was developed through a comprehensive and robust process with the public and relevant stakeholders, including the private sector and community groups, providing community representation and feedback and the opportunity to gain valuable information and critical insights, ensuring that people who live and work in the Borough have been involved in the plan’s development.

STEERING COMMITTEE (SC)

The KPB established a committee to oversee the development of the CSAP and to comply with SS4A guidelines for developing CSAPs. The SC provided valuable local insights into transportation safety in KPB. It is made up of key transportation and safety representatives from the following agencies:

- KPB Emergency Services
- KPB Dispatch
- KPB Road Service Area
- ADOT&PF
- City of Soldotna
- Lynden Transport
- First Student
- Ninilchik Tribal Council
- City of Kenai

This group helped to identify specific transportation safety concerns in the KPB and provided oversight and direction on potential safety solutions, project recommendations, and implementation actions in the final plan. Meeting notes from the SC meetings can be found in Appendix A.

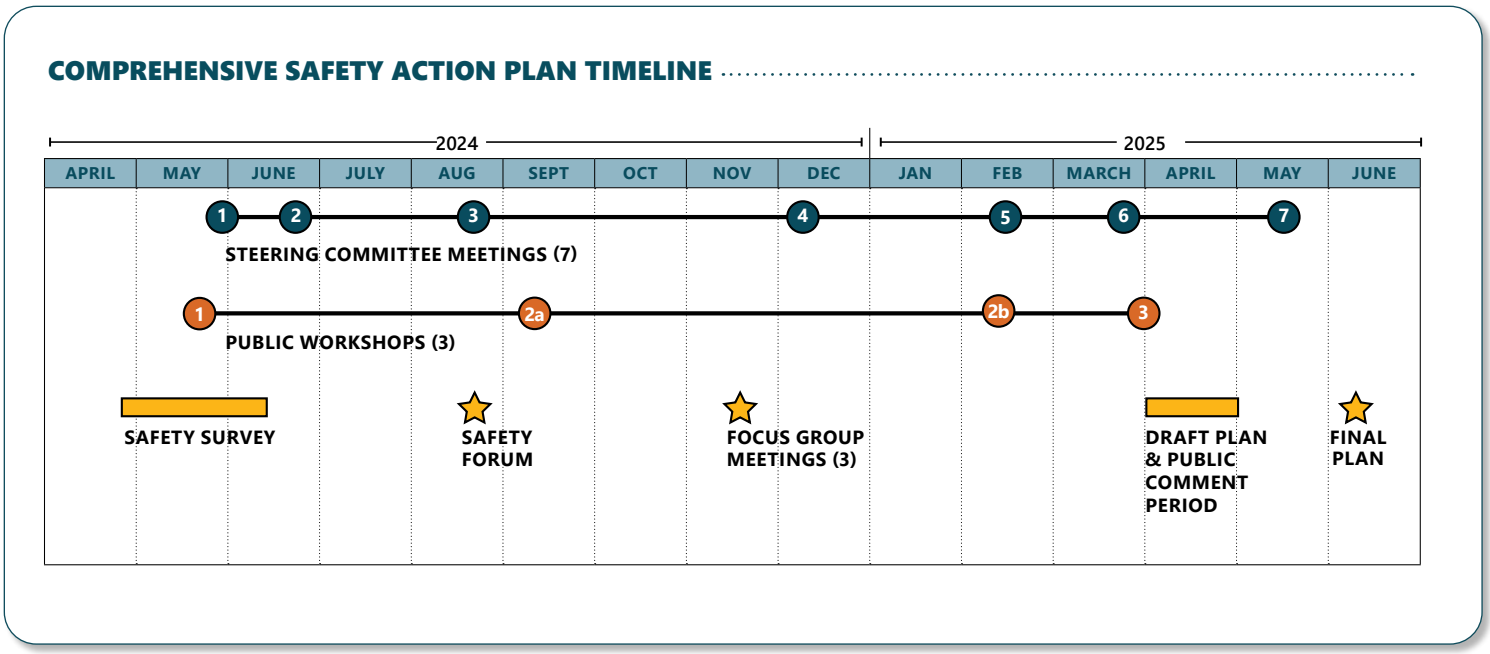


Figure 3: Plan Timeline

The SC met at key stages of plan development. These meetings included:

- SC Meeting 1: Project introduction, review of SC role and responsibilities, public outreach overview and focus group discussion
- SC Meeting 2: Review of preliminary crash data
- SC Meeting 3: Present and review Crash Data Dashboard
- SC Meeting 4: Review risk profile, scoring criteria, draft maps, and equity analysis
- SC Meeting 5: Review draft program and policy recommendations, preliminary 20 priority locations
- SC Meeting 6: Review draft plan prior to public review
- SC Meeting 7: Review public comments on draft plan and discuss possible plan amendments

PUBLIC ENGAGEMENT

Community engagement is vital to the success of the CSAP, reflecting diverse community perspectives and building trust to serve as the foundation of the plan. Guided by the SC and KPB, the Borough conducted a comprehensive engagement approach, which included a series of stakeholder meetings, a public survey, and public meetings. These helped the public connect with safety issues and determined needs for the roads and streets they use every day.

This comprehensive engagement approach included:

- Development of the project website
- Development of the stakeholder/outreach list
- Public facing interactive Borough-wide crash and high injury data dashboard
- Seven meetings with the CSAP SC
- Two presentations to nine Planning Commissions
- Social media and news publications
- Email notifications to a broad stakeholder list
- A safety survey which had a total of 728 responders
- A safety forum
- Three Focus Group meetings
- Virtual public workshop to receive community input on draft recommendations
- Four sets of public workshops
    1. Workshop 1: 3 in person and 1 virtual
    2. Workshop 2a: 3 in person and 1 virtual
    3. Workshop 2b: 1 virtual
    4. Workshop 3: 2 virtual

PROJECT WEBSITE

The project website provided a one-stop location to access the CSAP project, including general information about the plan, SSA, SS4A, participate in the survey, project timeline, upcoming public workshops, and a documents page where the public could view milestone deliverables. The webpage also includes the interactive Borough-wide crash and high injury data dashboard.

STAKEHOLDER & COMMUNITY BASED ORGANIZATIONS OUTREACH

A robust stakeholder and community-based organizations outreach list was developed. This list was used in a variety of ways:

- Conduits between the planning process and their constituency groups (i.e., elderly, minority, disabled, disadvantaged)
- Identify potential members of the SC
- Identify potential members of Safety Forum
- Identify potential members of the three Focus Groups
- Assist in notification of the public about the project, upcoming participation events, and the project timeline

Stakeholders included key representatives from the following groups:

- Local KPB Advocacy Groups
- Disability Services
- Family Services
- Recreation
- Senior Services
- KPB Government
- Kenai Peninsula Borough School District (KPBSD)
- City(s) Government
- Housing
- Employment Services
- Youth Services
- Tribal Governments
- Health Care
- Business
- Emergency Services
- Education
- Transportation Providers
- Community Councils

SAFETY FORUM

A virtual Safety Forum took place before the second Public Workshop, after assimilating the community safety survey responses and preliminary data. The forum was held virtually using Microsoft Teams. Representatives from the City of Seward, ADOT&PF, KPB Emergency Services, Kenai Fire Department, Seldovia Village Tribe, and the Kenai Police Department participated. This was an opportunity to highlight the survey results and gather additional feedback from targeted community members on specific safety related challenges, issues, and opportunities within the project area. Safety Forum participants were provided with an overview of the project and the SSA program, the survey results, crash data analysis and dashboard. Safety Forum participants were to rank implementation solutions to improve walking and biking in the KPB. They were also asked what they consider to be the biggest barriers to the solutions and to rank investment priorities. In general, the need for additional maintenance (winter and summer), funding/cost, and high-speed traffic were the primary concerns identified. For a more detailed accounting of the safety forum see Appendix A.

Community Workshop

FOCUS GROUPS

Three (3) Focus Group meetings were held virtually using Microsoft Teams. The focus groups were organized around three themes: school and commercial nodes, freight and commercial drivers and businesses, and pedestrian, bicycle, and alternative transportation.

The focus groups provided the opportunity to gather in-depth insights from a small group of stakeholders. The SC provided input on the focus group themes.

FOCUS GROUP 1

Pedestrian and Bike Alternative Transportation

What challenges do you see for walking and biking in the KPB?

- Local routes and connecting routes within the community and connecting area
- Connectivity is a really big thing
- Snow removal issue when walking (curb cutouts)
- Stress points at intersections
- Maintenance at curb cuts, potholes, glacier effect at the crosswalk ramp
- Traffic – moving at speed, noise, dust, dangerous
- Very little effort to change driver attitudes where they reach slower speed area (campaign to teach driver awareness)
- Lack of sidewalks and sidewalk maintenance
- Winter maintenance – needed for year-round use
- Speed
- Unity Trail – every intersection meets up trail users with drivers and needs improved crossing interactions
- How problematic are speed bumps for roadway maintenance – would be helpful in slowing drivers down

What areas of the KPB do you think need safer pedestrian and bicycle access to encourage more biking/walking?

- Unity Trail and intersections with the streets
- Two crosswalks in Homer – submitted to the State through Anna Bosin (#1-East Road at Kramer Lane, #2-Lake Street at Smokey Bay Way next to DMV)
- Big hotel approved by planning commission on Ocean Drive to Spit Road. Turning left at that spot is terrifying. What preliminary planning can be incorporated into the design, especially given that visitors will be using that location?
- Pioneer is signed to be 25 mph but designed to be 35 to 40 mph. It's too wide to cross. If the turn lane was eliminated, there is some contention on what that could be used for (i.e. bicycle lane, or traffic calming)
- Mapping would be beneficial to systematically improve the "red" choke points. Notes that there has been a lot of work in the last few years on forming those connections.
- Funny River Road resurfacing- opportunity to widen that to include pedestrian traffic.
- Kalifornsky Beach Road and the road out of Hope – dreams of making those a safer pedestrian route.

FOCUS GROUP 2

School and Commercial Nodes

What are some of the biggest safety concerns commercial operators face?

- Vehicles crossing the center line – create some sort of buffer
- The number of school closures due to weather is a substantial change in the last ten years. Also, City of Soldotna students cannot cross the streets due to snowbanks.
- How do we translate school closures to the safety plan?
- Placement of school zone signs or lack thereof. Placement of signs are not very visible.
- Placement of crosswalks does not give drivers a lot of warning. Additionally, high volumes of traffic turning off or waiting on the highway.
- Pedestrian misuse of the roadways, crossing in an unsafe manner or using the roadway as sidewalks are not plowed.
- Areas around the schools, the biggest concern is walking patterns and not having cleared sidewalks (so walk in streets instead) and a lack of good lighting.
- Kids are not wearing reflective anything to stand out to drivers. Designated crosswalks in each school area would help.
- Signage is a huge issue.
- Driver awareness for new residents from out of state. Police support, more ticketing for drivers speeding through school zones.
- Drop off and pick up of students by busses which stop along the highway.
- Reduction of staff by AD-OT&PF is contributing to the road maintenance issues, which causes the school closures during weather.
- Congestion at pickup times and speeding drivers.
- Sterling students are not allowed to walk to and from school just due to safety, no trail or sidewalks.
- Visibility. Commercial areas with large pedestrian volumes need to have safer intersections.
- There is a fundamental change in how kids are brought to school, and the roads and sites are not designed to accommodate that.
- Busses have to be consolidated. Parents that live closer prefer to take their students.
- Areas like Anchor Point have higher speeds in turn off areas.
- There needs to be a modern way to integrate those signs to make them useful.
- Center for Safe Alaskans gives reflectors for free; City of Soldotna is promoting this.

What do you suggest to solve the safety concerns near schools?

- Need to come up with plans to address traffic flows around the schools and get them off the highways and get buses off the highways at pick up/drop off. A center divider in the highway to address crossovers.
- Feedback signage and that all roads near schools are marked.
- Higher priority on roads and sidewalks near schools for winter maintenance.
- Education for students of safe crossing, lighting, signage, and maintenance.

Focus Group 2 continued

- Work on implementation of the plans to address safety.
- Maintenance of the roads.
- Increased law enforcement presence, safety education for kids but also public awareness campaign for school zones.
- Modernized school zone signage.
- Could there be a way to auto generate tickets for school zone violators?

What 3 -5 corridors would you suggest for a pilot program?

- Between Sterling and Soldotna.
- Fred Meyer Soldotna to Jim Dhaler, possibly add traffic signal. Kenai from Swires Road (Mt View Elementary School) to Community Ice Rink at Kenai High School – lots of walkers crossing the road and drivers blow through the light.
- Sterling to Soldotna is an issue, it's hard to turn out of there and head toward Sterling. Also, Sterling Highway near Skyview Middle School – speeds are 55 mph.
- Sterling and Soldotna, also stretch between Anchor Point and Homer.
- Safety Corridor Pilot Program should be data driven, for areas with documented speeding and accidents.

FOCUS GROUP 3

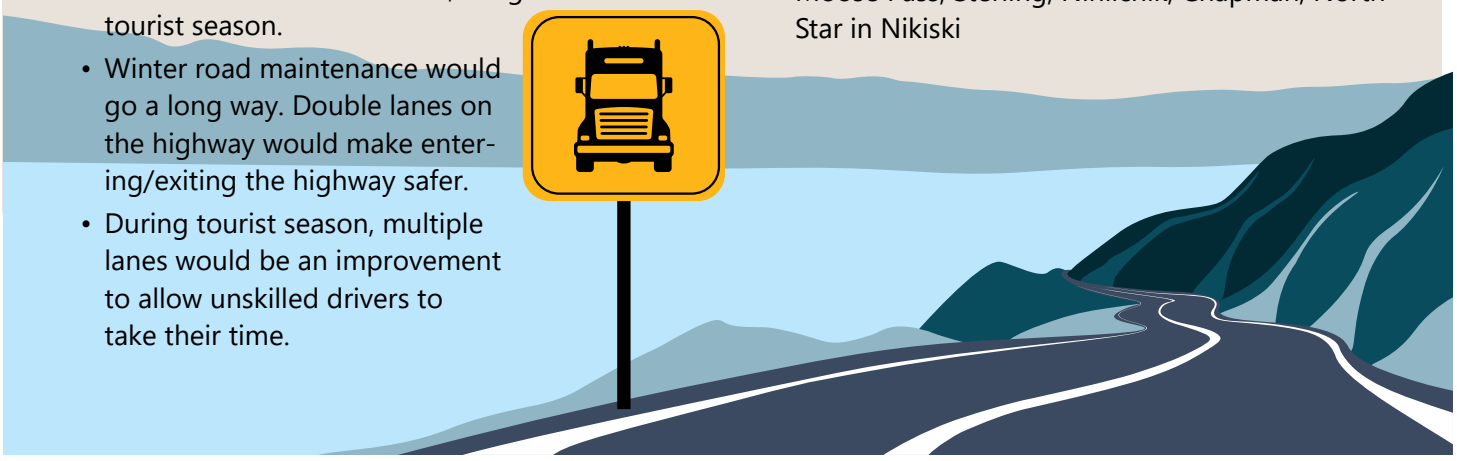
Freight and Commercial Drivers

What do you suggest to solve safety concerns as a commercial operator?

- Winter road maintenance, especially on the highway, double lanes would make it safer.
- Multiple lanes to accommodate large vehicles.
- What are some of the biggest safety concerns commercial operators face?
- Road maintenance prevents drivers from making it to their destination or having to take alternate routes.
- Road maintenance in winter, congestion in tourist season.
- Winter road maintenance would go a long way. Double lanes on the highway would make entering/exiting the highway safer.
- During tourist season, multiple lanes would be an improvement to allow unskilled drivers to take their time.
- There isn't a lot of rerouting available, but I don't have a suggestion on how to improve that.

What 3 -5 corridors would you suggest for a pilot program?

- Sterling Highway, elementary school
- Anchor Point
- Kalifornsky Beach, closer to Soldotna
- Tustumena
- Hill from Kasilof
- Traffic studies, speed, and volumes: Tustumena, Moose Pass, Sterling, Ninilchik, Chapman, North Star in Nikiski



PLANNING COMMISSION AND CITY PRESENTATIONS

The project team presented twice to the following:

Cooper Landing Advisory Planning Commission
June 5, 2024 & April 9, 2025

Hope/Sunrise Advisory Planning Commission
June 5, 2024 & April 9, 2025

Moose Pass Advisory Planning Commission
June 6, 2204 & April 10, 2025

Nikiski Advisory Planning Commission
June 6, 2024 & April 10, 2025

City of Homer Planning Commission
July 17, 2024 & April 16, 2025

City of Seward Planning Commission
June 16, 2024 & April 8, 2025

City of Soldotna City Council and Planning Commission
June 5, 2024 & April 23, 2025

City of Kenai City Council and Planning Commission
June 19, 2024 & April 16, 2025

City of Seldovia City Council and Planning Commission May 29, 2024 & April 2, 2025

The first presentation took place early in the development of the plan. At this meeting, the project and the SSA framework were introduced. Communities shared where they feel safe or unsafe, where speed is an issue, where gaps exist in the pedestrian network, winter maintenance challenges, and other transportation safety concerns, such as emergency response times.

The second presentation coincided with the release of the public review draft plan. At this meeting key findings and recommended countermeasures were presented, as well as the next steps in the plan process.

SOCIAL MEDIA & OTHER OUTREACH

Social media is a powerful tool to promote plan awareness and gather feedback at key milestones of the plan process and can help ensure broad public participation. At the beginning of the plan process a project Fact Sheet was created for broad distribution. It was provided to the KPB, five partner cities, Kachemak City, KPBSD, and a local Transportation Gaps workshop.

Before each public workshop, a project flier advertising the project, the dates, times, and locations of the public workshops and the project website was created. The first flier also included a QR code to the Safety Survey. These fliers were distributed to the City Councils and Planning Commissions of the five partner cities, KPB Planning Commission, Kachemak City, KPBSD, the Cooper Landing Walkable Community group and emailed to the stakeholder list.

Facebook posts were developed throughout the project to advertise the public workshops, guide people to the project website and survey. A promotional reel was developed and distributed prior to the second set of public workshops. A second reel to raise awareness of safety during the dark winter months particularly for children, was also distributed by the KPB, partner cities, and school district.

Figure 4: KPB Facebook Post Encouraging Survey Participation

SAFETY SURVEY

A comprehensive safety survey was available from April 29, 2024, to June 7, 2024. The survey was available online at the KPB SS4A CSAP website. Physical copies of the survey were handed out during public workshops in Homer, Soldotna, and Seward on May 7th, May 8th, and May 9th. Paper copies of the survey, with a stamped, return envelope addressed to the consultant, were also available at the Borough offices in Kenai, Nikiski, and Soldotna. A detailed survey report is available in Appendix B.

Access to the online survey was advertised at the four public workshops in May (3 in person and 1 virtual), on the project website, emails, flyers, and via social media by the partner cities and the Borough, and at presentations to the cities and advisory planning commissions. A link to the survey was promoted via a sponsored post on KPB Facebook and reposted on KPB Alerts Facebook and Kenai Peninsula Roads and Highways Facebook.

SNAPSHOT OF SURVEY RESPONDENTS

728 Respondents

24 % Soldotna/Kenai

82 % Motor-vehicle commuters

75 % White

60 % 36–55 year-olds combined

57 % Female

30 % Male

Results

The graphic below illustrates what would make respondents more likely to walk or bike to get around.

= *More likely to bike* = *More likely to walk*

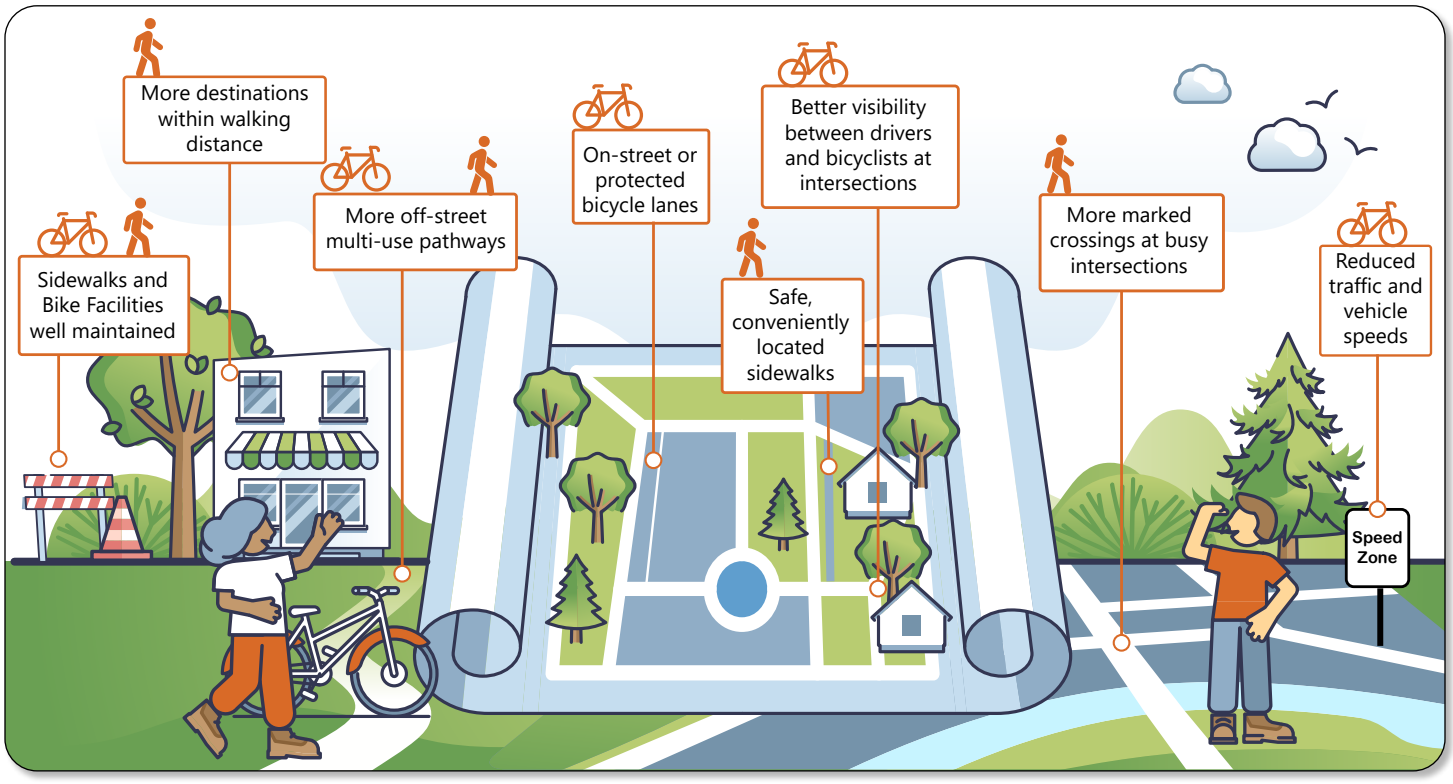


Figure 5: Survey Response to Walking or Biking More

BIGGEST SAFETY CHALLENGES TO ADDRESS SEVERE CRASHES

Respondents Top 5

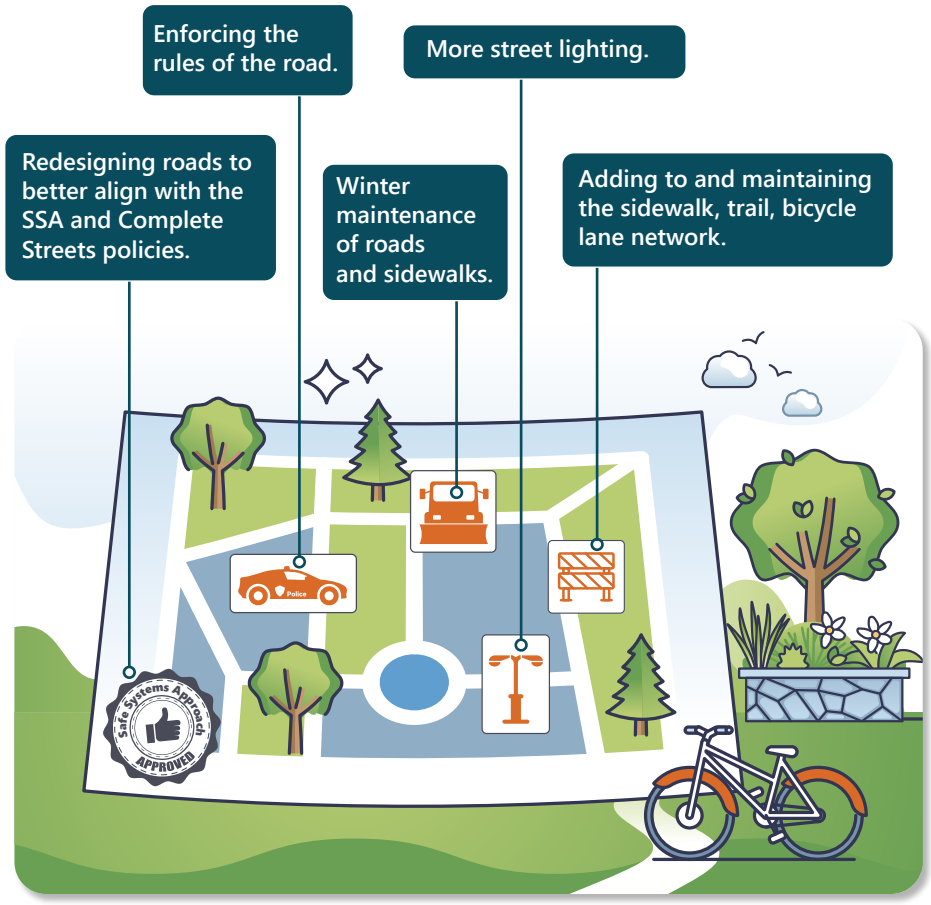
1. Lack of separated places to walk or bicycle (away from vehicles)
2. Inadequate maintenance of roads, sidewalks, and multiuse pathways in all seasons
3. Unsafe driving behaviors
4. Lack of bicycle lanes and crosswalks
5. Lack of crosswalks, sidewalks, or other improvements

Areas of Concern

To help identify specific areas of safety concern, survey respondents were asked to list their three biggest safety concerns, using mile markers, intersections, landmarks, and establishments, such as schools or stores, to help identify the location. The map on the following page displays the hundreds of pins dropped by survey participants to indicate each of their three biggest safety concerns located within the road system of the KPB. Common themes are high speeds and the need to extend and connect separated non-motorized paths.

SUGGESTIONS TO IMPROVE SAFETY IN THE KPB

Respondents Top 5



35% of respondents generally feel that biking is less safe in their neighborhoods but **43%** feel more safe during daylight hours.

80% of respondents are in support of roadway design changes (SSA and Complete Streets policies) to truly improve safety.

45% are in favor of stronger laws and enforcement.

Figure 6: Survey Respondent Safety Improvement Suggestions.

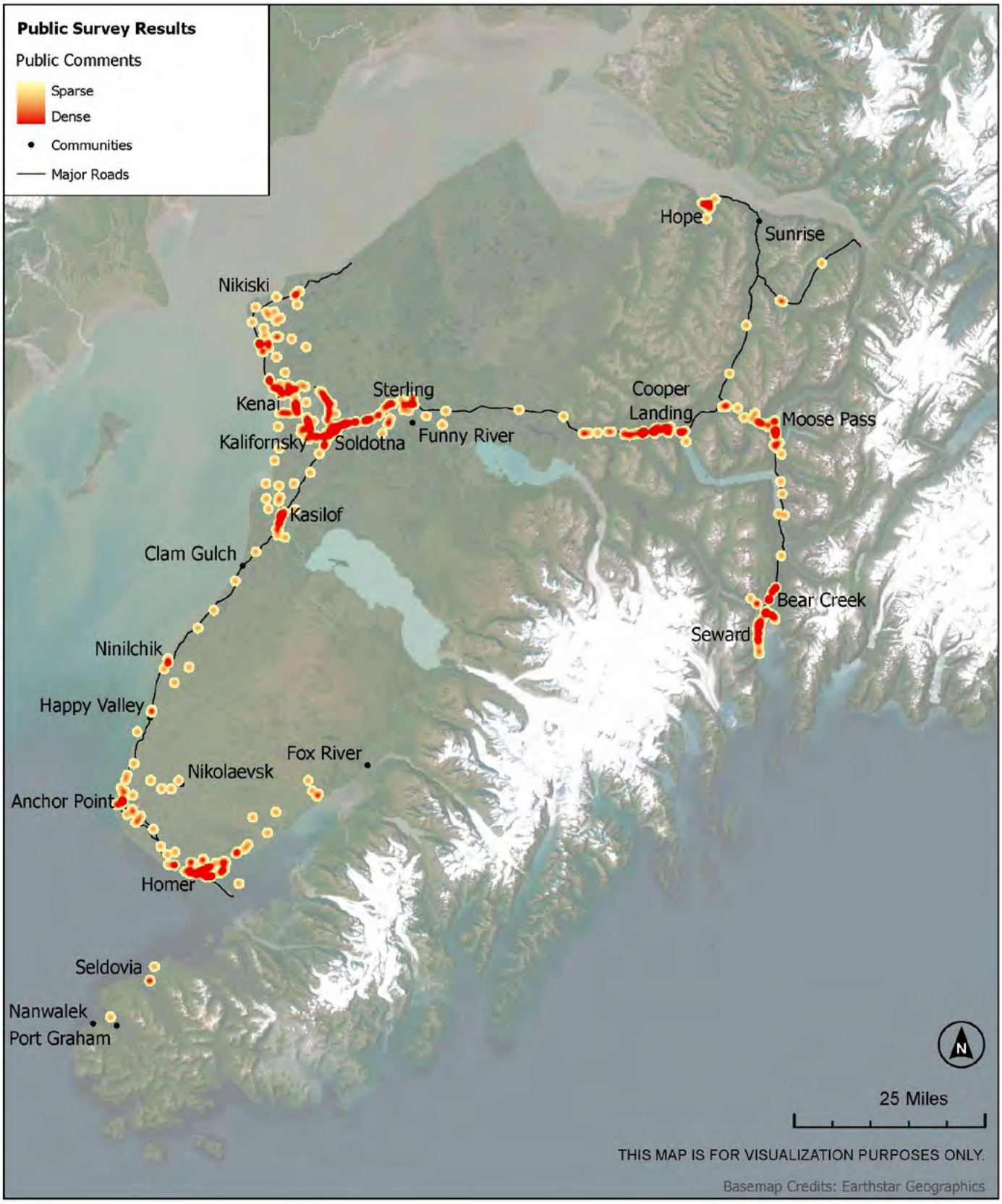


Figure 7: KPB Areas of Concern from Survey

Chapter 4

Kenai Peninsula Borough's Safety Story

KSI

Killed or Seriously Injured

Serious Injury is defined as *an injury other than fatal which results in one or more of the following: Severe laceration resulting in exposure of underlying tissues/muscle/organs or resulting in significant loss of blood; Broken or distorted extremity (arm or leg); Crush injuries; Suspected skull, chest or abdominal injury other than bruises or minor lacerations; Significant burns (second and third degree burns over 10% or more of the body); Unconsciousness when taken from the crash scene; or Paralysis.*

SAFETY ANALYSIS (AKA CRASH TRENDS)

One way to address SSA principles is to use data analysis to understand safety challenges. Below is a summary of crash data within the KPB from 2018-2022. This data forms the basis for understanding where and why crashes are happening so we can begin to take steps to prevent them.

Several data sources were used to prepare this analysis. Collision data was obtained from law enforcement collision reports, which includes driver self-reports, Alaska State Troopers, Kenai Police Department, Soldotna Police Department, Homer Police Department, Seldovia Police Department, and Seward Police Department. These detailed reports provided incident, unit, and person-level data. Collision data from the five-year period, from January 1, 2018, through December 31, 2022, informed this analysis. Fatality Analysis Reporting System (FARS) was reviewed and compared to the fatal collision trend analysis.

Key Findings from 2018-2022 Crash Trends

During the 2018-2022 timeframe there were a total of 3,722 crashes. Of those, 201 crashes resulted in fatal or serious injury (KSI) and 44 of those were fatal. On average each year, there were 40 KSI collisions, nine of which were fatal, and 31 of which resulted in serious injuries. The effect of the COVID-19 pandemic is also present in the most recent years of collision data. In 2020 and 2021, the Borough experienced reduced travel overall and the related benefit of fewer collisions, but the overall KSI trends remained consistent. Details of the crash data can be found in Appendix C.

44 Fatal Crashes

19 Bicycle Crashes

23 Pedestrian Crashes

41 Motorcycle Crashes

Trends by Mode

KPB has a commute mode share[i] of 68% driving, 5% biking, and under 1% walking, but 4% of pedestrians and 1% of bicyclists were killed or seriously injured over the last five years.

Figure 8 and Figure 9 shows in detail the Fatal and Serious Injury collisions by year by mode. The following sections highlight the trends for each mode in detail.

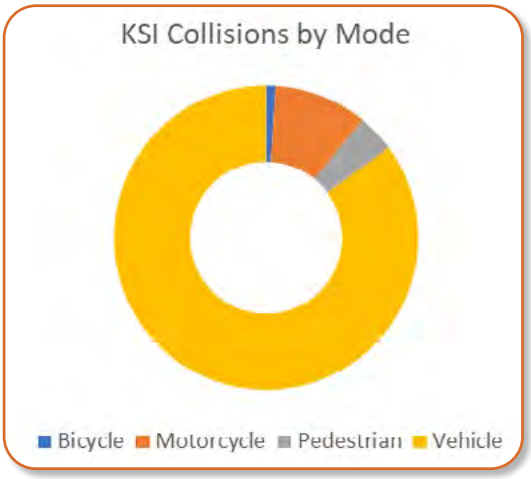


Figure 8: KSI Collisions by Mode

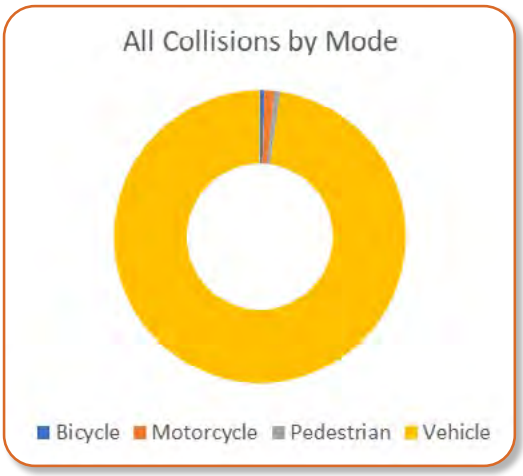


Figure 9: All Collisions by Mode

Vehicles were involved in 98% of collisions and 85% of KSIs

Pedestrians were involved in 0.5% of collisions and 4% of KSIs

Bicyclists were involved in 0.5% of collisions and 1% of KSIs

Motorcyclists were involved in 1% of collisions and 10% of KSIs

Driver suspected of being under the influence of alcohol or drugs accounted for about 37% of KSIs

Driver ran off the roadway in 28% of KSIs

About 66% of KSIs occurred during daylight hours

66% of KSIs occurred during clear conditions and 48% in dry conditions

Nearly 57% of all KSIs occurred on a highway

81% of KSIs took place outside any city boundary

67% of KSIs were male

Table 1: Key Collision Trends

KEY TRENDS	KEY DATA
Mode-Based Trends	• Vehicles were involved in 98% of collisions and 85% of KSIs. • Pedestrians were involved in 0.5% of collisions and 4% of KSIs. • Bicyclists were involved in 0.5% of collisions and 1% of KSIs. • Motorcyclists were involved in 1% of collisions and 10% KSIs.
Collision Type	• 51% of the KSIs involved Motor Vehicle Collision. • 15% of the KSIs involved an overturn/rollover. • 14% of the KSIs involved hitting an object (Object, Pedestrian or Bicycle, Live Animal).
Circumstance-Based Trends	• About 37% of KSIs, the driver was suspected of being under the influence of alcohol or drugs. • 28% of the KSI, the driver ran off the roadway. • 12% of the KSIs involved the driver failing to stay in their lane. • 9% of KSIs involved Distracted Driving.
Movement-Based Trends	• Almost 50% of the KSIs involved a movement going straight. • Almost 50% of the KSIs involved a driver negotiating a curve. • About 8% of the KSIs involved a left-turning movement.
Time-Based Trends	• About 26% of the reported KSIs occurred when it was dark outside (between the hours of about 7pm-4am); 3% with streetlights on, 23% without streetlights. • About 66% of the KSIs occurred during daylight hours. • Most KSIs occurred Tuesdays (18%), Fridays (17%), and Saturdays (20%). • In the summer months, 38% of KSIs occurred during June (11%), July (16%) and August (10%). • 66% of the KSIs occurred during clear conditions. • 48% of the KSIs occurred in dry conditions, 22% KSIs in ice/frost conditions, 12% KSIs in wet conditions, 9% KSIs in snowy conditions.
Location-Based Trends	• Nearly 57% of all KSIs occurred on a highway. • Nearly 25% of all KSIs occurred on an arterial roadway. • Nearly 78% of KSIs occurred away from an intersection (as defined by Junction Relationship). • 81% of KSIs occurred outside of any City Boundaries. • Within City boundaries, 9% of KSIs occurred in Kenai, 5% of KSIs occurred in Soldotna, and 3% of KSIs occurred in Homer.
Gender and Age	• 67% of KSIs were male. • 50% of the KSIs were between the ages of 19 to 39.

Chapter 5
Safe Roads for All

EQUITY

The USDOT requires the development of a CSAP to have an equity-centered process, analysis, and impact assessment. One of the SS4A Action Plan components is "Equity Considerations". This includes the identification of underserved communities through data analysis, which will be integrated into the proposed projects and strategies in the plan. Additionally, the CSAP must include a description of how progress towards safety improvements in the KPB will be measured over time, through the identification of equity indicators and tracking performance measures.

Equity in Transportation

Equity in road safety means the road network offers all users equal opportunities to travel safely and comfortably, regardless of how they choose to travel. Additionally, equity encompasses geographic and demographic context when evaluating community road networks.

KPB Equity by the Numbers

4
Census tracts in Disadvantaged or Partially Disadvantaged Communities (CEJST)[ii]

7
Census tracts in Communities with Social Vulnerability (ETC)[iii]

6
Census tracts in communities that experience transportation disadvantages and transportation insecurity (ETC)[iii]

20.6%
Minority within KPB population

4.8%
Households lacking vehicle ownership

Communities that may only be accessed by boat or plane should be considered, specifically the identification of safety concerns of lesser used roads in rural villages is equally important as safety concerns on more heavily traveled roadways in cities. Incorporating equity into transportation safety planning and subsequent implementation through design and policy changes, means taking extra care to consider and plan for the unique challenges that disadvantaged communities face regarding mobility and connectivity needs. Engaging with historically disadvantaged communities early and often will help to ensure an equitable transportation network is achieved. A detailed report of this analysis can be found in Appendix D.

Table 2: Equity Data Sets

DATA	TOOL	USE
Determining disadvantaged populations	Council on Environmental Quality's Climate and Economic Justice Screening Tool (CEJST)[ii]	Preliminary evaluation, engagement, project prioritization criteria
Assess the overall burden experienced by a community due to underinvestment in transportation	USDOT Equitable Transportation Community (ETC) Explorer[iii]	Preliminary evaluation, engagement, project prioritization criteria
Minority population & vehicle ownership	American Community Survey, 2021	Preliminary evaluation, engagement, project prioritization criteria

Historically Disadvantaged Communities in the Kenai Peninsula Borough

For the KPB CSAP, an equity analysis was completed to identify historically disadvantaged populations in the KPB. These populations have a disproportionately high risk of serious injury or death from crashes. The results of this analysis show a correlation between demographics and safety risk, and they provide an equity-specific lens that can be used to help prioritize and recommend projects for implementation. To complete this analysis, three separate methods were used for determining disadvantaged populations in the KPB. The first method features results using the Council on Environmental Quality's Climate and Economic Justice Screening Tool (CEJST)[ii]. This tool uses census tract boundaries from 2010 and includes the following eight categories to assess climate and economic justice burden:

- ***Climate Change*** – loss of agriculture, buildings, and population because of climate change, flood risk, and wildfire risk
- ***Energy*** – high energy costs
- ***Health*** – asthma, diabetes, heart disease, low life expectancy
- ***Housing*** – historic underinvestment, high housing costs, lack of green space, lack of indoor plumbing, presence of lead paint
- ***Legacy Pollution*** – presence of abandoned mining land or former defense sites, proximity to hazardous waste facilities, proximity to superfund sites, proximity to risk management plan facilities
- ***Transportation*** – exposure to diesel particulate matter, transportation barriers, traffic proximity and volume
- ***Water and Wastewater*** – presence of underground storage tanks and releases of wastewater discharge
- ***Workforce Development*** – linguistic isolation, low median income, poverty, unemployment

The second equity analysis tool used was the USDOT Equitable Transportation Community (ETC) Explorer[iii]. This interactive web application complements the CEJST[ii] by focusing on transportation-related disadvantages. The ETC[iii] evaluates 14 census tracts. (Note: The ETC Explorer[iii] divides census tract 02122000700 into 701 and 702). The communities of Tyonek and Beluga are included in Tract 1, which was not included in the ETC Explorer[iii] tool. The ETC Explorer[iii] analyzes five components to assess the overall burden experienced by a community due to underinvestment in transportation. They include:

- Transportation insecurity
- Environmental burden
- Social vulnerability
- Health vulnerability
- Climate and disaster risk burden

Future SS4A funding may be determined using the CEJST[ii] or the overall ETC[iii] disadvantaged communities.

Transportation Insecurity

Transportation insecurity is a core component indicating transportation disadvantage in a community. It occurs when a significant number of people in

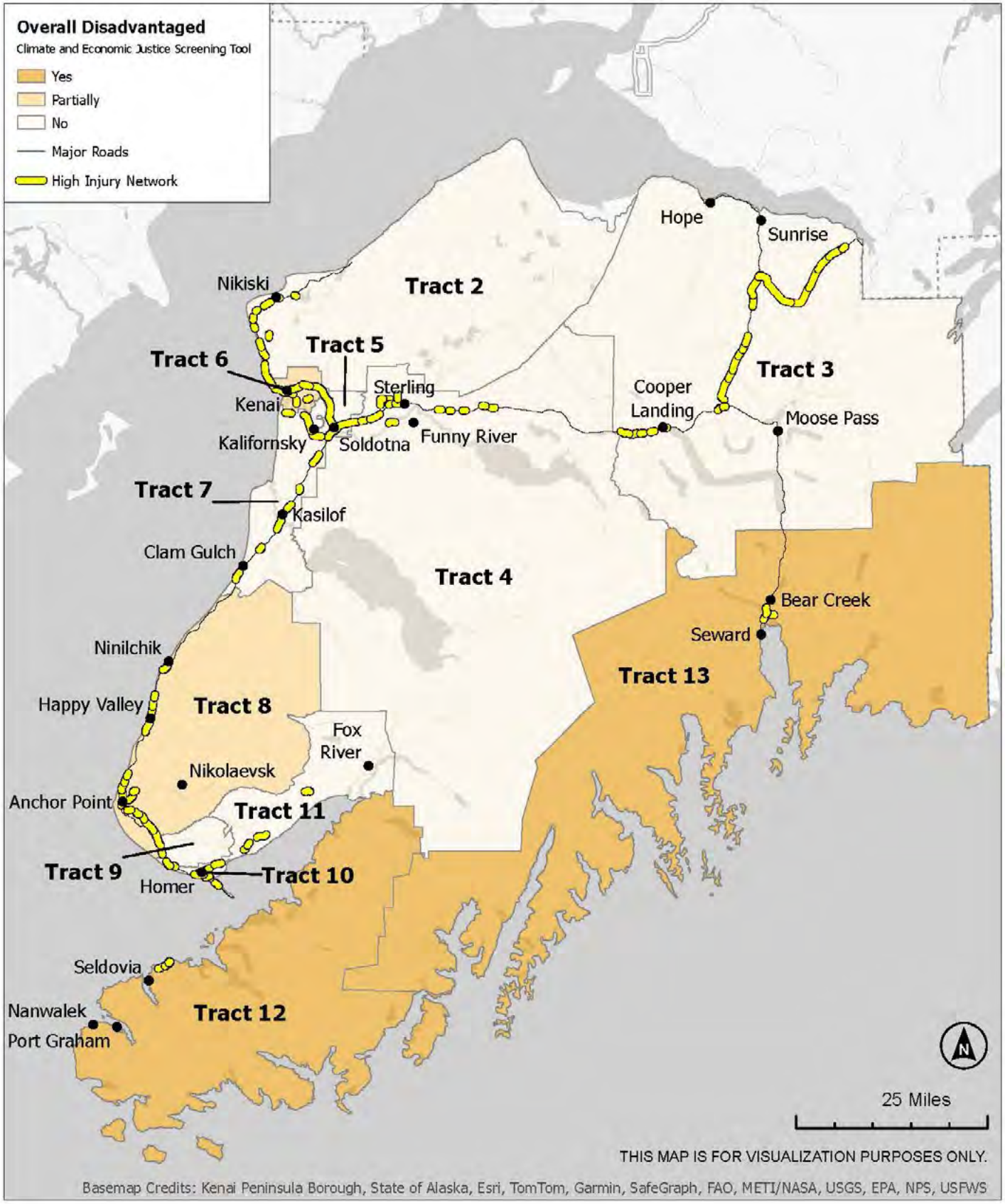


Figure 10: CEST[ii] - KPB Disadvantaged Communities

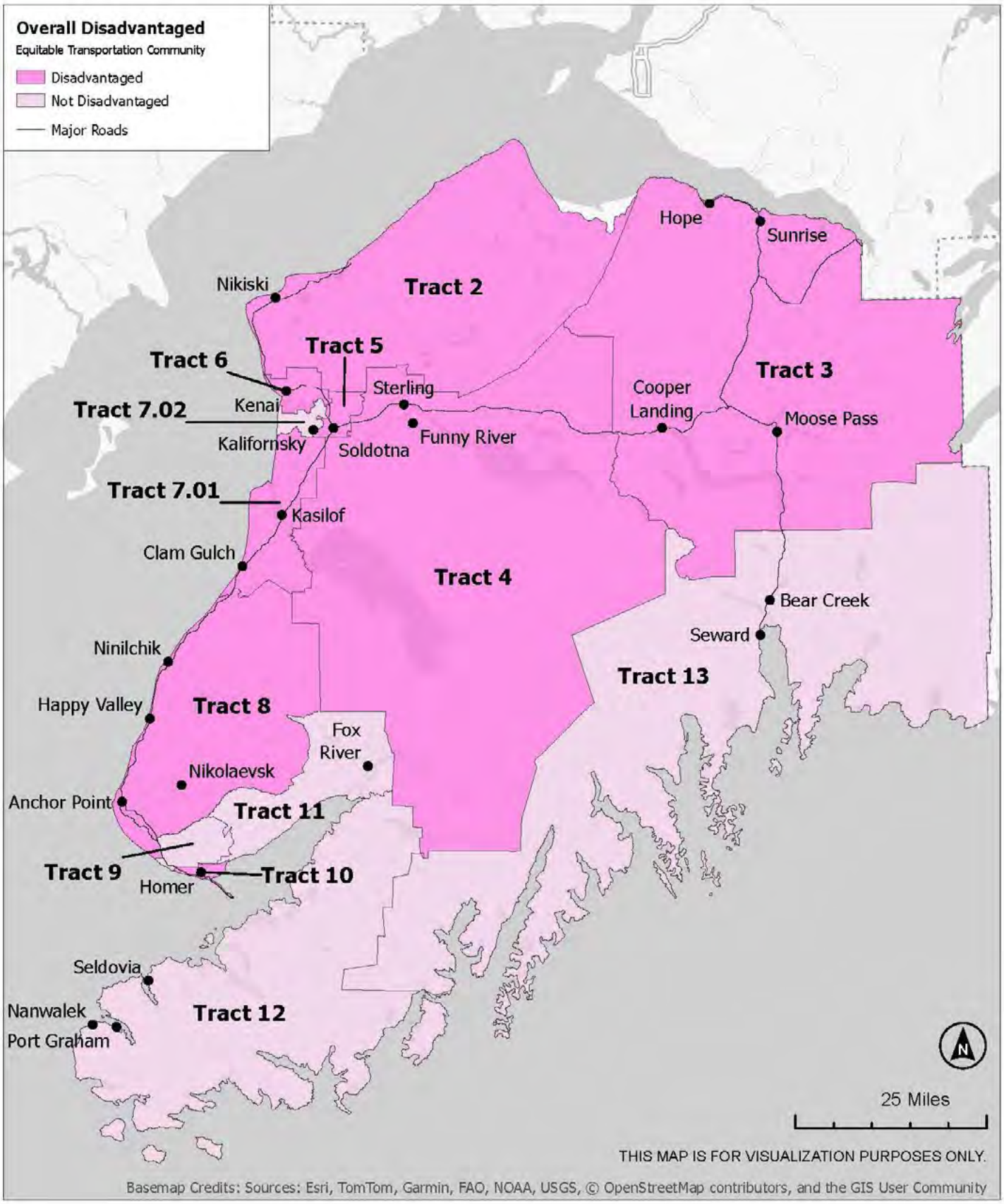


Figure 11: ETC[iii] Overall Disadvantaged Communities in the KPB

a community are unable to meet their daily needs regularly, reliably, and safely. Transportation insecurity is also a substantial factor in persistent poverty. Access to transportation is the primary burden experienced in the KPB.

- ***Transportation access*** – Includes long commute times and difficultly traveling where they want to go by car, walking, biking, or taking transit. Long commute times and limited access to a vehicle are barriers to employment and resources.
- ***Transportation cost burden*** – Households that spend a greater than average percentage of their income on transportation, which includes transit costs, vehicle maintenance and insurance costs, gasoline, and fuel. When a high percentage of household income is spent on transportation, less money is available for housing, medical care, and food, which may lead to households living in sub-standard housing with higher rates of chronic illness and obesity.
- ***Transportation safety*** – This indicator shows areas that are disadvantaged due to unsafe conditions and areas with high crash rates.

Social Vulnerability

Social vulnerability measures lack of employment, level of education, level of poverty, percentage of home ownership, access to broadband internet, housing cost burden, age, English proficiency, and disability status. These socioeconomic indicators are measured because they have a direct impact on quality of life.

Health Vulnerability

The health vulnerability category assesses the rates of disease that may result from exposure to air, noise, and water pollution as well as lifestyle factors such as poor walkability, dependence on a vehicle, and long commute times. This category looks at the prevalence of asthma, cancer, high blood pressure, diabetes, and poor mental health in a community.

Social Vulnerability Indicators in the Kenai Peninsula Borough

Finally, a third equity analysis of the KPB focused on the social vulnerability category of the ETC Explorer[iii] to assess the highest historically disadvantaged areas. For this equity analysis, socioeconomic status and household characteristics were used to assess social vulnerability.

Indicators for socioeconomic status include:

- Percent of population with income below 200% of poverty level
- Percent of people age 25+ with less than a high school diploma
- Percent of people age 16+ who are unemployed
- Percent of total housing units that are renter-occupied
- Percent of houses that spend 30% or more of their income on housing with less than $75k income
- Percent of population uninsured
- Percent of households with no internet subscription
- Gini index (degree of inequality in the distribution of income/wealth)

Indicators for household characteristics include:

- Percent of population 65 years or older
- Percent of population 17 years or younger
- Percent of population with a disability
- Percent of population (age 5+) with limited English proficiency
- Percent of total housing units that are mobile homes

Seven census tracts within the KPB had high percentages of the above indicators for social vulnerability. These census tracts have scores 65% or higher in five or more of the 13 indicators. The census tracts are shown in Figure 12.

High Injury Network (HIN) Analysis

Between 2018-2022 the KPB suffered a total of 3,722 crashes. Of those crashes 44 were fatal and 157 resulted in serious injury. Figure 13 shows crash locations for fatalities and serious injuries.

Looking at the HIN and the areas with historically disadvantaged communities, 30% of the fatal or serious injury crashes took place in communities identified as disadvantaged. Of the 44 fatal crashes, 14% of fatal and 18% of serious injury crashes were in disadvantaged communities (Figure 11).

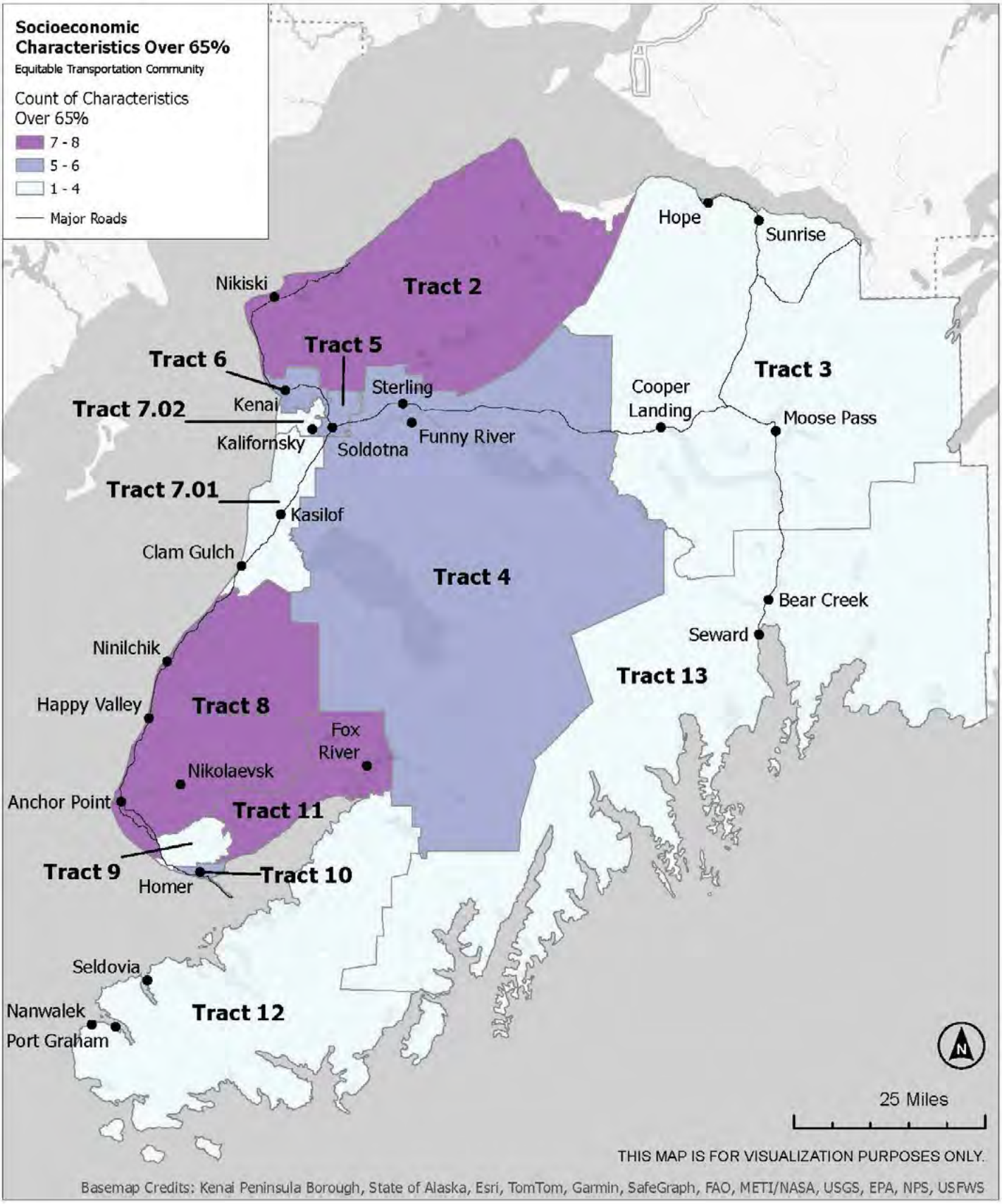


Figure 12: Areas of Social Vulnerability in the KPB

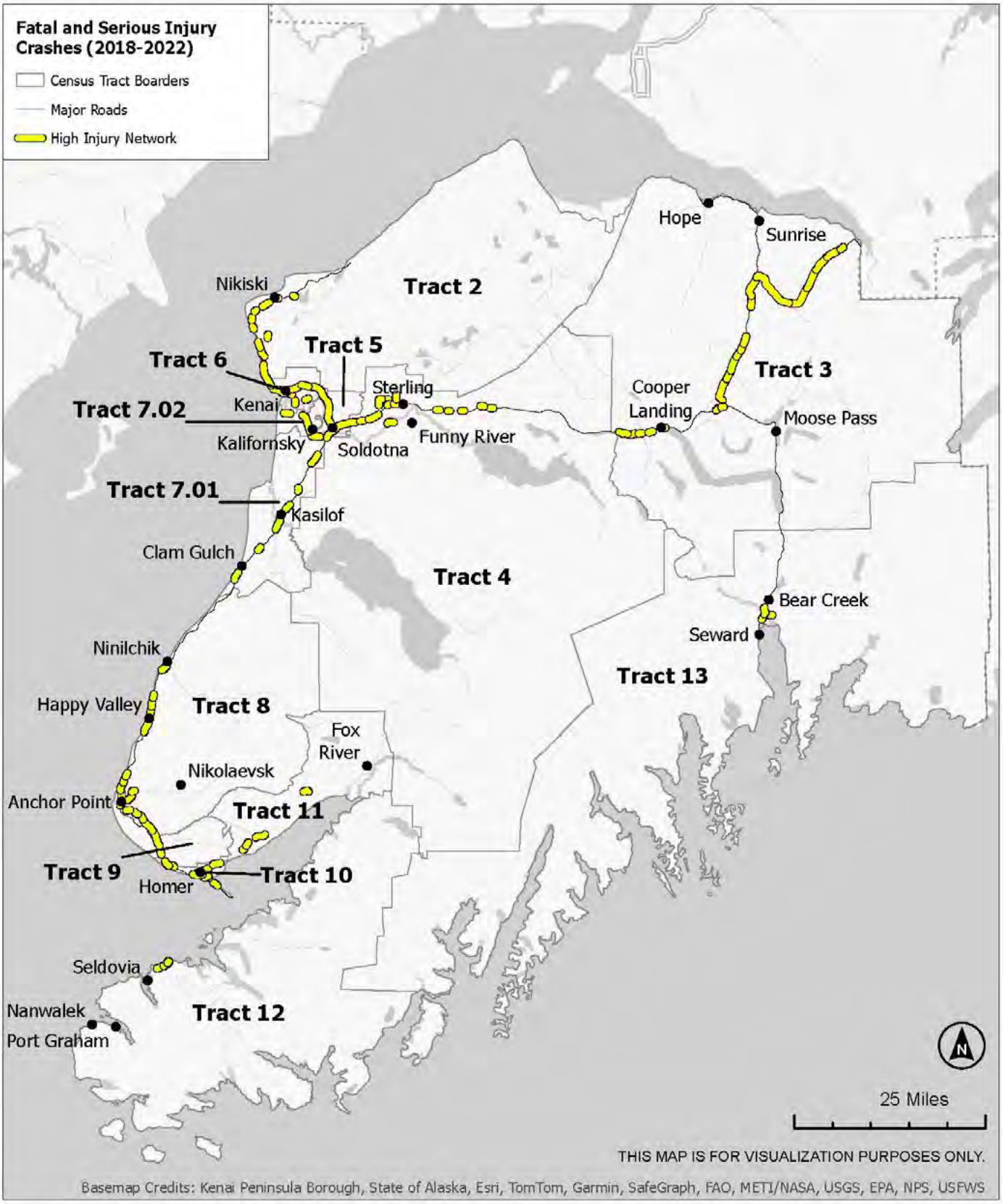


Figure 13: Locations of Serious and Fatal Crashes (HIN)

Transportation Disparities

The focus of the KPB CSAP is to reduce safety risks within the transportation network. Not all individuals have the same safe transportation choices. For example:

- Seniors may no longer be able to drive or may not be able to drive safely in low light and poor weather conditions.
- Households with lower incomes are disproportionally more dependent on walking, biking, and public transit to meet their mobility needs.
- Certain disabilities can prevent individuals from driving fully or under certain conditions such as low light or extreme weather.

Access to limited transportation options creates an elevated transportation safety risk. These disparities can also have a substantial impact on a community member's health, ability to work, and ability to meet their day-to-day needs, such as access to groceries. It can also lead to social isolation and reduced quality of life.

Transportation Barriers That Exist Within Vulnerable Populations

Transportation barriers are caused by a lack of adequate transportation or access to transportation to the extent that it interferes with an individual's ability to meet their daily needs and be socially connected. For the KPB we identified the following barriers through the CSAP:

- High cost of transportation (higher than 90th percentile nationally)
- Lack of transit facilities/routes
- Long commute times to employment and resources
- Limited access to a vehicle
- Vehicle maintenance/insurance/fuel costs (higher than 90th percentile nationally)

Neighborhood Snow Berm.

- Lack of safe walking and biking facilities
- Lack of adequate all-season maintenance to keep roads and pathways clear
- Low income to transportation needs cost ratio
- Limited access to transportation options and destinations

By addressing these barriers through future investments in the Borough's transportation network, transportation disparities can be reduced, creating greater equity, a safer and more convenient transportation system, and safer communities.

EQUITABLE DISTRIBUTION OF SAFETY INVESTMENTS

This equity analysis is a core component of the KPB CSAP and will serve to influence decisions about future safety investments within the KPB. The disproportionate safety risk identified within disadvantaged populations in the study area means that any safety improvements made in these areas, including new infrastructure, policies, programs, enforcement, and education, will help to advance equity. This analysis helps determine where future investments will make the most headway in decreasing severe injuries and fatalities. It will also help make the most of limited transportation improvement funding.

RECOMMENDATIONS

To ensure that the KPB and the partner cities make the most of limited resources in advancing transportation equity, it is important to respond to the transportation disparities and barriers that have been identified in the CSAP. Infrastructure and services that support safe, multi-modal transportation should be advanced throughout the Borough, but also specifically targeted towards those within the HIN that are identified as socially vulnerable. Investments in infrastructure and services could include:

- Expanding local transit operations.
- Investing in protected walking and biking facilities such as sidewalks and separated pathways.
- Funding adequate all-season maintenance of existing multi-modal transportation facilities.
- Including funding for all-season maintenance in planned transportation infrastructure (new facilities).
- Installing additional lighting at intersections, transit, and school bus stops.
- Retrofitting existing transportation facilities to ensure compliance with the Americans with Disabilities Act (ADA).
- Ensuring that new or planned transportation facilities are ADA compliant.
- Encouraging the development of transit supportive corridors that incentivize compact, mixed-use development along commercial nodes and urban centers, affordable housing, and easy access to walking and bicycling facilities.
- Closing gaps within the existing transportation networks with new planned infrastructure.
- Connecting the on-street transportation network to existing pathways and trails.
- Connecting the existing transportation network to reduce (eventually eliminate) single access neighborhoods.
- Developing consistency in safe street design for vulnerable road users in school zones including, signage, reduced speeds, congestion management countermeasures, and lighting.
- Developing educational safety campaigns that target vulnerable road users and the importance of the SSA.

The above recommendations are specific to equity within the KPB. The implementation chapter includes additional safety recommendations inclusive to all areas within KPB.

Chapter 6
Polices, Processes and Tools

EXISTING PLANS REVIEW

To ensure that the CSAP builds upon current and past KPB transportation safety planning efforts, the relevant goals, strategies, and solutions from those plans and policies are documented in the Plan Review Memorandum, completed as another deliverable for this project. This review consolidates all existing planning-related information on transportation safety in the Borough in one place.

The following plans were reviewed and are summarized in Appendix F:

- ADOT&PF 2024-2027 State Transportation Improvement Plan (STIP)
- Kenai Borough Comprehensive Plan, 2019
- Kenai Peninsula Borough Transportation Gaps & Solutions, 2023
- Kenai Peninsula Coordinated Public Transit-Human Services Transportation Plan, 2019
- Kenai Peninsula Borough All-Hazard Mitigation Plan, 2019

- Kenai Borough Transportation Plan, 2003
- Cooper Landing Walkable Community Project, 2010
- Homer Comprehensive Plan, 2018
- Homer Transportation Plan, 2024 DRAFT
- Homer Trail Design Criteria Manual, 2009
- Homer Standard Construction Specifications, 2011
- City of Seldovia Comprehensive Plan, 2014
- Seward's 2030 Comprehensive Plan, 2017
- Seward City Code 16.05.010, Required Public Improvements
- Envision Soldotna 2030, 2011
- Soldotna Downtown Riverfront Redevelopment Plan, 2024
- Soldotna Standard Construction Specifications, 1986

KEY FINDINGS

1. A common theme among many of the plans and all the communities, is the impact that **seasonal increase in traffic volumes** during the summer months has on transportation safety and congestion.
2. Several of the plans reviewed support the incorporation of **traffic calming measures** and **complete streets implementation**. Potential countermeasures have been identified which include improvements to sidewalks and other pedestrian facilities, as well as bikeways.
3. Several of the plans recommend **access management** for major roads, including the Sterling and Seward Highways.
4. Several of the plans reviewed identify the need for a **complete and feasibly constructed road network**.
5. Many of the plans reviewed emphasize **multimodal safety** and creating separated facilities for non-motorized users. Potential countermeasures include new and revitalized sidewalks, trail connections, separated non-motorized pathways, and widened shoulders.

CRASH RISK

To reduce crashes, it is important to understand where and why they are occurring and then make changes to the road or built environment to prevent future ones. To do this, five years (2018-2022) of historical crash data (see Chapter 4) were combined with available land use and roadway data to analyze contributing factors and identify over-represented trends. These were organized into potential risk factors for fatal and serious injury crashes. The Borough's street network was then analyzed to identify locations with the most risk factors. Crash risk factors are incorporated into the location prioritization process and countermeasure identification.

Methodology for Identifying Risk Factors

To identify potential risk factors associated with crashes, the 2018-2022 crash data were aggregated and analyzed for patterns. The crash data was joined spatially in GIS to nearby contextual data, which included the following variables:

- Streets, including number of lanes, posted speed limit, and functional classification
- Land use zoning
- Education facilities and school traffic zones
- Proximity to senior facilities
- Presence of sidewalks and bicycle facilities
- Horizontal alignment
- Locations of parks
- Proximity to intersections

To determine the over-represented crash factors, the frequency of fatal and serious injury crash factors was compared against the average for all crashes. An in-depth evaluation of the high-risk factor crashes and recommended countermeasures can be found in Appendix E.

Policy & Project Recommendations

Safety policies and processes are an essential element of the KPB's CSAP. Policy and process recommendations complement the site-specific recommendations within the plan, building a framework intended to protect users of the transportation network, and developing a culture of roadway safety, which plays a significant role in reducing fatalities and serious injuries on the roadway. This chapter includes strategies and solutions to improve safety within KPB as well as detailed policy and practice recommendations for each of the five SSA elements, addressing safe people, safe vehicles, safe speeds, safe roads, and post-crash care.

Code Review

As part of the CSAP process, subdivision design requirements and construction manuals for the KPB and the partner cities (with such requirements) were reviewed. To help improve safety and align with SSA principles, the following changes to the existing construction manuals are recommended:

1. Explore changes to improve connectivity such as prioritizing closing gaps in the transportation network and access management protocols.
2. Develop high volume driveway standards.
3. When subdivision occurs adjacent or near high-speed road system(s) require the platting and construction of frontage and backage roads in an effort to minimize the number of access points to those high speed roads.
4. Require construction of right-of-way through the subdivision process to ensure there are multiple points of ingress and egress for the purpose of providing evacuation routes or access to a safe muster point.
5. Traffic impact analyses for certain development (criteria to be determined).
6. Changes to design criteria in the Subdivision Construction Manual to promote Complete Streets and/or self-enforcing roadways, including design speed, reductions in lane width, and warranting conditions for separate non-motorized facilities.

Strategies and Solutions for the KPB

Schools

The KPBSD operates a total of 42 schools. The majority are physical schools, located on the road system. Of the 42 schools, 17 are Title 1 schools. Most Title 1 schools are located on the road system. The KPBSD Title I program is made available through federal grants to improve the academic achievement of students in schools with high percentages of economically disadvantaged students. KPBSD uses Title I funds to serve elementary and K-12 schools that have a 40% or higher percentage of economically disadvantaged students. Of the 17 Title 1 schools, four are located on the HIN and three are within ¼-mile of the HIN.

Throughout the CSAP planning process, concerns were voiced by the community, including parents and school staff, and transportation providers, about transportation safety near schools. Schools on the road system fall generally into two categories, those on arterials and those in town(s) on local streets. The safety challenges are different depending on what type of road the school is located.

For schools on local streets concerns center around congestion. Following the COVID-19 pandemic, and for other reasons, fewer students are riding the bus, and are being driven, or are driving to school. At the beginning and end of each school day many schools and the surrounding streets experience heavy congestion. The school sites and their circulation plans were designed around school buses and not individual vehicles picking up and dropping off students. Inadequate, and/or unsafe queuing areas result in long lines extending out to adjacent streets. Lack of adequate winter maintenance of roads, sidewalks and crosswalks is also a concern, limiting safe areas for students walking to and from school campuses.

For those schools located on arterials there are also often issues of congestion at the beginning and end of the school day in addition to speeding and disrespect of the school zone. Many of the solutions identified below seek to address these concerns. Additionally, a safety demonstration project (discussed below) is suggested that has the potential to improve safety for four schools: Chapman Elementary, Kenai Middle School, Kenai Central High School and Tustumena Elementary School.

Because of the complex nature of safety concerns surrounding schools, it is recommended the KPB seek

Safety Challenges for School Zones

funding or support for a School Zone Safety Study from appropriate agencies, such as the Alaska Department of Transportation and Public Facilities.

Eastern Peninsula Highway Emergency Service Area (ESA)

One of the ways KPB is unique from other Alaska boroughs, is that vast stretches of the Seward and Sterling Highways which include state of Alaska owned and maintained rights-of-way, cross land predominately owned by the federal government, rather than privately owned lands. Service areas are funded through a portion of the funds the federal government provides through a Payment In Lieu of Taxes program (PILT). The need for emergency services in the Eastern Peninsula Highway ESA is outgrowing what currently is provided by volunteer response teams located in Bear Creek, Cooper Landing, Hope, and Moose Pass. Summer traffic continues to grow as more and more people travel to and through the KPB for tourist opportunities, recreation, fishing, and hunting. Long stretches of the Sterling and Seward Highways are narrow, two-lane roads, with constricted or non-existent shoulders, making it difficult for vehicles to pull over to allow emergency vehicles to pass. Helicopters are often deployed as a precaution, to ensure quick response times and post-crash care. Helicopters must then find suitable places to land, which is challenging with increased road congestion, rugged topography, and low numbers of vehicle pull outs with adequate space for landing. In the winter, this can be further complicated by insufficient highway maintenance, which results in pull outs covered in snow and unavailable for safe helicopter landings.

> **“ It is recommended that the Eastern Peninsula Highway ESA develop and implement a 5-year plan.”**

Ideally, the Eastern Peninsula Highway ESA would have sufficient funding to provide two paid employees at the Cooper Landing, Hope, and Moose Pass stations. Implementing this will require coordination and collaboration with these response partners. Funds would also be used to improve communications. A centralized station, with paid staff, would be located near the Wye (junction of Sterling and Seward Highways). Providing a standing unit at the Wye would eliminate “assembly time”, which increases response time to the scene, improving post-crash care. Roads would be widened, and additional pull outs designed to accommodate helicopter landings, in order to increase response time and post-crash care. To set a course to accomplish these tactics, and more, it is recommended that the Eastern Peninsula Highway ESA develop and implement a 5-year plan. The first consideration for implementation would be to add six personnel at the Wye for Emergency Medical Services (EMS)/transport. This would have the greatest impact on care.

> **“ KPB should identify predefined evacuation locations dependent on the hazard. ”**

Emergency Evacuation Routes

The KPB experiences a multitude of severe natural hazards, such as earthquakes, floods, wildfires, and severe weather events. The USDOT ETC Explorer Tool[iii] identifies 73% of the Borough as experiencing a Climate and Disaster Risk burden. Communities with higher scores have had a higher yearly financial loss due to climate related hazards such as floods, hurricanes, and severe weather events, as defined by the Federal Emergency Management Agency (FEMA). Additionally, communities with higher scores will likely experience an increased frequency and severity of extreme weather events such as heat waves, heavy rainfall, droughts, and coastal flooding in coming years. The Borough has a robust set of plans in place specific to response, recovery, and mitigation actions, including the KPB Emergency Operations Plan, the Multi-Jurisdictional Hazard Mitigation Plan, the Community Wildfire Protection Plan, and the Interagency All Lands/All Hands Action Plan. Emergency evacuation routes are essential to facilitate a swift and organized response to protect life and property. To enable safe and efficient evacuations, multiple evacuation routes are necessary. For example, in the event of a wildfire or flood, an evacuation route may become unsafe and impassable. Having access to an alternative route may determine life or death in an

emergency. The KPB has many "single access" roads, meaning the road only connects with another road once. Limited connections throughout the transportation network exacerbate evacuation challenges. Having a connected transportation network, with "multi access roads" also has other benefits such as more efficient road maintenance and school bus service, and improved access (and potentially shorter response time) for fire trucks and emergency service vehicles, such ambulances.

Contraflow – when traffic travels the opposite way intended or designed. The primary goal of contraflow is to increase rate of flow and decrease the travel time from evacuation origins and destinations.

The KPB can help proactively address limited connectivity by requiring new streets to connect with existing streets and requiring construction of platted rights-of-way through the subdivision process. The more challenging aspect is addressing the many developments that currently have only one constructed access. To move as many people as quickly as possible out of a hazard threat zone the KPB should inform the public about contraflow operations, what that means to motorists, and how and when said operations are deployed to safely extract motorist from a potentially dangerous area. Furthermore, the KPB should identify predefined evacuation locations dependent on the hazard. For example, preidentified gravel pits, fields, and air strips may be used when egress may be inaccessible during a wildfire incident.

> "KPB should inform the public about contraflow operations, what that means to motorists."

The Multi-Jurisdictional Hazard Mitigation Plan (HMP) includes many road network strategies and information strategies intended to improve safety during evacuation. In addition to the recommendations above and those included in the HMP, the KPB and partner cities should also consider factors beyond roadway capacity and connection due to the Borough's culturally diverse populations. Specifically, behavioral considerations should be evaluated and how the public responds to, or interacts with, phased evacuation levels, public alert, and warning methods as well as reentry and repopulation tactics. A combination of planning by agencies and preparedness by the public can improve the effectiveness of these tactics.

Safety Emphasis Roadway Pilot Program

A safety emphasis roadway pilot (demonstration) program is a short-term initiative on a section of roadway selected for increased road user education, increased enforcement of traffic safety laws, emergency response, and consideration of engineering strategies.

- Education examples: safety messaging through public service announcements, safety campaigns, radio stations, newspapers, and social media.
- Enforcement examples: high visibility enforcement (HVE) to discourage high-risk driving behaviors such as not wearing a seatbelt, speeding, or impaired driving.
- Emergency response examples: research and identification of issues w/post-crash care in the corridor.
- Engineering examples: low/medium cost safety improvements such as enhanced pavement markings and signage.

Emergency Vehicle Staging

- ADOT&PF has Safety Corridors (portions of Seward and Sterling Highways) which includes double fines for enforcement. The recommended "Safe Emphasis Roadway" term used in this CSAP is to avoid confusion with the ADOT&PF Traffic Safety Corridors.

Benefits of safety emphasis roadway programs include:

- Motorists driving behavior will be influenced by targeted media campaigns, signage, and increased law enforcement within the corridors. With more drivers choosing safer speeds, wearing seat belts, and avoiding driving while impaired, we expect increased safety for all road users along the safety corridors.
- Schools and businesses along the corridors will receive educational messages.
- Additional funding for demonstration projects and supplemental planning activities through future SS4A grants and other funding sources.

Two of the three KPB CSAP focus groups discussed the concept of a safety corridor pilot program (now called Safety Emphasis Roadway Program). Participants agreed that road sections selected for a pilot program should be data driven, in that there should be documented cases of accidents or speeding. It was also suggested that some sections of road could be appropriate as a safety emphasis roadway during the summer months only.

Areas for the KPB to consider for pilot, or demonstration, safety emphasis roadway projects include:

- Sterling Highway in Kasilof at Tustumena Elementary School
- Kalifornsky Beach Road
- Seward Highway at Moose Pass
- Sterling Highway from Sterling to the Kenai Spur Road in Soldotna
- Sterling Highway in Anchor Point at Chapman Elementary School
- Sterling Highway at Skyview Middle School
- Sterling Highway Anchor Point to Homer
- Kenai Spur Road from Swires Road to Bridge Access Road

It should be noted that the roads listed are ADOT&PF owned and maintained, and implementation of Safety Emphasis Roadway Program(s) will require collaboration and concurrence with the ADOT&PF.

School Safety Awareness Efforts.

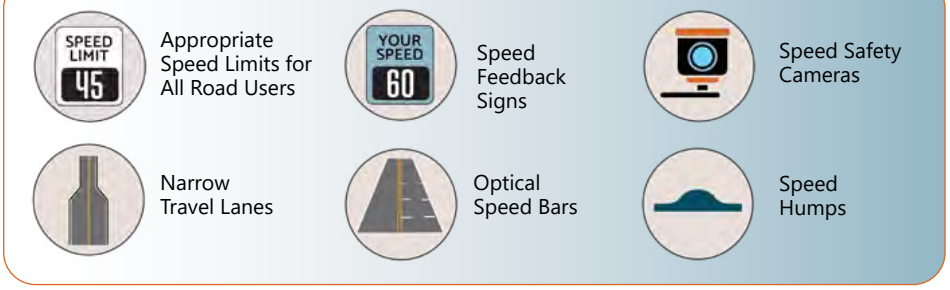
Proven Countermeasures

Below is a range of safety countermeasures that are known to reduce crashes involving people driving, walking, bicycling, or rolling (using a wheelchair or other mobility assistive devices). The strategies were selected from the FHWA's Proven Safety Countermeasures as appropriate for the KPB. It is important to keep in mind that not all strategies are appropriate for every road or circumstance as there are a variety of types of contexts for KPB roads, with different types of speed, volume, and geometry. This is not an all-inclusive list, and there may be other strategies that are appropriate. These countermeasures are intended to aid decision making during the planning and design of roadway improvement projects.

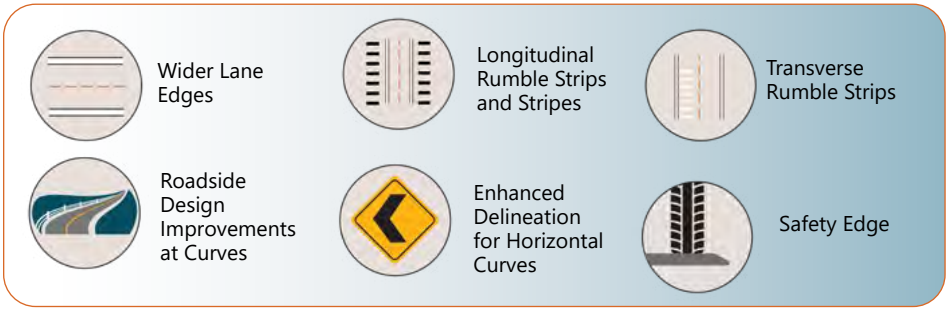
This set of safety countermeasures is developed from the FHWA's Proven Safety Countermeasures initiative[iv]. This initiative includes strategies designed for all road users and all kinds of roads and addresses at least one safety focus area; speed management, intersections, roadway departures, or pedestrians/bicyclists. Some of the countermeasures address multiple safety focus areas. Incorporating multiple countermeasures will create redundancy in the SSA. Detailed descriptions of these proven countermeasures are found in Appendix G.

PROVEN SAFETY COUNTERMEASURES

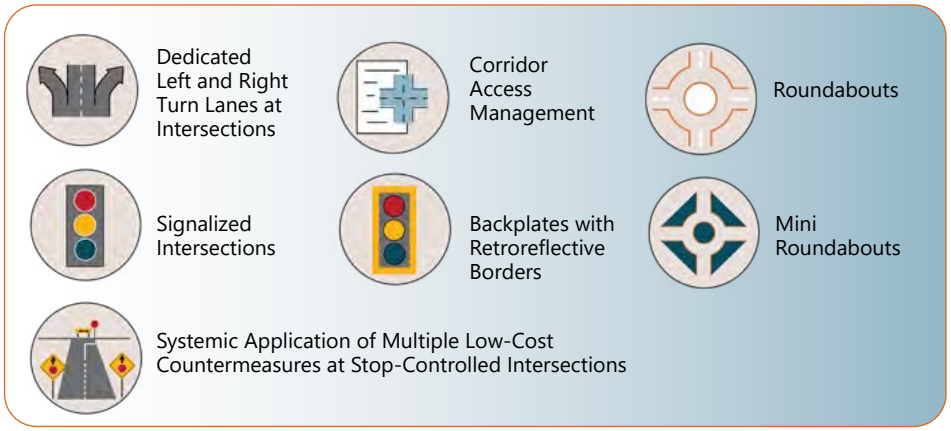
SPEED MANAGEMENT



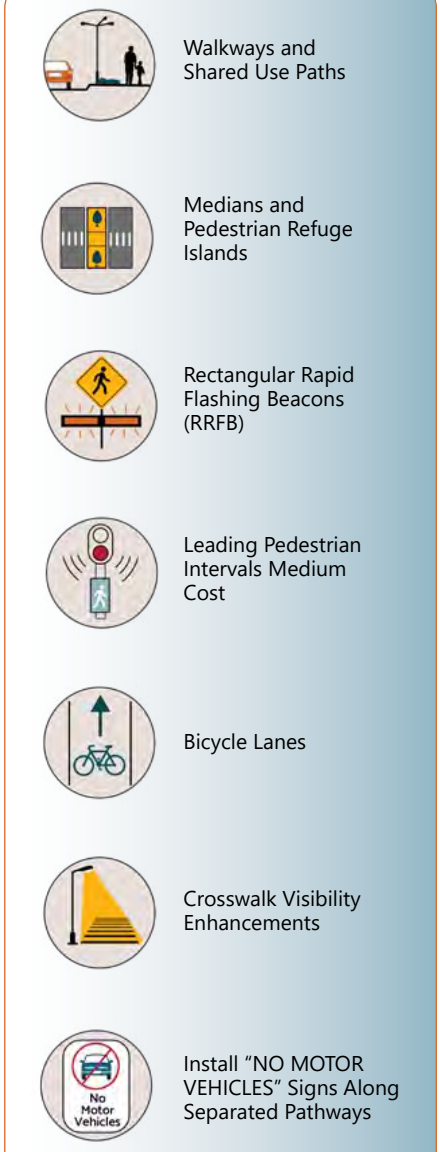
ROADWAY DEPARTURE



INTERSECTIONS



PEDESTRIANS/BICYCLES



CROSSCUTTING

Figure 14: Proven Safety Countermeasure Icons

PARTNER CITIES

While many of the road segments and intersections selected for specific countermeasure recommendations fall within the boundaries of the five partner cities, many more do not. The partner cities are encouraged to review the proven countermeasures above. Many of these countermeasures can be incorporated into future funding requests for road projects. Additionally, the data found in the HIN map and dashboard can be used to establish a need for improvements.

Homer

The City of Homer has a recently updated Transportation Plan, a Non-motorized Transportation Plan, mature subdivision regulations and construction standards. Adopted plans position the city to be successful in obtaining grant funding and STIP funding[v].

Three of the top 20 segments are located in, or near the City of Homer: Pioneer Avenue, Homer Spit Road, and East End Road. The recommended countermeasures for these segments should be incorporated into the city's STIP requests. Using the HIN map and the dashboard, the city and other community partners, can use the data to establish the need for improvements, and use the proven countermeasures to recommend safety improvements. The city may also use this information to prioritize their capital planning for infrastructure such as streetlights.

Kenai

The City of Kenai's Comprehensive Plan addresses transportation in a broad holistic way. The city does not have an adopted transportation plan. Two of the top 20 segments are located in the City of Kenai: Kenai Spur Highway and Bridge Access Road. The recommended countermeasures for these segments can be incorporated in the city's STIP requests. Using the HIN map and the dashboard the city, and other community partners, can use the data to establish the need for improvements, and use the proven countermeasures to recommend safety improvements. This information can be used to develop STIP and other ADOT&PF funding. The city may also use this information to prioritize their capital planning for infrastructure such as streetlights or other funding such as increased police force to facilitate increased enforcement.

Seldovia

The City of Seldovia has an adopted Comprehensive Plan with broad transportation goals, including safety. Seldovia is included in, and adopted, the 2024 Multi-jurisdictional Hazard Mitigation Plan. The city does not have adopted subdivision regulations; therefore, subdivisions follow Borough requirements. One of the priority locations is in Seldovia. The community of Seldovia has a limited road system and is connected to the rest of the borough via ferry. While there have been three KSI's in the community (Jakolof Bay Road) the community is not considered to be on the HIN. Further investigation into the three KSI's revealed that there was no common cause, and that an engineering countermeasure or policy change would not have changed the outcome. Nonetheless, Jakolof Bay Road is a narrow, two-lane road with constricted shoulders and no sidewalk or separated path for non-motorized use.

Seldovia would like to see increased streetlights and improved non-motorized facilities on Jakolof Bay Road. Concern was raised about the locations of the stop signs at Main Street. Concern was also raised about the historic boardwalk and the weight it can safely accommodate. The City of Seldovia and the Seldovia Village can use the proven countermeasures to help shape funding requests for transportation safety projects.

Seward

Seward's adopted Comprehensive Plan includes a transportation element. The plan makes recommendations for some new transportation infrastructure and recommends a Transportation Plan. Seward is included in, and adopted, the 2024 Multijurisdictional Hazard Mitigation Plan. One of the top 20 priority locations is in Seward. Some of the recommended infrastructure improvements may be appropriate for future safety focused funding such as SS4A. Developing a Transportation Plan may position the city to be more successful in receiving funding from the ADOT&PF.

The community of Seward would like to see increased street lighting and non-motorized facilities.

Soldotna

The City of Soldotna has an adopted Comprehensive Plan and Downtown Improvement Plan, both of which include specific transportation projects, many of which are safety oriented. Additionally, the city has an adopted Safe Routes to School plan, focused on the safety of students traveling to school. These plans have enabled the city to be successful in receiving funding for transportation projects. Two of the top 20 segments are within the City of Soldotna.

SSA POLICY AND PRACTICES

Below are recommended policies and practices for the KPB and partner cities organized around the five complimentary objectives of the SSA elements.

Safe People

Encourages safe, responsible driving and behavior by people who use our roads and create conditions that prioritize everyone's ability to get home safely.

- Establish a Safety Action Plan (Safe Streets KPB) Implementation working group.
- Implement Safe Streets KPB campaigns and build and maintain a regional Safe Streets KPB webpage.
- KPB and partner cities work together to develop Complete Streets Policies and create and distribute educational materials about Complete Streets.
- KPB and partner cities work with local community partners to create and distribute seasonal safety messaging on how to be safe on the roadway during winter and low light conditions.
- Combine countermeasure deployment with promotional activities (press releases, promotional signage, media interviews).
- Explore a change in state law to reduce the legal blood alcohol content (BAC) for impaired driving.
- Implement a submittal checklist for developers and/or roadway design project reviews prior to project approval.
- Host safety walking tours annually for elected officials and the public to demonstrate safety needs and navigating locations where improvements have been implemented.
- Create a policy to establish consistent messaging for school zone safety throughout the KPB.
- Work with local partners to develop a safety campaign that encourages young people to advocate for safe driving behaviors.
- Explore the feasibility of a local ATV, snowmachine, and bicycle safety program, working with local dealerships, bicycle shops, and rider groups. Focus on education and outreach for safe and legal operation and increased use of helmets.
- In urban areas of the Borough, work with local agencies and policy makers to create economic investment incentives for new development that adds walkable facilities, smaller lot sizes, increased density, and greenspace.

Safe Vehicles

Seeks to expand the availability of vehicle systems, features, and safety enhancements (i.e. car seats, helmets) that help prevent crashes and minimize the impact of crashes on both occupants and non-occupants.

- Conduct education workshops to inform the public about safe vehicle practices such as correct child car seat set up, preparing vehicles for winter travel conditions, proper driver ergonomics, and other safe vehicle practices.
- Incentive programs to encourage vehicle owners to maintain proper care and upkeep of their vehicles such as operable headlights, blinkers, brakes and brake lights, and seasonal tires.
- When purchasing new vehicles for the KPB and partner cities vehicle fleet, ensure that vehicles with optimal safety features are selected. These can include hazard warning notification, safety automations, and back up cameras.

Safe Speeds

Promotes safer speeds in all roadway environments through a combination of thoughtful, equitable, context-appropriate roadway design, appropriate speed-limits, targeted education, outreach campaigns and enforcement.

- Develop a policy for active monitoring for speed enforcement.
- As part of the KPB or partner city's Complete Streets Plan(s), assess current designated road speed and evaluate potential changes based upon proposed compete streets functionality.
- Work with local enforcement agencies to advocate for and provide more funding for enforcement of safe speeds throughout KPB.
- Develop a boroughwide Speed Management Plan.

Safe Roads

Safe roads aims to design roadway environments to mitigate human mistakes and account for injury tolerances, to encourage safer behaviors, and to facilitate safe travel by the most vulnerable road users.

- Develop a KPB Complete Streets Plan.
- Partner cities develop Complete Streets Plans.
- Revaluate street design guidelines, standards, and Borough code to prioritize and support the SSA and Complete Streets principles.
- Seek implementation funding for projects identified the KPB CSAP including federal grant funding such as the SS4A program.
- Create design policies to ensure design that supports complete streets in new developments and subdivisions within KPB.
- Create design policies that require connections between new developments and existing subdivisions whenever possible to ensure multiple points of ingress and egress for the purpose of providing evacuation routes or access to a safe muster point.
- Create new policies centered on consistent, year-round maintenance practices and standards that ensure walkability and safe non-motorized travel within KPB.
- Facilitate efficient use of resources dedicated for road maintenance and upkeep through consolidation of Road Service Areas.

Post Crash Care

Post crash care seeks to enhance the survivability of crashes through expedient access to emergency medical care, while creating a safe working environment for vital first responders and preventing secondary crashes through robust traffic incident management.

- Coordinate training opportunities for emergency responders involved in post-crash care and crash reporting.
- Involve health organizations and safety advocacy groups (non-profits) in the development of rehabilitation programs for people involved in drug and alcohol related crashes.
- Work with the state and federal governments to increase funding for emergency services (and communications, i.e. radio and cell) on segments of the road network that are predominantly within federal and state lands.

Chapter 7

Road Map to Safer Streets

> **“The list includes at least one priority location within each of the five partner cities, Homer, Kenai, Seldovia, Seward, and Soldotna, regardless of scoring.”**

PRIORITY LOCATIONS

One of the central objectives of the CSAP is to prioritize locations based on safety needs and then develop projects and programs to improve safety at those locations (priority locations). Prioritizing locations helps the KPB focus limited resources and align with the prerequisites of federal and state funding programs the Borough and partner cities may pursue. Ideally, improvements that address priority locations also complement past, current, and planned projects by adding systemic and site-specific improvements.

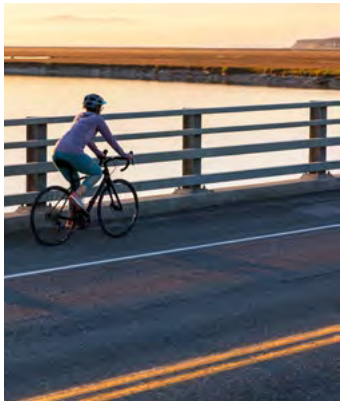
The process of selecting 20 priority locations throughout the Borough for recommended countermeasures (solutions to transportation safety challenges) was multifaceted.

First, road segment and prioritization scoring data, described in Appendix E, Crash Risk and Prioritization Memorandum, was reviewed. Highest scoring locations were reviewed against ADOT&PF STIP projects. Several of the highest scoring segments fall within the boundaries of a STIP project. Those projects were omitted because the STIP projects will mitigate safety concerns in the area. The remaining list was reviewed and includes at least one priority location within each of the five partner cities, Homer, Kenai, Seldovia, Seward, and Soldotna, regardless of scoring. A deeper review showed that many lower scoring segments tied in scoring. From these, a location outside of the partner cities was selected, with an effort to spread priority locations throughout the Borough. Further review revealed that many higher scoring segments had adjacent, lower scoring locations. The priority location was expanded by including the lower scoring segments to capture a larger portion of the road corridor to address more safety concerns within each priority location.

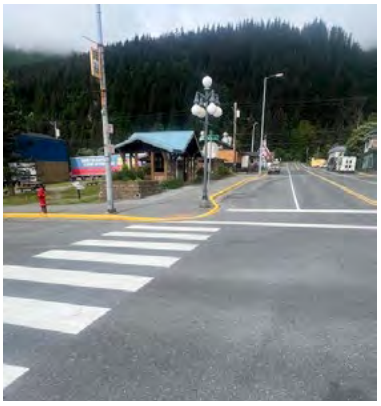
Project recommendation narratives are provided below, followed by maps for each priority location in ranked order of score. This ranking is not intended to suggest or require an order of implementation. The KPB and partner cities should take advantage of all funding opportunities that become available. In some cases, recommended countermeasures could be incorporated into other projects, such as wider edge paint or wider shoulders in repaving projects. These should be communicated to ADOT&PF and other entities responsible for the project.

For each of the priority locations a suite of recommended countermeasures unique to that area is provided. One-page graphic summaries for each of the priority locations have been prepared identifying safety countermeasures recommended for locations along the corridor. The recommended countermeasures identified for each of the priority corridors have been grouped by cost. Cost level (low/medium/high) represents the effort in engineering, construction, right-of-way acquisition, inspection, and traffic control costs.

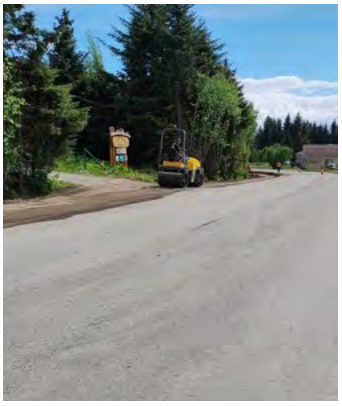
See Appendix G for descriptions of many of the suggested countermeasures.



Bike Bridge Access



Road Paint



New Sidewalk Construction

Emergency Landing Area

PRIORITY 1

KENAI SPUR HIGHWAY – KENAI

(MP 8-15)

ADOT&PF Classification: **Principal Arterial • Other**

Background

The Kenai Spur Highway serves as a critical link between the communities of Kenai and Soldotna. This 39-mile-long (63 km) highway begins at a junction with the Sterling Highway in Soldotna and provides access to Kenai and Nikiski. Within the City of Kenai, the highway is a four-lane undivided road with a center turn lane and with high densities of driveways and intersections. Kenai Middle School and Kenai Central High School are both accessed from this highway. Mountain View Elementary School is accessed via Swires Road, which intersects the Kenai Spur. Some sections of the highway have separated non-motorized paths or sidewalks.

Recommendations

This section of the Kenai Spur Highway has experienced significant development. With that development comes increased traffic and non-motorized users. Adding a separated pathway between Borgen Avenue and Bridge Access Road would alleviate safety concerns and address the public comments requesting to expand the pathway network. Selected treatments at intersections along the corridor would help with speeding and turning movement conflicts. Treatment can be adding a traffic signal, constructing a roundabout, or adding turn lanes. Improved and additional lighting will provide added safety in the dark winter months.

In the more developed area of the road segment, in the heart of Kenai, a corridor management plan should be completed to address the multiple turning conflicts and high traffic volumes at driveways and businesses.

In the area around Kenai Central High School and Kenai Middle School, a high visibility pedestrian crossing on the highway should be investigated. Grade separated crossings, such as a bridge, provide the safest solution but are expensive. Other options include flashing beacons or Rectangular Rapid Flashing Beacons (RRFBs) to alert drivers of students crossing the road during school hours.

LOW COST $

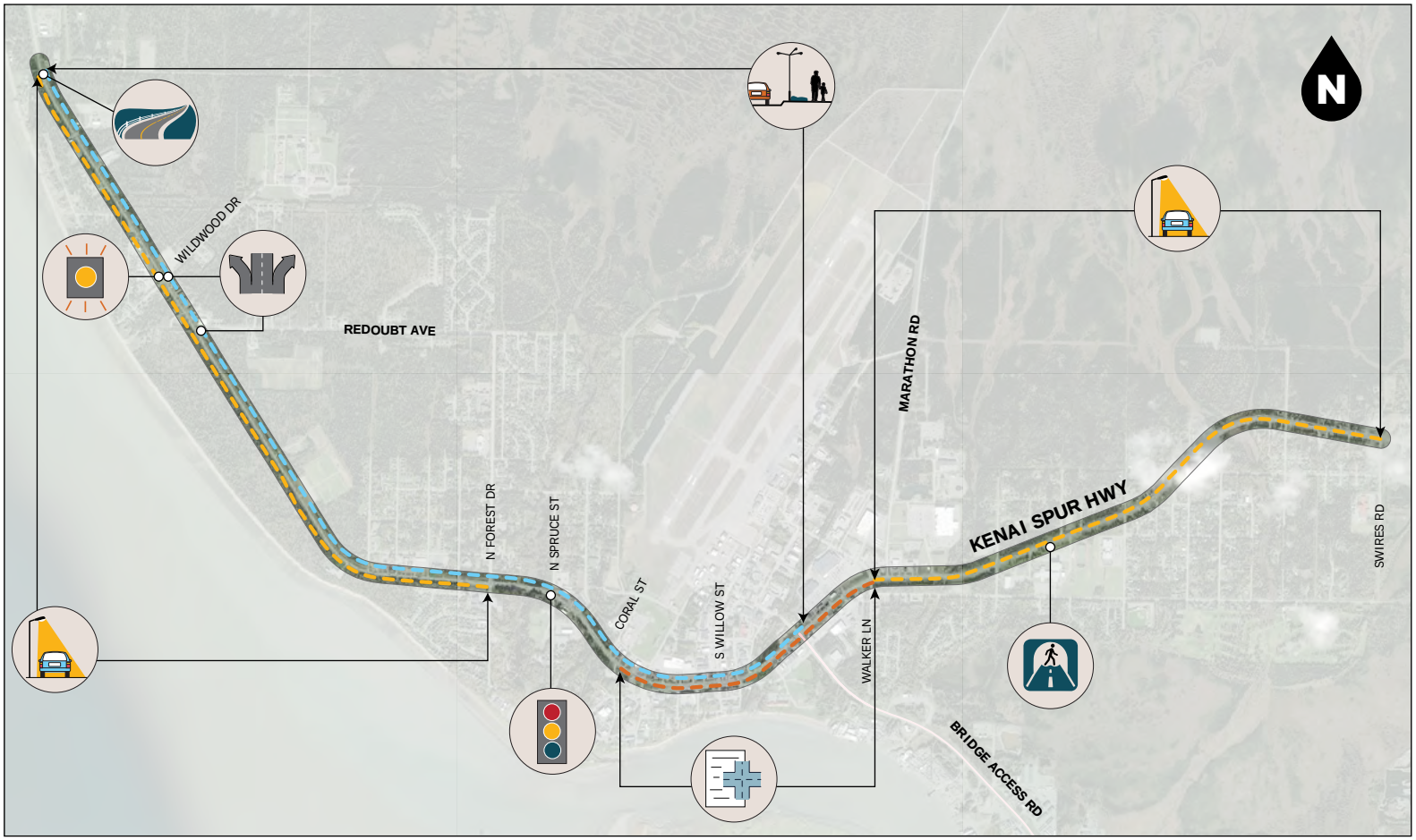
1. Wider edge paint (consider use of MMA paint)
2. Flashing beacon at Cook Inlet View Drive/ Wildwood Drive
3. RRFB

MEDIUM COST $ $

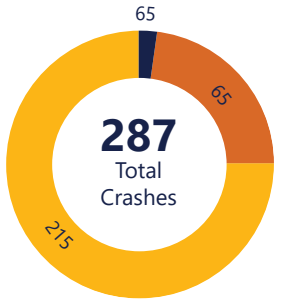
1. Traffic signal at Spruce Street (potentially only for seasonal use)
2. Lighting (focused on school bus and transit stops, intersections and pedestrian crossings)
3. Wider edge paint with MMA paint inlaid (ground) into road surface

HIGH COST $ $ $

1. Roadway improvements
   - At Borgen Avenue, striping changes to improve passing related crashes and concerns
   - Turn lanes from Forest Drive north
2. Corridor Management Plan:
   - Turn lanes
   - Raised medians and pedestrian refuge islands
   - Roundabouts
   - Traffic signals
   - Separated pathway



COLLISION HISTORY



KSI | Injury | No-Injury

CRASH MODAL SHARE

Motor Vehicle	283
Bike	0
Pedestrian	4

PRIORITY 1

KENAI SPUR HIGHWAY, KENAI

MP 8-15

- Roadway Improvements: Striping Changes
- Flashing Beacon
- Lighting: Install or Improve
- Separated Pathway
- Traffic Light
- Turn Lanes
- Corridor Management Plan
- Grade Separated Pedestrian Crossing

PRIORITY 2

KENAI SPUR HIGHWAY – SOLDOTNA

(MP 0-1)

ADOT&PF Classification: **Principal Arterial • Other**

Background

The Kenai Spur Highway serves as a critical link between the communities of Kenai and Soldotna. This 35 to 55 mph, 39-mile-long (63 km) highway begins at a junction with the Sterling Highway in Soldotna and provides access to Kenai and Nikiski. Within the City of Soldotna, the highway is a four-lane undivided road with a center turn lane, sidewalks on both sides, and high densities of driveways and intersections. The surrounding area consists of commercial and industrial development with interspersed residential development. Within proximity, but not directly accessing the corridor, is a commercial and retail area.

Recommendations

This section of the Kenai Spur Highway should be investigated from a high level to address the multiple driveways and side roads. A corridor management plan could tie into the Sterling Highway through Soldotna and take a holistic approach to the growth in the heart of Soldotna. Roundabouts, traffic signals, and medians would help slow traffic and reduce turning movement conflicts along the corridor.

LOW COST $

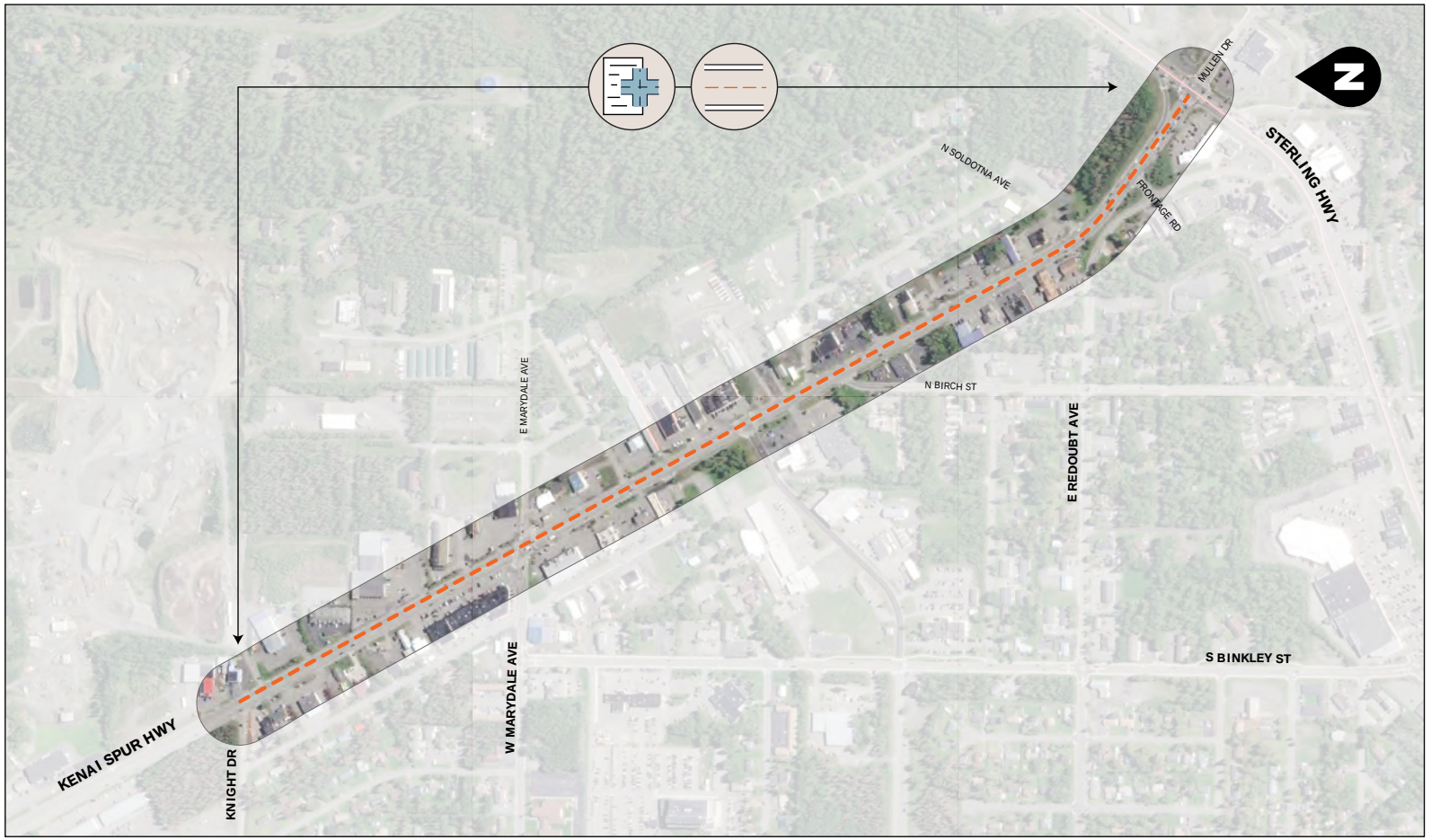
1. Wider edge paint (consider use of MMA paint)

MEDIUM COST $ $

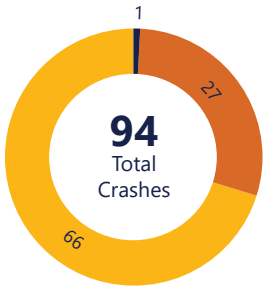
1. Wider edge paint with MMA paint inlaid (ground) into road surface

HIGH COST $ $ $

1. Roadway improvements
   - At Borgen Avenue, striping changes to improve passing related crashes and concerns
   - Turn lanes from Forest Drive north
2. Corridor Management Plan:
   - Turn lanes
   - Raised medians and pedestrian refuge islands
   - Roundabouts
   - Traffic signals



COLLISION HISTORY



KSI | Injury | No-Injury

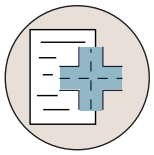
CRASH MODAL SHARE

Motor Vehicle	93
Bike	0
Pedestrian	1

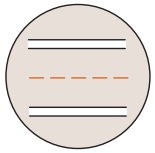
PRIORITY 2

KENAI SPUR HIGHWAY, SOLDOTNA

MP 0-1



Corridor Management Plan



Wider Lane Edges

PRIORITY 3

FUNNY RIVER ROAD – SOLDOTNA

(MP 12)

ADOT&PF Classification: **Major Collector**

Background

Funny River Road provides the only road access to the Sterling Highway (via Soldotna) for the unincorporated community of Funny River. The 17-mile, two-lane road provides access to residential areas, the Kenai National Wildlife Refuge, and the Funny River State Recreation Site. The portion of the road selected as a priority location is a curved segment that intersects with Glenmore Circle near the Bird Homestead Golf Course and the Funny River Campground.

Recommendations

This location on Funny River Road would benefit from a road realignment to provide a gentler curve for motorists to navigate. It appears there is sufficient right-of-way. However, should this option prove to be too costly, treatments like widening the shoulders, painting wider edge stripes, delineating the curve, and/or adding lighting would be beneficial.

LOW COST $

1. Reflective guide markers
2. Wider edge paint (consider use of MMA paint)

MEDIUM COST $ $

1. Lighting
2. Wider shoulders
3. Wider edge paint with MMA paint inlaid (ground) into road surface

HIGH COST $ $ $

1. Flatten curve

COLLISION HISTORY

KSI | Injury | No-Injury

CRASH MODAL SHARE

Motor Vehicle	4
Bike	0
Pedestrian	0

PRIORITY 3

FUNNY RIVER ROAD, SOLDOTNA

MP 12

- Wider Lane Edges
- Widen Shoulders or Road Surface
- Lighting
- Enhanced Delineation for Curves
- Flatten Slopes Roadside Design Improvements
- Flatten Curve

PRIORITY 4

STERLING HIGHWAY – SOLDOTNA

(MP 94-96)

ADOT&PF Classification: **Principal Arterial • Other**

Background

This section of the Sterling Highway includes intersections with Kenai Spur Highway and Kalifornsky Beach Road. Within this segment of the Sterling Highway the speed limit is posted at 35 mph and incorporates four travel lanes, a center turn lane, and both left and right intersection turn lanes at high volume intersections. The surrounding area is a heavily developed commercial area, serving as a commercial hub for the Borough. Additionally, this area experiences heavy traffic during the summer months when visitors travel to the Kenai River and to the southern peninsula.

Recommendations

Similar to the Kenai Spur Highway location above, a corridor management plan for this section of the Sterling Highway should be investigated to address the complications that come with high traffic volumes and non-motorized activity, coupled with multiple driveways and side roads.

LOW COST $

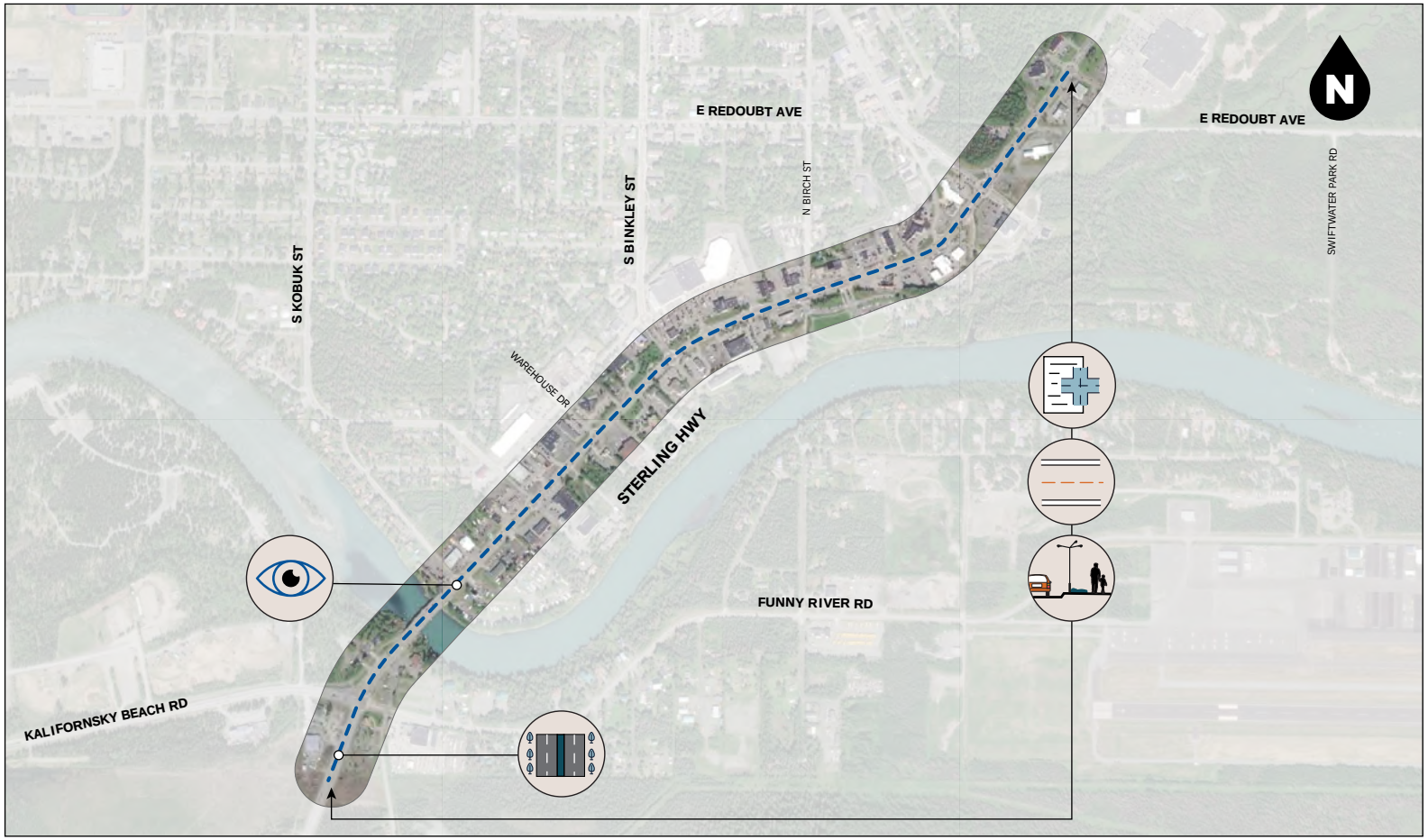
1. Sight distance improvements at Riverside Drive intersection
2. Wider edge paint (consider use of MMA paint)

MEDIUM COST $ $

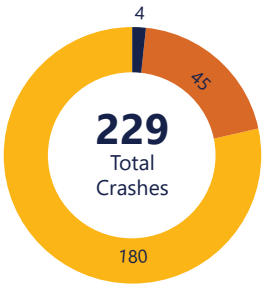
1. Wider edge paint with MMA paint inlaid (ground) into road surface

HIGH COST $ $ $

1. Extend two-lane southbound section to move merge zone away from the Kalifornsky Beach Road intersection.
2. Corridor Management Plan:
   - Turn lanes
   - Raised medians and pedestrian refuge islands
   - Roundabouts
   - Traffic signals
3. Separated pathway



COLLISION HISTORY



KSI | Injury | No-Injury

CRASH MODAL SHARE

Motor Vehicle	227
Bike	2
Pedestrian	1

PRIORITY 4

STERLING HIGHWAY, SOLDOTNA

MP 94-96

- Corridor Management Plan
- Walkways & Shared Use path
- Wider Lane Edges
- Additional Travel Lane
- Site Distance Improvements

PRIORITY 5

BRIDGE ACCESS ROAD – KENAI

ADOT&PF Classification: **Major Arterial**

Background

Connecting the Kenai Spur Highway to Kalifornsky Beach Road, Bridge Access Road is the primary access from the unincorporated community of Kalifornsky to Kenai. The 3.25-mile, two-lane road has turn lanes at each end and an intersection with Beaver Loop Road. The speed limit varies from 45 to 55 mph. Bridge Access Road provides access to the Port of Kenai, the Port of Kenai Campgrounds, industrial facilities, as well as multiple public access points to the Kenai River and wetlands around the river.

Recommendations

Many of the comments received from the public focused on adding a pathway along this section of Bridge Access Road. This would continue the progression of expanding and connecting the pathway network in the area and including the nearby STIP project between Kenai Spur Highway and Beaver Loop Road.

In addition to a pathway, this section would benefit from additional lighting and roadway delineation.

LOW COST $

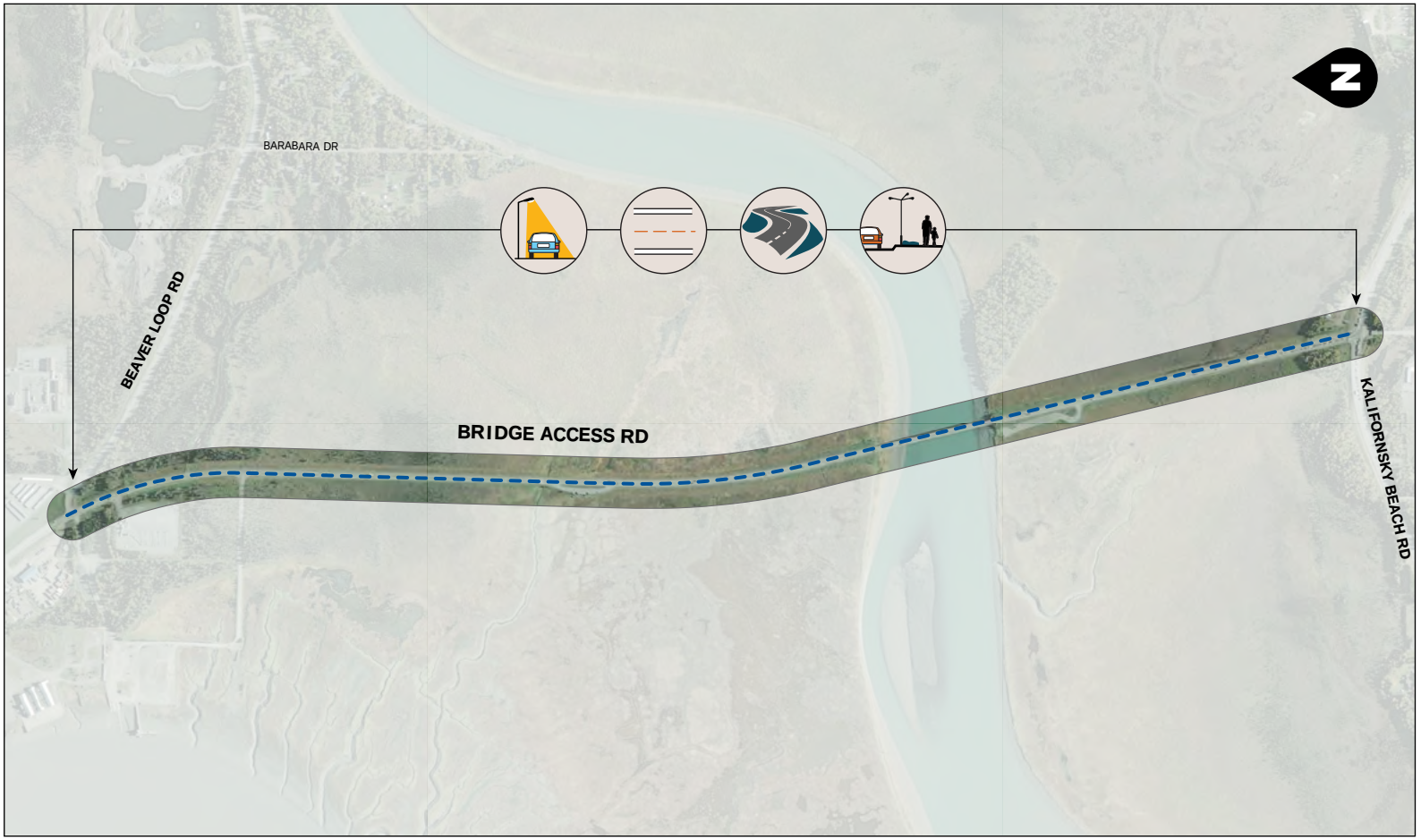
1. Wider edge paint (consider use of MMA paint)
2. Reflective guide markers

MEDIUM COST $ $

1. Lighting
2. Wider edge paint with MMA paint inlaid (ground) into road surface

HIGH COST $ $ $

1. Separated pathway



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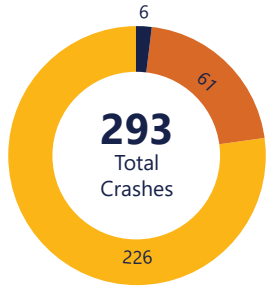


KSI | Injury | No-Injury

CRASH MODAL SHARE

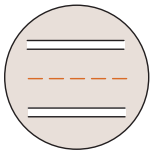
Motor Vehicle	289
Bike	3
Pedestrian	1

PRIORITY 5

BRIDGE ACCESS ROAD, KENAI


Lighting


Walkways & Shared Use Path


Wider Lane Edges & Reflective Guide Markers


Roadside Design Improvements

PRIORITY 6

STERLING HIGHWAY – COOPER LANDING

(MP 45-54)
ADOT&PF Classification: **Interstate**

Background

This 9-mile segment of the Sterling Highway passes directly through Cooper Landing. The surrounding area supports many recreational destinations. This two-lane section of Sterling Highway has narrow shoulders, and many intersections. The area experiences heavy traffic during the summer months. Speed limits vary along this segment, ranging from 35 mph while passing through the unincorporated community of Cooper Landing, to 55 mph.

Recommendations

The nearby Sterling Highway MP 45-60 Reconstruction project will significantly alleviate traffic through Cooper Landing. This will reduce safety concerns relating to turning traffic and pedestrians. However, this area is a major destination in the summer for fishing, camping, hiking, etc. Traffic calming measures such as adding roundabouts at Bean Creek Road and Snug Harbor Road will help reduce speeds and turning conflicts. Adding shoulders along this section would improve safety.

In addition to these countermeasures, constructing a separated pathway would provide the greatest benefit to the area, given the high number of pedestrians. The pathway should connect to the pathway being constructed in the Sterling Highway MP 45-60 project near MP 47.

In the more developed area of Cooper Landing, a continuous center turn lane would ease congestion, thus reducing driver frustration and reckless maneuvers.

LOW COST $

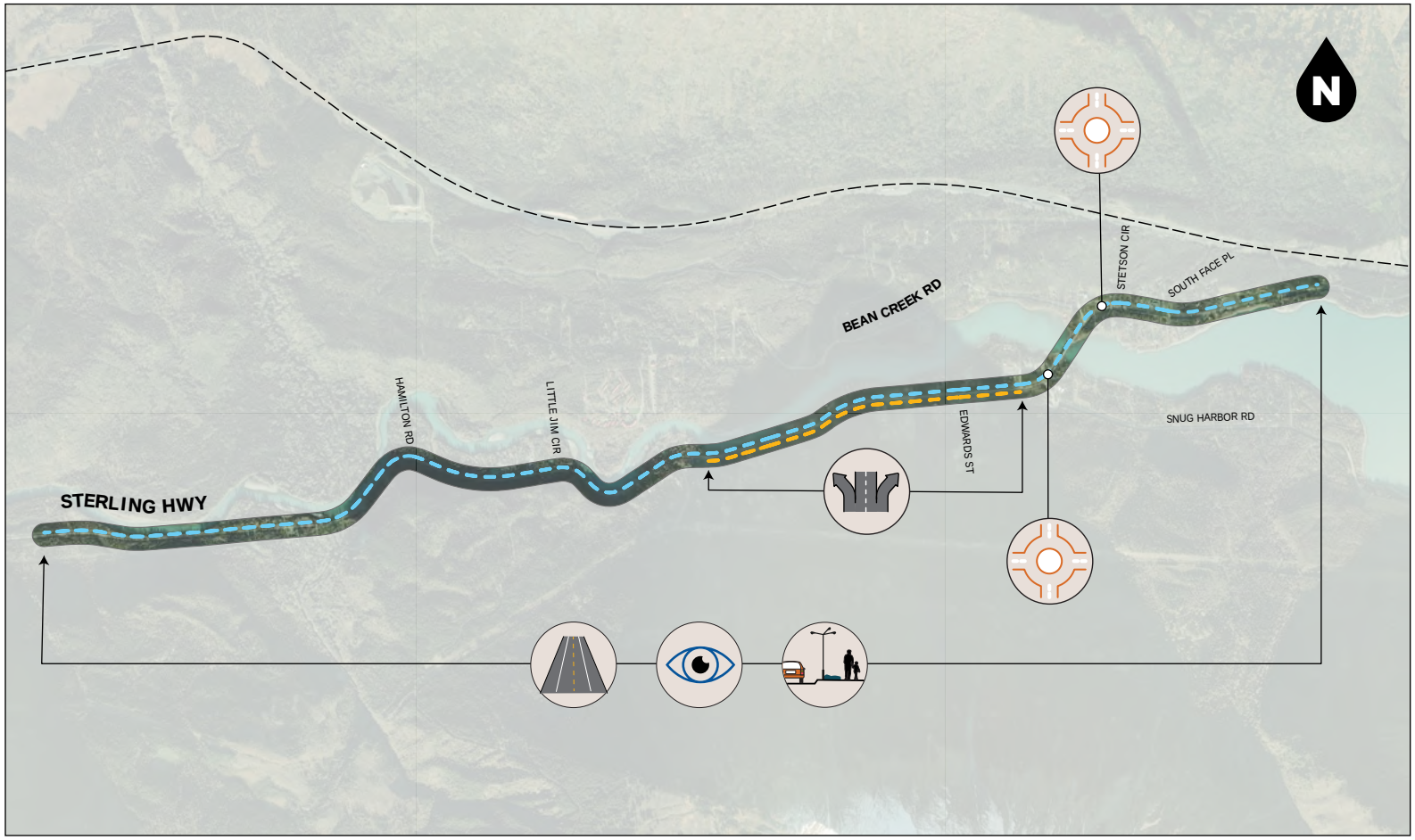
1. Wider edge paint (consider use of MMA paint)

MEDIUM COST $ $

1. Clear zone improvements
2. Wider edge paint with MMA paint inlaid (ground) into road surface

HIGH COST $ $ $

1. Wider shoulders
2. Separated pathway
3. Center turn lane
4. Roundabouts



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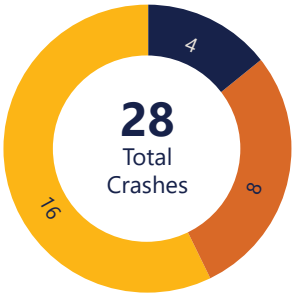


KSI | Injury | No-Injury

CRASH MODAL SHARE

Motor Vehicle	28
Bike	0
Pedestrian	0

PRIORITY 6

STERLING HIGHWAY, COOPER LANDING

MP 45-54

- Widen Shoulders or Road Surface
- Site Distance Improvements
- Walkways & Shared Use path
- Roundabout
- Turn Lanes

PRIORITY 7

SEWARD HIGHWAY – TURNAGAIN PASS / HOPE TURNOFF

(MP 53-58 & MP 62-75)
ADOT&PF Classification: **Interstate**

Background

This section of the Seward Highway connects the Kenai Peninsula with the rest of southcentral Alaska and the state's connected road system. It intersects with the Hope Highway. The surrounding area is primarily unpopulated wilderness. There are many areas for public recreation access, including many dedicated way sides. Speed limits range from 55 to 65 mph. Road lanes vary depending on the segment. The majority is a two-lane highway. There are lengths of alternating-direction passing lanes through the steepest sections of road. This section of roadway is within the Eastern Peninsula Highway ESA discussed in Chapter 6.

Recommendations

The section of the Seward Highway from MP 63 to 75 has seen numerous KSIs and speeding motorists. Dividing the highway with a grassy median and providing flatter side slopes would reduce head-on collisions and run-off-the-road types of crashes.

Between MP 53 and 58.5, the highway could be realigned both horizontally and vertically to better match driving speeds and improve sight distance.

LOW COST $

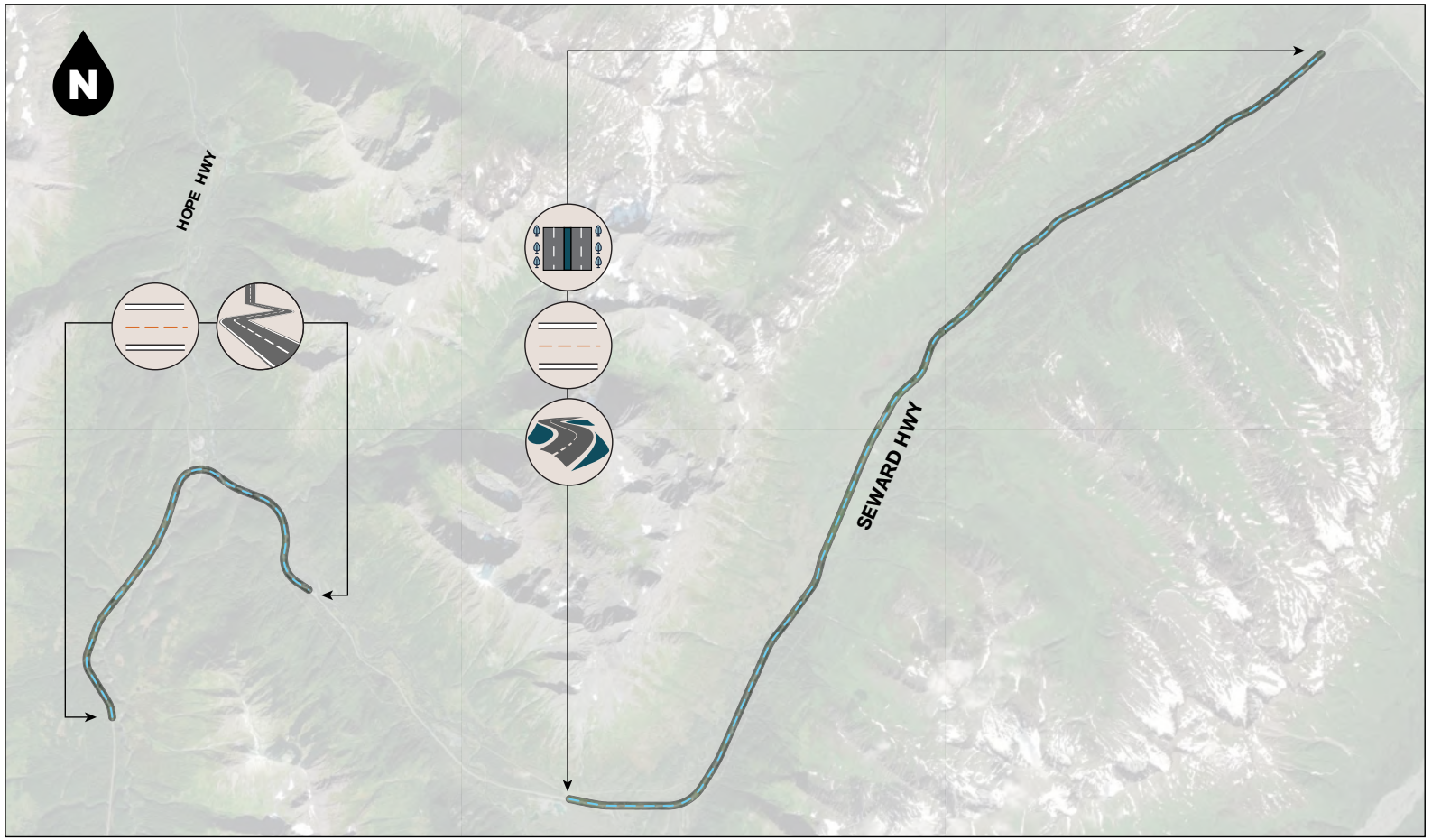
1. Wider edge paint (consider use of MMA paint)

MEDIUM COST $ $

1. Wider edge paint with MMA paint inlaid (ground) into road surface

HIGH COST $ $ $

1. Flatten side slopes
2. Realign highway at Hope Highway intersection curve
3. Divide travel lanes with vegetated median from MP 64 to MP 75
4. Additional pullouts to support emergency services
5. Enlarge existing pullouts to better serve emergency services



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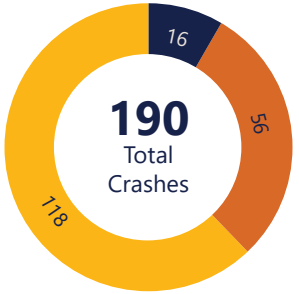


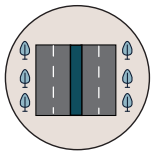
CRASH MODAL SHARE

Motor Vehicle	189
Bike	0
Pedestrian	1

PRIORITY 7

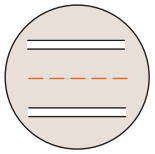
SEWARD HIGHWAY, TURNAGAIN PASS/HOPE TURNOFF

MP 53-58 & 62-75



Evaluate Divided Highway

Evaluate Realigning Highway



Wider Lane Edges

Flatten Slopes
Roadside Design Improvements

PRIORITY 8

COLLEGE ROAD – SOLDOTNA

ADOT&PF Classification: **Minor Collector**

Background

This section of College Road is primarily surrounded by undeveloped land. It does provide access to residential neighborhoods. The road has a two-lane S-curve with 35 mph speed limits.

Recommendations

College Road would benefit from paved shoulders and curve delineators.

A traffic signal at Kalifornsky Beach Road would help with turning conflicts and assist non-motorists to cross Kalifornsky Beach Road.

In addition to these countermeasures, constructing a separated pathway would provide the greatest benefit to the area, given the high number of pedestrians. The pathway should connect to the pathway being constructed in the Sterling Highway MP 45-60 project near MP 47.

In the more developed area of Cooper Landing, a continuous center turn lane would ease congestion, thus reducing driver frustration and reckless maneuvers.

LOW COST $

1. Curve delineators
2. Wider edge paint (consider use of MMA paint)

MEDIUM COST $ $

1. Wider shoulders
2. Traffic signal at Kalifornsky Beach Road with high visibility pedestrian crosswalks

HIGH COST $ $ $

1. Flatten curves

COLLISION HISTORY

CRASH MODAL SHARE

Motor Vehicle	8
Bike	0
Pedestrian	0

PRIORITY 8

COLLEGE ROAD, SOLDOTNA

- Enhanced Delineation for Curves
- Widen Shoulders or Road Surface
- Signalized Intersections
- Flatten Slopes Roadside design Improvements
- Wider Lane Edges

PRIORITY 9

STERLING HIGHWAY – HOMER

(MP 172-175)

ADOT&PF Classification: **Principal Arterial • Other**

Background

This section of the Sterling Highway is also called the "Homer By-pass". It was developed as an alternative access to the Homer Spit. Over time the area adjacent to the road has experienced significant development. The road also intersects with Lake Street, and Ocean Drive. The surrounding area is a mix of residential and commercial development. The road provides access to Homer Middle School, Homer Skatepark, Homer Public Works Department, Post Office, Islands and Oceans, as well as the Homer Spit and Homer Airport. Speed limits vary from 20 mph in the school zones to 35 mph. The road is primarily two lanes with a center turn lane. There are sidewalks on both sides.

Recommendations

Given the considerable number and variety of destinations along this section, a corridor management plan should be considered. Other countermeasures to be considered are wider sidewalks and either traffic signals or roundabouts. Raised medians and pedestrian refuge islands are an appropriate demonstration project in this location, particularly at the Main Street intersection.

LOW COST $

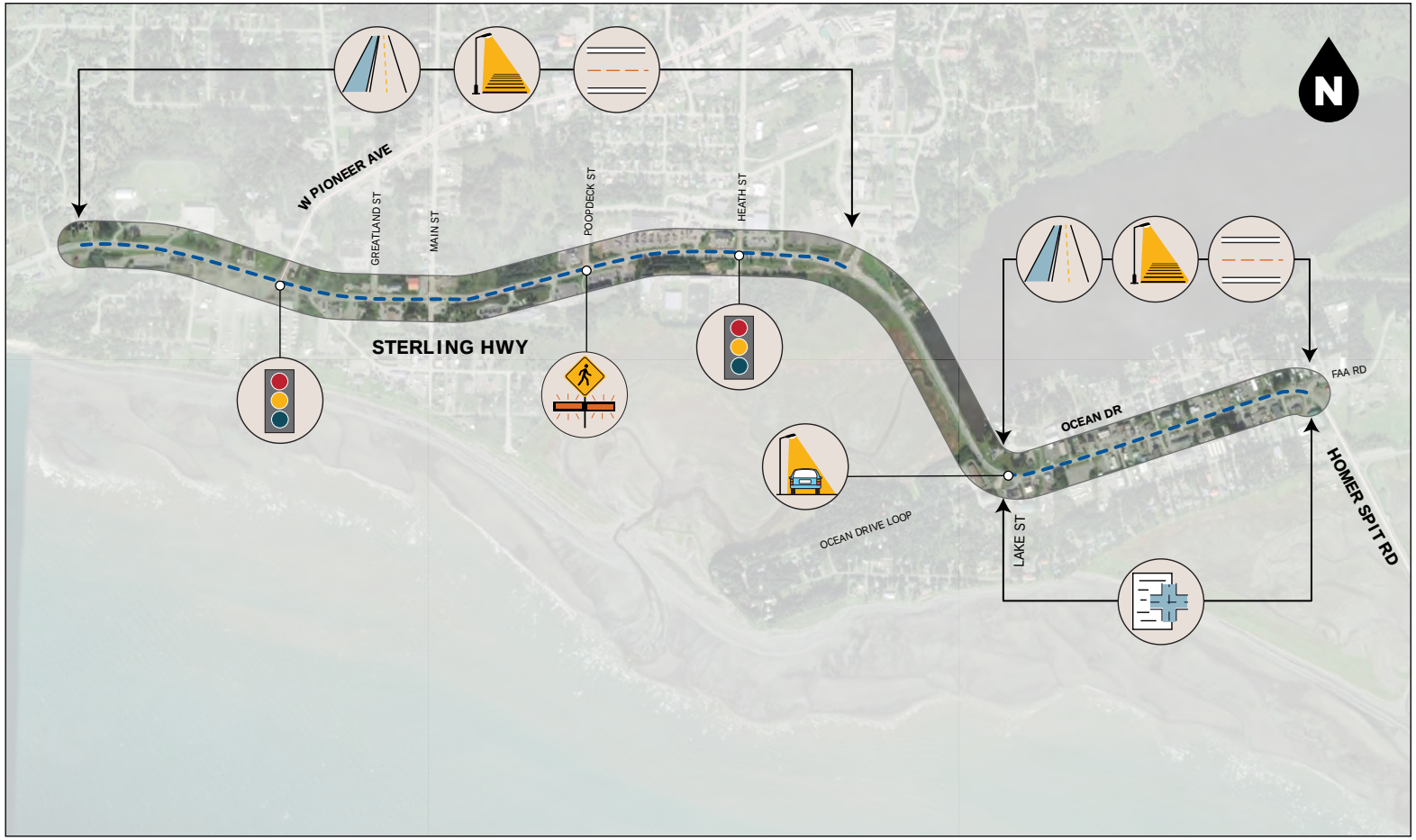
1. Modify signal timing to prioritize pedestrians
2. High visibility crosswalks
3. Wider edge paint (consider use of MMA paint)

MEDIUM COST $ $

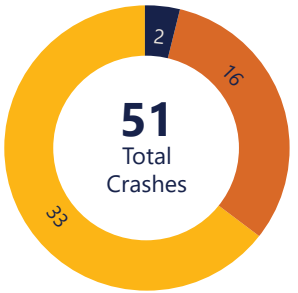
1. Wider sidewalks or separated pathway
2. Lighting
3. Wider edge paint with MMA paint inlaid (ground) into road surface
4. Traffic signal
   - Heath Street
   - Pioneer Avenue

HIGH COST $ $ $

1. Corridor Management Plan:
   - Turn lanes
   - Raised medians and pedestrian refuge islands
   - Roundabouts
   - Traffic signals



COLLISION HISTORY



KSI | Injury | No-Injury

CRASH MODAL SHARE

Motor Vehicle	50
Bike	1
Pedestrian	0

PRIORITY 9

STERLING HIGHWAY, HOMER

MP 172-175

- Corridor Management Plan
- Dedicated Left/Right Turn Lanes
- Modify Signal Timing To Prioritize Pedestrians
- Wider Sidewalks or Separated Pathway
- Wider Lane Edges
- Roundabout
- Medians and Pedestrian Refuge Islands
- High Visibility Crosswalks
- Lighting
- RRFB Rectangular Rapid Flashing Beacons

PRIORITY 10

EAST END ROAD – HOMER

(MP 0-4)

ADOT&PF Classification: **Major Arterial • Collector**

Background

East End Road, beginning at the intersection with Lake Street, provides access to the southern tip of the Kenai Peninsula. From the intersection of Lake Street to the intersection of Fairview Avenue the road has two travel lanes, a center turn lane and sidewalks on both sides. From Fairview Avenue to the end of the priority section, the road has two lanes with occasional turn pockets. The surrounding area consists of residential and commercial development, including Paul Banks Elementary School, and Homer High School.

Recommendations

For this section of East End Road, consider adding lighting and improving the roadway clear zone by widening shoulders, flattening side slopes, clearing brush (sight distance improvements), and adding curve delineators. At more targeted areas, such as Homer High School, a separated pathway should be considered. Evaluate the installation of a roundabout or traffic signal at the Lake Street intersection.

LOW COST $

1. Extend school zone at Paul Banks Elementary School
2. Curve delineators
3. Wider edge paint (consider use of MMA paint)
4. Sight distance improvements

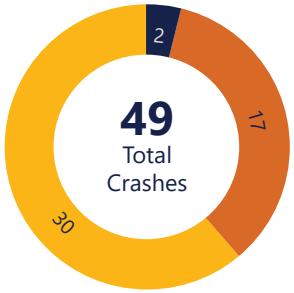
MEDIUM COST $ $

1. Road Safety Audit:
   - Clear zone improvements
   - Lighting focused at intersections and crosswalks
2. Traffic signal at Lake Street
3. Wider edge paint with MMA paint inlaid (ground) into road surface

HIGH COST $ $ $

1. Roundabouts
   - Lake Street
   - Fairview Avenue
2. Separated pathway
3. Flatten side slopes

COLLISION HISTORY



KSI | Injury | No-Injury

CRASH MODAL SHARE

Motor Vehicle	47
Bike	2
Pedestrian	0

PRIORITY 10

EAST END ROAD, HOMER

MP 0-4

Signalized Intersections

Road Safety Audit

Lighting

Roundabout

Cross Walk Visibility

Extend School Zone

Sight Distance Improvements

Walkways & Shared Use Path

RRFB Rectangular Rapid Flashing Beacons

Flatten Slopes Roadside Design Improvements

Widen Shoulders or Road Surface

Enhanced Delineation for Curves

PRIORITY 11

PIONEER AVENUE – HOMER

ADOT&PF Classification: **Major Arterial**

Background

Pioneer Avenue begins at the Sterling Highway and ends at the Lake Street intersection where it becomes East End Road. Pioneer Avenue provides access to the commercial core of Homer, with a mix of residential and commercial uses. The Homer Fire Department and Homer High School (via Fairview Avenue and Heath Street) are also accessed from Pioneer Avenue. The 25 mph road has two lanes, a center turn lane, and turning pockets at intersections. There are numerous driveways and cross streets intersecting Pioneer Avenue.

Recommendations

With the high density of driveways and intersecting streets along Pioneer Avenue, a corridor management plan evaluating roundabouts or traffic signals and raised medians would reduce speeding and turning conflicts.

Wider sidewalks would comply with current standards and practices.

LOW COST $

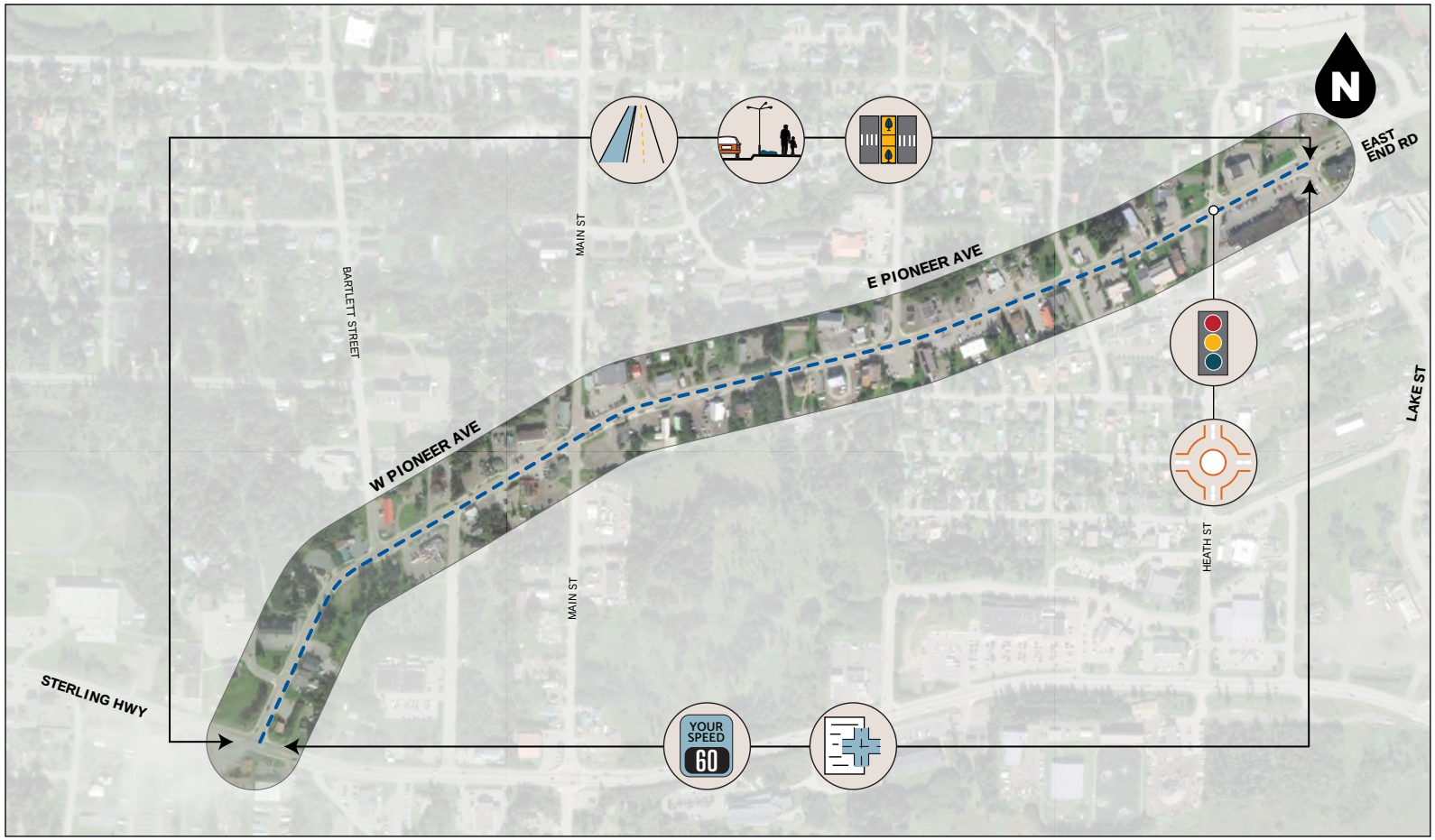
1. Wider edge paint (consider use of MMA paint)
2. High visibility crosswalks

MEDIUM COST $ $

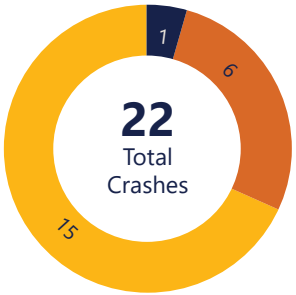
1. Wider sidewalks
2. Traffic signal at Lake Street (see location #10 East End Road)

HIGH COST $ $ $

1. Corridor Management Plan:
   - Turn lanes
   - Raised medians and pedestrian refuge islands
   - Roundabouts
   - Traffic signals
2. Roundabouts
   - Lake Street
   - Heath Street
   - Kachemak Way
   - Svedlund Street
   - Main Street
   - Bartlett Street



COLLISION HISTORY



KSI | Injury | No-Injury

CRASH MODAL SHARE

Motor Vehicle	21
Bike	0
Pedestrian	1

PRIORITY 11

PIONEER AVENUE, HOMER

- Corridor Management Plan
- Wider Sidewalks
- Walkways & Shared Use Path
- Medians and Pedestrian Refuge Islands
- Roundabout
- Signalized Intersections
- Speed Feedback

PRIORITY 12

STERLING HIGHWAY – ANCHOR POINT

(MP 156-157)
ADOT&PF Classification: **Major Arterial**

Background

This section of the Sterling Highway travels directly through the unincorporated community of Anchor Point. In this section of the corridor the speed limit is 45 mph. This priority location also includes a small section of the Old Sterling Highway. Chapman Elementary School is located at the intersection of Sterling Highway and Old Sterling Highway. Access is also provided to the Post Office, multiple restaurants, and commercial establishments.

Recommendations

Sight distance is an issue along the curve at the southern end of this section. The trees and brush along the inside of the curve should be cut back to improve sight distance for the school and Bates Avenue intersection.

Countermeasures such as an advance warning sign and light, separated pathway, and high visibility crosswalk with an RRFB should be considered at Chapman Elementary School.

A speed zone study is recommended for the commercial core of Anchor Point to address speeding.

LOW COST $

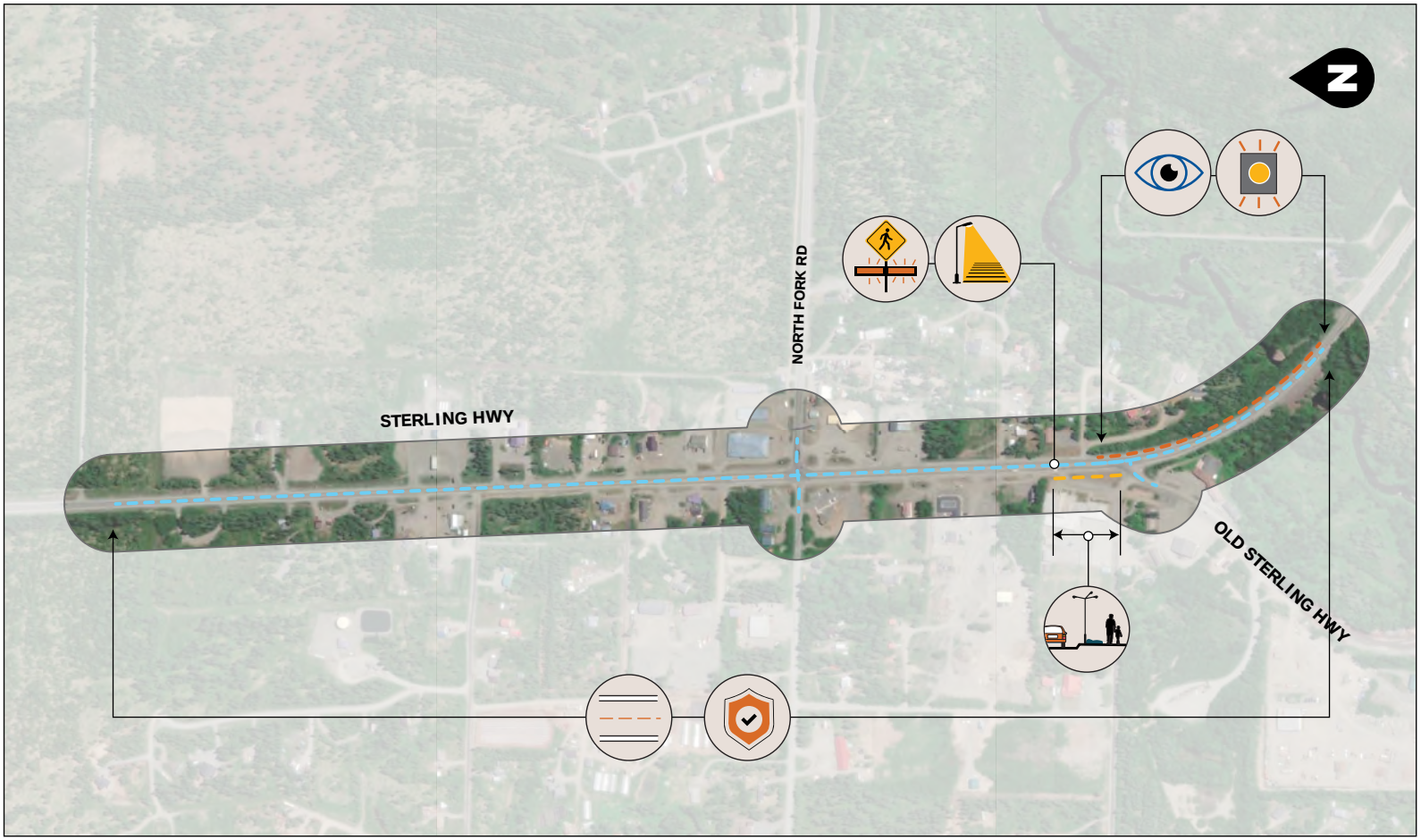
1. Speed Zone Study
2. High visibility crosswalk
3. Advanced warning light/sign speed reduction to 20 mph during school hours
4. Wider edge paint (consider use of MMA paint)
5. Sight distance improvements

MEDIUM COST $ $

1. Wider edge paint with MMA paint inlaid (ground) into road surface
2. RRFB at Chapman Elementary School

HIGH COST $ $ $

1. Separated pathway



COLLISION HISTORY

KSI | Injury | No-Injury

CRASH MODAL SHARE

Motor Vehicle	17
Bike	0
Pedestrian	1

PRIORITY 12

STERLING HIGHWAY, ANCHOR POINT

MP 156-157

- Road Safety Audit
- RRFB (Rectangular Rapid Flashing Beacons)
- Walkways & Shared Use Path
- Cross Walk Visibility
- Wider Lane Edges
- Site Distance Improvements
- Advanced School Zone Warning

PRIORITY 13

HOMER SPIT ROAD – HOMER

ADOT&PF Classification: **Principal Arterial • Other**

Background

Homer Spit Road is located on its namesake, the Homer Spit. This area receives heavy traffic during the summer due to tourism, commercial fishing, and recreation. The road begins at Ocean Drive and ends at the end of the spit. It is a two-lane road with a paved separated path that ends at Fishing Hole Campground. The separated pathway continues, unpaved, until Freight Dock Road. There are pedestrian crossings located at several locations such as the harbor, parking lots, and points of beach access. However, jaywalking is a common occurrence on this 45 mph road. The lack of dedicated pedestrian facilities, combined with heavy seasonal traffic and numerous parking lots creates confusion and conflicts between motorists and non-motorists.

Recommendations

Wider, paved shoulders or dedicated pedestrian facilities such as sidewalks or separated pathways would benefit the high seasonal volume of pedestrians. Also, high visibility crosswalks at the more popular locations would help drivers be more alert to pedestrians crossing the road and reduce vehicle/pedestrian conflicts.

At the intersection with Kachemak Drive, a traffic signal would improve traffic flow and improve safety in the short term. However, with the future hotel construction planned at the intersection, a roundabout might be a better solution to handle the high traffic volumes and maintain low speeds.

LOW COST $

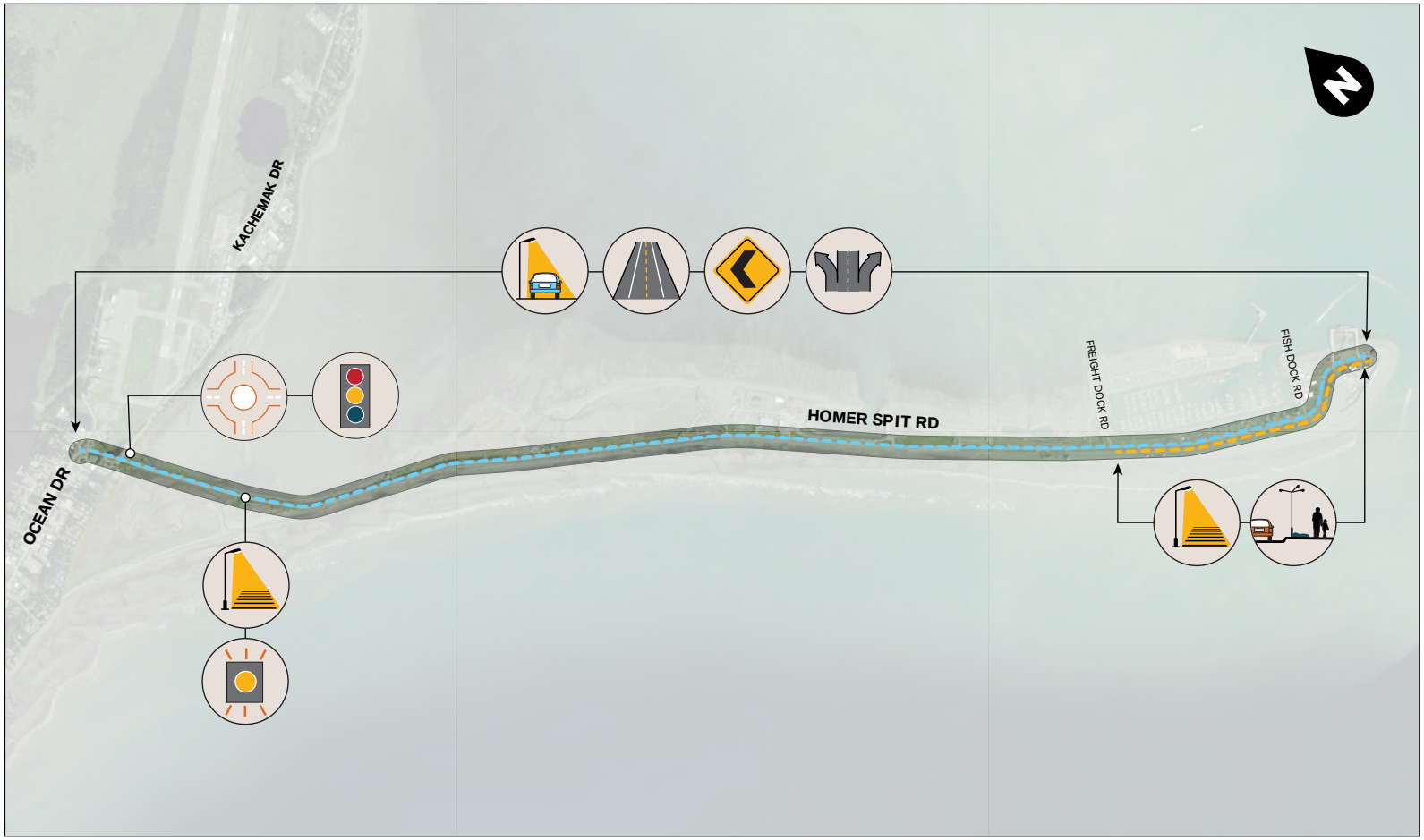
1. High visibility crosswalk
2. Wider edge paint (consider use of MMA paint)

MEDIUM COST $ $

1. Wide shoulders
2. Traffic signal at Kachemak Drive

HIGH COST $ $ $

1. Sidewalks or separated pathway
2. Roundabout at Kachemak Drive



COLLISION HISTORY

KSI Injury No-Injury

CRASH MODAL SHARE

Motor Vehicle	14
Bike	0
Pedestrian	1

PRIORITY 13

HOMER SPIT ROAD, HOMER

- Lighting
- Widen Shoulders or Road Surface
- Enhanced Delineation for Curves
- Turn Lanes
- Signalized Intersection
- Cross Walk Visibility
- Walkways & Shared Use Path
- Flashing Beacon
- Roundabout

PRIORITY 14

STERLING HIGHWAY – ANCHOR POINT

(MP 155)

ADOT&PF Classification: **Principal Arterial • Other**

Background

This section of the Sterling Highway is located north of Anchor Point and includes a small section of curve near Shorebird Lane. The surrounding development is primarily rural, with a number of individual driveways intersecting the highway. This section of the Sterling Highway is a two-lane road with no passing allowed. Speed is reduced from 55 mph to 50 mph at the curve.

Recommendations

This curve should be flattened to better match driving speeds along the highway. Lower cost options to consider are additional lighting and wider edge paint to bring attention to this sharp curve. Should a vehicle leave the roadway, flatter side slopes would help to reduce the severity of a crash.

LOW COST $

1. Wider edge paint (consider use of MMA paint)

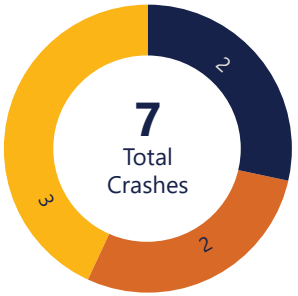
MEDIUM COST $ $

1. Lighting
2. Wider edge paint with MMA paint inlaid (ground) into road surface

HIGH COST $ $ $

1. Flatten curve
2. Flatten side slopes

COLLISION HISTORY



KSI | Injury | No-Injury

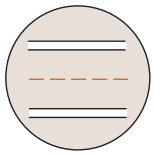
CRASH MODAL SHARE

Motor Vehicle	7
Bike	0
Pedestrian	0

PRIORITY 14

STERLING HIGHWAY, ANCHOR POINT

MP 155



Wider Lane Edges

Lighting

Roadside Design Improvements at Curves

Flatten Slopes
Roadside Design Improvements

PRIORITY 15

STERLING HIGHWAY – KASILOF

(MP 109-110)

ADOT&PF Classification: **Principal Arterial • Other**

Background

Located in the unincorporated community of Kasilof, this section of the Sterling Highway intersects with Kalifornsky Beach Road. Notable locations include the Kasilof River Boat Launch, the Kasilof River Recreation Area, Central Emergency Services Fire Station #6, and Tustumena Elementary School. This section of road has two travel lanes, and the speed limit is primarily 55 mph, with a 20 mph school zone. There are no dedicated turn lanes for Kalifornsky Beach Road.

Recommendations

With the popularity of the nearby parking lot for people accessing the Kasilof River for fishing, improvements should draw attention to pedestrians and accommodate turning traffic. Countermeasures such as adding turn lanes, crosswalks, lighting, and a separated pathway should be considered.

The intersection at Kalifornsky Beach Road should be reconstructed with turn lanes, acceleration lanes, and a flashing beacon to address the safety concerns of high-speed traffic and turning movements. Speed feedback signs should be considered at the Tustumena Elementary school zone.

LOW COST $

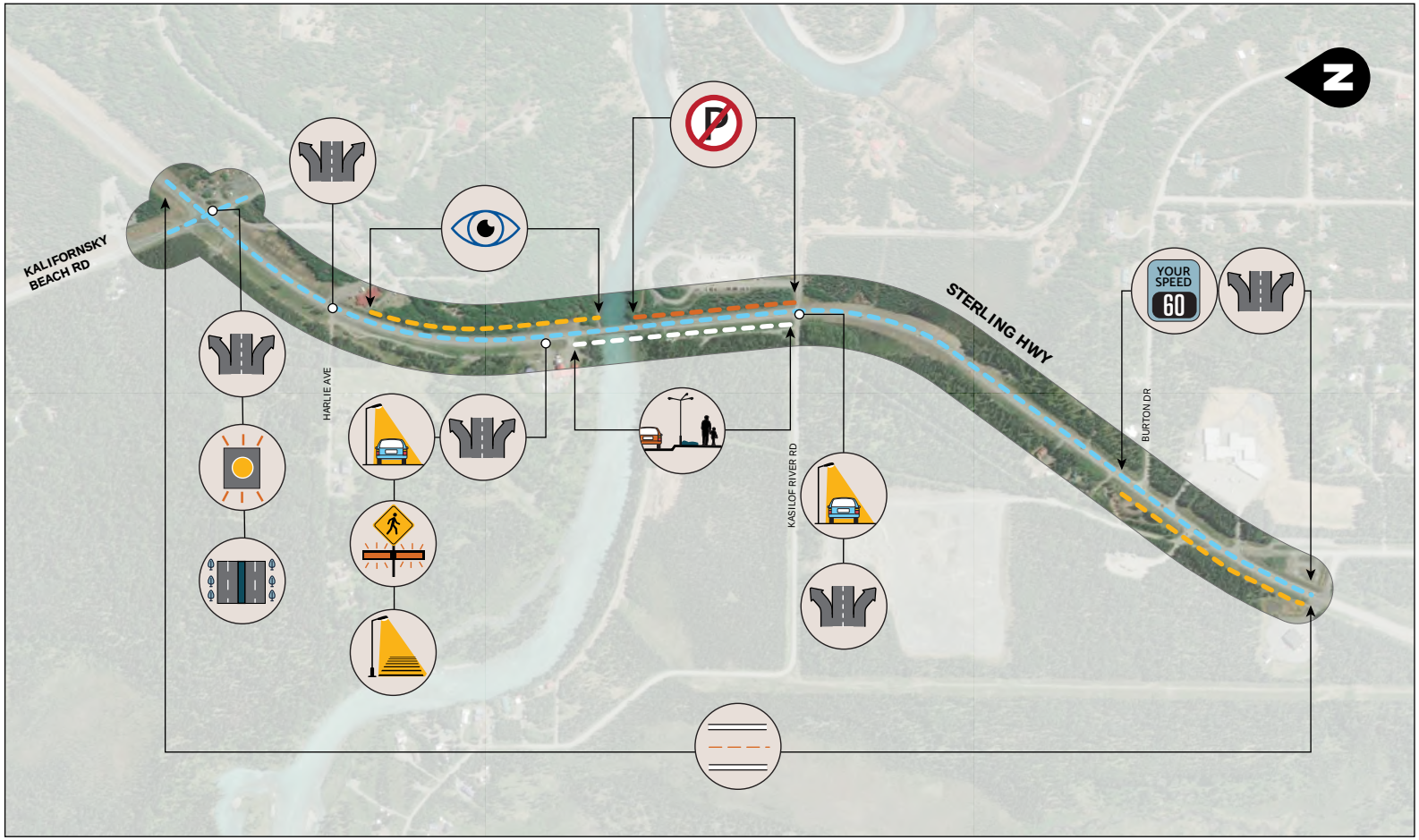
1. Wider edge paint (consider use of MMA paint)
2. High visibility crosswalk
3. "No parking" signs

MEDIUM COST $ $

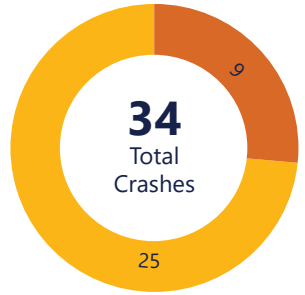
1. Lighting
2. Sight distance improvements
3. RRFB
4. Speed feedback signs
5. Flashing beacon
6. Wider edge paint with MMA paint inlaid (ground) into road surface

HIGH COST $ $ $

1. Turn lanes at Harlie Avenue
2. Southbound acceleration lane



COLLISION HISTORY



KSI | Injury | No-Injury

CRASH MODAL SHARE

Motor Vehicle	34
Bike	0
Pedestrian	0

PRIORITY 15

STERLING HIGHWAY, KASILOF

MP 109-110

- Wider Lane Edges
- Dedicated Left/Right Turn Lanes
- Acceleration Lane
- Walkways & Shared Use Path
- Lighting
- RRFB Rectangular Rapid Flashing Beacons
- Flashing Beacon
- Speed Feedback
- Site Distance Improvements
- No Parking

PRIORITY 16

KENAI SPUR HIGHWAY – NIKISKI

(MP 27)
ADOT&PF Classification: **Minor Arterial**

Background

This section of the Kenai Spur is located within Nikiski. The area is primarily rural residential with some commercial and industrial development. Nikiski Middle School is not accessed directly by this section of road, however the majority of traffic to the school uses this road. The road consists of two travel lanes with a center turn lane and has a 45 mph speed limit.

Recommendations

The curve at MP 27 would benefit from curve delineators, lighting, and sight distance improvements to help drivers navigate the curve.

Consideration should be given to realigning Holly-Beck Street to align with Marhenke Street, which would consolidate turning traffic into one location and reduce turning conflicts. This design should include a flashing beacon, intersection lighting, and a high visibility crosswalk given the proximity of the nearby school.

LOW COST $

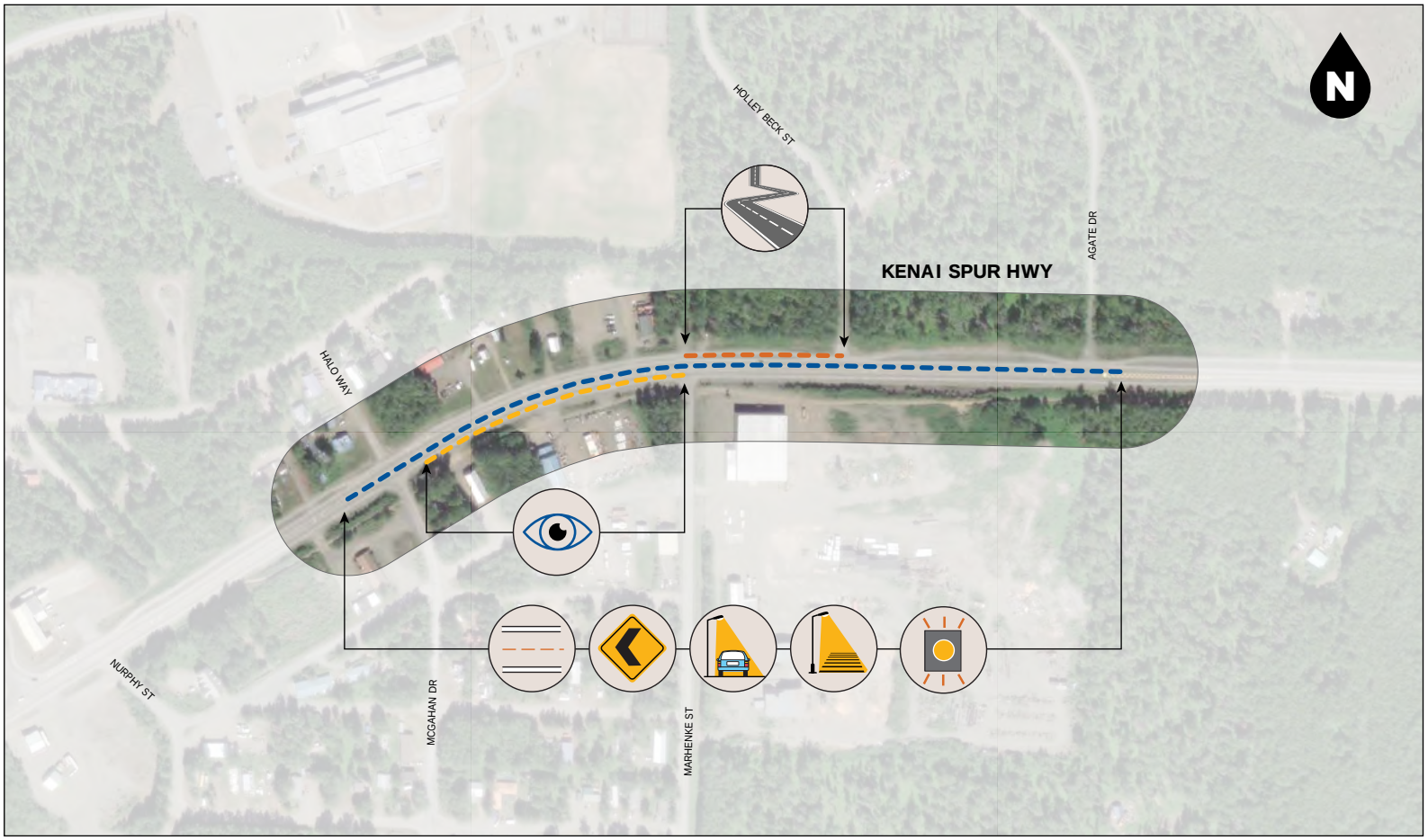
1. Wider edge paint (consider use of MMA paint)
2. Curve delineators

MEDIUM COST $ $

1. Lighting
2. RRFB and high visibility crosswalk at Marhenke Street
3. Sight distance improvements at Marhenke Street
4. Wider edge paint with MMA paint inlaid (ground) into road surface

HIGH COST $ $ $

1. Realign Holly-Beck Street to align with Marhenke Street



COLLISION HISTORY

KSI | Injury | No-Injury

CRASH MODAL SHARE

Motor Vehicle	5
Bike	0
Pedestrian	0

PRIORITY 16

KENAI SPUR HIGHWAY, NIKISKI

MP 27

- Evaluate Realigning
- Wider Lane Edges
- Enhanced Delineation for Curves
- Lighting
- Cross Walk Visibility
- Flashing Beacon
- Site Distance Improvements

PRIORITY 17

SEWARD HIGHWAY – SEWARD

(MP 2)
ADOT&PF Classification: **Principal Arterial • Other**

Background

This segment of the highway is within the City of Seward. The road has two travel lanes with a center turn lane. Speed limits range from 35 to 45 mph. The surrounding area is a mix of residential, commercial, and industrial development, with notable nearby locations of Seward Harbor and Seward Airport.

Recommendations

Public comments centered around difficulties with crossing the Seward Highway, especially during the busy summer months. Installing crosswalks with RRFBs would make pedestrians more visible to motorists and increase pedestrian confidence. In addition, improved access and signage to the underpass would help non-motorized users cross the highway more safely.

The intersection at Port Avenue should include raised medians and pedestrian refuge islands given the high number of pedestrians in the area, especially during the summer months. This location is appropriate for a median and pedestrian refuge demonstration project.

LOW COST $

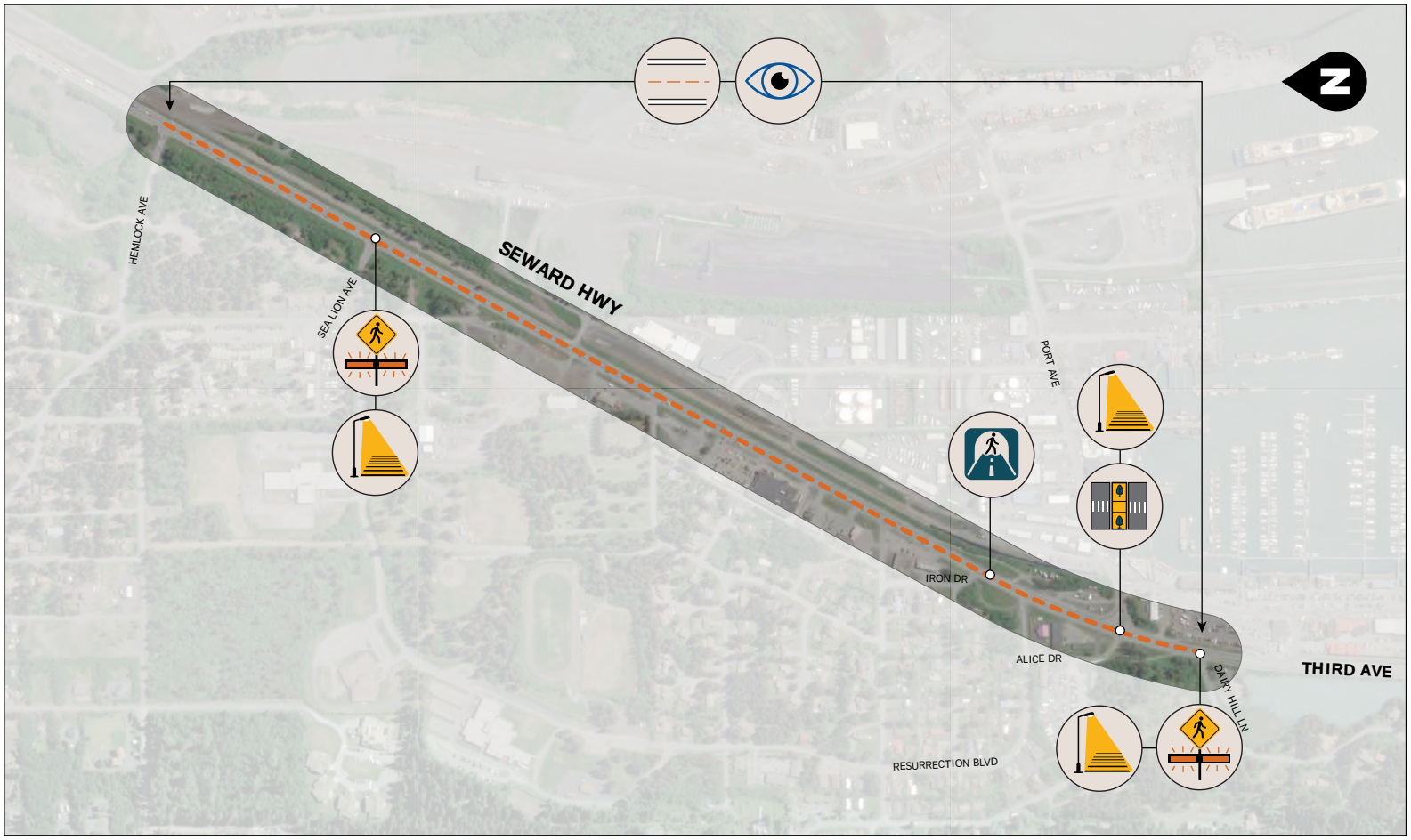
1. Wider edge paint (consider use of MMA paint)
2. High visibility crosswalks
3. Wayfinding signs for underpass

MEDIUM COST $ $

1. Access to underpass from the north
2. RRFBs at crosswalks
3. Wider edge paint with MMA paint inlaid (ground) into road surface
4. Sight distance improvements

HIGH COST $ $ $

1. Raised medians and pedestrian refuge islands



COLLISION HISTORY

KSI | Injury | No-Injury

CRASH MODAL SHARE

Motor Vehicle	19
Bike	0
Pedestrian	0

PRIORITY 17

SEWARD HIGHWAY, SEWARD

MP 2

- Wider Lane Edges
- Site Distance Improvements
- RRFB Rectangular Rapid Flashing Beacons
- Cross Walk Visibility
- Medians and Pedestrian Refuge Islands
- Grade Separated Pedestrian Crossing with Wayfinding

PRIORITY 18

JAKOLOF – SELDOVIA

ADOT&PF Classification: **Minor Collector**

Background

Connecting the City of Seldovia and Seldovia Village, Jakolof Bay Road crosses primarily undeveloped land. Currently Jakolof Bay Road is unpaved, winding, and does not have pedestrian or non-motorized facilities. This is a popular road for recreational mountain bikers.

Recommendations

This rural road should be upgraded with a wider travel way for vehicles, wider shoulders for pedestrians, flatter side slopes, improved sight distance, and curve delineation to help motorists navigate the winding nature of this road. A wider road, with widened shoulders would also benefit non-motorists. If or when the road is paved, it should include wide painted edges. The community would benefit from a separated non-motorized facility on this roadway.

LOW COST $

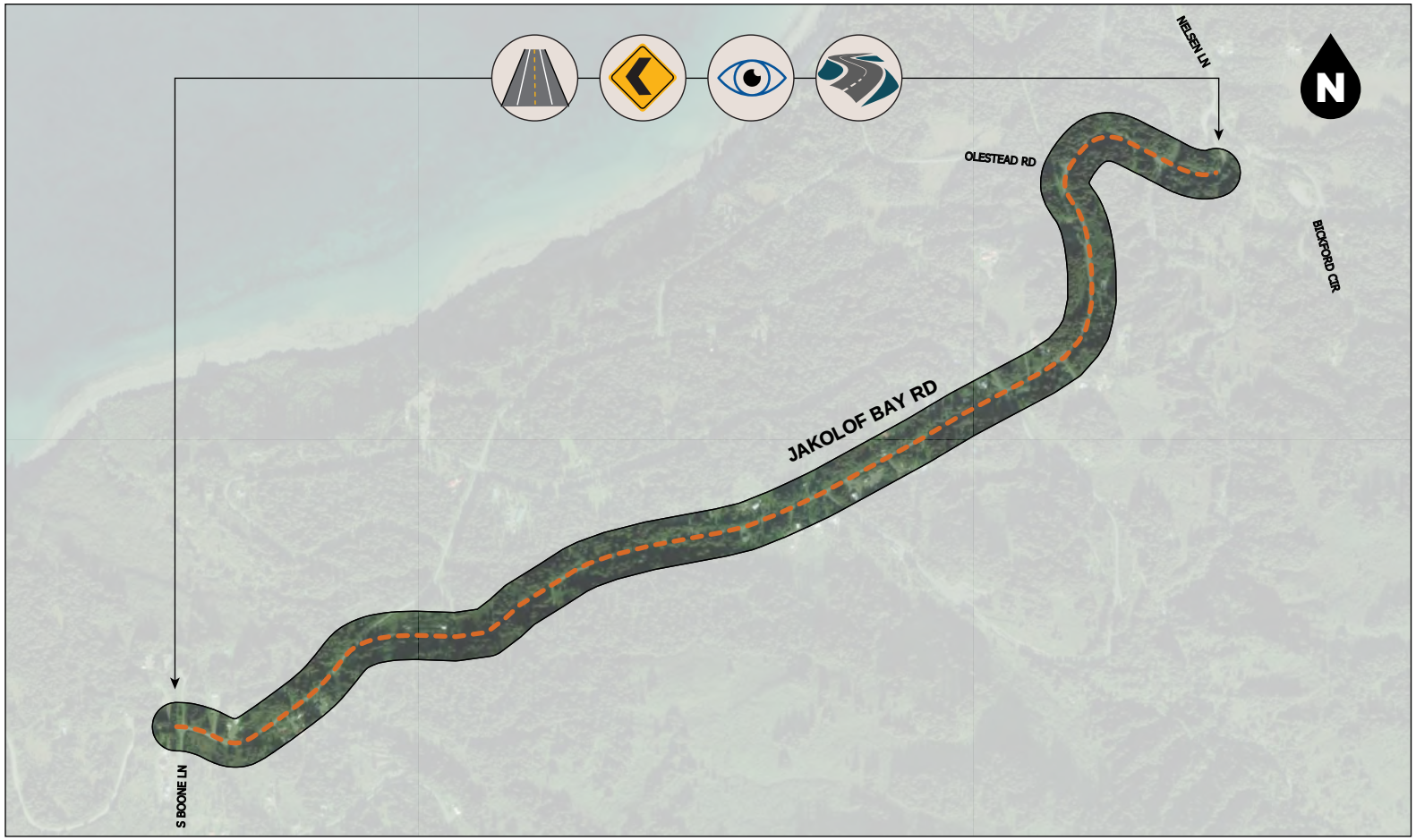
1. Curve delineators

MEDIUM COST $ $

1. Sight distance improvements
2. Flatten side slopes

HIGH COST $ $ $

1. Wider road (entire travel way)



COLLISION HISTORY

KSI Injury No-Injury

CRASH MODAL SHARE

Motor Vehicle	2
Bike	1
Pedestrian	0

PRIORITY 18

JAKOLOF BAY ROAD, SELDOVIA

- Widen Shoulders or Road Surface
- Enhanced Delineation for Curves
- Site Distance Improvements
- Flatten Slopes Roadside Design Improvements

PRIORITY 19

KENAI SPUR HIGHWAY – SALAMATOF

(MP 19)

ADOT&PF Classification: **Principal Arterial • Other**

Background

This section of the Kenai Spur Highway is located north of the Nikiski Fire Station #1. The two-lane road has a speed limit of 55 mph.

Recommendations

This section of the Kenai Spur Highway's proximity to eroding bluffs is cause for concern. To preserve access to the communities to the north, the road should be realigned and straightened, away from the bluff.

Adding turn lanes at the Miller Loop Road intersection would alleviate turning conflicts.

Adding a separated pathway would further the goal of providing a robust non-motorized network to the area.

LOW COST $

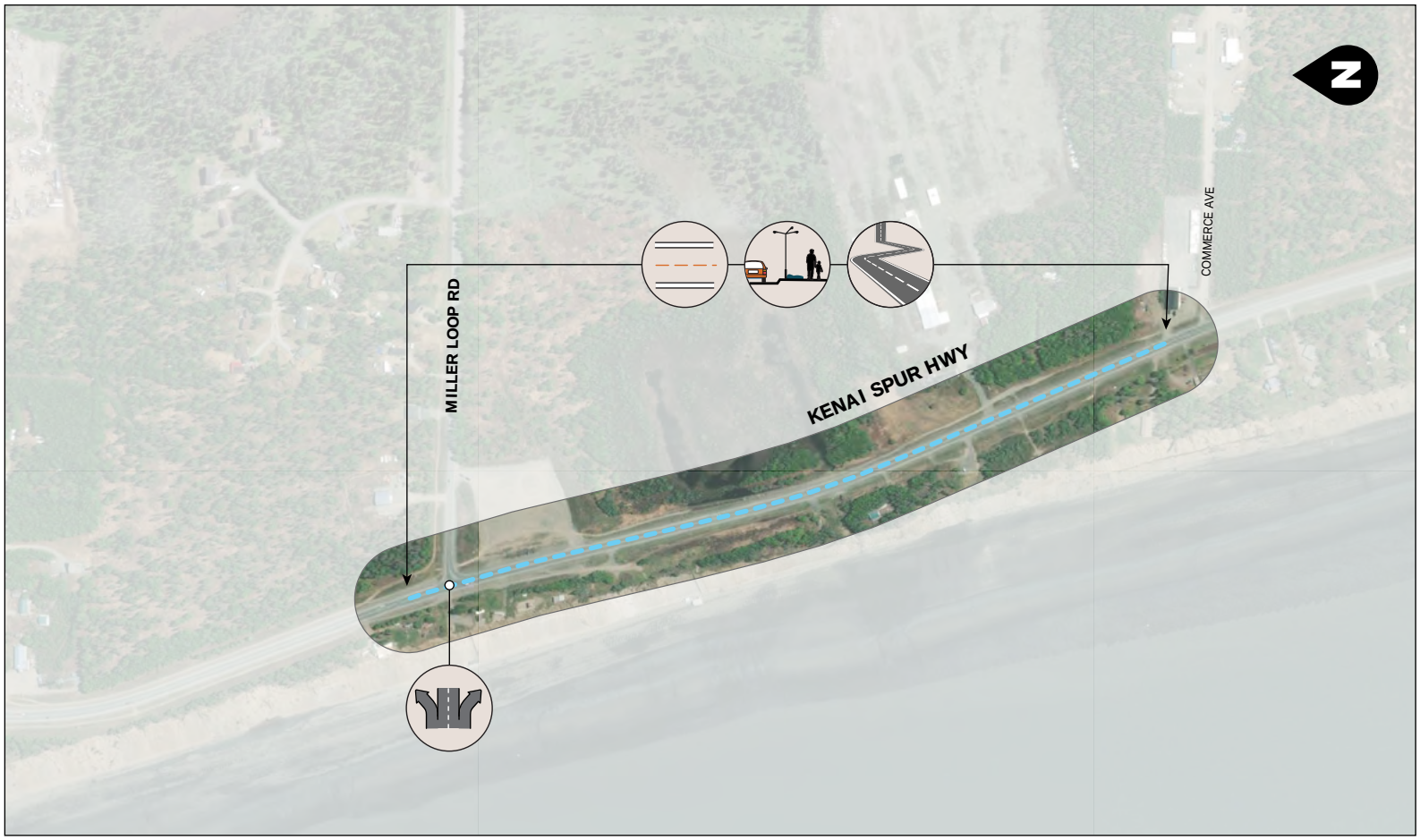
1. Wider edge paint (consider use of MMA paint)

MEDIUM COST $ $

1. Turn lanes at Miller Loop Road
2. Wider edge paint with MMA paint inlaid (ground) into road surface

HIGH COST $ $ $

1. Separated pathway
2. Realign highway away from eroding bluff



COLLISION HISTORY

KSI Injury No-Injury

CRASH MODAL SHARE

Motor Vehicle	15
Bike	0
Pedestrian	0

PRIORITY 19

KENAI SPUR HIGHWAY, SALAMATOF

MP 19

Dedicated Left/Right Turn Lanes

Wider Lane Edges

Walkways & Shared Use Path

Road Diet, Reconfiguration or Flatten Curve

PRIORITY 20

KALIFORNSKY BEACH ROAD

(MP 17-19.5)
ADOT&PF Classification: **Minor Arterial**

Background

This section of Kalifornsky Beach Road is surrounded by a mix of residential, commercial, and industrial development. The road is primarily two-lanes, with turn lanes at intersections, and a 45 mph speed limit. There are numerous driveways intersecting this segment of road.

Recommendations

This section of Kalifornsky Beach Road is highly developed and has speeding issues. It would benefit from a corridor management plan which could include the consideration of roundabouts or traffic signals to provide traffic calming and reduce turning-related crashes.

LOW COST $

1. Wider edge paint (consider use of MMA paint)

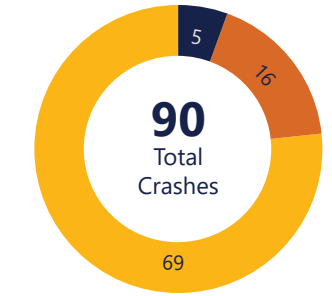
MEDIUM COST $$

1. Lighting
2. Traffic signal at Murwood Avenue
3. Turn lane on Murwood Avenue

HIGH COST $$$

1. Corridor Management Plan
2. Roundabouts
   - Poppy Lane
   - Murwood Avenue

COLLISION HISTORY



KSI | Injury | No-Injury

CRASH MODAL SHARE

Motor Vehicle	90
Bike	0
Pedestrian	0

PRIORITY 20

KALIFORNSKY BEACH ROAD, SOLDOTNA

MP 17-19.5

- Corridor Management Plan
- Wider Lane Edges
- Lighting
- Turn Lanes
- Roundabout
- Signalized Intersections

Chapter 8

Moving Ahead - The Action Plan

> **“The CSAP includes a matrix to provide a complete list of clear actions to follow.”**

IMPLEMENTATION

In addition to identifying prioritized areas for safety improvements as well as projects to implement, this plan includes the following implementation matrix which will provide a complete list of clear actions to follow that are tied back to the policies and practices recommended in Chapter 6. These action items, including recommended implementation of policies and practices, are accompanied by timeframes for implementation (near term, mid-term, and long-term) and identify potential partners responsible for carrying out these actions.

Table 3: Implementation Matrix – Near-term (0-2 years)

IMPLEMENTATION ACTION – Near Term (0-2 Years)	SUPPORTING SSA ELEMENT	PARTNERS
Apply for funding to implement the KPB CSAP recommended list of near-term projects in Chapters 6 & 7.	Safe Roads, Safe Speeds	KPB and Partner Cities
Apply for funding to implement the KPB CSAP recommended list of near-term demonstration projects in Chapter 6.	Safe Roads, Safe Speeds, Safe People	KPB and Partner Cities
Create a Safe Streets KPB Working Group to oversee implementation of KPB CSAP.	Safe People, Safe Roads	KPB, Partner Cities, community representatives
Establish a Maintenance Working Group to address key challenges and roadblocks associated with all-season maintenance of streets, sidewalks, multi-use pathways, bicycle lanes, bus stops, and school zones. Devise a resource such as a checklist or infographic to illustrate the hierarchy of information, roles, and responsibilities for adhering to maintenance goals.	Safe Roads, Safe People	KPB, Partner City Departments responsible for maintenance & operations, ADOT&PF
Create a Safe Streets KPB Coordinator position to staff the Safe Streets KPB Working Group and Safe Streets Maintenance Working Group.	Safe People, Safe Vehicles, Safe Roads	KPB
Distribute the KPB CSAP and list of potential countermeasures to Borough agencies, partner cities, and community organizations to help generate public awareness and support for implementation projects.	Safe People	KPB, Partner Cities and community organizations
Coordinate annual safety walking tours for KPB elected officials and the public to demonstrate local transportation safety needs.	Safe People	KPB, Partner Cities and community representatives
Create a policy that coordinates with the pending Alaska Traffic Manual updates to establish consistent features within school zones including signs, markings, and lighting practices.	Safe Roads, Safe People, Safe Speeds	KPB, ADOT&PF, KPBSD
Coordinate media and public awareness campaigns that align with implementation project construction and demonstration project roll out.	Safe People	KPB and Partner Cities
Encourage policy development for automated speed enforcement or pilot project to demonstrate this technology.	Safe Speeds	KPB, Alaska State Troopers, Partner City Police Departments
Work to improve emergency response times through addressing access issues, increased staffing, GIS support functions, and increased fleet vehicles.	Safe People, Safe Vehicles	KPB, Alaska State Troopers, Local Emergency Responders
Work to incorporate vehicles with high safety ratings when replacing KPB and city fleet vehicles.	Safe Vehicles	KPB and Partner Cities
Coordinate safety education campaigns to improve community safety through safe vehicle education including all season maintenance safety practices such as tire replacement, winterizing vehicles, and proper installation of child car seats.	Safe People	KPB, Partner Cities, Tribes, Center for Safe Alaskans

IMPLEMENTATION ACTION – Near Term (0-2 Years)	SUPPORTING SSA ELEMENT	PARTNERS
Identify ADOT&PF Maintenance and Operations Regional Leads to coordinate winter weather maintenance needs and secure and prioritize sustainable funding for weather maintenance of service for all road users.	Safe Roads	ADOT&PF
Target low seat belt users for education programs.	Safe People	KPB, Alaska State Troopers, Tribes and Center for Safe Alaskans
Encourage people to use existing public safe ride programs when traveling to and from bars (e.g. CARTS - Central Area Rural Transit System).	Safe People	KPB, Partner Cities and Tribes
Research existing education courses, trainings, and best practices for off-road vehicle operators and on-road All-Purpose Vehicles (APV)s and develop recommendations for on-road APV rider education training. Conduct a comprehensive education campaign about licensing, registration, and insurance requirements and using protective equipment to operate APVs on public roads.	Safe Vehicles	KPB, Partner Cities, Tribes, Alaska State Troopers, ADOT&PF and Center for Safe Alaskans
Conduct a comprehensive education and outreach campaign to provide information for both motorists and motorcycle riders about motorcycle safety needs, protective equipment (e.g. helmets), visibility, speeding, perception-reaction times., pertinent laws, motorcycling best practices, tips for riding in Alaska, and other appropriate topics.	Safe Vehicles	KPB, Partner Cities, Tribes, Alaska State Troopers, ADOT&PF and Center for Safe Alaskans
Encourage road users to use the free Safe Kids Kenai Peninsula Inspection Stations provided by the fire departments.	Safe Vehicles	KPB and Partner Cities, Safe Kids Kenai, Tribes
Develop potential incentives for vehicle owners that address vehicle maintenance issues such as operable headlights and blinkers, brakes and brake lights, and tires with proper all-season tread.	Safe Vehicles	KPB and Partner Cities
Initiate policy development for active monitoring for speed enforcement.	Safe Speeds	KPB, Alaska State Troopers and Partner City Police Departments
Collaborate with health organizations and non-profits to engage in treatment options for people involved in drug and alcohol related crashes.	Post Crash Care	KPB, Partner Cities, Tribes, and health organizations

Table 4: Implementation Matrix – Mid-term (2-10 years)

IMPLEMENTATION ACTION – Mid Term (2-10 Years)	SUPPORTING SSA ELEMENT	PARTNERS
Apply for funding to implement the KPB CSAP recommended list of mid-term projects in Chapters 6 & 7.	Safe Roads, Safe Speeds	KPB and Partner Cities
Apply for funding to implement the KPB CSAP recommended list of mid-term demonstration projects in Chapter 6.	Safe Roads, Safe Speeds, Safe People	KPB and Partner Cities
Create a KPB Complete Streets Plan to apply to areas within the Borough as appropriate.	Safe Roads, Safe People, Safe Speeds	KPB
Work to update street design standards that reflect Complete Streets policies and the SSA.	Safe Roads, Safe People, Safe Speeds	KPB and Partner Cities
Create a KPB Development Working Group focused on developing policies and practices that enforce safe street design practices.	Safe People, Safe Roads, Safe Speeds	KPB, and Partner Cities
Develop a comprehensive evacuation plan to enhance egress, muster sites, and evacuation safe zones.	Safe People	KPB and Partner Cities
Create plans that reduce duplication and identify shared strategies to accomplish safe street projects among multi-jurisdictional partners, (i.e. Community Wildfire Protection Plan, Hazard Mitigation Plan, Transportation Plan, etc.).	All SSA Elements	KPB, State, Federal and City Partners
Install low-cost safety countermeasures at priority locations identified in the KPB CSAP.	Safe Roads, Safe Speeds	KPB, ADOT&PF, and Partner Cities
Before and during new project implementation, engage in promotional activities to educate the public on the safety benefits of new infrastructure.	Safe People	KPB, Partner Cites, ADOT&PF
Advocate for increased funding to provide staffing and equipment for improved enforcement.	Safe People, Post Crash Care	KPB, ADOT&PF, Alaska State Troopers and Partner City Police Departments
Coordinate training sessions with local law enforcement to help facilitate more accurate crash reporting.	Safe People, Post Crash Care	KPB, ADOT&PF, Alaska State Troopers, Partner City Police Departments
Update the KPB CSAP.	All SSA Elements	KPB and Partner Cities
Coordinate with local agencies, jurisdictions, and community stakeholders to develop a priority system and plowing sequence on routes for winter maintenance on motorized and non-motorized facilities.	Safe Roads	KPB, Partner Cities, and ADOT&PF
Evaluate and revise state warrants and criteria for installing Vulnerable Road User roadway crossing infrastructure.	Safe Roads	ADOT&PF
Encourage use of the ADOT&PF's safety issue reporting app.	Safe People	KPB, Alaska State Troopers and Partner City Police Departments
Develop policies that increase accountability for alcohol server training and marijuana handlers permits.	Safe People	KPB, Partner Cities, State of Alaska Alcohol and Marijuana Control Office

IMPLEMENTATION ACTION – Mid Term (2-10 Years)	SUPPORTING SSA ELEMENT	PARTNERS
Increase Law Enforcement knowledge of child occupant protection resources and DUI driving detection.	Safe People	Alaska State Troopers, Partner City Police Departments
Review existing state and municipal policies, statutes, regulations, and manuals to identify gaps in consideration of motorcycles, APVs, and snowmachines.	Safe Vehicles	KPB, Alaska State Troopers and Partner City Police Departments
Work with nonprofits to expand the CarFit program statewide.	Safe Vehicles	KPB, Partner Cities and AARP
Explore opportunities to share transportation safety best practices within the tourism industry, including peer exchanges and shared messaging.	Safe Vehicles	KPB, Partner Cities, Chambers of Commerce
Review/implement speed management policies for setting speed limits.	Safe Speeds	KPB, Partner Cities, ADOT&PF
Conduct high visibility enforcement (HVE) mobilizations/patrols and operations through local law enforcement and Alaska State Troopers, using a data-informed approach to select enforcement times and locations.	Safe Speeds	Alaska State Troopers, Partner City Police Departments
Conduct a comprehensive education campaign on the dangers of speeding in the KPB, risks to vulnerable road users, and driving appropriately in inclement weather conditions.	Safe Speeds	KPB, Partner Cities, ADOT&PF and Alaska State Troopers
Develop online course materials to be completed in conjunction with in-person checks to train police officers on speed enforcement best practices and current law.	Safe Speeds	Alaska State Trooper and Partner City Police Departments
Provide training on basic and advanced speed measuring devices and high-visibility enforcement best practices to new law enforcement officers and as continuing career education.	Safe Speeds	Alaska State Trooper and Partner City Police Departments
Collaborate with state agencies and local jurisdictions to implement rigorous and safety-focused Traffic Impact Study processes.	Safe Roads	KPB, Partner Cities and ADOT&PF

Table 5: Implementation Matrix – Long-term

IMPLEMENTATION ACTION – Long-term	SUPPORTING SSA ELEMENT	PARTNERS
Apply for funding to implement the KPB CSAP recommended list of long-term projects in Chapters 6 & 7.	Safe Roads, Safe Speeds	KPB and Partner Cities
Apply for funding to implement the KPB CSAP recommended list of long-term demonstration projects in Chapter 6.	Safe Roads, Safe Speeds, Safe People	KPB and Partner Cities
Continue working to improve all seasonal maintenance of roads, sidewalks, multi-use pathways, and separated paths.	Safe Roads	KPB, Partner Cities and ADOT&PF
Continue implementing countermeasures such as improvements to blind spots along the highway, visibility, lighting, MMA paint, and shoulder widening through the implementation of projects identified in the KPB CSAP.	Safe Roads	KPB, Partner Cities and ADOT&PF
Implement safety improvements and countermeasures along priority corridors.	Safe Roads	KPB, Partner Cities and ADOT&PF
Continue the development of projects to create more sidewalks and safe crossings throughout KPB.	Safe Roads, Safe People	KPB, Partner Cities and ADOT&PF
Develop data collection processes to increase understanding of risk-tolerant behaviors when riding motorcycles and APVs.	Safe Vehicles	KPB, ADOT&PF and Alaska State Troopers
Continue to improve ambulance availability and response times.	Post Crash Care	KPB and Partner Cities
Continue to improve communications networks (radio and cellular) to reduce delays in post-crash care.	Post Crash Care	KPB, ADOT&PF and Alaska State Troopers
Continue to engage with emergency responders and hospitals to more effectively share data across agencies.	Post Crash Care	KPB, Partner Cities and hospitals
Support local jurisdictions in identifying and applying for safety funding.	Post Crash Care	KPB
Update the KPB CSAP.	All SSA Elements	KPB and Partner Cities

DASHBOARD

To assist the KPB in continuous monitoring of safety trends, crash patterns, and other contributing safety factors the project team developed a comprehensive Safe Streets Dashboard. The Dashboard is an interactive, online tool for data driven decision making and strategic planning.

The Dashboard integrates map data to provide a comprehensive view of road safety data. The Dashboard may also be used to filter crash data based on specific safety attributes to assess trends to make informed decisions on project implementation and funding requests.

This tool will help the KPB and partner cities to make proactive and informed decisions as they work towards achieving the long-term goal of zero traffic related fatalities, so everyone can get home safely. To remain a useful tool the Dashboard must be reviewed and updated regularly, at a minimum of once a year (annually). Regular review and updates ensure the Dashboard provides a current assessment of safety trends over time, allowing assessment of crash reduction targets.

MEASURING SUCCESS

Targets

Initially, the KPB should focus on tracking the highest impact and easily tracked measures with readily available data, while continuing to improve data availability and reliability. The following Safety Report Card will help the KPB track progress on implementation of the CSAP and towards the long-term goal of zero traffic related fatalities and serious injuries.

The plan recommends the following performance measure and targets to actively monitor transportation safety improvements over time:

Table 6: Roadway Travel Safety Report Card

ROADWAY TRAVEL Performance Measure	**Existing Plan** (2018-2022)	**2030** Target	**2035** Target	**2040** Target	**2045** Target	**2050** Target
Five-year average number of fatal crashes on the roadway.	**9**	TBD	TBD	TBD	TBD	TBD
Five-year average number of serious injury crashes on the roadway.	**31**	TBD	TBD	TBD	TBD	TBD
Five-year average number of non-motorized fatalities on the roadway.	**3**	TBD	TBD	TBD	TBD	TBD
Five-year average number of non-motorized serious injuries on the roadway.	**2**	TBD	TBD	TBD	TBD	TBD
Number of miles of added road facilities with safety upgrades including safety countermeasures recommended in KPB CSAP.	**NA**	TBD	TBD	TBD	TBD	TBD
Five-year average number of KSIs on state owned roadways with posted speed of 45 mph and over.	**27**	TBD	TBD	TBD	TBD	TBD
Five-year average number of KSIs on borough/city owned roadways with posted speeds of 35 mph and under.	**4**	TBD	TBD	TBD	TBD	TBD

Table 7: Nonmotorized Travel Safety Report Card

NONMOTORIZED TRAVEL Performance Measure	**Existing Plan** (2018-2022)	**2030** Target	**2035** Target	**2040** Target	**2045** Target	**2050** Target
Number of sidewalks added within one mile of city limits	TBD	TBD	**X**	**X**	**X**	**X**
Number of miles of protected bicycle facilities added within one mile of city limits	TBD	TBD	**X**	**X**	**X**	**X**
Number of miles of multi-use pathways added	TBD	**X**	**X**	**X**	**X**	**X**
Number of miles of separated pathways added	TBD	**X**	**X**	**X**	**X**	**X**

Table 8: Maintenance Safety Report Card

MAINTENANCE Performance Measure	**Existing Plan** (2018-2022)	**2030** Target	**2035** Target	**2040** Target	**2045** Target	**2050** Target
Average time (in hours) to clear roadways and pathways after snow events	**<48 hrs.**	**<48 hrs.**	**<36 hrs.**	**<36 hrs.**	**<24 hrs.**	**<24 hrs.**
Number of Maintenance Forums held to educate policy makers and the public on evolving maintenance needs	**1**	**1**	**1**	**1**	**1**	**1**

Table 9: Enforcement Safety Report Card

ENFORCEMENT Performance Measure	**Existing Plan** (2018-2022)	**2030** Target	**2035** Target	**2040** Target	**2045** Target	**2050** Target
Number of training workshops held to provide education on crash response safety measures and crash reporting	**1**	**1**	**1**	**1**	**1**	**1**
Develop pilot project for automated speed enforcement	TBD	**X**	NA	NA	NA	NA

Table 10: Project Implementation Safety Report Card

PROJECT IMPLEMENTATION Performance Measure	**Existing Plan** (2018-2022)	**2030** Target	**2035** Target	**2040** Target	**2045** Target	**2050** Target
Number of KPB CSAP projects initiated	**1**	**1**	**1**	**1**	**1**	**1**
Number of KPB CSAP projects completed	NA	**1**	**1**	**1**	**1**	**1**
Number of SS4A demonstration projects or supplemental plans completed	**1**	**1**	**1**	**1**	**1**	**1**

Table 11: Policies and Practices Safety Report Card

POLICIES AND PRACTICES Performance Measure	**Existing Plan** (2018-2022)	**2030** Target	**2035** Target	**2040** Target	**2045** Target	**2050** Target
Safe Streets KPB Working Group	**X**	NA	NA	NA	NA	NA
Development of a KPB Complete Streets Policy	TBD	**X**	NA	NA	NA	NA
Development of a KPB Complete Streets Plan	TBD	TBD	**X**	NA	NA	NA

KBP CSAP

The KPB CSAP will help guide important transportation safety strategies for many years to come. However, it is important that the plan be monitored and kept up to date, ensuring that it reflects the most current safety trends, and continues to align with the community's transportation safety goals. Regular updates called for in the implementation matrix above should reflect:

- Progress on action items identified in the implementation matrix.
- Progress toward completion of recommended countermeasures for the 20 Priority Locations.
- Safety Report Card Updates
- Progress made toward recommended policy and programs.
- Dashboard Updates

FUNDING OPPORTUNITIES

There are a variety of programs and funding mechanisms available to the KPB and partner cities for funding and implementing safety improvements. Ranging from local and regional to state and federal sources, KPB can take advantage of partnerships with other agencies and grant opportunities to fund and implement safety projects, programs, and strategies. It is up to the KPB and partner cities to decide what mechanisms and sources are most appropriate given program parameters, eligibility requirements, and other factors. The list below is not comprehensive.

Table 12: Funding Opportunities

FUNDING PROGRAM	DESCRIPTIONS
The State of Alaska Statewide Transportation Improvement Program (STIP)	The state's four-year program for transportation system preservation and development. It includes interstate, state, and some local highways, bridges, ferries, and public transportation. It does not include airports or non-ferry related ports and harbors. It covers system improvements for which partial or full federal funding is approved and that are expected to take place during the four-year duration of the STIP.
Community Transportation Projects (CTP)	This program promotes the development of surface transportation facilities in Alaska, such as new or existing surface transportation facilities that enhance travel and tourism, reduce wildlife-vehicle collisions, and improve air quality, and projects that connect different transportation types, such as roads and trails. Funding of this program is executed through the STIP.
Transportation Alternatives Program (TAP)	The TAP provides funding for various generally smaller scale transportation projects that benefit active transportation, pedestrian and bicycle facilities, construction of turnouts, overlooks, and viewing areas, recreational trails, safe routes to schools projects, and vulnerable road user safety assessments. Funding of this program is executed through the STIP.
Safe Streets and Roads for All (SS4A)	The SS4A program funds regional, local, and Tribal projects through grants to prevent roadway deaths and serious injuries.
Surface Transportation Block Grant (STBG)	This program provides flexible funding that may be used by states and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. The STBG program funding is made available through the ADOT&PF.

FUNDING PROGRAM	DESCRIPTIONS
Better Utilizing Investments to Leverage Development (BUILD)	This grant program provides grants for surface transportation infrastructure projects with significant local or regional impact. The eligibility requirements of BUILD allow project sponsors, including state and local governments, counties, Tribal governments, transit agencies, and port authorities, to pursue multi-modal and multi-jurisdictional projects that are more difficult to fund through other grant programs.
Reconnecting Communities Pilot (RCP) Program	The RCP Program provides funding for two types of grants. Planning Grants fund the study of removing, retrofitting, or mitigating an existing facility to restore community connectivity, conduct public engagement, and other transportation planning activities. Capital Construction Grants are to carry out a project to remove, retrofit, mitigate, or replace an existing eligible facility with a new facility that reconnects communities.
Highway Safety Improvement Program (HSIP)	This federally mandated program is managed by the ADOT&PF. Its purpose is to reduce fatalities and serious injuries due to crashes on Alaskan roads. Under the HSIP, ADOT&PF Traffic and Safety personnel annually identify high accident locations on Alaska roads, evaluate corrective measures, fund the most cost-effective ones, and evaluate their effectiveness after projects are completed. HSIP funds are intended to be targeted single-mindedly at lifesaving and injury reduction.
Safe Routes to School (SRTS)	SRTS is an international movement designed to reach communities. The goal, simply stated, is to increase the number of children safely walking and biking to school. The movement began in Europe and has spread to the U.S. as a means to encourage and enable children to walk and bicycle to school safely. Dedicated funding to this program ended in 2012. Grant funding still exists through the TAP program. A match of 20% is required.
Road Service Area (RSA)	The KPB RSA maintains over 645 miles (95% is gravel and 5% is paved) of roads. The RSA is divided into five regions: Central, West, North, East and South. Each region is divided into units. There are twenty-eight (28) road maintenance units Borough-wide. All road maintenance work is performed by local contractors selected through a competitive bidding process. The RSA operates under the principle that the private sector is best suited to provide these Borough-wide services. The RSA team ensures that these contractors' work is cost effective, and that it meets the public's expectations. Road improvements may be funded through the RSA.
Road Improvement Assessment District (RIAD)	Administered by the KPB, it is a process where the cost of upgrading existing roads, or the construction of new roads in public rights-of-way to meet road construction standards, is allocated to all benefited properties. Roads within city limits are not eligible. The allocated cost is assessed to each benefited parcel through a special assessment lien. The owners of record of at least 60% of the total number of parcels subject to assessment within the proposed district, and at least 60% of the value of the property to be benefitted, must agree to share in the cost of the improvements of a RIAD.
Homer Accelerated Roads and Trails Program (HART)	This program's objective is to pay for the reconstruction of substandard city roads, upgrading existing roads, and constructing new streets and non-motorized trails. The intent is to reduce maintenance costs, improve access, increase property values, and improve the quality of life. State maintained roads are not part of this program. The program is funded by a voter approved dedicated sales tax, and assessments levied on adjacent benefited properties.
Seldovia Safe Roads Program	The Seldovia Safe Roads Program allocates city funding which is then used to leverage state and federal funds. Funds are used to resurface unpaved road sections as well as to support development of platted but undeveloped roads within City limits.

ENDNOTES

[i] US Census Bureau ACS 5-year estimate, 2022

[ii] On January 20, 2025, President Trump signed an Executive Order (EO) titled Initial Rescissions of Harmful Executive Orders and Actions rescinding President Biden's EO 14008, which established the Justice40 Initiative and required CEQ (Council on Environmental Quality) to create a Climate & Economic Justice Screening Tool (CEJST) identifying communities with significant environmental, social, and/or economic burdens as "disadvantaged communities" that would receive targeted investment of federal "benefits" from certain climate, energy, and environmental programs. As of Jan. 22, 2025, CEQ's CEJST is no longer available on the White House website.

[iii] On January 20, 2025, President Trump signed an Executive Order (EO) titled Initial Rescissions of Harmful Executive Orders and Actions rescinding President Biden's EO 14008, which established the Justice40 Initiative and required CEQ (Council on Environmental Quality) to create a Climate & Economic Justice Screening Tool (CEJST) identifying communities with significant environmental, social, and/or economic burdens as "disadvantaged communities" that would receive targeted investment of federal "benefits" from certain climate, energy, and environmental programs. As of Jan. 22, 2025, ETC Explorer is no longer available on the White House website.

[iv] Proven Safety Countermeasures | FHWA

[v] Gayah et al. Safety and Operational Impacts of Setting Speed Limits below Engineering Recommendations. Accident Analysis and Prevention, Vol. 121, pp.43-52, (2018).