

Appendices

Alaska Statewide Active Transportation Plan



Appendix A

Public Involvement Summary



Appendix A – Public Involvement

The public participation strategy for this plan was robust and included outreach to urban and rural communities across Alaska. Our public outreach team was assembled with careful consideration of differing public outreach skills based on the needs and lifestyles of communities in each geographic region. A Public Involvement Plan was developed and forms Attachment 1 to this Appendix.

A.1 Steering Committee

The purpose of the Steering Committee was to assist the project team throughout the planning process. The Steering Committee provided valuable input on draft documents and plan recommendations. Representatives from organizations listed in below formed the Steering Committee:

- ADA Compliance Program
- Alaska Mobility Coalition
- Alaska State Troopers and VPSO Program
- AEDC Live, Work, Play Trails Initiative
- Bureau of Land Management (BLM)
- Department of Transportation and Public Facilities (DOT&PF)
- People Mover Anchorage
- Skinny Raven Sports
- Citizen Representative
- Municipality of Anchorage
- Alaska Federation of Natives (AFN)
- Alaska Native Tribal Health Consortium (ANTHC)
- Alaska Trails
- Bike Anchorage
- Department of Health and Human Services (DHHS)
- Fairbanks Metropolitan Area Transportation System (FMATS)
- Providence Health and Services
- Sitka Bicycle Friendly Community Coalition
- Vision Zero Anchorage
- Alaska State Parks
- Alaska Marine Highway System (AMHS)
- Alaska Railroad Corporation
- Anchorage Metropolitan Area Transportation Solutions (AMATS)
- Bureau of Indian Affairs (BIA)
- Department of Natural Resources (DNR)
- National Park Service
- Single Track Advocates
- Youth Advocate
- United States Forest Service

The Steering Committee met four times over the course of plan development. The purpose of the meetings was to develop preliminary goals, objectives, and a vision for the bicycle and pedestrian network in Alaska, and work to refine them over the life of the project so that the final plan is a true reflection of needs across communities and demographics. Stewart Osgood and Renee Whitesell of DOWL led and facilitated each steering committee meeting, with support from other team members as needed. The planning team coordinated meetings, prepared meeting agendas and briefing materials, facilitated the meeting in coordination with DOT&PF staff, and recorded meeting notes and action items.

In addition to the three face-to-face Steering Committee meetings, one supplementary teleconference call was scheduled to discuss matters where feedback is required from the Steering Committee, and to provide updates on progress toward plan development. Summary notes from each meeting and the teleconference call are Attachment 2 to this Appendix.

A.2 Public Involvement Plan (PIP)

The PIP was developed by the DOWL team in conjunction with DOT&PF and the Steering Committee. The PIP reflected a strategy designed to gain consensus among stakeholders and the public from the commencement of the project. The PIP served as a guide for two-way communication between the DOWL team/DOT&PF and stakeholders and enabled the public to provide input to the project team about bicycle and pedestrian issues, needs, alternatives, and recommendations. The PIP outlined electronic measures for consideration, such as a project website, online open house, Facebook, electronic surveys, newsletters, and social media. The PIP is Attachment 1 to this Appendix.

A.3 Public Meetings and Comments

The Team held meetings in eight communities across the state:

- **Anchorage:** A meeting was held on September 20, 2016 at East High School between 5:00pm and 7:00pm.
- **Palmer/Wasilla:** A meeting was held on September 21, 2016 at Colony Middle School between 5:00pm and 7:00pm.
- **Soldotna (Kenai Peninsula):** A meeting was held on November 2, 2016 at Soldotna High School between 5:00pm and 7:00pm.
- **Utqiagvik (Northern Alaska):** A meeting was held on April 17, 2017 at the City of Utqiagvik between 12:00pm and 2:00pm.
- **Fairbanks:** A meeting was held on April 18, 2017 at the Raven Landing Center between 5:00pm and 7:00pm.
- **Nome (North-West Alaska):** A meeting was held on April 19, 2019 at the Nome Mini-Convention Center between 5:00pm and 7:00pm.
- **Bethel (Western Alaska):** A meeting was held on April 24, 2019 at the Yupiit Piciyarait Cultural Center between 5:00pm and 7:00pm.
- **Juneau (South-East Alaska):** A meeting was held on March 27, 2018 at the Tlingit and Haida Indian Tribes of Alaska Vocational Training and Resource Center between 5:00pm and 7:00pm.

An additional public meeting was scheduled in Dillingham but following two attempts to visit the city this public meeting was cancelled. A radio call-in show was held in place of a public meeting to elicit feedback on the vision, goals and objectives of the plan. The public meeting summaries are as follows:

- **Attachment 3:** Anchorage public meeting summary, meeting map comments, and comment sheets.
- **Attachment 4:** Palmer/Wasilla public meeting summary and comment sheets.
- **Attachment 5:** Soldotna public meeting summary, meeting map comments, and comment sheets.

- **Attachment 6:** Utqiagvik public meeting summary.
- **Attachment 7:** Fairbanks public meeting summary and comment sheet.
- **Attachment 8:** Nome public meeting summary.
- **Attachment 9:** Bethel public meeting summary and comment sheets.
- **Attachment 10:** Juneau public meeting comment sheets.

A.4 Additional Meetings and Engagements

In addition to the meetings listed above, additional engagements were conducted throughout the state to inform people about the plan, elicit feedback and answer questions. Additional engagements included:

- A booth at the Mat-Su Transportation Fair on September 22, 2016. Newsletter updates were provided as part of DOT&PF's planning booth in 2017 and 2018.
- Newsletter updates at DOT&PF's planning booth at the Anchorage Transportation Fair in 2017 and 2018.
- Presentation to the Soldotna Senior Center in November, 2016.
- Presentation to the City of Soldotna in November, 2016.
- Presentation to American Planning Association Alaska Chapter Planning Conference in November 2016.
- Presentation to the Alaska Trails Conference in April 2017 and April 2018.
- Presentation to Bethel Schools in April 2017.
- Presentation to Matanuska-Susitna Borough Transportation Advisory Board in July 2017.

**ALASKA STATEWIDE BICYCLE AND PEDESTRAIN PLAN
PUBLIC INVOLVEMENT PLAN**

SEPTEMBER 2016

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1.0 PUBLIC INVOLVEMENT PLAN

1.1 General Information

This Public Involvement Plan (PIP) is prepared in accordance with the State of Alaska's Administrative Code 17.05.120. The document outlines the public outreach methods the DOWL Planning Team (Team) will use for the Alaska Statewide Bicycle and Pedestrian Plan (Plan). The Alaska Department of Transportation and Public Facilities (DOT&PF) are developing a Statewide Bicycle and Pedestrian Master Plan to articulate the long- and medium-range bicycle and pedestrian transportation planning needs of the state. The Master Plan will:

- Develop an DOT&PF Bicycle/Pedestrian Mission;
- Draw clear distinctions between the roles and needs of bicyclists and pedestrians;
- Define what needs to be done to encourage and strengthen local bicycle and pedestrian efforts to improve conditions for bicycling, walking and connectivity to public transit;
- Discuss respective roles of state and local governments in planning and designing bicycle and pedestrian facilities; and
- Establish recommendations for performance measures.

This PIP reflects a strategy that is designed to gain consensus among stakeholders and the public. The PIP will serve as a guide for two-way communication between the DOWL team, DOT&PF and stakeholders, and will facilitate the public's ability to provide input to the project team about bicycle and pedestrian issues, needs, alternatives, and recommendations.

1.2 Steering Committee

We propose to have a Steering Committee assist us throughout the planning process. The Steering Committee will provide us with valuable input on draft documents and plan recommendations. We propose to invite a representative from each of the organizations shown in Table 1 to be a member of the Steering Committee.

Table 1-Steering Committee

COMPANY/ORGANIZATION	NAME	TITLE	EMAIL
ADA Compliance Program	Camille Brill	Temporary State ADA Coordinator	camille.brill@alaska.gov
Alaska Federation of Natives (AFN)	Maude Blair	Vice President	mblair@nativefederation.org
Alaska Marine Highway System (AMHS)	Christa Hagan	Planner	christa.hagan@alaska.gov
Alaska Mobility Coalition	Patrick Reinhart	President	info@alaskamobility.org
Alaska Native Tribal Health Consortium (ANTHC)	LeeAnn Garrick	Senior Director	lgarrick@anthc.org
Alaska State Troopers and VSPO Program	Walter Monegan	Commissioner	dps.commissioner.office@alaska.gov; walter.monegan@alaska.gov
Alaska Trails	Steve Cleary	Executive Director	steve.cleary@alaska-trails.org
AMATS	Joni Wilm	Bicycle & Pedestrian Coordinator	willmjc@muni.org
AEDC - Live Work Play Trails Initiative	Moira Sullivan	Director	msullivan@aedcweb.com
Bike Anchorage	Lindsey Hajduk	President	lhajduk@gmail.com
Bureau of Indian Affairs (BIA)	Stuart Hartford	Transportation Director	stuart.hartford@bia.gov
Bureau of Land Management (BLM)	Mark Spencer	District Manager - Anchorage District	m1spence@blm.gov
Celebrate Sitka Cycling	Charles Bingham	Cyclist	charleswbingham3@gmail.com
Citizen	Bob Laurie	Citizen	alaskabob1@alaskan.com
Denali Randonneurs	Kevin Turinsky	President	denalirandonneurs@gmail.com
Department of Health and Human Services (DHHS)	Shaun Willhelm	Policy and Planning	shaun.willhelm@alaska.gov
Department of Natural Resources (DNR)	Darcy Harris	Director, Anchorage Parks	darcy.harris@alaska.gov
DOT&PF	Marcheta Moulton	Project Manager	marcheta.moulton@alaska.gov
DOT&PF	James Boyle	Transportation Planning Manager	james.boyle@alaska.gov
DOT&PF	Marie Heidemann	Planner	marie.heidemann@alaska.gov
DOT&PF	James Starzec	Planner	james.starzec@alaska.gov
DOT&PF	Duane Hoskins	Planner	duane.hoskins@alaska.gov
FMATS	Donna Gardino	MPO Coordinator	donna.gardino@fmats.us
National Park Service	Paul Clark		paul1_clark@nps.gov
People Mover Anchorage	Bart Rudolph	Director	RudolphBH@ci.anchorage.ak.us
Providence Health & Services	Sara Penisten	Safe Kids Alaska	sara.penisten@providence.org
Single Track Advocates	Janice Tower	Single Track Advocates	singletrackadvocates@gmail.com
Skinny Raven	Hallidie Wilt	Running Club	hallidie@skinnyraven.com

Please note: Some organizations assigned an alternate to represent their organization. Those names will be updated once we hold the first steering committee meeting.

COMPANY/ORGANIZATION	NAME	TITLE	EMAIL
Southwest Road Runners	John Kern	President	johnakern@gmail.com
USDA Forest Service	Susan Detwiler	Director of Public Affairs & Partnerships	susankdetwiler@fs.fcd.us
Western Federal Lands Highway Division (WFLHD)	Pete Field	Program Officer	peter.field@dot.gov
Youth Advocate	Ellie Mitchell	Youth Advocate	superal@gci.net
Vision zero	Katie Dougherty		doughertykl@muni.org

The Steering Committee will meet every six months starting in September 2016 (see **Table 2** for meeting schedule). The purpose of these meeting is to develop preliminary goals, objectives, and a vision for the bicycle and pedestrian network in Alaska, and work to refine them over the life of the project so that the final plan is a true reflection of needs across communities and demographics. Stewart Osgood of DOWL will lead and facilitate each steering committee meeting with support from other team members as needed. The Team will coordinate meetings, prepare meeting agendas, and briefing materials, facilitate the meetings in coordination with DOT&PF staff, and record meeting notes and action items.

1.3 Interactive Website and Facebook Account

In order to provide the public and stakeholders with a central location to find information, we will set up and maintain a website and Facebook page. We propose to use the standard DOT&PF format for planning projects. The main menu tabs will mirror the respective sections of the agreed upon plan outline. Other menu tabs will include upcoming meetings, frequently asked questions, contact information, link to the public survey, schedule, and an e-newsletter sign up page. The website will be updated frequently by the Team's project administrator, Charles J. Guinchard, so that information is current.

The Team will work with DOT&PF headquarters to develop and maintain the Facebook page. Once we get the Facebook page and website published, we will create an announcement with plan information and boost the post. By boosting the post, we are able to reach a targeted market of interested users, such as bicycle and pedestrian advocates, across the state.

1.4 Public Meetings

The Team proposes to hold meetings in 9 communities across the state: Anchorage, Fairbanks, Juneau, Bethel, Nome, Barrow, Soldotna, Dillingham, Kenai, and Wasilla/Palmer. We propose to conduct a wider group of public meetings for the data gathering and needs assessment phase. The meeting schedule is in Table 2 below:

Table 2 - Meeting Schedule

Year	Month	Day	Meeting	Location
2016	September	20	Public	Anchorage
2016	September	21	Public	Palmer/Wasilla
2016	September	22	Steering Committee	Anchorage
2016	November	1-3	Public	Soldotna
2017	April	Week of 10th	Steering Committee and Public	Fairbanks, Bethel, Dillingham, Nome, and Barrow
2018	January	Week of 22nd	Steering Committee and Public	Juneau

1.5 Conferences

We propose to hold pop up open houses and workshops at upcoming conferences to gather input and feedback from a large group at one time. We will identify conferences to attend in the PIP and with input from the Steering Committee.

<<Conference attendance is not part of our contracted scope of work – DOWL identified conferences to attend and developed a budget for conference attendance – currently no budget amendments have been processed. DOWL will discuss with PM and confirm approach for this section >>

1.6 Interviews

The Team will conduct interviews with DOT&PF planners and engineers, private and public sector firms working in transportation, and elected officials. The purpose of the interviews will be to identify key challenges with current policy and procedures, and discuss ideas on ways to make improvements. The goal will be to focus on a bottom-to-top and top-to-bottom product so that when DOT&PF implements a new policy and guidance, the staff responsible for implementing these changes will have been part of the planning process and feel ownership of

the plan. The Team will develop a list of interview questions and individuals to be interviewed in coordination with DOT&PF's Project Manager.

1.7 Email Communications

The Team will assemble a contact list through existing resources and public meetings. All information materials such as surveys, newsletters and meeting announcements will be sent out to public contacts via Constant Contact. Constant Contact is an email system that allows the Team to create and maintain a contact list in one central location. The system also tracks the number of emails opened, not opened or returned because of a bad email address. This tool allows the Team to implement and measure public outreach success via email communication.

1.8 Newsletters

The Team will prepare and distribute up to three newsletters announcing project milestones, public meetings, and requesting public input via surveymonkey.com. All newsletters will include a link to the survey.

1.9 Surveys

The Team will utilize the website to collect input from the public. The public can provide general comments via the website. The website and comments section will be updated throughout the planning process. The comment/survey page will be made available until the public comment period closes in April 2018. The Team will develop hard copy surveys to key organizations to hand out to the elderly, disabled, and individuals who may not have access to or want to use a computer, and provide during public meetings/events.

1.10 Online Open House

In accordance with 17 AAC 05.145, the Team will hold a 45 day online open house to present the draft and recommendations and receive public comments. We will use the website developed for the Plan to present the sections of the draft and the appendices. The Team will provide written notice to interested persons and members of the public review group informing them of the 45 day online open house.

1.11 Comment/Response Log

The Team will create and maintain a comment response log for the draft report. Each comment that is received will be documented and addressed. Comments that are substantial will be responded to via email, and comments that are editorial or are small, will be addressed in the document. All responses to comments will be discussed with the DOT&PF Project Manager before they are addressed.

1.12 Media Outreach

The Team will work with existing stakeholders to share announcements about public outreach methods, upcoming meetings, and key milestones that the public needs to be informed on, as determined by the DOT&PF. Tribal organizations such as Association of Village Council Presidents (AVCP), Kawarek, and Tanana Chiefs Conference (TCC) will be used to distribute information to surrounding communities in each region.

The Team will also use local radio stations, libraries and schools to get information out rural communities.

In some cases, a translator may be needed to convert public outreach materials into Alaska Native languages.

1.13 Project Communication

DOWL will be responsible for developing, implementing, and managing the PIP, and communications relating to the plan. Comments regarding the Plan will be collected by DOWL, summarized, reported to DOT&PF, responded to, and incorporated into the planning effort. **Table 3 includes** the planning team's role and contact information.

Table 3: Team Contacts

Name	Agency	Role	Phone	E-mail
Marcheta Moulton	DOT&PF	Project Manager	907-465-8769	marcheta.moulton@alaska.gov
Stewart Osgood	DOWL	Project Manager	907-562-2000	sosgood@dowl.com
Renee Whitesell	DOWL	Lead Project Planner	907-562-2000	rwhitesell@dowl.com
Adison Smith	DOWL	Rural Planner	907-562-2000	adsmith@dowl.com
Fred Young	Alta	Bike and Ped Planner	206-735-7466	fredyoung@altaplanning.com

1.14 Plan Evaluation

After each public involvement event, the planning team will evaluate the public's response and input, and discuss and agree on any needed adjustments to the scope and budget with the DOT&PF project manager. The project team will solicit feedback from DOT&PF and the Steering Committee regarding the public outreach efforts.



STEERING COMMITTEE MEETING #1 NOTES

PROJECT OVERVIEW AND GOALS

The Alaska Department of Transportation & Public Facilities (ADOT&PF) Division of Program Development is developing a comprehensive Statewide Bicycle and Pedestrian master plan to promote a safe and efficient bicycle and pedestrian network and infrastructure to encourage bicycling and walking. Our team is working to create a master plan that will also develop the supporting programs necessary to promote and increase bicycling and walking as transportation modes. This includes data collection, public involvement, financial/economic analysis, policy analysis, and recommendations.

Major Discussion Items:

1. **Safety Minute**
2. **Introductions**
 - Introduction to the project team
 - ADOT&PF
 - DOWL
 - Alta Planning + Design
3. **Project Purpose**
4. **What the Plan is and isn't**
5. **Current Policies**
6. **Progress to Date**
7. **Next Steps**
8. **Role of the Steering Committee**
9. **Discussion Questions (for open discussion and feedback)**
 - Future bicycle network
 - Future pedestrian network
 - Rural bicycle and pedestrian network
 - Gaps in the bicycle and pedestrian network policy currently
 - Key areas for future bicycle and pedestrian policy to focus on

10. Questions and Answers

Meeting Summary:

Planning Process/Finalization

There was discussion about what happens once the Master Plan is finished, and how the plan will be implemented without the project team's further involvement. The Master Plan will be signed and accepted by the Commissioner of DOT and also FHWA. The finalized document will not go to the State Legislature or any other elected body. The DOT&PF Project Manager hopes that this document will be a reference guide for all designers in the future to refer to for walkers and bikers. Advocacy and community support will be essential for this plan to have lasting effects.

Steering Committee Involvement

There was discussion about the Steering Committee meeting timeframes and if the current schedule is flexible and whether or not the meetings coincide with project milestones. The Steering Committee will convene at major milestones to provide a contribution to document content and to support document critique and review for draft sections of the plan that may be available. The steering committee will reconvene in April once the project team has established the inventory and started to develop the needs analysis. There will be at least one more Steering Committee meeting prior to presenting the document to the public.

Planning Direction and Policy Recommendations

This was a discussion about the effectiveness and implementation of the Master Plan. Committee members expressed concern that guidelines can simply remain guidelines unless they are **mandated in pre-construction manuals**. The project team explained that establishing firmer, more specific goals will lead to more inclusive design guidelines on projects in the future. When the last Statewide Bicycle and Pedestrian Master Plan was developed in 1995, DOT&PF received a directive to consider non-motorized use. Crash data changed, and additional space was added in the form of shoulders. This is a continuously evolving situation. DOT&PF is continuously seeking to better accommodate non-motorized transportation in the Right of Way (ROW) and also on recreational trails. **Another committee member suggested an Alaska-wide bicycle and pedestrian advocacy group to educate on safety, work on grants, connect community, all items that will assist to help bicycle and pedestrian safety.**

One committee member from Southeast Alaska stated that the 1995 Alaska Bicycle and Pedestrian Master Plan is lacking in specific policy points and would like to see a Complete Streets Policy in the new Statewide Bicycle and Pedestrian Master Plan. The public is starting to see a few of these plans emerging in Alaska to ensure that roads are built for all users, not just cars. This was a discussion about consciously creating large roadways separating major attractors (i.e. schools and residences). **The committee**

member also expressed a need for a vulnerable users' law. This type of law has higher repercussions for drivers who hit/kill a vulnerable road user. **There was common interest expressed in a safe passing law (i.e. 3 foot law for passing a bicycle) in addition to slower speed limits in areas with higher bicycle/pedestrian traffic like neighborhoods, school zones, etc.**

There was a lot of discussion about previous funding structures and how those have changed throughout different legislative administrations. There is no standard funding structure for pedestrian infrastructure within different municipalities and boroughs across the state. **A statewide policy for a spending quota could be helpful for different regions to establish a similar standard in funding allocations.** The project team explained that communities will need funding to meet the performance targets in the plan. The public understands budgets are tight, and while not every project will be a major overhaul, **there can still be significant improvements made if funding allocations are prioritized for bike/ped infrastructure now and into the future.** There are models of good systems around the state – FMATS has developed a toolkit in partnership with DOT&PF for pedestrian facilities and tries to encourage DOT&PF to follow suit. There is flexibility in funding guidelines from FHWA, DOT&PF and USDOT but the pre-construction manuals set hard and fast rules. The steering committee recognizes that community input and voice will get a lot done.

One Committee member reminded everyone that economic development should also be a factor in addition to community development. Both of those aspects attract people to live in communities. However, Alaska is unique because of the maintenance aspect. **Communities could consider "Adopt a Trail" initiatives to cut down on maintenance costs.** ADA compliance is also a big issue and needs to be addressed when thinking about accessibility and maintenance. Often times there are **tradeoffs** for safer, more separated paths and maintenance. For example many of the bike routes in Fairbanks are set up to be easier to be maintained but have poor separation. This often presents challenges to transit operators and users who desire more frequent access and more stops that either aren't built or are not all maintained.

There was extensive discussion surrounding rural Alaska. Alaska ranks as #1 for people who walk to work, #6 for people who bike to work and the committee and project team recognizes a lot of those numbers stem from villages. **One of the strategies discussed is having a policy that steers the state toward developing localized plans for specific areas through the Statewide Plan.** Indian Road Reservation (IRR) (now Tribal Transportation Program (TTP)) funds can be used for bike/ped projects, great way to leverage to get larger projects. In addition, the Alaska Native Tribal Health Consortium (ANTHC) has been collecting injury data, would be good to analyze this to understand causes of crashes and whether improvements can address issues surrounding off road vehicles and rural pedestrians. More concrete data will ultimately provide better access to funding opportunities, this is something the committee and team both would like to grow by working with community partners. Perhaps setting a standard for data collection and

reporting in the master plan would be helpful in the future. The project team will reach out to ANTHC to gather information they are collecting.

There was a lot of discussion surrounding education. Education about biking and walking benefits, access, and safety for those commuting to and from school, namely children is a concern. Education surrounding road users is also a challenge. Most drivers do not educate themselves about current or changed laws and there is even confusion about state laws vs. municipal laws and how those apply differently in different areas. **Committee members would like to see local laws in addition to bike/ped laws on driver exams as opposed to only state laws.**

Zoning is also a challenge in many communities. **One steering committee member recognized that public infrastructure is not attractive when developing a property privately, but pedestrian facilities are important and should be mandated in planning and zoning laws.** Good facilities ultimately increase property values, but there are tax measures that could be put in place for developers that don't account for sidewalks, secure bike racks, etc.

At the end of the meeting steering committee members and the project team alike expressed interest in **establishing a technical advisory committee**, reaching out to other people from unrepresented regions/demographics to invite more feedback, and expressed interest in reviewing the public involvement plan to make sure the project team is engaging as many people as possible.

Action Items

1. Consider adding additional Steering Committee Meetings to the scope and budget.
2. Provide the Steering Committee with the draft outline of the report.
3. Provide the Steering Committee with the PIP.



STEERING COMMITTEE MEETING #2 NOTES

Meeting Summary:

Overview

This Steering Committee meeting focused on the development of the Vision, Objectives and Goals to guide the Alaska Statewide Bicycle and Pedestrian Master Plan. Information was taken from the previous Steering Committee meeting and also community feedback and provided to the Steering Committee prior to the meeting as key themes to guide the development of the Vision, Objectives and Goals. Information that was heard prior to the meeting was summarized into a PowerPoint presentation, and additional feedback through the meeting discussion was captured. This summary captures the key themes heard during the meeting.

Vision

Feedback prior to the meeting included:

- Guide transportation development decisions to maximize public benefits from transportation investments in Alaska.
- Promote awareness of the needs of those walking and cycling.
- Words like leverage, encourage, equitable, facilitate transformation, maximize.

Discussions in the meeting included using words/phrases such as:

- Connectivity, mobility, intermodal, accessibility
- Hard to do State plans that represent all communities, particularly in a place like Alaska – need words like inclusive. It cannot be a one size fits all due to diversity of community represented.
- We need to consider priorities – need to prioritize non-motorized transportation. Bicycle and pedestrian facilities should be provided when rebuilding sections of roads, and they shouldn't be considered a luxury and the first thing that is eliminated to save cost. This may be difficult with 1R projects, but should be a priority with 3R projects.

Goal Area 1: Increase Active Transportation Funding in Alaska

Feedback prior to the meeting included:

- Setting aside a percentage of funds for active transportation is very importance

- Developing a statewide policy quota
- Create partnerships, funding opportunities with the healthcare industry
- Create partnerships with private industry, generate investment in active transportation infrastructure on private sites
- Promote awareness to Legislature

Discussions in the meeting included:

- Provide recognition that DOT&PF does have set-aside through the TAP Program
- There is a need to recognize that FMATS, AMATS have their own plans and funding, but there is a disconnected network in between.
- Consider using a scoring mechanism for funds such as what is used in the STIP, with higher scores awarded to projects with a greater level of active transportation provision.

Goal Area 2: Safety

Feedback prior to the meeting included:

- Creating wider roads needs more specificity, as it can result in speeding up traffic.
- Improving intersection standards needs specificity.
- Wayfinding signage with travel distances is good in rural areas.
- Consider active transportation safety in State Highway Safety Plan objectives.
- A single database to collect safety data is a great idea.
- Add something to these goals and objectives about winter snow removal.
- Consider lighting.

Discussions in the meeting included:

- Providing lighting is very important, particularly in the winter.
- Consider road design elements and their impact on safety, particularly roundabouts, right hand turn lanes, etc. Also road widths and classification create different safety considerations which need to be factored in when considering non-motorized transportation facilities.
- Consider developing a statewide safety advocacy group.
- The plan needs to provide designs for all ages and abilities, and have a goal about what level of facility we are looking to provide.
- Active transportation facilities are not necessarily appropriate on all major facilities. Alternative routes can and should be considered where they are not appropriate.

Goal Area 3: Economic Development

Feedback prior to the meeting included:

- Question whether this should be addressed in a DOT&PF Statewide plan.
- Focus on connections that enhance economic value.
- Promote awareness of how bicycle/pedestrian facilities, infrastructure, planning, etc, can improve economic conditions.

- Encourage a statewide study that quantifies existing and potential benefits of better infrastructure.

Discussions in the meeting included:

- Provide priority to projects that provide linkages between residential and commercial districts, including connecting businesses to trails, wayfinding, etc. Consider whether this is economic wellbeing or connectivity.
- Walkability and bikability score rankings can increase the value of neighborhoods when it comes to selling property. The team were encouraged to think about local ordinances and working with developers to see the value of bicycle and pedestrian facilities.
- Tourism is a key area where active transportation can grow economic wellbeing. Consider whether a good trail system will mean visitors to Alaska will stay for longer?

Goal Area 4: Maintenance/System Preservation

Feedback prior to the meeting included:

- Encourage allocation of, or identify additional funding for maintenance of non-motorized facilities.
- Coordinating with other organization to improve winter snow removal is very important.
- Design of facilities to enable easier maintenance is very important.

Discussions in the meeting included:

- DOT&PF currently have a policy requiring a statement of how maintenance will be paid for at the outset of a project.
- Need to consider how maintenance can be shared rather than being a burden for DOT&PF – consider adopt a trail, adopt a sidewalk, etc.
- Organizations have historically received complaints about spending money to maintain facilities if they're not available for half the year.
- Snow removal is a particular issue. Communities should provide feedback on what priorities there should be for snow removal on trails and bike paths, and there may not be consistency in application.
- Consider comparing what capabilities and equipment each organization has, and trading to ensure best form of maintenance for limited budget is happening.
- Consider whether, on the basis of a cost per user, bicycle and pedestrian infrastructure maintenance is being funded consistently with other modes of transportation.

Goal Area 5: Improve Design Standards

Feedback prior to the meeting included:

- Adding active transportation facilities to the Highway Preconstruction Manual, and incorporating design manuals and guidance is important.
- Encourage communities to adopt Complete Streets.
- Encourage the use of Context Sensitive Solutions (CSS)
- Develop thresholds for when certain non-motorized transportation is warranted.
- It is often difficult to fit bicycle facilities into resurfacing projects due to ROW widths.

Discussions in the meeting included:

- Adoption of Complete Streets should be a decision made by a local community.
- Non-motorized transportation is always warranted, need to consider pedestrian facilities in particular in every design.
- DOT&PF needs to look at the range of design guidance available and develop its own standards to suit the Alaska situation (climate, funding, geography, etc).
- The Highway Preconstruction Manual already includes a standard which requires consideration and accommodation of non-motorized use where possible. Any updates to the Manual will cost money, and there needs to be recognition that there has already been improvements year-on-year since the requirement to consider non-motorized use was introduced.

Goal Area 6: Health

Feedback prior to the meeting included:

- Encourage development of educational materials.
- Maps/wayfinding with minutes to destination/calories burned to destination information.
- Encourage partnership with the health industry.
- Question raised about whether this goal area is actionable by DOT&PF.

Discussions in the meeting included:

- Diverse feedback on whether this is an actionable goal for DOT&PF in the context of this being an active transportation plan. Particular care will be needed to about how to quantify health goals.
- Need to consider whether partnerships would assist to deliver on health goals, and to reduce barriers to health created by transportation infrastructure.

Goal Area 7: Education

Feedback prior to the meeting included:

- Consider PSAs around active transportation (i.e. 30 second "Did you know...")
- Consider use of newspaper articles, commercials.
- Could an app be developed to promote active transportation in Alaska?
- Question raised whether Every Day Counts initiative is relevant to education.

- Question raised whether this goal area is actionable by DOT&PF.

Discussions in the meeting included:

- General discussion on whether education was in the purview of DOT&PF. Owing to Safe Routes to School Program and Highway Safety Office, it appears clear that education is part of its role.
- Encourage communities to educate each other on active transportation (i.e. use of social media to share routes, etc).
- Consider education to support cyclists who are not clear on how to ride safely in public places.
- Utilize educational tools like Bicycle rodeos to educate young people on active transportation safety.
- Consider educating the population about the costs and savings associated with making active transportation choices.
- Consider employing a dedicated Bicycle/Pedestrian Coordinator in the State.

Goal Area 8: Connectivity

Feedback prior to the meeting included:

- Recommend amending language since the plan will not include a list of project priorities/recommendations. Include language such as 'encourage'.
- Develop an online map resource of state owned sidewalk/path/trail network as well as all sidewalks and paths that are not state owned.
- Develop printed map resources.
- Identify gaps in the network.

Discussions during the meeting included:

- Maps and online resources are helpful – consider using phone based maps.
- Data collection will be helpful, and should be a key goal. However it will be important to look at data collection efforts being developed by others to reduce duplication (i.e. Google).
- Need to look at connections relative to demand, particularly in smaller communities.
- Consider connections to public lands and potential overlaps particularly in the provision of trails.
- Need to consider multimodal connections as well.
- Consider the Last Mile to Transit concept as an important way to support non-motorized transportation facilities and leverage efforts.



AK STATEWIDE BICYCLE & PEDESTRIAN MASTER PLAN

PROJECT NO. 2516H013

STEERING COMMITTEE MEETING #4 Notes
MARCH 28, 2018 at 10:30 a.m.

PROJECT OVERVIEW AND GOALS

The Alaska Department of Transportation & Public Facilities (DOT&PF) Division of Program Development is developing a comprehensive Statewide Bicycle and Pedestrian Master Plan to promote a safe and efficient bicycle and pedestrian network and infrastructure to encourage bicycling and walking. Our team is working to create a master plan that will also develop the supporting programs necessary to promote and increase bicycling and walking as transportation modes. This includes data collection, public involvement, financial/economic analysis, policy analysis, and recommendations.

Attendees:

- Marcheta Moulton (DOT&PF)
- Jackson Fox (FMATS)
- Alicia Stevens (FMATS)
- Stephanie Mormilo (MOA)
- Don Galligan (FNSB)
- Steve Cleary (Alaska Trails)
- Darcy Harris (Alaska State Parks)
- Stewart Osgood (DOWL)
- Sharon Fife (Forest Service)
- Marie Heidemann (DOT&PF)
- James Starzec (DOT&PF)
- Paul Clark (National Park Service)
- Brian Lindamood (ARRC)
- Scott Thomas (DOT&PF)
- Jim Potdevin (DOT&PF)
- Rory Renfro (Alta Planning + Design)
- Renee Whitesell (DOWL)
- LeeAnn Garrick (ANTHC)

STEERING COMMITTEE FEEDBACK AND DISCUSSION

Bicycle and Pedestrian Facility Design Best Practices:

- Clarification was sought on whether there would be a minimum standard for paved shoulders. Renee clarified that currently the standard is 4-ft. Bob noted that previously DOT&PF had a directive of a 6-ft minimum paved shoulder, but that disappeared somewhere. This is particularly important if a rumble strip is to be provided, and he would like to advocate for 6-ft paved shoulder wherever possible
-
- DOWL has been reluctant to call out specific minimum standards and dimensions in the planning document. Rather, we are referencing design standards and other reference materials, and remaining more general in our discussions in the plan. Perhaps we should consider adding a "desirable minimum or as stated a specified standard" to the plan.
- One member questioned whether we are looking at sidewalk standards as well. He has noticed that some of the design stuff seems to work against walkers (used example of crossing Seward Highway between Sears Mall and Fred Meyer, where three crossings are needed instead of one) because of the intersection geometry and the dual left turn lanes. This adds a lot of additional walking effort for elderly, disabled, etc. Cuts walker and driver conflicts, but there are better ways to do this such as having a longer, multi-way pedestrian signal. Confirmation was given that this plan will set out guidance to

encourage more direct pedestrian facilities, and existing design issues such as the example given can be addressed through individual projects (e.g. DOT&PF's ongoing Midtown Congestion Relief project).

- Is DOT&PF going to be doing more of the same, or will this plan recommend changes/improvements in the provision of bicycle and pedestrian facilities? In relation to reliable and consistent prepared surfaces, there needs to be a space available for non-motorized use of the ROW, regardless of the surface. This is a change from the previous approach, as it requires that ROWs are designed and allocated for non-motorized use, rather than purely for roads. With regard to design standards, DOT&PF has a list that is already used. As new facilities are designed, the latest design factors will be used. For scaled accommodations, there is recognition that what is appropriate for one highway may not be appropriate for another facility. This also applies to the political desires at the time the facility is constructed (more money, different level of commitment). The Plan will recommend improvements that are scaled, and provide appropriate accommodations at the time the facility is constructed. We have heard that where facilities are modernized (even for Type A users), this has made a considerable difference even in the more remote areas of the state. There are gaps (i.e. sections of the Glenn Highway that haven't been modernized). There is recognition that DOT&PF controls a certain proportion of the ROW, and should be setting a best practice example, but local communities are responsible for the remainder and there are established plans and standards in these locations. The plan will recognize that facilities should be designed and constructed in a manner that provides for maintenance, so they can be more easily taken care of. There is recognition that M&O budgets are always squeezed, and will continue to be squeezed. The report didn't want to be too specific, but sought to raise the bar overall. The team doesn't believe that this is status quo, but it provides recognition that where things are being done well, we need to keep doing them; and where things can be improved, we need to call that out and set the target higher.
- There was appreciation of the recommendations for wise investment, collaboration, and especially in urban communities. There was also appreciation the work that DOT&PF has been doing.
- One Steering Committee member noted they would like to see more collaboration between the State and local communities when projects do happen. The example used was the Halibut Point Road resurfacing project in Sitka, which was completed about 5- yrs ago. DOT&PF was initially going to replace the bridges just as they are (without pedestrian or bicycle facilities or shoulders). There was very little contact with DOT&PF on the planning of the road, and finally had to call engineers down to Sitka to address this. Some revisions were included, but not enough. The member would like to see more collaboration with communities, not just turning up in communities with poorly advertised public meetings when designs are largely complete. One member suggested there may be the potential for some sort of guidance/questions about whether the character of the area has changed to a point where a level of intervention greater than a pavement preservation project should be considered. Need to think about the context of the area/project as some time could have passed and improvements may be appropriate.
- The planning team noted that expectations do need to be better defined, especially when 1R projects are being undertaken. The planning team also discussed whether passing on the pavement rehabilitation project and waiting for a couple of additional years could be appropriate, to enable a more comprehensive project to be undertaken.

- Another project example was improving biking and walking access on Sona Street in Sitka (STIP project). This project has resulted in options that maintain the status quo rather than generating improvements, as the title suggests.
- We should consider ways we can be more efficient in combining projects so construction projects aren't being completed twice (i.e. roads being pulled out shortly after completion for utility upgrades). There needs to be more planning and community collaboration as part of project development.
- Project Manager Marcheta Moulton noted some early success stories through her involvement with Western Federal Lands program coordination, which has avoided the need for roads to be resurfaced multiple times.
- One Steering Committee member enquired about how much of the Plan will be devoted to Safe Routes to School (SRTS). He understands there was a lot of money that was turned back into federal government. Marcheta Moulton confirmed money wasn't just diverted into something else, it was spent on SAFETEA-LU improvements. The last school project was recently finished. The State is aware there are groups pushing for a stand-alone program, but the State is looking at how additional funding can be directed to SRTS. It was a Congressional direction that SRTS would no longer be a stand-alone program. Very few schools applied for TAP funding for SRTS (one). A significant issue is finding the champions that have the match funding, and this is now a competitive process. This document will address SRTS as an element of the plan, but it is not a SRTS plan.
- In Sitka there are other groups that can contribute to SRTS, not just the School Districts.

Performance Measures:

- DOT&PF Project Manager Marcheta Moulton noted that along with the update of the ASBPP, the Strategic Highway Safety Plan (SHSP) is also being updated and FHWA is also introducing new performance measures for DOT&PF to implement. There has been close work with SHSP team to ensure that there is no duplication of effort, but there are several other performance measure issues going on.
- One member noted he was having some difficulty connecting the performance measures to the objectives, and the actual implementation of the performance measures. Used example of count collection recommendations. He has asked how this is going to occur? This seems to be a big bite of the apple, and many of the other performance measures don't make that leap.
- The intention is that performance measures will eventually be wrapped into the Plan. Some of the original performance measures were grouped together to enable the tracking of progress over time.
- The recommendations are not a list of absolute requirements – these are recommendations that can be taken forward to benefit DOT&PF.
- How we are going to judge the effectiveness of the Master Plan?
- DOT&PF Planning Chief Marie Heidemann noted part of the difficulty is that we don't have the data to measure everything. The performance measures recommended are well rounded, and capture the broad range of issues. The biggest challenge is to try and work within what we can measure, so when this plan is updated in the future we can understand progress.
- These performance measures are being crafted to show progress in the implementation of the Master Plan. This isn't a 'maybe' list, it is a means to demonstrate that DOT&PF is accomplishing its goals and therefore they need to be measurable.

- Some of the recommended performance measures are more measurable than others, and this has been something that DOTs throughout the U.S. have been dealing with. This was one of the major reason for adding the forth column in the memorandum, to understand what measures will be easily implementable, and what will require additional work. These will also not be measured by DOT&PF alone, local and community partners also need to contribute. Because of the scale and uniqueness of Alaska, measuring performance statewide may not be effective so drilling down to a regional level may be necessary to have a better understanding of where good performance, versus the need to improve occurs.
- There needs to be a focus on performance measures that are measurable, and able to be implemented. Subjective measures cannot be relied on. The plan should have an emphasis on data collection to support performance measures. When DOT&PF is measuring its success/failure on something it doesn't control, there is no ability to do something about it.
- The team noted that some of the goals are quite binary, and some need additional work to make them SMART. Further consideration can be given to make them measurable.
- Bike and Walk-Friendly Community applications use to the 5Es – engineering, education, encouragement, enforcement, evaluation and planning – could we consider these in the performance measures? An example given was decreasing speed limits to make roads safer for non-motorized users.
- There is appreciation that the Plan it will encourage/force DOT&PF to look at the direct impacts of facilities, less measurable targets will also move DOT&PF toward greater integration with the rest of the system. Whilst this may be fuzzier, it is still valuable so don't lose sight of the overall improvements, not just what DOT&PF is doing.

Work Plan:

- Remember that Alaska has the highest percentage of people that walk and bike to work. This is why this Plan is so important, we need to make sure that this is accommodated in all our planning.

Marcheta and Renee Whitesell will be attending the Trails Conference and available to discuss the Plan. Steve Cleary offered to discuss the conference with anyone interested.



AK STATEWIDE BICYCLE & PEDESTRIAN MASTER PLAN

PROJECT NO. 2516H013

STEERING COMMITTEE MEETING #3 (Teleconference) Notes FEBRUARY 26, 2018 at 1:00 p.m.

PROJECT OVERVIEW AND GOALS

The Alaska Department of Transportation & Public Facilities (DOT&PF) Division of Program Development is developing a comprehensive Statewide Bicycle and Pedestrian Master Plan to promote a safe and efficient bicycle and pedestrian network and infrastructure to encourage bicycling and walking. Our team is working to create a master plan that will also develop the supporting programs necessary to promote and increase bicycling and walking as transportation modes. This includes data collection, public involvement, financial/economic analysis, policy analysis, and recommendations.

Attendees:

- Marcheta Moulton (DOT&PF)
- Kat Shuey (State of Alaska)
- Pierce Schwalb (Bike Anchorage)
- Bart Rudolph (MOA Transit)
- Don Galligan (FNSB)
- Dawn Groth (DHHS)
- Jim Amundsen (DOT&PF)
- Stewart Osgood (DOWL)
- Sharon Fife (Forest Service)
- Marie Heidemann (DOT&PF)
- James Starzec (DOT&PF)
- Paul Clark (National Park Service)
- Brian Lindamood (ARRC)
- Scott Thomas (DOT&PF)
- Emily Ferry (Alaska Trails/SRTS)
- Rory Renfro (Alta Planning + Design)
- Renee Whitesell (DOWL)

STEERING COMMITTEE FEEDBACK AND DISCUSSION

Vision, Goals and Objectives:

Goal 1: Safety

- Objective (4): Use of "must include" could create problems, and not all facilities are appropriate for bicycle and pedestrian facilities. The state and municipality in Anchorage are also creating a network of bicycle boulevards as a parallel network. Plan should encourage people to provide the facilities, or divert to alternative facilities, particularly when there is a better, safer option already in place.
- Encourage is acceptable if there is another facility in place, but this needs to be a caveat/requirement rather than assuming that an alternative will be provided. There are locations that there is only one way in and out, and there is a need to ensure facilities are provided.
- Be mindful that when people are biking and walking, they will look for the shortest route possible. It would be positive for the state to consider bicycle and pedestrian facilities in every case.
- Considering facilities is required by federal law, in every federally funded project. Note that this is different to a requirement that facilities are provided.
- This matter was also discussed in our design workshop and performance measures.

Goal 2: Health

- Ensure the material in the memoranda are incorporated into the objectives, and set performance measures consistent with this.
- Would appreciate a little more specificity. Some specific feedback has been required by email.

Goal 3: Maintenance/System Preservation

- Feedback has been received from the public about desire to keep trails/facilities open on a year-round basis.

Goal 4: Connectivity

- A reference to connecting schools, parks and neighborhoods would be helpful.

Goal 5: Economic Development

- Include enhancing tourism in this goal.
- Encourage Alaska to be viewed as a cycle touring destination.
- The State frequently receives calls seeking long-distance travel/bicycle touring guidance.

Vision/Goals/Objectives Generally

- Include information about how the vision/goals/objectives were developed based on public comment/feedback, memoranda, and input from federal goals and objectives.
- The vision/goals/objectives for other states were also researched, to ensure that these were not developed in a vacuum.
- Some would like a discussion of each of the goals and objectives, what they are there to achieve, where they came from and what they will lead to. While it is good to have a concise listing, it is also good to understand some of the thinking behind them.

Safety Data Analysis Summary Report:

- DOT&PF has reviewed data findings and is currently updating the data through 2015, which should be complete in the next two weeks. Scott Thomas (DOT&PF Traffic Engineer) noted that he has not reviewed the bullet points in detail, but bicycle/pedestrian collisions are both serious, and seriously over-represented.
- This memo was very powerful and made the data available and simple to understand, which will help the public understand the safety issues.
- One thing that would be helpful to further add value to the data is the denominator (overall population and exposure to crashes). There are statistical challenges with doing this however, particularly given the influence of the tourist season. We could

certainly try to normalize the data, but we will need to recognize that there are other influences.

- There is a desire for performance measures to track plan performance and success over time for crash rates. There is a need for careful consideration of whether the data will support policy decisions.
- Trend data is heading downward in some categories (fatalities and serious crashes). However, there are also areas of concern where there is a need for improvement. Some locations/intersections/intersection types/volumes are showing clusters that are problematic for bicycles and pedestrians. We should be able to gauge ourselves against the rest of the country, and prioritize improvements. It will be positive to illustrate the plan with some of the success stories in the last two decades, such as increasing rates of bicycling and walking, and yet the crash rate is trending downward. Within Alaska, we can see the return on investment in bicycle and pedestrian facilities.
- It would be good to have more data, particularly for rural Alaska, but we have gathered a lot of good, and informative information.
- We discussed whether public reporting platforms for collisions was being considered. There are some sites to report near misses/safety concerns, but not a documented collision to support this. We have not yet seen a standardized reporting mechanism. States are making their crash reporting forms more comprehensive, which is helping to understand the root causes of incidents.
- The Alaska Injury Prevention Center staff have pointed out that police are not trained to characterize nature of injuries sustained in collisions. It is currently extremely difficult to link injury/trauma data with a police report. Further complicating this is that some people reporting with trauma come to a care provider on their own, and others come in with police.
- This issue is not unique and is similar to crashes involving motor vehicles. Crash reporting has a varying degree of quality, which introduces data inconsistency.
- One Steering Committee member questioned the statement that most accidents occurring in rural Alaska are not reported. This may be a here-say statement.

Future Funding and Needs Analysis:

- Classification of E-bikes – are they being categorized as bicycles, or mopeds?
- In most jurisdictions there is a restriction on the number of watts for bicycles utilizing bike lanes and bike paths, which varies from jurisdiction to jurisdiction.
- The multi-use trail network in Anchorage is limited to skis at a maximum 12MPH.
- New AASHTO design guide raises design speed limited to 20MPH for trails, which will potentially cause an issue for vulnerable users, such as parents pushing strollers.
- The term 'non-motorized' by its very nature implies no motor. E-bikes have motors so they should be excluded from consideration in non-motorized plans.
- In other states and jurisdictions speed limits have been an issue. E-bikes do however create positive benefits by creating opportunities to participate in active transportation for more people, including elderly and disabled people.
- Other jurisdictions have also grappled with issues such as providing for vehicles like golf carts in bike lanes. Thought has also been given to provision for autonomous bicycles.

- As the technology develops, the ability to tell the difference between e-bikes and standard bikes will be almost impossible.
- In Anchorage e-bikes are currently limited to a speed of 19MPH, with a 750watt motor. This is a high threshold and, could move the bikes a lot faster than 30MPH.
- We need to acknowledge e-bikes in the plan, including both the drawbacks and the benefits of widening active transportation opportunities for a broader range of user groups.
- A deeper review of e-bikes, and development task force to consider statewide and local laws could be a recommendation of this planning effort. It would be good to consider other electronically assisted active transportation tools such as segways and hoverboards as well.
- There was discussion about whether the two percent figure for state funding quoted in the memo was correct for Alaska. This was confirmed, and it was noted language in legislation limits state to 2%. However, any provisions made as part of 3R or other projects (i.e. a wide shoulder), doesn't count in that two percent. Once these are factored in, it would be clear that DOT&PF spends a lot more than two percent on the construction of bicycle/pedestrian facilities.
- The actual contribution that DOT&PF makes to the construction of bicycle and pedestrian facilities in Alaska is not easy to track. We could consider encouraging project managers to break out facilities, so they can be accounted for and better illustrate DOT&PF's considerable commitment to providing bike/ped facilities. It would be good for this type of requirement to be part of the plan, but care will be needed as it can be difficult to quantify the value of facilities when they are included as part of a larger surface transportation project. At a minimum, a discussion around how projects are provided, and the value over and above the known two percent contribution would be a valuable inclusion in the plan.
- Projects that generate benefits for bicyclists/pedestrians may not be specifically aimed at bicyclists/pedestrians.
- We need to be aware that 9 percent of people bike/walk to work – this is the highest in country.
- Please add an additional funding source – cruise ship tax for SE Alaska and coastal communities provides significant funding for bicycle/pedestrian facilities.

State and User Profiles:

- Questions were raised about the practical application of these profiles and what they are going to be used for. The planning team confirmed they are a way to understand people and physical characteristics, due to the vastness of the state. The profiles reinforce the need to be context-specific, and one size fits all cannot apply for Alaska. As we consider design, intersection design, highway modernization, etc., there is a need to be aware the needs will be different. The profiles are intended to paint a broad picture of nuances.
- The team is looking to gather data on uses and use rates, and then set performance measures, which is addressed in subsequent memoranda.
- Dependent on the regions, the primary reason for the trip is helpful to inform facility design.

- Necessity trips need more attention, especially during the winter months (as this is a key part of maintenance).
- One Steering Committee noted he found the overview during the meeting more helpful than the memo, and asked for the memo to be revisited to make its intent clearer. The value of the profiles was questioned, and whether this memo is useful.
- A Steering Committee member considers that bicycle security is missing, and requested recommendations for ensuring that businesses offer safe and secure parking.
- The pre-construction manual discussion on selection of facilities based on the dominant users. This will help feed into the decision-making process.
- An understanding of users will also tie into data collection. It will hopefully encourage better programs in partnership with other organizations.

Economic Benefits:

- Economic development is particularly important. The Department of Commerce, Community and Economic Development are doing a study on the different economic drivers in the state, and one area being focused on is 'outdoor economic development'. Dependent on the status of the study we may be able to work in partnership.
- In rural Alaska gas prices has a significant effect on the number of people walking, which was covered in a White Paper printed in the Alliance for Biking and Walking Benchmarking report for 2012.
- One Steering Committee member queried whether these will be the same numbers to be used in the Anchorage Non-Motorized Plan. The Anchorage Plan will probably drill down to a deeper level.
- One Steering Committee member noted a lack of citations for dollar values, and requested more extrapolation of the methodology. Source citations can be added to help interpret where figures came from, as the sources will frequently have a different interpretation of the data.
- The planning team did take some of the more nationalized models tailored them to be Alaska specific.
- Many of the numbers quoted in the memo may be conservative.
- A Steering Committee member noted from a policy perspective it would be good to have a matrix to apply for project evaluation to understand the percentage of mode shift and associated economic benefit. It is generally easier to monetize the cost than the benefit.
- A discussion occurred on education spending for transportation. If more people walk/bike to school, this is a good way to generate education savings to the state. Historically, the State pays the school bus costs for students living more than 1.5 miles from the school. However, in a lot of locations, including Anchorage, the School Districts are paying a lot of money out of pocket.

Health Logic Model/A Healthier Alaska:

- The health logic model spells out what is known intuitively.
- A Steering Committee member noted in short-term outcomes one of the columns says increase walking and biking and increase rates of children and adults – increase safety in all seasons throughout Alaska ‘including policies supporting increased separation of pedestrians/vehicles’. There is insufficient money in the state budget to fully implement separation. It’s not supported by improved safety statistics, operational costs, and flies in the face of all bicycle and pedestrian policy over the last 30 years or more. There are some places where it is appropriate, and some places where it is unnecessary. It was agreed that this should be revisited.
- The outcomes listed are intended to guide the development of policies and intended to articulate qualitative benefits of plan. The mechanism for measuring some of these is through the DHSS project, and through the Center for Disease Control and Prevention.
- The March Steering Committee meeting will be going over best practices and performance measures. We will also look at who ‘owns’ the measure, and what is the best practice for reporting.

Count Collection Recommendations:

- The Committee discussed evolving technology and how “big data” will help supplement data available over time. We believe data availability will continue to increase, and is likely to provide a greater level of information on transportation modes. The assembly of, and making sense of the data will be the bigger challenge.
- DOT&PF Highway data staff have been involved in discussions on data collection. The funding of data collection will be a significant issue. Currently the data collection team operate statewide with a budget of \$2.8M, of which \$2.7M is spent on federally mandated programs. There is very little budget available to accommodate additional data collection. There was discussion on the collection of pedestrian and bicycle counts for individual projects, but there are inconsistent count locations statewide. Consistency is important to gather trends over time. Specific counts on a specific project may not be enough.

Closing Comments/Thoughts:

- A lot of tasks note that data collection is key. Will this be a bigger part of the Master Plan than initially expected? Marcheta Moulton on behalf of DOT&PF agreed data collection is a very large part of measuring the plan’s success, but the decision was made to focus on policy development to encourage a greater level of walking and cycling activity and investment rather than gathering data. This plan provides an opportunity to emphasize how improved data will help to enhance decision-making to enable the greatest benefit for investment to be derived. We can also emphasize how data will help us make more intelligent decisions.

- The programming of the STIP is using some data-driven criteria, but this may not be capturing bicycle and pedestrian needs well. The planning team should consider a policy recommendation to better articulate bicycle/pedestrian needs in STIP criteria, so when projects are being scored, non-motorized transportation is being particularly considered.
- When considering specific projects bicycle and pedestrian counts are frequently taken. However, the data is only used for the project for which the data is collected. It would be good to have a centralized location to capture the data for future use, so it can be used in the future.

Project Manager Closing Comments:

- Concern/commentary that the State and User Profile Memo needs more critical consideration. We will make sure that this is providing value to the overall project.
- Comments about trying to quantify the benefits and reference benefits (particularly on the economic side) – we will revisit this.
- Vision/Goals/Objectives – need to ensure good connection, particularly on safety.
- Care is needed around policy for e-bikes. The starting position is generally they are not welcome, but they are becoming increasingly accepted. There are particular concerns about excess speeds on narrow trails specifically, similar to concerns about high-speed road bikers on narrow trails.
- Further consideration/clarification about what percentage of the program is spent on bicycle/pedestrian facility improvements was encouraged. We need to keep trying to quantify this value. There is interest in how other states quantify this value, and some research can be undertaken to understand the approach taken by other states.
- Thanks to everyone for their time and effort/contribution to the plan. No comment will be overlooked. Our goal is to create a useful plan, and we are working to prepare the plan so people and organizations can use it.

Subject: Statewide Bicycle and Pedestrian Master Plan – Public Meeting**Date: September 20, 2016****Time: 5:00 PM to 7:00 PM****Location: East High School, Anchorage, AK**

Meeting Notes

The Alaska Department of Transportation and Public Facilities (DOT&PF) and DOWL conducted a public meeting for the Statewide Bicycle and Pedestrian Master Plan on Tuesday, September 20, 2016 at East High School in Anchorage, Alaska. The purpose of the meeting was to discuss the project purpose and need, present the project development process and schedule, and gather information the public. Ten people attended the meeting in person. DOWL also live streamed the meeting via Facebook. Twenty people viewed the presentation via Facebook.

DOWL advertised the meeting via the Alaska Dispatch's online calendar, constant contact email to community members, local governments, community councils, local and state politicians, the DOT&PF Facebook website, and through a Public Service Announcement (PSA) on 28 different local radio stations.

The meeting started with an open house from 5:00 PM to 5:45 PM. Project materials included display boards with thoughtful questions about bicycle and pedestrian topics, large maps of the state of Alaska, and copies of the presentation. The public was encouraged to provide feedback to project team members, on written comment forms, or via email at the project website.

At 5:45 PM DOWL provided a PowerPoint presentation with an overview of the project goals, history, and project area. After the presentation the public engaged in a dialogue with project team members. The following is a summary of the public questions/comments and project team responses:

Public Notification

DOWL's public involvement lead discussed the project team's plan to conduct outreach in the rural communities by traveling to engage stakeholders in public meetings, working with tribal councils, city councils, and tribal organizations. There will be digital ways to access meetings as well for those in surrounding communities.

Maintenance

Discussion about how communities can maintain bicycle and pedestrian infrastructure throughout the winter and summer seasons year while keeping budgets small during the State of Alaska's looming budget deficit. Locally maintained roadways and paths especially need maintenance. The public asked

about DOT&PF and the Municipality reprioritizing road plowing and selling most of the machines doing sidewalk removal. The planning team expressed that there are good examples of well-maintained pedestrian facilities like Elmore Road's bike lane, but there aren't enough of those examples throughout the state. Policy for major road projects providing for bike lanes/pedestrian facilities will be part of this Plan. As far as winter maintenance, the term has different meanings to different people; the planning team cannot know for sure what this will look like in the plan until we have more outreach and conduct our analysis. One attendee noted that DOT&PF recently said trails are Tier 4, which means a cul-de-sac on the Hillside has the same priority as a trail along Benson Boulevard – This needs to be reevaluated. There were also numerous ideas about how to maintain bicycle and pedestrian infrastructure during construction by going curb to curb to keep sidewalks in tact throughout construction. Ultimately the DOT&PF gets a lot of federal help to build projects, but none to maintain projects. Communities rely on advocacy and activism of passionate people to support bike/pedestrian infrastructure.

Policy

The public asked if this plan will identify projects or set policy. There were multiple suggestions from participants and ideas about how to collect data. The planning team went on to explain that this is a policy document that will set out objectives, standards and goals which will enable consistency in future projects as part of the STIP process. The planning team is looking into specifics like the 3 foot rule carried out in Washington, and collecting bike and pedestrian counts to establish needs. This plan will ultimately be approved by the Federal Highway Administration (FHWA) and the DOT&PF Commissioner before it is adopted.

Project Implementation and Execution

The public asked how DOT&PF is currently accommodating other existing bike/pedestrian plans that are developed by other entities, and how DOT&PF works with other state agencies to procure funding and make sure connectors are consistent. The planning team expressed that local policy documents will be most useful in specific project areas. The planning team wants to support these documents but also doesn't want to water down good work those groups are already doing. The goal is to save money and resources to be as effective as possible, recreating work that is already done is not in the plan. The planning team is aware that there are other agencies like Parks and Recreation, The Alaska Railroad Company, etc. and the project team has engaged with these groups to make sure stakeholder feedback is all encompassing.

Funding

The public asked how the plan will work from a policy standpoint if funding is not coming from federal government or the State of Alaska. The planning team responded stating that it is very difficult to strictly enforce, but are hopeful that if we are developing a document with a statewide focus that can be implemented by various entities, including tribal and local governments. The plan will create policies that are realistic and enhance opportunities to get funding from various sources.

Accessibility and Shared Use:

The public asked about public transit and accessibility for disabled and elderly people. The planning team will include people mover and other transit stakeholders as part of the steering committee and transit planners within DOT&PF will be integrally involved in development of the master plan. Additionally, the project team has engaged organizations that represent disabled and elderly adults in Alaska and welcome recommendations on other people to include. This plan will aim to address all pedestrian infrastructure users.



COMMENT SHEET – PUBLIC MEETING

Anchorage, AK

Tuesday, September 20, 2016

Please provide your comments on:

- What you would like to see in your community
- How bicycle/pedestrian improvements would affect you

On-road bike infrastructure should be included in every resurfacing / pavement rehab project. That must be the default option, and it ~~must~~ must be more difficult (procedurally, in terms of bureaucratic processes) for DOTPF not to include on-road infrastructure. Given funding constraints and the volume of "shove and pave" projects, this is by far the best opportunity to expand bike infrastructure quickly & economically.

Every single neighborhood should have safe & convenient bike and ped infrastructure. This is equally important in rural and urban Alaska.



COMMENT SHEET – PUBLIC MEETING

Anchorage, AK

Tuesday, September 20, 2016

Please provide your comments on:

- What you would like to see in your community
- How bicycle/pedestrian improvements would affect you

For new bike paths, excavate far enough to get below tree roots. The 1st phase in Anchu. (Chester Creek) soon had bumps in the pavement from roots expanding under it. Would cost more initially, but avoid later maintenance costs. JW Oakes

Subject: Statewide Bicycle and Pedestrian Master Plan – Public Meeting

Date: September 21, 2016

Time: 5:00 PM to 7:00 PM

Location: Colony Middle School, Palmer, AK

Meeting Notes

The Alaska Department of Transportation and Public Facilities (DOT&PF) and DOWL conducted a public meeting for the Alaska Statewide Bicycle and Pedestrian Master Plan on Wednesday, September 21, 2016 at Colony Middle School in Palmer, Alaska. The purpose of the meeting was to discuss the project purpose and need, present the project development process and schedule, and gather information the public. Ten people attended the meeting in person. DOWL also live streamed the meeting via Facebook. Ten people viewed the presentation via Facebook.

DOWL advertised the meeting via the Frontiersman's online calendar, constant contact email to community members, local governments, community councils, local and state politicians, the DOT&PF Facebook website, and through a Public Service Announcement (PSA) on 28 different local radio stations.

The meeting started with an open house from 5:00 PM to 5:45 PM. Project materials included display boards with thoughtful questions about bicycle and pedestrian topics, large maps of the state of Alaska, and copies of the presentation. The public was encouraged to provide feedback to project team members, on written comment forms, or via email at the project website.

At 5:45 PM DOWL provided a PowerPoint presentation with an overview of the project goals, history, and project area. After the presentation the public engaged in a dialogue with project team members. The following is a summary of the public questions/comments and project team responses:

Public Outreach Methods

The public suggested to include notice of public meetings in school newsletters in the future and to run a newspaper advertisement. It was suggested to choose a different, larger location to accommodate more people and to choose a time frame that would accommodate commuters, who work in Anchorage, time to travel home from Anchorage. The project team explained that the meeting was advertised in the Frontiersman online calendar (9/12/16). PSAs on 28 different radio stations, Facebook event, Constant Contact blast to city, state, and local representatives and public entities, and ensured the public that there will be more opportunities to engage the public. The planning team stated that they will include schools in future public outreach efforts.

Discussion about engaging rural/tribal communities took place. The public questioned the efforts that were going to take place in rural Alaska. The planning team stated that they will engage rural communities and invite key stakeholders to participate in the Steering Committee Meetings. The planning team will be traveling to the several communities across the state, partnering up with tribal organizations to get the word out about the meetings and planning effort. The planning team has established relationships and plan to use representatives within communities to conduct outreach in rural communities. If translation of materials is needed, then this is something the team will discuss with DOT&PF. The planning team will use PSAs, fax machines, and local forums to participate in discussions.

What the plan is and what it isn't.....

The public wanted to know how policies are currently written and if the plan would identify projects, the public raised concerns about specific projects throughout the Wasilla/Palmer area. The planning team explained that this project is focused on policy and goals for the Alaska Bicycle and Pedestrian Network. The public asked if the goals identified in the 1995 plan were met, or if any of the projects were built. The planning team responded stating that it is difficult to determine whether the goals were met in the old plan because there are no specific goals with metrics to measure. The planning team assured the public that the goal of this plan is to include metrics so that the goals can be measured and DOT&PF held accountable for what they said they were going to do.

Project Implementation and Execution

Discussion about how this plan will be implemented took place. The public asked if there will be different standards for roads, trails, and established paths in different communities and what those measurements would be based off of. The planning team explained that there are different standards for roads and how they will be classified. Ultimately it really depends on the level of improvement that is being done on the roadway. This plan will hopefully bring clarity to standards that are expected and realistic to implement.

Funding

Discussion about how the plan is being funded took place. The planning team explained that this project is funded by the FHWA and funds were allocated several years ago. The old plan needs to be updated which is one of DOT&PF's planning requirements. The planning team wants to make sure that this plan will enable the public to be involved in meaningful decisions. The public expressed interest in greater transparency surrounding funding for road construction projects and better access to decision makers throughout the planning and design process to better understand how federal, state, and borough funding is used to get projects developed. The planning team pointed attendees toward the DOT&PF Complete Street Policy/Methodology. The State of Alaska has a directive for complete street approach, but only methodology for pedestrian pathways. Projects are only required to comply by federal guidelines if they are federally funded, if the project is totally state/borough funded then they will not be required to comply with complete streets methodology.

Maintenance

There were numerous questions about trail and path maintenance during the winter months. The planning team stated that they are aware that maintenance is a significant issue, and will be addressed in the plan.

Accessibility and Shared Use:

One attendee expressed concern for wheelchair and mobility challenged pedestrians. There was also concern about motorized ATVs using pedestrian trails in rural areas and signage about shared use on roads and trails. DOT&PF does not allow non-motorized traffic on the right hand side of the white line. The planning team stated that this will be addressed in this plan, and that they will be analyzing the need for this in rural Alaska as well.

Project Team:

DOWL chose Alta as a teaming partner specifically as they have done work nationally and internationally in cold climates. They will be helping the team take the experience they have on a national level and then right-sizing it for Alaska. This plan will have State of Practice solutions. There will be demographic analysis, health impact analysis, and healthy and active communities analysis going into this new master plan. Transit groups are also working with the project team to ensure that these connections are considered.



COMMENT SHEET – PUBLIC MEETING Palmer, AK Wednesday, September 21, 2016

Please provide your comments on:

- What you would like to see in your community
- How bicycle/pedestrian improvements would affect you

Gravel -

paths adjacent to roads may be closed by road closures but snow
 snow plows will plow on ^{the} ~~road~~ on path path & ~~road~~ hit .. separated
 path records seen in samples

DotHeli
 aktrail@gnia

Separated
 Paths -
 Less
 DOT Helm Damage
 aktrail@gnia@gmail.com



COMMENT SHEET – PUBLIC MEETING

Palmer, AK
Wednesday, September 21, 2016

Please provide your comments on:

- What you would like to see in your community
- How bicycle/pedestrian improvements would affect you

Whenever DOT upgrades a road like Fairview Loop Rd, it should ^{collectors} only improve as much that can have pedestrian accommodations also,

DOT misleads residents about money allocated + switched around - namely additional money acquired due to resident appeal to the legislature & through bonding. Yet DOT is improving the road to improve vehicle safety & neglecting pedestrian safety.

Dan Elliott

Subject: Statewide Bicycle and Pedestrian Master Plan – Public Meeting**Date: November 2, 2016****Time: 5:00 PM to 7:00 PM****Location: Soldotna High School, Soldotna, AK**

Meeting Notes

The Alaska Department of Transportation and Public Facilities (DOT&PF) and DOWL conducted a public meeting for the Alaska Statewide Bicycle and Pedestrian Master Plan on Wednesday, November 2, 2016 at Soldotna High School in Soldotna, Alaska. The purpose of the meeting was to discuss the project purpose and need, present the project development process and schedule, and gather information the public. 30 people attended the meeting in person.

DOWL advertised the meeting in the Kenai Peninsula Clarion's classified section, constant contact email to community members, local governments, community councils, local and state politicians, the DOT&PF Facebook website, and through a Public Service Announcement (PSA) on local radio stations.

The meeting started with an open house from 5:00 PM to 5:30 PM. Project materials included display boards with thoughtful questions about bicycle and pedestrian topics, large maps of the state of Alaska, and copies of the presentation. The public was encouraged to provide feedback to project team members, on written comment forms, or via email at the project website.

At 5:30 PM DOWL provided a PowerPoint presentation with an overview of the project goals, history, and project area. After the presentation the public engaged in a dialogue with project team members. The following is a summary of the public questions/comments and project team responses:

Property Lines and Accessibility

The audience had several comments and questions about land use/access for pedestrians. The Kenai Peninsula is a mix of state and private lands. Meeting participants discussed creating a map that would indicate land owner contacts in order to assist with easements for future development and general understanding of public access and use. Laws and regulations in the area are a challenge to understand, making a definitive outline of what access/use is allowed in what areas would assist the public for motorized and non-motorized off road transportation. Volunteer organizations have challenges contacting and working with land owners. A utility map would assist organizations in leveraging utilities. Powerline Pass as an example is a highly used area, but in order to create infrastructure permitting has to come from land owners and utility companies. There were suggestions to include policy in regards to river access (bike and pedestrian as well as put ins for non-motorized modes) along the Kenai and other water ways in the area. Many people commute by the river and use it for recreation purposes year

round. The audience suggested that all new roadways that are built need to have non-motorized pathways parallel to them; especially on major arterials (this was discussed in the 1994 Statewide Bicycle and Pedestrian Master Plan). The project team noted that this would be added to their considerations for the region.

Funding

The public asked how the plan will work from a policy standpoint if funding is Federal Highway Administration (FHWA) and if there is a percentage required to be spent on trails rather than just roads. The project team stated that they would check and follow up with the group on this.

There were also several inquiries about alternative funding for tribes and smaller communities about how to obtain maintenance funding or funding for other bicycle/pedestrian projects in the state as ways to provide incentives for the state and businesses to offer alternative travel options and/or benefits to Alaskans. Tribes in particular could look into ways to provide incentives to shareholders for commuting, establishing bike share programs, etc. as a way to promote healthy communities and save money.

Policy

There were questions about specific policy points from the audience. Participants suggested that the state's pre-construction manual be updated to incorporate the Bicycle and Pedestrian Master Plan's design guidelines. The Cooper Landing Bypass project in particular – would this plan affect that project specifically? DOT&PF's project manager explained that this is more of a policy setting, guiding document and won't necessarily dictate the development of any laws. This document will, however, set specific standards that the team hopes the project will conform with. There were also inquiries about rail plan coordination with the Alaska Railroad Corporation and whether or not any umbrella plans will be considered in this project. DOT&PF will work with all necessary entities to see this plan is carried out as inclusively as possible. Other attendees expressed concern for driver awareness and what is being done to increase knowledge of shared use laws. Updating the state's drivers manual was one suggestion about how to reach people.

There were other, Kenai specific questions. The audience questioned what is considered rural vs. urban, and how the Kenai Peninsula will be classified. Participants suggested creation of a user fee payable at the time of purchase for off road vehicles (snow machines, ATVs, etc.) as a way to maintain off road infrastructure. Because of the Kenai Peninsula's off road trails, some being dirt, some paved, and some gravel, one user suggested different speeds to protect cyclists and pedestrians based on road conditions.

Safety

The Principal of Soldotna High School inquired about how safety plans would be incorporated into this document. DOT&PF is coordinating with TAP funding for Safe Routes to School to ensure that safety is a top consideration in the creation of this plan. The audience also expressed concern about isolated bike trails and the challenge that poses to commuters. Bike and pedestrian trails should be created along

roadways with a minimum of an 8 foot shoulder if separation is not available, so as to ensure proper lighting, safety, and accessibility to residents. It was also noted that separation between ATVs and bicycle/pedestrians should be a priority to enhance safety. In addition, connections should be established between recreational trails and commuter trails to increase user accessibility. Residents expressed interest in establishing a system to maintain asset management, safety, and system performance in order to maintain trails and pathways. Signage and trail system information was also requested.

Other attendees suggested that signalization be improved for longer crosswalk times as well as signal variations to accommodate disabled trail users. Oftentimes disabled people are forced into roadways due to lack of maintenance or accessibility to trails and public transit stops. Enforcement in all of these areas will also be necessary to help the public understand and abide by any new laws or policies.

Communication

The audience suggested that there needs to be one website to house all bike and pedestrian information. The project team explained that the DOT&PF has created a website for this project, www.akbikeped.com, which could be used in the future for the central location to store maps, policy documents, meetings, and project details.

Maintenance

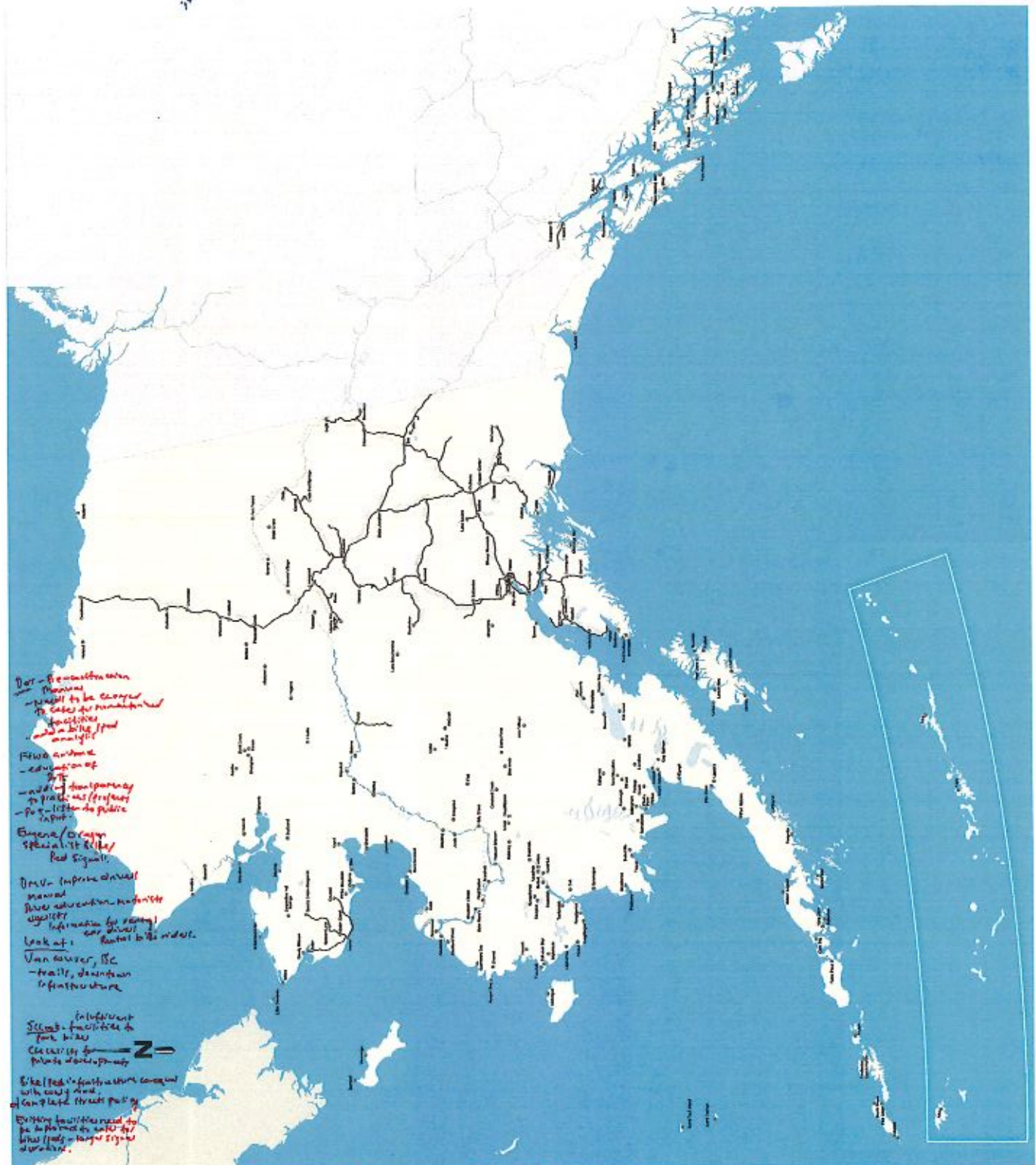
The audience expressed concern about snow storage and maintenance of trails during colder seasons to ensure accessibility year round. Road signs, striping along roadways and pedestrian paths, as well as directions signs are also a request.

Economic Development

The audience expressed interest in developing tourism around bicycle/pedestrian infrastructure. As mentioned above under funding, establishing bike share programs at ferry terminals, airports, and other key places in communities would be a great way to promote healthy communities and promote tourism and economic development in cities. One attendee suggested a statewide advertising campaign could get this program off the ground as well as help communities understand the goal of this document.

Blue Bikes @
Bicycle, in the
state DOT transportation manual
Portland, Ore. Dept.
University of Oregon
Sea Port Transportation manual

Portland, Ore. Dept.
University of Oregon
Sea Port Transportation manual
Portland, Ore. Dept.
University of Oregon
Sea Port Transportation manual



DOT - Re-examination
- Portland to be covered
- for cases of non-implementation
- Portland
- also a bike path
- analysis

Florida
- education of
DOT
- adding transportation
to traffic law program
- put - information public
input

Oregon/Oregon
Specialist Bill/
Red Signal

Ohio - improve overall
overall
Bike education - make it
available
- information for people
car about
bicycle to the rider

Van Nuys, CA
- trails, development
infrastructure

Schools - information
- for bikes
- call center for
bicycle information

Bike path infrastructure
- with road bike
- can't lead through park

Existing facilities need to
be improved, call for
bike paths - larger sign
direction

Needs
- Public outreach education
to think of bike as a part
- Law enforcement - bicyclist priority
- Bike 'bikes' - to bike can be seen in
trucks
- Connectivity, safety, health - more funding
for this effort
- Accept non-motorized public or corporate
road users

Performance measures for bike path
- Duration to be covered
- non-motorized
- more education/training for implementation

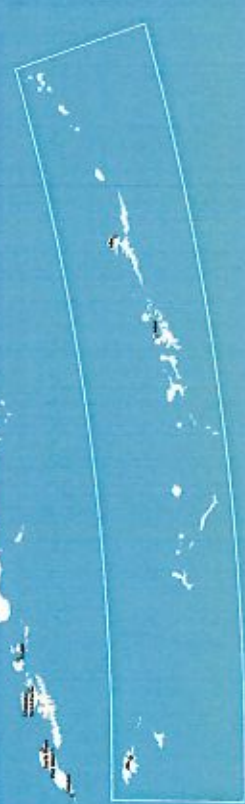
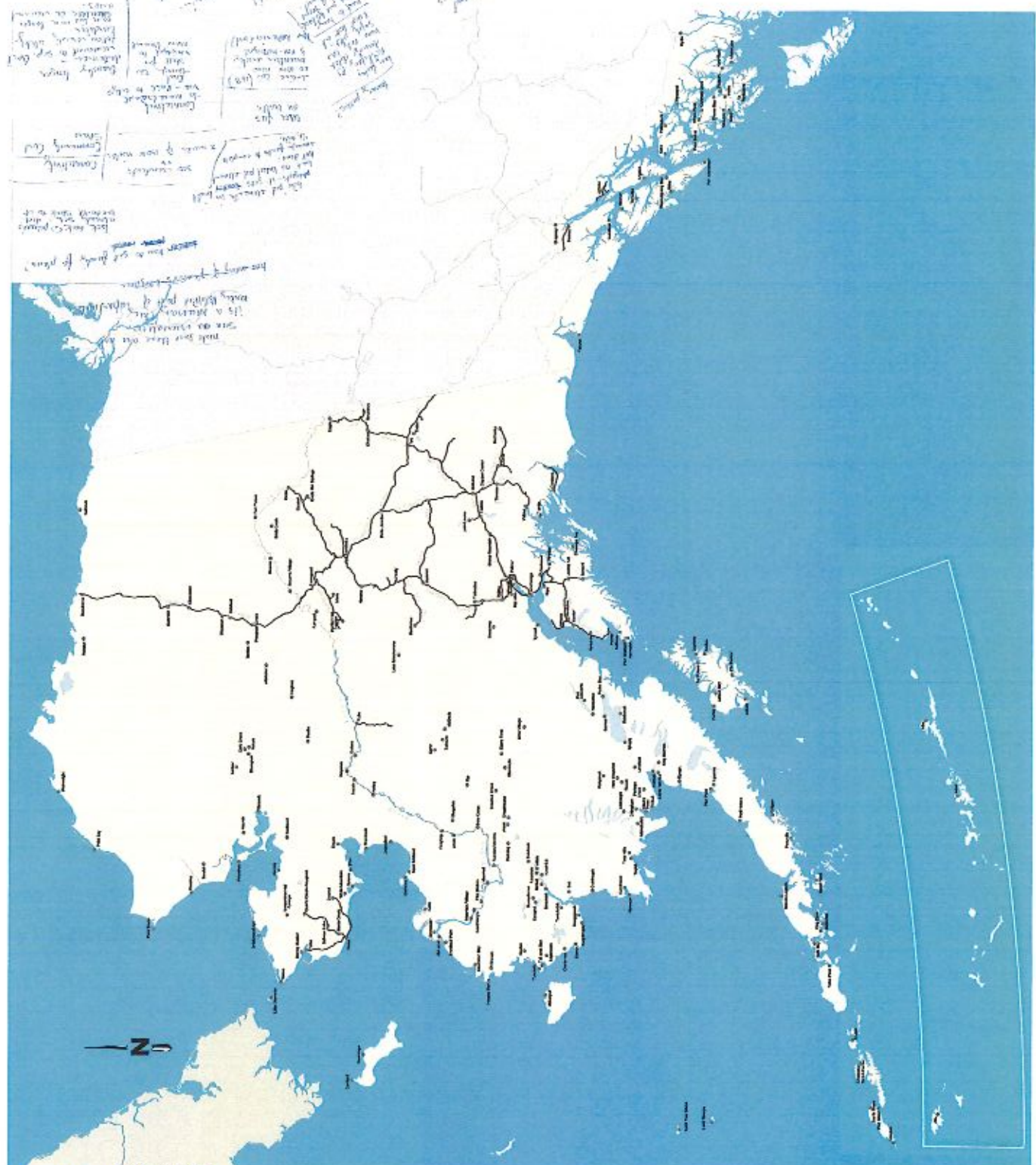
Bike count on all routes - better for non-motorized
- Transit - accessibility - intermodal links - park a ride links
- Planning based street planning not stand at
- Educating the driver

Make provision for disabled people so they don't have to do a road
Spacing between pedestrian signal on light side of road
Improve intersection signal sequencing
Improve awareness of other road users
Highway (Caltrans) - greater cycle awareness
Fire Unions - built into the road (trucks) where bike path
facilities have been started but there are gaps

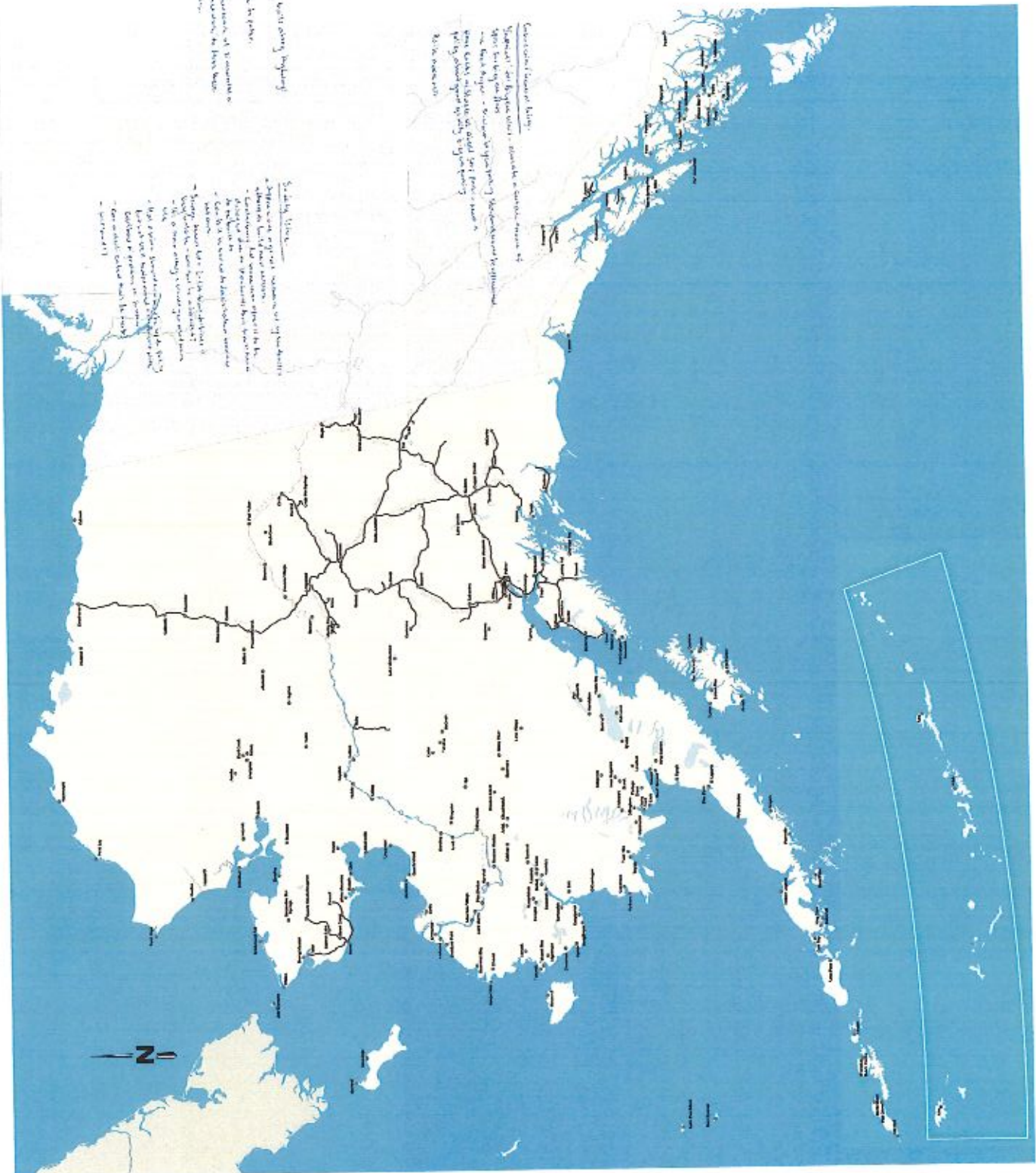
The following is a list of the
 names of the various
 groups of people who
 lived in the area
 of the map. The
 names are listed
 in the order in
 which they were
 first mentioned
 in the text.

The names of the
 various groups of
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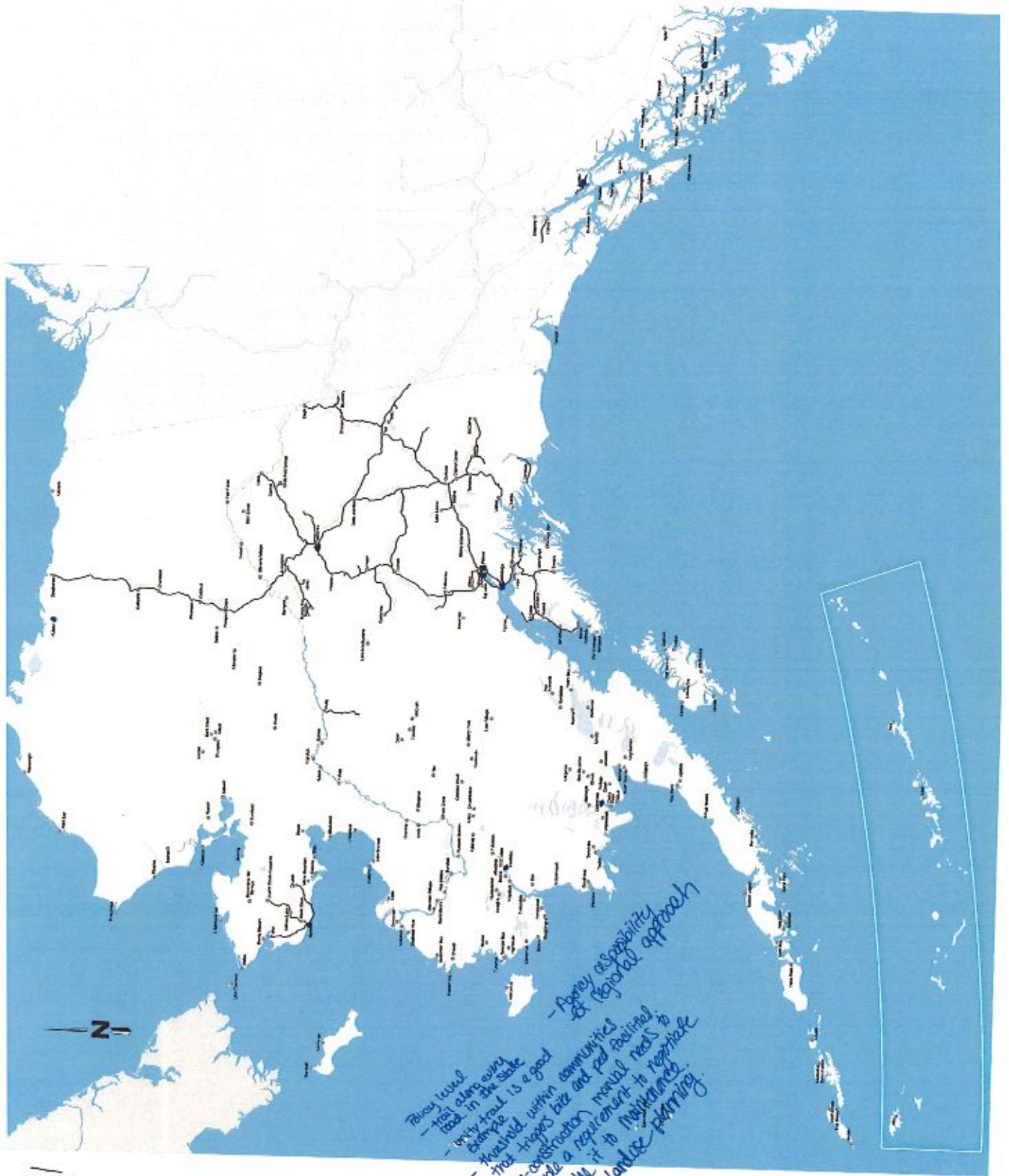
Get map.org Bce map for
 kenai penn.



Government of Britain
 - Westminster is the capital city
 - London is the largest city
 - The British Isles are divided into four countries: England, Scotland, Wales, and Northern Ireland.
 - The British Isles are also divided into counties.

Scottish Gaelic
 - The Scottish Gaelic language is spoken in the Scottish Highlands and Islands.
 - It is a member of the Goidelic branch of the Celtic languages.
 - The Scottish Gaelic language is also spoken in the Scottish Lowlands and in the Scottish Borders.

Government of Ireland
 - Dublin is the capital city
 - The Republic of Ireland is a sovereign state
 - Northern Ireland is a part of the United Kingdom



Water
Facilities/
Policy

- Policy level
- that along every road in the state
- every road is a good
- household within communities
- that traps late and poor facilities
- Pre-construction manual needs to include a requirement to register
- US the it to municipalities
- fit into landscape planning
- Policy consistency of regional approach



COMMENT SHEET – PUBLIC MEETING

Soldotna, AK

Wednesday, November 2, 2016

The State of Alaska Department of Transportation & Public Facilities (DOT&PF), in partnership with DOWL and Alta Planning + Design, are working to create a plan to improve bicycle and pedestrian infrastructure across the state.

The goal of the project is to improve safety, increase accessibility, and promote healthy lifestyles in our communities.

The project team will work with communities across the state through 2018 to hear concerns and better understand community needs in order to develop achievable solutions that will increase access to bicycle and pedestrian facilities and improve safety across Alaska.

We look forward to working with you on this project, please forward this information on to any parties who might be interested in bicycle or pedestrian safety, mobility, and accessibility in your community!

For further information or to sign up for our newsletter, visit our website at: www.akbikeped.com

Please provide your comments on:

- What you would like to see in your community
- How bicycle/pedestrian improvements would affect you

Wonderful presentation. Things explained
very clearly. Thank you

Frances Kelsch

Senior citizens



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EXTEND BIKE TRAILS FROM SOTOI SOLDOTNA TO
STERLING & KEHAI TO CAPTAIN CROOK PARK.
FEDERAL MONIES - BIKE TRAILS.

GREAT TO BE ABLE TO BIKE FROM ONE
END TO THE NEXT.

ALSO LOOK FORWARD TO Seward Highway
TRAILS BEING EXTENDED TO COOPER LANDING
& STERLING.

P.S. WHO IS "GIVING" US THE MONIES.
WALKER SAID WE WERE BACK.

Senior Citizens



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- What you would like to see in your community
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what can we do as Grandparents, w/grand kids
Kids bicycle's? on our Road ways? Grandparents
are always willing to Drive down with on the
* side off the (Road way, with them) Please
recomend, something for this problem? Please, Please
Recomend ~~the~~ something for this problem xxx??
~~Sherry~~ Sherry ~~the~~, Gramma Sherry ~~the~~ |
Help! Help! w/this Problem ???

Senior Citizens Center



COMMENT SHEET – PUBLIC MEETING

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Wednesday, November 2, 2016

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Please provide your comments on:

- What you would like to see in your community
- How bicycle/pedestrian improvements would affect you

100% paved roads, sidewalks everywhere in city limits.
Water + sewer on every city lot.

Love the bicycle paths already in.

(Need bike paths on secondary roads ie I took a
handicapped people liking. We only had bike paths near
major roads Kenai area)



COMMENT SHEET – PUBLIC MEETING

Soldotna, AK
Wednesday, November 2, 2016

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Please provide your comments on:

- What you would like to see in your community
- How bicycle/pedestrian improvements would affect you
- Safety along the highways - kids walk to town along the road.
- Concern about funding plan -
- [enforcement] of speed limit - walker and lost his driver's license. enforcers need a reputation for being more aggressive. Baracudas. increase fines.
- Idiot ride trails which can provide rides and create competition.
- Parental education for kids that ride to bikes - kids need to be supervised.
- Bike & walking paths - more protection.
- mobility use of trails and parkways - intersection and sidewalk access is awkward for mobility with



COMMENT SHEET – PUBLIC MEETING Soldotna, AK Wednesday, November 2, 2016

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Please provide your comments on:

- What you would like to see in your community
- How bicycle/pedestrian improvements would affect you

(parallel, non-motorized)

I'd like to see a local bike network and a regional bike network. I would like including bike infrastructure into all transportation improvements. I am open to these bike networks also serving to build ATV and snowmachine networks. I want bike trails to be useable and safe for children.

Incentives for beautification - ie trees along the bike path.

Path maintenance - gravel along the bike path is a major issue year-round.

Safety for cyclists - cyclist awareness.

- campaign for awareness
- widened shoulders

Improve connections.

Motorized & Non-Motorized don't mix - non-motorized are too vulnerable

- Cultural Shift.

City centers are sprawling - Make it very difficult to walk & bike

Disrupted 'Smart growth' - Need to improve planning & zoning

⇒ State needs a comprehensive overall approach to zoning.

Future revenue - look at mechanisms to gather revenue to fund bike path.

- Ecotourism.

- Capitalize on AK's unique characteristics.

Bikeable Communities for a Statewide Healthy Communities Plan

- local produce

- active transportation.

- proactive healthcare vs reactive healthcare.

- reward & incentives to be part of a "well community"

Bridge gap between people who want to do something (ie Saltash Ski Club) & the government who are facing an uncertain future in terms of funding

- incentivize private contributions.

- look at things that work, & then duplicate them.

**Subject: Statewide Bicycle and Pedestrian Master Plan – Public Meeting****Date: April 17, 2017****Time: 12:00 PM to 2:00 PM****Location: 2022 Ahkovak Street, Bethel, AK**

Meeting Notes

The Alaska Department of Transportation and Public Facilities (DOT&PF) and DOWL conducted a public meeting for the Alaska Statewide Bicycle and Pedestrian Master Plan on Monday, April 17, 2017 at 2022 Ahkovak Street, Utqiagvik, Alaska. The purpose of the meeting was to discuss the project purpose and need, present the project development process and schedule, draft vision goals and objectives, and gather information the public. 5 people attended the meeting in person.

DOWL advertised the meeting in the Arctic Sounder classified section, constant contact email to community members, local governments, community councils, local and state politicians, the DOT&PF Facebook website, and through a Public Service Announcement (PSA) on local radio stations.

The meeting started with a PowerPoint presentation with an overview of the project goals, history, and project area. After the presentation the public engaged in a dialogue with project team members. The public was encouraged to provide feedback to project team members verbally, on written comment forms, or via email at the project website.

The following is a summary of the public questions/comments and project team responses:

Vision

- Consider dust control and other health hazards.
- Visibility of pedestrians and bicyclists is a key issue, owing to long hours of darkness in the winter.
- Education should be a key consideration, starting at elementary school age.

Goal Area 1: Increase Active Transportation Funding in Alaska

- Funding for provision and maintenance of transportation facilities is a key issue.
- The City shares services to leverage skills and connections and reduce costs.

Goal Area 2: Safety

- Snow machines and ATVs frequently conflict with pedestrians.

Goal Area 3: Economic Development

- If more people will walk, then they are more inclined to visit local restaurants/shops and facilities, which can assist to boost the economy.
- The City has a local walking map to encourage visitors to walk.

Goal Area 4: Maintenance/System Preservation

- Heavy equipment is used to “clean” streets by bringing snow into the middle of the road and then hauling it out of town. This also ensures that the road is kept wide for pedestrians, and assists with drainage.

Goal Area 5: Improve Design Standards

- Improved signage is needed to mark where non-motorized transportation facilities are located.

Goal Area 6: Health

- Dust control is a key concern.
- Consider promoting active transportation to the community through initiatives such as “Walking Wednesdays”.

Goal Area 7: Education

- Look at updates to the DMV driver manual to encourage drivers to be respectful to non-motorized road users, drive defensively.
- Educate people on how to use/cross the road safely, particularly in rural communities.
- Teach young people how to use GPS for wayfinding.

Goal Area 8: Connectivity

- Trail marking is important as people often walk between villages.
- LED lighting is a significant concern, as it has reduced the halo effect of villages (and therefore their value for wayfinding).

Subject: Statewide Bicycle and Pedestrian Master Plan – Public Meeting**Date: April 18, 2017****Time: 5:00 PM to 7:00 PM****Location: Raven Landing Center, 1222 Cowles Street, Fairbanks, AK**

Meeting Notes

The Alaska Department of Transportation and Public Facilities (DOT&PF) and DOWL conducted a public meeting for the Alaska Statewide Bicycle and Pedestrian Master Plan on Tuesday, April 18, 2017 at the Raven Landing Center, 1222 Cowles Street, Fairbanks, Utqiagvik, Alaska. The purpose of the meeting was to discuss the project purpose and need, present the project development process and schedule, draft vision goals and objectives, and gather information the public. 26 people attended the meeting in person.

DOWL advertised the meeting in the Fairbanks Daily News-Miner classified section, constant contact email to community members, local governments, community councils, local and state politicians, the DOT&PF Facebook website, and through a Public Service Announcement (PSA) on local radio stations.

The meeting started with a PowerPoint presentation with an overview of the project goals, history, and project area. After the presentation the public engaged in a dialogue with project team members. The public was encouraged to provide feedback to project team members verbally, on written comment forms, or via email at the project website.

The following is a summary of the public questions/comments and project team responses:

Vision

- Non-motorized transportation in winter vs summer – consider seasonal component and whether this is a main form of transportation or whether they are minority users.
- Safety – ability for people to get around in a safe manner.
- Line between motorized and non-motorized is becoming blurred – non-motorized users would prefer not to share with ATVs and snow machines (more of an issue in rural areas).
- Consider using term ‘active transportation’ rather than just bicycle and pedestrian.
- Ensure that the plan provides for vulnerable users.
- Describe what we want the state to look like in the future, including providing more options for people to get to destinations, enhancing connections, prioritizing bicycle and pedestrian facilities.

Goal Area 1: Increase Active Transportation Funding in Alaska

- Could bicycle and pedestrian facilities be tagged on to existing street rehabilitation projects? This should be a key consideration.
- Organizations should work together – understand what projects are coming up.
- Find out data about usage – once this is better known then there is more information to support development of facilities.
- Many opportunities already – most projects in STIP do not specifically call out bicycle and pedestrian projects as part of listed rehabilitation projects – scope needs to be broadened to build more facilities.

Goal Area 2: Safety

- Clearing bike paths/sidewalks in winter time creates safety issues and inhibits use of facilities.
- It's important that drivers know there are other types of users in the road. Currently pedestrians and cyclists are treated as though they are in the way. Need to reinforce that their use is legitimate.
- Alaska is one of the only states that still has a state law that requires that bicyclists must yield to motor vehicles.
- Connectivity – interface between bicycle paths/pedestrian paths and then have to merge into a non-existent shoulder (or broken/gravel/mudpits). Creates inhospitable environment for bicycle/pedestrian users.
- Consider design standards (signal changes, right hand turns) to create a safer environment for bicycles and pedestrians.
- Discuss with legislators about the laws, how they affect the safety of pedestrians and bicyclists. Advocate for changes to the laws to improve safety for pedestrians and bicyclists.

Goal Area 3: Economic Development

- A lot of people will decide where they are going to shop based on where they will be able to get to safely, park and lock up their bike. The plan should recognize that providing active transportation facilities could enhance the economic wellbeing of businesses.

Goal Area 4: Maintenance/System Preservation

- Design standards can enhance maintenance of facilities.
- Consider partnerships with private businesses to enhance maintenance and upkeep. Local communities should be willing to work together to maintain facilities.
- Have great trails, but need some kind of maintenance plan/budget otherwise the trails will become useless. Maintenance needs to be part of the long term plan for a project.
- Funding is a big issue right now, a lot of the maintenance funding is through State of Alaska budget, whereas design, etc., is through FHWA. Need to consider ways to maintain facilities that do not necessarily rely on state funds.

Goal Area 5: Improve Design Standards

- Take existing guidance and tailor it to Alaska specifically. Consider adding design standards to the DOT&PF Pre-Construction Manual. Design standard should have at least a shoulder that a cyclist should go on.
- When construction takes place on bicycle and pedestrian facilities, provide re-routing to keep facilities open.
- Consider road diets – shrinking from 4 lanes to 3 and using additional space to provide bicycle and pedestrian facilities. Generally most of the cost is associated with ROW acquisition, so this saves that cost. Also reduces the speed associated with the provision of facilities.
- Problem with providing a bike lane is unless a barrier is put up then there is very little respect for the bicycle facility.
- Rural communities – no control at intersections and a lot of people don't drive. As life in village changes and motorized transportation is becoming more dominant, communities are working to address these issues. Need to consider design so there is roadway for vehicles, space for ATVs, dirt bikes, etc, and other non-motorized transportation.
- ATVs – solutions simple, just isn't going to be popular – need to make them get a license for ATV vehicles. Get them onto the roadways as that is where they belong.
- Bicyclists need to be aware of others as well – recreational bicyclists are not paying attention.

Goal Area 6: Health

- Dust control/asthma a big issue in rural communities.
- Majority of attendees thought health was a valuable goal area, but noted the difficulties in measuring the health impacts of facilities.
- Consider partnerships to deliver health outcomes.
- Promote commuting year-round by bike to reduce air emissions.

Goal Area 7: Education

- Alaska seems to be behind other places in terms of attitudes toward active transportation. Need to raise awareness of cycling and walking, and that non-motorized transportation users also use cars as well.
- Consider school programs to educate on bicycle maintenance, safety on the road.
- Work with companies in town to spread the word on active transportation and its benefits. Consider working with Chambers of Commerce to reach businesses and get their support.

Goal Area 8: Connectivity

- Prioritize projects that enhance connectivity.
- Consider active transportation design standards to enhance connections.
- Consider connections to transit, and promote that most have bike racks available.

- Support the development of a community oriented Bicycle Plan to share connection secrets, safe ways to get around using social media/app.



COMMENT SHEET – PUBLIC MEETING

Fairbanks, AK

Tuesday, April 18, 2017

The State of Alaska Department of Transportation & Public Facilities (DOT&PF), in partnership with DOWL and Alta Planning + Design, are working to create a Master Plan to improve bicycle and pedestrian infrastructure across the state.

The goal of the Master Plan project is to improve safety, increase accessibility, and promote healthy lifestyles in Alaska's communities.

The project team will work with communities across the state through 2018 to hear concerns and better understand community needs in order to develop achievable solutions that will increase access to bicycle and pedestrian facilities and improve safety across Alaska.

We look forward to working with you on this project, please forward this information on to any parties who might be interested in bicycle or pedestrian safety, mobility, and accessibility in your community!

For further information or to sign up for our newsletter, visit our website at: www.akbikeped.com.

Please provide your comments on:

- What you would like to see in your community?
- How bicycle/pedestrian improvements would affect you?

I have ~30 yrs. bike commuting in Fairbanks.

The most important issues to me are route maintenance (esp. in winter) and safety/avoiding conflict with motorized traffic.

Improvements in awareness & education of vehicle laws relative to bicycles and any maintenance improvements would be welcome.

Local efforts in route mapping would also help.



Subject: Statewide Bicycle and Pedestrian Master Plan – Public Meeting

Date: April 19, 2017

Time: 5:00 PM to 7:00 PM

Location: Nome Mini-Convention Center, 102 River Street, Nome, AK

Meeting Notes

The Alaska Department of Transportation and Public Facilities (DOT&PF) and DOWL conducted a public meeting for the Alaska Statewide Bicycle and Pedestrian Master Plan on Wednesday, April 19, 2017 at the Nome Mini-Convention Center, 102 River Street, Nome, Alaska. The purpose of the meeting was to discuss the project purpose and need, present the project development process and schedule, draft vision goals and objectives, and gather information the public. 6 people attended the meeting in person.

DOWL advertised the meeting in the Nome Nugget classified section, constant contact email to community members, local governments, community councils, local and state politicians, the DOT&PF Facebook website, and through a Public Service Announcement (PSA) on local radio stations.

The meeting started with a PowerPoint presentation with an overview of the project goals, history, and project area. After the presentation the public engaged in a dialogue with project team members. The public was encouraged to provide feedback to project team members verbally, on written comment forms, or via email at the project website.

The following is a summary of the public questions/comments and project team responses:

Vision

- Focus should be on safety and health.
- Improved access and connections is important – Nome is a hub town, but it is growing with satellite communities and it needs to be safe for children to walk in any direction.

Goal Area 1: Increase Active Transportation Funding in Alaska

- Most funding appears to be associated with Airports in rural Alaska.
- There was encouragement to consider TAP funding to assist with paying for circular transportation routes.
- Add an objective about internal coordination within DOT&PF and between other transportation organizations.

Goal Area 2: Safety

- Creating a designated place for pedestrians and bicycles should be an ultimate goal, either next to roads or separated from roads.
- Consider animals (musk ox) and their impact on active transportation facilities.
- Consider nature of facilities (maintenance, construction standards) as they can impact on safety.

Goal Area 3: Economic Development

- Recreation, health and tourism are key elements for active transportation.
- Cruise ships and their tourists have a significant impact on small towns like Nome – need to ensure that active transportation facilities are provided for them.
- The Iditarod has a significant impact on Nome roads and brings a lot of visitors to the town. Need to provide facilities for tourists walking and bicycling as there are limited cars available for hire.

Goal Area 4: Maintenance/System Preservation

- Consider partnerships/volunteering, such as prison, schools, halfway house corporation as a form of community service and doing something positive for the community.
- Tribal organization could be potential partners to support maintenance – could have inter-agency agreements in place.

Goal Area 5: Improve Design Standards

- Need to draw from the best of standards available and adapt them to be Alaska-specific and right for local communities.
- Recognize the snow machines and ATVs are major modes of transportation.

Goal Area 6: Health

- Dust is a significant issue in rural communities – respiratory disease is a major concern.
- Giving people a place to be active encourages physical activity.
- Consider active transportation events such as walk/bike to school/work day, Health Fair, activities being undertaken in associated with Hospital to encourage physical activity.

Goal Area 8: Connectivity

- Connections to schools a significant consideration, as well as winter trail markings.
- Connections to transit should also be a significant consideration.

**Subject: Statewide Bicycle and Pedestrian Master Plan – Public Meeting****Date: April 24, 2017****Time: 5:00 PM to 7:00 PM****Location: Yupiit Piciryait Cultural Center, Bethel, AK**

Meeting Notes

The Alaska Department of Transportation and Public Facilities (DOT&PF) and DOWL conducted a public meeting for the Alaska Statewide Bicycle and Pedestrian Master Plan on Tuesday, April 24, 2017 at the Yupiit Piciryait Cultural Center in Bethel, Alaska. The purpose of the meeting was to discuss the project purpose and need, present the project development process and schedule, draft vision goals and objectives, and gather information the public. 31 people attended the meeting in person.

DOWL advertised the meeting in the KUAC / The Delta Discover classified section, constant contact email to community members, local governments, community councils, local and state politicians, the DOT&PF Facebook website, and through a Public Service Announcement (PSA) on local radio stations.

The meeting started with a PowerPoint presentation with an overview of the project goals, history, and project area. After the presentation the public engaged in a dialogue with project team members. The public was encouraged to provide feedback to project team members verbally, on written comment forms, or via email at the project website.

The following is a summary of the public questions/comments and project team responses:

Vision

- Include key works such as dust free, safe, scenic, clean.

Goal Area 1: Increase Active Transportation Funding in Alaska

- Consider increasing sales taxes
- Work with leaders in transportation development – DOT, City of Bethel, YKHC – coordinate and identify champions/key points of contact for partnerships
- Work with the legislature to amend evaluation criteria so it is more friendly to rural Alaska

Goal Area 2: Safety

- Consider educating on safe behaviors (i.e. crossing at signals)
- Develop a single database to collect safety data

- Focus on the roads being drivable as cars just go straight into the bike paths even if riders are there to avoid the dips in the road. Maintaining the roads will avoid this.
- Consider creating curbs on major highways to separate bicycle and pedestrian facilities, especially as frost heaves occur and dips form.

Goal Area 3: Economic Development

- Provide bike racks at businesses to encourage active transportation users.
- Safe transportation on the river during winter – being able to travel back and forth to the villages is a significant economic development opportunity (Folks walk on the river in the winter, and fat tire bike, ski)
- Consider bike share/bike lock share schemes.
- Create a local regional construction crew so they are working on local projects, and keeping the income for local families.

Goal Area 4: Maintenance/System Preservation

- Improve dust control on the DOT&PF highway.
- Rather than trying to build a whole new highway at once, consider smoothing small sections and repaving so the whole highway will be improved over time.
- Educate the community so they can minimize damage, how everyone can pitch in to fix the small things before they become big things. Also understanding the cost of maintenance facilities, watering trucks.

Goal Area 5: Improve Design Standards

- Chief Eddie Hoffman Highway is in poor condition with frost heaves. Consider research projects through TRB to better understand what is working and what isn't so there is a better idea of what standards should be applied to rural Alaska. (DOT&PF is connected here, also connect through asset management).
- Effect of studded tires on roads should be considered as well.
- Consider accident prevention mechanisms such as guardrail in high accident locations.

Goal Area 6: Health

- Dust control is a key issue in rural Alaska. Connect with the hospital to understand the health impact of dust. YKHC should be able to help support monitoring the impact of dust. There tend to be more admissions on windy days in Bethel.
- Teach kids how to ride bikes – once a year, so as to reduce injuries.

Goal Area 7: Education

- Consider working with physical education teachers to teach kids how to ride bikes over the summer months.
- Re-establish activities such as bike rodeos with bike helmets.

- Snow machine and ATV driving classes – to prevent people from driving on the wrong side of the road, basic hand signals, etc. Consider running it through schools.

Goal Area 8: Connectivity

- Have a goal to extend the bicycle trails all throughout the state highway system.
- Use Facebook to bring the communities together to share active transportation opportunities. Would be nice to know what people are doing throughout the State, as well as locally.
- Good to get a drawing of where road should be located if the region was to become connected. This would enable us to see the future, and how the roads could result in cost savings through provision of infrastructure (such as bypass mail – wouldn't be needed if there was a road network). Also consider community clustering for the provision of services. Look ten years and beyond, sharing of electrical lines, etc.

COMMENT SHEET – PUBLIC MEETING

Bethel, AK

Monday, April 24, 2017

The State of Alaska Department of Transportation & Public Facilities (DOT&PF), in partnership with DOWL and Alta Planning + Design, are working to create a Master Plan to improve bicycle and pedestrian infrastructure across the state.

The goal of the Master Plan project is to improve safety, increase accessibility, and promote healthy lifestyles in Alaska's communities.

The project team will work with communities across the state through 2018 to hear concerns and better understand community needs in order to develop achievable solutions that will increase access to bicycle and pedestrian facilities and improve safety across Alaska.

We look forward to working with you on this project, please forward this information on to any parties who might be interested in bicycle or pedestrian safety, mobility, and accessibility in your community!

For further information or to sign up for our newsletter, visit our website at: www.akbikeped.com.

Please provide your comments on:

- What you would like to see in your community?
- How bicycle/pedestrian improvements would affect you?

Safe Ped + bike path on Akakeek street + ptarmigan street.

There are very limited safe paths for peds + bikers in the community. There are dust concerns which discourage walking/biking. The paths that are here do not provide safe paths to common destinations ie: grocery store, hospital, schools.

Many of the main roads in the community are unpaved. Dust control/mitigation is a priority to encourage utilization of paths.



COMMENT SHEET – PUBLIC MEETING

Bethel, AK

Monday, April 24, 2017

The State of Alaska Department of Transportation & Public Facilities (DOT&PF), in partnership with DOWL and Alta Planning + Design, are working to create a Master Plan to improve bicycle and pedestrian infrastructure across the state.

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For further information or to sign up for our newsletter, visit our website at: www.akbikeped.com.

Please provide your comments on:

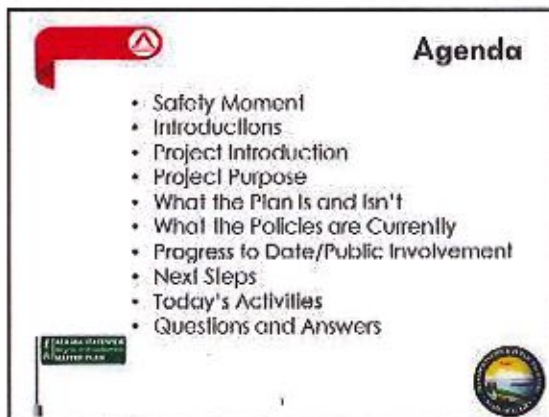
- What you would like to see in your community?
- How bicycle/pedestrian improvements would affect you?

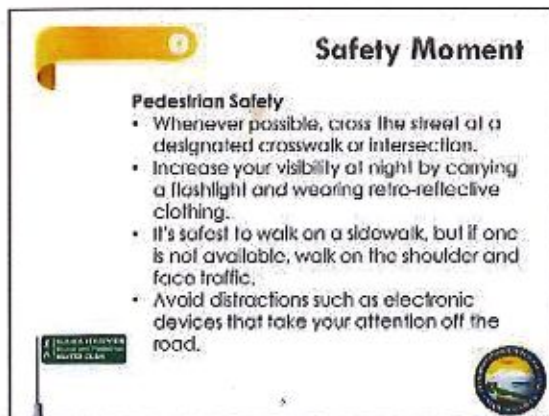
extend bike path (I love biking but often get cluttered)
more street lights
water, the highways ←

Ashton T Jensen

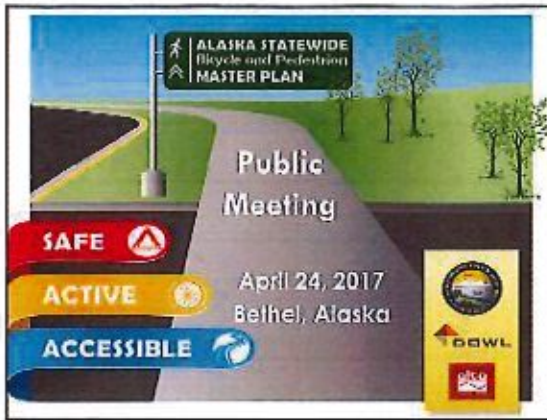
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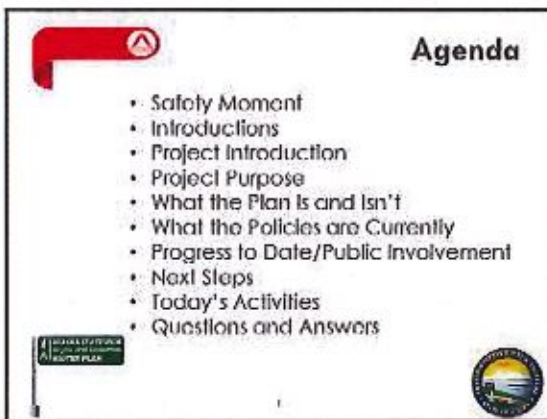


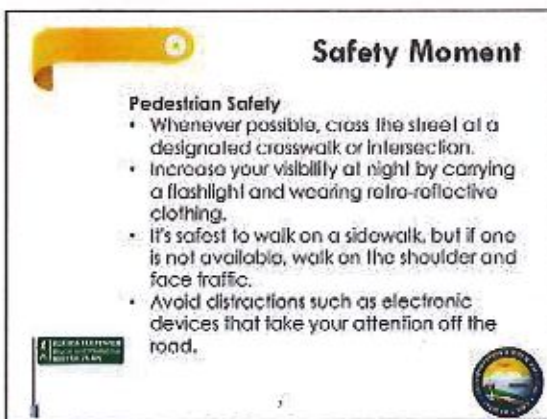


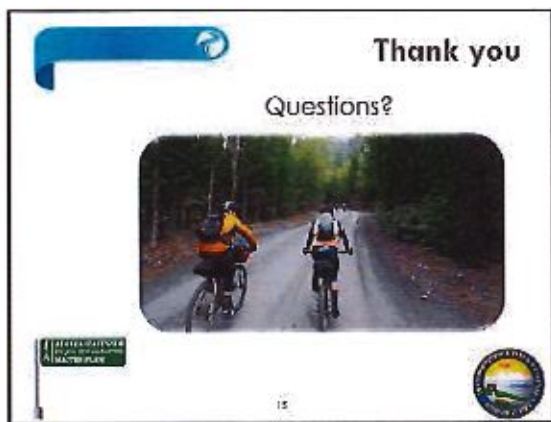


ideas way back
↓
1









1 More short cuts
to walk through.
make more roads
to places so you
can drive more
~~to~~ see places.



COMMENT SHEET - PUBLIC MEETING

Juneau, AK

Tuesday, March 27, 2018

Please provide your comments on:

- Vision, Goals and Objectives
- What would you like to see included in the Master Plan?

Connectivity is key in Juneau: esp ferry terminal to downtown
 focus on bottleneck points: areas of difficulty due to heavy traffic or
 poor facilities: in Juneau - Lemon Creek - and path connecting
 Hospital Drive with S Glacier Highway
 for safety purposes, could some education efforts (PSAs?) about
 riding on right, walking on left. Sharing the ^{road} ~~lane~~
 is a seldom understood concept

To receive project information, provide your name and an e-mail or postal address:

Name: Dave Ringle

Address: _____

E-mail: dvringle@gmail.com

Telephone: 907-321-7026

Website: www.akbikeped.com

To submit comments: E-mail akbikeped@dowl.com



COMMENT SHEET - PUBLIC MEETING

Juneau, AK

Tuesday, March 27, 2018

Please provide your comments on:

- Vision, Goals and Objectives
- What would you like to see included in the Master Plan?

Alaska Marine Highway is our road between towns in SE Alaska, as well as a route into and out of SE Alaska -- to the lower 48 or the northern road system. Much could be done to make it more bike friendly. Bike fees are high. There is often no safe & secure place for bikes on the ferry deck, staff is not helpful in accomodating bikes. Tourists travelling by bicycle need better signage into town. It is sad to say that it costs more to put a bike on the ferry to Bellingham than it does to fly it.

mud & water! often an impediment to walking along roads where pedestrians are sprayed from head to toe

would be great to encourage & help businesses to install bike racks.

To receive project information, provide your name and an e-mail or postal address:

Name: Stephanie Hoag
Address: _____
E-mail: hoags@gci.net
Telephone: _____



COMMENT SHEET - PUBLIC MEETING

Juneau, AK

Tuesday, March 27, 2018

Please provide your comments on:

- Vision, Goals and Objectives
- What would you like to see included in the Master Plan?

To include : a map for each community showing existing bicycle routes

Clarify which roads are impacted by the plan
Does the plan apply to city / borough roads / trails as well as state maintained roads?

To receive project information, provide your name and an e-mail or postal address:

Name: _____

Address: _____

E-mail: _____

Telephone: _____

Appendix B

Health Analysis Methodology
and Results





The Joseph Vance Building
1402 Third Avenue, Suite 206
Seattle, WA 98101
(206) 735-7466

To: Alaska Department of Transportation & Public Facilities

From: Alta Planning + Design

Date: July 21, 2017

Re: Alaska Statewide Bicycle and Pedestrian Masterplan | Regional Health Profiles and Health Logic Model (Task 5D)

Regional Health Analysis

Introduction

This analysis identifies statewide pedestrian and bicycle crash statistics, as well as chronic health disparities across ten different geographic regions in the state. The findings from the analysis will be used to make the health case for statewide recommendations and establishing priorities for where to make active transportation infrastructure and programmatic investments. The analysis includes a background of the factors that shape human and community health; the benchmarking methodology used for the regional health analysis; findings from the analysis; and an explanation of how active transportation can have a positive impact on chronic disease indicators.

Why health is relevant to the Alaska State Bike and Pedestrian Plan

As part of the Statewide Bicycle and Pedestrian Plan, the Alaska Department of Transportation and Public Facilities (DOT&PF) is taking important and deliberate steps to plan for a healthier Alaska. Through the explicit recognition that active transportation has a considerable impact on individual and community health and wellness, DOT&PF is working to reduce rates of chronic disease and preventable injuries through the development and promotion of a safe and connected statewide active transportation network.

In the United States, chronic disease is the leading cause of death and disability, associated with approximately 70% of deaths each year.ⁱ In Alaska, six out of ten of the leading causes of death are due to chronic conditions, of which Alaska Native people experience disproportionately high rates.ⁱⁱ It is well understood that increasing physical activity levels is one of the most effective ways to reduce the risk of chronic diseases and related risk factors. Specifically, physical activity is associated with reductions in the risk of overweight/obesity, high blood pressure, abnormal cholesterol, diabetes, coronary heart disease, some cancers, depression, and all-cause mortality, among others.^{iii, iv, v, vi, vii, viii, ix}

In order to best realize the benefits that physical activity can have for all Alaskans, local, regional and statewide active transportation infrastructure must be designed in consideration of the unique opportunities and constraints of the geography, weather, and culture of the state, to meet a high level of safety and comfort to encourage walking and biking.

What Shapes Health

Determinants of health are factors that contribute to a person's current state of health. These determinants include clinical care, biology and genetics, social and economic factors, health behaviors, and the physical environment.^x Scientists do not know the precise contribution of each determinant, but health behaviors, the physical environment, and social and economic factors account for approximately 60-75% of the health factors that contribute to shaping health outcomes, which are all factors that can be impacted by physical activity.^{xi}

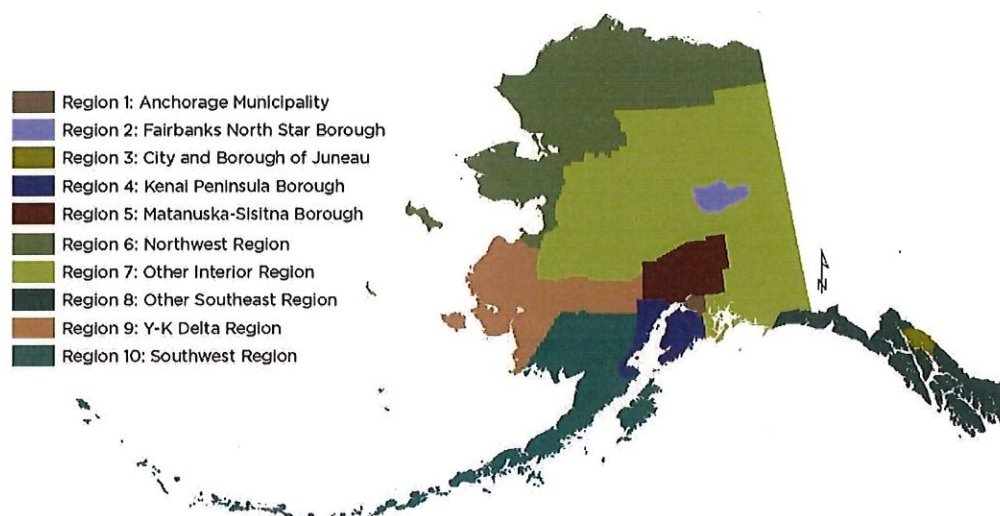
Physical activity is an important way to reduce the risk of overweight/obesity, high blood pressure, diabetes, stroke, heart disease, certain types of cancers, depression, and anxiety.^{xii, xiii, xiv} Communities and local areas designed to promote safe and connected active transportation and recreational opportunities, are positively associated with greater levels of resident physical activity and consequently, with improved health.^{xv, xvi}

The following analysis indicates there are high rates of poor health for different health indicators throughout Alaska. Most concerning is that there are higher rates of obesity and overweight, coronary heart disease, breast cancer, depression, and unintentional injury within various regions in Alaska compared with average statewide and national rates.

Benchmarking Methodology

The benchmarking process used in this analysis compared health indicators for ten behavioral health regions in Alaska with those from the state and nation. These "behavioral health regions" were defined by the Alaska Department of Health and Human Services as areas primed for behavioral health systems assessment, as each contain at least a population of 20,000 people in compliance with HIPPA Privacy Rules. The ten behavioral health regions are shown in Figure 1.^{xvii}

Figure 1. Alaska Behavioral Health Regions



This analysis mapped the geographic distribution of specific chronic diseases within the state. As a starting point, a cursory analysis was performed of the health conditions within each of the ten behavioral health regions and found evidence of several health concerns. Five health indicators in particular (**obesity prevalence, overweight prevalence, physical activity, poverty, unintentional injury**) were selected as a focus for this analysis due to their inclusion in the Healthy Alaskans 2020 (HA2020) initiative target goals, their rates throughout the state, and the potential impact that increased physical activity and enhanced bicycle and pedestrian facilities can have on improving these specific health outcomes.

The analysis was conducted using 2015 data from the Alaska Department of Health and Human Services, U.S. Department of Transportation, National Cancer Institute, and U.S. Census Bureau. Unintentional injury data was collected from 2002 through 2011 from the Alaska Native Tribal Health Consortium. Using this data, the state average prevalence rate was used for each health indicator and graphs were generated that visually illustrate the distribution of the average, above average, and below average prevalence rates for each health indicator in each region. The analysis also included a comparative analysis for each indicator at the state and national level.

While this analysis provides a snapshot of Alaska's health status, it is recommended that additional social demographic data, collision data, and travel behavior be evaluated to provide a more complete picture of the overall state of health throughout the state. Additionally, supplemental research and geographic mapping of social demographic data, such as age, race, income, and education, is recommended to further understand the geographic correlations between social demographics and health outcome measures.

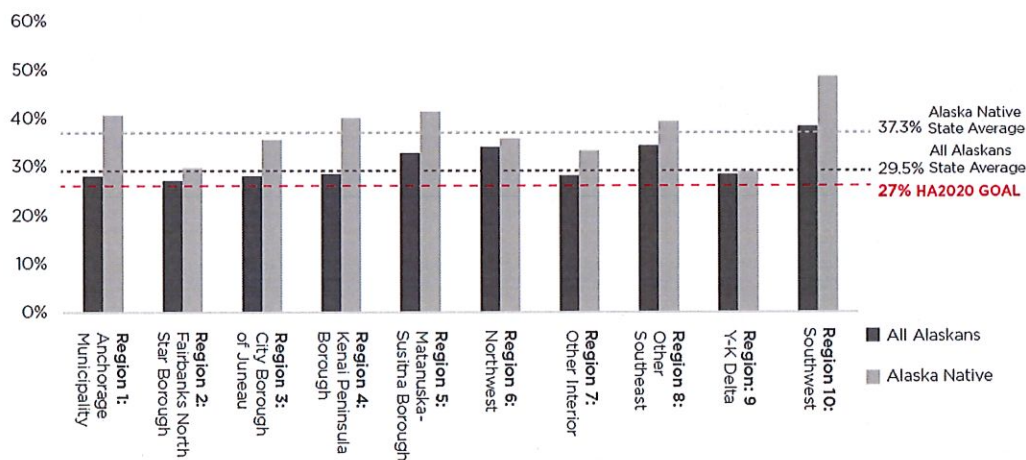
Health Indicator Analysis – Healthy Alaskan 2020 Indicators

In 2012, the Alaska Department of Health and Social Services and the Alaska Native Tribal Health Consortium partnered to develop Healthy Alaskans 2020 (HA2020), a statewide collaborative initiative aimed at improving the health of all Alaskans. As part of this statewide initiative, 25 health indicators were identified and targets were applied to each indicator to reach by 2020.^{xviii} The following health indicators analyzed are in support of the Healthy Alaskans 2020 goals, and were selected due to the considerable impact that walking and biking has on the reduction of such chronic conditions.

Obesity Prevalence

Obesity is a nationwide epidemic affecting over one third of the U.S. adult population and approximately one fifth of U.S. children (ages 2-19).^{xix,xx} Obesity impacts individuals physically, emotionally and socially, and is associated with a number of serious chronic illnesses including high blood pressure, high cholesterol, stroke, diabetes, asthma, heart disease, and certain types of cancer.^{xxi,xxii,xxiii} Of the ten leading causes of death in the United States, obesity is linked to seven of these conditions.^{xxiv}

Obesity Prevalence



All Alaskans

The HA2020 goal for the rate of obesity prevalence in adults, age 18 and over, in Alaska is 27 percent.^{xxv} As of 2015, every behavioral health region in Alaska, for all Alaskans, had an obesity rate higher than the HA2020 goal. The Southwest Region, at 38.3 percent, was the region with the highest obesity prevalence rate, followed by the Northwest Region (34 percent), Southeast Region (34.3 percent), and Matanuska Susitna Borough (32.8 percent). The Fairbanks North Star Borough reported the lowest rate of obesity in 2015, at 27.1 percent, followed by the Anchorage Municipality and the City and Borough of Juneau (each with rates at 28 percent). Although these rates are still above the HA2020 target, they are less than the state and national average rates of obesity of 29.5 percent and 27.5 percent respectively.^{xxvi}

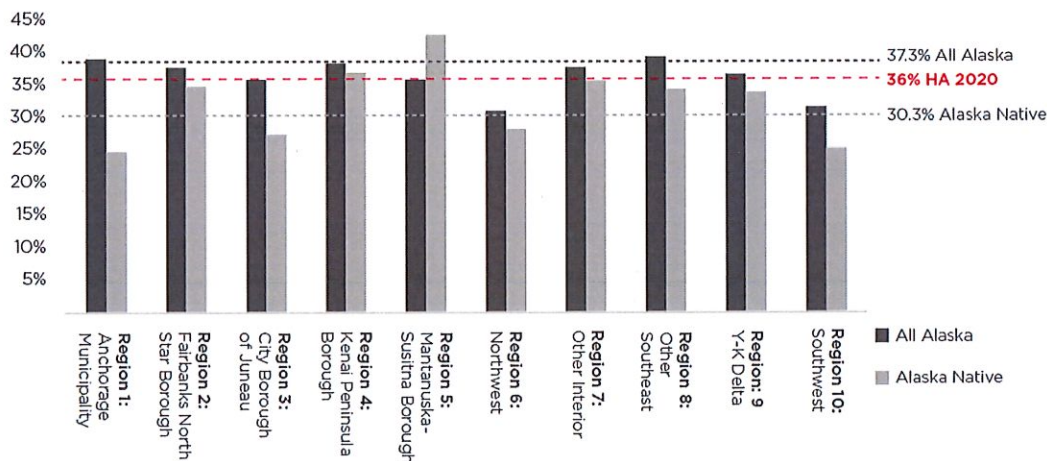
Alaska Native

Within the Alaska Native population, there are five behavioral health regions with greater reported rates of obesity than the HA2020 goal: the Anchorage Municipality, Kenai Peninsula Borough, Matanuska-Susitna Borough, Southeast Region, and Southwest Region. Of these regions, the Southwest Region experiences the highest rate of obesity within the state at almost 50 percent of the population.^{xxvii}

Active transportation presents an important opportunity to begin to reduce the incidence of obesity in every region and improve overall health for all Alaskans. Active transportation allows Alaskans to incorporate physical activity into their daily routines and is associated with greater rates of walking and cycling, physical activity, and lower rates of obesity.^{xxviii} For example, evidence indicates that for every 0.62 mile walked per day, there is an associated five percent reduction in the likelihood of obesity.^{xxix}

Overweight prevalence

Overweight Prevalence



All Alaskans

The HA2020 goal for the rate of overweight prevalence in adults, age 18 and over, throughout the state is 36 percent by 2020.^{xxx} As of 2015, more than half of the boroughs and regions within the state of Alaska reported rates higher than 36 percent. Specifically, the Southeast Region experienced 39.1 percent overweight prevalence; the Anchorage Municipality, 38.8 percent; the Kenai Peninsula Borough, 38.1 percent; the Other Interior Region, 37.5 percent; the Fairbanks North Star Borough, 37.5 percent; and the Yukon-Delta Region, 36.4 percent. In comparison to the state and national averages for overweight prevalence, 37.3 percent and 35.8 percent, respectively, all of the regions previously mentioned exceeded these rates with the exception of the Yukon-Delta Region, which falls in between the state and national average. The portion of Alaska with the lowest rate of the population overweight was the Northwest Region at 30.8 percent. This indicates that, for the entire state, approximately one in three adults is overweight regardless of geographic location.^{xxxi}

Alaska Native

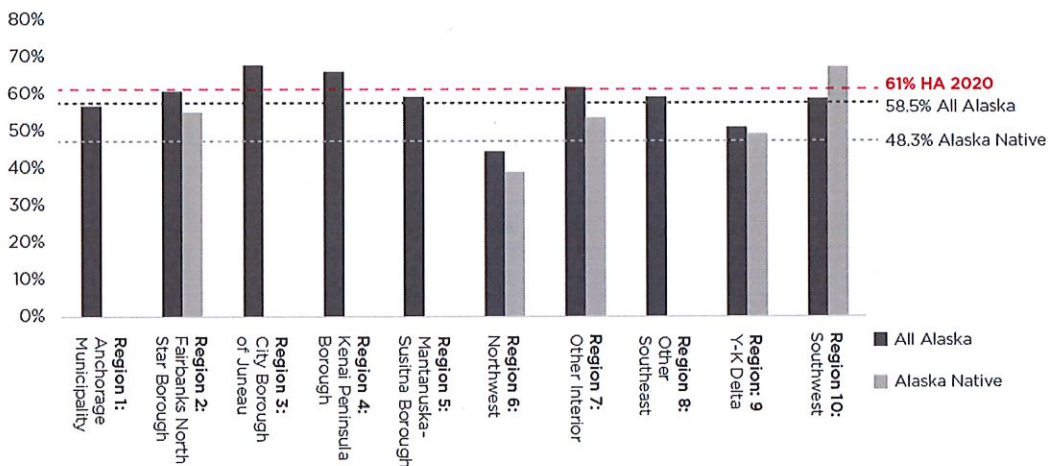
Within the Alaskan Native population, only two of the ten behavioral health regions reported rates of overweight greater than the HA2020 goal in 2015. The Matanuska-Susitna Borough and the Kenai Peninsula Borough each had overweight prevalence rates of 42.5 percent and 36.7 percent, respectively. In contrast to obesity rates throughout the state, overweight prevalence in the Alaska Native population was better than the state and national averages in every region in 2015, with the exception of the two previously mentioned; a stark difference in comparison to the rates for all Alaskans.^{xxxii}

Over two thirds of all adults in Alaska, as well as Alaska Native residents, are both overweight and obese. This represents a significant portion of the state population that are at risk of developing high blood pressure, high cholesterol, stroke, diabetes, heart disease, certain types of cancer, among other chronic illnesses. Children who are overweight are also more likely to become obese as adults. Walkable and bikeable communities can mitigate these impacts by supporting safe options for daily physical activity and healthy behaviors that lead to reductions in the incidence of overweight and obesity in residents. For example, overweight adolescents who are able to ride their bikes three to four times a week are 85 percent more likely to fall within a normal weight range as adults.^{xxxiii}

Physical activity

Regular physical activity is one of the most important ways to maintain overall health and wellness. The U.S. Surgeon General recommends that all adults engage in at least 150 minutes of moderate to vigorous aerobic activity per week. The HA2020 goal for physical activity is to have 61 percent of the state population, age 18 and over, reporting 150 total minutes per week of moderate or vigorous physical activity.^{xxxiv}

Physical Activity



(Where no data is shown, data was unavailable)

All Alaskans

Currently, in Alaska, only three regions meet the HA2020 goal: the City and Borough of Juneau (67.4 percent), the Kenai Peninsula Borough (65.7 percent), and the Other Interior Region (61.5 percent). However, all but four regions have higher rates of physical activity than both the state average (58.5 percent) and national average (51 percent).^{xxxv}

Alaska Native

Within the Alaska Native population, four regions have suppressed data (i.e., unavailable data) – the City and Borough of Juneau, the Kenai Peninsula Borough, the Matanuska-Susitna Borough, and the Southeast Region – and thus physical activity rates are not provided. However, of the rates that are available, the Southwest Region reported the highest rate of physical activity (66.9 percent); higher than the HA2020 goal (61 percent). Whereas the Yukon-Delta Region and Northwest Region had particularly low rates of physical activity, 48.9 percent and 38.70 percent respectively.^{xxxvi}

The health benefits of greater physical activity, especially walking and biking, are manifold and include significant reductions in the risk of being overweight/obese and developing numerous chronic physical and mental conditions such as heart disease, high blood pressure, diabetes, stroke, certain types of cancers, depression, and anxiety.^{xxxvii,}

^{xxxviii, xxxix} Studies have shown that physical activity also has numerous cognitive benefits including enhanced creativity, improved memory, and better cognitive performance.^{xi, xli, xlii}

Active transportation allows individuals the opportunity to integrate physical activity into their daily routines, which has proven effective in increasing physical activity for commuting, but also may lead to behavior change when traveling for other purposes. For instance, evidence has shown that residents of walkable communities are twice as likely to meet physical activity guidelines than those who do not live in walkable areas.^{xliii} Adolescents who bike or walk to school are 30 percent more likely to bike or walk to other locations in their neighborhoods.^{xliiv} Research has also found that walkable communities lead to increased physical activity as well as increased social interaction and cohesion.^{xliv}

Unintentional Injury

Unintentional injury is the third leading cause of death in the state of Alaska, with the Alaska Native population experiencing a disproportionate rate of unintentional injury mortality.^{xlvi, xlvii} In particular, falling is one of the leading causes of unintentional injury for both Alaskan residents and Alaska Natives, and is inclusive of slipping, tripping, and falling due to ice and snow, among other causes.^{xlviii, xlix} Also significant, is unintentional injury deaths from ATV and off-road vehicles, especially in more remote parts of the state for both Alaskan residents and Alaska Natives.^{i, ii} Improved walking and bicycling facilities have the potential to have a marked impact on reducing unintentional injury from falling and ATV and off-road vehicle accidents, improving resident health and safety throughout the state.

All Alaskans

Every census area and borough with reported unintentional injury mortality data in Alaska had prevalence rates higher than the national average. Three census areas and boroughs (Dillingham Census Area, Lake and Peninsula Borough, and Yukon-Koyukuk Census Area), representative of the Other Interior and the Southwest regions, have particularly high rates of unintentional injury in comparison to the state and national average. Specifically, each region had a reported unintentional injury mortality rate of 153, 160.2, and 146.3 injuries per 100,000 population, respectively, in comparison to the state average of 52.4 injuries and the national average of 43.2 injuries per 100,000 population.^{lii}

Alaska Native

The Alaska Native population experiences a disproportionate rate of unintentional injuries. For comparison, while the national average for unintentional injury mortality is 43.2 injury deaths per 100,000 population and the state average is 52.4 injury deaths per 100,000 population, the *average* for the Alaska Native population in 2015 was 130.4 injury deaths per 100,000 population.^{liii} According to the Alaska Native Tribal Health Consortium's Alaska Injury Atlas, the leading causes of unintentional injury hospitalizations in the Alaska Native population between 2002 and 2011 were falls, at 37.6 percent, followed by suicide attempts (23.7 percent) and motor vehicle collisions (10.8 percent).^{liv} In all but two regions, falls were the leading cause of hospitalization for unintentional injury among Alaskan Natives (Figure 2).^{lv}

According to the Alaska Native Tribal Health Consortium's Alaska Injury Atlas, from 2002-2011, off-road vehicle injury deaths, inclusive of persons on the outside of the off-road vehicle who are injured, was the second leading cause of unintentional injury death for Alaska Natives in the Arctic Slope region, the third leading cause in the Northwest Arctic and Yukon-Kuskokwim regions, and the fourth leading cause in Bristol Bay (Figure 3).^{lvi, lvii*} For unintentional injury hospitalizations of Alaska Natives, ATV accidents, inclusive of those involving bicyclists and pedestrians, were the second leading cause of unintentional injury hospitalizations in Bristol Bay; the third leading cause in the Aleutians & Pribilofs; the fourth lead cause in the Arctic Slope, Kodiak, and Norton Sound; and the fifth leading cause in the Kenai Peninsula, Northwest Arctic, and Yukon-Kuskokwim.^{lviii, lix*} Snow machine accidents also ranked within the top six leading causes of unintentional injury hospitalization for Alaska Natives for many regions during this time period and represent a point of concern (Figure 2).^{lx}

Improving safe and accessible walking and bicycling infrastructure has the potential to derive a considerable impact on reducing injury and hospitalizations in the Alaska Native population, as well as the Alaskan adult population as a whole. According to a study of pedestrians in Sweden, a climate similar to that of Alaska, pedestrian unintentional injuries tended to increase in the winter due to slippery conditions related to snow and ice.^{lxi} In an effort to reduce the incidence of falls in Alaska, it is recommended to examine maintenance strategies to reduce slipping on ice, developing education programs about preventing falls on ice, and making recommendations about lighting requirements. Improved, as well as dedicated bicycle and pedestrian facilities removed from motor

* Note: Regions for unintentional injuries differ from the ten behavioral health regions used throughout the remainder of the analysis. Regions for unintentional injuries referred to in this section can be found in the [2014 Alaska Native Injury Atlas](#).

vehicles, off-road vehicles, ATVs, and snow machines, also has the potential to reduce the number of unintentional injury deaths and hospitalizations resulting from conflicts with pedestrians and cyclists. The HA2020 goal for unintentional injury in Alaska is 54.8 injuries per 100,000 population and the Alaska Statewide Bicycle and Pedestrian Plan can contribute greatly to achieving this goal, especially with regard to reducing falls and off-road vehicle, ATV, and snow machine accidents.

Figure 2. Alaska Native Injury Atlas – Leading Causes of Injury Hospitalization by Region

ALASKA NATIVE INJURY ATLAS

Figure 27. Leading Causes of Injury Hospitalization by Region, All Alaska Native People, 2002-2011 *

Data Source: Alaska Trauma Registry

	Aleutians & Pribilofs	Anchorage & MatSu	Arctic Slope	Bristol Bay	Copper River/PWS	Interior	Kenai Peninsula	Kodiak	Northwest Arctic	Norton Sound	Southeast	Yukon-Kuskokwim	Total
1	Falls 61	Falls 1,328	Falls 234	Falls 223	Falls 68	Falls 534	Falls 166	Falls 68	Suicide Attempts 301	Suicide Attempts 514	Falls 771	Falls 679	Falls [†] 4,801
2	Assault 17	Assault 624	Suicide Attempts 109	ATV 98	Motor Vehicle 38	Suicide Attempts 355	Motor Vehicle 92	Suicide Attempts 35	Falls 278	Falls 348	Suicide Attempts 335	Suicide Attempts 647	Suicide Attempts [†] 3,021
3	ATV 13	Motor Vehicle 615	Assault 80	Suicide Attempts 88	Suicide Attempts 19	Assault 264	Suicide Attempts 63	Motor Vehicle 23	Assault 208	Assault 128	Assault 201	Assault 357	Assault [†] 2,045
4	Suicide Attempts 7	Suicide Attempts 539	ATV 72	Assault 88	Assault 19	Motor Vehicle 180	Assault 31	ATV 16	Snow-machine 136	ATV 111	Motor Vehicle 169	Snow-machine 259	Motor Vehicle [†] 1,376
5	Motor Vehicle 7	Other Vehicle 162	Snow-machine 63	Snow-machine 53	Snow-machine 9	Snow-machine 98	ATV 17	Other Vehicle 13	ATV 102	Snow-machine 76	Other Vehicle 79	ATV 193	ATV 774
6	Other Vehicle 6	Cut 93	Motor Vehicle 42	Motor Vehicle 46	Other Vehicle 8	ATV 72	Struck by Object 16	Assault 12	Other Vehicle 40	Motor Vehicle 56	Poisoning 50	Cut 126	Snow-machine [†] 749
Total	133	3,913	724	810	203	1,895	479	210	1,263	1,513	1,904	2,942	16,141[†]

† 152 cases missing the region of occurrence: 37 Falls, 15 Suicide Attempts, 19 Assaults, 18 Motor Vehicle, 7 ATV, 9 Snowmachine, and 47 Other

Figure 3. Alaska Native Injury Atlas – Leading Causes of Injury Death by Region

ALASKA NATIVE INJURY ATLAS

Figure 2. Leading Causes of Injury Death by Region, Alaska Native People, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	Aleutians & Pribilofs	Anchorage & MatSu	Arctic Slope	Bristol Bay	Copper River/PWS	Interior	Kenai Peninsula	Kodiak	Northwest Arctic	Norton Sound	Southeast	Yukon-Kuskokwim	Total
1	§§	Poisoning 135	Suicide 28	Drowning 19	Suicide 6	Suicide 54	Suicide 13	Suicide 5	Suicide 48	Suicide 64	Suicide 28	Suicide 130	Suicide 478
2		Suicide 86	Off-Road Vehicle 9	Poisoning 14	Motor Vehicle 6	Poisoning 32	Motor Vehicle 13	§§	Drowning 17	Poisoning 14	Poisoning 28	Drowning 57	Poisoning 276
3		Motor Vehicle 70	Drowning 8	Suicide 12	§§	Motor Vehicle 20	Poisoning 9		Off-Road Vehicle 11	Drowning 14	Drowning 17	Off-Road Vehicle 28	Drowning 168†
4		Homicide 51	Motor Vehicle 5	Off-Road Vehicle 11		Excessive Cold 20	§§		Excessive Cold 10	Motor Vehicle 11	Homicide 12	Homicide 26	Motor Vehicle 158
5		Excessive Cold 21	§§	Excessive Cold 7		Drowning 18			Poisoning 10	Homicide 11	Motor Vehicle 10	Poisoning 25	Homicide 125
Total	22	491	61	97	25	199	51	20	117	154	134	346	1,718†

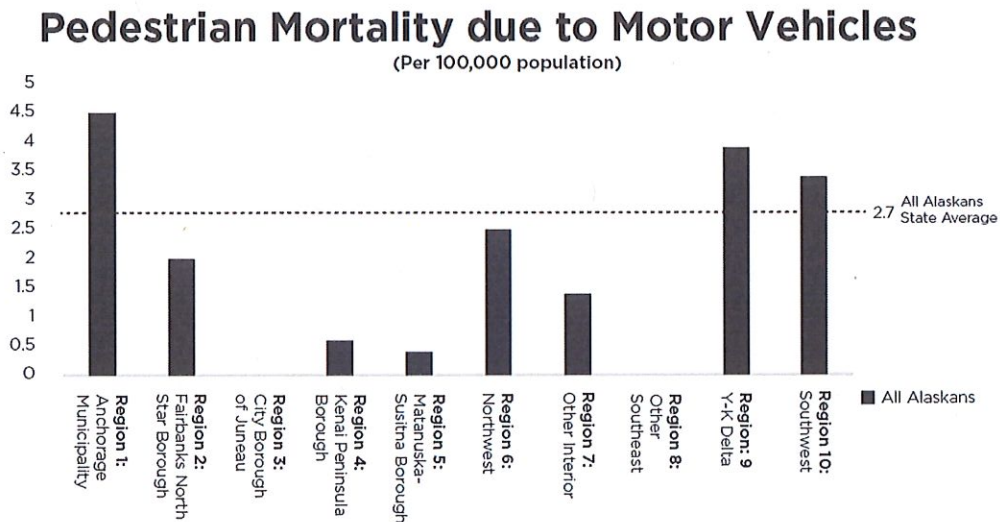
§§ Categories with fewer than 5 deaths are not reported

† One case missing the region of occurrence

Health Indicator Analysis – Supplemental Health Indicators

In addition to those health indicators identified in HA2020, a variety of other important health indicators were assessed for the state that are relevant to active transportation.

Pedestrian Mortality due to Motor Vehicles



All Alaskans

For the pedestrian mortality due to motor vehicles indicator, data was only available for all Alaskans. The Anchorage Municipality has a considerably higher incidence of pedestrian mortality due to motor vehicles compared with statewide and national averages, at 4.5 deaths per 100,000 population compared with 2.7 deaths and 3.1 deaths per 100,000 population, respectively. The Y-K Delta and Southwest Regions also have particularly high rates of pedestrian mortality, greater than the state and national averages, despite their low population densities. In contrast, the City and Borough of Juneau, the Kenai Peninsula Borough, the Matanuska-Susitna Borough, and the Other Southeast region had considerably lower incidences of pedestrian mortality due to motor vehicles than the statewide and national average, with 0, 0.6, 0.4, and 0 deaths per 100,000 population, respectively.^{lxii} Improved walking and biking facilities will directly support the reduction of pedestrian mortalities, a highly preventable cause for mortality. Safety improvements aimed at reducing pedestrian mortality should be emphasized, particularly in the Anchorage Municipality, Y-K Delta, and Southwest regions.^{lxiii}

In comparison to the rest of the state, Anchorage is likely to have some of the highest rates of vehicular, as well as pedestrian use due to its population size and density. However, it is significant to note that Anchorage's pedestrian mortality rate is considerably higher than the national average, which may indicate a need for better pedestrian infrastructure within the municipality of Anchorage. In contrast, the Matanuska-Susitna Borough is likely to have high rates of vehicular use and lower rates of pedestrian use, due to the region's low density. Low density, similar to many other regions throughout Alaska, may begin to explain low rates of pedestrian mortality due to motor vehicles.

Bicycle Mortality due to Motor Vehicles

In 2013, the rate of bicyclist (pedalcyclist) mortality due to motor vehicles in the state of Alaska was 1.36 per million population compared with the national average of 2.35 per million population.^{lxiv} However, from 2001 to 2011, an average of 174 traffic crashes involving bicycles occurred, and from 2003 to 2008, approximately 76.7 percent of those crashes on average resulted in minor to serious injury. Additionally, an average of 76.63 percent of all bicycle crashes due to motor vehicles from 2001 to 2011 in Alaska occurred in the greater Anchorage area.^{lxv}

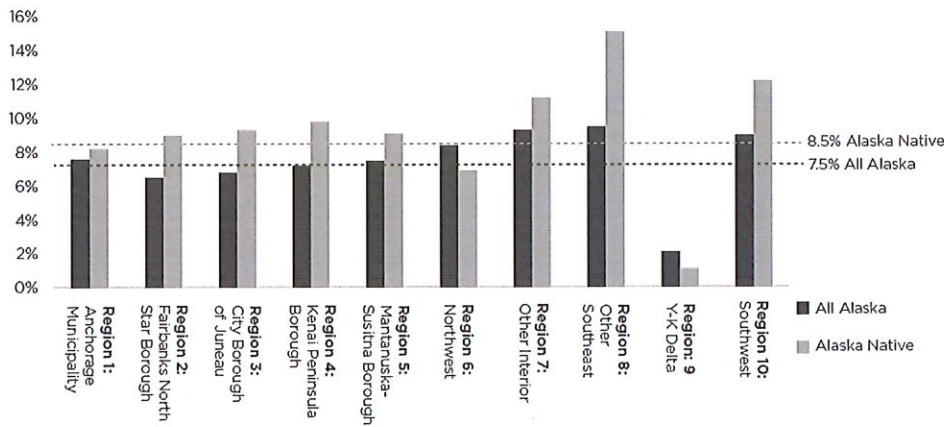
While bicycle fatalities due to motor vehicles in Alaska do not represent a leading cause of death, they do contribute to over a hundred injuries, and at least one death per year, in the state of Alaska, the majority of time in the greater Anchorage metropolitan area.^{lxvi} Further, according to the Pedestrian and Bicycle Information Center, bicycle crash data is largely under-reported, meaning that the number of injuries and fatalities could be greater than recorded.^{lxvii} Improved safety and separation of bicycle and pedestrian facilities in Anchorage, as well as other urban areas throughout the state, such as Fairbanks and Juneau, has the potential to reduce the number of bicycle injuries and fatalities due to motor vehicle collisions. In one study looking at cyclist injury rates in Vancouver and Toronto, it was found that separated bike lanes reduced risk of injury for cyclists by as much as 90 percent.^{lxviii}

Diabetes prevalence

Diabetes is the seventh leading cause of death in Alaska.^{lxix} The health risks associated with diabetes can be quite serious and include heart disease, stroke, blindness, kidney disease, high cholesterol, and permanent lower-

extremity nerve damage.^{lxx, lxxi} While there are a number of genetic factors that contribute to a person’s risk of developing diabetes, there are also many modifiable factors that a person can control to prevent the disease. These modifiable risk factors include overweight/obesity, physical inactivity, high blood pressure, and abnormal cholesterol.^{lxxii} Improving the safety, access, and availability of walking and bicycling infrastructure, policy, and programming will provide opportunities for increased physical activity and an associated reduced risk for diabetes.

Diabetes Prevalence



All Alaskans

As of 2015, the diabetes prevalence was high in the Other Southeast and Other Interior regions compared with the rest of the state and the nation. Specifically, the diabetes prevalence in the Other Southeast was 9.5 percent, and in the Other Interior region, 9.3 percent. The diabetes prevalence rate for the state was 7.5 percent, and 9.19 percent for the nation. The Y-K Delta had the lowest diabetes prevalence rate in the state at 2.1 percent.^{lxxiii}

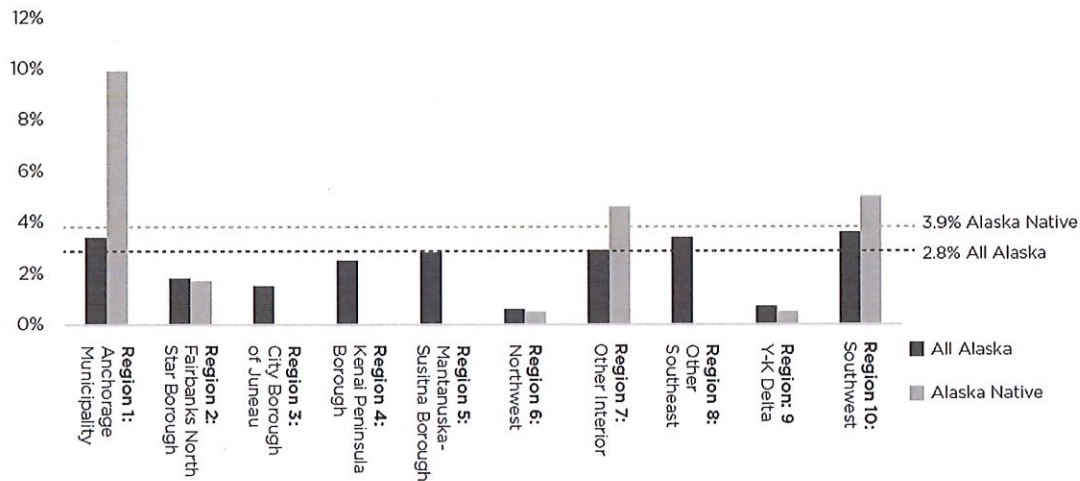
Alaska Native

There is a disproportionate rate of diabetes reported in the Alaska Native population, with five out of ten regions experiencing diabetes rates higher than state and national averages, and rates close to the national average in two additional regions. Similar to the “All Alaskans” analysis, the Y-K Delta region has the lowest diabetes prevalence rate for the Alaskan Native population at 1.1 percent.^{lxxiv}

Coronary heart disease

Coronary heart disease (CHD) is the second leading cause of death in Alaska, as well as in the Alaska Native population.^{lxxv, lxxvi} Genetic factors play a role in people’s risk for CHD, but a number of risk factors are highly preventable, including diabetes, overweight/obesity, poor diet, and physical inactivity.^{lxxvii} Approximately half of Americans have at least one of these risk factors, which doubles a person’s risk of having CHD.^{lxxviii, lxxix} The prevalence of each of the previous risk factors for CHD can be significantly reduced by improved pedestrian and bicycle infrastructure and active transportation encouragement programs and policies.

Coronary Heart Disease Prevalence



(Where no data is shown, data was unavailable)

All Alaskans

The prevalence rate for CHD for all Alaskans is elevated in the Anchorage Municipality, the Other Interior, Other Southeast, and the Southwest regions compared with state and national averages. Particularly in the Southwest Region of Alaska, the CHD prevalence rate is almost 30 percent higher than the state average. In contrast, the Northwest and Y-K Delta regions have particularly low rates of CHD compared with state and national averages.^{lxxx}

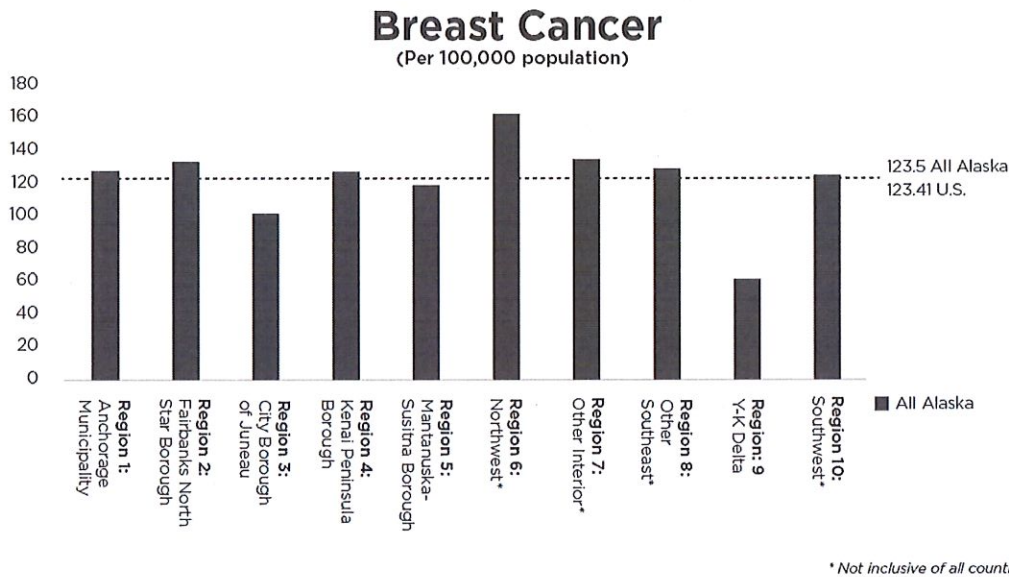
Alaska Native

In the Alaska Native population, while the City and Borough of Juneau, Kenai Peninsula Borough, Matanuska-Susitna Borough, and Other Southeast have suppressed data, half of the reporting regions experienced high rates of CHD. In particular, the Anchorage Municipality has a 9.9 percent prevalence rate of coronary heart disease for Alaskan Natives, over three and half times the state average for all adults. This should be an important consideration when developing the statewide bicycle and pedestrian plan.^{lxxx}

Cancer

Breast Cancer

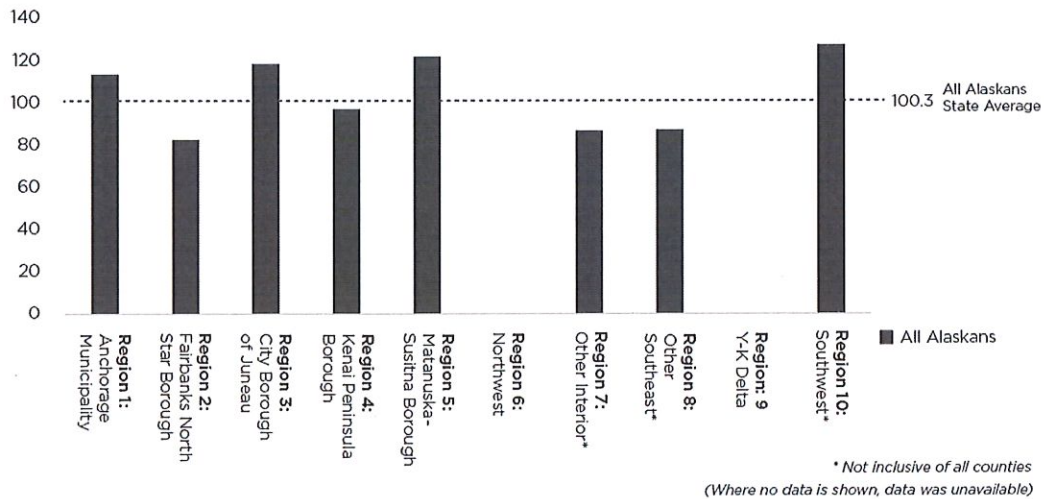
Seven of the ten Alaska behavioral health regions have elevated prevalence rates of breast cancer compared with state and national averages. Most notable, in the Northwest region, breast cancer rates are about 30 percent higher than the state and national average, as well as almost every other region in the state. In contrast, the Y-K Delta has the lowest rate of breast cancer in the state, at 61.5 per 100,000 population, compared with 123.5 per 100,000 population for All Alaskans and 123.4 per 100,000 population for the nation.^{lxxxii} Alaska Native specific-data is not available for this indicator.^{lxxxiii}



Prostate Cancer

Two regions did not report data for prostate cancer, the Northwest and Y-K Delta regions. Of the remaining regions, the Southwest region was the only area with an elevated rate of prostate cancer, 126.8 per 100,000 population, in comparison to the state and national averages of 100.3 and 123.41 per 100,000 population, respectively. Three additional regions (the Anchorage Municipality, the City and Borough of Juneau, and the Matanuska-Susitna Borough) reported rates in between state and national averages. The regions with prostate cancer prevalence rates lower than the state and national averages had rates close to the state average.^{lxxxiv}

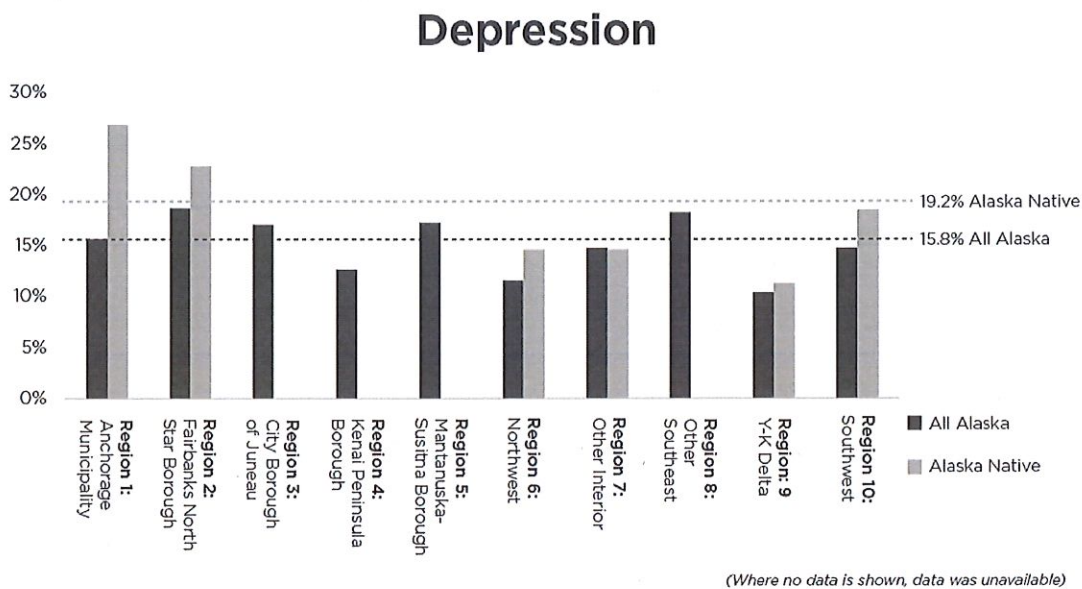
Prostate Cancer



Cancer is the leading cause of mortality in Alaska, with the Alaska Native population making up a disproportionate percentage of overall cancer deaths.^{lxxxv, lxxxvi} While the exact cause of both breast and prostate cancer is unknown, there are certain risk factors that have been linked with each cancer, including overweight/obesity and physical activity.^{lxxxvii, lxxxviii}

An integrated and safe bicycle and pedestrian network will serve to increase rates of physical activity and reduce the risk of obesity and overweight, which in turn can have a direct impact on cancer rates. For instance, one study found that women who walked over seven hours per week (as their only form of recreational activity) had a 14 percent lower risk of observed breast cancer compared than those who only walked 3 hours per week.^{lxxxix} Men who exercised vigorously for over three hours per week experienced a 61 percent lower risk of death from prostate cancer compared to men who only exercised vigorously for less than one hour per week.^{xc} At the same time, obese men were more likely to have their cancer spread beyond the prostate gland and more likely to die from prostate cancer.^{xci}

Depression



All Alaskans

The Fairbanks North Star Borough, the City and Borough of Juneau, the Matanuska-Susitna Borough, and the Other Southeast all have elevated rates of depressions compared with the state average. In contrast, the Y-K Delta Region had a rate almost 35 percent less than the state average.^{xcii}

Alaska Natives

The City and Borough of Juneau, the Kenai Peninsula Borough, the Matanuska-Susitna Borough, and the Other Southeast region have suppressed depression prevalence rates for Alaska Natives. Of the reported regions, the Anchorage Municipality and the Fairbanks North Star Borough have rates of depression well above both the state average for All Alaskans and for Alaska Natives. Anchorage in particular had a rate of depression for Alaskan Natives in 2015 that was 70 percent greater than the state average. The Southwest region also has elevated rates above the state average for All Alaskans.

Determinants of mental illness can be individual, social and environmental, and broken down into adverse and protective factors.^{xciii} Adverse or risk factors are those characteristics at the individual, social, or environmental level that are associated with a higher likelihood of problem outcomes, whereas protective factors are those characteristics associated with a lower likelihood of problem outcomes.^{xciv} Creating more livable, healthy, and well-connected communities has a direct impact on many of the protective factors of mental illness. Promoting increased bicycle and pedestrian activity is directly related to improved physical health and fitness. One study found that bicycling improves self-confidence, tolerance to stress, and overall well-being; while another study indicates that 30 minutes of daily moderate intensity physical activity (walking or biking) at least three days a week, is associated with reduced anxiety, depression, and improved self-esteem and social interaction.^{xcv xcvi}

Asthma

While asthma prevalence data is not available by the ten geographic behavioral health regions, it is available at the state level and is an important chronic health indicator to consider as it is associated with numerous chronic comorbidities and may be directly impacted by the bicycle and pedestrian plan. Chronic lower respiratory diseases, inclusive of asthma, is the fourth leading cause of death in Alaska.^{xcvii, xcvi} According to the Alaska Department of Health and Social Services, in 2015, the percentage of adults, 18 years and older, with asthma was 8.5 percent for all Alaskans and 9.4 percent for Alaska Natives, in comparison to the national average of 9.2 percent.^{xcix} This indicates a disproportionately high rate of asthma for Alaska Natives compared with all Alaskan residents.

While there are many theories about the cause of asthma, researchers believe it is most likely a combination of genetic and environmental factors.^c One of the triggers of asthma is airborne particulate matter (PM) less than 10 micrometers in diameter, which are considered inhalable particles and are associated with serious respiratory concerns. These inhalable particles may include motor vehicle exhaust, dust, wild fire, among others.^{ci, cii} While more research is needed to establish a causal relationship between PM and the development of asthma, studies have shown that PM in the air exacerbates asthma, impairs lung function, and may increase the prevalence of asthma attacks, especially in children.^{ciii, civ, cv} Localized dust in the air in communities in Alaska may be of concern and contribute to asthma prevalence among residents, but more data is needed at the local level to make this conclusion. If dust is contributing to worsened asthma in localized areas of Alaska, improved walking and bicycling infrastructure and access, as well as separated and non-motorized facilities have been shown to reduce exposure to air pollutants from motor vehicles. Specifically, in one study, separated bike facilities reduced exposure to vehicular pollutants by as much as 33 percent.^{cvi} Improved bicycle and pedestrian facilities and access may also serve to reduce chronic diseases associated with asthma, such as obesity, overweight, hypertension, etc. and in turn, reduce incidence of asthma in Alaskan residents.^{cvi}

Next Steps

The information presented in this memo will help guide the development of a “health logic model” for the Alaska Statewide Bicycle and Pedestrian Plan. A health logic model is a pathway diagram depicting the connections between the Plan’s objectives (e.g., data and policy review), outputs (e.g., Alaska Bike and Pedestrian Master Plan strategies/recommendations), short- and long-term outcomes, and potential health impacts (e.g., meeting HA2020 goals). This baseline analysis and the forthcoming health logic model will then serve to inform the Alaska Statewide Bicycle and Pedestrian Plan’s priorities, activities, and policies around health and equity, and will help to inform decisions regarding active transportation investments throughout the state. The Statewide Bicycle and Pedestrian Plan will better position AKDOT&PF and local/regional partners in undertaking efforts to improve public health. Collaboration with the health sector will also aid in leveraging funding for implementation of the Plan’s health efforts. This baseline health analysis can also be used to inform the Plan’s overarching goals, objectives and performance measures.

The following health indicator measures should be considered when developing and prioritizing transportation projects, programs, implementation measures, and policies. Each represent health indicators that have prevalence rates above the state average for All Alaskans.

Health Indicator	Region 1: Anchorage Municipality	Region 2: Fairbanks North Star Borough	Region 3: City and Borough of Juneau	Region 4: Kenai Peninsula Borough	Region 5: Matanuska-Susitna Borough	Region 6: Northwest	Region 7: Other Interior	Region 8: Other Southeast	Region 9: Y-K Delta	Region 10: Southwest
Obesity Prevalence										
Overweight Prevalence										
Physical Activity Prevalence										
Pedestrian Mortality Prevalence										
Diabetes Prevalence										
Coronary Heart Disease Prevalence										
Breast Cancer Prevalence										
Prostate Cancer Prevalence										
Depression Prevalence										

Conclusion

The Alaska Statewide Bicycle and Pedestrian Plan presents a unique opportunity for the state of Alaska to achieve improved widespread physical, mental and social health through increased access and opportunities for walking and bicycling. While many behavioral health regions are doing well compared with state and national averages for many of the health indicators analyzed, there are evident areas of concern, particularly in the Alaska Native population. In particular, rates of pedestrian mortality, obesity and overweight, breast cancer, diabetes, coronary heart disease, depression, and unintentional injury are particularly high in certain regions of the state. Active transportation investments represent a cost-effective means to reduce the prevalence of each of these highly preventable risk factors and health concerns and help meet HA2020 goals.

Health Logic Model

Introduction

The Alaska Statewide Bicycle and Pedestrian Master Plan health logic model (see Figure 4) is a graphic depiction of the relationships between the activities necessary for development of the primary output, the Master Plan, and the associated short-, medium-, and long-term health outcomes that occur as a result of Master Plan implementation. The logic model serves as a roadmap of the many ways in which bicycle and pedestrian infrastructure and policies may contribute to improved health for people in Alaska.

Health Logic Model Development

The health logic model is based on the goals defined in the Master Plan's Vision, Goals and Objectives, as well as informed by the health data synthesis provided in the Regional Health Profiles analysis (see separate Regional Health Profiles Memorandum). Both the Master Plan goals and the Regional Health Profiles data synthesis are incorporated into the short-, medium-, and long-term outcomes of the health logic model. The health logic model is read from left to right, and relationships between components are indicated via solid arrows.

Health Logic Model Framework

Activities

The health logic model begins with a list of activities necessary for the development of the Alaska Statewide Bicycle and Pedestrian Master Plan. Activities include the formation of the Master Plan goals and objectives, a review of existing bicycle and pedestrian facilities (based on available data), preparation of the Regional Health Profiles and economic analyses, and community and stakeholder engagement.

Output

The primary output of the health logic model is the Alaska Statewide Bicycle and Pedestrian Master Plan, inclusive of the five goals that the Plan aims to achieve, listed in the model. Each of these goals is closely tied to the resulting health outcomes in the health logic model. An explanation of how each Master Plan goal is related to the corresponding health outcomes in the logic model is as follows:

- **Goal 1: Safety** – In the health logic model, the goal of safety, or improved safety of bicycling and walking throughout Alaska, has the potential to lead to increased active transportation use throughout the state, reduced chronic illnesses and collision mortality, and improved overall health for people in Alaska.
- **Goal 2: Health** – In the health logic model, the goal of health may be achieved throughout the short-, medium-, and long-term outcomes in direct response to implementing the Master Plan.
- **Goal 3: Maintenance/System Preservation** – In the health logic model, the goal of improved maintenance and system preservation, especially during winter months, may encourage and potentially increase active transportation use and the safety of bicyclists and pedestrians, reduce chronic illnesses and unintentional injuries due to slipping or falling, and consequently, improve overall health for people in Alaska.
- **Goal 4: Connectivity** – In the health logic model, the goal of connectivity, or improved connectedness of bicycle and pedestrian facilities throughout urban and rural areas of the state, may increase active transportation use of such facilities; increase resident access to healthy food options, jobs, and services in urban areas; improve remote access to subsistence fishing and hunting routes; and overall, improve the health of people in Alaska due to increased physical activity and access to healthy food options.
- **Goal 5: Economic Development** – Improved bicycle and pedestrian facilities and policies may contribute greatly toward boosting local economies through tourism, jobs, and service access for residents, which in turn may improve socioeconomic conditions and overall health.

Short-term Outcomes

The short-term outcomes of the logic model demonstrate the immediate effects of implementing the Statewide Bicycle and Pedestrian Master Plan, and typically occur within one to four years. Implementing the Master Plan's policies and recommendations throughout the state occurs first, resulting in subsequent short-term outcomes such as increased walking and bicycling, improved mobility options, and increased transit use. Within the short-term timeframe, a third series of outcomes stems from the initial outcomes including an increased rate of adults and children meeting physical activity guidelines, increased time that people in Alaska spend outside, improved safety for cyclists due to increased numbers of residents using active transportation, and increased numbers of children walking and bicycling to school. It is important to note that in order to achieve the eventual long-term outcome of reduced health disparities and improved overall health for people in Alaska, implementation of the Statewide Bicycle and Pedestrian Master Plan should consider the existing health disparities highlighted in the Regional Health Profiles, and adapt bicycle and pedestrian policies appropriately.

Medium-term Outcomes

Medium-term outcomes, which may occur between four and seven years after policies are implemented, begin to address the specific health concerns identified in the Regional Health Profiles analysis. In particular, statewide active transportation policies and projects may reduce rates of chronic disease in all populations throughout the state, reduce unintentional injury and injury deaths due to motor vehicles and off-road vehicle collisions, and improve economic output by improving access to jobs and services. If the Master Plan and its recommended policies specifically target health disparities and those populations with significant health concerns, medium-term health impacts are likely to have a positive impact on overall health in all populations throughout the state. For example, specific consideration of culturally relevant and appropriate policies or programs that help to increase Alaska Natives' use of bicycle and pedestrian facilities in Anchorage may help reduce the disproportionate rate of obesity and coronary heart disease among the Alaska Native population in that region.

Long-term Outcomes

Over time, policies and programs that result from the Alaska Statewide Bicycle and Pedestrian Master Plan have the potential to:

- Greatly increase the number of Alaskans and visitors using active transportation in all regions of the state
- Improve overall physical, mental, and social health in all populations
- Help the state meet its Healthy Alaskans 2020 goals of reduced chronic disease prevalence and unintentional injuries
- Reduce health care spending on chronic conditions
- Minimize health disparities and socioeconomic inequities throughout the state.

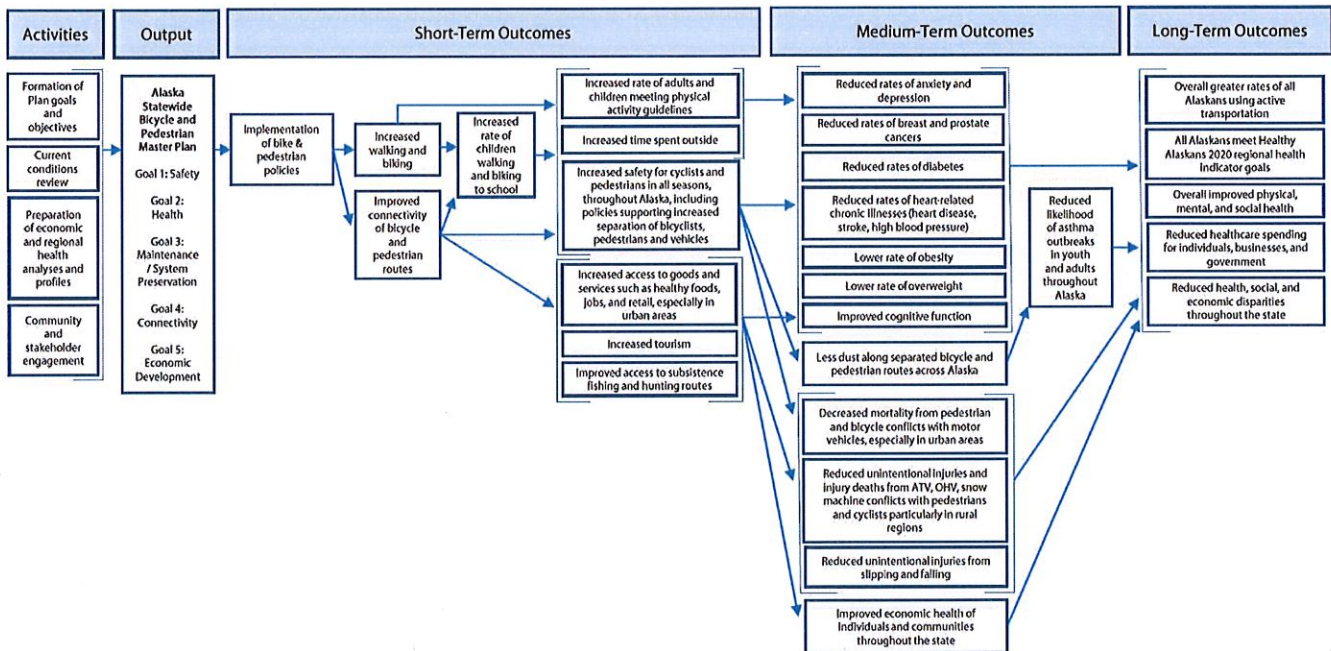
Importance

The health logic model provides a roadmap and insight into the potential positive health impacts of implementing the Alaska Statewide Bicycle and Pedestrian Master Plan, assuming Plan goals are realized. During Master Plan development, the model serves as a guide in the development of policy recommendations that target the intended health outcomes, and can be used to develop specific indicators to evaluate outcomes. Upon Master Plan

completion, the health logic model provides guidance for how to effectively implement the Plan in such a way as to achieve the desired health outcomes. The visual appeal of the health logic model also makes it a powerful tool to communicate the Master Plan’s impact to stakeholders, decision makers and the broader public, while providing a persuasive instrument during strategic partnership development and in grant funding applications.

Overall, successful implementation of the Alaska Statewide Bicycle and Pedestrian Master Plan has potential to create long-lasting and meaningful change in the overall health status and health equity of all Alaskan populations. The health logic model is an important tool demonstrating the relationship between the Master Plan and these health outcomes, and should be used to guide development of policy recommendations, implementation of the Master Plan, and plan evaluation.

Figure 4. Health logic model: health improved throughout outcomes



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Appendix C

Equity Indicator Maps





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1402 Third Avenue, Suite 206
Seattle, WA 98101
(206) 735-7466

APPENDIX C

To: Alaska DOT & PF
From: Alta Planning + Design
Date: September 15, 2017

Re: Alaska Statewide Bicycle and Pedestrian Plan | Task 5.B State and User Profiles Demographic Analysis

Appendix 1: Demographic Analysis

The following series of maps presents the findings from the demographic analysis conducted in support of the State and User Profile analysis. The findings of this analysis provide an increased understanding of population characteristics throughout Alaska and how they differ among regions. The populations explored here are typically connected with historically disadvantage or vulnerable communities who are also more likely to experience decreased transportation access or have other specific needs regarding transportation. For example, populations over 65 often rely on options other than driving as 61% of American adults over this age have at least one activity-based limitation¹, and safe, walkable communities can help these individuals maintain independence when driving is no longer a safe option.

The following demographic indicators are explored:

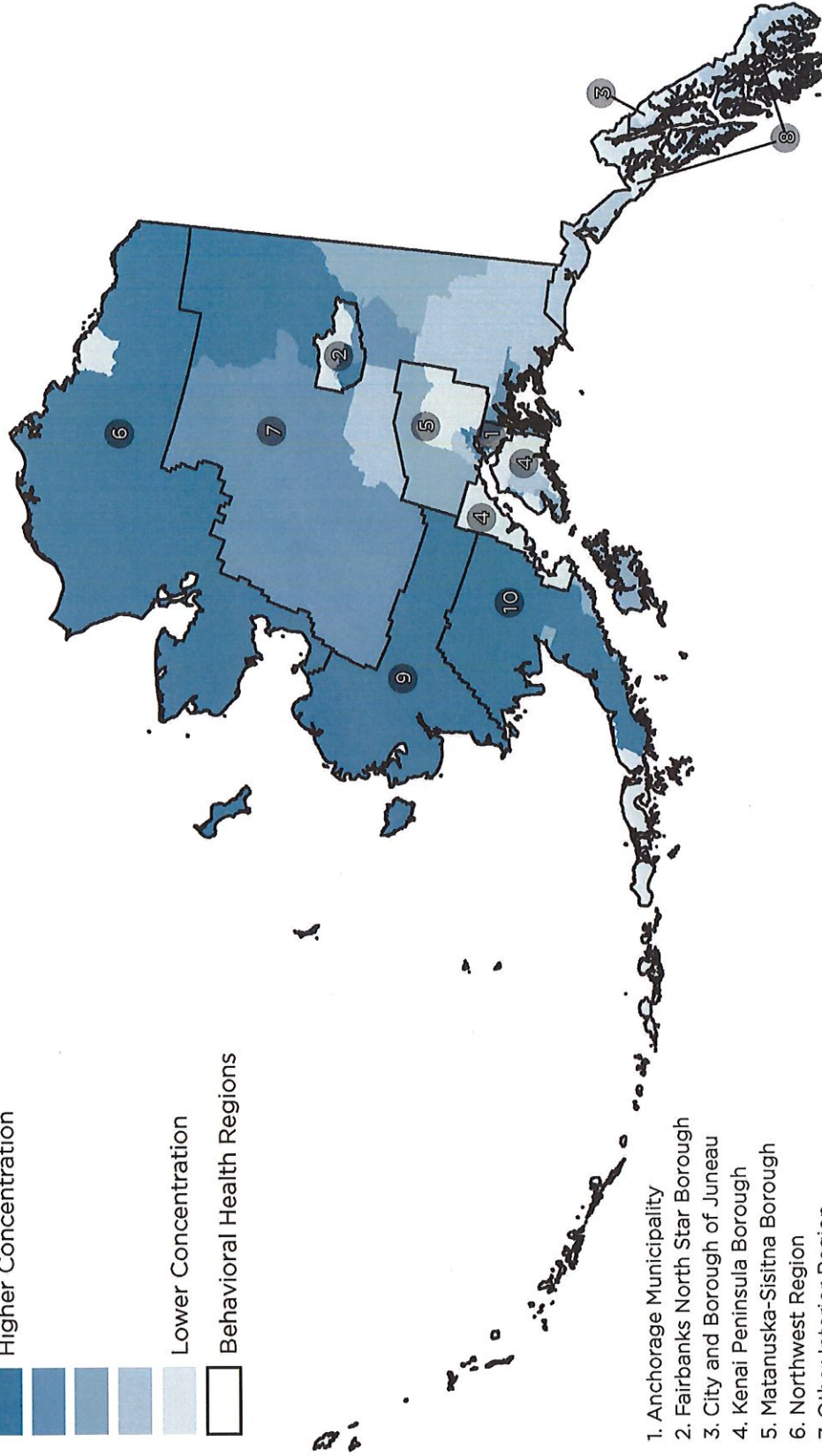
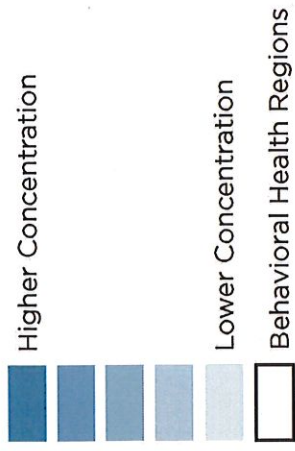
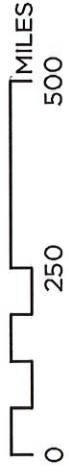
- **Race:** This indicator measures the percentage of the population that identifies as non-white. Within Alaska, this help provide insight into where Alaska Native populations are located, specifically in relation to the Alaska Native Tribal Health Consortium's Alaska Native Injury Atlas.
- **Age:** Individuals under the age of 18 and over the age of 65 comprise this indicator. These two age groups are displayed separately to better identify the differing needs of these populations.
- **Income:** This indicator measures individuals of working age living at or below 200% of the Federal Poverty Level, which is a threshold set by the U.S. Census Bureau and is updated annually.
- **Educational Attainment:** This indicator represents the percentage of the population over 25 years of age that does not have a high diploma or equivalent.
- **No Access to a Motor Vehicle:** This indicator represents the percentage of the population without access to a vehicle. This specifically relates to the availability of passenger cars, trucks, and vans but does not consider the availability of ATVs or snow machines, which may be particularly prevalent and beneficial in Alaska.

The data presented in the maps below is based on American Community Survey 2014 5-year estimates and presents the concentration of individuals meeting the defined criteria in relation to the state mean. Darker areas have a larger percentage of population meeting the defined criteria, while lighter areas are not as highly concentrated.

¹ National Center for Health Statistics. Health, United States, 2016. *Cent Dis Control Prev.* 2016.

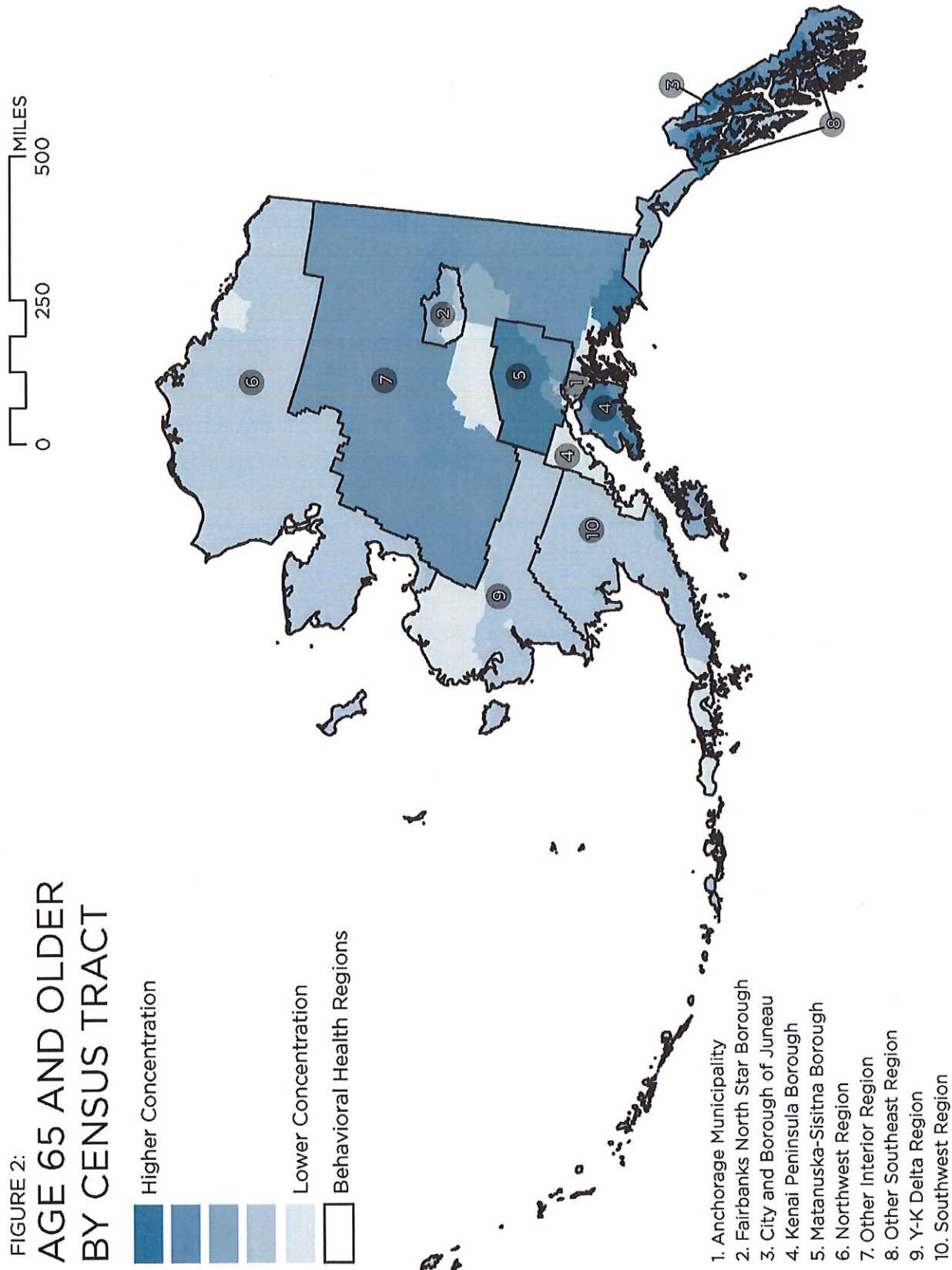
The maps present the data at the Census Tract level to provide greater understanding of the distribution within each region; however, the health region boundaries identified as the unit of analysis for this plan are also included to facilitate comparison among regions.

FIGURE 1:
**UNDER THE AGE OF 18
 BY CENSUS TRACT**



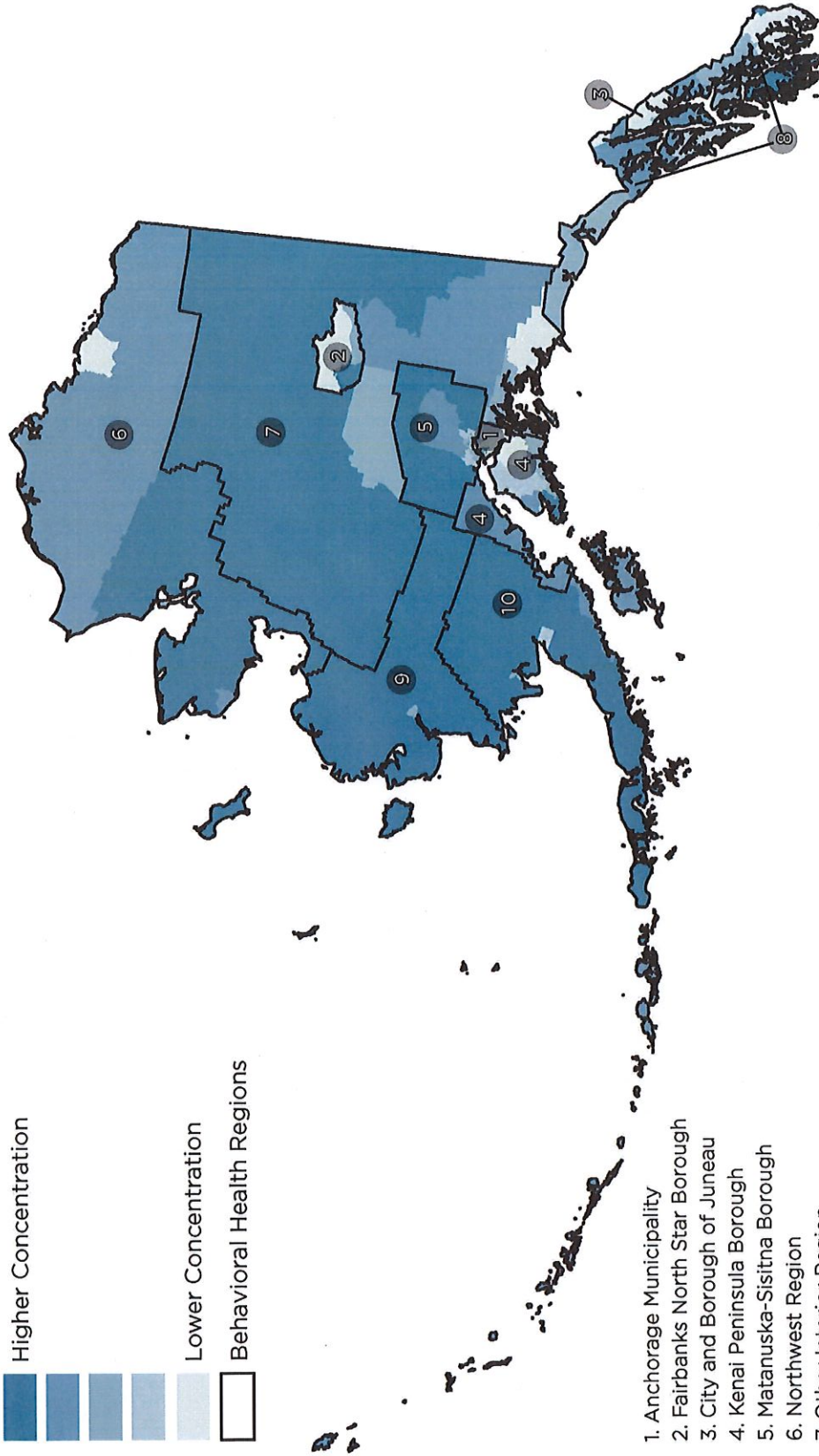
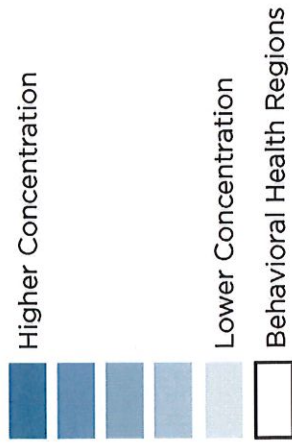
1. Anchorage Municipality
2. Fairbanks North Star Borough
3. City and Borough of Juneau
4. Kenai Peninsula Borough
5. Matanuska-Sitka Borough
6. Northwest Region
7. Other Interior Region
8. Other Southeast Region
9. Y-K Delta Region
10. Southwest Region

FIGURE 2:
**AGE 65 AND OLDER
BY CENSUS TRACT**



1. Anchorage Municipality
2. Fairbanks North Star Borough
3. City and Borough of Juneau
4. Kenai Peninsula Borough
5. Matanuska-Sitka Borough
6. Northwest Region
7. Other Interior Region
8. Other Southeast Region
9. Y-K Delta Region
10. Southwest Region

**FIGURE 3:
INDIVIDUALS AT OR BELOW
200% OF THE POVERTY LEVEL
BY CENSUS TRACT**



1. Anchorage Municipality
2. Fairbanks North Star Borough
3. City and Borough of Juneau
4. Kenai Peninsula Borough
5. Matanuska-Sitka Borough
6. Northwest Region
7. Other Interior Region
8. Other Southeast Region
9. Y-K Delta Region
10. Southwest Region

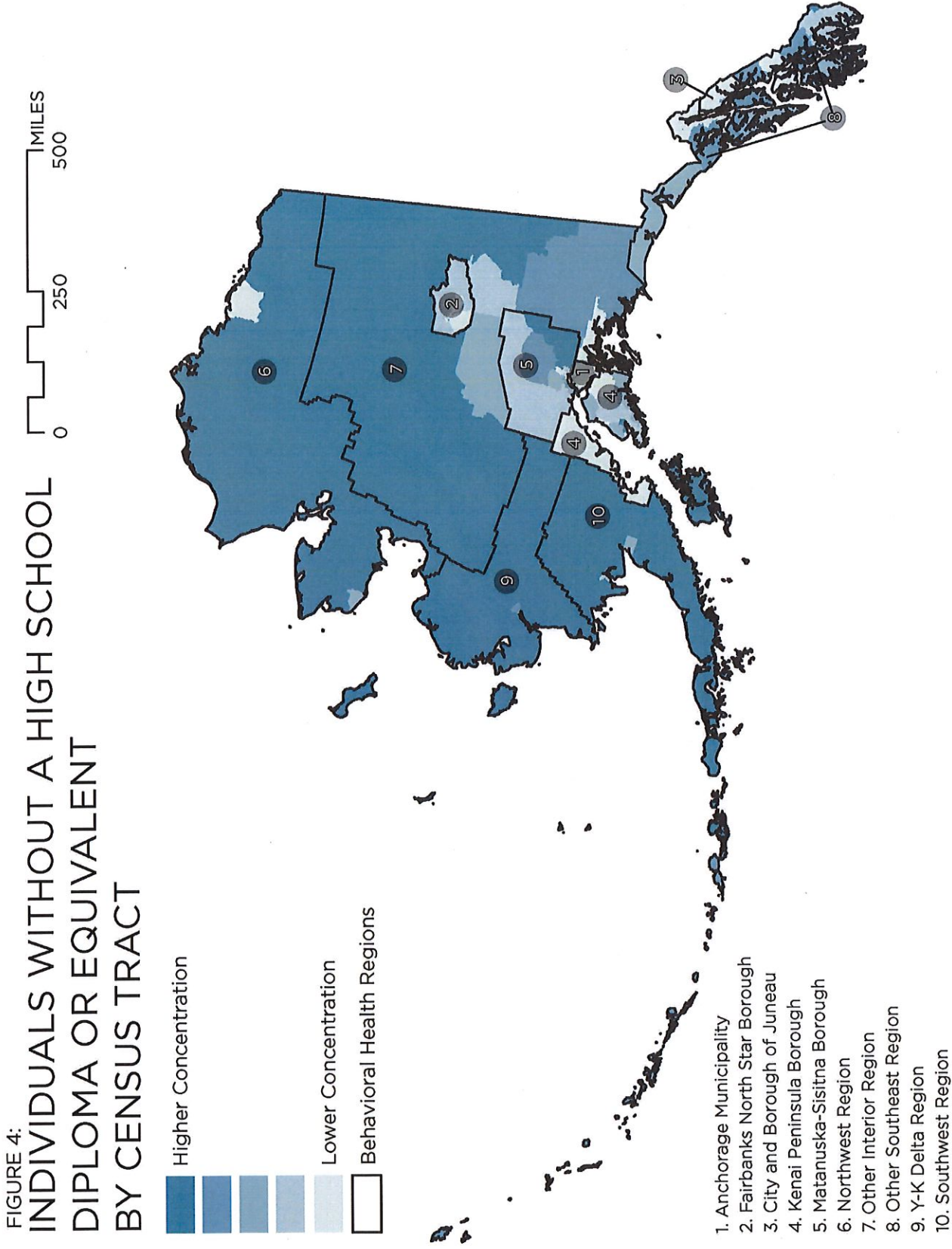
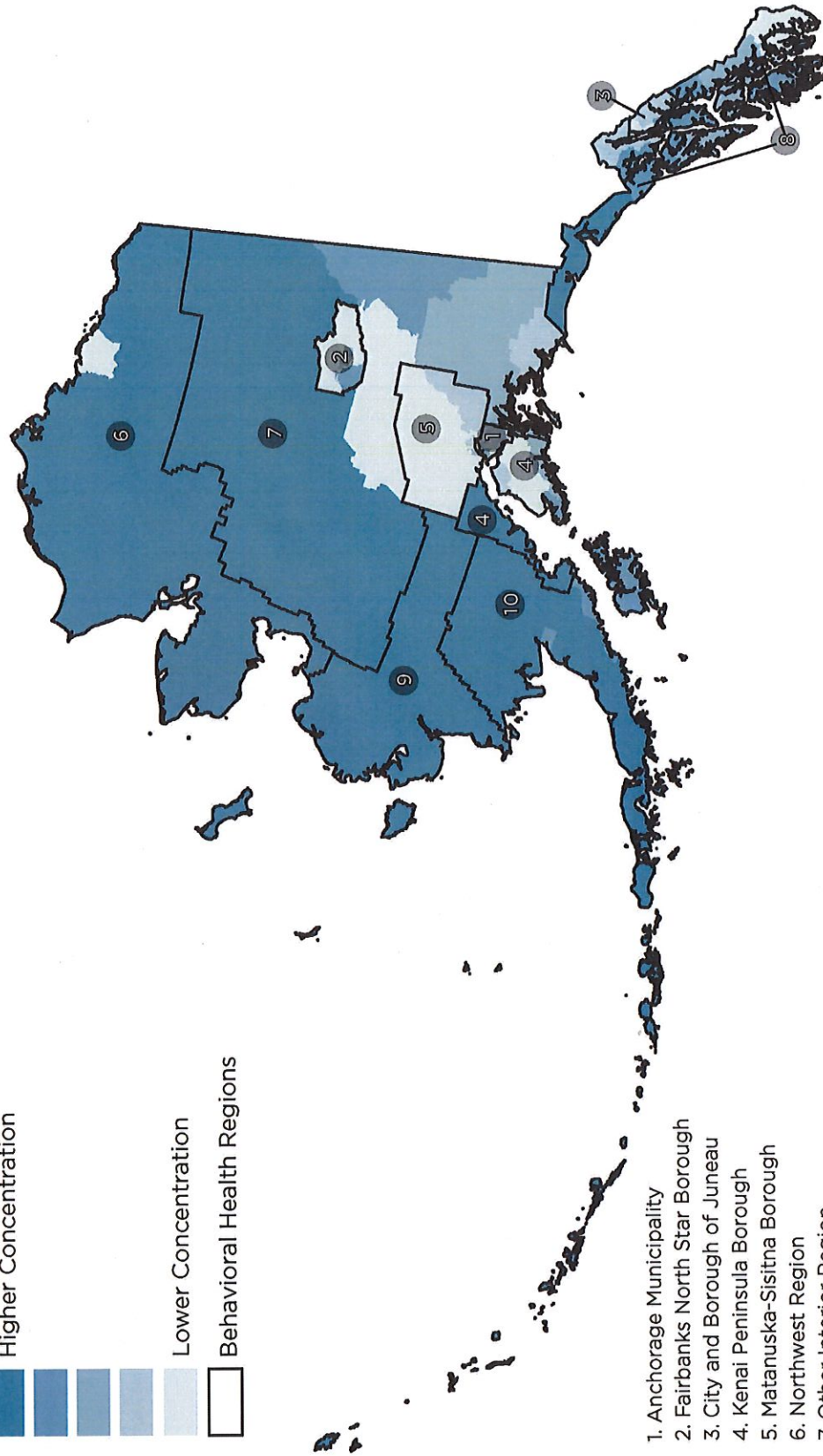
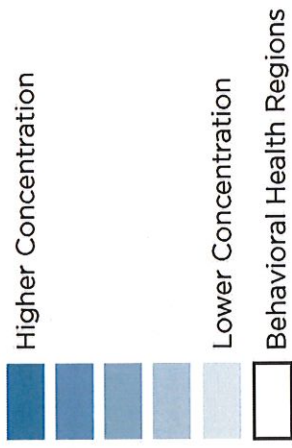
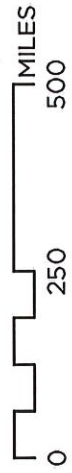
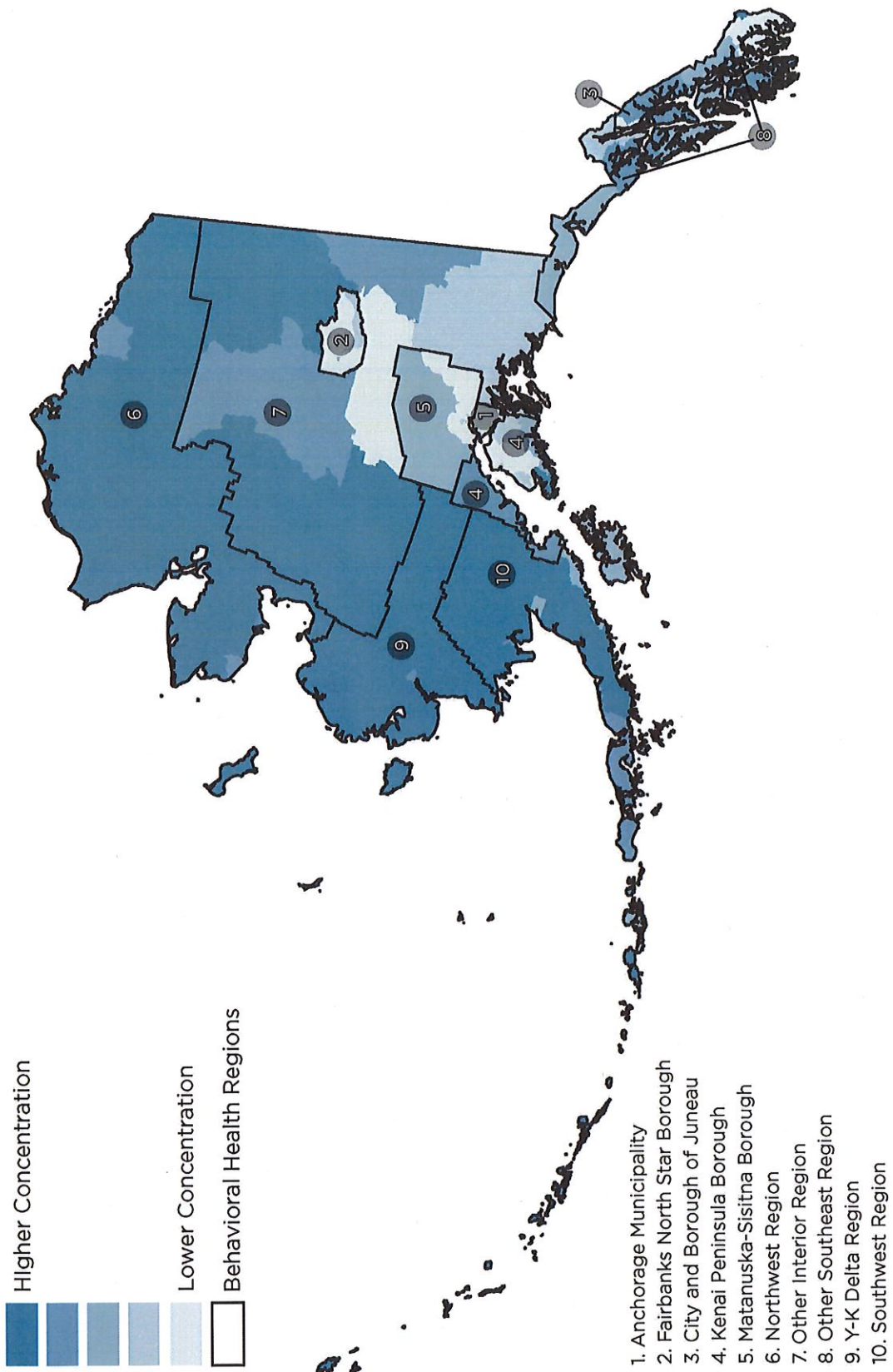


FIGURE 5:
NON-WHITE POPULATIONS
BY CENSUS TRACT



1. Anchorage Municipality
2. Fairbanks North Star Borough
3. City and Borough of Juneau
4. Kenai Peninsula Borough
5. Matanuska-Sitna Borough
6. Northwest Region
7. Other Interior Region
8. Other Southeast Region
9. Y-K Delta Region
10. Southwest Region

FIGURE 6:
**NO ACCESS TO A MOTOR VEHICLE
BY CENSUS TRACT**



1. Anchorage Municipality
2. Fairbanks North Star Borough
3. City and Borough of Juneau
4. Kenai Peninsula Borough
5. Matanuska-Sitna Borough
6. Northwest Region
7. Other Interior Region
8. Other Southeast Region
9. Y-K Delta Region
10. Southwest Region

Appendix D

Economic Benefit Estimates





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APPENDIX D

To: Alaska DOT&PF

From: Alta Planning + Design

Date: October 30, 2017

Re: Alaska Statewide Bicycle and Pedestrian Master Plan | Economic Benefits (Task 5C)

Introduction

There is increasing recognition of the benefits of walking and bicycling including improved community access and connectivity, reduced dependence on fossil fuels, reduced vehicle emissions, and active, healthier communities. However, the way these benefits are accounted for are often less tangible and are more qualitative in nature. Indeed, bicycling and walking infrastructure can be difficult to justify when the majority of people drive to everyday destinations, or do not see the immediate benefits of these transportation modes. In order to make the case for investing in bicycle and pedestrian infrastructure, communities increasingly seek methods to quantify these benefits.

Often the most convincing case for these investments is made by quantifying the economic value of these benefits. Quantifying the economic benefits of walking and bicycling in dollars, with real data, enables transportation policy makers and planners to integrate benefit-cost discussions into the decision-making process, and ultimately leads to a more informed discussion about the cost-effectiveness of transportation investments. The data is not only an effective framing tool – it allows communities to be more competitive in pursuing grant funding, and may lead to creative new partnerships and initiatives.

The main purpose of this analysis is to set the stage for a more informed policy discussion on how to best invest in bicycle/pedestrian infrastructure across the state.

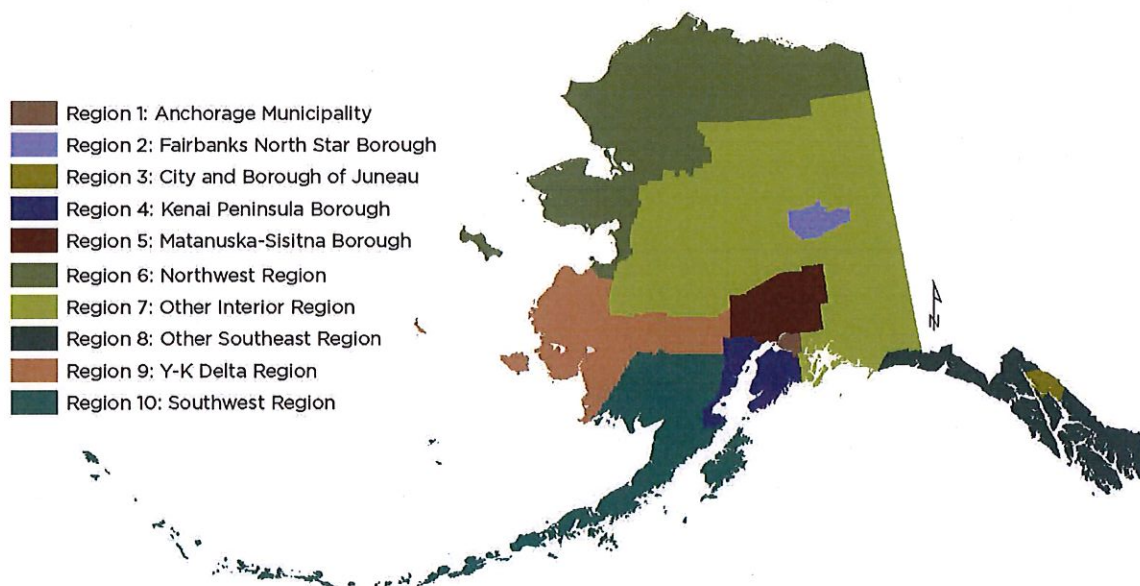
Methodology

To estimate the potential transportation, environmental, health, and economic benefits of walking and bicycling, the first step typically consists of estimating current levels of walking and bicycling activity. This is followed by projecting the benefits associated with an increase in walking and bicycling. In other words, transportation practitioners seek to answer three primary questions:

- What are the current levels of walking and bicycling activity at the regional level?
- Based on existing activity, what are the future goals for walking and bicycling?
- What are the anticipated economic benefits associated with these goals?

Study Areas

The state was divided into ten regions to provide a more refined, geographically appropriate, and usable scale for goal-setting and benefits estimation. The figure below depicts the geographic boundaries of the ten regions defined for this analysis (See Appendix A for a breakdown of Alaskan Boroughs contained within each region). The regions were originally designated by the Alaska Department of Health and Social Services to conduct the statewide behavioral health systems assessment, and represent geographies with a population of 20,000 people or greater. These geographic groupings were also used to provide a consistent approach for other analyses performed for this master planning effort.



Establishing Existing Walking and Bicycling Activity

Embarking on this task, the Project Team pursued background data and other relevant information available at the regional and statewide level. This approach facilitates a consistent analysis and enables decision-makers to more accurately identify trends while drawing regional comparisons. At the outset of this task, the Team contacted stakeholders throughout Alaska with the goal of obtaining transportation data reflective of the unique environments found throughout the state, particularly in smaller communities without roadways where other transportation modes (e.g., ATVs, snow machines, boats, cross-country skiing) are prevalent. However, this data was either unavailable in a format that could be used for regionwide or statewide analyses, or it was lacking altogether. As an alternative, the Project Team consulted the U.S. Census Bureau's American Community Survey (ACS), which provides a more-consistent data baseline, and is inclusive of communities throughout Alaska.

According to the ACS, Alaska currently ranks among the top five states in terms of the percentage of residents bicycling and walking to work, due in part to many factors such as relatively compact development in rural areas (making walking and bicycling more conducive for short trips), and the absence of conventional roads and

highways in many communities (thereby increasing reliance on walking/bicycling). Indeed, most rural communities are off the highway network, and roads between cities, towns and villages are limited. The ACS's five-year estimates were used to estimate existing walking and bicycling activity levels. This data set represents the most current and reliable sample of travel data for each borough and region, and offers the most widely reported and consistent coverage across the state. This particular data set reports "journey to work" (also known as commute trip) data, which serves as the starting point for the analysis. Various multipliers were derived from National Household Travel Survey and National Center for Safe Routes to School data to account for school and college trips, utilitarian trips, social/recreational trips and other non-commute trips. Table 1 presents the existing walking and bicycling commute mode shares for each region.

Estimating Future Walking and Bicycling Benefits

As a preliminary step toward answering the second question, the Project Team developed walking and bicycling commute mode share goals for each region. "Mode share" refers to the proportion of employed residents whose commute trips are primarily made by a particular transportation mode. Goals were based in part on existing activity levels and previous regional and local planning efforts, and generally align with the Alaska Statewide Bicycle and Pedestrian Master Plan's 20-year planning horizon. Because the ten regions each have differing geographies, demographics, and current walking/bicycling commute mode shares, the goals were adjusted accordingly. These goals were then refined by the Project Team based on feedback provided by the Alaska Statewide Bicycle and Pedestrian Master Plan Steering Committee. This ensured that the regional goals established were aspirational, yet appropriate and achievable given the characteristics of each region.

Bicycling and Walking Commute Mode Share Goals

Stated earlier, the purpose of this effort is to attempt to assign a dollar amount to the various benefits attributed to walking and bicycling, based on a future level of walking and bicycling activity. In other words, it can be argued that if walking and bicycling activity increased to X% of trips in the future, then the benefits could potentially be represented in \$Y. "X%" represents the "commute mode share goal."

Table 1 presents existing regional walking and bicycling commute mode shares for the ten regions, along with future regional mode share goals. For purposes of the broader analysis, Regions 1 through 5 were generally considered more urban with relatively higher population densities, while Regions 6 through 10 were considered more rural in character with relatively lower population densities. The Project Team understands that exceptions to the "urban" and "rural" classifications exist within each individual region (e.g., mix of urban and rural communities in Regions 2 through 5, and the higher proportion of Alaskans residing in Region 1). It is understood that localized mode share goals could be higher or lower, while the proposed region-wide goals paint an aggregate, broader-scale picture.

For all ten regions, the bicycle commute mode share goals were set at approximately twice the existing rate. For the walk commute mode share goals, more urbanized regions had goals set at roughly twice the existing rate, while more rural regions (with significantly higher existing walk mode shares) were assigned goals at approximately 1.25 times the existing rate. Mode share goals for the regions encompassing multiple boroughs were projected by averaging the commute mode shares for each borough and weighting by the total working population size.

The Project Team recognizes that individual localities may substantially vary in terms of existing transportation facilities, require differing levels of support and investment to increase walking and bicycling, and should consequently develop their own respective mode share goals as part of a locally-based planning process.

At the statewide level, a **statewide bicycle commute mode share goal of 2%** (roughly twice the existing 1% mode share) and a **statewide walk commute mode share goal of 13.4%** (nearly twice the existing 7.8% mode share) would achieve the same overall benefits as derived by the individual regions.

Table 1. Regional Walking and Bicycling Commute Mode Shares and Mode Share Goals

	Bicycling		Walking		Comments
	Existing Regional Bike Commute Mode Share	Regional Bike Commute Mode Share Goal	Existing Regional Walk Commute Mode share	Regional Walk Commute Mode Share Goal	
Region 1: Anchorage Municipality	1.2%	2.4%	3.1%	6.1%	Double walk and bike commute mode share for Urban Regions over 20 years
Region 2: Fairbanks North Star Borough	1.3%	2.5%	3.6%	7.1%	Double walk and bike commute mode share for Urban Regions over 20 years
Region 3: City and Borough of Juneau	1.3%	2.5%	5.8%	11.6%	Double walk and bike commute mode share for Urban Regions over 20 years
Region 4: Kenai Peninsula Borough	0.5%	1.0%	5.9%	11.8%	Double walk and bike commute mode share for Urban Regions over 20 years
Region 5: Matanuska-Susitna Borough	0.2%	0.3%	1.9%	3.9%	Double walk and bike commute mode share for Urban Regions over 20 years
Region 6: Northwest Region	0.4%	0.8%	39.6%	49.5%	Double bike mode share for rural regions over 20 years, Increase walk mode shares by 25% over 20 years
Region 7: Other Interior Region	0.3%	0.6%	20.2%	25.2%	Double bike mode share for rural regions over 20 years, Increase walk modes hares by 25% over 20 years
Region 8: Other Southeast Region - Northern	2.2%	4.4%	16.4%	20.5%	Double bike mode share for rural regions over 20 years, Increase walk mode shares by 25% over 20 years
Region 9: Y-K Delta Region	0.4%	0.7%	36.7%	45.8%	Double bike mode share for rural regions over 20 years, Increase walk mode shares by 25% over 20 years
Region 10: Southwest Region	0.5%	0.9%	29.6%	37.0%	Double bike mode share for rural regions over 20 years, Increase walk mode shares by 25% over 20 years

Projected Benefits

The sections below describe the potential economic benefits of implementing the Alaska Statewide Bicycle and Pedestrian Master Plan, specifically relating to health, transportation, and the environment. The memo concludes with an estimation of total economic benefits. While the potential benefits in each section below are expressed in aggregate form, they should be considered relative order-of-magnitude values, and could be further refined in the future as more information and data becomes available.

Health Benefits

A growing body of research documents the active-living benefits associated with walking and bicycling, including improved mental health, improved academic performance, strengthened connection to nature and the outdoors, and the cultivation of a sense of place. While the monetary value of many of these benefits is difficult to measure, other more direct economic benefits can be accounted for. These include the economic benefits accruing from increased physical activity levels, and resulting health care cost reductions.

Designing and constructing a connected network of safe and accessible walking and bicycling facilities within and across each region will provide communities with more active transportation options and opportunities to increase physical activity. Well-designed walkways, bikeways and off-street trails can encourage residents and visitors alike to make more of their work, utilitarian, social and recreational trips by walking or biking, and thereby help to meet the Centers for Disease Control and Prevention's recommended daily hours of physical activity. Here we quantify the estimated increase in walking and bicycling trips and miles travelled stemming from each region's mode share goal. These metrics translate to new walking and bicycling activity relative to the reported physical inactivity rates of each borough. Unit cost multipliers for health care cost savings were then applied to the estimated change in physical activity. The dollar amounts presented in Table 2 represent the total health care costs saved as a result of people meeting the recommended physical activity levels due to increased walking and bicycling.

If all ten regions attained their respective walk mode share goals, this would result in over **93 million** more walking trips statewide, **28.7 million** additional miles travelled by walking, an **increase of 10%** of Alaskans meeting recommended physical activity levels per year, and amount to nearly **\$3.25 million per year** in health care cost savings. Table 2 below presents the regional and statewide estimates for these health-related walking benefits.

Table 2. Regional and Statewide Health-Related Walking Benefits

Regional Health Benefits of Walking				
Region	Annual Trips	Annual Miles	Percentage Increase of Regional Population Meeting Recommended Physical Activity Levels	Annual Health Care Cost Savings
Region 1: Anchorage Municipality	25,019,000	7,364,000	6.3%	\$963,000
Region 2: Fairbanks North Star Borough	9,322,000	2,768,000	7.1%	\$378,000
Region 3: City and Borough of Juneau	4,961,000	1,548,000	12.2%	\$164,000
Region 4: Kenai Peninsula Borough	7,196,000	2,227,000	10.0%	\$239,000
Region 5: Matanuska-Susitna Borough	4,466,000	1,169,000	3.1%	\$164,000
Region 6: Northwest Region	10,602,000	3,449,000	32.5%	\$337,000
Region 7: Other Interior Region	5,073,000	1,636,000	17.2%	\$164,000
Region 8: Other Southeast Region - Northern	7,750,000	2,502,000	15.7%	\$249,000
Region 9: Y-K Delta Region	7,011,000	2,260,000	22.5%	\$220,000
Region 10: Southwest Region	11,602,000	3,779,000	31.9%	\$370,000
Annual Statewide Benefits	93,002,000	28,702,000	10.0%	\$3,248,000

If each region were to attain its bicycle mode share goal, this would lead to approximately **13.9 million** additional annual trips statewide by bike, and amount to over **18.8 million** additional miles travelled by bike per year. These additional trips would amount to a **2% increase** in the number of Alaskans meeting the recommended physical activity levels per year, and result in approximately **\$655,000 per year** in health care cost savings. Table 3 summarizes the regional and statewide estimates for these health-related bicycling benefits.

Table 3. Regional and Statewide Health-Related Bicycling Benefits

Regional Health Benefits of Bicycling				
Region	Annual Trips	Annual Miles	Percentage Increase of Population Meeting Recommended Physical Activity Levels	Annual Health Care Cost Savings
Region 1: Anchorage Municipality	7,401,000	10,101,000	2.6%	\$345,000
Region 2: Fairbanks North Star Borough	2,473,000	3,358,000	2.6%	\$122,000
Region 3: City and Borough of Juneau	840,000	1,158,000	2.7%	\$36,000
Region 4: Kenai Peninsula Borough	512,000	669,000	0.9%	\$24,000
Region 5: Matanuska-Susitna Borough	302,000	305,000	0.2%	\$21,000
Region 6: Northwest Region	185,000	232,000	0.6%	\$9,000
Region 7: Other Interior Region	131,000	158,000	0.5%	\$8,000
Region 8: Other Southeast Region - Northern	1,669,000	2,332,000	4.4%	\$69,000
Region 9: Y-K Delta Region	130,000	153,000	0.4%	\$6,000
Region 10: Southwest Region	301,000	395,000	1.0%	\$15,000
Annual Statewide Benefits	13,944,000	18,861,000	2.0%	\$655,000

Transportation Benefits

Walking and bicycling facilities provide people with more travel options, and the freedom to decide how to get from Point A to Point B. This does not mean that Alaskans are going to completely give up other transportation means altogether. It simply assumes people will pick the most sensible, convenient and safe option for their daily trips when those options are available. In many cases, Alaskans are already walking and bicycling in places where transportation infrastructure does not currently exist or is less than ideal, but new or improved facilities would allow them to travel more safely and efficiently. The transportation benefits of walking and bicycling can be quantified in terms of the cost savings resulting from reduced congestion, reduced road maintenance, vehicle crashes avoided, and household vehicle operation cost savings. All of these metrics are relative to the reduction in vehicle miles travelled. Unit multipliers corresponding to the monetary value (per vehicle mile travelled) for each of these metrics were then applied to the number of vehicle miles avoided to estimate the economic benefits of each metric. Transportation benefits estimates should be considered conservative estimates due to the fact that vehicle trip replacement calculations typically do not differentiate between varying fuel efficiency levels (e.g., replacing a trip in a newer, fuel-efficient vehicle versus replacing a trip in an older, less fuel-efficient car), and do not account for trips replaced on other conveyances such as ATVs, snow machines or boats.

Table 4 (on the following page) summarizes the regional and statewide transportation benefits of walking. An annual total reduction of **25.8 million** vehicle miles travelled per year would result if all ten regions met their respective walk mode share goals. This would amount to **\$1.8 million** in reduced traffic congestion costs per year, **\$12.8 million** in reduced vehicle collision costs per year, nearly **\$3.9 million** in reduced road maintenance costs per year, and about **\$14.7 million** in household vehicle operation cost savings per year.

Table 4. Regional and Statewide Transportation Benefits Associated with Walking

Regional Transportation Benefits of Walking					
Region	Annual VMT Reduced	Reduced Traffic Congestion Costs	Reduced Vehicle Crash Costs	Reduced Road Maintenance Costs	Household Vehicle Operation Cost Savings
Region 1: Anchorage Municipality	7,846,000	\$549,000	\$3,923,000	\$1,177,000	\$4,473,000
Region 2: Fairbanks North Star Borough	2,951,000	\$206,000	\$1,475,000	\$442,000	\$1,682,000
Region 3: City and Borough of Juneau	1,534,000	\$108,000	\$767,000	\$230,000	\$875,000
Region 4: Kenai Peninsula Borough	2,113,000	\$148,000	\$1,056,000	\$317,000	\$1,204,000
Region 5: Matanuska-Susitna Borough	1,281,000	\$89,000	\$641,000	\$192,000	\$730,000
Region 6: Northwest Region	1,883,000	\$132,000	\$942,000	\$283,000	\$1,074,000
Region 7: Other Interior Region	1,394,000	\$98,000	\$697,000	\$209,000	\$794,000
Region 8: Other Southeast Region - Northern	2,285,000	\$160,000	\$1,142,000	\$343,000	\$1,302,000
Region 9: Y-K Delta Region	1,128,000	\$79,000	\$564,000	\$170,000	\$643,000
Region 10: Southwest Region	3,352,000	\$235,000	\$1,676,000	\$502,000	\$1,911,000
Annual Statewide Benefits	25,767,000	\$1,804,000	\$12,883,000	\$3,865,000	\$14,688,000

The bicycling transportation benefits would also amount to substantial VMT reduction and cost savings. If all ten regions met their respective bicycle mode share goals, this would lead to an estimated annual reduction of **12.2 million** vehicle miles travelled, **\$857,000** in reduced traffic congestion costs per year, **\$6.1 million** in vehicle crash costs saved per year, over **\$1.8 million** in reduced road maintenance costs per year, and nearly **\$7 million** in annual household vehicle operations cost savings. Table 5 presents the regional and statewide estimates for each of these categories.

Table 5. Regional and Statewide Transportation Benefits Associated with Bicycling

Regional Transportation Benefits of Bicycling					
Region	Annual VMT Reduced	Reduced Traffic Congestion Costs	Reduced Vehicle Crash Costs	Reduced Road Maintenance Costs	Household Vehicle Operation Cost Savings
Region 1: Anchorage Municipality	6,933,000	\$486,000	\$3,466,000	\$1,040,000	\$3,952,000
Region 2: Fairbanks North Star Borough	2,300,000	\$161,000	\$1,149,000	\$345,000	\$1,310,000
Region 3: City and Borough of Juneau	750,000	\$52,000	\$376,000	\$112,000	\$428,000
Region 4: Kenai Peninsula Borough	415,000	\$29,000	\$207,000	\$62,000	\$237,000
Region 5: Matanuska-Susitna Borough	217,000	\$15,000	\$109,000	\$32,000	\$124,000
Region 6: Northwest Region	59,000	\$4,000	\$29,000	\$9,000	\$33,000
Region 7: Other Interior Region	79,000	\$5,000	\$39,000	\$12,000	\$45,000
Region 8: Other Southeast Region - Northern	1,273,000	\$89,000	\$637,000	\$191,000	\$725,000
Region 9: Y-K Delta Region	40,000	\$3,000	\$20,000	\$6,000	\$23,000
Region 10: Southwest Region	178,000	\$13,000	\$90,000	\$27,000	\$102,000
Annual Additional Statewide Benefits	12,244,000	\$857,000	\$6,122,000	\$1,836,000	\$6,979,000

Environmental Benefits

One of the most direct environmental benefits of walking and bicycling is fact that these transportation modes produce zero emissions. Other environmental benefits include a relatively lower carbon footprint (due to reduced manufacturing/production and life-cycle impacts), but these are considered negligible for purposes of this analysis. The change in carbon dioxide, hydrocarbons, nitrous oxides, carbon monoxide, and particulate matter as a result of increased walking and bicycling activity can be estimated by analyzing the vehicle miles travelled reduced. The unit weight of each air emission type is factored with a multiplier derived from recent studies. These multipliers correspond to the dollar amount it would cost to mitigate the air pollution or the cost equivalent of the damage caused by that pollutant to the environment.

The total weight of carbon dioxide emissions reduced by increased walking levels across all regions is estimated to be approximately **21 million pounds** per year. The total weight of the other air pollutants listed above is estimated at **835,000 pounds** per year. The total emissions cost reduction for all regions adds up to about **\$862,000** per year. Table 6 presents the regional and statewide environmental benefits attributed to increased walking activity and reduced emissions.

Table 6. Regional and Statewide Environmental Benefits Associated with Walking

Regional Environmental Benefits of Walking			
Region	CO2 Emissions Reductions (lbs)	Other Vehicle Emissions Reduced (lbs)	Total Vehicle Emission Cost Reduced
Region 1: Anchorage Municipality	6,383,001	254,000	\$262,000
Region 2: Fairbanks North Star Borough	2,400,740	96,000	\$99,000
Region 3: City and Borough of Juneau	1,248,008	50,000	\$52,000
Region 4: Kenai Peninsula Borough	1,718,491	68,000	\$70,000
Region 5: Matanuska-Susitna Borough	1,041,932	41,000	\$43,000
Region 6: Northwest Region	1,532,191	61,000	\$63,000
Region 7: Other Interior Region	1,134,291	46,000	\$47,000
Region 8: Other Southeast Region - Northern	1,858,749	74,000	\$76,000
Region 9: Y-K Delta Region	917,673	37,000	\$37,000
Region 10: Southwest Region	2,726,964	108,000	\$113,000
Annual Statewide Benefits	20,962,041	835,000	\$862,000

Similar to VMT reductions associated with increased walking activity, so too are the environmental benefits attributed to bicycling. This amounts to a lower, yet still substantial statewide total of nearly **10 million pounds** of carbon dioxide reduced per year, approximately **400,000 pounds** of other air pollutants reduced per year, and a total of around **\$410,000** of vehicle emissions costs saved per year.

Table 7. Regional and Statewide Environmental Benefits Associated with Bicycling

Regional Environmental Benefits of Bicycling			
Region	CO2 Emissions Reductions (lbs)	Other Vehicle Emissions Reduced (lbs)	Total Vehicle Emission Cost Reduced
Region 1: Anchorage Municipality	5,639,461	225,000	\$232,000
Region 2: Fairbanks North Star Borough	683,001	74,000	\$77,000
Region 3: City and Borough of Juneau	610,718	25,000	\$25,000
Region 4: Kenai Peninsula Borough	337,178	14,000	\$14,000
Region 5: Matanuska-Susitna Borough	177,034	7,000	\$8,000
Region 6: Northwest Region	48,155	2,000	\$2,000
Region 7: Other Interior Region	64,440	2,000	\$2,000
Region 8: Other Southeast Region - Northern	1,035,596	42,000	\$42,000
Region 9: Y-K Delta Region	32,693	2,000	\$2,000
Region 10: Southwest Region	145,265	6,000	\$6,000
Annual Statewide Benefits	8,773,541	399,000	\$410,000

Aggregate Economic Benefits

Tables 8 and 9 summarize the total regional and statewide health, transportation, and environmental benefits anticipated as a result of increased walking and bicycling activity in Alaska, based on respective regional and statewide mode share goals. The total economic benefits associated with walking are estimated at approximately \$37 million per year, while increased bicycling would derive an estimated \$17 million in economic benefits annually.

As suggested earlier, these totals can be considered conservative estimates, because they primarily account for the direct benefits that can be quantified in monetary terms. Additionally, these totals do not fully account for localized aggregate health, transportation and environmental impacts of complete walking and bicycling networks. This implies that statewide walking and bicycling economic benefits, when fully accounted for, may well exceed the sum of the individual regional and local benefits presented here.

Table 8. Total Health, Transportation, and Health Economic Benefits Associated with Walking

Total Regional and Statewide Economic Benefits of Walking				
Region	Health Benefits	Transportation Benefits	Environmental Benefits	Total Benefits
Region 1: Anchorage Municipality	\$963,000	\$10,122,000	\$262,000	\$11,347,000
Region 2: Fairbanks North Star Borough	\$378,000	\$3,805,000	\$99,000	\$4,282,000
Region 3: City and Borough of Juneau	\$164,000	\$1,980,000	\$52,000	\$2,196,000
Region 4: Kenai Peninsula Borough	\$239,000	\$2,725,000	\$70,000	\$3,034,000
Region 5: Matanuska-Susitna Borough	\$164,000	\$1,652,000	\$43,000	\$1,859,000
Region 6: Northwest Region	\$337,000	\$2,431,000	\$63,000	\$2,831,000
Region 7: Other Interior Region	\$164,000	\$1,798,000	\$47,000	\$2,009,000
Region 8: Other Southeast Region - Northern	\$249,000	\$2,947,000	\$76,000	\$3,272,000
Region 9: Y-K Delta Region	\$220,000	\$1,456,000	\$37,000	\$1,713,000
Region 10: Southwest Region	\$370,000	\$4,324,000	\$113,000	\$4,807,000
Annual Additional Statewide Benefits	\$3,248,000	\$33,240,000	\$862,000	\$37,350,000

Table 9 Total Regional and Statewide Health, Transportation, and Health Economic Benefits Associated with Bicycling

Total Regional and Statewide Economic Benefits of Bicycling				
Region	Health Benefits	Transportation Benefits	Environmental Benefits	Total Benefits
Region 1: Anchorage Municipality	\$345,000	\$8,944,000	\$232,000	\$9,521,000
Region 2: Fairbanks North Star Borough	\$122,000	\$2,965,000	\$77,000	\$3,164,000
Region 3: City and Borough of Juneau	\$36,000	\$968,000	\$25,000	\$1,029,000
Region 4: Kenai Peninsula Borough	\$24,000	\$535,000	\$14,000	\$573,000
Region 5: Matanuska-Susitna Borough	\$21,000	\$280,000	\$8,000	\$309,000
Region 6: Northwest Region	\$9,000	\$75,000	\$2,000	\$86,000
Region 7: Other Interior Region	\$8,000	\$101,000	\$2,000	\$111,000
Region 8: Other Southeast Region - Northern	\$69,000	\$1,642,000	\$42,000	\$1,753,000
Region 9: Y-K Delta Region	\$6,000	\$52,000	\$2,000	\$60,000
Region 10: Southwest Region	\$15,000	\$232,000	\$6,000	\$253,000
Annual Additional Statewide Benefits	\$655,000	\$15,794,000	\$410,000	\$16,859,000

Appendix A

Behavioral Health Systems Regions Boroughs/Census Areas included in Region

- Region 1 - Anchorage Municipality
 - Anchorage Municipality (02020)
- Region 2 - Fairbanks North Star Borough
 - Fairbanks North Star Borough (02090)
- Region 3 - City and Borough of Juneau
 - City and Borough of Juneau (02110)
- Region 4 - Kenai Peninsula Borough
 - Kenai Peninsula Borough (02122)
- Region 5 - Matanuska-Susitna Borough
 - Matanuska-Susitna Borough (02170)
- Region 6 - Northwest Region
 - Nome Census Area (02180)
 - North Slope Borough (02185)
 - Northwest Arctic Borough (02188)
- Region 7 - Other Interior Region
 - Denali Borough (02068)
 - Southeast Fairbanks Census Area (02240)
 - Valdez-Cordova Census Area (02261)
 - Yukon-Koyukuk Census Area (02290)
- Region 8 - Other Southeast Region - Northern
 - Haines Borough (02100)
 - Hoonah-Angoon Census Area (02105)
 - Petersburg Borough (02195)
 - Sitka City and Borough (02220)
 - Skagway Municipality (02230)
 - Wrangell City and Borough (02275)
 - Yakutat City and Borough (02282)
 - Ketchikan Gateway Borough (02130)
 - Prince of Wales-Hyder Census Area (02198)
- Region 9 - Y-K Delta Region
 - Bethel Census Area (02050)
 - Kusilvak Census Area (02158)
- Region 10 - Southwest Region
 - Aleutians East Borough (02013)
 - Aleutians West Census Area (02016)
 - Bristol Bay Borough (02060)
 - Dillingham Census Area (02070)
 - Kodiak Island Borough (02150)
 - Lake and Peninsula Borough (02164)

Appendix E

Alignment of ASATP Vision,
Goal Areas and Objectives
with LRTP



How the Alaska Statewide Active Transportation Master Plan Will Support the Achievement of the Vision, Goals and Policies in the Alaska Statewide LRTP

Table E.1 details how the Active Transportation Master Plan’s goals and objectives will support the achievement of the LRTP goals.

Table E.1: ASATP Goal Areas and Objectives that will support the achievement of the Alaska LRTP Goals

LRTP Goal	ASATP Goal Area/Objective
<p>New Facilities: Develop new capacity and connections that cost-effectively address transportation system performance.</p>	<p>Goal Area Four: Connectivity <u>Objectives:</u> 1. Identify and address gaps in the non-motorized transportation network, including where facilities need repair to facilitate a connection or for access. 4. Identify and encourage multi-modal transportation opportunities.</p>
<p>Modernization: Make the existing transportation system better and safer through transportation system improvements that support productivity, improve reliability, and reduce safety risks to improve performance of the system.</p>	<p>Goal Area One: Safety <u>Objectives:</u> 1.1 Reduce the number and severity of conflicts between people bicycling, walking and driving. 1.2 Design the walking and bicycling network, including roads, to enhance safety for bicycles and pedestrians using current state of the practice approaches. 1.3 Integrate design criteria that incorporate best practices into local, regional and statewide design guidance documents and the Alaska Highway Preconstruction Manual (HPM). 1.4 Consider provisions for the safer movement of active transportation on roadway segments that are being reconstructed or rehabilitated (except for curb-to-curb mill and pave projects). 1.5 Improve facilities and wayfinding throughout Alaska to encourage walking and bicycling as a primary transportation mode.</p> <p>Goal Area Three: Maintenance and System Preservation <u>Objectives:</u> 3.1 Provide safer and more convenient active transportation provisions during construction activities. 3.2 Encourage coordination between transportation organizations to improve maintenance, including winter snow removal on active transportation facilities. 3.3 Encourage maintenance of facilities to be a key consideration in the design of active transportation facilities.</p>
<p>System Preservation: Manage the Alaska Transportation System to meet infrastructure condition performance targets and acceptable levels of service for all modes of transportation.</p>	<p>Goal Area One: Safety <u>Objectives:</u> 1.1 Reduce the number and severity of conflicts between people bicycling, walking and driving.</p>

L RTP Goal	ASATP Goal Area/Objective
<p>System Management and Operations: Manage and operate the system to improve operational efficiency and safety.</p>	<p>Goal Area One: Safety <u>Objectives:</u> 1.1 Reduce the number and severity of conflicts between people bicycling, walking and driving.</p> <p>Goal Area Three: Maintenance and System Preservation <u>Objectives:</u> 3.1 Provide safer and more convenient active transportation provisions during construction activities. 3.2 Encourage coordination between transportation organizations to improve maintenance, including winter snow removal on active transportation facilities.</p>
<p>Economic Development: Promote and support economic development by ensuring safe, efficient, and reliable access to local, national, and international markets for Alaska’s people, goods, and resources, and for freight-related activity critical to the state’s economy.</p>	<p>Goal Area Five: Economic Development <u>Objectives:</u> 5.2 Establish comfortable and safer active transportation connections to activity centers. 5.3 Increase awareness of Alaska’s active transportation network. 5.4 Create transportation systems that encourage natural movement for daily activities and encourage active transportation, in conjunction with broader community and infrastructure development planning.</p>
<p>Safety and Security: Improve transportation system safety and security.</p>	<p>Goal Area One: Safety <u>Objectives:</u> 1.1 Reduce the number and severity of conflicts between people bicycling, walking and driving. 1.2 Design the active transportation network, including roads, to enhance safety for non-motorized users using current state of the practice approaches. 1.7 Review statewide laws to improve safety for active transportation on the road network.</p> <p>Goal Area Three: Maintenance and System Preservation <u>Objectives:</u> 3.1 Provide safer and more convenient active transportation provisions during construction activities.</p>
<p>Livability, Community, and the Environment: Incorporate livability, community, and environmental considerations into planning, delivering, operating and maintaining the Alaska Transportation System.</p>	<p>Goal Area Two: Health <u>Objectives:</u> 2.1 Collaborate with other organizations connected to or part of the health care and community services industry to promote active transportation and help design facilities that meet community health needs. 2.2 Promote active transportation use as a viable means to improve health among Alaskans.</p>

LRTP Goal	ASATP Goal Area/Objective
	<p>Goal Area Three: Maintenance and System Preservation <u>Objectives:</u> 3.4 Encourage “Adopt a Trail” and “Adopt a Road” initiatives in all communities and with the private sector to support the maintenance of all active transportation facilities.</p> <p>Goal Area Four: Connectivity <u>Objectives:</u> 4.1 Support education, encouragement and enforcement initiatives. 4.5 Establish and identify active transportation connections through public lands.</p> <p>Goal Area Five: Economic Development <u>Objectives:</u> 5.1 Encourage facilities for active transportation users in private and public premises. 5.2 Establish comfortable and safer active transportation connections to activity centers. 5.4 Create transportation systems that encourage natural movement for daily activities and encourage active transportation, in conjunction with broader community and infrastructure development planning.</p>
<p>Results-Based Alignment for Transportation System Performance: Ensure broad understanding of the level, source, and use of transportation funds available to DOT&PF; provide and communicate the linkages between this document, area transportation plans, asset management, other plans, program development, and transportation system performance.</p>	<p>All goal areas and objectives.</p>

The ASATP will also support the delivery of several policies and actions identified in the LRTP. Table E.2 summarizes relevant policies and actions and supporting ASBPP policies and recommendations.

Table E.2: How the ASATP will support delivery of the LRTP

LRTP Policy	LRTP Action	How ASATP will support delivery of LRTP
<p>Policy 1.A: Develop the multimodal transportation system to provide safe, cost-effective, and reliable accessibility for people and freight. We will identify multimodal solutions and regional priorities for the development of the transportation system through area, corridor and modal plans that appropriately and realistically</p>	<p>1.5 Address increasing pedestrian, bicycle, and transit demands in urban areas through the MPO, corridor, and local planning process (Priority 1). 1.6 Incorporate travel demand management and multi-modal</p>	<p>The ASATP sets out a framework for the encouragement of, and provision of quality facilities for bicyclists and pedestrians throughout the state. Elements include ensuring the provision of facilities as part of all projects (except for resurfacing projects) and encouraging the implementation of design best practices when constructing facilities. The ASATP also promotes consideration of the role of active transportation as part of the multi-</p>

LRTP Policy	LRTP Action	How ASATP will support delivery of LRTP
<p>address the values of communities and stakeholders. We will address efficient intermodal connections between roads, airports, rail, harbors, transit terminals, and bicycle and pedestrian facilities through area, corridor and modal plans to improve asset utilizations, safety, reliability, and the cost-effective movement of people and freight. We will evaluate projects for funding by considering the overall benefits and costs to the state in meeting Long-Range Transportation Plan New Facilities and Modernization goals.</p>	<p>solutions into transportation plans at all levels (Priority 1).</p>	<p>modal transportation network and ensuring recognition of active transportation as a legitimate transportation mode, and easy connection to other transportation modes including transit.</p>
<p>Policy 2.B: Increase understanding of, and communicate DOT&PF’s responsibilities for, system preservation as the owner of highways, airports, harbors, marine terminals, and vessels. ... We will address bicycle and pedestrian needs as part of system preservation and modernization. ...</p>	<p>None.</p>	<p>The ASATP sets out a policy framework for the provision of facilities to support active transportation. This includes incorporating design best practices into facilities and supporting the creation of a transportation system that encourages and supports active transportation.</p>
<p>Policy 4.B: Preserve and operate Alaska’s multimodal transportation system to provide efficient and reliable access to and from local, national and international markets to support economic development goals. We will focus on preserving and modernizing the existing system while recognizing that system development is also necessary in Alaska. We will maintain and operate the system to provide acceptable reliability and performance. ...</p>	<p>None.</p>	<p>The ASATP is supportive of encouraging, establishing and increasing awareness of facilities for active transportation in Alaska to reduce household costs and as a tourism opportunity for the state.</p>

Appendix F

Investment Decision Criteria



Relationship between ASATP Goal Areas, Objectives, Performance Measures, and Investment Decision Criteria

Goal Area	Objective	Performance Measure	Investment Decision Criteria
Goal Area One: Safety	1.1 Reduce the number and severity of conflicts between people bicycling, walking and driving.	1.1 Reduction in the number of fatal or serious injury collisions involving bicyclists and pedestrians in the last five years, as both a rolling average and percentage of total collisions.	<ul style="list-style-type: none"> Reduces crash rate or potential threat of crashes Reduces severity of crashes
	1.2 Design the active transportation network, including roads, to enhance safety for non-motorized users using current state of the practice approaches.	<p>1.1 Reduction in the number of fatal or serious injury collisions involving bicyclists and pedestrians in the last five years, as both a rolling average and percentage of total collisions.</p> <p>1.2 Percentage of funding dedicated to new or rehabilitated roadways including bicycle and pedestrian facilities compared to total funding of roadway projects.</p>	<ul style="list-style-type: none"> Reduces crash rate or potential threat of crashes Reduces severity of crashes Integrates best practices into facility design
	1.3 Integrate design criteria that incorporate best practices into local, regional and statewide design guidance documents and the Alaska Highway Preconstruction Manual.	1.2 Percentage of funding dedicated to new or rehabilitated roadways including bicycle and pedestrian facilities compared to total funding of roadway projects.	<ul style="list-style-type: none"> Integrates best practices into facility design
	1.4 Include provisions for the safer movement of active transportation on roadway segments that are being reconstructed or rehabilitated (except for curb-to-curb mill and pave projects).	1.2 Percentage of funding dedicated to new or rehabilitated roadways including bicycle and pedestrian facilities compared to total funding of roadway projects.	<ul style="list-style-type: none"> Reduces crash rate or potential threat of crashes Reduces severity of crashes
	1.5 Improve facilities and wayfinding throughout Alaska to encourage walking and bicycling as a primary transportation mode.	1.2 Percentage of funding dedicated to new or rehabilitated roadways including bicycle and pedestrian facilities compared to total funding of roadway projects.	<ul style="list-style-type: none"> Integrates best practices into facility design
	1.6 Streamline and improve bicycle and pedestrian data collection efforts across Alaska.		<ul style="list-style-type: none"> Increases DOT&PF's ability to gather and use data to prioritize projects
	1.7 Review statewide laws to improve safety for active transportation on the road network.	1.2 Reduction in the number of fatal or serious injury collisions involving bicyclists and pedestrians in the last five years, as both a rolling average and percentage of total collisions.	<ul style="list-style-type: none"> Reduces crash rate or potential threat of crashes Reduces severity of crashes
Goal Two: Health	2.1 Collaborate with other organizations connected to or part of the health care and community services industry to promote active transportation and help design facilities that meet community health needs.		<ul style="list-style-type: none"> Provides the opportunity to reduce disease/obesity in children, adults and seniors Provides mobility options for underserved populations Provides safe active transportation to schools and learning centers Provides pedestrian mobility for seniors and disabled persons
	2.2 Promote active transportation use as a viable means to improve health among Alaskans.	<p>3.1 Percent change in average minutes of physical activity per day per capital over a five-year period, as measured by the Alaska Department of Health and Social Services.</p> <p>3.2 Percentage of Health Regions meeting Healthy Alaska Benchmarks by 2020.</p>	<ul style="list-style-type: none"> Provides the opportunity to reduce disease/obesity in children, adults and seniors Provides mobility options for underserved populations Provides safe active transportation to schools and learning centers Provides pedestrian mobility for seniors and disabled persons

Goal Area	Objective	Performance Measure	Investment Decision Criteria
Goal Area Three: Maintenance and System Preservation	3.1 Provide safer and more convenient active transportation provisions during construction activities.		<ul style="list-style-type: none"> Improves conditions for walking and bicycling Completes or connects an active transportation network or system
	3.2 Encourage coordination between transportation organizations to improve maintenance, including winter snow removal on active transportation facilities.		<ul style="list-style-type: none"> Funds are available (federal, state, local, other agency or user) to cover the capital cost of the active transportation facility Funds are available (federal, state, local, other agency or user) to cover the costs of operation and maintenance of the active transportation facility Improves conditions for walking and bicycling Completes or connects an active transportation network or system Provides potential to reduce motor vehicle congestion
	3.3 Encourage maintenance of facilities to be a key consideration in the design of active transportation facilities.		<ul style="list-style-type: none"> Funds are available (federal, state, local, other agency or user) to cover the costs of operation and maintenance of the active transportation facility Improves conditions for walking and bicycling Completes or connects an active transportation network or system
	3.4 Encourage "Adopt a Trail" and "Adopt a Road" initiatives in all communities and with the private sector to support the maintenance of all active transportation facilities.	3.1 Miles of roadways and trails adopted through Adopt a Trail/Adopt a Road initiatives.	<ul style="list-style-type: none"> Funds are available (federal, state, local, other agency or user) to cover the costs of operation and maintenance of the active transportation facility Improves conditions for walking and bicycling Completes or connects an active transportation network or system Provides potential to reduce motor vehicle congestion
Goal Area Four: Connectivity	4.1 Identify and address gaps in the non-motorized transportation network, including where facilities need repair to facilitate a connection or for access.		<ul style="list-style-type: none"> Provides continuous walking and biking facilities on scenic byways Improves connection or access to other modes of transportation (multi-modal connectivity)
	4.2 Encourage the use of technology to enhance connectivity.		<ul style="list-style-type: none"> Encourages mapping of facilities and sharing information using technology and interactive platforms Improves connection to other modes of transportation (multi-modal connectivity)
	4.3 Support education, encouragement and enforcement initiatives.		<ul style="list-style-type: none"> Encourages mapping of facilities and sharing information using technology and interactive platforms
	4.4 Identify and encourage multi-modal transportation opportunities.	4.1 Percent of commute trips completed by walking or bicycling, as determined by American Community Survey data.	<ul style="list-style-type: none"> Encourages mapping of facilities and sharing information using technology and interactive platforms Provide continuous walking and biking facilities on scenic byways Improves connection to other modes of transportation (multi-modal connectivity) Provides multi-use pathways near population centers

Goal Area	Objective	Performance Measure	Investment Decision Criteria
	4.5 Establish and identify active transportation connections through public lands.	4.1 Miles of state-owned active transportation facilities, including trails, sidewalks, and designated bicycle facilities.	<ul style="list-style-type: none"> • Encourages mapping of facilities and sharing information using technology and interactive platforms • Creates access to public lands
Goal Area Five: Economic Development	5.1 Encourage facilities for active transportation users in private and public premises.		<ul style="list-style-type: none"> • Improves non-motorized access to employment centers • Provides the opportunity to induce a mode shift to bicycling and walking for short trips • There is public support for the active transportation facility
	5.2 Establish comfortable and safe active transportation connections to activity centers.		<ul style="list-style-type: none"> • Improves non-motorized access to employment centers • Induces a mode shift to bicycling and walking for short trips
	5.3 Increase awareness of Alaska's active transportation network.	5.1 Number of communities with current active transportation plans and Safe Routes to School Programs.	<ul style="list-style-type: none"> • Bolsters tourism • Induces a mode shift to bicycling and walking for short trips
	5.2 Create transportation systems that encourage natural movement for daily activities and encourage active transportation, in conjunction with broader community and infrastructure development planning.	<p>4.1 Miles of state-owned active transportation facilities, including trails, sidewalks, and designated bicycle facilities.</p> <p>5.2 Percent of commute trips completed by walking or bicycling, as determined by American Community Survey data.</p>	<ul style="list-style-type: none"> • Improves non-motorized access to employment centers • Bolsters tourism • Provides the opportunity to induce a mode shift to bicycling and walking for short trips • There is public support for the active transportation facility