Existing Conditions
This plan comes at a time of change in the transportation infrastructure within Auke Bay. Both marine and upland transportation facilities are in the process of being substantially redesigned and reconstructed, with projects underway at the time of the planning effort including the Alaska Department of Transportation and Public Facilities (DOT&PF) Glacier Highway and Back Loop Road, Intersection Safety Improvements and Fritz Cove Road to Seaview Avenue; and the City and Borough of Juneau’s Statter Harbor Improvements.

Other projects scheduled in the short-term include the reconstruction of Fritz Cove Road, the paving of the Auke Lake parking lot, constructing a ten-foot-wide separated path on the north side of Glacier Highway from the Mendenhall River to the Auke Lake parking lot, and improvements at the Auke Bay terminal of the Alaska Marine Highway System.

![Auke Bay Average Daily Traffic: 2002 - 2012](image)

Source: Alaska Department of Transportation and Public Facilities annual Traffic Maps

Residential, recreational, and employment uses continues to expand north of Auke Bay. Therefore traffic is expected to continue to increase through the Auke Bay corridor unless alternative routes are provided, or significant changes to travel patterns occur.

One of the fundamental realities of the vehicular transportation network in Auke Bay is that there is no network; that is, there are no alternative routes to, through, or around the area to Glacier Highway and its single intersection with the Mendenhall (Back) Loop Road. This means that all vehicular traffic, including passenger vehicles, heavy trucks,
buses, bicyclists, pedestrians, and personal trucks with boat trailers must use the same roads, regardless of whether the vehicles are simply passing through the area or beginning or ending their trip in the area.

The Pederson Hill Access Study was prepared in 2010 for the City and Borough of Juneau to evaluate potential residential development areas and densities, as well as transportation access for future development of that area. Both UAS and the CBJ own land on Pederson Hill. Potential routes identified in the study for an alternate Auke Bay corridor access include on top of Pederson Hill and along the north side of it, potentially connecting from Glacier Highway to Goat Hill Road. Development constraints, such as wetlands and existing steep topography, make the construction problematic. However, the study’s preliminary routing identified that by using a series of switchbacks, acceptable road grades (< 10%) are possible. However this can make the road longer and more expensive to construct.

DOT/PF’s Auke Bay Corridor Study, prepared in 2004 by USKH Inc. presented “Near-Term” goals as mentioned above with the current improvements and addition of a roundabout near Auke Bay. The study also outlines “Long-Term” goals for the area by completing a bypass of the Auke Bay community that would start at Industrial Blvd., follow the east side of Hill 560, cross Mendenhall Loop Road (Back Loop Road) at Goat Hill and continue behind the community of Auke Bay and connect to Glacier Highway near Auke Nu Creek. A connection would also be added, through a roundabout, from the proposed bypass to Back Loop Road at the North UAS access. Sidewalks are proposed for both sides of the bypass connector from Back Loop Road to the UAS/National Guard Joint Use facility.

Transportation in and through the Auke Bay area is discussed in Chapter 8 of the 2013 Comprehensive Plan of the City and Borough of Juneau; selected sections of that plan are included in the Comprehensive Plan Appendix of the Auke Bay Area Plan. In summary, the Comprehensive Plan calls for clustering residential density and destinations along transit routes, and for the provision of safe bicycle and pedestrian routes providing connections between transit and trip origins and destinations within the Urban Service Area Boundary. Auke Bay is called out for an “urban” treatment, with provision of safe bicycle and pedestrian facilities, including protected crossings of Glacier Highway, described as priorities in multiple locations in the plan.

The 2014 Transit Development Plan for Capital Transit calls for a complete restructuring of transit service north of the Nugget Mall. Budget constraints preclude full implementation of the recommended service scenario in that plan, but at the time that this small area plan was drafted, CBJ staff continued to work with Nelson\Nygaard Consulting Associates to develop interim changes to the system that can accomplish budgetary and service goals. Transit access to and from Auke Bay, especially to UAS, was recognized as an important service feature of the system that should be retained or strengthened. Transit service to the Alaska Marine Highway System ferry terminal in Auke Bay was listed by many community members and stakeholder groups as one of the
most important destinations not currently served by Capital Transit, and it remains a high priority for future service additions.

Although some trails and non-motorized paths provide alternative routes for pedestrians and bicyclists, these routes are primarily designed and constructed to serve University of Alaska Southeast (UAS) students, faculty, and staff, and serve UAS destinations in particular. Other more informal (unpaved) trails exist between the Spaulding Meadows trail, Auke Bay Elementary School, and the Joint Use Facility. While the UAS trails are paved, plowed of snow, and have some lighting as well as emergency call boxes, the remainder of the Auke Bay trail network consists of dirt trails and boardwalks that do not meet the requirements of the Americans with Disabilities Act (ADA), which are not maintained in the winter, and which do not have lighting.

The 2009 Non-Motorized Transportation Plan (NMTP) provides guidance on such topics as traffic calming and design standards for non-motorized transportation facilities, including particular improvements in the Auke Bay area. Selected sections of that plan are included in the Non-Motorized Transportation Plan Appendix of the Auke Bay Area Plan. Similar to the Comprehensive Plan, the NMTP calls for traffic calming, provision of improved pedestrian crossings of Glacier Highway in the Auke Bay area, and specific capital improvements that should be made to the area as funding becomes available.

Auke Bay Elementary School did not participate in the parent surveys used to collect information about other Juneau School District schools during the development of the 2012 Safe Routes to Schools Plan, and observations of student arrivals and dismissals conducted for that plan occurred on a winter day with poor walking conditions; no students were documented walking to or from school on the day of observations. CBJ staff and volunteers conducting bicycle and pedestrian counts in the school area on other dates have, however, documented children walking and biking to and from the school. This plan identifies similar safety concerns and infrastructure/design shortcomings to those identified in other plans; namely, inadequate safe crossing opportunities across Glacier Highway, high vehicle speeds, and inadequate sidewalk and other non-motorized transportation route connectivity.

Snow removal and maintenance of non-motorized transportation routes has consistently been identified in all of the above-mentioned plans as a priority improvement. Typically, both CBJ and DOT&PF maintenance crews plow snow from the roadway onto the adjacent sidewalk or shoulder for temporary storage (generally one to seven days). This results in a situation where pedestrians must walk in the street or “post-hole” through deep berms of snow. This situation not only discourages active transportation and use of transit, it may also result in keeping many elderly and mobility-impaired citizens in their homes during the winter months since sidewalks are unsafe.

**Transportation Vision**

In visioning brainstorming, surveys, and discussions, the topic of bicyclist and pedestrian safety in the Auke Bay area frequently surfaced as a primary goal. Bicyclist and
pedestrian safety was voted as the most important aspect of an Auke Bay vision by the majority of survey respondents.\textsuperscript{1}

Increased traffic through the Auke Bay area resulting from developments north of the area could have detrimental effects on public safety in the Auke Bay village area. A frequent community suggestion is that a bypass highway should be constructed to remove through-traffic from the Auke Bay.

A seawalk providing for pedestrian movement through the Auke Bay waterfront area, with convenient and safe connections to and across Glacier Highway has been envisioned by many users of the area for years. Although access across the United States Coast Guard’s new facility may pose security/access conflicts, a public access easement across the only privately-owned Alaska Tidelands Survey between the harbor and Auke Creek ensures that the route a seawalk might take is on public tidelands, within dedicated right-of-way, or within an access easement.

**Recommended Tools**

**Capital Improvements**

The primary tools for improving transportation systems are the Capital Improvement Program (CIP) at the local level, and the Statewide Transportation Improvement Program (STIP) at the state level. Projects are nominated to these programs and constructed based on support in adopted plans, public need, available funding, and public/staff advocacy. Simply adopting a project into a plan is not, in and of itself, enough to ensure that the project will be funded and constructed. The community’s need for a project must be continually evaluated and promoted, sometimes for many years, before it may be funded. Thus, the capital projects listed within the plan are prioritized according to current conditions and perceptions, and can be expected to change as Auke Bay changes through both private and public investment.

The prioritized list of the top capital projects below was developed through a series of public meetings and brainstorming sessions culminating in a project prioritization exercise at a plan Steering Committee meeting in May, 2014. Projects were ranked by respondents for when they should take place, either as Short Term (within 5 years), Mid-Term (5-10 years), Long Term (10-20 years), Beyond the Plan Horizon (20+ years), or as Not a Priority. Using a weighted score that assigned higher points for near term votes and negative points for Not a Priority votes, the entire list of projects was ranked in priority. The list below ranks projects by their weighted score, with a timeline assigned by staff based on votes. Thus, some short-term projects are deemed lower priorities.

By mid-October, that project list had been refined to clarify evolving ideas and reflect the input from the public and Steering Committee. These changes include breakthrough ideas from the land use charrette like a grid network of streets and a seawalk

\textsuperscript{1}“Safe for bicyclists and pedestrians”, selected by 58.3% of respondents, Auke Bay Vision Survey #1, Question 4.
interconnected to the sidewalk and trail system in Auke Bay. The refined list of capital projects, grouped by type of project, is included as Attachment ___.

The construction of the by-pass road envisioned the DOT&PF’s 2003 Auke Bay Corridor (ABCor) study, connecting Glacier Highway to Mendenhall Loop Road over Pederson Hill and bypassing the Auke Bay village area, was highly supported beyond the plan horizon of 2034. The need for this bypass to be constructed prior to the connection of Glacier Highway to the highway system in Skagway was raised on numerous occasions; as an extended highway and shuttle ferry terminal at the Katzehin River, which is the currently-proposed project, would not markedly increase access for commercial, industrial, tourism, or recreational vehicle traffic, this project would not necessarily warrant a bypass road around the Auke Bay village area. A road connection from Juneau to the rest of the national highway system would, however, likely lead to increased traffic levels warranting the construction of a bypass.

In addition to the specific improvements that are called out as being supported or not supported, other general concepts that are not particular improvements were raised throughout the planning process. The importance of developing a transportation network for all modes of transportation was raised repeatedly. New development should include new streets that provide a network of streets and sidewalks to the northeast of the intersection of Glacier Highway and Mendenhall Loop Road; trails and paths should be connected to create a complete network which eliminates the need for walkers and bikers to travel within major roadway corridors for most trips. Pedestrian-scale lighting (fixtures generally 12-15 feet tall) should be included on non-motorized routes; maintenance, especially snow plowing, of these facilities is critical to their continued use.

Policies and Programs
In addition to the construction of new or improved facilities, various policies and programs can improve the transportation system in the Auke Bay area.

Scenic Byways
DOT/PF’s Scenic Byways Program identifies access corridors that exhibit at least one of six qualities for Alaskan byways: scenic quality, natural quality, historic quality, cultural quality, archaeological quality, and recreational quality. The application process to nominate and adopt a byway into the State’s program requires work by the community, but the designation can help the adopted corridor receive additional monies for potential improvements as well as ensure that the goals for the area are followed. This designation could be sought for Auke Bay area roads as they appear to meet a number of the required intrinsic qualities for the State’s scenic byways.
Safe Routes to Schools
The Safe Routes to Schools program focuses on the “Five E’s”: Engineering, Encouragement, Education, Enforcement, and Evaluation. The Engineering component is covered under the capital projects discussed above; the other four E’s are policy or program components:

**Encouragement:** Support formal and grassroots campaigns that promote walking, bicycling, scooter-riding, skateboarding, and even skiing as fun and safe transportation choices to and from school.

**Education:** Develop materials and programs to educate parents, students, and the community about safe walking, cycling and driving practices and about the benefits of active transportation.

**Enforcement:** Increase enforcement of traffic laws around schools.

**Evaluation:** Monitor and document outcomes and trends through the collection of data.

The Safe Routes to Schools plan for Auke Bay Elementary School should be implemented. Some components, such as Education, Enforcement, and Evaluation can be implemented immediately, while it may be prudent to wait until the extensive roadway reconstruction projects currently underway have been completed and new infrastructure (Engineering) is in place before focusing on Encouragement.

Connectivity
As new development takes place in the Auke Bay area, access roads should be designed to create a connected street network. Trails and paths should be extended and connected to create a non-motorized transportation system that allows pedestrians and bicyclists to move through the Auke Bay area away from vehicular routes. Cul-de-sacs should be avoided except where topography or other features make through-streets impractical, and should be connected to adjacent streets, trails, and pathways with appropriate non-motorized connections.

Maintenance
Maintenance of roadways, sidewalks, and separated paths is a critical issue in Juneau, and lack of maintenance has been cited as a barrier to access in many CBJ surveys. In the winter, snow removal is a particular concern. Streets and separated paths should be designed to facilitate maintenance and snow removal; however, the current practice of using roadway shoulders, bike lanes, and sidewalks for snow storage forces pedestrians and other non-motorized users to travel in the vehicular way, increasing their exposure to vehicle traffic. Alternative designs and maintenance practices, such as providing a

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2 Community Transportation Needs Assessment, November 25, 2013; 2013 ADA Accessibility Survey; 2013 Transit Development Plan
vegetated buffer between the travel way and sidewalks, could provide snow storage capacity that does not interfere with non-motorized routes.

Goals and Policies

Bypass Route

Goal 1: Preserve space for a future right-of-way for the Alaska Department of Transportation & Facilities (DOT & PF) bypass route to north of the developed areas of Auke Bay.

Policies

1.1 As Auke Bay grows, ensure that development does not preclude DOT & PF’s ability to locate a future bypass route to the north.
1.2 Future route considerations should include an evaluation of routes to maintain the scenic nature, waterfront views and value of Auke Bay.
1.3 Future DOT & PF’s by pass routes shall preserve or accommodate existing trails and provide pedestrian crossing amenities.

Seawalk

Goal 2: The creation of an appropriately scaled Seawalk along the waterfront, linking residential, commercial, and recreational uses to the Statter Harbor Marina.

Policies

2.1 Encourage public and private partnerships to accomplish an Auke Bay Seawalk for the common enjoyment of the community.
2.2 Encourage marine education, safety, artistic and cultural exhibits along the Seawalk whenever feasible.
2.3 Encourage properties fronting on the seawalk to connect to the seawalk and to provide connections from seawalk to public rights-of-ways for pedestrian cross circulation.
2.4 The seawalk design should encourage and celebrate the bay’s role in education, creativity, cultural heritage, and industry in the region.

Safe Connections Across Glacier Highway

Goal 3: Promote safe connections, at intervals, across the Glacier Highway consistent with both State and Federal standards.

Policies

3.1 Safe connection across the highway at Auke Bay should serve the community’s interests including the following:
3.1A Encourage safe routes between businesses, recreation, scenic viewpoints, residential neighborhoods and public or private schools;
3.1B Promote walkability to businesses from both sides of Glacier Highway;
3.1C Promote walkability between major employers including the University, Coast Guard and the Alaska Marine Highway port; and,
3.1D Create design standards consistent with DOT & PF and that meet needs of the pedestrian, bicyclists, and recreationalists.

3.2 Promote additional bicycle and pedestrian connections throughout the Auke Bay area.

3.3 Encourage, fund and develop pedestrian connections as identified in the Auke Bay Area Plan and other adopted plans.

3.4 Create a walkable community by encouraging, promoting, and investing in street furniture and safe lighting in higher density areas of the Plan.

3.5 Promoting trail linkages between uses and between residential area, scenic vistas and recreational pursuits.

3.6 Work closely with both public and private institutions and not-for-profit groups to develop a partnership to plan, construct and, where appropriate, maintain trail linkages across City, State and Federal properties.

3.7 Create and adopt a way-finding and signage policy for the Plan area.

Parking
Goal 4: Promote the development of adequate parking to meet the needs of the growing community.

Policies

4.1 Promote an integrated parking management plan that encourages walking between the University, schools, private and public sector parking areas through the creation of new trail linkages and way-finding signage for parking.

4.2 Seek funding for a parking structure or park and ride facility that will adequately serve growth needs of the University and public and private sector employees who commute to work from Auke Bay to other areas of the City and Borough of Juneau for the next 20 years.

4.3 Develop tools for reducing parking standards through a parking management plan.

4.4 No parking reductions should be allowed unless the development is developing at or near (80%) maximum property density.

4.4.1 Parking reduction tools and options can be used if pedestrian cross circulation is provided.

4.4.2 Parking reduction tools and options can be used if transit oriented development is proposed and developed.

4.5 Create a fee in lieu of district within the Plan that works with a parking management plan to allow for maximum lot coverage and densities for residential mixed use projects.
Auke Bay Elementary School Intersection & Vicinity

Goal 5: Address intersection improvements in a prioritized fashion within the Auke Bay Area Plan.

Policies

5.1 Lighting and multi-modal safety issues should be inventoried.
5.2 Design aspects of each intersection in Auke Bay Area Plan shall be inventoried and reviewed periodically. This should include review for disabled access, walkability, and safety.

Project Selection for the Auke Bay Area Plan

Goal 6: Use a Return on Investment (ROI) Analysis when ranking and recommending public sector projects within the Plan on a regular basis.

Policy

6.1 Public Sector ROI Analysis must account for both costs and returns in broad social, political, and economic terms.
6.2 No CIP or STIP project shall be approved that shows a negative ROI to the area within the Plan, in any of the areas listed in Policy 6.1.
6.3 New access points to DOT highways should include a lighting plan and lighting improvements that reduce or minimize impacts to safety caused by the new access point.

Cross Circulation

Goal 7: Promote cross circulation for all projects within the Auke Bay Area Plan.

Policies

7.1 Cross circulation should be in the form of roadways or bike/skiing/pedestrian trails that are connecting to a sidewalk or path system.
7.2 Cross circulation should be required for all projects within the Plan area. Cross circulation means access is provided to the public and at least one neighboring property unless cross circulation is not possible because of topography or some other physical barrier.
7.3 Cost shall not be a cross circulation barrier when dedication of right-of-way or a public access easement can be considered as a proportional alternative to construction.

Goal 8: Develop a grid street network in the Auke Bay hub which facilitates growth and improves circulation for both vehicles and pedestrians.

Policies

8.1 Encourage new development to dedicate grid street right-of-way consistent with the Auke Bay Area Plan.
8.2 Pedestrian-oriented designs shall be used to capitalize on the opportunities presented at grid street corners.