

**ASSEMBLY STANDING COMMITTEE
COMMITTEE OF THE WHOLE
THE CITY AND BOROUGH OF JUNEAU, ALASKA
January 13, 2014, 6:00 PM.
Municipal Building - Assembly Chambers**

I. ROLL CALL

II. APPROVAL OF AGENDA

III. APPROVAL OF MINUTES

- A. December 9, 2013 - Committee of the Whole Meeting Minutes

IV. PUBLIC PARTICIPATION

(Not to exceed a total of 10 minutes nor more than 2 minutes for any individual).

V. AGENDA TOPICS

- A. "Healty Indicators" - Report from Matt Felix
- B. Transit Development Plan
- C. Auke Lake Management Update

VI. STAFF REPORTS

VII. COMMITTEE MEMBER / LIAISON COMMENTS AND QUESTIONS

VIII. ADJOURNMENT

Note: Agenda packets are available for review online at www.juneau.org.

ADA accommodations available upon request: Please contact the Clerk's office 72 hours prior to any meeting so arrangements can be made to have a sign language interpreter present or an audiotape containing the Assembly's agenda made available. The Clerk's office telephone number is 586-5278, TDD 586-5351, e-mail: city_clerk@ci.juneau.ak.us

**ASSEMBLY AGENDA/MANAGER'S REPORT
THE CITY AND BOROUGH OF JUNEAU, ALASKA**

December 9, 2013 - Committee of the Whole Meeting Minutes

SUBJECT:

BACKGROUND:

RECOMMENDATION:

ATTACHMENTS:

File Name

Description

☐ [2013-12-09 COW Minutes DRAFT.doc](#)

December 9, 2013 - Committee of the Whole DRAFT Minutes

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THE CITY AND BOROUGH OF JUNEAU, ALASKA
Assembly Committee Of The Whole Work Session Minutes

December 9, 2013

I. ROLL CALL

Deputy Mayor Mary Becker called the meeting to order at 6:00 p.m. in the Assembly Chambers.

Assemblymembers Present: Mary Becker, Karen Crane, Loren Jones, Jesse Kiehl, Jerry Nankervis, Merrill Sanford, Carlton Smith, Kate Troll and Randy Wanamaker .

Assemblymembers Absent: None.

Staff present: Kim Kiefer, City Manager; Amy Mead, City Attorney, Laurie Sica, Municipal Clerk; Robert Barr, Library Director; Kirk Duncan, Public Works Director; Samantha Stroughtenger, Wastewater Superintendent; Bob Bartholomew, Finance Director; Rorie Watt, Engineering Director; Hal Hart, Community Development Director; Carl Uchtyl, Port Director; and Gary Gillette, Port Engineer.

II. APPROVAL OF AGENDA

Hearing no objection, the agenda was approved as presented.

III. APPROVAL OF MINUTES

- a. November 18, 2013 Assembly Committee of the Whole

Hearing no objection, the minutes of the November 18, 2013 Committee of the Whole meeting were approved.

IV. AGENDA TOPICS

- a. Election Turnout and Voting By-Mail

Laurie Sica, Municipal Clerk, spoke about the Assembly's interest in increasing voter turnout. She provided statistics on voter turnout since 1995, which indicated the average turnout is 35% and the turnout for the 2013 election was 19.1%. The low turnout was likely due to the lack of propositions on the ballot and only one contested race. To increase informed voter turnout, Ms. Sica suggested allowing for candidate profiles to be obtained and published, placing advisory questions on the ballot, and using social media to get the word out. In response to a request for information on holding a "by-mail" election, in which each voter is mailed a ballot and no precinct polling places are open on election day, Ms. Sica provided an initial review of the topic and estimated costs of holding such an election in comparison to current costs. She noted that the League of Women Voters was currently investigating this topic and the Alaska Association of Municipal Clerks was forming an ad-hoc committee to review the topic, and she could participate in those efforts if the Assembly wanted more information.

The Assembly asked questions and shared thoughts on the issue. Ms. Kiefer summarized the direction of the Assembly, which included working with the League of Women Voters to

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investigate the topic, outlining the mechanics, timeline and requirements for voting by mail, information on turnout from other communities in the state and the turnout demonstrated by areas using voting by mail, refined costs, signature verification requirements and cost for that, other types of electronic voting, and if a mixture of voting types is allowed and which brings out the most voter turnout.

Ms. Crane said she would like definite recommendations from the clerk on candidate information on the website, social media, advertising and any other recommendations for increasing voting.

b. Library Design

Robert Barr, Library Director, gave a general architectural overview of the design of the new Mendenhall Valley Library, the public process underway, the budget and research done on sustainability. The project is a \$14 million project. The revenue comes from \$1 million in land value, \$1 million in contributions from the Friends of the Public Library, \$300,000 from the Library Endowment Fund, \$4.7 million from the voter approved sales tax, and \$7 million from the State of Alaska major library construction grant. Mr. Barr, Nathan Coffee, CBJ Project Architect and a mechanical subcontractor worked with the Juneau Commission on Sustainability early in the design. Heating and building envelope were primary areas of concern. The projects has applied for a ground source heat installation but many sacrifices have been made in the design to put ground source heat into the base big regardless of whether the grant is successfully obtained. He discussed the efforts to reduce heat loss on the windows. The project continues in the design phase until February, then to bid in March. The Friends of the Public Library maintain a website for information and comments on the library design www.friends.jpl.org

Ms. Troll said that at the last JCOS meeting, the commission appreciated the accommodations from the design team and the modifications that they made to the facility for energy conservation.

c. Water and Wastewater Study

Kirk Duncan, Public Works Director, spoke about the importance to do a water and wastewater rate study update every 5 – 10 years in order to stay current with system demands and expansion, new technologies and aging infrastructure. The last study was done in 2004. The purpose of the model was to ensure there were adequate funds to operate the utilities as well as to keep them running in compliance with regulations, and for system replacement. CBJ water and wastewater system was in place since 1970 and expanded every year. Major expansions were funded by the Clean Water Act in the early 1980's as well as by a combination of 1% sales tax and grants from the State of Alaska. The Mendenhall Wastewater Treatment Plant was an example – a \$22 million project from the Federal Government and CBJ had not been putting money aside to do major replacements for the plant. The current rates allowed for operational costs but did not allow for replacement costs and system upgrades. CBJ held \$275 million in water and wastewater assets. This study was recommending a \$72 million system upgrade over the next ten years. That represented 25% of the total system to be replaced in the next ten years, indicating all the components can last 40 years. It was a good step forward and would work, but it was a large investment. The utility would ask for ½ of the 1% sales tax for five years in its next iteration on the ballot, which would account for \$22 million. Another assumption was that \$8 million would be received from the Passenger Fee funds. The utility had met with the cruise lines and it was supportive of water and wastewater improvements for its summer use. Major infrastructure improvements on-line were improvements in the Last Chance Basin, the Mendenhall Wastewater Treatment Plant headworks project, Juneau-Douglas Treatment Plant process controls, and water and wastewater distribution and collection replacement.

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Mayor Sanford asked how the \$8 million figure was derived from Passenger Fees. Mr. Duncan said it was an estimated figure. Ms. Kiefer said that CBJ had met with the cruise lines and the industry was supportive of investigating new well fields but there was not an MOU or a set amount of funding. CBJ had not been able to provide the cruise lines with the desired water demand so a mutual agreement was possible, anticipated with funding provided by 2018. Mr. Duncan said the \$8 million figure included \$5 million to update wells at the Last Chance Basin and \$3 million improvement to the Juneau-Douglas Treatment plant.

Mr. Duncan introduced Karyn Johnson, a principle with the FCS Group, in Redmond, Washington, who was involved with last rate study for CBJ.

Ms. Johnson reviewed the Financial Performance Summary as a framework for the proposed policies and revenue requirements. The study was reviewing how much funding the water and wastewater systems needed to operate in total and the second phase of the study investigated how that would be collected from the individual customers. The examples of residential rates in the presentation were for illustrative purposes only and more information about all users, including commercial rates, would be forthcoming and provided to the Assembly in February, 2014.

Ms. Johnson said that from a Financial/Accounting Reporting Perspective, both the water and wastewater systems were operating at a financial loss. The rate revenues were not set at a level high enough to recover the annual depreciation expense. She explained that depreciation expense was determined by the system assets divided by useful life in years and included in the calculations as a non-cash expense. Ms. Johnson reviewed proposed financial policies regarding operating reserve, capital reserve and system reinvestment funding. Her firm's recommendations, based on industry best practices, were to fund an amount annually from rates using the depreciation expense figure as the benchmark. She explained three alternatives for residential rates as an example, called "baseline," and "low, middle and top" scenarios.

Mayor Sanford said CBJ had been using a combination of funding sources to meet the needs of water and sewer, including grants, taxes and rates, and asked if the proposal included rate increases to meet the needs. Ms. Johnson said yes, but it still assumed that some of the capital projects would be funded by outside funding sources. This proposed the utilities to operate at a positive cash flow position and be more self-supporting. Grants were becoming less available.

Mayor Sanford asked when the Assembly decision on which set of assets would be used to make up the needs of the decision. Ms. Johnson said the information was being gathered for the Assembly to make the ultimate decision. If there were any preferences expressed today by the Assembly they would use that to direct their work. Mr. Duncan said the alternative funding provided in the past did not provide what the rate study would have provided and there was a lot of deferred maintenance that could have been provided if the previous rates were implemented. Mayor Sanford said the Assembly was supportive of basic infrastructure projects and had found the money outside of rates to accomplish the work. Mr. Duncan said the total needs of the system may not have been fully expressed.

Mr. Smith asked for information on the previous rate study and rate increases that were proposed at the time. Ms. Johnson said she had a chart on that, but not available at the meeting, but the rate increases were partially implemented. The shortfall was that some of the projects intended to be completed were not completed.

Mr. Kiehl asked to see what would have been available for maintenance projects if what was recommended in the previous study if it would have been adopted vs. what was spent for projects regardless of their funding source in order to compare the positions.

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Mr. Nankervis asked about the rate of inflation. Ms. Johnson said 2% was assumed for operating costs and 4.5% was assumed for capital construction.

Ms. Troll asked for a list of capital projects referred to for system reinvestment funding.

Mr. Smith asked how the roll out would happen once the Assembly had decided on a direction. Ms. Johnson said public engagement was part of the study and there had been introductory meetings with the top 50 users, with the Chamber of Commerce and the general public, and she would return in February with the cost of service results to get more feedback then.

Mayor Sanford asked that the Assembly be informed about the feedback from the public meetings. The Assembly discussed the inability to guarantee revenues from the 1% sales tax extension.

Mr. Jones said that the study was based on the assumption that every ten years 25% of the assets needed replacement, and that revenues were the only guaranteed funding source. He asked if other scenarios were possible given that it was not a known factor the exact age of all the pipes, pumps and infrastructure, such as 20% of the assets over a 20 year period for replacement. The best option was to identify what had to be replaced and then the decision would be a matter of who paid for the replacement and when. He said all residents would pay in some way to fund and maintain the system.

d. Ordinance 2013-14 – An Ordinance Amending the Disturbing the Peace Code

Ms. Mead reported back to the Assembly regarding its inquiry about “pure tones.” She found that those would be tones with no variation, which were more aggravating to the listener.

Ms. Mead also reported back that there was no legal reason for the timeframe identified on noise emanating from vehicles and that could be removed by motion if that was the Assembly’s intent.

MOTION, by Kiehl, to amend Ordinance 2013-14, section D, to remove the timeframe “between the hours of 10:00 p.m. and 9:00 a.m.”

Mr. Nankervis objected said the ordinance needed to have consistent time frames for noise.

Mr. Kiehl said the difference was that vehicles were on the move and the noise was not emanating from a stationary location and there was no opportunity to cure the problem.

Mr. Smith spoke in favor of the motion and said the health of those with hearing impairments was impacted by that type of noise at any time of the day or night.

Mr. Wanamaker asked if this was an enforcement problem or was it just another burden the police enforce would address when they were available. Mr. Nankervis said the amendment did not present an enforcement problem.

Roll Call:

Aye: Becker, Crane, Jones, Kiehl, Smith, Troll, Wanamaker, Sanford.

Nay: Nankervis

Motion passed, 8 ayes, 1 nay.

Hearing no objection, the Assembly forwarded the amended Ordinance 2013-14 to the Assembly.

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e. Reconsideration of Assembly Decision on USE 2011-0030

Mr. Smith noted a conflict of interest in the matter, and hearing no objection, withdrew from the conversation.

Ms. Mead said that the Fisherman's Memorial asked the Assembly to withdraw its decision on the Osborne's appeal of dock project 16b because they state the record wasn't final, that the information related to the status of the tideland conveyance was not made part of the record and there could have been issues on appeal not raise because of the lack of that information. There was no provision in the code that provided for the withdrawal of a decision similar to Civil Rule 60, which was what was argued in the letter. The closest thing was a reconsideration, which had a time frame associated and it was well past the time frame. The code did allow the Assembly to bend the procedural rules with a finding of a manifest injustice. Her opinion was that a CUP was a planning permit and the Notice of Decision specifically stated that the applicant was responsible for obtaining all necessary permits before construction. The CUP was not a construction permit. Proof of ownership or approval by the landowner was required as part of the building permit process. There was nothing in the tideland conveyance that would have changed the decision of the Planning Commission in her opinion. The Assembly could make a substantive decision or decline to take up the issue.

MOTION, by Sanford, for orders of the day. Hearing no objection, the Assembly took no action.

Mr. Smith rejoined the meeting.

V. COMMITTEE MEMBER / LIAISON COMMENTS AND QUESTIONS

Mr. Wanamaker said there was some recent discussion from the cruise industry regarding redeployment of the panamax ships away from the Southeast market and asked if it would be possible to contact Kirby Day to provide a presentation to the Assembly about what was going on and what the Assembly might need to consider. Ms. Kiefer said she had contacted Mr. Day and related their discussion. Mr. Wanamaker asked to hear directly from Mr. Day. Ms. Troll suggested contacting Holland America representatives as well.

VI. ADJOURNMENT - 8:24 p.m.

Submitted by Laurie Sica, Municipal Clerk

**ASSEMBLY AGENDA/MANAGER'S REPORT
THE CITY AND BOROUGH OF JUNEAU, ALASKA**

"Healty Indicators" - Report from Matt Felix

SUBJECT:

BACKGROUND:

RECOMMENDATION:

ATTACHMENTS:

File Name	Description
☐ NCADD Juneau HealthyIndicators_final.pdf	Healthy Indicator Report 2013

2013

JUNEAU HEALTHY INDICATORS REPORT

A REPORT THAT FOCUSES ON JUNEAU'S
HEALTH AND QUALITY OF LIFE

SPECIAL THANKS

NCADD BOARD OF DIRECTORS

Joan Cahill, Board President

William F. Cummings

Steve Krall, Board Treasurer

Leslie Longenbaugh, Board Secretary

Ann Rausch

Ross Soboleff

Alex Viteri

Joe Winders

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This publication was prepared by The National Council on Alcoholism and Drug Dependence (NCADD) and reviewed by the McDowell Group.

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We would like to thank the City and Borough of Juneau, the Service Advisory Board for funding this research. The State of Alaska and private donations also assisted in this publication.

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INTRODUCTION



HISTORY & PURPOSE

By Matt Felix MS
NCADD / Researcher

A Community Health Indicator Report (HIR) is an objective gathering of data to clarify health concerns expressed by citizens through surveys. This Health Indicator Report follows two major surveys done in Juneau, Alaska. The 2005 Compass Survey and the 2010 McDowell Community Survey both gave the citizens of Juneau a chance to prioritize their health concerns. This HIR focuses on alcohol and both licit and illicit drugs and includes tobacco. Alcohol and drug use, abuse and addiction was the priority concern of the Juneau population in both surveys. In the McDowell Survey, the statement that received the most responses was *“Alcohol and Drugs is a critical problem in our community and is a key factor in the multiple health conditions in our community”*.

This report begins with a comparative view of Juneau’s health status and rank by including the County Health Rankings data. This study gives a general overview of Juneau’s health and how we compare to Alaska as a state and provides a national benchmark to achieve a healthy population.

This Health Indicator Report attempts to give a better understanding of the health in Juneau and the Southeast region. We have included data on the high incidence of chemical use and the related diseases associated with these rates. We have attempted to compare rates of related diseases and issues in Juneau, the state, and the nation when the data allowed. This attempt at community awareness also presents critical insight for health planners and funders in the future. Most importantly, we hope this data gives direction to disease prevention efforts that may make Juneau a better place to live.

In addition, the latest state wide survey on health, The Healthy Alaskans Report 2020 found that the leading health concern of Alaskans was “Alcohol Use and Abuse.” This concern superseded the cost of health care (2), diet and obesity (3), other substance abuse issues (4) and violence (5).

The HIR focuses on alcohol, drug, and tobacco because these products have been shown to be the greatest contributors to morbidity and mortality in our community as well as the state. Alaska is the only state that lists cancer as the leading cause of death over heart disease. Alcohol and tobacco are major contributors to both of these diseases.

The measures presented in this Community HIR illustrate as current as possible, the environment in which we live, work, and in which our children grow and learn. The report also hints at the rising financial burden on families and government that comes with diseases that have social-legal consequences. Most importantly, this document gives a baseline profile of the Juneau community that validates our citizens concerns. None of the data in this report is confidential.

GENERAL HEALTH INDICATORS

	Juneau	Alaska	National Benchmark*
Health Outcomes			
Mortality			
Premature death	5,867	7,455	5,317
Morbidity			
Poor or fair health	11%	13%	10%
Poor physical health days	3.4	3.5	2.6
Poor mental health days	3.0	2.9	2.3
Low birthweight	4.9%	5.9%	6.0%
Health Factors			
Health Behaviors			
Adult smoking	19%	22%	13%
Adult obesity	26%	28%	25%
Physical inactivity	18%	23%	21%
Excessive drinking	22%	19%	7%
Motor vehicle crash death rate	7	11	10
Sexually transmitted infections	563	836	92
Teen birth rate	27	42	21
Clinical Care			
Uninsured	19%	21%	11%
Primary care physicians**	827:1	1,206:1	1,067:1
Dentists**	1,077:1	1,286:1	1,516:1
Preventable hospital stays	44	55	47
Diabetic screening	75%	70%	90%
Mammography screening	69%	57%	73%
Social & Economic Factors			
High school graduation**	72%	68%	
Some college	74%	65%	70%
Unemployment	5.3%	7.6%	5.0%
Children in poverty	10%	15%	14%
Inadequate social support	17%	19%	14%
Children in single-parent households	36%	31%	20%
Violent crime rate	426	641	66
Physical Environment			
Drinking water safety	0%	11%	0%
Access to recreational facilities	22	12	16
Limited access to healthy foods**	6%	8%	1%
Fast food restaurants	40%	44%	27%

* 90th percentile, i.e., only 10% are better.

** Data should not be compared with prior years due to changes in definition.

Note: Blank values reflect unreliable or missing data

Table A

Juneau gets positive rankings in many areas of health, such as environment, clean water, and fewer low birth weight babies. Other health rankings put Juneau ahead of state averages but below the optimum benchmarks. Excessive drinking is one of the few areas that places Juneau at a poorer ranking with both the state and national benchmarks.

Sources: Table A.) <http://www.countyhealthrankings.org/app/home#/alaska/2013/juneau/county/outcomes/overall/snapshot/by-rank>, University of Wisconsin National County Health Rankings

DEMOGRAPHICS

WHO LIVES HERE?

PEOPLE	JUNEAU	ALASKA
Population, 2010	31,275	710,231
Persons under 5 years, percent, 2010	6.3%	7.6%
Persons under 18 years, percent, 2010	23.5%	26.4%
Persons 65 years and over, percent, 2010	8.4%	7.7%
Female persons, percent, 2010	49.0%	48.0%
White persons, percent, 2010 (a)	69.7%	66.7%
Black persons, percent, 2010 (a)	0.9%	3.3%
American Indian and Alaska Native persons, percent, 2010 (a)	11.8%	14.8%
Asian persons, percent, 2010 (a)	6.1%	5.4%
Native Hawaiian and Other Pacific Islander, percent, 2010 (a)	0.7%	1.0%
Persons reporting two or more races, percent, 2010	9.5%	7.3%
Persons of Hispanic or Latino origin, percent, 2010 (b)	5.1%	5.5%
White persons not Hispanic, percent, 2010	67.4%	64.1%
<i>(a) Includes persons reporting only one race.</i>		
GEOGRAPHY	JUNEAU	ALASKA
Land area in square miles, 2010	2,701.93	570,640.95
Persons per square mile, 2010	11.6	1.2

Table A

AGING

Juneau's population is essentially static but rapidly aging. Alaskan seniors are more likely than U.S. seniors as a whole to die of causes linked to behavioral health issues.

AGING POPULATION

ALASKA'S AGING POPULATION

POPULATION AGE 60+	60+ % of Area's 2010 Population	CY 2010	CY2009	CY2008	CY2000	% Seniors Change 2000-2010
Southeast*	16.4%	11,764	11,271	10,809	7,740	+52.0%
Age 60-64	39.5%	35,938	32,837	30,395	17,327	+107.4%
Age 65-74	38.9%	35,350	33,081	31,019	22,507	+57.1%
Age 75-84	16.4%	14,877	14,169	13,795	10,558	+40.9%
Age 85+	5.2%	4,711	5,013	4,641	2,634	+78.9%
Rank Among States in growth of Senior population		Ranking #1	Ranking #1	Ranking #1		Fastest growing A. senior population per capita. Age 65+

Note: * Southeast includes: Haines, Juneau, Ketchikan, Prince of Wales, Sitka, Skagway-Hoonah-Angoon, Wrangell-Petersburg, Yakutat

Table A

Juneau has one of the fastest growing senior population in Alaska and in 2010, it's senior population (60+) was at 4,495. Drug-induced deaths (including both prescription and non-prescription drugs) are 82% higher among Alaskan seniors than among U.S. seniors. (Source: 2011 Alaska Commission on Aging Senior Snapshot)

Alaskan seniors are more likely to die from cancer and chronic lower respiratory diseases than the national average. Senior death rates from heart diseases are substantially lower in Alaska. Older Alaskans have suicide rates 45% higher than national senior suicide rates, as well as high rates of accidental deaths and alcohol and drug-induced deaths. The figures presented in this section suggest that behavioral health programs targeted to seniors with depression, other mental illness, and substance abuse problems could have a dramatic impact on the quality of life of this age group. (Source: Alaska Commission on Aging FY 2010 Annual Report)

AGING POPULATION

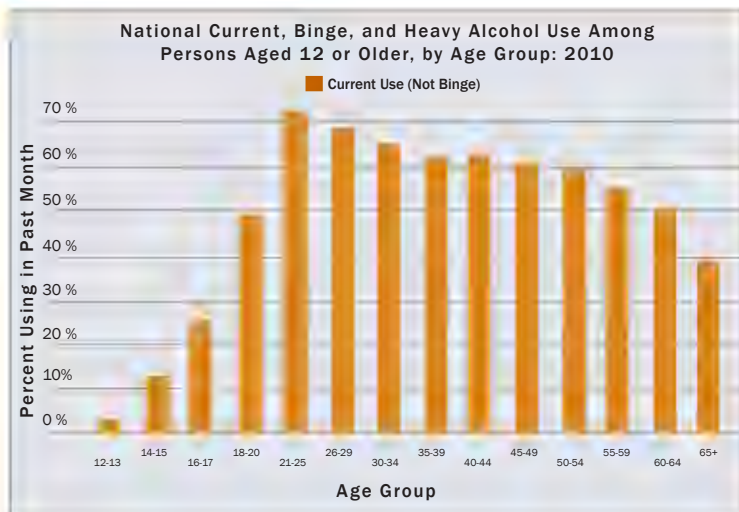


Chart A

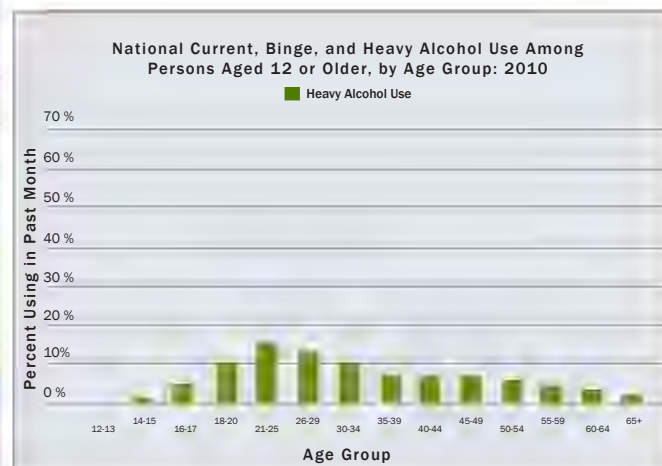


Chart C

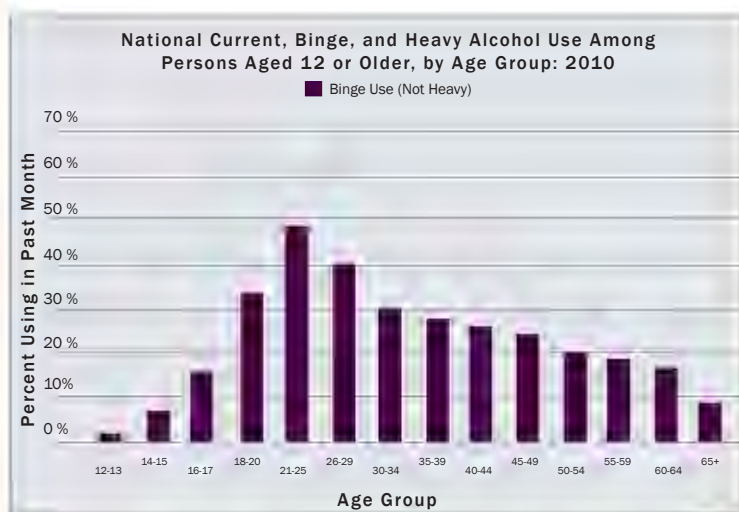


Chart B

Although heavy drinking subsides with age, it is exceedingly high for seniors in Alaska.

Alaskan seniors are over 3 times more likely than U.S. Seniors as a whole to experience an alcohol related death.

(Binge Drinking = 5 or more drinks in a setting)

(Source: 2011 Alaska Commission on Aging Senior Snapshot)

Hospital admissions for non-fatal falls, Age 60+	AK, 2010 706 (76.6% of all non-fatal injury hospitalizations)	AK, 2009 753 (76.6% of all non-fatal injury hospitalizations)	565,029 (74.3% of all non-fatal injury hospitalizations from top 20 causes)
Alcohol Use Suspected	AK, 2010 61 (7.8%)	AK, 2009 66 (8.8%)	-
Age 60+ Binge Drinkers	5%	5.1%	3.5%
Age 60+ Heavy Drinkers	3%	4.1%	3.1%
Age 60+ Smokers	9.9%	8.6%	8.2%

Table A

Sources: Chart(s) A.,B.,C.) SAMSHA 2009, Results from the 2008 National Survey on Drug Use and Health: National Findings (Office of Applied Studies, NSDUH Series H-36, HHS Publication No. SMA 09-4434) Rockville, MD. <http://www.samhsa.gov/data/NSDUH/2k10NSDUH/2k10Results.htm#Fig3-1> Table A). Alaska Trauma Registry; WISQARS data base (CDC), Age 65+ - 2010 BRFSS

**Underage Alcohol Use, Juneau, Alaska and U.S,
2007, 2009, 2011**

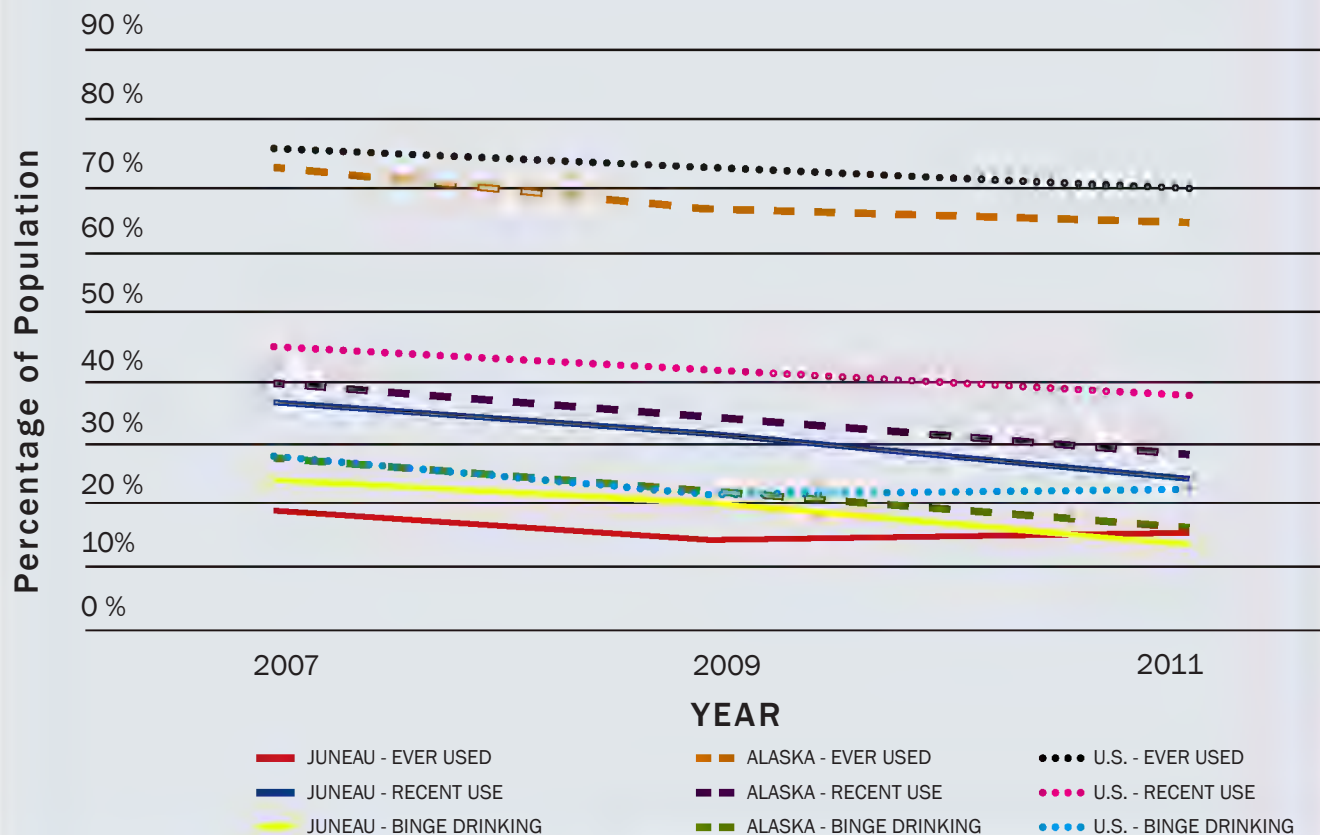
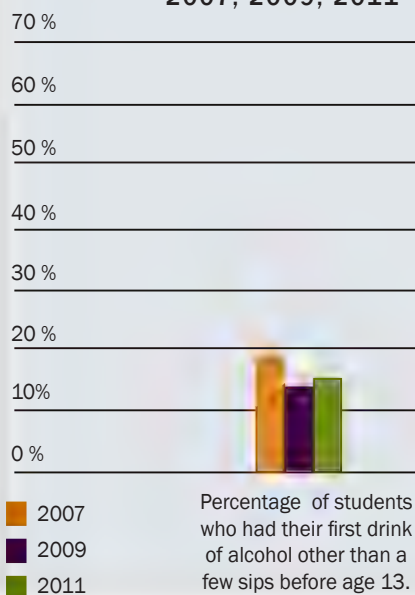


Chart A

**First drink before age 13, Juneau,
2007, 2009, 2011**



WHAT IS THE YRBSS?

The Youth Risk Behavior Surveillance System (YRBSS) monitors health-risk behaviors that contribute to the leading causes of death and disability among youth nationally.

The slight reduction in the use of alcohol among Juneau's teens mirrors the national trend. Alcohol still remains the overall drug of choice among teens in Alaska.

Chart B

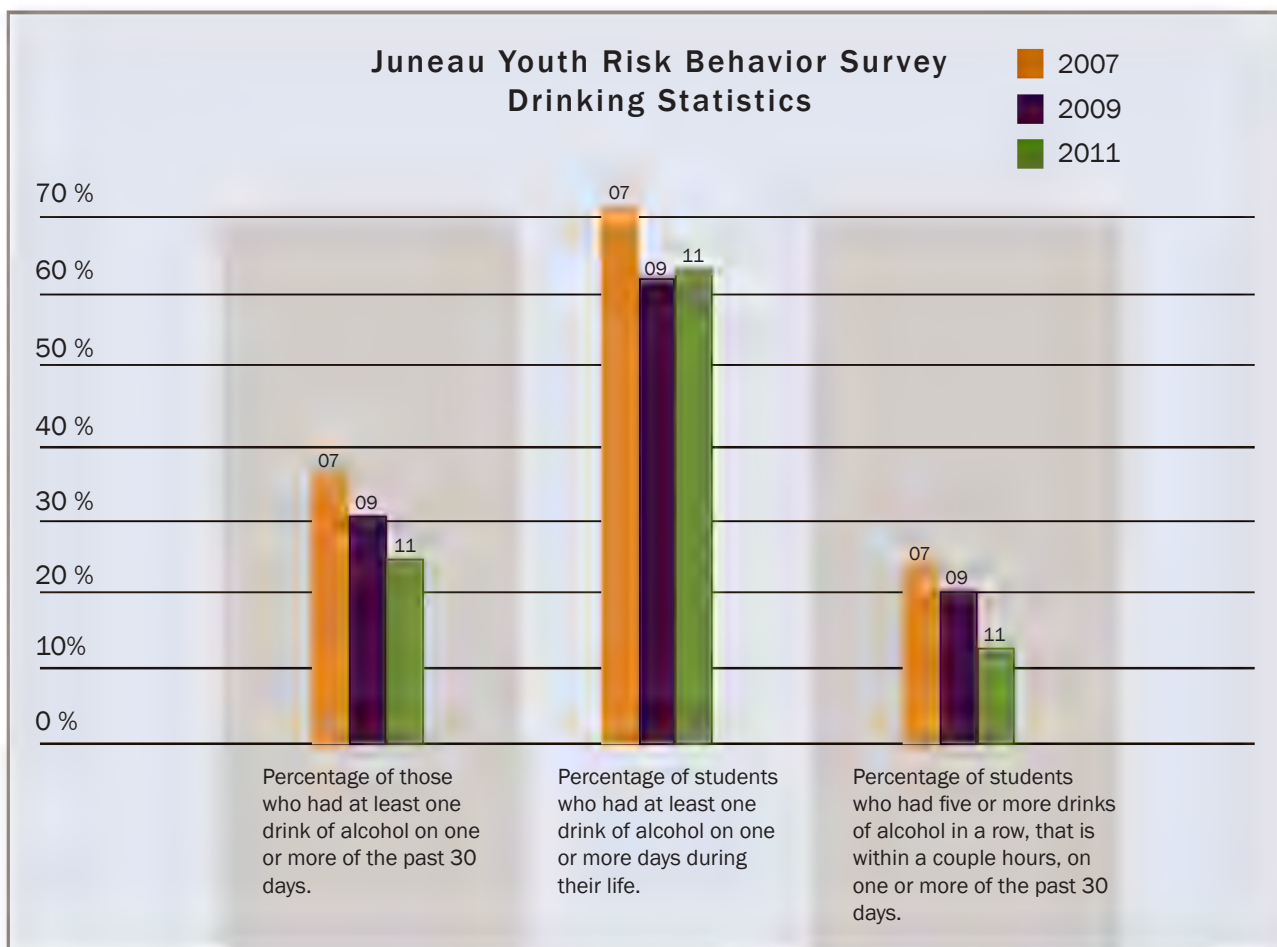


Chart A

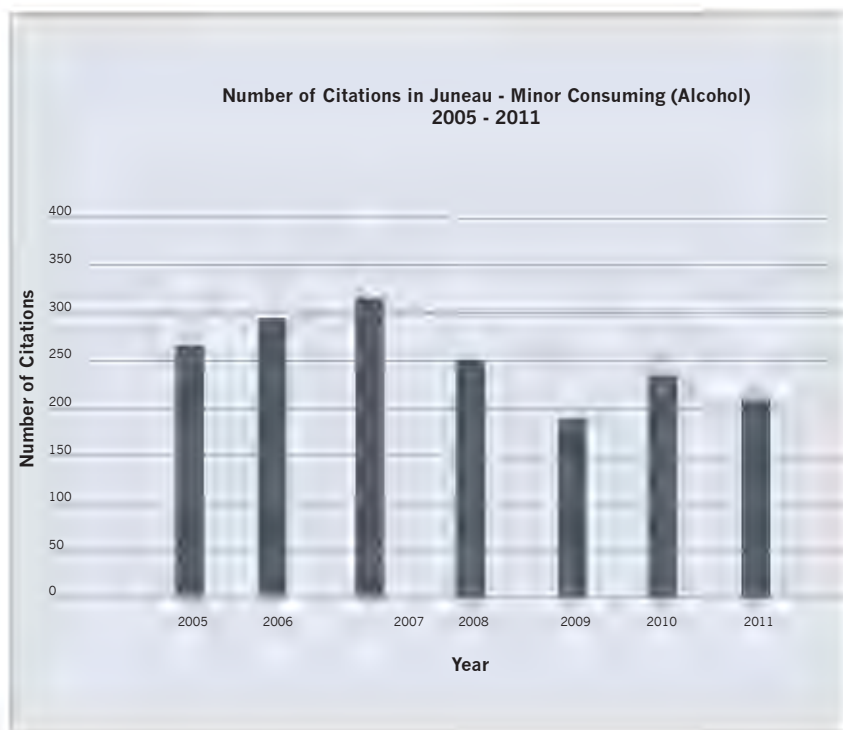


Chart B

YOUTH AND ALCOHOL

The use of alcohol and tobacco by youth has declined over the last five years. Early onset of alcohol use and binge drinking puts teens at greater risk of developing alcohol addiction later in life times four.

Sources: Chart A.) Youth Risk Behavior Survey 2007, 2009, 2011, Chart B.) Juneau Police Department

Youth Tobacco Indicators, Juneau, 2007, 2009, 2011

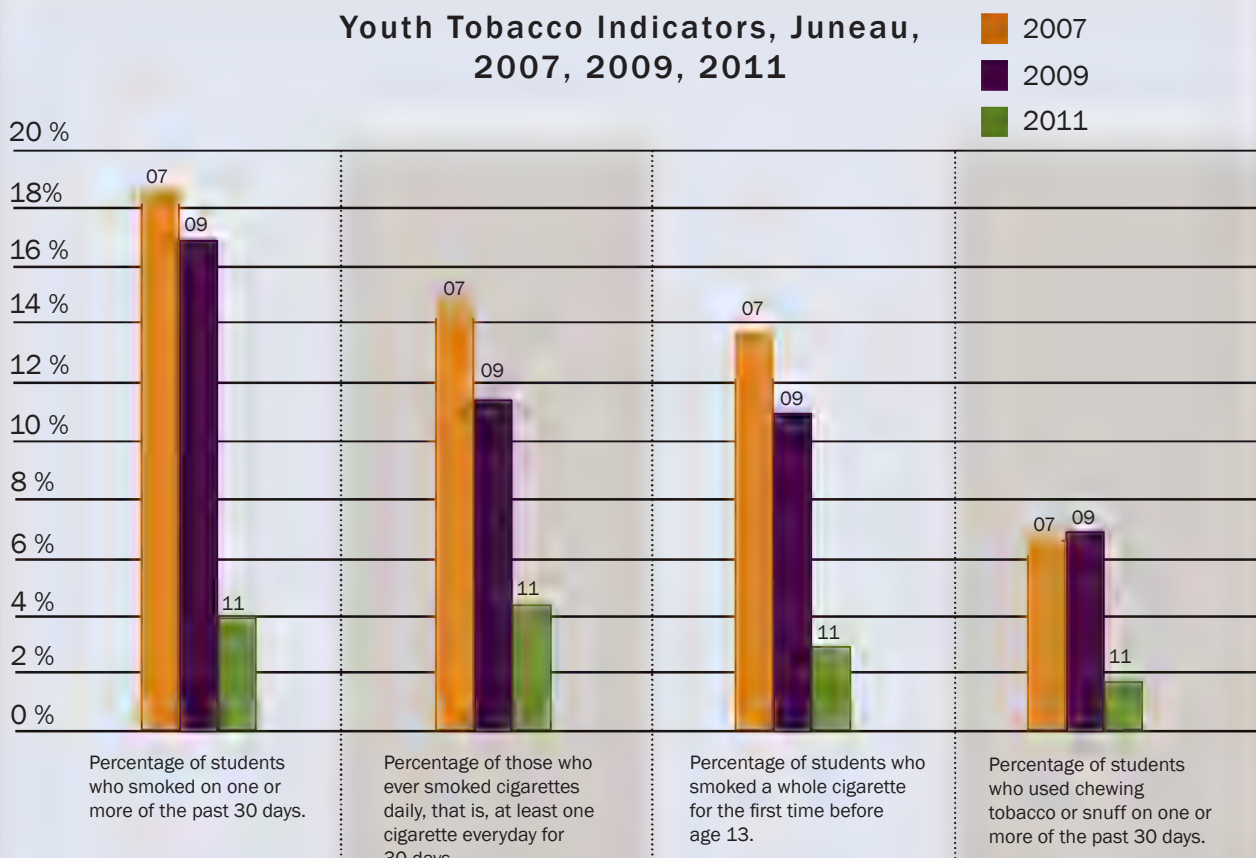


Chart A

Number of Underage Tobacco Citations for The City of Juneau 2005 - 2011

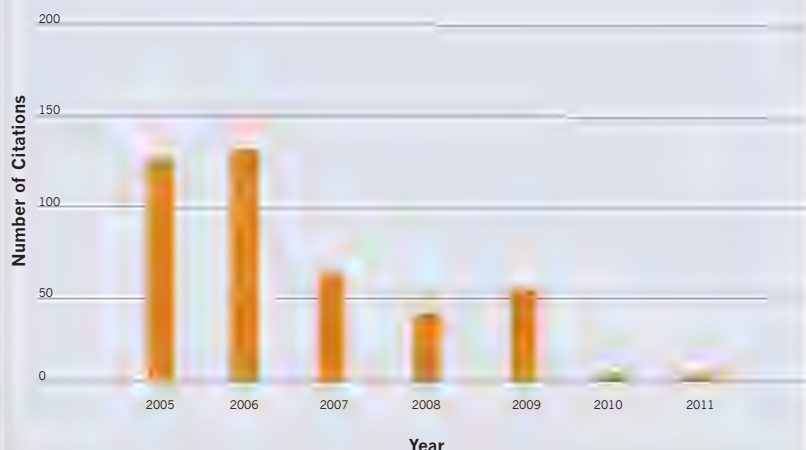


Chart B

YOUTH AND TOBACCO

Although smoking by teens has declined substantially over the last ten years, the consequences of smoking among this age group will impact the overall health of a community for many years. Eighty-five to ninety percent of adult smoking begins in the teen years. The use of tobacco products is the single most important factor that negatively impacts a community's health.

Illicit Drug Use Indicators, Juneau, 2007, 2009 and 2011

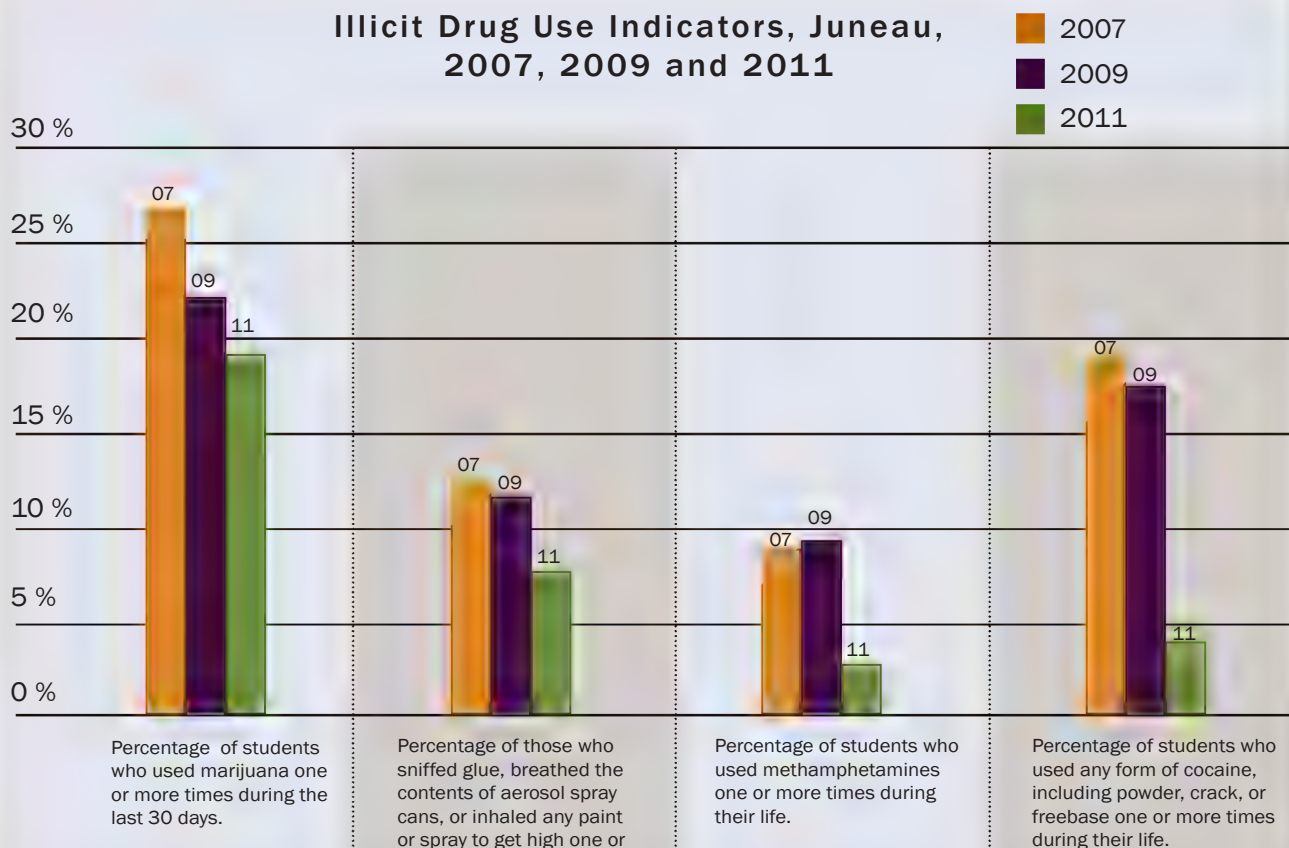


Chart A

**Juneau Youth Risk Behavior Survey
Prescription Drug Comparison
2009 - 2010**

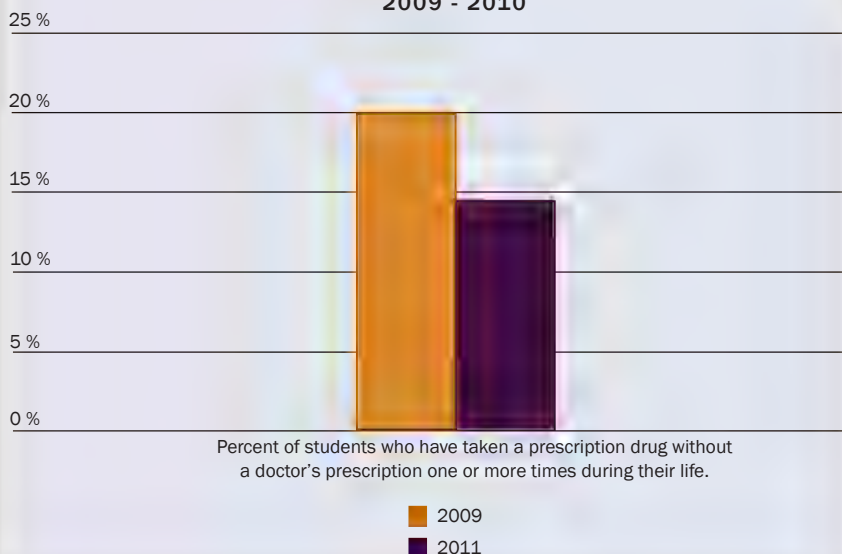


Chart B

YOUTH AND DRUGS

Drug abuse continues to be a factor in teen health.

It appears that prescription drug use decreased between 2009 and 2011.

Reformulation of opioid prescription medication made it more difficult to abuse.

Sources: Chart A.) Youth Risk Behavior Survey 2007, 2009, 2011, Chart B.) Youth Risk Behavior Survey 2007, 2009, 2011

ALCOHOL ABUSE & ADDICTION

WHAT IS A STANDARD DRINK IN THE UNITED STATES?

A standard drink is equal to 14.0 grams (0.6 ounces) of pure alcohol. Generally, this amount of pure alcohol is found in:

- 12-ounces of beer
- 8-ounces of malt liquor
- 5-ounces of wine
- 1.5-ounces or a “shot” of 80-proof distilled spirits or liquor (e.g., gin, rum, vodka, or whiskey)

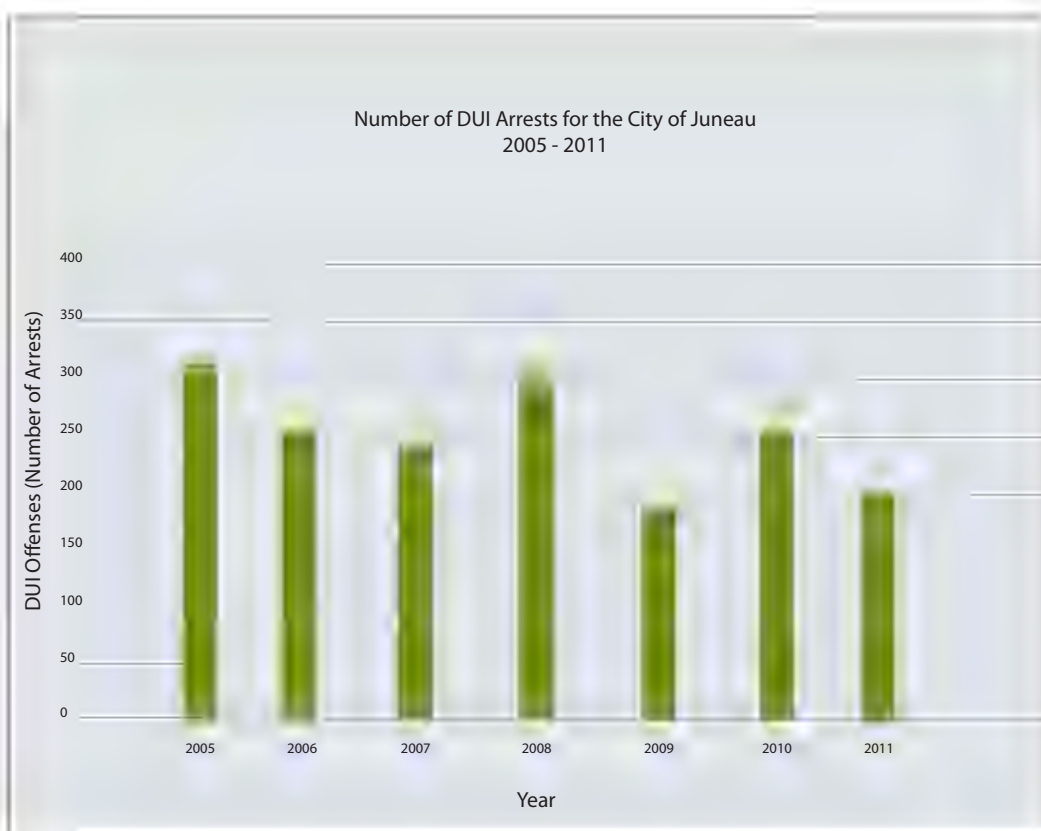


Chart A

Sources: AK Department of Revenue; Report of Alcoholic Beverages Distributed or Sold, AK Department of Revenue; Report of Alcoholic Beverages Distributed or Sold, 2010 U.S. Census (Southeast Alaska population: 58,942 : alcohol consumption among adults (age 14+), NIAA Surveillance Report, <http://www.cdc.gov/alcohol/faqs.htm#whatAlcohol>.) Chart A.) Juneau Police Department

ALCOHOL ABUSE & ADDICTION

WHY DO WE DRINK SO MUCH?

Community laws and norms encourage or discourage alcohol abuse. Alcohol outlet density or the number of places selling alcohol also significantly influences consumption rates, with consumption increasing as the number of outlets increases. Access (availability) to alcohol greatly influences the amount of use and abuse among all age groups. During the territorial period, the federal jurisdiction issued Juneau many liquor licenses. These licenses and establishments were grandfathered into the state upon statehood. The state issued new licenses from 1959 to 1986 at a population ratio of one license per 1500 people. In 1986, the state amended the statute to mirror other states and began issuing licenses at one type of license per 3,000 population. This effectively cut off new licenses except seasonal and restaurant liquor licenses. Because of this history, Juneau now has many licenses in excess of the allowed by statute.

Alaska statutes stipulate Juneau should have no more than 1 bar and 1 liquor store per 3,000 people, which equals 11 outlets of each type. The estimated population for Juneau is 31,275. (Sources: AS04.11.400, 2010 US Census).

Abundant availability of alcohol influences its use and price in a small community such as Juneau.

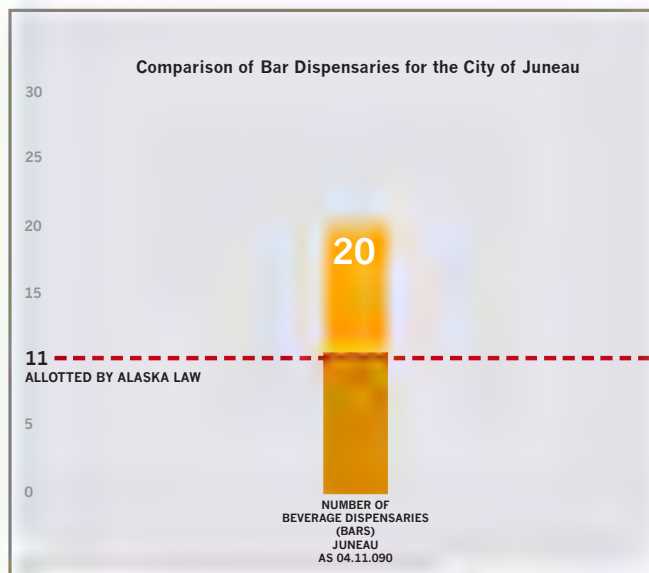


Chart A

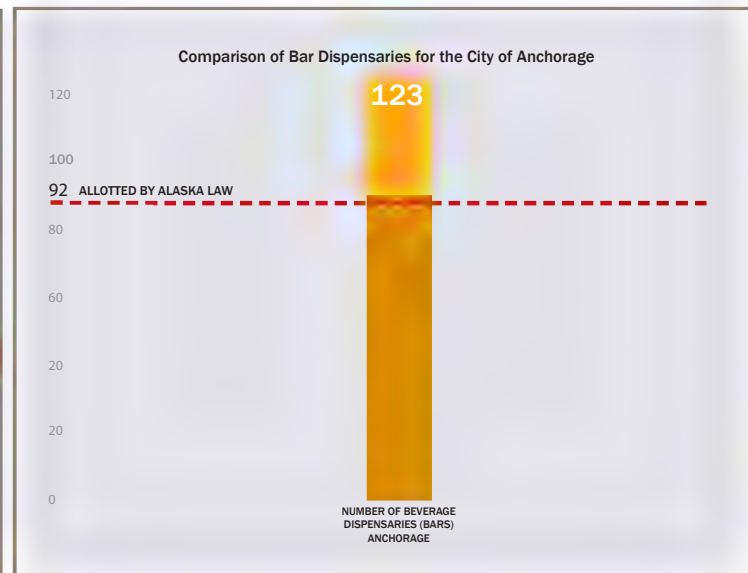


Chart B

Bars & Beverage Dispensary license
AS 04.11.090

Sources: Chart A.) Alcoholic Beverage Control Board for State of Alaska, Healthy Anchorage Indicators Report, 1998, Chart B.) Alcoholic Beverage Control Board for State of Alaska, Healthy Anchorage Indicators Report, 1998

Average Yearly Consumption of Gallons of Pure Alcohol

District 1 Average with Tourist
Influence: 3.4 Gallons

District 1 Average w/o Tourist
Influence: 3.0 Gallons

U.S. Average: 2.3 Gallons

Table A

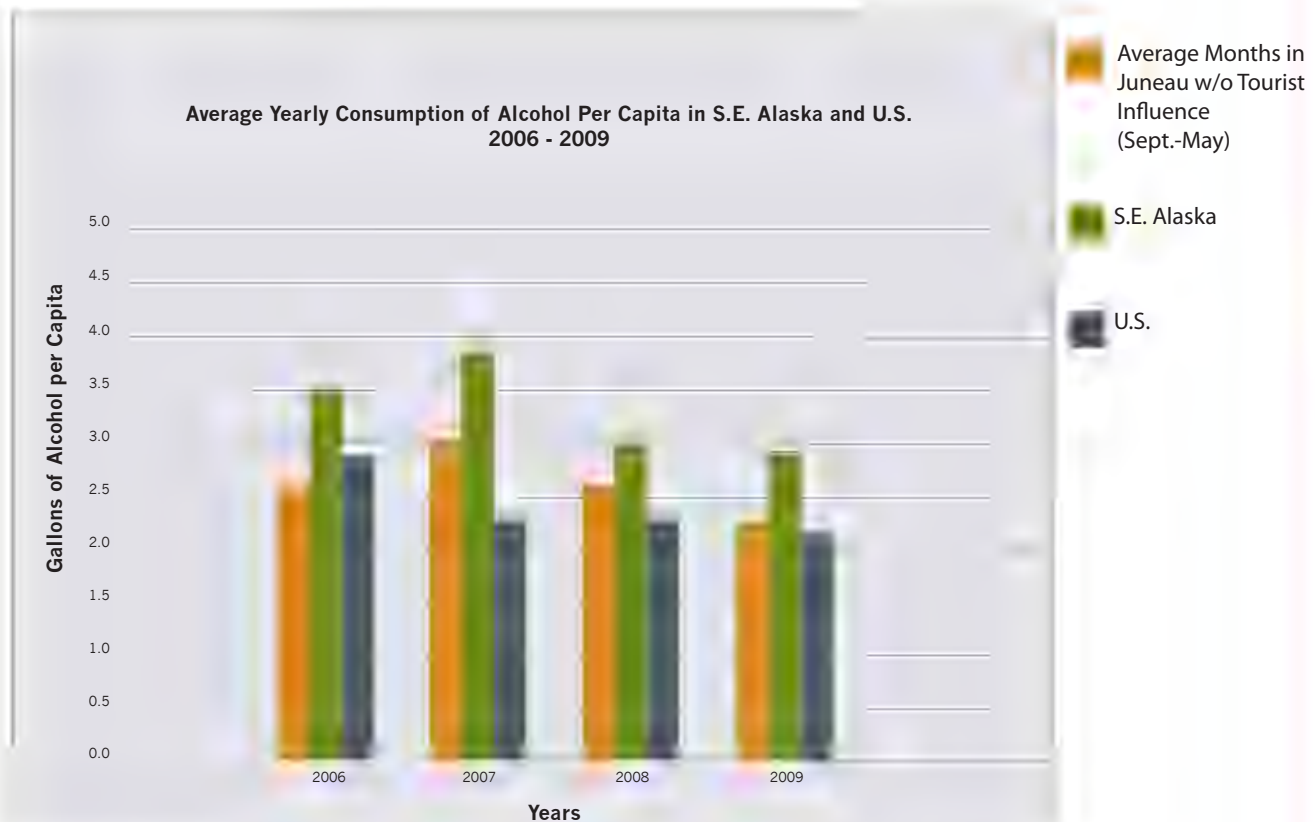


Chart A

A bell weather indicator of a community's health and social problems is the per-capita consumption of alcohol. The amount of alcohol consumption is positively correlated to the health, social, and legal status of a given community or state. This is measured in pure or absolute alcohol consumed by the average resident of a population. Southeast (District 1) is the the heaviest drinking region in the state and one of the highest consuming regions in the nation.

ALCOHOL ABUSE & ADDICTION

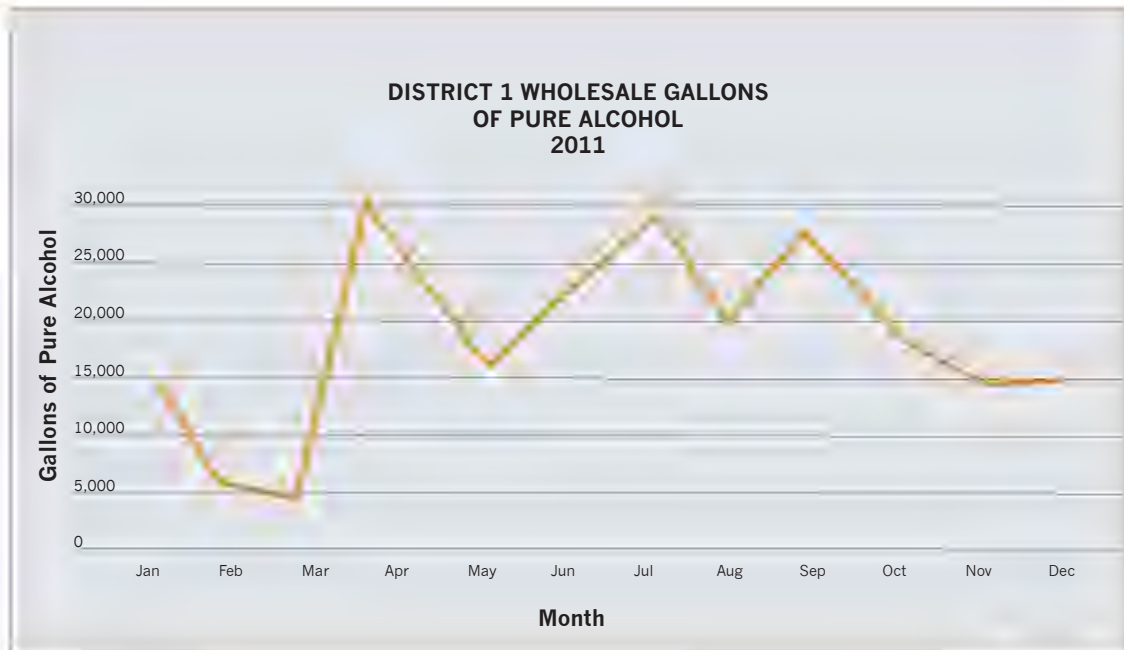


Chart A

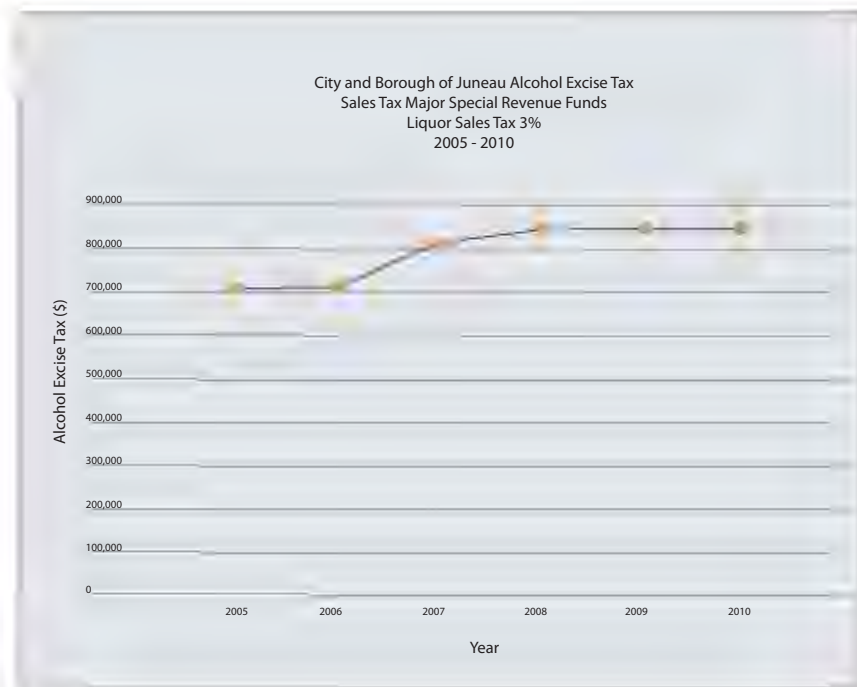


Chart B

For the six non-tourists months, 75,860 wholesale gallons of pure alcohol were purchased, averaging to 12,643 gallons per month.

For the six tourists months, 146,625 wholesale gallons of pure alcohol were purchased. For these months the monthly average was 24,437 gallons.

After removing the tourism influences on the per-capita drinking, Juneau still has an exceedingly high rate of alcohol consumption.

Sources: Chart A.) The National Council on Alcoholism and Drug Dependence- Juneau Affiliate, AK Dept. of Revenue, Chart B.) City and Borough of Juneau, AK Dept. of Revenue

Alcohol consumption is the single most influencing factor in crime, preventable injuries, domestic violence, suicide, drowning, pedestrian and auto fatalities. Recent research demonstrated that alcohol combined with tobacco is a major contributing factor in cancer, especially liver, lung, and breast cancer. Throat and esophageal cancers are most prominent with alcohol use as well. Alcohol is implicated in 70% of fatalities by fire in the state. Alcohol use during pregnancy is the leading preventable cause of birth defects in all regions of the state. (Source: National Council on Alcoholism and Drug Dependence-Juneau).

SOUTHEAST ALASKA ALCOHOLIC BEVERAGES DISTRIBUTED OR SOLD 2010 - 2011

Wholesale Pricing

Category	Amount
Liquor:	\$2,680,973
Wine:	\$811,985
Malt Beverage:	\$1,686,745
Qualifying Beer:	\$159,425

Table A



Pure alcohol % by type sold

Liquor	40%
Wine	13%
Malt Beverage	4.5%
Qualifying Beer	4%

Table B

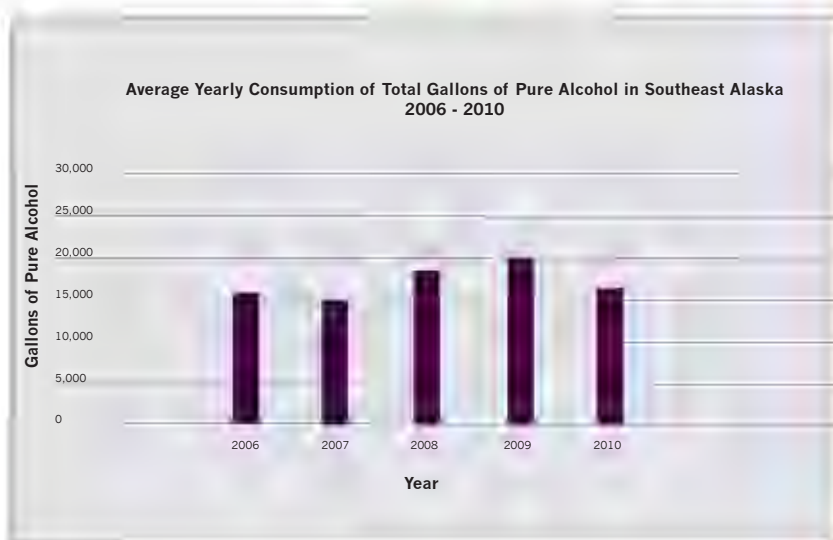


Chart B

ALCOHOL IS THE #1 HEALTH CONCERN OF ALASKANS

The State of Alaska Department of Health and Social Services and the Alaska Native Tribal Health Consortium joined together for the Healthy Alaskans 2020 initiative (HA2020), a project working to pinpoint Alaska-specific health concerns and guide efforts in the state around common health goals.

HA2020 is a decade-long project that will narrow in on Alaska's most pressing health concerns, set health goals, and look for ways to meet those goals by 2020.

As part of this project, Alaskans were asked to rank the top 10 health issues important to Alaskans in order of priority.

1. ALCOHOL USE AND ABUSE
2. COST OF HEALTH CARE
3. DIET, EXERCISE AND OBESITY
4. OTHER SUBSTANCE ABUSE
5. VIOLENCE
6. COMMUNITY SAFETY
7. QUALITY OF LIFE AND WELL-BEING
8. SEXUAL AND REPRODUCTIVE PRACTICES
9. CHRONIC DISEASE RELATED HEALTH OUTCOMES
10. EDUCATION

This state wide survey has reported similar to the two surveys of Juneau residents rating alcohol abuse as the top concern. (Sources: www.alaskadispatch.com/article/study-alsohol-number-one-health-concern-alaskans#.UMEnbod93jc.t...)

FETAL ALCOHOL SPECTRUM DISORDERS

BIRTH DEFECTS FROM WOMEN DRINKING WHILE PREGNANT ARE PERMANENT, PREVENTABLE

- Fetal alcohol spectrum disorders (FASD) refers to conditions caused by prenatal exposure to alcohol, including fetal alcohol syndrome (FAS).
- FASD are one of the most common causes of developmental disability and the only cause that is entirely preventable.
- FAS is a medical diagnosis defined by the presence of specific growth and nervous system abnormalities and other factors.
- Alaska has the highest rate of FAS in the nation among states that track this data. As many as 180 children are reported to the Alaska Birth

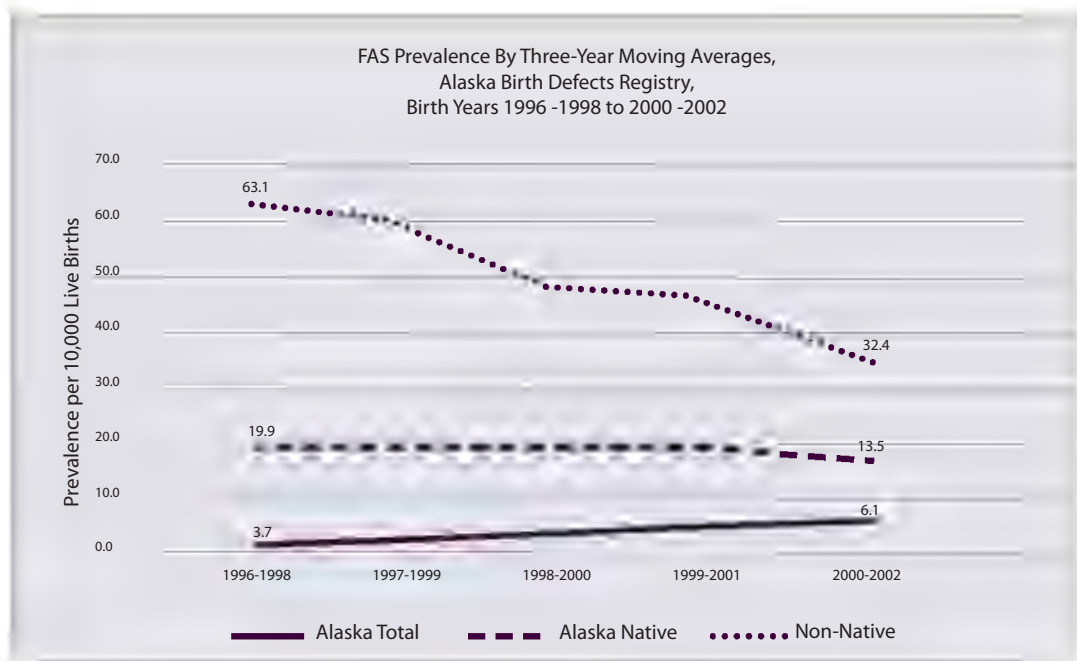


Chart A

The rate of this birth defect continues to decline, demonstrating the effectiveness of the targeted prevention efforts.

Sources: Chart A.) The State of Alaska Epidemiology Bulletin, State of Alaska Department of Health and Social Services, http://dhss.alaska.gov/News/Documents/press/2010/FAS_fs_021810.pdf

TOBACCO & RELATED ILLNESSES

TOBACCO-CAUSED ILLNESS AND DISEASE

Approximately 1,330 Americans die each day as a result of tobacco use—nearly one death each minute. Annually in the United States, tobacco use was directly responsible for approximately:

- 30% of all cancer deaths
- 21% of all coronary heart disease deaths
- 18% of all stroke deaths

(Sources: U.S. Department of Health and Human Services, “The Health Consequences of Smoking: A Report of the Surgeon General”, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2004, “A decade of Progress,” Tobacco Prevention and Control in Alaska)

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SMOKELESS TOBACCO RISKS

Smokeless tobacco comes in a variety of styles and is known by different names: snuff, chew, spit, dip, and now the new products - dissolvables in the form of lozenges, pellets and thin film strips similar to breath fresheners, among others.

These highly addictive products contain nicotine, and 28 carcinogens, including formaldehyde, arsenic, cadmium and radioactive polonium-210 along with high levels of carcinogens.

A smokeless user can expect bad breath, stained teeth, bone loss and receding gums. There is an increase risk of oral cancer such as: cancer of the lip, tongue, cheek, roof and even the larynx. Smokeless tobacco increases the risk of stomach and pancreatic cancer as well as heart disease and high blood pressure.

(Sources: SAMSHA, Office of Applied Studies, National Survey on Drug Use and Health, 2008)

SECONDHAND SMOKE

According to a 2011 survey done by The Behavioral Risk Factor Surveillance System (BRFSS), a majority of respondents did not allow smoking in their homes (88%) or their vehicles (79%). In 2011, 88% believe smoking should be prohibited in all workplaces. *(Sources: BRFSS 2011)*



Figure A

ADULT SMOKING IN SOUTHEAST ALASKA

Significantly fewer (24% v. 31%) respondents are current smokers in 2011 compared to 2008.

Significantly more respondents reported they have never smoked (100 cigarettes in their lifetime) in 2011 (45%) than in 2008 (39%) indicating fewer people are initiating smoking and 56% of current daily smokers in 2011 were 25 to 34 year olds.

Research has shown the price of a product greatly influences its use and onset of first use.

Sources: Figure A.) National Council on Alcoholism and Drug Dependence - Juneau Affiliate, Alaska BRFSSD. 2007-2009. Alaska Department of Health and Social Services, Division of Public Health, Chronic Disease Prevention and Health Promotion Section

TOBACCO & RELATED ILLNESSES

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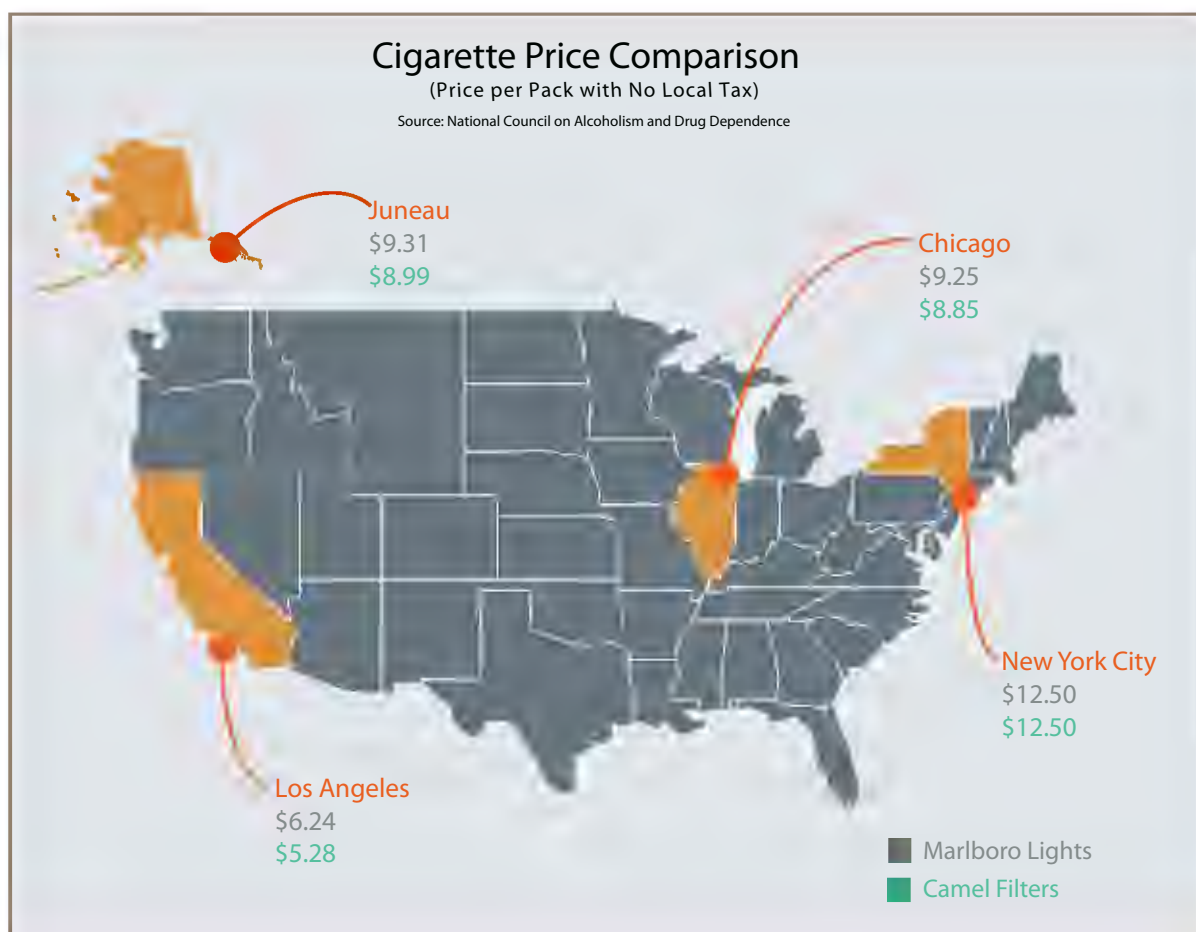


Figure A

THE COST OF A PACK A DAY FOR 365 DAYS

CAMEL FILTERS

NEW YORK CITY
\$4,562.50 per year

CHICAGO
\$3,230.25 per year

JUNEAU
\$3,281.35 per year

LOS ANGELES
\$1,927.20 per year

MARLBORO LIGHTS

NEW YORK CITY
\$4,562.50 per year

CHICAGO
\$3,376.25 per year

JUNEAU
\$3,398.15 per year

LOS ANGELES
\$2,277.18 per year

Source: Figure A.) National Council on Alcoholism and Drug Dependence - Juneau Affiliate

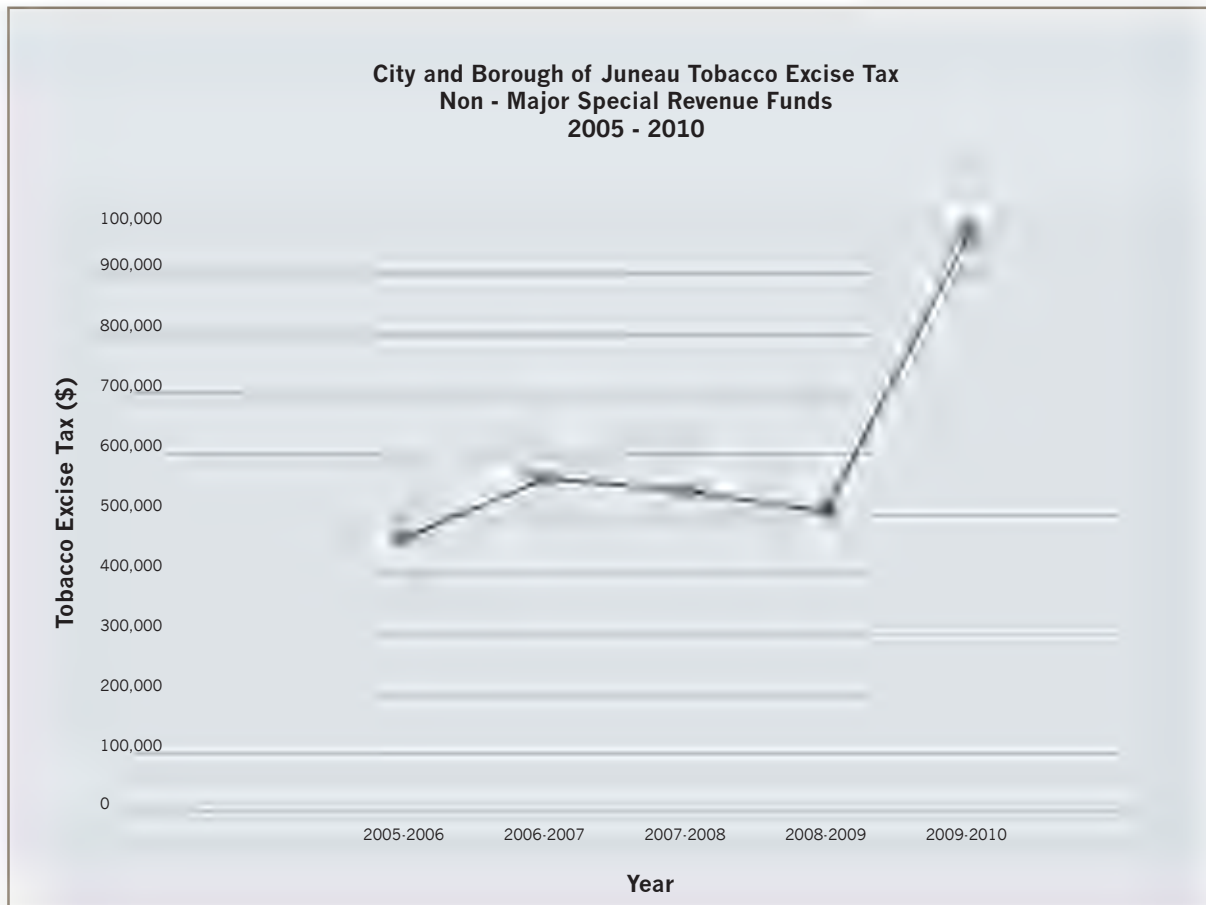


Chart A

ADULT SMOKING RATES

Current Smoking by Region	Juneau 18.2 %	Alaska 23.4 %	U.S. 17.3 % (a)	Healthy People 2020 Objective 12%
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Current Smoking by Gender	Male 20.7 % Female 15.7%
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Table B

On average, smoking rates are higher among Juneau men than Juneau women. Juneau adult smoking rates are lower than other areas of the state and near the national average. (Source: Alaska BRFSSD. 2007-2009. Alaska Department of Health and Social Services, Division of Public Health, Chronic Disease Prevention and Health Promotion Section).

Sources: Chart A.) City and Borough of Juneau, Table B.) 2010 BRFSS, Healthy People 2020 Objective

DRUGS: LICIT & ILLICIT ABUSE

THE NEW ADDICTION CRISIS: PRESCRIPTION DRUG OVERDOSE RATES

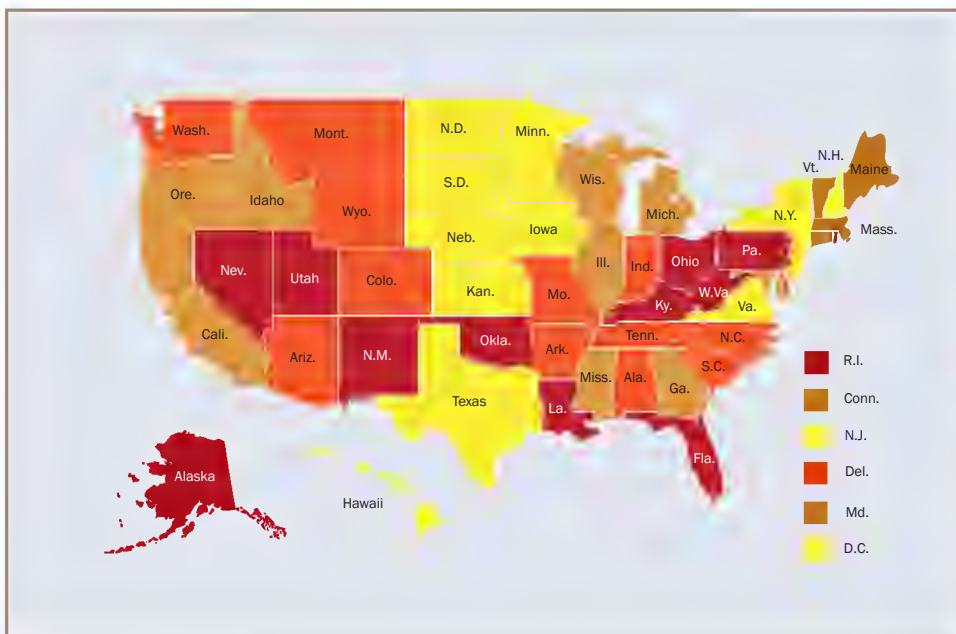


Figure A

METHOD OF OBTAINING PRESCRIPTION PAIN RELIEVERS REPORTED BY PAST MONTH NONMEDICAL USERS AGES 12 OR OLDER IN THE U.S. (2009 & 2012 COMBINED ANNUAL AVERAGES)

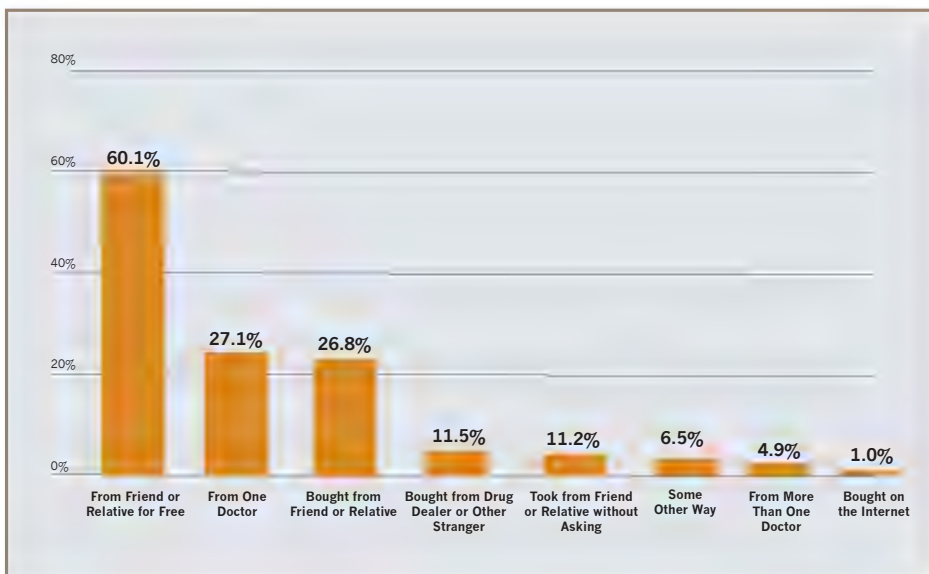


Chart B

Alaska is in the highest percentile of prescription drug overdoses per capita.

Source: Figure A.) Center for Disease Control (CDC), Chart B.) Adapted by CESAR from Substance Abuse and Mental Health Services Administration, Results from the 2010 National Survey on Drug Use and Health: Detailed Tables, 2011. Available online at <http://oas.samhsa.gov/nsduhLatest.htm>. NOTES: Percentages sum to more than 100% because respondents could indicate multiple sources from which they obtained pain relievers for past month nonmedical use. The response options "Wrote a fake prescription" and "Stole from doctor's office, clinic, hospital, or pharmacy" were reported by less than one percent of those who used prescription pain relievers nonmedically in the past year and are not shown in the chart above.

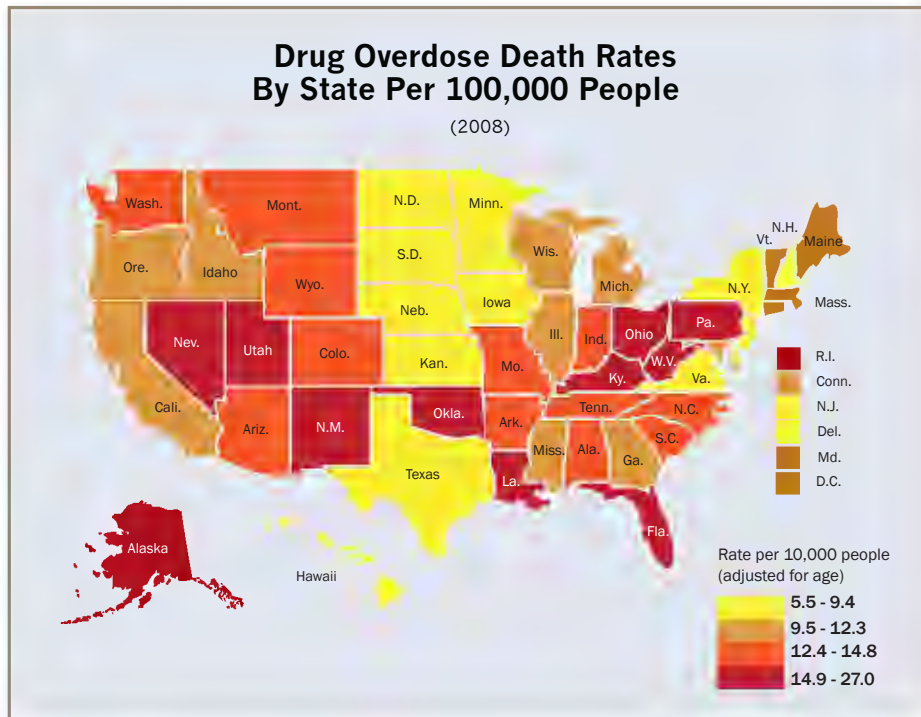


Chart A

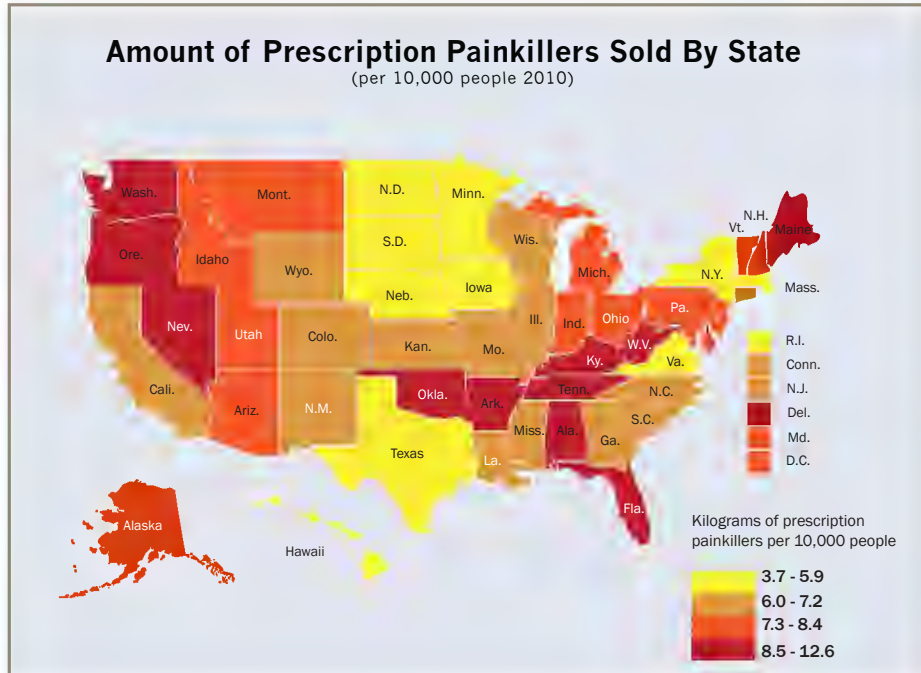


Chart B

There were 16,500 overdose prescription drug painkiller deaths nationally in 2010. Importation of illicit opiates as well as over prescribing by medical professionals has resulted in increased availability over the last ten years.

While Alaska instituted a prescription drug monitoring system in the Department of Commerce in 2011, NCADD was repeatedly denied access to prescription drug sales data in Juneau for this report.

DRUGS: LICIT & ILLICIT ABUSE

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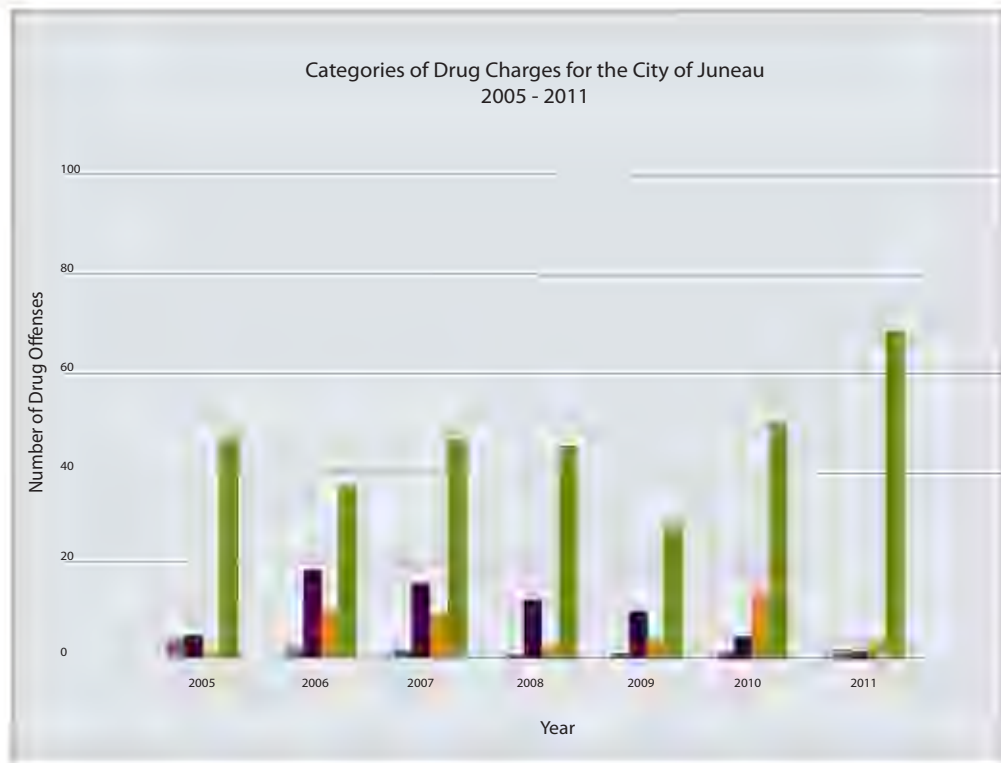


Chart A

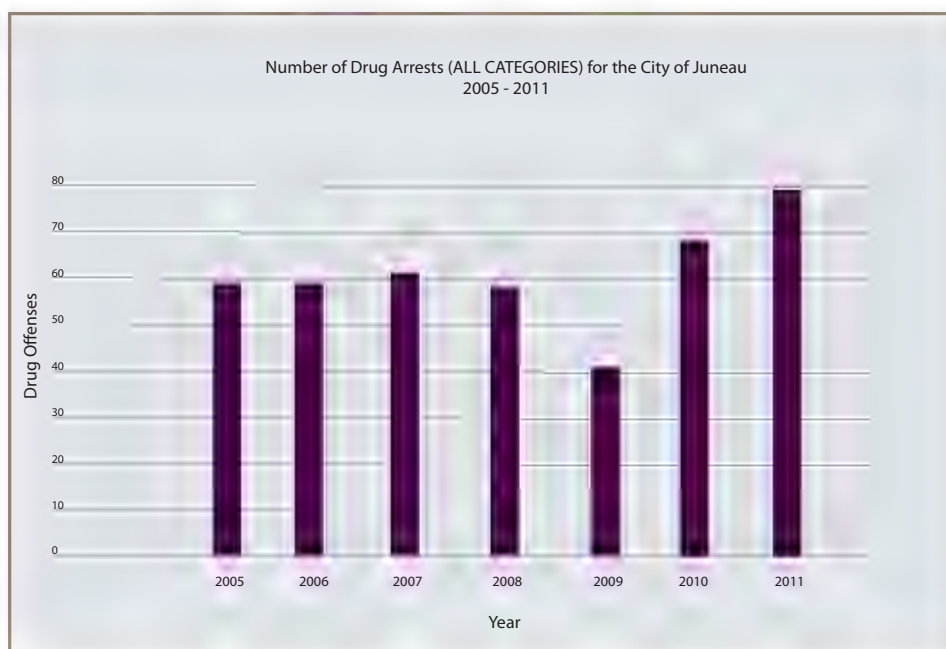


Chart B

Generally, enforcement resources allocated as well as drug availability will determine number of arrests.

Sources: Chart A.) Youth Risk Behavior Survey 2007,2009,2011, Chart B.) Juneau Police Department

OPIOID PAIN RELIEVERS(OPR) RELATED TOXICITY REPORTS IN NATIONAL POISON DATA SYSTEM (NPDS) ALASKA 2001-2010

	TOTAL *	INTENTIONAL EXPOSURE **	UNINTENTIONAL EXPOSURE	MANAGED IN HCF***
Hydrocodone	465	259 (56%)	171 (37%)	175 (38%)
Oxycodone	388	186 (48%)	171(44%)	150 (39%)
Codeine	203	97 (48%)	95 (47%)	77 (38%)
Tramadol	179	111 (62%)	58 (32%)	97 (54%)
Methadone	86	47 (55%)	29 (34%)	50 (58%)
Morphine	77	7 (9%)	46 (60%)	24 (31%)
Meperidine	24	6 (25%)	12 (50%)	8 (33%)
Total	1,422	713 (50%)	582 (41%)	581 (41%)

Table A

*Totals include intentional and unintentional exposures, as well as "other" exposures and adverse reactions (data not shown); totals do not include cases where intent was undetermined.

** Defined as intentional improper or incorrect use of substance to achieve a euphoric or psychotropic effect or to cause self-harm.

*** HCF = health care facility

OPR overdose is a growing health problem nationally and in Alaska. In Alaska (2008) the rate of overdoses of prescription medication is twice as high as the national average. (14.6 vs 6.5 per 100,00 population). In Alaska, 79% of all overdoses, accidental and purposeful were with opioid medication.

During 2001 to 2010, there were 1,422 cases of OPR-related toxicity reports in NPDS, and half of these were identified as intentional exposures. Overall, 41% of the reported cases were managed in a health care facility.

The Alaska Epidemiology Section reports that 82% of the hospitalizations for opiate overdoses between 2001-2010 were due to suicide attempts. The number of opiate overdose hospitalizations is highest in the Anchorage/Mat-Su area. Rates vary by region, with the statewide rate between 3 per 100,000 and 5 per 100,000 since 2007.

DRUGS: LICIT & ILLICIT ABUSE

JUNEAU DRUG OVERDOSE DEATH RATES BY YEAR 2006 - 2011

	2006	2007	2008	2009	2010	2011	2006-2011
1.) ALL DRUGS							
Number	3	4	6	2	5	5	25.0
Crude Rate	**	**	9*	**	**	**	0.6
Age-Adjusted Rate	**	**	9*	**	**	**	0.6
2.) PRESCRIPTION DRUGS							
Number	0	1	6	1	5	2	15.0
Crude Rate		**	9*	**	**	**	4*
Age-Adjusted Rate		**	9*	**	**	**	0.6
3.) OPIOID PAIN RELIEVERS							
Number	0	1	5	1	5	2	14.0
Crude Rate		**	**	**	**	**	3*
Age-Adjusted Rate		**	**	**	**	**	4*
4.) ILLICIT DRUGS							
Number	0	2	1	1	0	2	6.0
Crude Rate		**	**	**		**	1*
Age-Adjusted Rate		**	**	**		**	1*

Table A

Notes:

- Deaths with underlying causes of unintentional drug poisoning, suicide drug poisoning, homicide drug poisoning, or drug poisoning of undetermined intent, as coded in the International Classification of Diseases, 10th Revision.
 - Drug overdose deaths, as defined, that have prescription drugs as contributing causes.
 - Drug overdose deaths, as defined, that had other opioids, methadone, and other synthetic narcotics as contributing causes.
 - Drug overdose deaths, as defined, that have heroin, cocaine, hallucinogens, or stimulants as contributing causes.
- *Rates based on fewer than 20 occurrences are statistically unreliable and should be used with caution.
- **Rates based on fewer than 6 occurrences are not reported.

Source: Table A.) Alaska Bureau of Vital Statistics, last updated on 01/09/2013

RAINFOREST RECOVERY CENTER EMERGENCY SERVICES PATROL PROGRAM

ADMISSIONS - 2010											
JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
52	60	72	81	100	57	79	64	81	87	60	82

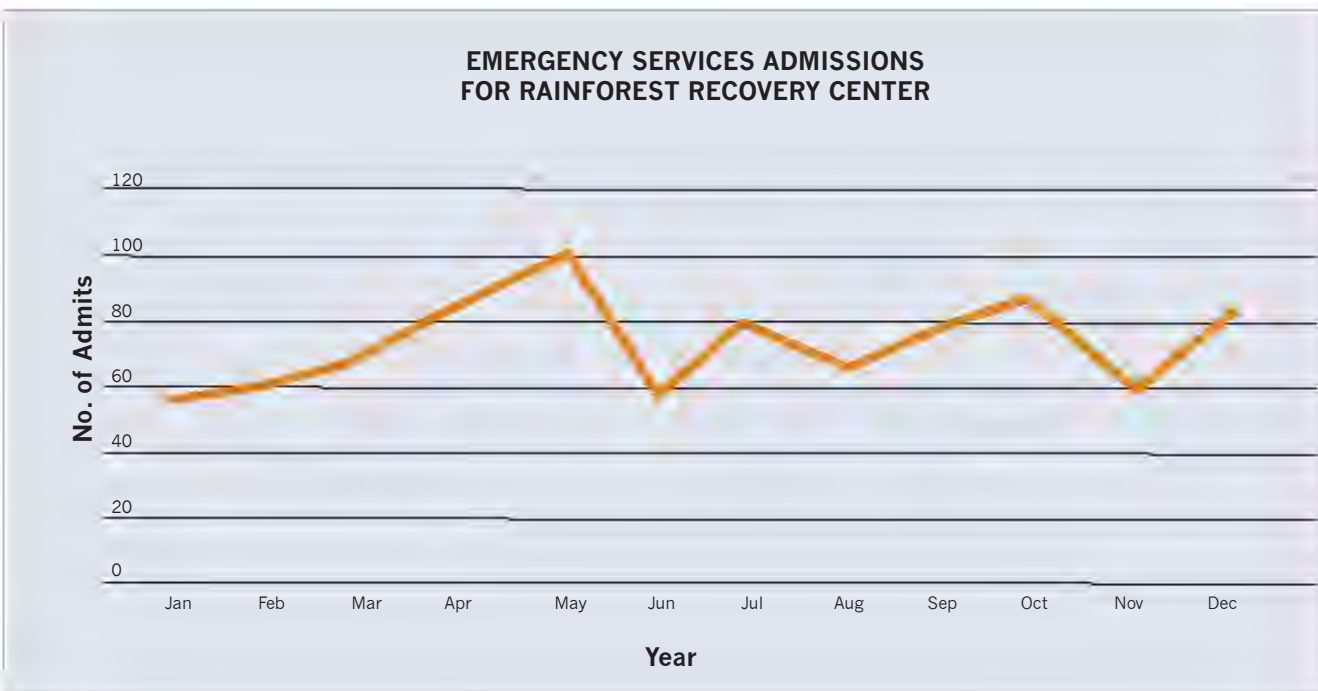


Chart A

PATIENT VISITS THROUGH THE BARTLETT REGIONAL HOSPITAL EMERGENCY DEPARTMENT WITH ALCOHOL INTOXICATION OR DRUG MISUSE DIAGNOSIS RELATED GROUPS (DRGS)

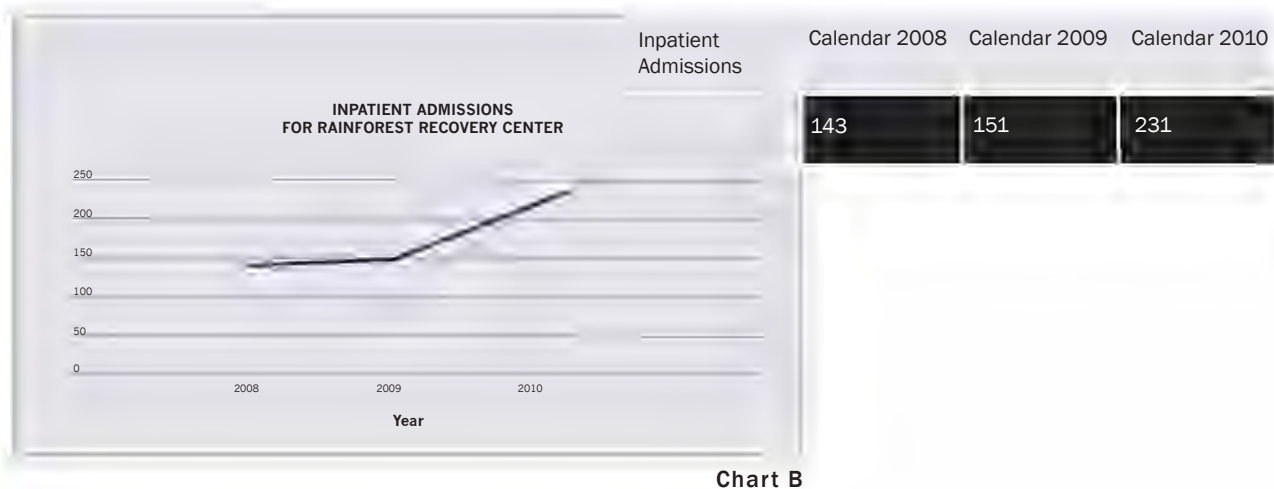
	Alcohol Abuse (intoxication)	Other drug use including multiple, amphetamine, cocaine, hypnotics	Total
CY 2010	396	60	456
CY 2011	288	41	329

Table A

Source: Charts A. & Table A.) Rainforest Recovery Center *NOTE- data have not been verified, totals subject to error. This is number of visits, not number of patients (same patients often seen regularly). This data does not include patients seeking detox services, or suffering from alcohol withdrawal. Rainforest Recovery Center

DRUGS: LICIT & ILLICIT ABUSE

RAINFOREST RECOVERY CENTER CLIENT NUMBER COMPARISONS 2008-2010



OUTPATIENT

Outpatient services provide diagnostic and primary treatment services on a scheduled and nonscheduled basis in a nonresidential setting. Those qualifying for this level of clinical care must demonstrate physical and emotional status allowing them to function in their usual environment including the maintenance of health.

INPATIENT

Inpatient treatment provides a planned regime of care of addiction and mental health disorders in a residential setting and is reserved for most critically ill. Medical and psychiatric care is coordinated with this service.

Source: Charts A. & Chart B.) Rainforest Recovery Center *NOTE- data have not been verified, totals subject to error. This is number of visits, not number of patients (same patients often seen regularly). This data do not include patients seeking detox services, or suffering from alcohol withdrawal. Rainforest Recovery Center

ALASKA DRUG OVERDOSE DEATH RATES BY SELECTED CHARACTERISTICS 2006-2011

	1.) ALL DRUGS	2.) PRESCRIPTION DRUGS	3.) OPIOID PAIN RELIEVER	4.) ILLICIT DRUGS
OVERALL	13.9	8.7	7.0	3.6
SEX				
Men	16.2	10.2	8.5	5.0
Women	11.4	7.2	5.4	2.1
RACE				
White	14.6	9.0	7.8	3.6
Black	9.9*	4.4*	**	4.5*
Asian/Native Hawaiian or Pacific Islander	**	**	**	**
American Indian /Alaska Native	17.8	11.8	6.8	5.3
AGE GROUP				
0-14	**	**	**	**
15-24	10.9	7.1	5.9	2.5*
25-34	18.9	10.5	8.9	5.8
35-44	24.2	15.5	12.2	7.0
45-54	28.9	18.0	15.1	7.8
55-64	14.9	9.2	6.5	3.1*
65+	6.2*	4.6*	3.3*	**
INTENT				
Unintentional	11.6	7.1	6.0	3.4
Undetermined	1.0	0.7	0.5	2*
Suicide	1.4	1.1	0.6	**

Note:

Table A

1.) Deaths with underlying causes of unintentional drug poisoning, suicide drug poisoning, homicide drug poisoning, or drug poisoning of undetermined intent, as coded in the International Classification of Diseases, 10th Revision.

2.) Drug overdose deaths, that have prescription drugs as contributing causes to the death.

3.) Drug overdose deaths, that had other opioids, methadone, and other synthetic narcotics as contributing causes.

4.) Drug overdose deaths, as defined, that have heroin, cocaine, hallucinogens, or stimulants as contributing causes.

*Rates based on fewer than 20 occurrences are statistically unreliable and should be used with caution.

**Rates based on fewer than 6 occurrences are not reported.

Source: Table A.) Alaska Vital Statistics

INFECTIOUS DISEASES & NON INFECTIOUS DISEASES

NUMBER OF INCIDENT CASES OF INFECTIOUS DISEASES 2006-2011

ILLNESS		2006	2007	2008	2009	2010	2011
Hepatitis A	Juneau Borough	5	0	0	0	0	*
	Southeast Region	1	1	0	1	0	*
Hepatitis B (acute)	Juneau Borough	0	<5	0	0	0	*
	Southeast Region	1	2	0	0	0	*
Hepatitis C**	Juneau Borough	36	55	64	42	30	*
	Southeast Region	74	130	120	96	82	*
Chlamydia	Juneau Borough	105	121	125	131	177	*
	Southeast Region	266	285	297	332	433	*
Gonorrhea	Juneau Borough	15	<5	<5	17	7	*
	Southeast Region	74	130	120	96	82	*
HIV	Juneau Borough	<5	<5	<5	<5	<5	<5
	Southeast Region	3	3	2	1	2	2

Table A

Excessive drinking and drug use are a risk factor for a number of adverse health outcomes such as sexually transmitted infections, alcohol poisoning, hypertension, acute myocardial infarction, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, suicide, interpersonal violence, and motor vehicle crashes. (Source: 2011 County Health Rankings)

Source: Table A.) State of Alaska Center of Epidemiology Juneau level data indicating less than 5 cases have been suppressed, per Section policy.

*2011 data for these conditions are not yet available **Numbers for Hepatitis C represent incident and prevalent cases each time period, not just incident (new) cases.

MORTALITY INDICATORS - JUNEAU

SELECTED CAUSES OF DEATH TO JUNEAU RESIDENTS 2006-2010

ILLNESS	NUMBER OF DEATHS
Aortic aneurysm and dissection	3
Atherosclerosis	1
Cerebrovascular diseases	34
Acute myocardial infarction	22
Malignant neoplasm of bladder	3
Malignant neoplasm of esophagus	7
Malignant neoplasms of kidney and renal pelvis	3
Malignant neoplasm of larynx	1
Leukemia	4
Malignant neoplasms of trachea, bronchus and lung	40
Malignant neoplasm of pancreas	13
Malignant neoplasm of stomach	4
Asthma	4
Emphysema	4
Chronic lower respiratory diseases	32

Table A

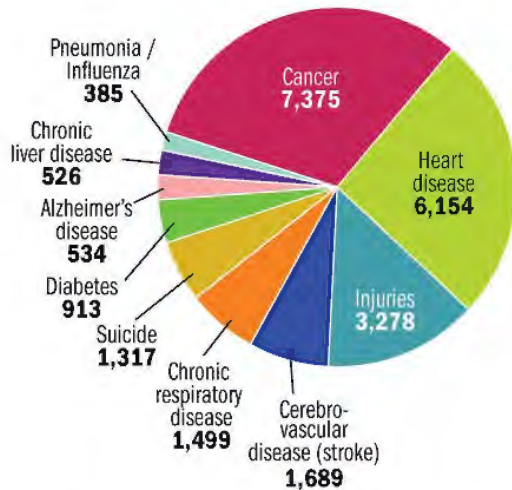
Source: Table A.) State of Alaska Chronic Disease Prevention and Health Promotion, Vital Statistics

MORTALITY INDICATORS - JUNEAU

9 OUT OF 10 OF THE LEADING CAUSES OF DEATH IN ALASKA INVOLVE ADDICTION AND SUBSTANCE ABUSE.

Leading causes of death in Alaska

1999 - 2008



Tobacco, alcohol, and other drugs are implicated in most of the leading causes of death. These chemicals either cause mortality directly such as lung cancer, cirrhosis, and overdoses or indirectly such as pneumonia and suicide. Alcohol and tobacco are implicated in significant numbers of all hospital admissions. A substantial number of emergency room visits are due to the use and abuse of these products. These admissions to inpatients, impact the cost of care in Alaska.

Factors contributing to cause of death

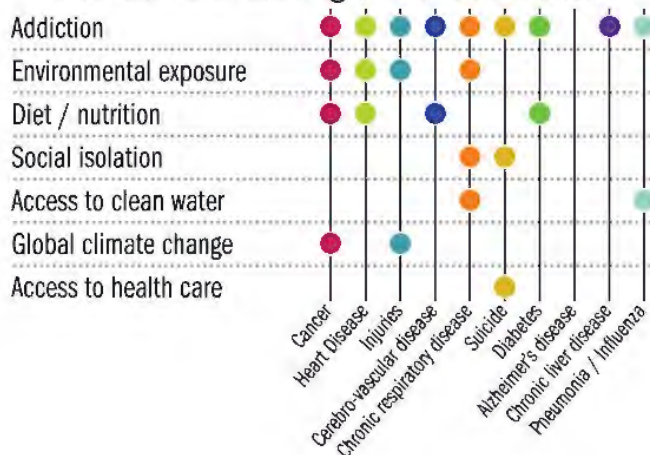


Figure A

Sources: Figure A.) "Social and Physical Determinants of Circumpolar Health: A meta-analysis" David Driscoll, PhD, MPH, MA, Bruce Dotterer, MS Institute for Circumpolar Studies University of Alaska, Anchorage Graph created by Pamela Dunlap-Shohl/Anchorage Daily News, Alaska Bureau of Vital Statistics (1999 - 2008); ichs.uaa.alaska.edu

TOP 5 LEADING CAUSES OF DEATH FOR JUNEAU 2007- 2009

Cause of Death	Deaths	Age - Adjusted Rate	Alaska Age-Adjusted Rate
1.) Malignant Neoplasms	105	144.8	182.9
2.) Diseases of the Heart	91	143.6	151.2
3.) Unintentional Injuries	40	47.4	55.3
4.) Chronic Lower Respiratory Diseases	20	33.8	46.5
5.) Cerebrovascular	18	29.1	43.1
6.) Intentional Self Harm (Suicide)	18	21.5	22.7
TOTAL DEATHS	466	684.0	764.3

* per 100,000 population

Table A

Alaska is the only state where cancer supersedes heart disease as the leading cause of death. This phenomenon could be attributed partially due to the heavy use of tobacco and alcohol. Tobacco smoking has been implicated in lung cancer and chewing tobacco is associated with mouth and stomach cancers. Alcohol users have a higher rate of esophageal, stomach, breast and liver cancer.

WHAT ARE PROTECTIVE FACTORS?

Protective Factors

Protective factors are characteristics within the individual and/or conditions in the family, school or community that help someone cope successfully with life challenges. When people can successfully negotiate problems and deal with pre-existing risk factors, they are less likely to engage in unhealthy behavior. Protective factors are instrumental in healthy development; they build resiliency, skills and connections. Building upon strengths and protective factors leads to more positive health outcomes including a reduction in substance use.

The more protective factors are increased and risk factors reduced the more likely unhealthy behavior and its associated problems can be prevented.

Protective factors offered in Juneau:

- Nationally accredited local treatment system
- Active Parks and Recreation Department involve Youth and Substantial afterschool programs
- Funding provided to nonprofits by local government
- Curfew ordinance and Youth Court diversion
- School District alternative programs targeting high risk youth and Drug-Alcohol Counselors in schools
- State Public Health Center located locally, a substantial medical community, Supported accredited treatment center locally (Rainforest Recovery Center, Substantial Youth Treatment Center (Juneau Youth Services)
- Availability of family services
- Local taxes on alcohol and tobacco

Sources: Alaska Division of Behavioral Health 2008, juneauyouth.org/activities/fullList.php, NCADD

PROTECTIVE FACTORS

Characteristics within the individual or conditions in the family, school or community that help youth cope successfully with life challenges and existing risk factors.

FAMILY CONNECTEDNESS

(Attachment & bonding)

- Positive parenting style
- Living in a two parent family
- Higher parent education
- High parental expectations about school

CONNECTED TO SCHOOL

- Caring school climate
- Student participation in extracurricular activities

POSITIVE CONNECTION TO OTHER ADULTS

- Safe supportive, connected neighborhood
- Strong community infrastructure (services for those in need)
- Local, state policies and practices that support healthy norms and child-youth programs
- Range of opportunities in the community for meaningful youth engagement

ENGAGEMENT IN MEANINGFUL ACTIVITIES

- Life skills and social competencies (social Emotional/Employability Skills)
- Cultural identity
- Positive personal qualities
- Positive self concept
- Positive peer role models
- Religious identity
- High grade point average

RISK FACTORS

Characteristics within the individual or conditions in the family, school or community that increase the likelihood youth will engage in problem behavior.

DEATH BY SUICIDE OF A FAMILY MEMBER

- Family history of the problem behavior
- Family management problems
- Family conflict
- Favorable parental attitudes and involvement in problem behaviors
- Household access to substances or guns

- Academic failure
- Lack of personal commitment to school

AVAILABILITY OF ALCOHOL/OTHER DRUGS

- Community norms and laws
- Availability of firearms
- Transitions and mobility
- Low neighborhood attachment and community disorganization
- Poverty

EXPERIENCED CHILD ABUSE (PHYSICAL, SEXUAL) OR OTHER FAMILY VIOLENCE

- Early initiation of the problem behavior
- Loss of cultural identity
- Early and persistent antisocial behavior
- Friends who engage in the problem behavior
- Favorable attitudes toward the problem behavior (low perceived-risk of harm)
- Gang involvement
- Older physical appearance than peers
- Paid work more than 20 hrs/week
- Perceived risk of untimely death

WHAT JUNEAU OFFERS

Programs and organizations in Juneau that relate to these domains.

- Fun nights at Gastineau Elementary
- Public Skate
- Bowling
- Arts and Theater
- First Friday Events
- Folk Festival

- Afterschool programming
- RALLY
- Students Against Destructive Decisions (SADD)
- CHOICE

- Girls on the Run and Coaching Boys into Men (AWARE)
- Catholic Community Service's Young Parent Healthy Teen Center
- Community Schools Express
- Youth Group (clergy)
- Discovery Southeast
- Gruening Park Homework Clubs
- Rotaract

- Teens Against Tobacco Use (T.A.T.U.)
- Zach Gordon Youth Center
- Little Leagues/ sports etc.
- Rainforest Recovery Center
- Juneau Youth Services
- NCADD
- Gastineau Human Services
- Private providers



HELP IS JUST A CALL OR VISIT AWAY - MAKE THE CONTACT NOW!

NCADD 24 HOUR HOTLINE

907.463.3755

This publication was produced by
The National Council on Alcoholism and Drug Dependence (NCADD).

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**ASSEMBLY AGENDA/MANAGER'S REPORT
THE CITY AND BOROUGH OF JUNEAU, ALASKA**

Transit Development Plan

SUBJECT:

BACKGROUND:

RECOMMENDATION:

ATTACHMENTS:

File Name	Description
☐ Juneau-Transit-Plan-Draft-Recommendations-Report.pdf	Transit Plan Recommendations - DRAFT Report
☐ Juneau-Transit-Plan-Draft-Recommendations-Presentation.pdf	Transit Plan Recommendations - Presentation to Assembly Committee of the Whole 1/13/14
☐ 2014-01-08-PC Notice of Recommendation-2013-Capital Transit Plan.pdf	Planning Commission Recommendation to Assembly re Transit Plan



Transit Development and Capital Improvement Plan DRAFT RECOMMENDATIONS

January 3, 2014



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DRAFT RECOMMENDATIONS

INTRODUCTION

Unlike many small cities across the country, transit in Juneau is very well utilized and is an important part of the transportation infrastructure and daily life. In fact, ridership on Capital Transit is among the highest in the country for a community of its size. Buses in Juneau are frequently full, service is provided seven days a week, and service extends well into the evening – all characteristics of much larger transit systems. Financial and community support for transit in Juneau is also exceptional compared to most other small cities, and many members of the community feel passionate about ensuring transit continues to be an integral part of the Juneau.

However, in recent years, physical changes in the community (traffic, new signals, etc.) and increasing ridership on the transit system have meant buses are running behind schedule more often, some transfers are being missed, and buses are overcrowded at certain times of the day. Operators are also having a harder time staying on schedule, especially in the late afternoon, and they often do not have time for a break after driving very long routes. At the same time, there are demands for service to areas of the community that do not currently have transit service – in particular Riverside Drive, the Lemon Creek industrial/employment area, and the Ferry Terminal. Similarly, there are demands for earlier and later service to certain areas, like UAS, the employment center in Lemon Creek, and downtown Juneau. And while service has been improved over the last 20 years, such as more frequent express service since the last Transit Development Plan, the route structure has not changed as much as the community has. While the permanence of transit in Juneau is a benefit, the existing transit system can no longer be maintained as is, let alone meet new service demands. At the same time, it is recognized that funding is constrained, and thus this Transit Development Plan has focused on recommendations that do not significantly increase operating costs. Because resources are not infinite, changes to the system necessarily come with strengths and weaknesses.

The City and Borough of Juneau recognizes that transit services must periodically be reviewed to ensure they are effectively bringing people where they need to go. As such, a Transit Development Plan (TDP) is performed about every five years. As with other TDPs, this update was performed to evaluate how well Capital Transit and Care-A-Van is serving existing population, employment and activity centers in the community, as well as the overall productivity and effectiveness of individual bus routes. This TDP update consisted of the following key tasks, all of which have resulted in the recommendations included in this report:

- **A Comprehensive Operations Analysis** that included:
 - A **market analysis** that identified concentrations of population and employment, as well as other activity centers that have the ability to effectively support transit
 - **Stakeholder outreach**, including extensive stakeholder interviews and meetings to discuss common objectives and perceived travel needs throughout the Juneau area.
 - **Customer and non-rider surveys** conducted during the spring and summer of 2013 to identify the travel patterns and desires of more than 2,000 riders, as well as individuals who don't currently ride Capital Transit or Care-A-Van.
 - A **peer review** of five other communities around Alaska and the country that have some characteristics similar to Juneau.

- **Detailed route evaluations** that consisted of in-depth analysis of the market each route is intended to serve, its ridership patterns, its strengths and weaknesses, and opportunities for improvement.
- **Development of service scenarios** that included:
 - **Three service scenarios** that presented different ways transit could be provided in Juneau.
 - **Presentation of the service scenarios to the public** as well as the Assembly and Planning Commission.
 - **An online survey** soliciting input on the service scenarios.
 - **Ongoing communication with a Project Management Team** to discuss technical issues and concerns.

The information gained during this process led to the recommendations in this Plan. The recommendations incorporate a number of common improvement themes, plus specific changes to each route, as described in subsequent sections. It is important to reiterate that the context for all recommendations is a goal to minimize the need for increased local financial support for transit.

All of the recommendations are based on the following service goals:

1. Ensure that routes have adequate time to operate on-schedule
2. Better match service levels with the level of ridership demand to ensure resources are being used in the most efficient way possible
3. Evaluate requests/demand for service to new areas, including
 - Riverside Drive
 - Lemon Creek industrial/employment area
 - Ferry Terminal
4. Strive to ensure high-quality and convenient service, so that:
 - When a transfer is required, make it as convenient and comfortable and wait times are as short as possible
 - Service is provided for commuter needs during peak periods as well as riders using the service during non-peak times and on weekends
 - Some service continues to operate through the core of downtown (Franklin, Fourth, and Main)
5. Ensure that service design, marketing information, buses, and other elements of the service are as legible and easy-to-understand as possible

OVERVIEW OF RECOMMENDATIONS

As described at the beginning of this document, Capital Transit is very successful, but is also stretched very thin, and due to financial constraints, does not serve all areas where there is demand. The framework for this effort was to determine short-term changes that could be made within Capital Transit's existing budget, or that would require only minimal increases. The short-term recommendations will resolve most existing operational issues (primarily reliability) and expand service to new areas (Riverside Drive and Montana Creek). However, they do not achieve all of the service expansion objectives, as there is no way to provide all desired service expansion within existing or minimally expanded budget levels. Thus, some service expansion initiatives are in the mid-term, rather than short-term, recommendations. A summary of how each major objective is addressed follows:

- **Improve on-time performance:** Existing Valley Local and Express routes are increasingly operating behind schedule at certain times of the day, resulting in late arrivals and missed transfers. In addition, drivers have little or no time for layover and recovery at certain times of the day, resulting in routes remaining behind schedule on successive trips. The proposed short-term changes would resolve all on-time performance issues. The most significant ways in which this would be done include:
 - Add a third bus to Express service during peak periods to provide additional schedule time (and allow service to be extended to Montana Creek and the Downtown Transportation Center (DTC)). However, to offset the cost of the additional bus, midday service frequencies would be reduced from every 30 to every 60 minutes.
 - Shorten Valley Local service to operate to and from the Downtown Transit Center rather than around the downtown loop, and via a more direct alignment through Lemon Creek.
- **Maintain timed-transfers:** On paper, Capital Transit provides perfectly timed transfers between nearly all routes; in practice, late buses mean that many are being missed. The proposed short-term changes would provide reliable timed-transfers for the large majority of existing riders. However, longer transfers would be required for some trips, most notably non-peak direction travel between Douglas and the Mendenhall Valley.
- **Provide service along Riverside Drive:** Riverside Drive is the highest demand area in Juneau that is not served, and is the location of important public facilities such as the Dimond Park Pool, Library, Thunder Mountain High School and multiple sports fields. The short-term recommendation includes seven day a week service to Riverside Drive with reconfigured Valley Local service.
- **Maintain service to Back Loop:** Ridership on “Back Loop” portion of Mendenhall Loop Road is low, but existing riders rely on the service. With the shifting of Valley Local service to Riverside Drive, the short-term recommendations include extending Express service to Montana Creek via the Back Loop. However, service to the Back Loop and Auke Bay would end approximately two hours earlier than it now does (late evening ridership in this area is low).
- **Provide service to Lemon Creek Industrial Area:** The Lemon Creek Industrial Area, which is where Costco, the Alaskan Brewing Company, Home Depot and other major employers are located, is another high demand area that is not served. The provision of service to this area would cost an additional \$540,000 per year and cannot be accommodated within existing budget levels, and thus is not included in the short-term recommendations. It has, however, been included in the mid-term recommendations.
- **Provide service to Auke Bay Ferry Terminal:** A significant amount of demand was expressed throughout this study for service to the Auke Bay ferry terminal. However, the provision of this service would cost \$450,000 per year and cannot be accommodated within existing budget levels, and thus is also not included in the short-term recommendations. It has, however, been included in the mid-term recommendations.
- **Implement a downtown circulator route:** There was significant demand expressed during this study for a dedicated downtown circulator to provide service every 15 minutes. The implementation of a downtown circulator that operates from 7:00 AM to 11:00 PM seven days a week would cost approximately \$600,000 per year to operate and cannot be accommodated within existing budget levels. Instead, service is provided around the downtown loop every 30 minutes by the Douglas route.
- **Provide earlier service for workers with early work start times:** Existing service is generally designed to serve work trips that start at 8:00 AM, while many workers start earlier.

The short-term recommendation includes earlier service on the Valley Local and Express routes to better serve start times as early as 7:00 AM.

- **Provide later Express service between UAS and downtown:** Service on the Express route currently ends at 6:03 PM from downtown and 6:27 PM from UAS, and thus does not serve evening classes. The short-term recommendation adds new Route 2 Auke Bay – Nugget Mall service that would operate until 8:47 PM from the Nugget Mall and until 9:22 PM from UAS with connections to and from downtown at the Nugget Mall. However, as mentioned above, Valley Local service would no longer operate via the Back Loop, and thus the proposed service would end earlier than the existing Valley Local route that now indirectly serves UAS.
- **Implement technology improvements to improve operations and passenger information:** Capital Transit performs many functions manually that most other transit systems have automated. The mid-term recommendations include procurement and implementation of technology solutions that are now used as a matter of course by most transit systems:
 - Computer Aided Dispatch (CAD) and Automatic Vehicle Location (AVL) so that Capital Transit can know where its vehicles are and quickly respond to problems, and provide passengers with real-time passenger information.
 - Electronic fareboxes, to improve fare handling and provide better ridership information.
 - Automatic Passenger Counters (APCs) to track ridership and loads on an ongoing basis, so that Capital Transit can make service adjustments more quickly than every five years (the TDP cycle).
 - Real-Time Passenger Information via signs at major transit points and via smartphones.
 - Improved web and printed information, and the provision of schedule information via Google Maps.
- **Make service simpler and easier to understand:** There are a number of existing service elements that are confusing to many, and especially potential new riders. These include the alternating loop service in the Mendenhall Valley, and “Additional Service” trips that are similar to, but different, than existing services, and in the case of Douglas service, create a “hole” in the regular schedule, and inconsistent route nomenclatures. The short-term recommendations would make service simpler and easier to understand in a number of ways:
 - Rebrand all routes with a name and a number.
 - Operate loop service through the Mendenhall Valley counter-clockwise only.
 - Combine the different Mendenhall Valley and Lemon Creek “Additional Service” express trips into a new Route 1X Mendenhall Valley – Downtown Express route in which all trips would operate in a consistent manner.

SHORT-TERM RECOMMENDATIONS

The short-term recommendations consist of low cost changes and improvements that would resolve existing operating issues, provide better service to most riders, expand service into some new areas, and provide better service information to existing and potential new riders.

SYSTEMWIDE IMPROVEMENTS

For people to be able to use transit, they must first know that it is there and be able to understand how to use it. This means that it is extremely important for transit systems to provide clear and concise

information on their available services. Furthermore, transit in Juneau serves a very broad cross-section of the area's residents, workers, and visitors. Because different people access, use, and process information in different ways, transit systems must deliver clear and consistent information in a number of different ways. For example, many seniors are not web-literate, and thus the provision of information via the web will not reach many older residents. For this reason, telephone and printed information must be provided. However, telephone and printed information will not reach many younger riders, who rely primarily on the Internet. For transit systems to reach the people that they are there to serve, it is essential that they provide effective information in ways that will reach all potential riders.

Proposed improvements for Capital Transit include consistently numbering and naming routes to provide greater clarity on where they go, improving printed marketing information, and getting Capital Transit on Google Transit.

Designate All Routes with Numbers and Names

Capital Transit inconsistently labels routes with numbers and names, or just names. To make it easier for passengers to refer to routes and understand how they operate, all routes should be rebranded with both a number and a name. The following are suggested designations for the proposed new and revised services:

- 1 Mendenhall Valley - Downtown
- 1X Mendenhall Valley – Downtown Express
- 2 Montana Creek/Auke Bay – Nugget Mall
- 2X Montana Creek/Auke Bay - Downtown Express
- 5 Douglas - Downtown
- 6 North Douglas - Downtown

The route names and numbers should also be used consistently on all schedules, bus head signs, on marketing materials, etc.

Publish Schedule Information on Google Transit

Google Transit is increasingly becoming an important trip planning tool for transit riders across the country. Just a few years ago, Google Transit's availability was limited to larger or more extensive systems – but no longer. Even small and rural communities are taking advantage of Google Transit. While the service is free to use, there are costs associated with formatting schedule and bus stop information into the General Transit Feed Specifications, or GTFS. The GTFS is essentially a common format that transit providers can use to incorporate transit schedules, fares and associated geographic information into Google Maps. Due to the interest in getting into Google Transit, the wait time can be substantial. As such, it is recommended that Capital Transit begin this process as soon as possible – even if it is before service changes are implemented as part of this TDP. Once a transit agency has submitted their GTFS to Google, and has been accepted, changes are relatively easy to make. (Additional information about Google Transit can be found at: <https://developers.google.com/transit/>. The National Rural Transit Assistance Program also provides support and software for GTFS development: www.nationalrtap.org.)

Produce System Map and Single Brochure with Simplified Schedules

For many riders, the starting point for determining whether service is available is a system map. Effective system maps display the services that are available with enough detail to allow the user to determine

origins, destination, major attractions, and routes. Similarly, a single transit brochure allows riders (or potential riders) to quickly understand all available transit services.

While Capital Transit had historically prepared a system map and brochure, and the website has an interactive system map, print versions have been replaced by two schedule pamphlets with simplified route maps:

- One of the brochures is blue and labeled simply “Bus Schedule.” This brochure clearly presents the schedules for Route 3/4 Valley Local and Douglas service. It less clearly presents information on North Douglas service and most of the “Additional Service” peak period express trips that are provided between the Mendenhall Valley and Lemon Creek and downtown.
- The second brochure is red and labeled as “Express Bus Schedule.” This brochure clearly presents UAS/Auke Bay – Downtown express service schedule, but does not present any information on the “Additional Service” peak period express trips (which as described above, are presented in the “Bus Schedule” brochure).

Because these brochures present the schedule information inconsistently, some riders—or more importantly, potential riders—can be confused by the two schedules, or just pick up the Bus Schedules brochure and think that the routes presented therein are the only services available. To provide clearer information on available services, the existing two brochures should be combined into a single brochure.

Upgrade Website

Websites for transit systems have become ubiquitous, and most people interested in using transit find the information they desire on the Internet. While Capital Transit makes good use of its website within the City’s site, the website is easy to find via search engines, and the website is simple to link from other sites or put on printed materials (www.juneau.org/capitaltransit), it would be preferable to have a stand-alone website specifically for Capital Transit with links back to the CBJ website. The website should include all of the same information as the brochure (system map, schedules, fare information, etc.), but could also include some additional features, such as:

- Links to a Facebook page and/or Twitter feed
- Trip planner (using Google Transit, when available)
- Information on news, events and rider alerts
- Ability for users to provide input about the system (phone, email, comment form)

ROUTE CHANGES

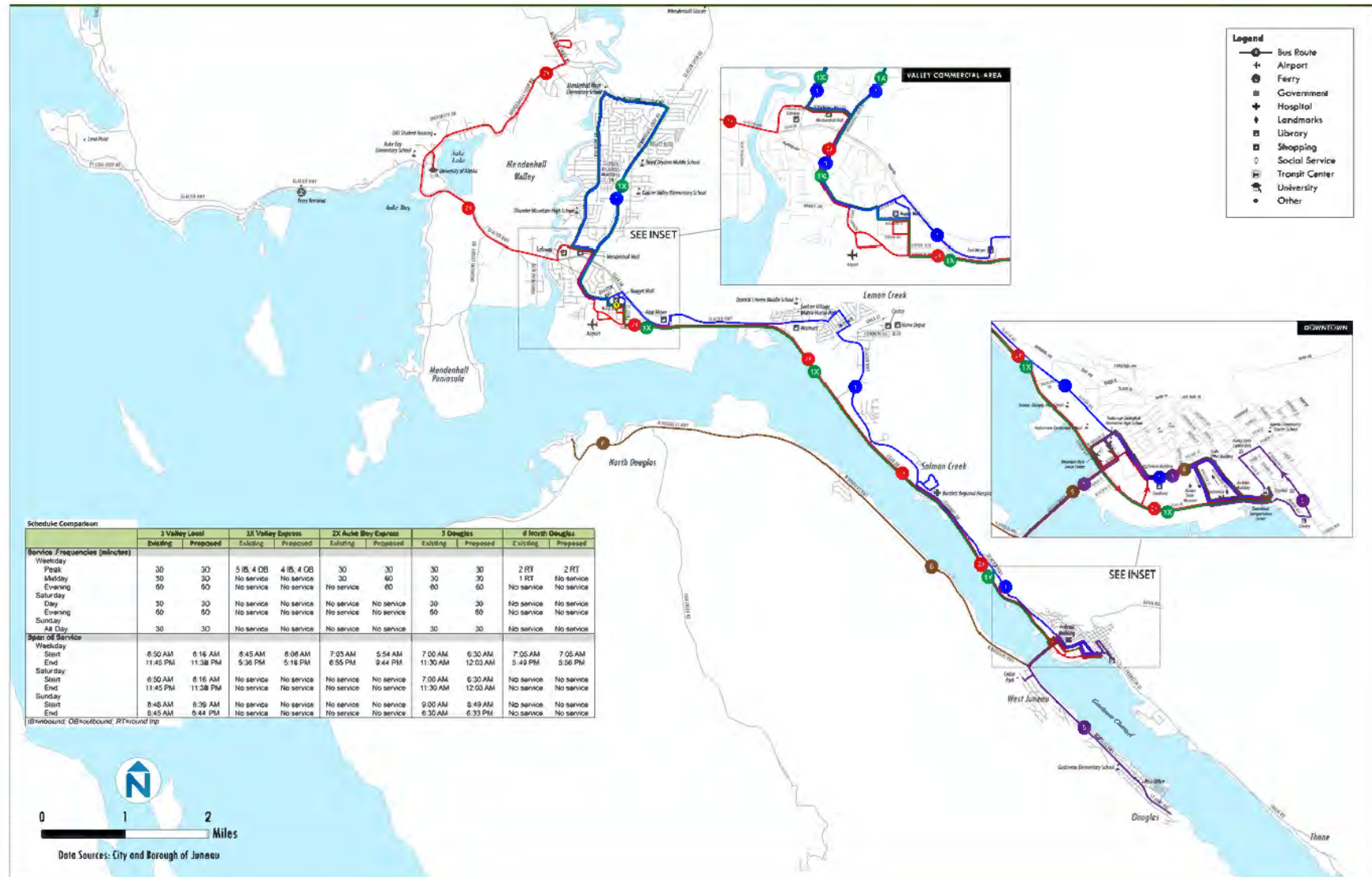
This section presents specific recommended short-term route changes. A map of the proposed changes is shown in Figure 1, and draft schedules are presented at the end of this report for each route

One important note about the recommendations is that Capital Transit’s services are currently scheduled to facilitate transfers at the Nugget Mall and the Federal Building, and when service is operating on schedule, convenient transfers are available between nearly all routes in all directions. However, because travel times have been increasing, more and more transfers are being missed, and with increased travel times, there is no possible way to continue to provide timed transfers between all routes. These

Transit Development Plan

2013 Update

Figure 1 Map of Recommended Changes



recommendations maintain very convenient transfers for most, but not all, riders. Key information on transfer-related elements of the recommended service plan is as follows:

Maintain Nugget Mall as outer transfer location. The Nugget Mall has served as the main transfer location for the Express and Local buses in the Mendenhall Valley for many years and it offers a good location for transferring passengers (on Mallard Street). While passenger facilities are minimal (there are two small shelters), the location is relatively easy to access, there are sidewalks on both sides of the street, a marked crosswalk across Mallard Street, and a door directly into the Nugget Mall close to the bus stop. For these reasons, it is recommended that in the short-term, this remain the main transfer location in the Mendenhall Valley.

- **Maintain timed-transfers for the major travel flows.** There are a number of important timed transfers in the existing system, particularly:
 - Mendenhall Valley Local (Routes 3 and 4) to the Express route (both directions) at the Nugget Mall
 - Mendenhall Valley Local (Routes 3 and 4) to the Douglas route (both directions) at the Federal Building

Maintaining these transfers is a primary focus of the service changes. However, because of modified route alignments, timed transfers between the Valley Local (Route 1) and the Douglas Local (Route 5) occur in one direction in the morning (inbound Route 5 to outbound Route 1) and the other direction in the late afternoon and evening (inbound Route 1 to outbound Route 5). This is because ridership from Douglas is largely inbound to Juneau in the morning and outbound to Douglas in the afternoon/evening.

- **Operate all service to/from or via the Downtown Transportation Center.** Besides the buses themselves, the Downtown Transportation Center (DTC) is most visible feature of Capital Transit, and provides a very comfortable transfer location. As such, it is recommended that all routes serve the DTC – both for symbolic reasons as well as operational reasons related to driver layover and recovery.

Route 3/4 Valley Local (Rebrand as Route 1 Mendenhall Valley – Downtown)

Route 3/4 is Capital Transit's highest ridership route, and in most respects is very successful. However, there are a number of issues, which are:

- Bus running times have increased due to heavier traffic, new traffic lights, and heavy ridership to the extent that the route is now experiencing significant on-time performance issues, especially in the late afternoon. As a result, transfers are being missed and drivers often do not have sufficient time for breaks.
- The route does not serve Riverside Drive, where demand is among the highest in Juneau, and where new community facilities have been and continue to be located.
- The alternating loop operation through the Mendenhall Valley (Route 3 counter-clockwise/Route 4 clockwise) is confusing and makes service frequencies irregular.

To resolve these issues, the following changes are recommended (see also Figure 2):

- Revise the outer loop so that all service operates counter-clockwise via Mendenhall Loop Road, Mint Way, and Riverside Drive. This shift will continue to provide frequent service to the eastern part of Mendenhall Loop Road and provide additional service coverage to an area with high population density (Riverside Drive), serve activity centers at Dimond Park (high school, library, pool), and improve the simplicity service and provide more consistent service.

Transit Development Plan

2013 Update

Figure 2 Valley Local Changes (with Service Rebranded as Mendenhall Valley – Downtown)



Transit Development Plan

2013 Update

- Shorten the deviation through Lemon Creek to operate via Central Avenue, Lund Street and Davis Avenue. This change will reduce travel times for through passengers while still providing convenient service to Lemon Creek, and the time savings will help resolve reliability issues.
- Operate service to and from the Downtown Transit Center instead of via the downtown loop to shorten running times, also to resolve on-time performance issues.
- Start weekday service earlier, at 6:16 AM, to serve 7:30 AM work start times.
- Rebrand the route as Route 1 Mendenhall Valley – Downtown.

With the exception of the earlier weekday service described above, service spans and frequencies would remain essentially as they are today (see Table 1).

Table 1 Valley Local and Route 1 Schedule Comparison

	Existing Route 3/4			Proposed Route 1		
	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday
Service Frequencies (mins)						
Peak	30	30	30	30	30	30
Midday	30	30	30	30	30	30
Evening	60	60	-	60	60	-
Span of Service						
Start	6:50 AM	6:50 AM	8:48 AM	6:16 AM	6:46 AM	8:39 AM
End	11:45 PM	11:45 PM	6:45 PM	11:38 PM	11:38 PM	6:44 PM

Express Route (Rebrand as Route 2 Montana Creek/Auke Bay – Nugget Mall and Route 2X Montana Creek/Auke Bay – Downtown Express)

The existing Express route operates between UAS and the Archives Building in downtown. This route is also experiencing on-time performance issues and currently does not operate all the way into downtown because it does not have sufficient time to do so. Because transfers between this route and the Valley Local route are so important, many of the recommended changes are designed to ensure that these connections can be provided more reliably (see also Figure 3):

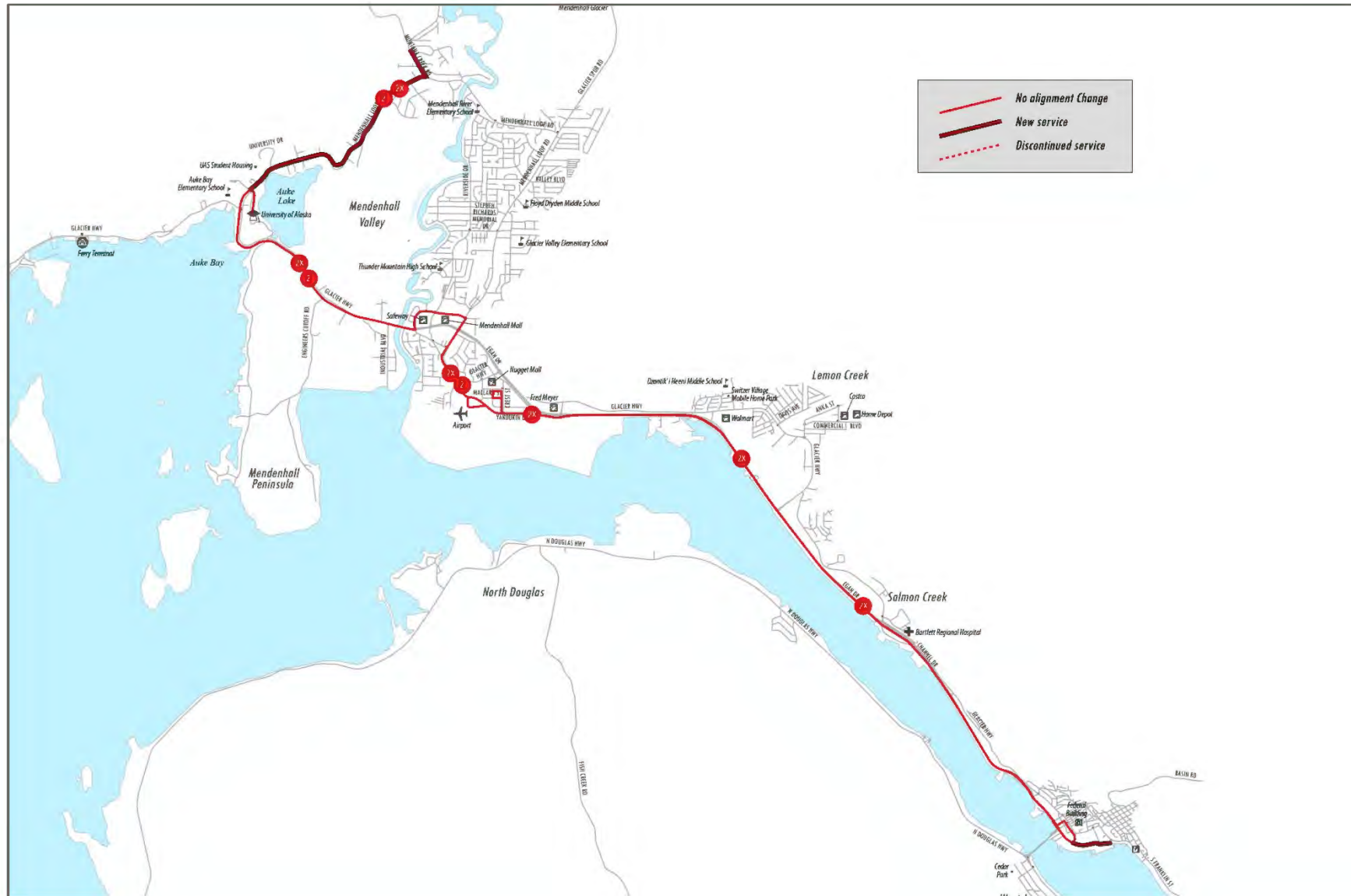
- Add a third bus during peak periods so that it can operate reliably.
- Extend most outer end service to Montana Creek to serve this growing neighborhood and maintain service on Back Loop in lieu of existing Valley Local (3/4) service.
- Extend inner end service to the Downtown Transportation Center.
- Start weekday service earlier (at 5:45 AM with an arrival in downtown at 6:30 AM) to better serve earlier work start times.
- Operate weekday service later (until 9:32 PM) to better serve evening classes at UAS.
- Add weekend service between Montana Creek and the Nugget Mall via UAS to replace Valley local service that would be shifted to Riverside Drive, with timed transfers to Route 1 Mendenhall Valley – Downtown at the Nugget Mall.¹

¹ It should be noted that although later service would be provided into UAS, the provision of service to the Back Loop with Route 2 will mean that service to Auke Bay will end earlier than with the current Valley Local service that operates until approximately 11:30 PM on weekdays and Saturdays. However, nighttime ridership in those areas is very light.

Transit Development Plan

2013 Update

Figure 3 Express Route Changes (with Service Rebranded as Route 2 Montana Creek/Auke Bay – Nugget Mall and 2X Montana Creek/Auke Bay – Downtown)



Transit Development Plan

2013 Update

- To mitigate the cost increases of adding a third bus and the extended service, operate evening trips only between Montana Creek and the Nugget Mall (with timed transfers to Route 1), and reduce lightly utilized midday service from every 30 minutes to every 60 minutes).
- Brand the Montana Creek/Auke Bay – Nugget Mall evening and weekend service as Route 2 Montana Creek – Nugget Mall, and the weekday service between Montana Creek and downtown as Route 2X Montana Creek/Auke Bay – Downtown Express.

A comparison of Route 2/2X service characteristics to the existing Express schedule is provided below in Table 2.

Table 2 Express and Route 2/X Schedule Comparison

	Existing Express			Proposed Route 2/2X		
	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday
Service Frequencies (mins)						
Peak	30	-	-	30	60	60
Midday	30	-	-	60	60	60
Evening	-	-	-	60	60	-
Span of Service						
Start	7:03 AM	-	-	5:54 AM	6:05 AM	9:05 AM
End	6:55 PM	-	-	9:44 PM	8:05 PM	6:05 PM

Douglas (Rebrand as Route 5 Douglas – Downtown)

The Douglas route generally operates very well, and only minor changes are proposed:

- Incorporate AM peak “Douglas Express” morning trip (that departs St Anns at 7:30 AM) into the regular Douglas schedule to simplify service and plug the hole in the existing Douglas schedule.
- Interline early morning Douglas trips with the new Route 2X Auke Bay/Montana Creek Express so that passengers traveling from Douglas can choose to stay on the same bus and continue on Route 2X to the Nugget Mall, UAS or Auke Bay during these times. (Due to schedule constraints, a similar interline would not work during other times.)
- Rebrand Service as Route 5 Douglas – Downtown.

Other important notes about Route 5 include:

- All service would continue to provide service around the downtown loop.
- In the morning, timed-transfers would be provided at the Federal Building between inbound Route 5 Douglas service and outbound Route 1 Mendenhall Valley – Downtown service, and the reverse would be the case in the afternoon. This would maintain timed-transfers for most riders. However, with the schedule changes that would be required so that Route 1 will operate reliably, transfers in the off-peak direction would not be timed, and would be 20 minutes. However, these transfers would be reliable, which is not the case with the current transfers that appear very good on paper but that often do not work well in practice.

A comparison of existing Douglas service and the recommended changes are summarized in Table 3.

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Table 3 Douglas and Route 5 Schedule Comparison

	Existing Douglas			Proposed Route 5		
	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday
Service Frequencies (mins)						
Peak	30	30	30	30	30	30
Midday	30	30	30	30	30	30
Evening	60	60	-	60	60	-
Span of Service						
Start	7:00 AM	7:00 AM	9:00 AM	6:30 AM	6:30 AM	8:49 AM
End	11:30 PM	11:30 PM	6:30 PM	11:33 PM	11:33 PM	6:33 PM

North Douglas (Rebrand as Route 6 North Douglas)

While service is limited to North Douglas and ridership is low compared to other routes in the system, it is recognized that this is an important lifeline service for some people. However, because an important objective of this planning process is to focus on the most efficient use of resources spent on the system, the midday trip is recommended for elimination due to very low ridership (only two riders in each direction observed during on-board surveying). The existing resources spent on this one midday trip accounts for about 1.1% of total annual expenses, which could be better allocated elsewhere in the system. The route should also be branded as Route 6 North Douglas - Downtown.

Table 4 presents a comparison of existing and proposed service.

Table 4 North Douglas Schedule Comparison

	Existing North Douglas			Proposed Route 6		
	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday
Service Frequencies (mins)						
Peak	2 RT	-	-	2 RT	-	-
Midday	1 RT	-	-	-	-	-
Evening	-	-	-	-	-	-
Span of Service						
Start	7:00 AM	-	-	7:05 AM	-	-
End	5:55 PM	-	-	5:56 PM	-	-

“Additional Service” Valley Express Trips (Rebrand as Route 1X Mendenhall Valley – Downtown Express)

Capital Transit publicizes four AM inbound and three PM outbound trips that provide peak period peak direction service. These trips are similar to each other but vary slightly:

- “Lemon Creek Express,” which consists of a single AM inbound trip that operates between Switzer Village and downtown via Lemon Creek with no outbound counterpart.
- “Mendenhall Valley Commuter Morning Run,” which consists of a single AM inbound trip that operates between Auke Bay and downtown via Riverside Drive and Egan Drive. This trip does not have a direct outbound counterpart.

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- “Mendenhall Valley Express Morning Runs,” which consists of two AM inbound trips that operate between the Auke Bay and downtown via the Mendenhall Loop Road and Egan Drive. These trips do not have a direct outbound counterpart.
- “Lemon Creek/Mendenhall Valley Express Afternoon Runs,” which consists of PM outbound trips that operate between downtown and the Mendenhall Valley via Lemon Creek. These trips do not have a direct inbound counterpart.

These trips are designed to provide faster service during peak periods and to relieve pressure on the Valley Local and Express routes during the peak commute periods. However, they are confusing to understand, especially for new riders, and not all trips are publicized.

To make service easier to understand and more consistent, it is recommended that all of the Mendenhall Valley and Lemon Creek “Additional Service” express routes be consolidated into a new Mendenhall Valley – Downtown express route that provides all service in the same manner (see Figure 4):

- From the Downtown Transportation Center, operate to the Federal Building and then via Egan Drive to the Nugget Mall in the same manner as Route 2X, and then through the Mendenhall Valley in the same manner as Route 1 (Mendenhall Loop Road, Mint Way, and Riverside Drive).
- On weekdays, provide four AM inbound and four PM outbound trips.
- Brand the route as Route 1X Mendenhall Valley – Downtown Express.

Operating Cost Impacts of Short-Term Recommendations

One of the most important aspects of the TDP is to ensure that services are being provided as cost effectively and efficiently as possible. Related to this is the goal of keeping operating costs at or near the existing budget. While there are ways to reduce costs associated with the recommended changes (through service reductions in certain areas), it is recommended that a relatively minor—\$200,000—increase in total operating costs be considered to make the recommended changes. The impacts of the recommendations are calculated by estimating total pay hours, which consists of time in revenue service, layover, deadhead (trips to and from the beginning of a trip), and prep/cleanup time before and after shift times. The comparison of existing to recommended total pay hours is summarized in Table 5.

Table 5 Summary of Total Pay Hours and Costs (Existing and Recommended)

Day	Pay Hours			Operating Cost Impact
	Existing	Recommended Plan	Change (%)	
Weekdays	142	144	+ 2%	
Saturdays	91	106	+ 17%	
Sundays	64	73	+14%	
Annual	44,300	46,200	+ 4.3%	+\$200,000

MID-TERM RECOMMENDATIONS

The recommended mid-term improvements consist of service expansion that would require additional operating funds, and capital improvements that would require a number of years to implement, and that would also require the identification of capital funding.

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Figure 4 “Additional Service” Changes (with Service Rebranded as Route 1X Mendenhall Valley – Downtown Express)



SERVICE CHANGES**Provide Service to Lemon Creek Industrial Area**

Based on input from existing riders as well as the community, one of the most important changes recommended in the mid-term will be to operate Route 1 into the Lemon Creek Industrial area to better serve Costco, Home Depot, Alaskan Brewing Company, and other businesses in this area.

As outlined above, a number of short-term changes are recommended for Valley Local service. However, these changes would not allow enough time to deviate into the Lemon Creek industrial area. After extensive evaluation of different options, it was determined that the best way to serve this area was to extend the round trip operating time by 30 minutes so that the route could deviate into this area in both directions. This change would extend the round trip travel time to 150 minutes, which would require the deployment of one additional bus to maintain existing 30 minute headways. This service would cost \$540,000 per year.

Provide Service to Auke Bay Ferry Terminal

To maintain service to the Back Loop in the short-term, it is recommended that Express service (rebranded as Route 2/2X) be extended to Montana Creek, and to fund that extension, midday service be reduced from every 30 minutes to every 60 minutes. On weekdays, with a restoration of midday service to every 30 minutes, and the provision of evening service every 30 minutes, outer end service could be reconfigured to alternate between Montana Creek and the Ferry Terminal. This would provide service every 60 minutes to both locations, and the cost of this change would be \$450,000 per year. On weekends, the proposed Route 2 Montana Creek – Nugget Mall route could alternate its trips between Montana Creek and the Ferry Terminal to provide service to each every two hours, at no increase in costs.

Provide Earlier and Later Service

Over the course of this study, many expressed the demand for earlier and later service, as most routes do not start service sufficiently early to serve 7:00 AM work start times, or late work end times. As financial resources permit, it is recommended that Capital Transit's span of service be expanded to start earlier and end later. At the present time, and with the short-term recommendations, the first trips of the Valley Local and Douglas routes, which are two of Capital Transit's highest ridership routes, do not arrive in downtown until after 7:00 AM. Providing earlier service on those routes (which would be rebranded as Routes 1 and 5) would cost approximately \$48,000 per year. The two other major routes—the proposed Routes 1X Mendenhall Valley – Downtown Express, and 2X Montana Creek/Auke Bay – Downtown Express – would serve 7:00 AM starts with the short-term recommendations.

Table 6 Annual Operating Costs for Earlier Service to Serve 7:00 AM Work Start Times

	First Arrival in Downtown		Annual Operating Cost
	Short-Term Recs	To Serve 7:00 AM Starts	
Rt 1 Mendenhall Valley - Downtown	7:20 AM	6:50 AM	\$32,000
Rt 1X Mendenhall Valley – Downtown Express	6:50 AM	6:50 AM	\$0
Rt 2X Montana Creek/Auke Bay – Downtown Express	6:27 AM	6:27 AM	\$0
Rt 5 Douglas - Downtown	7:12 AM	6:42 AM	\$16,000
Total			\$48,000

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In the evening, the short-term recommendations would not significantly change the evening end of service, and the last trips would depart from downtown between 8:47 PM (Route 2X Montana Creek/Auke Bay – Downtown Express) and 11:17 PM (Route 1 Mendenhall Valley – Downtown) (see Table 7). The cost to extend service so that the last departures on all major routes would be 11:30 PM or later would be \$152,000 per year.

Table 7 Annual Operating Costs for Earlier Service to Serve 7:00 AM Work Start Times

	First Arrival in Downtown		Annual Operating Cost
	Short-Term Recs	To Provide Service until at least 11:30 PM	
Rt 1 Mendenhall Valley - Downtown	10:35 PM	11:35 PM	\$40,000
Rt 1X Mendenhall Valley – Downtown Express	No evening service	NA	\$0
Rt 2X Montana Creek/Auke Bay – Downtown Express	8:47 PM	11:47 AM	\$96,000
Rt 5 Douglas - Downtown	11:17 PM	12:17 AM	\$16,000
Total			\$152,000

CAPITAL IMPROVEMENTS

In addition to the operating improvements described above, a number of capital improvements are also recommended. These include technology enhancements, upgrades to Nugget Mall transfer facilities, and better lighting at unlit or poorly lit stops. These improvements have not been split between short-term and long-term, but considering costs and lead-times, most would necessarily fall into the mid-term timeframe.

TECHNOLOGY ENHANCEMENTS

Several technology improvements are recommended to enable Capital Transit to provide more reliable service, to provide better customer information, and to better track ridership and performance on an ongoing basis:

- **Automatic Vehicle Location (AVL)/Computer Aided Dispatch (CAD)**, which would provide the ability for Capital Transit to know where buses are throughout the day, and communicate more effectively with bus operators, which would allow the system to better responded to delays and incidents. According to the USDOT Research and Innovative Technology Administration (RITA) publication, *Intelligent Transportation Systems Benefits, Costs, Deployment, and Lessons Learned* (2008 Update), the deployment of AVL/CAD can produce schedule adherence improvements in the range of 9 to 23%. The cost of an AVL/CAD system would be approximately \$600,000.
- **Scheduling software**, which would allow Capital Transit to develop bus and driver schedules more efficiently, make schedule adjustments, and monitor performance over time. The cost of scheduling software would be approximately \$150,000.
- **Automatic passenger counters (APCs)** would count the number of passengers getting on and off the bus at each stop on an ongoing basis, which would provide better information to Capital Transit staff on how the system is being utilized. Data on passenger boarding activity could be collected throughout the year to better understand seasonal differences. The cost of an APC system that would be tied into the AVL/CAD system would be approximately \$150,000.
- **Real-time passenger information**, which would also be tied into the AVL/CAD system, could provide passengers with information on the current location of buses, estimated actual departure

times at individual stops via smartphones and fixed signage at stops. The development of a system to provide real-time information via smartphones would be approximately \$65,000, and the provision of estimated actual departure times via signs at stops would be approximately \$150,000 for 10 stops, and \$4,000 for each additional location.

- **Electronic fareboxes** would allow Capital Transit to accept electronic fare media and collect more robust boarding data. Implementation of an electronic fare collection system involves numerous up-front and ongoing costs to establish and maintain fare collection equipment, as well as internal and external processes to print and distribute tickets and passes, collect and reconcile fares, and conduct other customer relations and financial transactions. Estimated costs for electronic fareboxes and associated items are \$250,000.

FACILITY IMPROVEMENTS

Upgrade Nugget Mall Transfer Facility

For the foreseeable future, the Nugget Mall will continue to be Capital Transit's primary outer hub, and this location, although one of the most important and highest ridership stops in the Capital Transit system, has only very basic facilities (see Figure 5).

Figure 5 **Nugget Mall Transfer Facility**



Considering the importance of this location, these facilities should be upgraded to at least “superstop” status, in which comfortable facilities and a wide range of amenities are provided (see Figure 6). The cost of developing a superstop would be largely dependent upon the design and included elements, and could range in cost from approximately \$100,000 to over \$1 million. For the purposes of this plan, a capital cost of \$500,000 has been assumed.

Provide Shelter Lighting

Many of Capital Transit's bus stops are located in unlit or poorly lit locations, which can make waiting uncomfortable. It also makes it difficult for bus operators to see waiting passengers. One lighting

solution would be to install solar powered lighting, which can be done for approximately \$1,000 per shelter. It is recommended that Capital Transit undertake a program to install solar powered lighting at shelters in unlit and poorly lit locations, at a cost of approximately \$1,000 per shelter.

Figure 6 Superstop Example



SUMMARY

Juneau is served with an impressively successful transit system, but one whose success has exceeded its capacity to deliver. It has also fallen behind technologically, and its manual processes provide further challenges in meeting its passengers' needs. The short-term recommendations presented in this report would address the system's most pressing short term issues with a modest increase in operating costs (\$200,000 per year), but would not be sufficient to serve new areas, particularly the Lemon Creek Industrial Area and the Auke Bay Ferry Terminal.

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The mid-term recommendations, which would expand service to those areas, would require an increase in operating expenditures \$1.2 million per year. Technological improvements, which would provide Capital Transit with the ability to better track service on an ongoing basis to more quickly adjust to changing demand, provide better customer information, and improve internal processes in line with what most other transit systems already do, would require approximately \$2.0 million in capital expenditures, and which could be phased over multiple years (see Table 8).

Table 8 Cost Summary

	Short-Term	Mid-Term	Total
Operating Costs			
Short-Term Changes	\$200,000	--	\$200,00
Mid-Term Expansion			
Lemon Creek Industrial Area		\$550,000	\$540,000
Auke Bay Ferry Terminal		\$450,000	\$450,000
Earlier/Later Service		\$200,000	\$200,000
Total	\$200,000	\$1.2 million	\$1.4 million
Capital Costs			
Technology Improvements			
Automatic Vehicle Location/Computer Aided Dispatch (AVL/CAD)		\$600,000	\$600,000
Scheduling Software		\$300,000	\$300,000
Automatic Passenger Counters (APCs)		\$150,000	\$150,000
Real-Time Passenger Information		\$250,000	\$250,000
Electronic Fareboxes		\$250,000	\$250,000
Total		\$1.6 million	\$1.6 million
Facility Upgrades			
Nugget Mall Transfer Facility Upgrades		\$500,000	\$500,000
Shelter Lighting		\$50,000	\$50,000
Total		\$550,000	\$550,000
Total Capital		\$2.7million	\$2.7 million

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DRAFT SCHEDULES FOR SHORT-TERM IMPLEMENTATION

Route 1 Mendenhall Valley – Downtown

Seven days a week, service outside of shaded area does not run on Sunday

Outbound					Valley Loop				Inbound					
DTC	Federal Bldg	Hospital	Lemon Creek	Nugget Mall (arr)	Nugget Mall (dep)	Mend Mall	Riverside/Taku	Mend Mall	Nugget Mall (arr)	Nugget Mall (dep)	Lemon Creek	Hospital	Federal Bldg	DTC
						6:16 AM	6:22 AM	6:31 AM	6:37 AM	6:39 AM	6:53 AM	7:02 AM	7:14 AM	7:20 AM
						6:46 AM	6:52 AM	7:01 AM	7:07 AM	7:09 AM	7:23 AM	7:32 AM	7:44 AM	7:50 AM
						7:16 AM	7:22 AM	7:31 AM	7:37 AM	7:39 AM	7:53 AM	8:02 AM	8:14 AM	8:20 AM
6:58 AM	7:02 AM	7:12 AM	7:23 AM	7:37 AM	7:39 AM	7:46 AM	7:52 AM	8:01 AM	8:07 AM	8:09 AM	8:23 AM	8:32 AM	8:44 AM	8:50 AM
7:28 AM	7:32 AM	7:42 AM	7:53 AM	8:07 AM	8:09 AM	8:16 AM	8:22 AM	8:31 AM	8:37 AM	8:39 AM	8:53 AM	9:02 AM	9:14 AM	9:20 AM
7:58 AM	8:02 AM	8:12 AM	8:23 AM	8:37 AM	8:39 AM	8:46 AM	8:52 AM	9:01 AM	9:07 AM	9:09 AM	9:23 AM	9:32 AM	9:44 AM	9:50 AM
8:28 AM	8:32 AM	8:42 AM	8:53 AM	9:07 AM	9:09 AM	9:16 AM	9:22 AM	9:31 AM	9:37 AM	9:39 AM	9:53 AM	10:02 AM	10:14 AM	10:20 AM
8:58 AM	9:02 AM	9:12 AM	9:23 AM	9:37 AM	9:39 AM	9:46 AM	9:52 AM	10:01 AM	10:07 AM	10:09 AM	10:23 AM	10:32 AM	10:44 AM	10:50 AM
9:28 AM	9:32 AM	9:42 AM	9:53 AM	10:07 AM	10:09 AM	10:16 AM	10:22 AM	10:31 AM	10:37 AM	10:39 AM	10:53 AM	11:02 AM	11:14 AM	11:20 AM
9:58 AM	10:02 AM	10:12 AM	10:23 AM	10:37 AM	10:39 AM	10:46 AM	10:52 AM	11:01 AM	11:07 AM	11:09 AM	11:23 AM	11:32 AM	11:44 AM	11:50 AM
10:28 AM	10:32 AM	10:42 AM	10:53 AM	11:07 AM	11:09 AM	11:16 AM	11:22 AM	11:31 AM	11:37 AM	11:39 AM	11:53 AM	12:02 PM	12:14 PM	12:20 PM
10:58 AM	11:02 AM	11:12 AM	11:23 AM	11:37 AM	11:39 AM	11:46 AM	11:52 AM	12:01 PM	12:07 PM	12:09 PM	12:23 PM	12:32 PM	12:44 PM	12:50 PM
11:28 AM	11:32 AM	11:42 AM	11:53 AM	12:07 PM	12:09 PM	12:16 PM	12:22 PM	12:31 PM	12:37 PM	12:39 PM	12:53 PM	1:02 PM	1:14 PM	1:20 PM
11:58 AM	12:02 PM	12:12 PM	12:23 PM	12:37 PM	12:39 PM	12:46 PM	12:52 PM	1:01 PM	1:07 PM	1:09 PM	1:23 PM	1:32 PM	1:44 PM	1:50 PM
12:28 PM	12:32 PM	12:42 PM	12:53 PM	1:07 PM	1:09 PM	1:16 PM	1:22 PM	1:31 PM	1:37 PM	1:39 PM	1:53 PM	2:02 PM	2:14 PM	2:20 PM
12:58 PM	1:02 PM	1:12 PM	1:23 PM	1:37 PM	1:39 PM	1:46 PM	1:52 PM	2:01 PM	2:07 PM	2:09 PM	2:23 PM	2:32 PM	2:44 PM	2:50 PM
1:28 PM	1:32 PM	1:42 PM	1:53 PM	2:07 PM	2:09 PM	2:16 PM	2:22 PM	2:31 PM	2:37 PM	2:39 PM	2:53 PM	3:02 PM	3:14 PM	3:20 PM
1:58 PM	2:02 PM	2:12 PM	2:23 PM	2:37 PM	2:39 PM	2:46 PM	2:52 PM	3:01 PM	3:07 PM	3:09 PM	3:23 PM	3:32 PM	3:44 PM	3:50 PM
2:35 PM	2:39 PM	2:49 PM	3:00 PM	3:14 PM	3:16 PM	3:23 PM	3:29 PM	3:38 PM	3:44 PM	3:46 PM	4:00 PM	4:09 PM	4:21 PM	4:27 PM
3:05 PM	3:09 PM	3:19 PM	3:30 PM	3:44 PM	3:46 PM	3:53 PM	3:59 PM	4:08 PM	4:14 PM	4:16 PM	4:30 PM	4:39 PM	4:51 PM	4:57 PM
3:35 PM	3:39 PM	3:49 PM	4:00 PM	4:14 PM	4:16 PM	4:23 PM	4:29 PM	4:38 PM	4:44 PM	4:46 PM	5:00 PM	5:09 PM	5:21 PM	5:27 PM
4:05 PM	4:09 PM	4:19 PM	4:30 PM	4:44 PM	4:46 PM	4:53 PM	4:59 PM	5:08 PM	5:14 PM	5:16 PM	5:30 PM	5:39 PM	5:51 PM	5:57 PM
4:35 PM	4:39 PM	4:49 PM	5:00 PM	5:14 PM	5:16 PM	5:23 PM	5:29 PM	5:38 PM	5:44 PM	5:46 PM	6:00 PM	6:09 PM	6:21 PM	6:27 PM
5:05 PM	5:09 PM	5:19 PM	5:30 PM	5:44 PM	5:46 PM	5:53 PM	5:59 PM	6:08 PM	6:14 PM	6:16 PM	6:30 PM	6:39 PM	6:51 PM	6:57 PM
5:35 PM	5:39 PM	5:49 PM	6:00 PM	6:14 PM	6:16 PM	6:23 PM	6:29 PM	6:38 PM	6:44 PM	6:46 PM	7:00 PM	7:09 PM	7:21 PM	7:27 PM
6:35 PM	6:39 PM	6:49 PM	7:00 PM	7:14 PM	7:16 PM	7:23 PM	7:29 PM	7:38 PM	7:44 PM	7:46 PM	8:00 PM	8:09 PM	8:21 PM	8:27 PM
7:35 PM	7:39 PM	7:49 PM	8:00 PM	8:14 PM	8:16 PM	8:23 PM	8:29 PM	8:38 PM	8:44 PM	8:46 PM	9:00 PM	9:09 PM	9:21 PM	9:27 PM
8:35 PM	8:39 PM	8:49 PM	9:00 PM	9:14 PM	9:16 PM	9:23 PM	9:29 PM	9:38 PM	9:44 PM	9:46 PM	10:00 PM	10:09 PM	10:21 PM	10:27 PM
9:35 PM	9:39 PM	9:49 PM	10:00 PM	10:14 PM	10:16 PM	10:23 PM	10:29 PM	10:38 PM	10:44 PM	10:46 PM	11:00 PM	11:09 PM	11:21 PM	11:27 PM
10:35 PM	10:39 PM	10:49 PM	11:00 PM	11:14 PM	11:16 PM	11:23 PM	11:29 PM	11:38 PM						

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Route 1X Valley Mendenhall Valley – Downtown Express

Weekdays Only

Outbound			Valley Loop				Inbound			
DTC	Federal Bldg	Nugget Mall (arr)	Nugget Mall (dep)	Mend Mall	Riverside/ Taku	Mend Mall	Nugget Mall (arr)	Nugget Mall (dep)	Federal Bldg	DTC
				6:06 AM	6:12 AM	6:21 AM	6:27 AM	6:29 AM	6:44 AM	6:50 AM
				6:51 AM	6:57 AM	7:06 AM	7:12 AM	7:14 AM	7:29 AM	7:35 AM
				7:01 AM	7:07 AM	7:16 AM	7:22 AM	7:24 AM	7:39 AM	7:45 AM
				7:06 AM	7:12 AM	7:21 AM	7:27 AM	7:29 AM	7:44 AM	7:50 AM
2:35 PM	2:39 PM	2:54 PM	2:56 PM	3:03 PM	3:09 PM	3:18 PM				
3:05 PM	3:09 PM	3:24 PM	3:26 PM	3:33 PM	3:39 PM	3:48 PM				
4:10 PM	4:14 PM	4:29 PM	4:31 PM	4:38 PM	4:44 PM	4:53 PM				
4:35 PM	4:39 PM	4:54 PM	4:56 PM	5:03 PM	5:09 PM	5:18 PM				

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Route 2 Montana Creek/Auke Bay – Nugget Mall/Route 2X Montana Creek/Auke Bay – Downtown Express Weekday Service

Outbound								Inbound										
Route	DTC	Federal Bldg	Nugget Mall (arr)	Nugget Mall (dep)	Airport	UAS	Montana Cr (Arr)	Route	Montana Cr (Dep)	UAS	Airport	Nugget Mall (arr)	Nugget Mall (dep)	Federal Bldg	DTC	Franklin St	4th St	DTC
								2X		5:54 AM	6:04 AM	6:06 AM	6:08 AM	6:23 AM	6:27 AM			
								2X	6:14 AM	6:24 AM	6:34 AM	6:36 AM	6:38 AM	6:53 AM	6:57 AM			
								2X	6:44 AM	6:54 AM	7:04 AM	7:06 AM	7:08 AM	7:23 AM	7:27 AM			
								2X	7:14 AM	7:24 AM	7:34 AM	7:36 AM	7:38 AM	7:53 AM	7:57 AM			
2X	7:18 AM	7:22 AM	7:37 AM	7:39 AM	7:41 AM	7:51 AM	8:03 AM	2X	8:14 AM	8:24 AM	8:34 AM	8:36 AM	8:38 AM	8:53 AM	-	8:58 AM	9:00 AM	9:03 AM
2X	7:48 AM	7:52 AM	8:07 AM	8:09 AM	8:11 AM	8:21 AM	8:33 AM	2X	8:44 AM	8:54 AM	9:04 AM	9:06 AM	9:08 AM	9:23 AM	-	9:28 AM	9:30 AM	9:33 AM
2X	8:18 AM	8:22 AM	8:37 AM	8:39 AM	8:41 AM	8:51 AM	9:03 AM	2X	9:14 AM	9:24 AM	9:34 AM	9:36 AM	9:38 AM	9:53 AM	-	9:58 AM	10:00 AM	10:03 AM
2X	9:18 AM	9:22 AM	9:37 AM	9:39 AM	9:41 AM	9:51 AM	10:03 AM	2X	10:14 AM	10:24 AM	10:34 AM	10:36 AM	10:38 AM	10:53 AM	-	10:58 AM	11:00 AM	11:03 AM
2X	10:18 AM	10:22 AM	10:37 AM	10:39 AM	10:41 AM	10:51 AM	11:03 AM	2X	11:14 AM	11:24 AM	11:34 AM	11:36 AM	11:38 AM	11:53 AM	-	11:58 AM	12:00 PM	12:03 PM
2X	11:18 AM	11:22 AM	11:37 AM	11:39 AM	11:41 AM	11:51 AM	12:03 PM	2X	12:14 PM	12:24 PM	12:34 PM	12:36 PM	12:38 PM	12:53 PM	-	12:58 PM	1:00 PM	1:03 PM
2X	12:18 PM	12:22 PM	12:37 PM	12:39 PM	12:41 PM	12:51 PM	1:03 PM	2X	1:14 PM	1:24 PM	1:34 PM	1:36 PM	1:38 PM	1:53 PM	-	1:58 PM	2:00 PM	2:03 PM
2X	1:18 PM	1:22 PM	1:37 PM	1:39 PM	1:41 PM	1:51 PM	2:03 PM	2X	2:14 PM	2:24 PM	2:34 PM	2:36 PM	2:38 PM	2:53 PM	-	2:58 PM	3:00 PM	3:03 PM
2X	2:18 PM	2:22 PM	2:37 PM	2:39 PM	2:41 PM	2:51 PM	3:03 PM	2X	3:22 PM	3:32 PM	3:42 PM	3:44 PM	3:46 PM	4:01 PM	-	4:06 PM	4:08 PM	4:11 PM
2X	2:56 PM	3:00 PM	3:15 PM	3:17 PM	3:19 PM	3:29 PM	3:41 PM	2X	4:22 PM	4:32 PM	4:42 PM	4:44 PM	4:46 PM	5:01 PM	-	5:06 PM	5:08 PM	5:11 PM
2X	3:26 PM	3:30 PM	3:45 PM	3:47 PM	3:49 PM	3:59 PM	4:11 PM	2X	5:22 PM	5:32 PM	5:42 PM	5:44 PM	5:46 PM	6:01 PM	-	6:06 PM	6:08 PM	6:11 PM
2X	3:56 PM	4:00 PM	4:15 PM	4:17 PM	4:19 PM	4:29 PM	4:41 PM	2	5:52 PM	6:02 PM	6:12 PM	6:14 PM						
2X	4:26 PM	4:30 PM	4:45 PM	4:47 PM	4:49 PM	4:59 PM	5:11 PM	2	6:22 PM	6:32 PM	6:42 PM	6:44 PM						
2X	4:56 PM	5:00 PM	5:15 PM	5:17 PM	5:19 PM	5:29 PM	5:41 PM	2		6:39 PM	6:49 PM	6:51 PM						
2X	5:26 PM	5:30 PM	5:45 PM	5:47 PM	5:49 PM	5:59 PM	6:11 PM	2	7:22 PM	7:32 PM	7:42 PM	7:44 PM						
2X	5:56 PM	6:00 PM	6:15 PM	6:17 PM	6:19 PM	6:29 PM		2	8:22 PM	8:32 PM	8:42 PM	8:44 PM						
2X	6:26 PM	6:30 PM	6:45 PM	6:47 PM	6:49 PM	6:59 PM	7:11 PM	2	9:22 PM	9:32 PM	9:42 PM	9:44 PM						
2				7:47 PM	7:49 PM	7:59 PM	8:11 PM											
2				8:47 PM	8:49 PM	8:59 PM	9:11 PM											

Note: Schedule shift at 2:56 PM to correspond to commuter needs and connections to Route 1

Weekend Service; service outside of shaded area does not run on Sunday

Outbound				Inbound			
Nugget Mall (dep)	Airport	UAS	Montana Cr (Arrive)	Montana Cr (Depart)	UAS (Depart)	Airport	Nugget Mall (arr)
				6:05 AM	6:15 AM	6:25 AM	6:32 AM
6:39 AM	6:41 AM	6:51 AM	6:58 AM	7:05 AM	7:15 AM	7:25 AM	7:32 AM
7:39 AM	7:41 AM	7:51 AM	7:58 AM	8:05 AM	8:15 AM	8:25 AM	8:32 AM
8:39 AM	8:41 AM	8:51 AM	8:58 AM	9:05 AM	9:15 AM	9:25 AM	9:32 AM
9:39 AM	9:41 AM	9:51 AM	9:58 AM	10:05 AM	10:15 AM	10:25 AM	10:32 AM
10:39 AM	10:41 AM	10:51 AM	10:58 AM	11:05 AM	11:15 AM	11:25 AM	11:32 AM
11:39 AM	11:41 AM	11:51 AM	11:58 AM	12:05 PM	12:15 PM	12:25 PM	12:32 PM
12:39 PM	12:41 PM	12:51 PM	12:58 PM	1:05 PM	1:15 PM	1:25 PM	1:32 PM
1:39 PM	1:41 PM	1:51 PM	1:58 PM	2:05 PM	2:15 PM	2:25 PM	2:32 PM
2:39 PM	2:41 PM	2:51 PM	2:58 PM	3:12 PM	3:22 PM	3:32 PM	3:39 PM
3:46 PM	3:48 PM	3:58 PM	4:05 PM	4:12 PM	4:22 PM	4:32 PM	4:39 PM
4:46 PM	4:48 PM	4:58 PM	5:05 PM	5:12 PM	5:22 PM	5:32 PM	5:39 PM
5:46 PM	5:48 PM	5:58 PM	6:05 PM	6:12 PM	6:22 PM	6:32 PM	6:39 PM
6:46 PM	6:48 PM	6:58 PM	7:05 PM	7:12 PM	7:22 PM	7:32 PM	7:39 PM
7:46 PM	7:48 PM	7:58 PM	8:05 PM				

Juneau's Transit Development Plan

2013 Update | DRAFT Recommendations Report - December 19, 2013

Route 5 Douglas – Downtown

Seven days a week, service outside of shaded area does not run on Sunday

Outbound				Inbound						
DTC	Fed Bldg	Cordova St	Post Office	St. Anns (Dep)	Post Office	Cordova St	Federal Bldg	Franklin St	4th St	DTC
6:30 AM	6:34 AM	6:39 AM	6:46 AM	6:49 AM	6:52 AM	6:57 AM	7:02 AM	7:07 AM	7:09 AM	7:12 AM
7:00 AM	7:04 AM	7:09 AM	7:16 AM	7:19 AM	7:22 AM	7:27 AM	7:32 AM	7:37 AM	7:39 AM	7:42 AM
7:30 AM	7:34 AM	7:39 AM	7:46 AM	7:49 AM	7:52 AM	7:57 AM	8:02 AM	8:07 AM	8:09 AM	8:12 AM
8:00 AM	8:04 AM	8:09 AM	8:16 AM	8:19 AM	8:22 AM	8:27 AM	8:32 AM	8:37 AM	8:39 AM	8:42 AM
8:30 AM	8:34 AM	8:39 AM	8:46 AM	8:49 AM	8:52 AM	8:57 AM	9:02 AM	9:07 AM	9:09 AM	9:12 AM
9:00 AM	9:04 AM	9:09 AM	9:16 AM	9:19 AM	9:22 AM	9:27 AM	9:32 AM	9:37 AM	9:39 AM	9:42 AM
9:30 AM	9:34 AM	9:39 AM	9:46 AM	9:49 AM	9:52 AM	9:57 AM	10:02 AM	10:07 AM	10:09 AM	10:12 AM
10:00 AM	10:04 AM	10:09 AM	10:16 AM	10:19 AM	10:22 AM	10:27 AM	10:32 AM	10:37 AM	10:39 AM	10:42 AM
10:30 AM	10:34 AM	10:39 AM	10:46 AM	10:49 AM	10:52 AM	10:57 AM	11:02 AM	11:07 AM	11:09 AM	11:12 AM
11:00 AM	11:04 AM	11:09 AM	11:16 AM	11:19 AM	11:22 AM	11:27 AM	11:32 AM	11:37 AM	11:39 AM	11:42 AM
11:30 AM	11:34 AM	11:39 AM	11:46 AM	11:49 AM	11:52 AM	11:57 AM	12:02 PM	12:07 PM	12:09 PM	12:12 PM
12:00 PM	12:04 PM	12:09 PM	12:16 PM	12:19 PM	12:22 PM	12:27 PM	12:32 PM	12:37 PM	12:39 PM	12:42 PM
12:30 PM	12:34 PM	12:39 PM	12:46 PM	12:49 PM	12:52 PM	12:57 PM	1:02 PM	1:07 PM	1:09 PM	1:12 PM
1:00 PM	1:04 PM	1:09 PM	1:16 PM	1:19 PM	1:22 PM	1:27 PM	1:32 PM	1:37 PM	1:39 PM	1:42 PM
1:30 PM	1:34 PM	1:39 PM	1:46 PM	1:49 PM	1:52 PM	1:57 PM	2:02 PM	2:07 PM	2:09 PM	2:12 PM
2:00 PM	2:04 PM	2:09 PM	2:16 PM	2:19 PM	2:22 PM	2:27 PM	2:32 PM	2:37 PM	2:39 PM	2:42 PM
2:30 PM	2:34 PM	2:39 PM	2:46 PM	2:49 PM	2:52 PM	2:57 PM	3:02 PM	3:07 PM	3:09 PM	3:12 PM
3:00 PM	3:04 PM	3:09 PM	3:16 PM	3:19 PM	3:22 PM	3:27 PM	3:32 PM	3:37 PM	3:39 PM	3:42 PM
3:30 PM	3:34 PM	3:39 PM	3:46 PM	3:49 PM	3:52 PM	3:57 PM	4:02 PM	4:07 PM	4:09 PM	4:12 PM
4:00 PM	4:04 PM	4:09 PM	4:16 PM	4:19 PM	4:22 PM	4:27 PM	4:32 PM	4:37 PM	4:39 PM	4:42 PM
4:17 PM	4:21 PM	4:26 PM	4:33 PM	4:36 PM	4:39 PM	4:44 PM	4:49 PM	4:54 PM	4:56 PM	4:59 PM
4:47 PM	4:51 PM	4:56 PM	5:03 PM	5:06 PM	5:09 PM	5:14 PM	5:19 PM	5:24 PM	5:26 PM	5:29 PM
5:17 PM	5:21 PM	5:26 PM	5:33 PM	5:36 PM	5:39 PM	5:44 PM	5:49 PM	5:54 PM	5:56 PM	5:59 PM
5:47 PM	5:51 PM	5:56 PM	6:03 PM	6:06 PM	6:09 PM	6:14 PM	6:19 PM	6:24 PM	6:26 PM	6:29 PM
6:17 PM	6:21 PM	6:26 PM	6:33 PM	6:36 PM	6:39 PM	6:44 PM	6:49 PM	6:54 PM	6:56 PM	6:59 PM
7:17 PM	7:21 PM	7:26 PM	7:33 PM	7:36 PM	7:39 PM	7:44 PM	7:49 PM	7:54 PM	7:56 PM	7:59 PM
8:17 PM	8:21 PM	8:26 PM	8:33 PM	8:36 PM	8:39 PM	8:44 PM	8:49 PM	8:54 PM	8:56 PM	8:59 PM
9:17 PM	9:21 PM	9:26 PM	9:33 PM	9:36 PM	9:39 PM	9:44 PM	9:49 PM	9:54 PM	9:56 PM	9:59 PM
10:17 PM	10:21 PM	10:26 PM	10:33 PM	10:36 PM	10:39 PM	10:44 PM	10:49 PM	10:54 PM	10:56 PM	10:59 PM
11:17 PM	11:21 PM	11:26 PM	11:33 PM							

Juneau's Transit Development Plan

2013 Update | DRAFT Recommendations Report - December 19, 2013

Route 6 North Douglas

Weekdays Only

Outbound				Inbound			
DTC	Federal Bldg	Bonnie Doon	Sundown Drive	Sundown Drive	Bonnie Doon	Federal Bldg	DTC
7:05 AM	7:09 AM	7:11 AM	7:21 AM	7:31 AM	7:33 AM	7:47 AM	7:51 AM
5:10 PM	5:14 PM	5:16 PM	5:26 PM	5:36 PM	5:38 PM	5:52 PM	5:56 PM



Juneau Comprehensive Operations Analysis and
Transit Development Plan

DRAFT RECOMMENDATIONS

January 2014

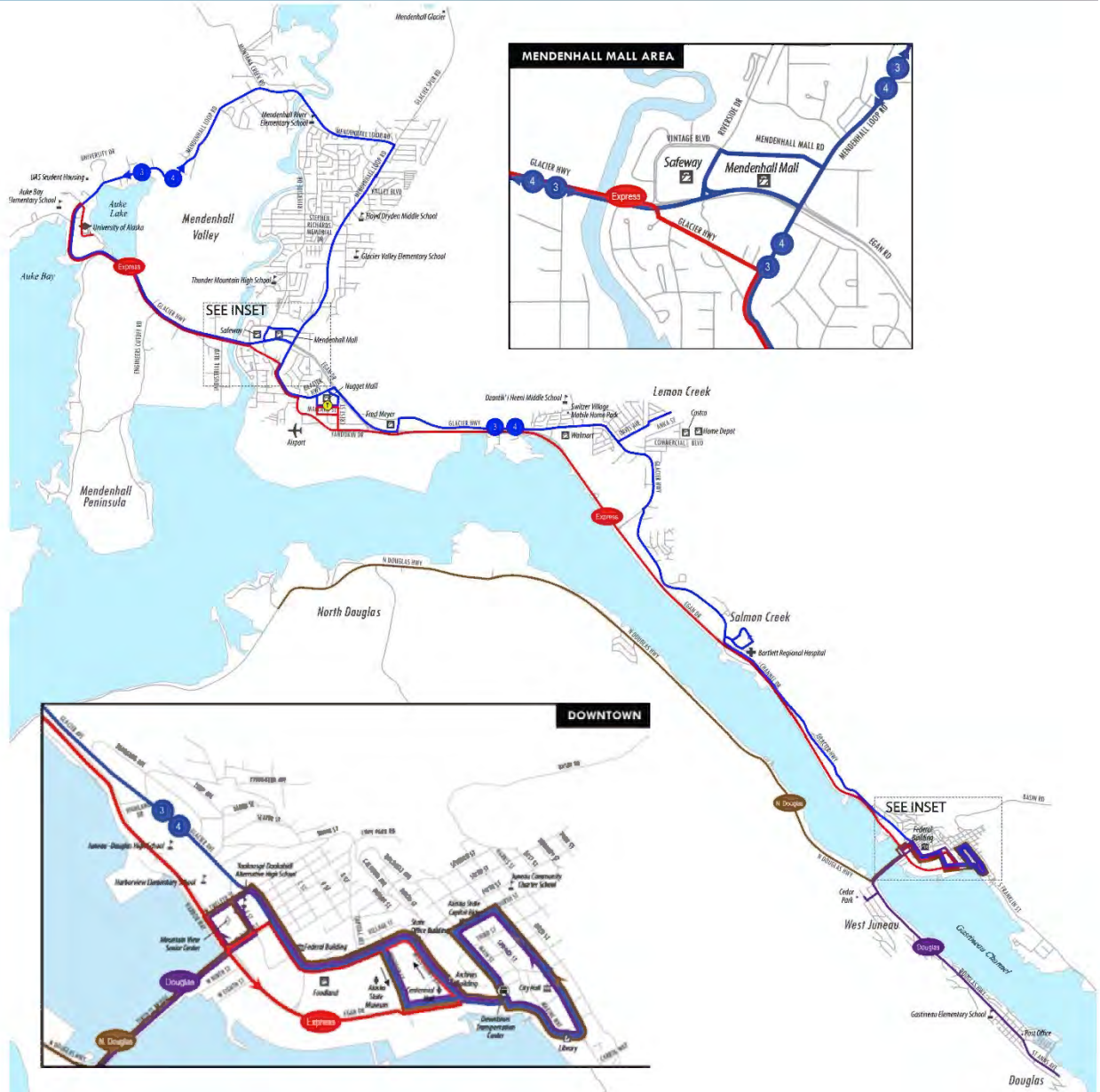


Tonight's Agenda

- System Strengths & Weaknesses
- Service Improvement Objectives
- Draft Recommendations

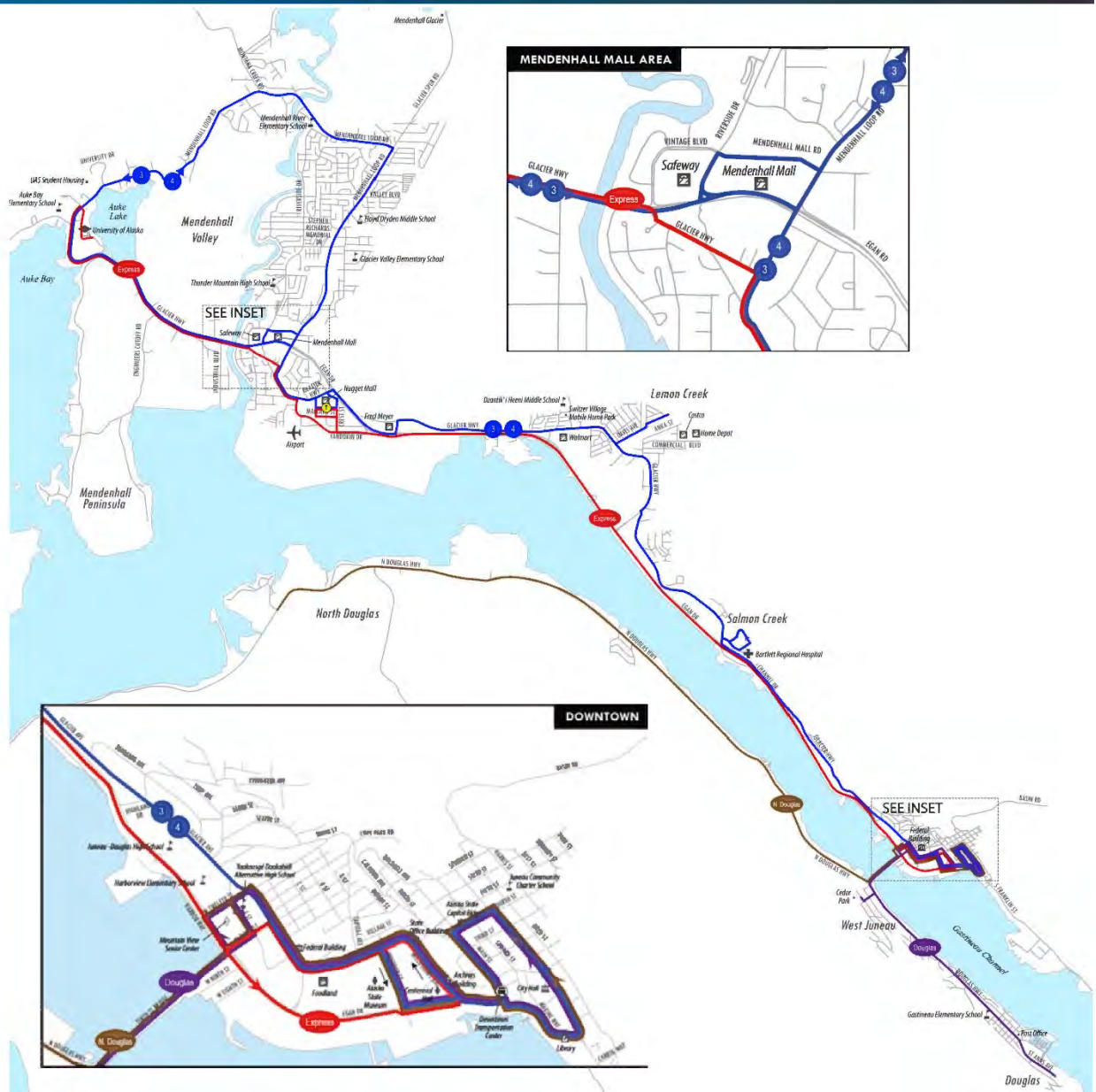
Existing System: Strengths

- Good to excellent service to most areas
- Frequent service (every 30 minutes) on most routes most of the time
- Express service between UAS, Valley, and downtown
- Late evening service on Valley Local and Douglas routes
- Timed-transfers between routes at Nugget Mall and Federal Building
- Two routes serve downtown loop
- High ridership and productivity (especially compared to peer cities)
- High community satisfaction



Existing System: Weaknesses

- Service has not kept pace with Juneau's growth
 - Buses running behind schedule
 - Transfers being missed
 - Express route doesn't have time to get to DTC
- Overcrowding
- Some significant demands not served
 - Riverside Drive
 - Lemon Creek Industrial Area
 - Auke Bay Ferry Terminal
 - Early work times
- Too much service in areas with low demand
 - Back Loop
 - Auke Bay
 - North Douglas



Service Improvement Objectives

Objective

- Improve on-time performance
- Maintain timed-transfers
- Make service simpler and easier to use
- Provide service to areas with high demand
 - Riverside Drive
 - Lemon Creek Industrial Area
 - Ferry Terminal
- Maintain existing service coverage, even where demand is low
 - Back Loop
 - North Douglas
- Implement downtown circulator

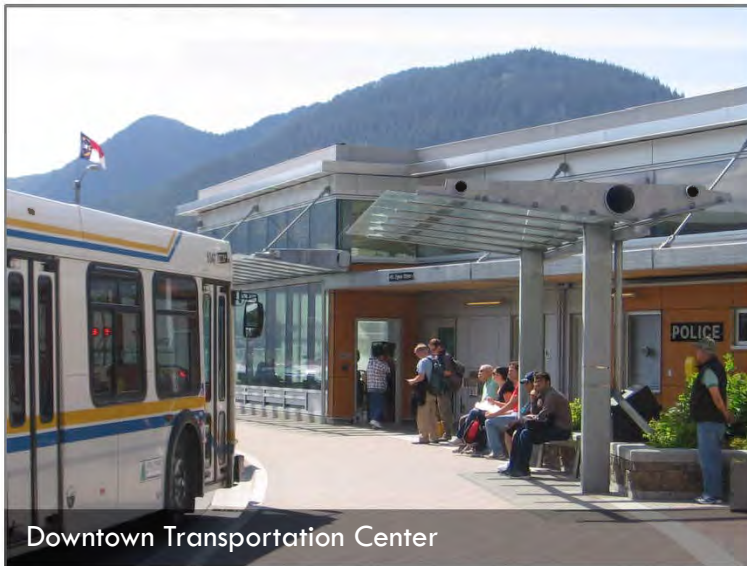
Service Improvement Objectives

Objective	Short-Term	Mid-Term
Improve on-time performance	✓	✓
Maintain timed-transfers	Most	Most
Make service simpler and easier to use	✓	✓
- Provide service to areas with high demand - Riverside Drive - Lemon Creek Industrial Area - Ferry Terminal	✓	✓ ✓ ✓
- Maintain service coverage, even where demand is low - Back Loop - North Douglas	✓ ✓	✓ ✓
Implement downtown circulator		

Additional Improvement Objectives

Objective

- Provide more user-friendly information
- Implement technology improvements
- Upgrade facilities



Additional Improvement Objectives

Objective	Short-Term	Mid-Term
- Provide more user-friendly information - Upgraded website - Improved maps and schedules - Google Transit - Real-time passenger information	✓ ✓ ✓	✓ ✓ ✓ ✓
- Implement technology improvements - Automatic vehicle location (AVL) - Computer aided dispatch (CAD) - Automatic passenger counters (APCs) - Electronic fareboxes		✓ ✓ ✓ ✓
- Upgrade facilities - Nugget Mall Superstop - Shelter Lighting	✓	✓ ✓

Short-Term Service Recommendations

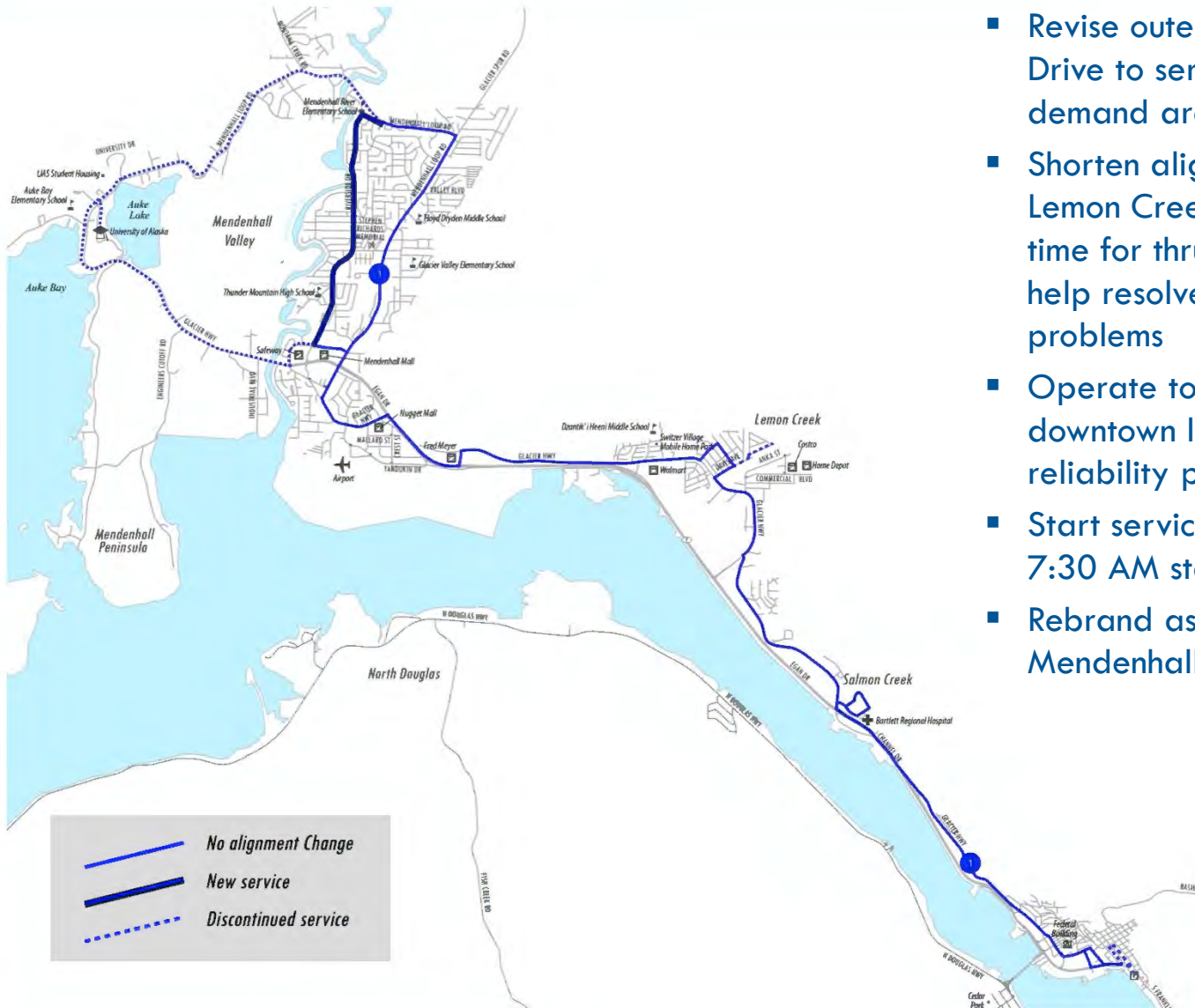
■ Systemwide

- Rebrand all routes with number and names
- Publish schedule information on Google Transit
- Produce system map and single brochure with all routes
- Upgrade website

■ Route changes

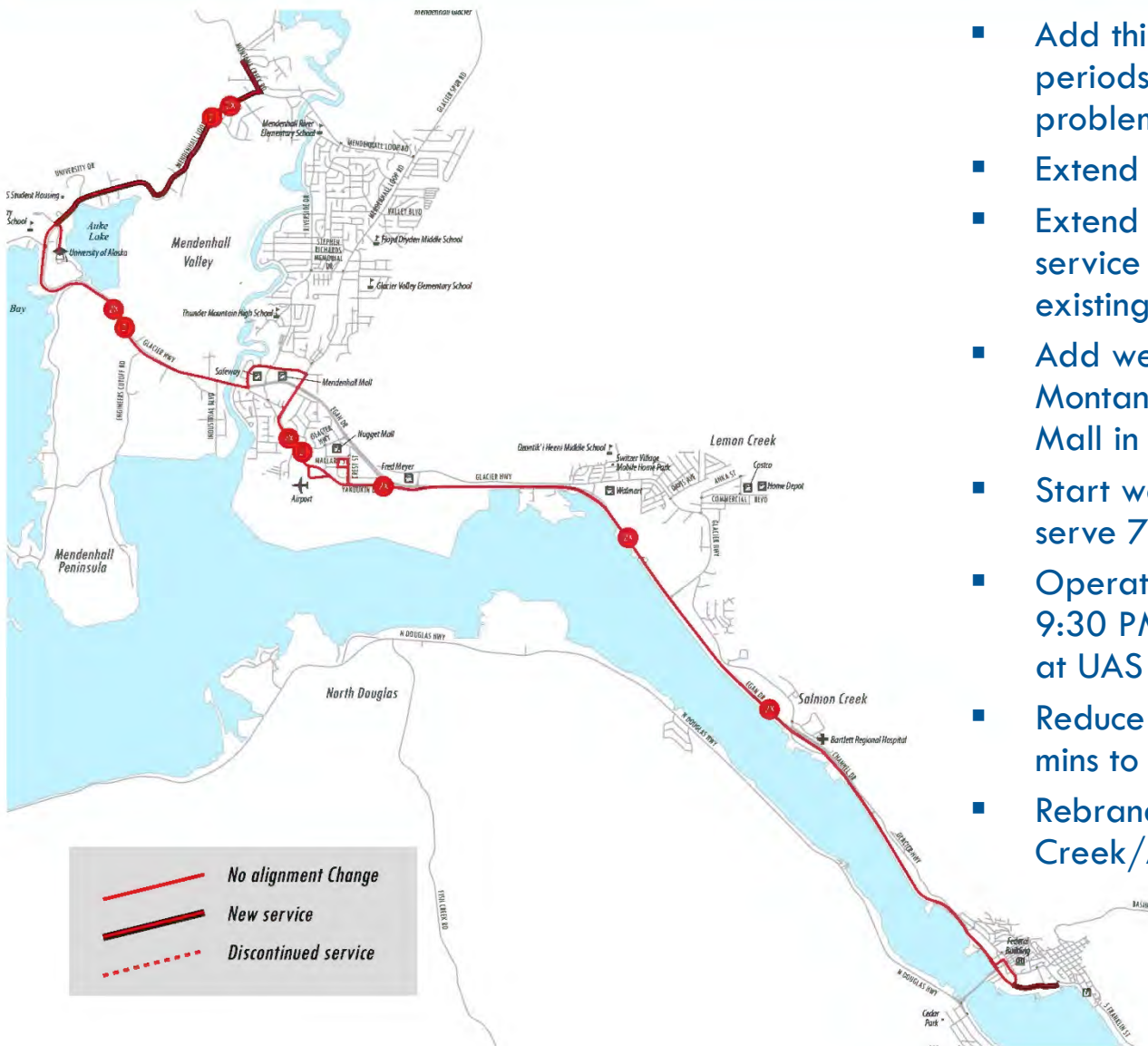
- **Valley Local:** Alignment changes to resolve on-time performance problems, operate via Riverside Drive, and earlier service
- **Express:** Add bus during peak periods to resolve running time problems, extend to Montana Creek and DTC, and earlier service; reduce midday frequencies to 60 minutes to offset cost of add'l bus
- **Douglas:** Only minor changes
- **North Douglas:** Discontinue barely utilized midday trip
- **“Additional Service” commuter runs:** Consolidate into new express route

Valley Local



- Revise outer loop to Riverside Drive to serve this high demand area
- Shorten alignment through Lemon Creek to reduce travel time for thru passengers and help resolve reliability problems
- Operate to DTC instead of downtown loop also to resolve reliability problems
- Start service earlier to serve 7:30 AM start times
- Rebrand as Route 1 Mendenhall Valley - Downtown

Express



- Add third bus during peak periods to solve reliability problems
- Extend inner end service to DTC
- Extend weekday outer end service via Back Loop in lieu of existing Valley Local service
- Add weekend service between Montana Creek and the Nugget Mall in lieu of Valley Local
- Start weekday service earlier to serve 7:00 AM start times
- Operate weekday service until 9:30 PM to serve evening classes at UAS
- Reduce midday frequencies to 60 mins to offset cost of new bus
- Rebrand as Route 2X Montana Creek/Auke Bay - Downtown

Douglas



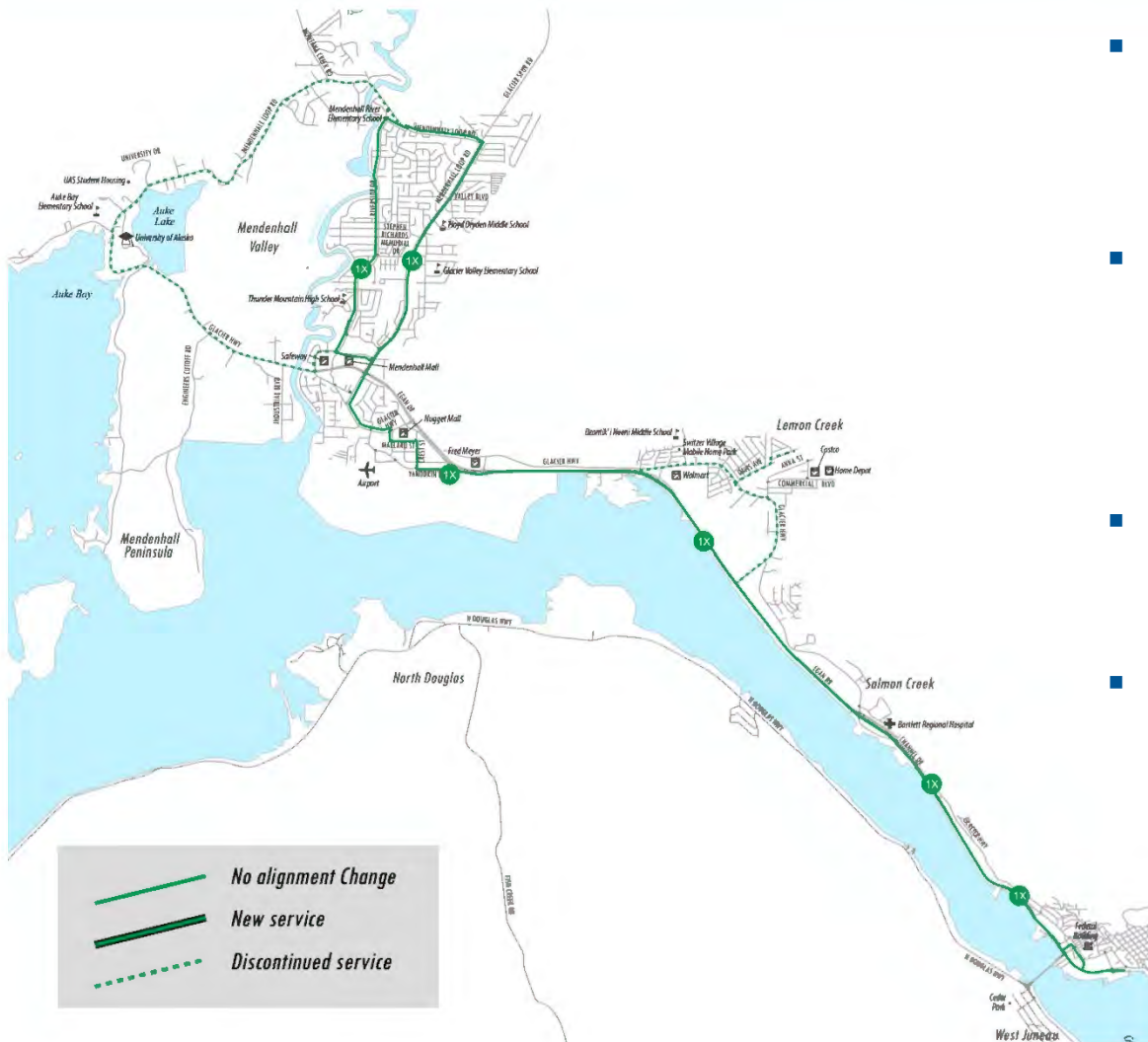
- Incorporate AM peak “Douglas Express” morning trip into the regular Douglas schedule to simplify service and plug the hole in the existing Douglas schedule.
- Continue to provide service around the downtown loop
- Continue to provide timed-transfers to peak direction passengers
- However, changes to Valley Local service to improve reliability would “break” non-peak direction timed-transfers
- Rebrand Service as Route 5 Douglas – Downtown

North Douglas



- Discontinue midday trip used by only 2 passengers in each direction to help fund other improvements
- Rebrand Service as Route 6 North Douglas – Downtown

“Additional Service” Commuter Runs



- Four AM inbound and three PM outbound trips provide similar but different service in a confusing manner
- Consolidate these trips into new Mendenhall Valley – Downtown express route that provides all service in the same manner
- On weekdays, provide four AM inbound and four PM outbound trips.
- Brand as Route 1X Mendenhall Valley – Downtown Express.

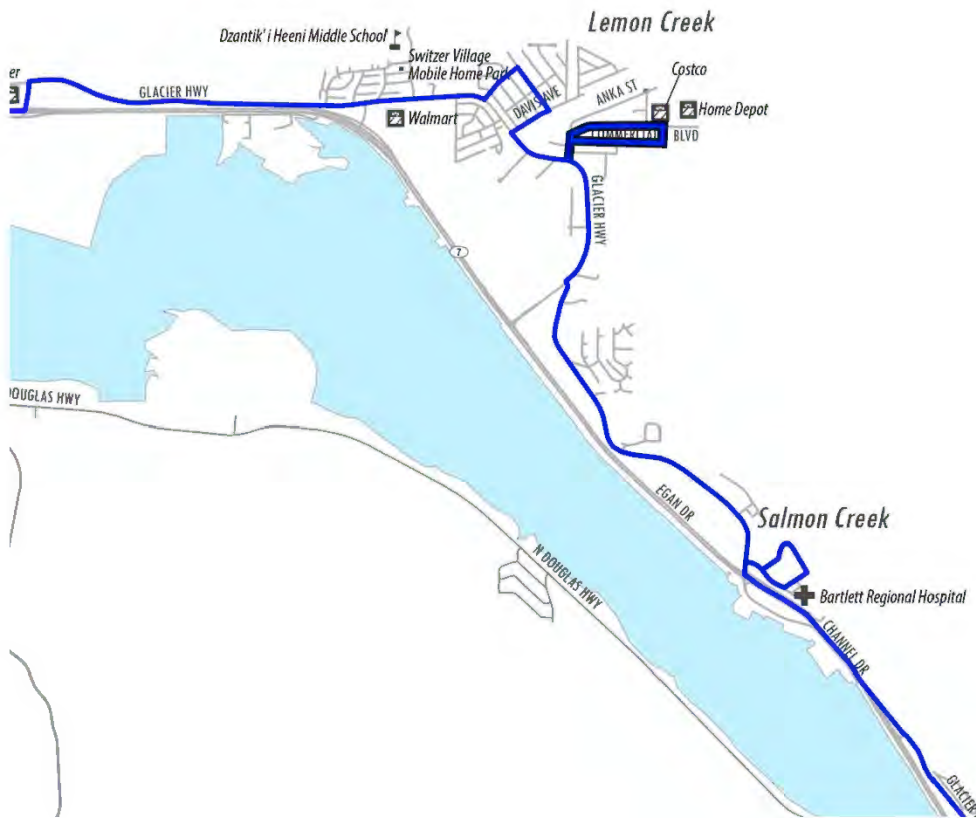
Impacts of Short-Term Changes

- Resolve on-time performance issues
- Provide equal or better service for most riders
 - Exceptions:
 - Midday Express route riders (frequencies reduced from 30 to 60 mins)
 - Nighttime Auke Bay riders (service would end at 9:30 PM instead of 11:30 PM)
 - Midday North Douglas riders (but only four)
- Serve new riders
 - Riverside Drive
 - Earlier work trips
- Maintain timed-transfers for large majority of riders
 - Exception: Douglas – Valley Local non-peak direction travel
- Operating cost impact = \$200,000 per year

Mid-Term Recommendations

- Service to Lemon Creek Industrial Area
- Service to Auke Bay Ferry Terminal
- Earlier and later service (beyond short-term recs)
- Technology improvements
 - Automatic Vehicle Location (AVL)
 - Computer Aided Dispatch (CAD)
 - Automatic passenger counters (APCs)
 - Electronic fareboxes
 - Real-time passenger information
- Facility improvements
 - Nugget Mall superstop
 - Shelter lighting

Service to Lemon Creek Industrial Area



- Would require addition of one bus to Valley Local service (new Route 1)
- Would also allow service to be extended around downtown loop
- Operating cost = \$540,000 per year

Service to Auke Bay Ferry Terminal



- Most cost-effective approach to alternate outer end Express (new Route 2X) service between Montana Creek and Ferry Terminal
- 60 min service to each outer leg/30 min trunk service would cost add'l \$450,000 per year
- Would also restore 30 min midday service, and add 30 minute evening service

Earlier and Later Service

- First arrivals in downtown to serve 7:00 AM work start times:

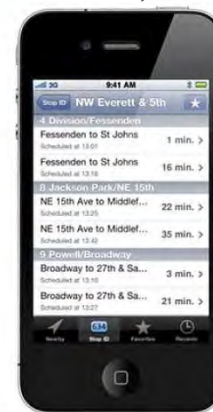
	First Arrival in Downtown		Annual Operating Cost
	Short-Term Recs	Mid-Term Recs	
Rt 1 Mendenhall Valley - Downtown	7:20 AM	6:50 AM	\$35,000
Rt 2X Montana Creek/Auke Bay – Downtown Express	6:27 AM	6:27 AM	\$0
Rt 5 Douglas - Downtown	7:12 AM	6:42 AM	\$15,000
Total			\$50,000

- Last departures from downtown no earlier than 11:30 PM:

	First Arrival in Downtown		Annual Operating Cost
	Short-Term Recs	Mid-Term Recs	
Rt 1 Mendenhall Valley - Downtown	10:35 PM	11:35 PM	\$30,000
Rt 2 Montana Creek/Auke Bay – Nugget Mall	8:47 PM	11:47 AM	\$100,000
Rt 5 Douglas - Downtown	11:17 PM	12:17 AM	\$15,000
Total			\$145,000

Technology Improvements

- Automatic Vehicle Location Computer Aided Dispatch (AVL/CAD) to know where buses are, better responded to delays, incidents, and automate scheduling (\$600,000)
- Scheduling software to produce more efficient schedules in a timely manner (\$150,000)
- Automatic passenger counters (APCs) to track ridership on an ongoing basis (\$200,000)
- Electronic fareboxes to automate fare handling (\$250,000)
- Real-time passenger information to provide much better information to passengers (\$250,000)



Facility Improvements

- **Nugget Mall Transfer Hub** upgrades (\$500,000):
 - Location is highest ridership stop outside of downtown
 - Facilities are minimal and substandard for a major transfer point
 - Upgrade to “Superstop”
- **Shelter Lighting** at unlit or poorly lit locations (\$1000 per shelter)



Nugget Mall Transfer Hub



Arlington, VA Superstop

Cost Impacts

- Short-term operating costs increases would be low (\$200,000)
- Mid-term costs significantly higher

	Short-Term	Mid-Term	Total
Operating Costs			
Short-Term Operating Recommendations	\$200,000	--	\$200,000
Mid-Term Expansion			
Lemon Creek Industrial Area		\$550,000	\$550,000
Auke Bay Ferry Terminal		\$450,000	\$450,000
Earlier/Later Service		\$200,000	\$200,000
Total	\$200,000	\$1.2 million	\$1.4 million
Capital Costs			
Technology Improvements			
Automatic Vehicle Location/Computer Aided Dispatch (AVL/CAD)		\$600,000	\$600,000
Scheduling Software		\$300,000	\$300,000
Automatic Passenger Counters (APCs)		\$150,000	\$150,000
Real-Time Passenger Information		\$250,000	\$250,000
Electronic Fareboxes		\$250,000	\$250,000
Total		\$1.6 million	\$1.6 million
Facility Upgrades			
Nugget Mall Transfer Facility Upgrades		\$500,000	\$500,000
Shelter Lighting		\$50,000	\$50,000
Total		\$550,000	\$550,000
Total Capital		\$2.7 million	\$2.7 million

Summary

- Juneau served with impressively successful transit system
- But demands have outgrown capacity
- Many new demands can be met with only small increase in operating costs
- But not all, including:
 - Lemon Creek Industrial Area
 - Auke Bay Ferry Terminal
 - Early and later service
- Proposed service changes represent collaborative effort between PMT and consulting team. They involve trade-offs but will:
 - Resolve existing service issues
 - Provide better or equal service for large majority of existing riders
 - More effective use of existing resources
 - Attract new riders



CITY/BOROUGH OF JUNEAU
★ ALASKA'S CAPITAL CITY

PLANNING COMMISSION
NOTICE OF RECOMMENDATION

Date: January 8, 2014
File No.: CSP2013 0009

City and Borough of Juneau
City and Borough Assembly
155 South Seward Street
Juneau, AK 99801

Proposal: Planning Commission Review of and Recommendation to the Assembly regarding the 2013 Capital Transit Recommended Service Scenario.

Legal Description: N/A

Property Address: Boroughwide

Parcel Code No.: Boroughwide

Hearing Date: January 7, 2014

The Planning Commission, at a special public meeting, forwarded the Draft Recommendations of the 2013 (2014) Transit Development Plan to the Assembly with a recommendation for adoption prior to the completion of the Final Transit Development Plan.

The Planning Commission directed that their comments on the draft recommendations and the Capital Transit system would be forwarded to the Assembly with this recommendation.

- 1) Operating Costs - \$200,000 operational increase does not include fare box recovery; Juneau collects 15% of its funding through fares. At this rate, \$30,000 of the \$200,000 increase would be borne directly by riders.
- 2) Automatic Vehicle Locators/Computer Aided Dispatch – The system that Commissioner Watson uses for a statewide transit system is substantially less expensive than what is recommended.

The proposed system would, however, distribute real-time information to the public, not just administrators.

Although Capital Transit is a very effective system, they are lagging behind the industry in terms of implementation of technology.

- 3) Bus stops do not exist out of the travel lane on most of Riverside Drive.

Notably, north of Melvin Park, busses will have to stop in the travel lane, however, there are likely to be no more than two stops in this area. South of Melvin Park there is one existing bus pullout at Dimond Park, and three additional stops may have to be constructed to allow the busses to pull out of the travel lane.

- 4) Snow removal is a real problem for both busses and riders, and can prevent riders from reaching the stops. How/do Capital Transit and the rest of Public Works coordinate snow removal?

Capital Transit and the Alaska Department of Transportation & Public Facilities (DOT&PF) try to work together to clear bus pullouts, and a shelter maintenance position has been funded for the last couple of years. All shelters can now be cleared within a couple of days, typically. Major streets with sidewalks that connect to bus routes are prioritized for snow removal from sidewalks by CBJ Public Works.

- 5) The Planning Commission has looked at transit and at Capital Transit and making it the most robust system possible. It is a real credit to Mr. Kern and all of his staff that an outside consultant looks at the system and says that it is one of the best systems that they have seen in terms of ridership compared to population. We've done a very good job of operating the system with limited resources, and having a linear community has helped us in doing that.

Now as the community expands, as we look to develop certain areas, we're having trouble servicing portions of it, because now we have to get into spurs off this main linear trunk line. It's good that we have these studies and that we can focus some investment in our transit system. But we as a Planning Commission have advocated for a step change in how we address the funding, both on a capital and an operational side. We need to look at this transit system just as we look at our sewer and water systems, and just as we look at building and maintaining roads, as part of the puzzle we have to look at when we are trying to address affordable housing in this community.

We don't have to look at the balance sheet here at the Planning Commission, so it frees us to make some recommendations, and we appreciate the Assembly members here who do have to look at that balance sheet, but we seem to find ways to build buildings that the community loves and uses, and we find ways to maintain them, and as a community we have to find ways to invest in the capital that is needed to do this step change expansion to our transit system.

We recognize that that is going to take an incredible amount of operating monies as well, but if we are going to recognize the benefits of things this commission has done, and things the Affordable Housing Commission has recommended, such as increasing density and fostering development in our community, we have to have the transit system. It's not just the roads and the sewers that make this happen. You have to be able to get people in and out; you have to make it

attractive for people to not necessarily have to have a vehicle in order to live in certain areas. If you can bring down the overall cost for them, they can afford a variety of housing.

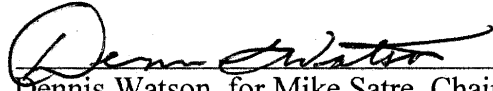
So we look forward, as a Planning Commission, to conversations along this line with the Assembly, and we hope that all of these recommendations that are before us tonight are taken up and put into future budgets. We hope to contribute more as we go, and hope we're not doing window dressing to our Capital Transit system.

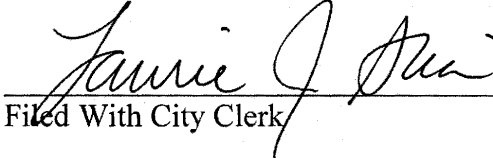
It's all well and good that we look at a couple million dollars in dispatch systems and the ability to see where your busses are on a smart phone, but somebody who is climbing over a four-foot snow berm to sit in the middle of a puddle and get splashed by vehicles as they wait for that bus, I don't think that they really care where that bus is on that dispatch system. They want good, well-lit transit stops, and that costs money to build those and to operate those. They want those busses where the centers of housing, the centers of education, and the centers of commerce are, and it's going to take a concerted effort to get there. There are no easy solutions, and we understand that there are budget constraints, but we want to be part of that discussion.

This Notice of Recommendation constitutes a recommendation of the CBJ Planning Commission to the City and Borough Assembly. Decisions to recommend an action are not appealable, even if the recommendation is procedurally required as a prerequisite to some other decision, according to the provisions of CBJ §01.50.020 (b).

Project Planner: _____


Ben Lyman, Senior Planner
Community Development Department


Dennis Watson, for Mike Satre, Chair
Planning Commission


Filed With City Clerk

Date

1 / 9 / 14

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this development project. ADA regulations have access requirements above and beyond CBJ - adopted regulations. The State Government and project designers are responsible for compliance with ADA. Contact an ADA - trained architect or other ADA trained personnel with questions about the ADA: Department of Justice (202) 272-5434, or fax (202) 272-5447, NW Disability Business Technical Center (800) 949-4232, or fax (360) 438-3208.

**ASSEMBLY AGENDA/MANAGER'S REPORT
THE CITY AND BOROUGH OF JUNEAU, ALASKA**

Auke Lake Management Update

SUBJECT:

BACKGROUND:

RECOMMENDATION:

ATTACHMENTS:

	File Name	Description
☐	2014-01-08-P_R_re_2013_Auke_Lake_Use_Data.pdf	Parks and Recreation Report on Auke Lake Use

MEMORANDUM



PARKS & RECREATION

155 S. Seward St., Juneau, Alaska 99801

PHONE (907) 586-5226

FAX (907) 586-5677

TO: Mary Becker, Chair, Committee of the Whole
THROUGH: Brent Fischer, Parks & Recreation Director
FROM: George Schaaf, Parks & Landscape Superintendent
DATE: January 8, 2014
RE: 2013 Auke Lake Use Data

The Assembly last May asked the Parks & Recreation Department to (1) provide more detailed data concerning recreational use of Auke Lake during the summer of 2013, (2) support educational efforts aimed at lake users, and (3) increase enforcement of existing regulations. This report contains a brief summary of data collected during the 2013 summer season at Auke Lake. The remaining items will be discussed in more detail when the Assembly meets as the Committee of the Whole on January 13.

Methodology

Conducting a typical landscape-level use study for an area like Auke Lake would require more people and money than we have available. Standard survey techniques also rely on random samples, which can be problematic at a lake where use levels are directly impacted by weather. To keep costs at a minimum while also yielding reasonably accurate results, this study employed three time-lapse cameras to document activity at Auke Lake between May and September 2013. Time-lapse photography allows even one person to review and document weeks of activity in a few hours, as if they had been at the lake all summer long.

Two Plotwatcher Pro HD cameras were mounted in trees along the southern shore of the lake, and a Reconyx HC600 was placed on a cliff above the lake's northern shore. The cameras recorded one image every 10 seconds from dawn until dusk. Batteries and memory cards were exchanged approximately every four weeks. Depending on the level of activity at the lake, it takes 20-45 minutes to review and document the footage from each camera, each day.

In addition to providing information on the number and types of vessels using Auke Lake, the cameras make it possible to observe the general behavior of lake users. Specifically, the cameras record how often vessels violate the no-wake zone or operate in areas where boats are prohibited. This data will likely be of value to the Assembly, however, time-lapse footage is not a tool for enforcement. The images identify activity and vessel type only (i.e., skiff, canoe, kayak, personal watercraft, etc.), and cannot resolve faces, vessel length, registration numbers, etc.

Most of the data in this report was obtained by "Camera 2", which overlooked the boat launch and most of the lake. Due to vandalism and equipment failure, footage from July 10th to August 12th is not available.

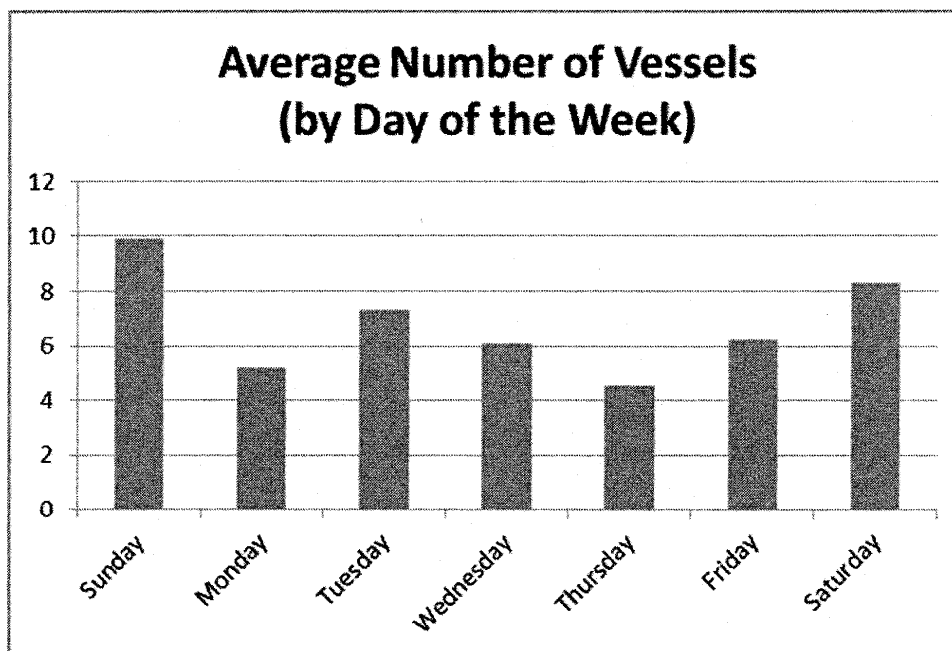
Summary

The three time-lapse cameras documented nearly 112 days over the course of the summer. The data in this report covers 65 days between May 11, 2013 and August 15, 2013. Additional footage will be compiled as resources allow.

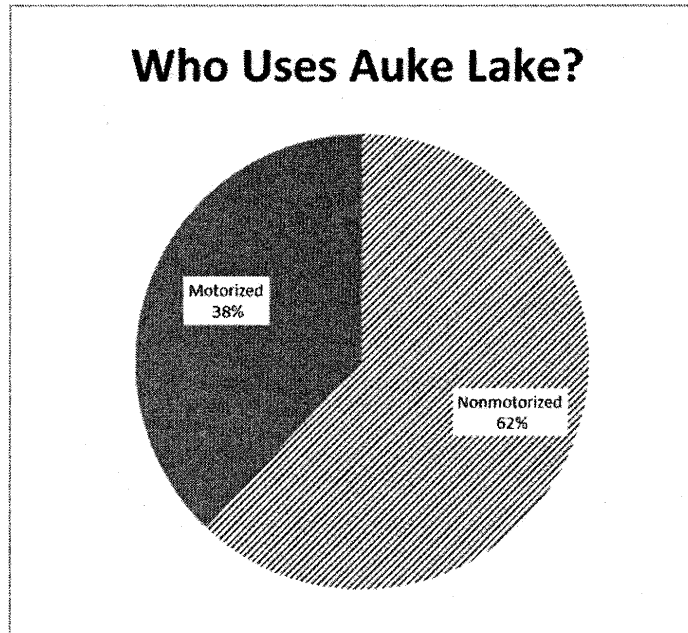
Vessels were classified as motorized, non-motorized, or personal watercraft (personal watercraft are included in the overall totals for motorized vessels):

- Motorized Vessel:** *Any craft intended to carry a person across the water that is powered by a motor of any kind. Aircraft are excluded.*
- Non-Motorized Vessel:** *Any craft intended to carry a person on or across the water that is not powered by a motor of any kind. This includes sailboats and human-powered craft.*
- Personal Watercraft:** *A vessel that uses an inboard motor powering a water jet pump as its primary source of power. The vessel is designed to carry from one to three persons, and to be operated by a person sitting, standing, or kneeling on the vessel, rather than by the conventional manner of sitting or standing inside the vessel.*

444	Season Total (all vessels)
176	Season Total (motorized)
268	Season Total (non-motorized)
14	Maximum number of vessels present at one time (June 16 th at 3 p.m.)
3	Average number of vessels present at one time
67	Number of vessels seen flushing or rinsing engines & bilges



To determine which users are most active on Auke Lake, we looked at how long each type of vessel spent on the water. During the 65 days covered by this report, nonmotorized vessels spent more than 730 hours on Auke Lake, while motorized vessels were seen during about 500 hours.



Among motorized users, personal watercraft spent 23% more time on the water than other motorized vessels., but also accounted for 80% of the violations of the no wake zone and other restricted areas:

