Regular Meeting
Tuesday, March 11, 2025
6:00 p.m.

Unalaska City Hall
Council Chambers
43 Raven Way

Council Members
Thomas D. Bell
Darin Nicholson
Daneen Looby

Council Members
Anthony Longo
Alejandro R. Tungul
Shari Coleman

To Provide a Sustainable Quality of Life
Through Excellent Stewardship of Government

UNALASKA CITY COUNCIL

P. O. Box 610 ▪ Unalaska, Alaska 99685
Tel (907) 581-1251 ▪ Fax (907) 581-1417 ▪ www.ci.unalaska.ak.us

Mayor: Vincent M. Tutiakoff, Sr. **City Manager:** William Homka
City Clerk: Estkarlen P. Magdaong, emagdaong@ci.unalaska.ak.us

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COUNCIL MEETING ATTENDANCE

The community is encouraged to attend meetings of the City Council:

- In person at City Hall
- Online via ZOOM (link, meeting ID & password below)
- By telephone (toll and toll free numbers, meeting ID & password below)
- Listen on KUCB TV Channel 8 or Radio Station 89.7

PUBLIC COMMENT

The Mayor and City Council value and encourage community input at meetings of the City Council. There is a time limit of 3 minutes per person, per topic. Options for public comment:

- In person
- By telephone or ZOOM - notify the City Clerk if you'd like to provide comment using ZOOM features (chat message or raise your hand); or *9 by telephone to raise your hand; or you may notify the City Clerk during regular business hours in advance of the meeting
- Written comment is accepted up to one hour before the meeting begins by email, regular mail, fax or hand delivery to the City Clerk, and will be read during the meeting; include your name

ZOOM MEETING LINK: https://us02web.zoom.us/j/83246795029
Meeting ID: 832 4679 5029 / **Passcode:** 630155

TELEPHONE: Meeting ID: 832 4679 5029 / **Passcode:** 630155
Toll Free numbers: (833) 548-0276; or (833) 548-0282; or (877) 853-5247; or (888) 788-0099
Non Toll-Free numbers: (253) 215-8782; or (346) 248-7799; or (669) 900-9128

AGENDA

1. **Call to order**
2. **Roll call**
3. **Pledge of Allegiance**
4. **Recognition of Visitors**
5. **Adoption of Agenda**
6. **Approve Minutes of Previous Meeting** – February 25, 2025
7. City Manager Report

8. **Community Input & Announcements** *Members of the public may provide information to council or make announcements of interest to the community. Three-minute time limit per person.*

9. **Public Comment on Agenda Items** *Time for members of the public to provide information to Council regarding items on the agenda. Alternatively, members of the public may speak when the issue comes up on the regular agenda by signing up with the City Clerk. Three-minute time limit per person.*

10. **Public Hearing** *Members of the public may testify about any item set for public hearing. Three-minute time limit per person.*

    a. Ordinance 2025-03: Creating Budget Amendment No. 2 to the Fiscal Year 2025 Budget, appropriating $187,008 from the General Fund for an increase of $21,000 to the Council Operating Budget, $25,000 for City Manager Operating Budget, $100,000 for Finance Operating Budget, $138,768 for the High School Boiler Replacement Project; reducing the Information Systems and Public Safety Budgets by a combined amount of $97,760; accepting Department of Homeland Security SHSP Grant for $103,350 to fund and create a DPS and City Hall Security Improvement Project; transferring $250,000 from City Manager Operating Budget to Planning Operating Budget for a Comprehensive Study; and increasing the Electric Fund Operating Budget for a transfer to Capital Projects for the Powerhouse SCADA and Reporting Upgrade Project

11. **Work Session** *Work sessions are for planning purposes, or studying and discussing issues before the Council.*

    a. Presentation of draft FY26-35 Capital and Major Maintenance Plan (CMMP) – Planning Director, Cameron Dean

12. **Regular Agenda** *Persons wishing to speak on regular agenda items must sign up with the City Clerk. Three-minute time limit per person.*

    a. Ordinance 2025-03: (2nd Reading) Creating Budget Amendment No. 2 to the Fiscal Year 2025 Budget, appropriating $187,008 from the General Fund for an increase of $21,000 to the Council Operating Budget, $25,000 for City Manager Operating Budget, $100,000 for Finance Operating Budget, $138,768 for the High School Boiler Replacement Project; reducing the Information Systems and Public Safety Budgets by a combined amount of $97,760; accepting Department of Homeland Security SHSP Grant for $103,350 to fund and create a DPS and City Hall Security Improvement Project; transferring $250,000 from City Manager Operating Budget to Planning Operating Budget for a Comprehensive Study; and increasing the Electric Fund Operating Budget for a transfer to Capital Projects for the Powerhouse SCADA and Reporting Upgrade Project

    b. Resolution 2025-16: Adopting the Comprehensive Park and Recreation Master Plan

    c. Resolution 2025-17: Adopting the City of Unalaska and Qawalangin Tribe of Unalaska Multi-Jurisdictional Hazard Mitigation Plan 5-Year Update

    d. Resolution 2025-18: A resolution of the Unalaska City Council to place on the 2025 General Election Ballot an advisory vote on repealing Ordinance 2024-15

13. **Council Directives to City Manager**

14. **Community Input & Announcements** *Members of the public may provide information to council or make announcements of interest to the community. Three-minute time limit per person.*

15. **Executive Session** *Executive Session is closed to the public.*

    a. Update on Collective Bargaining with the Public Safety Employees Association; and decide acceptance of PSEA's settlement offer on Collective Bargaining Agreement covering July 1, 2024 through June 30, 2027

16. **Adjournment**

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6:00 p.m.

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Mayor: Vincent M. Tutiakoff, Sr. **City Manager:** William Homka
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MINUTES

1. **Call to order.** Mayor Tutiakoff, Sr., called the regular meeting of the Unalaska City Council to order on February 25, 2025 at 6:01 p.m.

   Council Member Longo read the City's Mission Statement: *To provide a sustainable quality of life through excellent stewardship of government.*

2. **Roll call.** City Clerk called the roll. Mayor Tutiakoff and Council members Bell, Coleman, Longo, Looby and Tungul were present in person while Council member Nicholson was absent, excused. Mayor announced quorum established.

3. **Pledge of Allegiance.** Mayor led the Pledge of Allegiance.

4. **Recognition of Visitors.** Mayor acknowledged the following visitors:

   a. Art Thatcher from BerryDunn, LLC

   b. Dr. Angelia Trujillo, professor of Nursing at the University of Alaska Anchorage. With the assistance of a grant from the State of Alaska Comprehensive Domestic Violence Council and the Alaska Nurses Association, Dr. Trujillo designed the Alaska Comprehensive Forensic Training Academy (ACFTA) program to provide education and skills for a variety of interpersonal violence situations. She is here in Unalaska to speak about strengthening healthcare response for all victims of violence.

   c. Joanne Wiita works with Dr. Trujillo as a project coordinator funded by a Bureau of Justice Assistance grant that has also funded the trip to Unalaska that will increase awareness on the need and support to provide equitable healthcare for all victims of violence.

   d. Erin Terry, FBI Victim Specialist and 20-year victim service provider in Alaska

5. **Adoption of Agenda.** Coleman moved to adopt the agenda, with second by Longo. There being no objection, agenda was adopted by consensus.

6. **Approve Minutes of Previous Meetings.** Tungul moved to approve the proposed minutes of the Special Meetings held February 6 and 12, 2025 and the Regular meeting held February 11, 2025 as presented, with second by Looby. Hearing no objection, the proposed minutes were approved by consensus.

7. **Reports.**

    a. December 2024 Financial Reports

        City Manager Homka introduced Interim Finance Director Jim Sharpe who presented the December 2024 Financial Reports and answered Council questions.

    b. City Manager

        Mr. Homka highlighted some items on his report and answered Council questions. Erik Hernandez, Acting Department of Public Utilities Director, also provided clarification and answered Council questions.

    c. Annual Report from City Board, Committee and Commission

        i. Planning Commission and Platting Board;

        ii. Historic Preservation Commission

            Planning Commissioner Virginia Hatfield presented the annual reports for the Planning Commission and Platting Board, as well as the Historic Preservation Commission.

8. **Community Input & Announcements** were given as follows:

    a. Roger Blakeley, Parks, Culture and Recreation Director, announced events happening at the PCR.

    b. Virginia Hatfield announced several events that the Museum of the Aleutians is sponsoring.

    c. M. Lynn Crane announced events for Unalaskans Against Sexual Assault and Family Violence. Ms. Crane also mentioned Check-Up from the Neck Up, a new radio show co-produced by USAFV and KUCB.

    d. Kim Hanisch, Unalaska City School District Superintendent, mentioned home Raider Basketball games.

    e. City Clerk read into record the submitted flyers of events for Unalaska Visitors' Bureau.

9. **Public Comment on Agenda Items** were given as follows:

    a. Margo Peters and Greg Walter spoke in support of Iliuliuk Family Health Services and urged Council to support full funding for the clinic.

10. **Public Hearing.** The Mayor opened the public hearing on Ordinance 2025-02 authorizing the issuance of an Electric Utility Revenue Refunding Bond of the City to refund all or a portion of the outstanding Electric Utility Revenue Refunding Bond, 2015A, of the City; and authorizing the execution of certain documents in accordance therewith

    There being no testimony, the Mayor closed the public hearing.

11. **Work Session.** Tungul moved to go into work session, with second by Coleman. Hearing no objection, work session began at 6:40 p.m.

    a. Dawn Johnson, Interim Chief Executive Officer of Iliuliuk Family Health Services,

provided a presentation with an update to Council along with the clinic's quarterly grant reports for October 2024 and January 2025. Ms. Johnson answered Council questions followed by Council discussion.

b. Art Thatcher from BerryDunn, LLC presented the PCR Master Plan to Council followed by Council discussion.

c. Jim Sharpe, Interim Finance Director, discussed the Budget Goals & Revenue Projections and answered Council questions.

Longo moved to return to regular session, with second by Looby. Hearing no objection, Council returned to regular agenda at 8:14 p.m.

12. **Regular Agenda**.

a. Ordinance 2025-02: (2nd Reading) Authorizing the issuance of an Electric Utility Revenue Refunding Bond of the City to refund all or a portion of the outstanding Electric Utility Revenue Refunding Bond, 2015A, of the City; and authorizing the execution of certain documents in accordance therewith

Coleman moved to adopt Ordinance 2025-02, with second by Tungul.

Mr. Homka provided a brief introduction to the ordinance.

No Council discussion on this matter.

Roll call vote: all Council members voted in the affirmative. With this vote, Council has unanimously adopted Ordinance 2025-02.

b. Resolution 2025-14: Approving the Council's Goals for the Fiscal Year 2026 Budget

Looby moved to adopt Resolution 2025-14, with second by Longo.

Mr. Homka gave a quick overview. No Council discussion on this item as Jim Sharpe was able to provide information during his work session presentation.

Roll call vote: all Council members voted in the affirmative. Council has unanimously adopted Resolution 2025-14.

c. Resolution 2025-15: Supporting the development of Renewable Energy Resources

Longo moved to adopt Resolution 2025-15, with second by Coleman.

Mr. Homka provided an overview of the resolution.

Council discussion.

Roll call vote: all Council members voted in the affirmative. Council has unanimously adopted Resolution 2025-15.

d. Ordinance 2025-03: Creating Budget Amendment No. 2 to the Fiscal Year 2025 Budget, appropriating $187,008 from the General Fund for an increase of $21,000 to the Council Operating Budget, $25,000 for City Manager Operating Budget, $100,000 for Finance Operating Budget, $138,768 for the High School Boiler Replacement Project; reducing the Information Systems and Public Safety Budgets by a combined amount of $97,760; accepting Department of Homeland Security SHSP Grant for $103,350 to fund and create a DPS and City Hall Security Improvement Project; transferring $250,000 from City Manager Operating Budget to Planning Operating

Budget for a Comprehensive Study; and increasing the Electric Fund Operating Budget for a transfer to Capital Projects for the Powerhouse SCADA and Reporting Upgrade Project

Coleman moved to introduce Ordinance 2025-03 and schedule it for public hearing and second reading on March 11, 2025; with second by Tungul.

Mr. Homka provided an overview of the ordinance, followed by Council questions.

Jim Sharpe provided information and answered Council questions.

Roll call vote: Longo – yes; Coleman – yes; Bell- yes; Tungul – yes; Looby – yes

Motion passed with 5 yes and 0 no. With this vote, the Council has introduced the ordinance and scheduled it for public hearing and second reading on March 11, 2025.

13. **Council Directives to City Manager.** None

14. **Community Input & Announcements** were given as follows:

    a. Mayor announced that the Unalaska City School District will hold their Scholarship Committee meeting and is looking for a volunteer from the Council. Ms. Coleman confirmed that she would volunteer for the committee.

    b. Fire Chief Ben Knowles introduced and welcomed Karl Johansson with Aetta Architects. The firm was awarded the contract for the Feasibility Study for the Fire Station and Training Facility.

15. **Adjournment.** Having completed all items on the agenda, the Mayor adjourned the meeting at 8:33 p.m.

These minutes were approved by the Unalaska City Council on March 11, 2025.

_____
Estkarlen P. Magdaong, CMC
City Clerk

CITY MANAGER'S REPORT

TO: Mayor Tutiakoff and City Council Members
FROM: Marjie Veeder, Acting City Manager
DATE: March 11, 2025

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1. **JUNEAU LOBBYING:** City Manager Homka was in Juneau March 3 and 4, to speak with legislators and others about issues important to Unalaska and provides the following report.

   My third trip lobbying to Juneau proved different from the prior two years. The Mayor and Council Member Longo were not able to get out of Unalaska which left me, Natalie Cale of OC, and our state lobbyist Dianne Blumer. There is general concern about the condition of Alaska's budget. Specifically, there is consensus that little, or no money will be available for capital projects.

   We met with 11 elected officials and/or their key staff* as committee meetings were in progress. I had a brochure created with our state and federal legislative priorities to distribute and we stressed that our number one priority is the Robert Storrs Small Boat Harbor improvements, replacing the A and B floats. A few officials were encouraging about funding the State Harbor Matching Grant Program, and we pointed out that our Robert Storrs project scored the highest for the HMGP this year.

   The City and OC sponsored dinner at the Jorgenson House which gave us more time to meet with some of the officials. The dinner was well received, and we were able to share more details about our community needs and discuss this year's bi-annual legislative fly-in. The legislative fly-in has proven to be very beneficial over the last several years, when people can see the projects and needs in person, there is a higher likelihood for consideration of funding.

   We met with:

Rep. Louise Stutes*	Sen. Bert Stedman*
Rep. Andy Josephson	Sen. James Kaufman
Rep. Calvin Schrage*	Sen. Jesse Kiehl
Rep. Neal Foster*	Sen. Donald Olson*
Rep. Frank Tomaszewski	
Rep. Chuck Kopp	
Rep. Bryce Edgmon	

2. **STATE HARBORMASTER ASSOCIATION LOBBYING:** The Port Director travelled to Juneau with the Alaska Association of Harbormasters and Port Administrators the week of February 17. The purpose of the travel was to lobby on behalf of full funding for the Municipal Harbor Facility Grant Program. The Port Director met with our delegation and many of the other Representatives, State Senators, and Alaska DOT. The Harbor Matching Grant has been added to the budget by the Senate Finance Committee and the AAHPA continues to follow the legislative session and support testimony for full funding of the program. Unalaska has the #1 ranked project and is seeking $5,000,000 under the Municipal Harbor Facility Grant Program. The funding isn't guaranteed until the budget is approved, and the session is over.

Project Name	Tier	Score	Legislative District	Total Project Cost*	Local Match (50%)	State Match (50%)
City of Unalaska: Robert Storrs Harbor	II	138.7	37	$14,058,741	$6,695,000	$5,000,000
City and Borough of Sitka: Eliason Harbor	II	113.5	35	$1,119,800	$879,392	$240,408
City and Borough of Juneau: Aurora Harbor Drive Down Float	II	101.2	33	$13,942,502	$1,394,250	$1,394,250
City and Borough of Juneau: Statter Harbor	II	97.7	33	$1,000,000	$500,000	$500,000
* Reflects funding from other sources				**$30,121,043**	**$9,468,642**	**$7,134,658**

3. **SENIOR CITIZEN SALES TAX REFUND:** We have received 92 applications as of March 5th, and 2 were not approved. Total amount paid out so far is $36,800

4. **PROPERTY TAX COLLECTIONS:** As of March 5, 99% of the property tax accounts have been collected, with 49 accounts past due (42 real property and 7 personal property). The past due total is a bit more than $118,000, and staff in the Clerk's Department are working with the owners of the past due accounts to bring the accounts current.

5. **COUNCIL SUPPORT FOR ALASKA ASSOCIATION OF HARBORMASTERS AND PORT ADMINISTRATORS CONFERENCE:** The City of Unalaska and the International Port of Dutch Harbor will be hosting the 46th Annual Alaska Harbormaster and Port Administrators Conference here in Unalaska the week of October 20-24, 2025. This will be the 3rd time Unalaska has hosted. We hosted in 1999 and 2016. This conference is attended by 80-100 maritime professionals and is an incredible training opportunity for Ports and Harbors as well as the hosting community. The Port Department will bring forward a funding request to Council at a future meeting, seeking sponsorship dollars for the conference.

6. **REQUEST FROM QAWALANGIN TRIBE OF UNALASKA:** The City Manager's Report on February 25 included a letter from the Qawalangin Tribe asking the City to evaluate its Community Support Grant application for $215,154 for their Unalaska Food Bank program. The application falls outside the program guidelines adopted by Council as it was received after the deadline and is neither a 501(c) entity nor Camp Qungaayux. Because it falls outside the program guidelines, Planning is currently not evaluating the application. *If Council wishes to consider this request, a directive to the City Manager to present it along with the other FY26 Community Support Grant applications would be in order. If not, then no action is required.*

7. **FIRE DEPARTMENT TRAINING:** The Unalaska Fire Department, in collaboration with the Southern Region EMS Council, is currently conducting a National Registry Advanced Emergency Medical Technician (AEMT) course in Unalaska. This is a pivotal step in bolstering the community's pre-hospital emergency medical capabilities. This is a huge milestone for the Unalaska Fire Department. Aligning with the broader strategy of establishing a comprehensive roster of AEMTs and Paramedics will have substantial benefits, including improved patient outcomes through faster and more effective interventions. The expanded service capabilities with advanced life support procedures will include things like rapid sequence intubation, conscious sedation and blood transfusions. As part of the Fire Department's vision and goals, we aim to build a sustainable and highly capable emergency response system, ensuring the delivery of superior prehospital care to the Unalaska community. We look forward to sharing graduation results with you in the near future.

8. **AGREEMENT WITH ST. PAUL, RAW FISH TAX:** By March 15 the city is supposed to pay to St. Paul the fisheries taxes we collected on their behalf through February 15. We are on track for that to happen in a timely manner. The new report form created by staff for this endeavor has been mostly successful

for compliance and accuracy. City staff and our fisheries consultant Frank Kelty have been in contact with the parties involved and provided support as necessary.

9. **STATE CAP PAYMENT:** With the finalization and submission of the FY23 ACFR to the State, the City is now in line to receive the State Community Assistance Program Payment of $124,404.83. The CAP program (previously referred to as community revenue sharing) provides Alaska's boroughs, cities, and unincorporated communities with funds vital to the delivery of basic public services. CAP funds can be used for any public purpose that has been determined as a priority of the funding recipient.

10. **NPFMC MEETING:** The April 2025 meetings of the North Pacific Fisheries Management Council will be held online from March 31-April 7. Please see the attached agenda.

11. **STAFFING UPDATE:**
    A. Scott Brown has accepted the position of Deputy Port Director effective March 3, 2025, leaving a vacancy in the Public Works Director position. We will use recruiting firm Baker Tilly to assist us in recruiting for the director position.
    B. The Utilities Director position remains vacant. We will soon begin a third round of recruiting. Our ideal candidate will have skills and experience in electric production and distribution. Deputy Director Erik Hernandez continues to serve as Acting DPU Director.
    C. Administration and HR are continuing work with consultant McGrath on the compensation and classification study for the represented positions in DPW, DPU, City Hall, PCR (IUOE 302) and Ports (IBU).
    D. We look forward to our new Controller in the Finance Department starting work on May 12. Jim Sharpe continues as Interim Finance Director.

HR Information February 16 to March 6, 2025

Type of Action	Number of Employees	Internal	External
Hires	3	1	2
Pending Hires	4	0	4
Pending Offers	0	0	0
Resignations	0	0	0
Separations	1	0	0

Position Openings

Department	Number of Openings	Notes
DPS	5	Police Sergeant (2), Police Officer (3)
DPU	7	DPU Director, Water Operator (2), Util Lineman (2), Lineman Chief; Apprentice Lineman
DPW	1	DPW Director
Fire	1	Firefighter
PCR	1	Rec. Coordinator
Planning	1	Associate Planner
Finance	1	Director of Finance
TOTAL	**17**	

12. **STATUS OF OUTSTANDING COUNCIL DIRECTIVES TO MANAGER AND AGENDA ITEM REQUESTS:**

A. Animal Control Ordinance (6/25/2024): Bring forward to Council a review of the city's animal control ordinances and possible changes to address concerns of public comment on 5/28/2024 by Suzi Golodoff.

i. Status: Staff met with the city's attorneys the week of August 26. A proposed ordinance will be presented for consideration by Council in response to the directive.

B. Budget Process (6/11/2024): Research and recommend improvements to the City of Unalaska operating budget process and presentation.

i. Status: No action yet, but the former Finance Director was looking into adding a simplified budget document, sometimes referred to as a "Citizen's Budget".

C. Nuisance Abatement (2/27/2024): To move Option 2 as presented on 2/27/2024 memorandum to Council.

i. Status: The February 27 memorandum to Council discussed two nuisance buildings located at 111 Blue Fox Alley and 452 Bayview Avenue. The City Attorney drafted an agreement to reimburse the City for nuisance abatement of the two-story building on Blue Fox Alley, and Staff presented the agreement to the presumed heirs of the property, which remains in probate. The City has offered to assist with landfill fees for both properties if they are demolished. These agreements are voluntary, and as discussed at the February 27 meeting, the City has no practical means to pursue a normal nuisance abatement process. As reported on January 14, 2025, the owner of 452 Bayview Avenue, the smaller of the two derelict buildings, has completed demolition. The City waived landfill fees for disposing of the wood from the building.

D. Investment Policy Statement (2/27/2024): Initiate the development of an Investment Policy Statement for the establishment of the permanent fund.

i. Status: Alaska Permanent Capital Management presented to Council on August 27, 2024; and Joy Merriner from BDO presented Council on September 10th. Staff met with BDO's special services division on October 10 to begin the process of policy development. The next step is for BDO to perform their independent internal review, then provide an engagement letter and proposed amendment to the existing agreement for audit services.

E. Electric Power Cooperative (2/13/2024): Seek consultation on the development of an electrical generation and transmission cooperative between the private and municipal power producers in Unalaska.

i. Status: On Tuesday July 30, 2024 City staff and Matt Scott of Optimera met with representatives of seafood processing companies at the library. There is agreement about the next step which is to prepare a Request for Qualifications for obtaining professional services to assist with leading the group through an Integrated Resource Plan. In general, an IRP identifies the path forward that will meet everyone's needs, focuses on an initial 10-year transition period, and develops a 5-year action plan. The organizations will share the costs of the study.

On September 18, city staff and representatives of seafood processors in Unalaska participated in a Zoom meeting with Clay Koplin of Cordova Electric Cooperative to gain information and perspective on the electric cooperative model.

On September 27, city staff and representatives of seafood processors and other industry and community leaders met with the visiting group from the Department of Energy to express the community's power needs.

4. Unalaska Shoreline Erosion

$2,000,000

Higher king tides, combined with significant storm events, have accelerated coastal erosion in multiple locations across Unalaska, threatening critical infrastructure, public assets, and private property. To address this growing risk, we request $1.5 million to immediately reinforce the most damaged areas threatening infrastructure, and $500,000 to fund an Army Corps General Investigations study. This study will identify areas most vulnerable to erosion and assess the feasibility of a Corps-led shoreline protection and erosion control project.

5. Unalaska Marine Center & Light Cargo Dock

$700,000

This project needs to be completed in conjunction with the Harbor Entrance Channel Dredging project, which received $25.6 million in federal funding. By contracting with the same heavy civil marine contractor, JE McAmis, who was awarded the dredging project, we can save $4.5 million in mobilization and demobilization costs. After these savings, the total cost for this project is $800,000.

6. Tom Madsen Airport Terminal Building Upgrades, Planning & Engineering

$500,000

The $500,000 is for design and will initiate the project, including a public review process to assess designs and cost estimates before seeking full construction funding. The plan envisions remodeling the existing facility and expanding upon it. Total costs will remain unknown until the design phase is complete, and the entire process could take between five to ten years.

DOWNTOWN, UNALASKA

FY 2025 - FY 2026

CITY OF UNALASKA

LEGISLATIVE PRIORITIES

LEGISLATIVE PRIORITIES

FY 2025 - FY 2026

1. Robert Storrs Small Boat Harbor Improvements (A & B Floats)

$5,000,000

The project will replace aging and unsafe A and B floats, improve parking and dock access, and build restroom facilities for the harbor. The City has completed the basic design and obtained title to state tidelands needed for the project. The new C float was completed some years ago with great success; this project increases the number of slips available to local residents and received the top score from Alaska's Harbor Matching Grant Program in FY26.

ROBERT STORRS SMALL BOAT HARBOR, UNALASKA

2. Captains Bay Road- Paving

$5,000,000

This corridor improvement project is estimated to cost approximately $70 million. It will enhance safety by straightening the road and stabilizing cliff faces that annually drop large boulders onto the roadway. Senator Murkowski successfully secured $5 million in congressional funding for the project, but significant additional funding is still needed. Upon completion, the project will include water, sewer, and electric utilities beneath a newly paved roadway capable of supporting hundreds of trucks each week. The goal is to complete construction before Trident Seafoods Company opens its new $400 million processing plant by 2029.

3. Geothermal Investigation

$1,000,000

The City is working with GeothermEx to confirm the existence of geothermal resources at Makushin Volcano. We are leveraging advanced scanning and detection technologies to survey and identify geothermal potential in Unalaska and will develop a drilling plan to harness this energy as efficiently as possible. A tentative agreement has been reached with the Q-Tribe and the Department of Energy to transfer $1 million of previously allocated CDS funding from the Tribe, which will be combined with a request for additional CDS funding directed to the City for the project.

MAKUSHIN VOLCANO, UNALASKA

CAPTAINS BAY ROAD, UNALASKA

UPDATED 2/19/2025

DRAFT Agenda SCHEDULE – WEBCONFERENCE Apr 2025

NOTE: Agenda items may not be taken in the order in which they appear, and timing is subject to change as necessary. All meetings are open to the public, with the exception of Executive Sessions (*shown in italics*).

All meetings 8am – 4pm	**SSC** March 31-April 1 VIRTUAL	**Advisory Panel (AP)** March 31-4 VIRTUAL	**Council** April 3-7 VIRTUAL
Monday Mar 31	8:00 am Administrative issues D4 Survey modernization/ B4 AFSC report	8:00 am Administrative issues C1 Area 4 vessel caps	
	1:00pm D4/B4 Survey/AFSC (cont)	1:00 pm C1 Area 4 caps (cont) C2 Small sablefish	
Tuesday Apr 1	8:00 am C3 MRA adjustments	8:00 am C2 Small sablefish (cont)	
	1:00 pm *Report writing*	1:00 pm C3 MRA adjustments	
Weds Apr 2		8:00 am C4 Programmatic eval.	
		1:00 pm D1 Cost recovery D2 GOA Tanner crab	
Thursday Apr 3		8:00 am D2 GOA crab (cont)	8:00 am B Reports
		1:00 pm D3 CGOA Rockfish Review	1:00 pm B Reports (cont) C1 Area 4 vessel caps
Friday Apr 4		8:00 am E Staff Tasking	8:00 am C1 Area 4 caps (cont)
		1:00 pm *Continue as necessary*	1:00 pm SSC report in full C2 Small sablefish
Saturday Apr 5			8:00 am C2 Small sablefish (cont) C3 MRA adjustments
			1:00 pm C3 MRA adjust. (cont) C4 Programmatic eval. *3:00 pm Executive Session (T)*
Sunday Apr 6			8:00 am C4 Programmatic (cont) D1 Cost recovery
			1:00 pm D2 GOA Tanner crab
Monday Apr 7			8:00 am D3 CGOA Rockfish Review
			1:00 pm E Staff Tasking

UPDATED 2/19/2025

DRAFT AGENDA
274th Plenary Session, North Pacific Fishery Management Council
March 31-April 7, 2025, Webconference

The North Pacific Fishery Management Council will meet in early April via webconference. Other meetings to be held in close conjunction are:

Committee/Panel	Dates
Scientific and Statistical Committee	March 31 - April 1, 2025, 8 am – 4 pm Alaska time, Zoom link
Advisory Panel	March 31 - 4, 2025, 8 am – 4 pm Alaska time, Zoom link
Council	April 3 - 7, 2025, 8 am – 4 pm Alaska time, Zoom link

Red = SSC items	***Council staff lead***	***Approx TIMING***
A. **CALL MEETING TO ORDER**	*David Witherell*	
A1 Approve agenda		
B. **Reports** – *written presentations unless noted*		**7**
B1 Executive Director's Report, including BSAI allocation review for Atka mackerel, AI POP, and Yellowfin sole; and IFQ Report to the Fleet *(oral)*	*David Witherell*	
B2 NMFS Management Report, including EFH consultation, seabird update, chum salmon excluder EFP consultation *(oral)*		
B3 NOAA General Counsel Report		
B4 AFSC Report *(oral)*		
B5 ADF&G Report		
B6 USCG Report		
B7 USFWS Report		
B8 IPHC Report		
B9 NIOSH Report		
B10 Cooperative Reports *(oral)*	*Henry/Marrinan*	
C. Major Issues/Final Action Items		**20**
C1 Area 4 vessel use caps – Final Action	*Anna Henry*	4
C2 Small sablefish release – Final Action	*Sara Cleaver*	6
C3 MRA adjustments – Preliminary Review, Enforcement Committee report	*Taylor Holman*	4
C4 Programmatic evaluation – Refine alternatives	*Sara Cleaver*	6
D. Other Issues		**8**
D1 NMFS Annual Cost recovery report and discussion paper – Review	*Sarah Marrinan*	1
D2 GOA Tanner Crab Protections – Discussion paper	*Diana Stram*	4
D3 Central GOA Rockfish Program Review – Report	*Anna Henry*	4
D4 Survey modernization – Review AFSC report ***(SSC only)***	*Diana Stram*	
E. Staff Tasking		
E1 Committees (including Scallop Plan Team report, draft Ecosystem Committee Terms of Reference), New Business, and Tasking - Review	*Diana Evans*	**4**
TOTAL HOURS *(including SSC report in full)*		**40**

CITY OF UNALASKA
UNALASKA, ALASKA

ORDINANCE 2025-03

CREATING BUDGET AMENDMENT #2 TO THE FISCAL YEAR 2025 BUDGET, APPROPRIATING $187,008 FROM THE GENERAL FUND FOR AN INCREASE OF $21,000 TO THE COUNCIL OPERATING BUDGET, $25,000 FOR CITY MANAGER OPERATING BUDGET, $100,000 FOR FINANCE OPERATING BUDGET, $138,768 FOR THE HIGH SCHOOL BOILER REPLACEMENT PROJECT; REDUCING THE INFORMATION SYSTEMS AND PUBLIC SAFETY BUDGETS BY A COMBINED AMOUNT OF $97,760; ACCEPTING DEPARTMENT OF HOMELAND SECURITY SHSP GRANT FOR $103,350 TO FUND AND CREATE A DPS AND CITY HALL SECURITY IMPROVEMENT PROJECT; TRANSFERRING $250,000 FROM CITY MANAGER OPERATING BUDGET TO PLANNING OPERATING BUDGET FOR A COMP STUDY; AND INCREASING THE ELECTRIC FUND OPERATING BUDGET FOR A TRANSFER TO CAPITAL PROJECTS FOR THE POWERHOUSE SCADA AND REPORTING UPGRADE PROJECT

BE IT ENACTED BY THE UNALASKA CITY COUNCIL

Section 1. Classification: This is a non-code ordinance.
Section 2. Effective Date: This ordinance becomes effective upon adoption.
Section 3. Content: The City of Unalaska FY25 Budget is amended as follows:

A. That the following sums of money are hereby accepted and the following sums of money are hereby authorized for expenditure.
B. The following are the changes by account line item.

Amendment No. 2 to Ordinance 2024-08

	Current	Requested	Revised
I. OPERATING BUDGETS			
A. General Fund			
Sources:			
Appropriated Fund Balance	$ -	187,008.00	187,008.00
Uses:			
Transfers to Government Capital Projects	$ 1,077,852.03	138,768.00	1,216,620.03
City Council	$ 556,879.00	21,000.00	577,879.00
City Manager's Office	$ 769,111.00	(225,000.00)	544,111.00
Finance	$ 1,381,341.00	100,000.00	1,481,341.00
IS	$ 1,454,736.00	(50,000.00)	1,404,736.00
Planning	$ 852,150.00	250,000.00	1,102,150.00
Public Safety - Police	$ 4,360,305.00	(47,760.00)	4,312,545.00
	$ 10,452,374.03	187,008.00	10,639,382.03
B. Proprietary Funds			
Sources:			
Electric - Budgeted Use of Unrestricted Net Assets	$ 7,168,268.00	20,000.00	$ 7,188,268
Uses:			
Transfer to Electric Project	$ 1,826,312.00	20,000.00	1,846,312.00

II. CAPITAL BUDGETS

A. Governmental Project Budget

Sources:				
	Transfers from General Fund	$ 220,175.00	138,768.00	358,943.00
	DHS SHSP Grant	$ -	103,350.00	103,350.00
		$ 220,175.00	242,118.00	462,293.00
Uses:				
	High School Boiler Repair	$ 220,175.00	138,768.00	358,943.00
	DPS & City Hall Security Improvements	$ -	103,350.00	103,350.00
		$ 220,175.00	$ 242,118.00	$ 462,293.00

B. Electric Project Budget

Powerhouse SCADA & Report Upgrades				
Sources:				
	Transfers to Enterprise Capital Projects	$ 1,826,312.00	20,000.00	1,846,312.00
Uses:				
	Powerhouse SCADA & Report Upgrades	$ 150,000.00	20,000.00	170,000.00

PASSED AND ADOPTED by a duly constituted quorum of the Unalaska City Council on March 11, 2025.

_____
Vincent M. Tutiakoff, Sr.
Mayor

Attest:

_____
Estkarlen P. Magdaong, CMC
City Clerk

City of Unalaska, Ordinance 2025-03
Summary of Budget Amendment and Schedule of Proposed Accounts
FY25 Budget Amendment 2

1) General Fund - Operating Budget
   - Add $212,008 to Appropriated Fund Balance
   - Add $138,768 to Transfers to Govt Capital Projects for High School Boiler Replacement
   - Add $11,000 to Council - Other Professional Services for Baker Tilly CM evaluation & goal setting
   - Add $10,000 to Council - General Supplies for key to the city replicas
   - Add $25,000 to CMO - Other Professional Services for marketing video
   - Decrease CMO - Other Professional Services by $250,000 (Unalaska Transportation Study)
   - Add $50,000 to Finance - Audit Services
   - Add $50,000 to Finance - Other Professional Svc for Espelin contracted work
   - Decrease IS - Other Professional Services by $50,000 (replaced by DHS SHSP grant)
   - Add $250,000 to Planning - Other Professional Svcs for a Comp Study
   - Decrease Police - Other Professional Services by $47,760 (replaced by DHS SHSP grant)

2) Electric Fund - Operating Budget
   - Add $20,000 to Budgeted Use of Unrestricted Net Assets
   - Add $20,000 to Transfers to Enterprise Capital Projects (for EL25D)

3) General Fund - Capital Projects
   - Add $138,768 to Transfers from General Fund
   - Add $138,768 to High School Boiler Replacement project (SS24A),
   - Add $103,350 recognizing DHS SHSP grant
   - Add $103,350 to create DPS & City Hall Security Improvements project (PS25A)

4) Electric Fund - Capital Projects
   - Add $20,000 to Transfers from Proprietary Funds
   - Add $20,000 to Powerhouse SCADA & Report Upgrades project (EL25D)

	Org	Object	Project	Current	Requested	Revised
1) *General Fund - Operating Budget*						
Sources:						
Appropriated Fund Balance	01010049	49900		$ -	$ 187,008.00	$ 187,008.00
Uses:						
Transfer to Government Capital Projects	01029854	59920		$ 1,077,852.03	$ 138,768.00	$ 1,216,620.03
Council - Other Professional	01020152	53300		$ 150,000.00	$ 11,000.00	$ 161,000.00
Council - General Supplies	01020152	56100		$ 115,000.00	$ 10,000.00	$ 125,000.00
City Manager - Other Professional	01020252	53300		$ 326,000.00	$ (225,000.00)	$ 101,000.00
Finance - Audit & Accounting	01020652	53210		$ 125,000.00	$ 50,000.00	$ 175,000.00
Finance - Other Professional	01020652	53300		$ 25,000.00	$ 50,000.00	$ 75,000.00
IS - Other Professional	01020752	53300		$ 60,000.00	$ (50,000.00)	$ 10,000.00
Planning - Other Professional	01020852	53300		$ 40,000.00	$ 250,000.00	$ 290,000.00
Public Safey - Other Professional	01021152	53300		$ 153,760.00	$ (47,760.00)	$ 106,000.00
					$ 187,008.00	
2) *Electric Fund - Operating Budget*						
Sources:						
Budgeted Use of Unrestricted Net Assets	50015049	49910		$ 7,168,268.00	$ 20,000.00	$ 7,188,268.00
Uses:						
Transfers to Enterprise Capital Projects	50029854	59940		$ 1,826,312.00	$ 20,000.00	$ 1,846,312.00
3) *General Fund - Capital Project Budgets*						
High School Boiler Replacement						
Sources:						
Transfer from General Fund	31019848	49100	SS24A	$ 220,175.00	$ 138,768.00	$ 358,943.00
Uses:						
Repair & Maintenance	31023053	54300	SS24A	$ 179,175.00	$ 138,768.00	$ 317,943.00
DPS & City Hall Security Improvements						
Sources:						
DHS SHSP Grant	130A2741	42249	PS25A	$ -	$ 103,350.00	$ 103,350.00
Uses:						
Other Professional	310A2753	53300	PS25A	$ -	$ 49,550.00	$ 49,550.00
Machinery & Equipment	310A2753	57400	PS25A	$ -	$ 53,800.00	$ 53,800.00
					$ 103,350.00	
4) *Electric Fund - Capital Project Budgets*						
Powerhouse SCADA & Report Upgrades						
Sources:						
Transfers from Proprietary Fund	50119848	49130	EL25D	$ 150,000.00	$ 20,000.00	$ 170,000.00
Uses:						
Other Professional	50125053	53300	EL25D	$ 75,000.00	$ 20,000.00	$ 95,000.00

MEMORANDUM TO COUNCIL

To: Mayor and City Council Members
From: Jim Sharpe, Interim Finance Director
Through: Bil Homka, City Manager
Date: February 25, 2025; *corrected March 11, 2025*
Re: Ordinance 2025-03 creating FY 2025 Budget Amendment #2; accepting Department of Homeland Security funding in the amount of $103,350, appropriating $187,008 from the General Fund Fund Balance and $20,000 from the Electric Proprietary Fund Nets Assets; components of the budget amendment include:

- Reduce the Information Systems budget by $50,000;
- Reduce the Public Safety budget by $47,760;
- Transfer $103,350 Governmental Capital Projects to create a DPS and City Hall Security Improvement Project
- Increase the City Council operating budget by $21,000
- Increase the City Manager operating budget by $25,000;
- Transfer $250,000 from the City Manager Operating Budget to the Planning Department Operating Budget for a Comprehensive Study
- Increase the Finance operating budget by $100,000;
- Transfer $138,768 to Governmental Capital Projects for the replacement of the High School boiler;
- Transfer $20,000 to Enterprise Capital Projects for the Powerhouse SCADA and reporting upgrade project

SUMMARY:

Budget Amendment #2 will accomplish the following:

1) Accept $103,350 from the Department of Homeland Security; funds to be used to create a DPS and City Hall Security Improvement Project
2) Appropriate $187,008 (net) from the General Fund Fund Balance to be used as follows:
    a. Decrease Information Systems budget by $50,000 (related to #1)
    b. Decrease Public Safety budget by $47,760 (related to #1)
    c. Increase the City Council operating budget by $21,000
    d. Increase the City Manager operating budget by $25,000;
    e. Transfer $250,000 from the City Manager Operating Budget to the Planning Department Operating Budget for a Comprehensive Study
    f. Increase the Finance operating budget by $100,000;
    g. Transfer $138,768 to Governmental Capital Projects for the replacement of the High School boiler;
3) Appropriate $20,000 from the Electric Proprietary Fund Net Assets to transfer to the Enterprise Capital Projects funding the Powerhouse SCAD A and reporting upgrade project.

BACKGROUND:

City Hall Security Improvement Project portion of Budget Adjustment:

DPS and City Hall Security Improvement Project (PS25A): In February of 2024, the City of Unalaska applied for the Department of Homeland Security's State Homeland Security Program' (SHSP), which is designed to support local governments in their efforts to increase security, fight domestic terrorism, and provide community preparedness. The City received $103,350 to fund the project.

Currently, City Hall has no security cameras in place, which poses several issues.

- Members of the public could access secure offices or sensitive areas without any monitoring or access control
- It is not uncommon for local government employees and officials to receive threats of violence from the public, so a lack of any security cameras endangers Council Members and all City Hall employees
- City Hall is the location of Unalaska's voting booth, and proper election security requires proper monitoring, which will be provided by the cameras.

The SHSP grant funds will also be used to replace the outdated camera security system located at the Public Safety building. This project is expected to be executed over 2025 and 2026, with the grant closing at the end of 2026

Information Systems and Public Safety included $50,000 and $47,760, respectively in their FY 2025 budgets to complete this project. With the adoption of this budget amendment, their budgets will be reduced by the same amounts.

City Hall Security Improvement Project ALTERNATIVES:

Since the cost of this project was substantially covered in the FY 2025 Information Systems and Public Safety budgets, if Council elects to exclude this item from the amendment the cost of the anticipated project could also be met through departmental budgets.

City Council portion of Budget Adjustment:

Baker Tilly for City Manager Evaluation and Goal Setting ($11,000): The Council seeks to retain professional services from a third party to facilitate the annual review of the City Manager. This was not included in the original budget.

Key to the City ($10,000):

- This initiative is part of an effort to source locally made products for recognizing visiting dignitaries. It will also acknowledge people who have made significant contributions to the community.
- In April 2024, the City Manager commissioned local and renowned artist Gert Svarny to create a 'Key to the City.' The piece was completed in October 2024, and we are currently awaiting its provenance document.
- The City Manager plans to present it to the City Council for review and adoption in March 2025. As part of the presentation the Council will also review and adopt criteria for awarding the key along with a process.

- The original key will be displayed in a locked cabinet in the City Hall lobby.
- We are presently sourcing a company to reproduce the key using resin and anticipate costs for setup fee and per-unit production, however estimates are not yet available.
- The budget includes $10,000 in anticipation of initial production costs.

City Council ALTERNATIVES:
Should Council elect not to adopt this portion of the budget amendment, City Council may need to find other sources to meet the costs outlined above or delay the related activities.

City Manager portion of Budget Adjustment:

Marketing Video ($25,000):

- The City lacks a professionally produced marketing/informational video to showcase the community and the City's role in Unalaska.
- The video will serve as a resource for applicants and candidates for city employment, providing insight into the community.
- Future content will be developed in partnership with local stakeholders, including the shipping industry, seafood processing community, and schools.
- Many cities worldwide have similar informational videos available online as templates for reference.

City Manager ALTERNATIVES:
Should Council elect not to adopt this portion of the budget amendment, the City Manager would postpone the creation of the marketing video to fiscal year 2026.

Comprehensive Plan (Transfer $250,000 from City Manager budget to Planning Department budget):

- The City Council previously approved $250,000 in the City Manager's budget for a public transportation study.
- Rather than focusing solely on public transit, the City Manager proposes a new comprehensive plan incorporating a transportation component and an economic analysis for the city.
- As this is a planning initiative, it will be managed by the Planning Department.
- The budget for this project will be moved to the Planning Department's budget for appropriate oversight and implementation.

Comprehensive Plan ALTERNATIVES:
Should Council elect not to adopt this portion of the budget amendment, costs associated with the proposed comprehensive plan could be met using already appropriated funds within the City Manager's budget. The requested transfer assigns the project responsibility to the proper City Department.

Finance Department portion of Budget Adjustment:

In January 2025, the City engaged with Espelin & Associates LLC to provide interim Finance Director services, replacing the previous Finance Director. Additionally, the City recently completed their FY 2023 audit and it is expected that the FY 2024 audit will begin in March or April 2025 with a substantial amount of the work completed prior to the end of fiscal year 2025.

Espelin & Associates has provided limited services to the City throughout FY 2025, retaining them to fulfil Finance Director duties represents a substantial increase in their scope and volume of work, necessitating an increase ($50,000).

The City's external auditors have completed the FY 2023 audit and plan to move immediately into FY 2024. The Finance Department budget is sufficient to meet the financial obligations of one audit, but not two audits. Therefore, an increase of $50,000 is requested.

Finance Department ALTERNATIVES:

Should Council elect not to adopt this portion of the budget amendment, the Finance Department could meet a portion of the costs within the existing budget structure by moving personnel costs to operating expenses via a Line Item Transfer. However, if this route was required it is likely that the FY 2024 audit would be delayed.

Public Works Portion of Budget Adjustment:

High School Boiler Replacement Project (SS24A): In April 2023, during the annual boiler inspection it was determined that one of the high school boilers contained irreparable cracks, making it unfit for service. Consequently, operational capacity has been reduced to two boilers, leaving the staff and students vulnerable to potential disruptions.

On February 13, 2024, Council approved Ordinance 2024-03 approving a General Fund appropriation in the amount of $220,175 to fund the High School Boiler Replacement Capital Project (SS24A). Three boilers were ordered on May 3, 2024, and subsequently received on January 9, 2025. Upon receipt, a final installation quote was received in the amount of $233,061. Currently, $94,292 remains in the project budget, including contingency funds. Unfortunately, the original boiler replacement cost estimate did not account for certain expenses, including demolition/removal of existing boilers and travel-related costs for the contractor.

To cover the shortfall, an additional $138,768 is requested, which will bring the total project cost to $358,943.

Electrical portion of Budget Adjustment:

Powerhouse SCADA & Reporting Upgrades Project (EL25D): In FY24, the Electric Division requested $150,000 to upgrade its obsolete SCADA reporting servers. This upgrade is essential to ensure the division can generate the necessary reports required for compliance with various state and federal agencies. The current system is longer adequate to meet these reporting requirements, posing a risk to regulatory compliance.

Electric ALTERNATIVES:

Powerhouse SCADA & Reporting Upgrades Project (EL25D): EPS' proposal totals $155,350, which includes the necessary upgrades and comprehensive training. Staff intends to engage EPS for these upgrades due to their extensive institutional knowledge of Unalaska's power system. Engaging a different firm could potentially introduce additional delays and costs, stemming from the unfamiliarity of project specifics, knowledge of Unalaska's electric utility operations and overall scope of work. The funding request covers the cost of completing the upgrades and contingency for unplanned expenses.

Public Works ALTERNATIVES:

1) Approve budget amendment as presented
2) Do not approve; instead letting out an RFP for these services and try to obtain a lower cost that what was recently quoted for demolition/removal and installation; any delays in this process puts the project at risk to be completed prior to the next school year.
3) Do not approve.

FINANCIAL IMPLICATIONS:

- Department of Homeland Security funding the amount of $103,350 will be accepted and Department of Public Safety and Information Systems budgets will be reduced by $50,000 and $47,760, respectively; create a DPS and City Hall Security Improvement Project (PS25A)
- Appropriate $20,000 from the Electric Proprietary Fund Net Assets to the Powerhouse SCADA & Reporting Upgrades Project (EL25D)
- Appropriate $187,008 (net) from the General Fund Fund Balance
    - Decrease Information Systems budget by $50,000 (related to first bullet)
    - Decrease Public Safety budget by $47,760 (related to first bullet)
    - Increase City Council budget by $21,000 for the following:
        - $11,000 Baker Tilly for City Manager Evaluation and Goal Setting;
        - $10,000 for production of Key to the City replicas
    - Increase City Manager Budget by $25,000 for a marketing video
    - Transfer $250,000 from the City Manager Budget, previously appropriated for a transportation study, to the Planning Department Budget for the comprehensive plan
    - Increase Finance Budget by $100,000 for the following:
        - $50,000 for FY 2024 audit costs
        - $50,000 for accounting services provided by Espelin & Associates LLC
    - Transfer $138,768 to Governmental Capital Projects for the replacement of the High School boiler (SS24A)

LEGAL: None

STAFF RECOMMENDATION: Staff recommends adoption of Ordinance 2025-03.

PROPOSED MOTION: I move to adopt Ordinance 2025-03.

CITY MANAGER COMMENTS: I support staff's recommendation.

ATTACHMENTS: None

MEMORANDUM TO COUNCIL

To: Mayor and City Council Members
From: Cameron Dean, Planning Director
Through: Marjie Veeder, Acting City Manager
Date: March 11, 2025
Re: Draft FY26-35 Capital and Major Maintenance Plan (CMMP)

SUMMARY: City Council reviews the Capital and Major Maintenance Plan (CMMP) every year. This is the first draft of the FY26-35 CMMP.

PREVIOUS COUNCIL ACTION: Last year Council approved the FY25-34 CMMP, with 31 projects and a total portfolio of $119,767,593 over ten years. The first year of the CMMP is the most important because the financial figure represents what is approved to be budgeted. Council approved $6,268,574 for FY25, excluding external funding.

Council approved Resolution 2025-04 adopting its priorities for this year's CMMP. Regulatory Compliance, Impact on Operational Budget and Infrastructure/Public Safety were identified as top concerns. Staff focused on these factors while reviewing nominations.

Council also reviewed proposed CMMP nominations at their meeting on February 11, 2025.

BACKGROUND: Beginning in November, Planning Department Staff have worked with each department to update their capital projects. Staff met to discuss the CMMP in December and January. Council discussed proposed project nominations at its meeting on February 11, 2025.

Council heard a presentation of the PCR Master Plan at its meeting on February 25, 2025. If adopted, the plan will guide PCR's project nominations on the CMMP.

DISCUSSION: This draft of the FY26-35 CMMP proposes $3,332,000 from the General Fund and $21,746,683 from proprietary funds in FY26:

Table 1

Electric Proprietary Fund	14,336,573
General Fund	3,332,000
Grant	33,713,630
Ports Proprietary Fund	6,325,110
Solid Waste Proprietary Fund	265,000
Wastewater Proprietary Fund	150,000
Water Proprietary Fund	670,000
Total	**58,792,313**

Currently no funding from the 1% Special Revenue Fund is proposed for any CMMP projects, though that fund is available for capital projects. As of the beginning of February, $9,485,537 was available in the fund. One question for Council tonight is whether it would like to use the 1% Fund for any projects currently included on the CMMP or save it for another future capital project, like roof replacements.

Captains Bay Road

Utilities on Captains Bay Road are currently installed through Westward Seafoods, and paving that stretch has been fully funded through the Transportation Improvement Program (STIP) with a required City match totaling $13.1 million. The Department of Transportation & Public Facilities (DOTPF) will manage that portion of the project. The CMMP includes continued paving and safety improvements past Westward, currently planned to commence in FY28 after completion of the state's segment. Continued funding is one of the City's primary federal and state legislative priorities.

Water extensions are underway and are planned to be completed this summer. The section through Westward has been approved for operation and is in use. The extension will allow customers to retire the leaking wood stave pipe from Pyramid Valley, saving a significant amount of treated water.

Wastewater extensions are also proposed, and Staff is seeking grant funding for design.

Electrical upgrades may also be necessary and will be funded by the City's pending congressionally directed spending (CDS) award from the Department of Energy.

Future components of the Captains Bay Road projects are identified as "External" funding because Staff expects them to largely depend on grants or other mechanisms, like a special assessment district. Ultimately, however, the funding strategy is an open question that will be discussed with Council at a later meeting.

Fire

The feasibility study for the fire station and training facility is underway and will be completed in FY26. The current budget and timeline shown on the CMMP, a $22.5 million project with design in FY27 and construction beginning in FY28, is based on previous rough estimates and will be revised based on the results of the study. The study will consider both new sites as well as renovation of the existing building.

Currently, the CMMP depicts the entire project budget coming from the General Fund. However, there are multiple potential funding sources from the US Fire Administration, FEMA, the Alaska Mental Health Trust and others that Staff is evaluating. The state legislature is also considering funding to support rural fire department infrastructure.

Council will receive the preliminary presentation of the feasibility study this summer and a final presentation in the beginning of fall that will go deeper into the recommended location and design. Staff will revise the project plan based on Council's direction following that presentation.

PCR

PCR projects depicted on the CMMP were identified as needs prior to the PCR Master Plan. Both playground projects are safety related. The Elementary School Playground Replacement, actually comprised of several playgrounds, has reached its end of life and needs to be replaced. Based on budget estimates and recommendations in the PCR Master Plan, staff revised the total budget to $2.8 million, with design beginning in FY26.

The Community Center Playground Safety Improvements project addresses issues at the playground in front of PCR. It was previously scheduled for FY29, but Staff recommends advancing it to FY27 to complete concurrently with the Elementary School Playground Replacement to potentially save costs.

The Pump Track and Skate Park project, necessitated by IFHS's expansion, will replace the existing skatepark ramps with comparable modular equipment and add a pump track at a new site. The current ramps have exceeded their safe working life and cannot simply be relocated, and it is no longer practical to repair them. Staff would coordinate any paving with other paving projects in town.

If Council chooses to adopt the PCR Master Plan, Staff will nominate additional projects scheduled in the next decade based on its recommendations. Like any other new nomination, each will go through the normal prioritization process including consultation with the PCR Advisory Committee. Proposed projects include:

- Parks Improvement Project: Improvements and repairs to park amenities, including signage, tables, bike racks, basketball courts, etc. throughout the community and paving the walking loop at the High School. Staff would coordinate this project with other paving activities in town to save costs, and grant funding is readily available for historic interpretive signage. Currently estimated at $481,000.

- Rental Shop: Outdoor equipment rentals, for example kayaks or bicycles. The project would include transport and storage to provide equipment to the public at different locations around the community.

- Town Park Restroom: A permanent restroom at Town Park to replace the port-a-potties.

Two large, long-term projects, replacement of the Aquatics Center and a new multipurpose facility that would also serve as an emergency shelter, would begin with a feasibility study to determine sites, as well as reuse opportunities for the current Aquatics Center building. Staff have previously identified Ounalashka Community Park as the best location for the multipurpose facility, but the feasibility study will evaluate all possible options.

Future Projects

The assessment of roofs on all City buildings begins this summer, and the results will help prioritize roof repair and replacement. Those are currently not included on the CMMP but likely represent significant upcoming costs. For example, $2.5 million was appropriated for the replacement of the Public Works Building roof last year. Once the assessment is complete, Staff will recommend a schedule for roof projects on the CMMP.

Similarly, Staff is evaluating the City's paving priorities to take advantage of a batch plant operating in town.

Remaining CMMP Council Presentations

4/8	Final CMMP Presentation to Council
4/22	Adopt CMMP
5/13	1st Reading of Final Budget
5/27	2nd Reading of Final Budget

ALTERNATIVES: This memo and presentation are for informational purposes only. City Council is free to express concerns, recommendations or other comments and Staff will work to incorporate the changes into the CMMP. Staff will present a revised CMMP at the first regular meeting in April.

FINANCIAL IMPLICATIONS: City Council reviews the CMMP each year for an opportunity to provide input and subsequently adopt the CMMP as part of the overall budgeting process.

LEGAL: Not applicable.

STAFF RECOMMENDATION: No recommendation.

PROPOSED MOTION: Not applicable.

CITY MANAGER COMMENTS: City Staff have worked diligently over the last four months to construct the FY26-35 CMMP in line with code requirements, the approved process guide and Council's priorities. Project nominations have been reviewed internally, as well as by the Planning Commission and proposed nominations were presented to Council last month. Staff requests feedback from the Mayor and Council on the draft CMMP presented this evening, so that the final document presented for adoption is in line with Council's wishes.

ATTACHMENTS:

FY26 CMMP Draft Budget Table

FY26-35 CMMP Draft Budget Tables

FY26-35 CMMP Draft Summary Sheets

FY26	Electric Proprietary Fund	General Fund	Grant	Ports Proprietary Fund	Solid Waste Proprietary Fund	Wastewater Proprietary Fund	Water Proprietary Fund	Grand Total
Electric Proprietary Fund								
Electric								
Electric Energy Storage System	2,750,000							2,750,000
Electrical Distribution Equipment Replacement	500,000							500,000
Generator Sets Rebuild	215,000							215,000
Engine Control Upgrades	26,250		175,000					201,250
Subtransmission Upgrades	3,600,666		2,500,000					6,100,666
Wind Energy Development	6,509,657		26,038,630					32,548,287
Electric Total	13,601,573		28,713,630					42,315,203
Electric Proprietary Fund Total	**13,601,573**		**28,713,630**					**42,315,203**
General Fund								
Fire								
Engine 3 Replacement		1,500,000						1,500,000
Fire Total		1,500,000						1,500,000
PCR								
Elementary School Playground Replacement		200,000						200,000
PCR Total		200,000						200,000
Public Works								
Rolling Stock Replacement Plan	735,000	1,095,000		40,000			20,000	1,890,000
Fishermen's Memorial		100,000						100,000
City Hall and Community Center Elevator Repairs		437,000						437,000
Public Works Total	735,000	1,632,000		40,000			20,000	2,427,000
General Fund Total	**735,000**	**3,332,000**		**40,000**			**20,000**	**4,127,000**
Ports Proprietary Fund								
Ports								
LCD & UMC Dredging				700,000				700,000
Robert Storrs Small Boat Harbor Improvements (A & B Floats)			5,000,000	3,390,110				8,390,110
UMC Positions 5-7 Resurfacing and Repair				1,695,000				1,695,000
Spit Dock Fender Replacement and Utility Upgrade Project				500,000				500,000
Ports Total			5,000,000	6,285,110				11,285,110
Ports Proprietary Fund Total			**5,000,000**	**6,285,110**				**11,285,110**
Solid Waste Proprietary Fund								
Solid Waste								
Scale Replacement					175,000			175,000
Baler Belt Replacement					90,000			90,000
Solid Waste Total					265,000			265,000
Solid Waste Proprietary Fund Total					**265,000**			**265,000**
Wastewater Proprietary Fund								
Wastewater								
Lift Station Improvements						150,000		150,000
Wastewater Total						**150,000**		**150,000**
Wastewater Proprietary Fund Total						**150,000**		**150,000**
Water Proprietary Fund								
Water								
Sediment Traps Between Icy Lake and Icy Creek Reservoir							650,000	650,000
Water Total							650,000	650,000
Water Proprietary Fund Total							**650,000**	**650,000**
Grand Total	**14,336,573**	**3,332,000**	**33,713,630**	**6,325,110**	**265,000**	**150,000**	**670,000**	**58,792,313**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH
3	Appropriated	Requested Funds																																
4			2026	2026	2026	2026 Total	2027	2027	2027	2027 Total	2028	2028	2028	2028 Total	2029	2029	2029	2029 Total	2030	2030	2030 Total	2031	2031	2031 Total	2032	2032	2032 Total	2033	2033 Total	2034	2034 Total	2035	2035 Total	Request Total
5			General	Proprietary	External		General	Proprietary	External		General	Proprietary	External		General	Proprietary	External		General	Proprietary		General	Proprietary		General	Proprietary		Proprietary		Proprietary		Proprietary		
6		**Electric Proprietary Fund**																																
7		**Electric**																																
8	371,312	Electric Energy Storage System		2,750,000		**2,750,000**																												**2,750,000**
9		Electrical Breakers Maintenance and Service						234,000		**234,000**																								**234,000**
10	500,000	Electrical Distribution Equipment Replacement		500,000		**500,000**		500,000		**500,000**		500,000		**500,000**		500,000		**500,000**		500,000	**500,000**		500,000	**500,000**		500,000	**500,000**	500,000	**500,000**	500,000	**500,000**	500,000	**500,000**	**5,000,000**
11		Electrical Intermediate Level Protection Installation						650,000		**650,000**																								**650,000**
12		Engine Control Upgrades		26,250	175,000	**201,250**		575,000		**575,000**																								**776,250**
13	455,000	Generator Sets Rebuild		215,000		**215,000**		215,000		**215,000**		973,000		**973,000**		565,000		**565,000**																**1,968,000**
14		Subtransmission Upgrades		3,600,666	2,500,000	**6,100,666**		3,600,666		**3,600,666**		3,600,667		**3,600,667**																				**13,301,999**
15		Wind Energy Development		6,509,657	26,038,630	**32,548,287**																												**32,548,287**
16	**1,326,312**	**Electric Total**		**13,601,573**	**28,713,630**	**42,315,203**		**5,774,666**		**5,774,666**		**5,073,667**		**5,073,667**		**1,065,000**		**1,065,000**		**500,000**	**500,000**		**500,000**	**500,000**		**500,000**	**500,000**	**500,000**	**500,000**	**500,000**	**500,000**	**500,000**	**500,000**	**57,228,536**
17																																		
18	**1,326,312**	**Electric Proprietary Fund Total**		**13,601,573**	**28,713,630**	**42,315,203**		**5,774,666**		**5,774,666**		**5,073,667**		**5,073,667**		**1,065,000**		**1,065,000**		**500,000**	**500,000**		**500,000**	**500,000**		**500,000**	**500,000**	**500,000**	**500,000**	**500,000**	**500,000**	**500,000**	**500,000**	**57,228,536**
19																																		
20		**General Fund**																																
21		**Fire**																																
22		Engine 3 Replacement	1,500,000			**1,500,000**																												**1,500,000**
23		Fire Station with Integrated Training Facility					3,000,000			**3,000,000**	19,500,000			**19,500,000**																				**22,500,000**
24		**Fire Total**	**1,500,000**			**1,500,000**	**3,000,000**			**3,000,000**	**19,500,000**			**19,500,000**																				**24,000,000**
25																																		
26		**PCR**																																
27		Community Center Playground Safety Improvements					300,000			**300,000**																								**300,000**
28		Elementary School Playground Replacement	200,000			**200,000**	2,600,000			**2,600,000**																								**2,800,000**
29		Pump Track and Skate Park					200,000			**200,000**																								**200,000**
30		**PCR Total**	**200,000**			**200,000**	**3,100,000**			**3,100,000**																								**3,300,000**
31																																		
32		**Public Works**																																
33	15,718,241	Captains Bay Road Safety & Paving											14,000,000	**14,000,000**			14,600,000	**14,600,000**																**28,600,000**
34		City Hall and Community Center Elevator Repairs	437,000			**437,000**																												**437,000**
35	100,000	Fishermen's Memorial	100,000			**100,000**																												**100,000**
36	560,000	Rolling Stock Replacement Plan	1,095,000	795,000		**1,890,000**	1,210,000	490,000		**1,700,000**	1,685,000	225,000		**1,910,000**	1,080,000	345,000		**1,425,000**	1,020,000	30,000	**1,050,000**	785,000	375,000	**1,160,000**	645,000	370,000	**1,015,000**							**10,150,000**
37		Underground Fuel Tank Removal / Replacement													60,000			**60,000**																**60,000**
38	**16,378,241**	**Public Works Total**	**1,632,000**	**795,000**		**2,427,000**	**1,210,000**	**490,000**		**1,700,000**	**1,685,000**	**225,000**	**14,000,000**	**15,910,000**	**1,140,000**	**345,000**	**14,600,000**	**16,085,000**	**1,020,000**	**30,000**	**1,050,000**	**785,000**	**375,000**	**1,160,000**	**645,000**	**370,000**	**1,015,000**							**39,347,000**
39																																		
40	**16,378,241**	**General Fund Total**	**3,332,000**	**795,000**		**4,127,000**	**7,310,000**	**490,000**		**7,800,000**	**21,185,000**	**225,000**	**14,000,000**	**35,410,000**	**1,140,000**	**345,000**	**14,600,000**	**16,085,000**	**1,020,000**	**30,000**	**1,050,000**	**785,000**	**375,000**	**1,160,000**	**645,000**	**370,000**	**1,015,000**							**66,647,000**
41																																		
42		**Ports Proprietary Fund**																																
43		**Ports**																																
44	3,654,145	LCD & UMC Dredging		700,000		**700,000**																												**700,000**
45	6,695,000	Robert Storrs Small Boat Harbor Improvements (A & B Floats)		3,390,110	5,000,000	**8,390,110**																												**8,390,110**
46		Spit Dock Fender Replacement and Utility Upgrade Project		500,000		**500,000**		630,000		**630,000**			11,300,000	**11,300,000**																				**12,430,000**
47		UMC Positions 5-7 Resurfacing and Repair		1,695,000		**1,695,000**			20,305,000	**20,305,000**																								**22,000,000**
48	**10,349,145**	**Ports Total**		**6,285,110**	**5,000,000**	**11,285,110**		**630,000**	**20,305,000**	**20,935,000**			**11,300,000**	**11,300,000**																				**43,520,110**
49																																		
50	**10,349,145**	**Ports Proprietary Fund Total**		**6,285,110**	**5,000,000**	**11,285,110**		**630,000**	**20,305,000**	**20,935,000**			**11,300,000**	**11,300,000**																				**43,520,110**
51																																		
52		**Solid Waste Proprietary Fund**																																
53		**Solid Waste**																																
54		Baler Belt Replacement		90,000		**90,000**																												**90,000**
55		Scale Replacement		175,000		**175,000**																												**175,000**
56	700,000	Solid Waste Gasifier										7,620,000		**7,620,000**																				**7,620,000**
57	**700,000**	**Solid Waste Total**		**265,000**		**265,000**						**7,620,000**		**7,620,000**																				**7,885,000**
58																																		
59	**700,000**	**Solid Waste Proprietary Fund Total**		**265,000**		**265,000**						**7,620,000**		**7,620,000**																				**7,885,000**
60																																		
61		**Wastewater Proprietary Fund**																																
62		**Wastewater**																																
63	50,000	Captains Bay Road Wastewater Line Installation							11,187,600	**11,187,600**																								**11,187,600**
64		Lift Station Improvements		150,000		**150,000**		250,000		**250,000**		250,000		**250,000**																				**650,000**
65	**50,000**	**Wastewater Total**		**150,000**		**150,000**		**250,000**	**11,187,600**	**11,437,600**		**250,000**		**250,000**																				**11,837,600**
66																																		
67	**50,000**	**Wastewater Proprietary Fund Total**		**150,000**		**150,000**		**250,000**	**11,187,600**	**11,437,600**		**250,000**		**250,000**																				**11,837,600**
68																																		
69		**Water Proprietary Fund**																																
70		**Water**																																
71		Biorka Drive Cast Iron Waterline Replacement										396,500		**396,500**																				**396,500**
72		Icy Creek Reservoir Dredging						100,000		**100,000**		500,000		**500,000**																				**600,000**
73		Icy Lake Capacity Increase & Snow Basin Diversion																					2,860,000	**2,860,000**										**2,860,000**
74		Installation of Meter and Booster Pump at Agnes Beach PRV Station														70,000		**70,000**		320,000	**320,000**													**390,000**
75	1,228,750	Pyramid Water Storage Tank						7,906,193		**7,906,193**																								**7,906,193**
76		Sediment Traps Between Icy Lake and Icy Creek Reservoir		650,000		**650,000**																												**650,000**
77	**1,228,750**	**Water Total**		**650,000**		**650,000**		**8,006,193**		**8,006,193**		**896,500**		**896,500**		**70,000**		**70,000**		**320,000**	**320,000**		**2,860,000**	**2,860,000**										**12,802,693**
78																																		
79	**1,228,750**	**Water Proprietary Fund Total**		**650,000**		**650,000**		**8,006,193**		**8,006,193**		**896,500**		**896,500**		**70,000**		**70,000**		**320,000**	**320,000**		**2,860,000**	**2,860,000**										**12,802,693**
80																																		
81	**30,032,448**	**Request Total**	**3,332,000**	**21,746,683**	**33,713,630**	**58,792,313**	**7,310,000**	**15,150,859**	**31,492,600**	**53,953,459**	**21,185,000**	**14,065,167**	**25,300,000**	**60,550,167**	**1,140,000**	**1,480,000**	**14,600,000**	**17,220,000**	**1,020,000**	**850,000**	**1,870,000**	**785,000**	**3,735,000**	**4,520,000**	**645,000**	**870,000**	**1,515,000**	**500,000**	**500,000**	**500,000**	**500,000**	**500,000**	**500,000**	**199,920,939**

FY26-35 CMMP

Electric Energy Storage System

Electric

Project Description: This project includes the design, procurement, construction, integration and commissioning of one 1 MW energy storage system.

Project Need: Large equipment, such as ship to shore cranes, demand electrical supply loads that exceed the power supply system's intended loading profile. To smoothly provide a continuous, undiminished power supply under loads that can suddenly spike to 10 to 15% of the total load in seconds, the engines must constantly react to both the rapid increases and decreases of the system load. The engines' reactions decrease efficiency and create undue mechanical and electrical wear on the equipment and distribution system. Additionally, generation dispatch is often significantly affected due to the inability of the facilities to operate in the most efficient configuration possible. The proposed energy storage system will arrest the rapid changes in the electrical load.

Development Plan & Status : Design will be accomplished in FY26 and installation will immediately follow. Permitting is not anticipated for this project. This project will be funded by the Electrical Proprietary Fund.

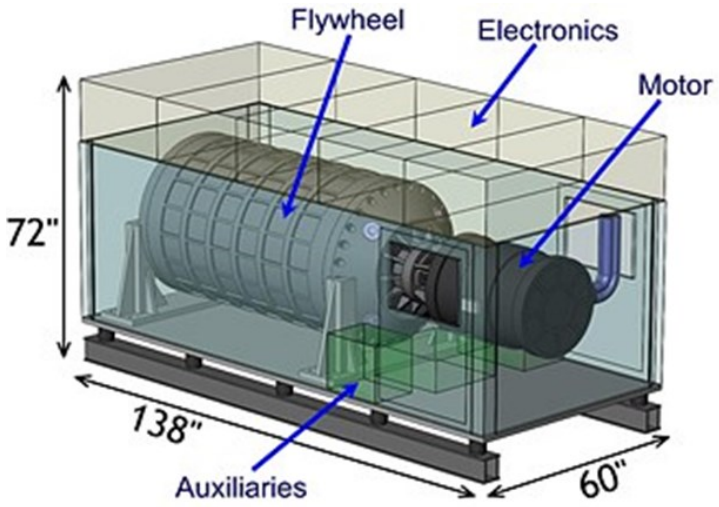
This project will only proceed if the City does not proceed with the Wind Energy Development Project.

Estimated Project & Purchase Timeline

Pre Design: FY25

Engineering/Design: FY26

Purchase/Construction: FY26



Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Electric Proprietary Fund	371,312	2,750,000	0	0	0	0	0	0	0	0	0	3,121,312
Total	371,312	2,750,000	0	0	0	0	0	0	0	0	0	3,121,312

FY26-35 CMMP

Electrical Breakers Maintenance and Service

Electric

Project Description: All Generation and distribution/feeder breakers at the New and Old Powerhouse and Town Substation will be serviced by a qualified industry service company. Breakers will be assessed and serviced. A detailed report indicating condition of the specific breakers will be provided along with recommended service maintenance intervals per the relevant industry codes.

Project Need: The City operates two powerhouses, New and Old Powerhouse, and one substation. Each of these facilities has at least one, possibly two primary electrical switchgear line-ups within each. Electrical switchgear require maintenance and cleaning to ensure proper operation. Safe operation switchgear reduces risks of arc-flash issues and improves operator safety. In the last five years, there has been very little major maintenance and testing activities performed at any of the powerhouses or Town Substation switchgear line-ups. Only general visual maintenance has been performed, except during the installation of the Unit 12 (CAT C280) project. A modification at the Town Substation was made as part of that project. During the implementation of the modification, the Contractor found that one of the substation breakers would not open/close properly. EPC onsite technicians working with EPC electrical maintenance leads in Anchorage were able to repair the breaker so that it will function properly. However, no other maintenance has been performed on this breaker or others. This project is part of the Electrical master Plan.

Development Plan & Status : This project will be funded by the Electric Proprietary Fund.

Estimated Project & Purchase Timeline

Pre Design: FY27

Engineering/Design: FY27

Purchase/Construction: FY27

Cost Assumptions	
Engineering, Design, Construction Admin	$150,000
Other Professional Services	
Construction Services	
Machinery & Equipment	$30,000
Subtotal	$180,000
Contingency (30%)	$54,000
Total Funding Request	$234,000

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Electric Proprietary Fund	0	0	234,000	0	0	0	0	0	0	0	0	234,000
Total	0	0	234,000	0	0	0	0	0	0	0	0	234,000

FY26-35 CMMP

Electrical Distribution Equipment Replacement

Electric

Project Description: This project funds the purchase of ongoing replacement equipment for the electrical distribution system. It includes electrical switches, section cans, transformers, and cables. Electrical equipment will also be purchased for new customers and for existing customers who need to upgrade electrical service.

Project Need: Ongoing replacement of the distribution system equipment is necessary to maintain its reliability and protect the assets of the City and ensure the safe distribution of electricity. This project will correctly capture and capitalize the expenditures made to keep the system operational as well as in expand the system where necessary.

Development Plan & Status : Funding for this project will come from the Electrical Proprietary Fund retained earnings.

Source	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Electric Proprietary Fund	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	5,500,000
Total	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	5,500,000

FY26-35 CMMP

Electrical Intermediate Level Protection Installation

Electric

Estimated Project & Purchase Timeline

Pre Design: FY27

Engineering/Design: FY27

Purchase/Construction: FY28

Project Description: This project adds protective devices at the major industrial services and at radial taps in the 35 kV system. Vacuum circuit re-closers will be installed to properly coordinate clearing times in the event of a system disturbance. This enables the rest of the system to stay on line and only remove the faulted service or radial feeder. Each location will require one recloser with dedicated relay control. The recloser will also require provisions for communications back to the NPH via radio link or fiber optic cable when available. An updated short circuit study and new protective relay settings will be required in order to properly complete the system coordination work. Engineering and installation of reclosers at five locations are assumed for this project.

Project Need: The 35 kV system does not have any intermediate level protective devices that would minimize power disruptions to customers. The system is only protected from faults via two main 35 kV re-closers at the powerhouse, two main 35 kV town substation breakers, Alyeska Seafoods recloser, Westward Seafoods recloser, Captains Bay Road tap recloser, and four main 12 kV town substation breakers. Other than primary fusing on customer transformers, the system lacks any coordinated protection scheme. Some under frequency and under voltage load shed schemes are currently employed in the system but still are limited in their ability to isolate the system in smaller manageable pieces that would minimize disturbances to as few customers as possible. The lack of adequate coordinated protection schemes and apparatus has caused system wide outages during to a fault or disturbance event most often induced by a single large industrial customer.

Development Plan & Status : Areas where intermediate level protection apparatus should be incorporated are as follows: 1. Ballyhoo Tap 2. CMP 3. Submarine Crossing 4. Bridge Crossing

Cost Assumptions	
Engineering, Design, Construction Admin	$50,000
Other Professional Services	$75,000
Construction Services	$100,000
Machinery & Equipment	$275,000
Subtotal	$500,000
Contingency (30%)	$150,000
Total Funding Request	$650,000

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Electric Proprietary Fund	0	0	650,000	0	0	0	0	0	0	0	0	650,000
Total	0	0	650,000	0	0	0	0	0	0	0	0	650,000

FY26-35 CMMP

Engine Control Upgrades

Electric

Estimated Project & Purchase Timeline

Pre Design: FY25

Engineering/Design: FY26

Purchase/Construction: FY26

Project Description:

Engines 8 & 9 Control Upgrades (FY26): This project would provide engineering and installation services for upgrading the existing analog controls on units 8 and 9 with digital controls and a fiber network.

Engines 10, 11, 12 & 13 Control Upgrades (FY27): This project would provide engineering, programming, installation and commissioning to upgrade the existing PLCs on the New Powerhouse Wartsila and Caterpillar Generators and the common PLC.

Project Need:

Engines 8 & 9 Control Upgrades (FY26): The upgrades would enhance current start, stop, synchronization and load sharing between large and small generation units. Currently, hardware prevents specific units from operating simultaneously, this upgrade aims to correct this deficiency. The digital upgrades will also provide operators with the ability to monitor additional parameters on the units, ei temperature, pressure, enhancing the overall system efficiency, performance, and user experience.

Engines 10, 11, 12 & 13 Control Upgrades (FY27): The Concept PLC modules installed on the Wartsila generators and common PLC are no long er in production (since 2015). Additionally, Shneider Electric ended support for the PLC software, Concept, May of 2015, it also requires Windows XP, which is no longer supported. Wartsila also used proprietary function blocks in the PLC code. This has made troubleshooting difficult through large parts of the PLC program causing support issues to take more time for the powerhouse technicians. Also, any adjustments to the PLC logic are very difficult with custom function blocks that cannot be modified.

Development Plan & Status : Funding for this project will come from the Electric Proprietary Fund and grants. In FY26 it is being funded primarily through a grid resiliency grant received by an OC-led consortium. The funding will be passed to the City for the project, and the City will additionally contribute $26,250 of matching funds. The grant is formula-based, and Staff plans to use future funding for this project if received.

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Electric Proprietary Fund	0	26,250	575,000	0	0	0	0	0	0	0	0	601,250
Grant	0	175,000	0	0	0	0	0	0	0	0	0	175,000
Total	0	201,250	575,000	0	0	0	0	0	0	0	0	776,250

FY26-35 CMMP

Generator Sets Rebuild

Electric

Project Description: This project consists of inspection, major maintenance, and rebuilds of the primary generator sets in the Unalaska Powerhouse. The maintenance schedule for the generator sets at the Unalaska Powerhouse is determined by engine hours. Engine inspections are also conducted by the manufacturer's mechanics to determine if engine rebuilds are needed or if they can be prolonged according to the hourly schedule.

Project Need: These generator set rebuilds are needed to maintain our equipment and the reliability of our electrical production. Our Certificate of Fitness from the Alaska Energy Authority states that we must keep all electrical generating equipment in good running condition.

Development Plan & Status : Due to the high cost of the engine rebuilds, it has been determined that the cost will be capitalized. Costs for the Generator Sets rebuilds can fluctuate greatly according to what is determined by the maintenance inspections. Costs for these rebuilds has been determined by the worst case scenario according to the history of the engines. Money that is not used for rebuilds by the end of the fiscal year, will be returned to the proprietary fund.

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Electric Proprietary Fund	455,000	215,000	215,000	973,000	565,000	0	0	0	0	0	0	2,423,000
Total	455,000	215,000	215,000	973,000	565,000	0	0	0	0	0	0	2,423,000

FY26-35 CMMP

Subtransmission Upgrades

Electric

Project Description: This project consists of multiple upgrade's to the City's electrical grid, including replacement of the submarine cable at Iliuliuk Bay, 35kV feeder replacement, intermediate level protection and a new 4-way switch at Town Substation.

Project Need: Upgrades are necessary for continued reliability and improving capacity to accommodate new generation sources.

Development Plan & Status : The City has received a congressionally directed spending (CDS) award for $2.5 million for the project, though it is currently on hold due to the federal funding pause. Staff and contractors are still developing the project, but completing the upgrades will likely take several years.

Estimated Project & Purchase Timeline

Pre Design: FY25

Engineering/Design: FY26

Purchase/Construction: FY26

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Electric Proprietary Fund	0	3,600,666	3,600,666	3,600,667	0	0	0	0	0	0	0	10,801,999
Grant	0	2,500,000	0	0	0	0	0	0	0	0	0	2,500,000
Total	0	6,100,666	3,600,666	3,600,667	0	0	0	0	0	0	0	13,301,999

FY26-35 CMMP

Wind Energy Development

Electric

Project Description: This project will integrate a medium-speed diesel generation at the Pyramid Powerhouse, create a 5 MW wind power system, and purchase a 3 MW / 6 MWh battery energy storage system (BESS) to stabilize the microgrid and reduce reliance on external fuel sources. Other planned upgrades to the 35 kV subtransmission system, submarine cables, and smart grid controls will improve grid reliability, support industrial growth, and ensure long-term resilience for the community.

Project Need: This project was designed to address Unalaska's most pressing energy challenges, including:

1. The need for distribution upgrades as outlined in EPS's recent load growth impact study.
2. Efficiency improvements to maximize existing infrastructure performance.
3. Growing demand from industrial customers.
4. Fuel price volatility, which affects the affordability and predictability of power costs.
5. Air permitting restrictions limiting the ability to expand conventional generation at the Dutch Harbor Power Plant.

Development Plan & Status : In February of 2025, the City of Unalaska submitted a concept paper to the Office of Clean Energy Demonstrations, a part of the US Department of Energy, for their 'Energy Improvements in Rural or Remote Areas (EIRRA)' grant program. The submitted concept paper is the first step in the application process. If the City's project is deemed promising, we will be invited to submit a full application to OCED in the fall. The project we submitted was titled 'Unalaska Resilient Energy Expansion' (UREE), and revolved around increasing the island's energy security by adding a battery energy storage system (BESS) and establishing wind power. The City asked for $25.3 million for the UREE project, with a cost share of $6.3 million.

If this project is funded, it will make the separate Electric Energy Storage System project redundant. In that case, that project will be closed and the funds returned.

Estimated Project & Purchase Timeline

Pre Design: FY25

Engineering/Design: FY26

Purchase/Construction: FY27

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Electric Proprietary Fund	0	6,509,657	0	0	0	0	0	0	0	0	0	6,509,657
Grant	0	26,038,630	0	0	0	0	0	0	0	0	0	26,038,630
Total	0	32,548,287	0	0	0	0	0	0	0	0	0	32,548,287

FY26-35 CMMP

Engine 3 Replacement

Fire

Project Description: Procurement of a replacement for Engine 3.

Project Need: Engine 3 is 20 years old and reaching the end of its expected life, beyond which maintenance costs increase significantly, and the risk of mechanical failures and breakdowns rise. The pump is currently malfunctioning, and Staff is working on options to repair or replace it, but doing so is costly and may not ensure long-term reliability.

New fire trucks have exceptionally long lead times approaching 5 years. Additionally, Engine 3 is poorly designed with poor maneuverability in tight spaces and high compartments that increase the risk for injury to responders. Change in apparatus status can negatively impact citywide insurance premiums by lowering the Insurance Services Office (ISO) rating.

Development Plan & Status : Purchasing and paying promptly would allow the City to secure the lowest possible price. This also shortens the lead time by guaranteeing the City's place in the production queue. Major manufacturers have comparable lead times across the industry, and readily available stock vehicles are extremely limited. As such, Staff propose ordering a replacement apparatus as soon as possible.

Estimated Project & Purchase Timeline

Pre Design: FY26

Engineering/Design: FY26

Purchase/Construction: FY26

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
General Fund	0	1,500,000	0	0	0	0	0	0	0	0	0	1,500,000
Total	0	1,500,000	0	0	0	0	0	0	0	0	0	1,500,000

FY26-35 CMMP

Fire Station with Integrated Training Facility

Fire

Project Description: The proposed project entails the construction of a standalone fire station with an integrated training facility and housing units for live-in student firefighters, aligning with the fire department's 5-year strategic plan. This initiative addresses immediate and future community needs, including providing a safe refuge during major events, ensuring ADA compliance and planning for future expansion of current and new partnerships for the City.

Project Need: The integrated training center aims to conduct various in-house training programs, minimizing the need for external training and reducing associated costs. Specialized areas for live-fire exercises and high-angle rescue training ensure comprehensive instruction for staff. The inclusion of live-in student firefighters, as part of a robust 5-year strategic plan, fosters a dynamic learning environment, supported by dedicated educational spaces within the station. The live-in program mirrors successful programs elsewhere, offering a pathway for individuals to receive post-secondary education while bolstering staffing levels at minimal cost to the department.

Development Plan & Status : A feasibility study considering both new sites and renovation of the existing building is underway. Council will receive the preliminary presentation of the feasibility study this summer and a final presentation in the beginning of fall that will go deeper into the recommended location and design. Staff will revise the project plan based on Council's direction following that presentation.

Currently, the CMMP depicts the entire project budget coming from the General Fund. However, there are multiple potential funding sources from the US Fire Administration, FEMA, the Alaska Mental Health Trust and others that Staff is evaluating. The state legislature is also considering funding to support rural fire department infrastructure.

Estimated Project & Purchase Timeline

Pre Design: FY25

Engineering/Design: FY27

Purchase/Construction: FY28

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
General Fund	0	0	3,000,000	19,500,000	0	0	0	0	0	0	0	22,500,000
Total	0	0	3,000,000	19,500,000	0	0	0	0	0	0	0	22,500,000

FY26-35 CMMP

Community Center Safety Improvements

PCR

Project Description: New playground equipment is necessary to replace the outdated playground equipment in front of the Community Center.

Project Need: The current play structures are too close to the railing that encloses the playground from the parking lot and sidewalk.

Development Plan & Status : Funding for this project will come to the General Fund. Staff recommends conducting it concurrently with the Elementary School Playground Replacement for efficiency and possible cost savings.

Estimated Project & Purchase Timeline

Pre Design: FY26

Engineering/Design: FY26

Purchase/Construction: FY27

Cost Assumptions	
Other Professional Services	
Engineering, Design, Construction Admin	50,000
Construction Services	180,769
Machinery & Equipment	
Subtotal	230,769
Contingency (30%)	69,231
Total Funding Request	300,000

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
General Fund	0	0	300,000	0	0	0	0	0	0	0	0	300,000
Total	0	0	300,000	0	0	0	0	0	0	0	0	300,000

FY26-35 CMMP

Elementary School Playground Replacement

PCR

Project Description: Replacement of the playgrounds at Eagle's View Elementary School.

Project Need: The current playgrounds were installed when the school was built and has reached the end of their useful lives. Repairs to the existing play structures are not practical and they will need to be replaced.

Development Plan & Status : This project was recommended by the Unalaska City School District. Like other PCR projects, it was considered as part of the PCR Master Plan. The budget and schedule shown is based on the recommendations of the plan.

Estimated Project & Purchase Timeline

Pre Design: FY26

Engineering/Design: FY26

Purchase/Construction: FY27

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
General Fund	0	200,000	2,600,000	0	0	0	0	0	0	0	0	2,800,000
Total	0	200,000	2,600,000	0	0	0	0	0	0	0	0	2,800,000

FY26-35 CMMP

Pump Track and Skatepark

PCR

Project Description: Replacement of the Skate Park at a new site with comparable equipment and construction of a paved pump track.

Project Need: The current Skate Park is old and needs to be replaced. It's had many different paint jobs and rust has made certain areas dangerous. The current location of the Skate Park sits on real estate that has been leased for IFHS's expansion. Adding a pump track would greatly increase what that park can offer and its use.

Development Plan & Status : This project will be funded by the General Fund.

Estimated Project & Purchase Timeline

Pre Design: FY26

Engineering/Design: FY26

Purchase/Construction: FY27

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
General Fund	0	0	200,000	0	0	0	0	0	0	0	0	200,000
Total	0	0	200,000	0	0	0	0	0	0	0	0	200,000

FY26-35 CMMP

Captains Bay Road Safety & Paving

Public Works

Project Description: This major infrastructure improvement project constructs drainage, utilities, and pavement out Captains Bay Road, 1.4 miles long, between Airport Beach Road and the south end of the Westward Seafoods Complex. Work on the existing gravel road includes widening the road to 13-ft lanes with 2-ft shoulders, base & various areas of embankment reconstruction, new asphalt pavement, and new 6-ft paved separated multi-use path. Project includes selective replacement of storm drain pipes & inlet structures. Utilities are ineligible for the CTP Grant.

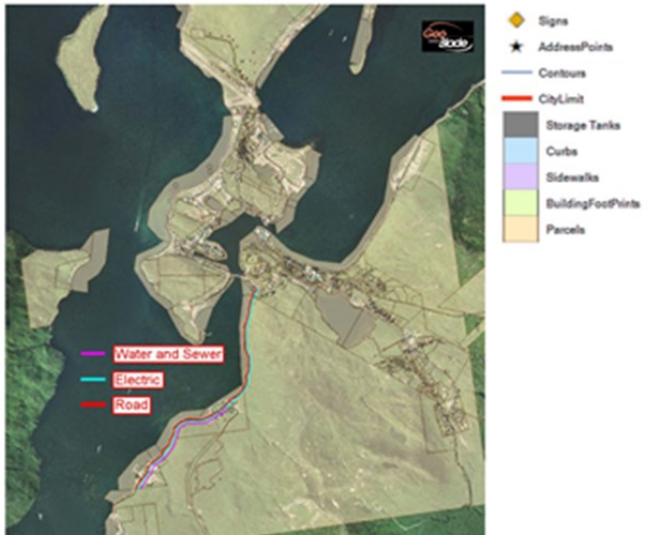
Project Need: Captains Bay Road is a primary transportation route for Westward Seafoods, North Pacific Fuel, Northland Services, Offshore Systems Inc., and several small businesses as well as residential areas. The road facilitates high traffic for heavy vehicles used by the fishing and support industries vital to the community's economy. In 2011 the City held public meetings regarding the Road Improvement Master Plan. Residents and industry representatives discussed Captains Bay Road and hazards its high road crown creates. The crown is needed for adequate drainage. There was strong support for improvements to Captains Bay Road. Captains Bay Road also presents future growth opportunities for the community as identified in the City's Comprehensive Plan.

Development Plan & Status : Segment A project funding was approved for the State Transportation Improvement Program. The grant and City match for that segment totals approximately $13.16 million.

Segment A Paving, $13,155,001
Safety Improvements, $4,500,000
Segment B Paving, $10,300,000
Segment C Paving, $3,100,000
Segment D Paving, $10,700,00

Estimated Project & Purchase Timeline
Pre Design: FY24
Engineering/Design: FY26
Purchase/Construction: FY27

Captains Bay Road and Utilities



Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
1% Fund	3,161,147	0	0	0	0	0	0	0	0	0	0	3,161,147
General Fund	2,564,556	0	0	0	0	0	0	0	0	0	0	2,564,556
Grant	9,992,538	0	0	14,000,000	14,600,000	0	0	0	0	0	0	38,592,538
Total	15,718,241	0	0	14,000,000	14,600,000	0	0	0	0	0	0	44,318,241

FY26-35 CMMP

City Hall and Community Center Elevator Repairs

Public Works

Project Description: Modernization of the control systems of the elevators at City Hall and the Community Center.

Project Need: The motherboard of the Community Center elevator is failing, and City Hall's elevator, being of the same age, requires similar work.

Development Plan & Status : Budget is based on an estimate from the elevator manufacturer.

Estimated Project & Purchase Timeline

Pre Design: FY25

Engineering/Design: FY26

Purchase/Construction: FY26

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
General Fund	0	437,000	0	0	0	0	0	0	0	0	0	437,000
Total	0	437,000	0	0	0	0	0	0	0	0	0	437,000

FY26-35 CMMP

Fishermen's Memorial

Public Works

Project Description: In 2022, City Council committed $250,000 to the Rusting Man Foundation to establish a memorial in Unalaska to commemorate fishermen lost at sea. The City leased space above the Carl E. Moses boat harbor and entered into an agreement with the artist for maintenance and ownership of the memorial.

Project Need: The City agreed to provide electric service and necessary safety improvements to the site selected for the Fishermen's Memorial.

Development Plan & Status : The artist began construction of the memorial last summer. The City's component will consist of two phases:

1) Electric utility extensions for lighting and security cameras. Basic site preparation and necessary safety improvements will be completed to allow installing the memorial.
2) Improve the site with additional landscaping, parking and other improvements.

Estimated Project & Purchase Timeline

Pre Design: FY24

Engineering/Design: FY25

Purchase/Construction: FY25

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
General Fund	100,000	100,000	0	0	0	0	0	0	0	0	0	200,000
Total	100,000	100,000	0	0	0	0	0	0	0	0	0	200,000

FY26-35 CMMP

Underground Fuel Tank Removal / Replacement

Public Works

Project Description: Remove the UST (underground storage tank) at City Hall and replace with an approved above ground fuel oil tank.

Project Need: UST's are known to rust and begin leaking. UST's are no longer approved and this tank needs to be replaced with an above ground tank with proper leak detection.

Development Plan & Status : This project will be funded from the General Fund.

Estimated Project & Purchase Timeline

Pre Design: FY29

Engineering/Design: FY29

Purchase/Construction: FY29

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
General Fund	0	0	0	0	60,000	0	0	0	0	0	0	60,000
Total	0	0	0	0	60,000	0	0	0	0	0	0	60,000

FY26-35 CMMP

LCD & UMC Dredging

Ports

Project Description: The dredging for the Unalaska Marine Center (UMC) and the Light Cargo Dock (LCD) is one of several projects that were developed to enhance commerce and safety for deep draft vessels in Dutch Harbor proper. In 2019 The City of Unalaska completed the renovation of Unalaska Marine Center (UMC) in preparation for deeper-draft cargo vessels. The renovation project of this industrial dock extended crane rails, added gantry crane infrastructure, fuel headers, and increased load capacity. The depth at the UMC dock face currently ranges from -38 to -40 feet. In 2019, the Corp of Engineers began the feasibility for Dredging the Entrance Channel into Dutch Harbor to -58 feet, currently at -43 feet. The USACE project is to accommodate the passage of deep-draft vessels to the cargo facilities inside Dutch Harbor. The dredging at UMC and LCD marries the USACE dredging and the UMC renovation projects together to meet the demands for deep-draft cargo operations. The UMC and LCD dredging project will bring the water depth at the face of UMC to -45' MLLW making it truly deep draft and operational for the deep draft vessels soon to navigate through the entrance channel. The dredging project for UMC and LCD have been earmarked and waiting for the approval of Congressional funding for the USACE entrance channel dredging so these projects could work in concert and recognize some efficiencies by sharing resources and the permitting processes. Congregational funding has been received for the USACE Entrance Channel Dredging project and in concert the City of Unalaska is moving forward with the UMC and LCD Dredging project. The Light Cargo Dock will be dredged to -35' and will then accommodate a wider range of fuel vessels, cargo vessels and catcher-processers. The Light Cargo Dock serves as a gear transfer dock and overflow for vessels not able to confirm space at UMC. The Light Cargo Dock, currently at -23 feet, will be dredged to -35 which is the maximum depth for the dock as designed and constructed. UMC will be dredged to -45 feet in order to accommodate deep-draft container ships and tankers. The UMC and LCD Dredging Project includes costs for the geotechnical work, bathymetry studies, permitting, means of dredging, disposal site, mobilization and demobilization and construction.

Project Need: The completion of this dredging will enhance current and future operations by creating usable industrial dock face that is designed for vessels in varying lengths and tonnage.

Development Plan & Status : It is estimated that the dredging project for the Unalaska Marine Center and the Light Cargo Dock will coincide with the timing of the USACE Dredging. State funding has been requested through CAPSIS for FY26.

Estimated Project & Purchase Timeline

Pre Design: FY19

Engineering/Design: FY23

Purchase/Construction: FY25

LIGHT CARGO DOCK, BARGE, TRAMPER

BARGE IS BEING USED AS A "SPACER" TO PROVIDE DEPTH FOR TRAMPER

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Ports Proprietary Fund	3,654,145	700,000	0	0	0	0	0	0	0	0	0	4,354,145
Total	3,654,145	700,000	0	0	0	0	0	0	0	0	0	4,354,145

FY26-35 CMMP

Robert Storrs Small Boat Harbor Improvements (A & B) Floats

Ports

Project Description: This project will remove the existing A and B Floats at the Harbor and reconfigure the Harbor to accommodate a new float system, ADA gangway and create uplands for parking and a public restroom. It will also include a fire suppression system, electricity and year-round water supply to users and new piling.

Project Need: This project would include replacing the deteriorated floats and reconfiguring the floats and fingers of A and B Floats to include updated electrical system, lighting, fire suppression, year-round utilities, and an ADA-required gangway. Based on current engineer concepts, the reconfiguration of A and B Floats will create at least 30 additional slips plus linear tie options. This should alleviate some of the 30 vessel waiting list. The reconfiguration will also allow for development of the uplands for required parking and a public restroom. The existing dock arrangement was carried over from a previous location. In order to accommodate the vessel demand at the Robert Storrs Harbor, a new configuration of the floats would allow for better use of the basin based on bathymetry and navigational approaches and also allow for additional vessel slips, with minimal fill and no dredging. It will add a significant number of slips for vessels 60' and under. This is an extension of the Robert Storrs Float Replacement Project. C Float was completed in FY16. As the Float Replacement Project for Robert Storrs is being constructed in phases it was logical to separate the phases into separate projects for tracking purposes.

Development Plan & Status : The total estimated cost is $15,085,110, with $6,695,000 already appropriated. An additional $5 million grant application was submitted and received the highest score among applicants, though it is currently not included in the governor's budget. Staff propose covering the remaining $3,390,110 from the Ports Proprietary Fund, or potentially 1% Fund, in FY26. The cost increases over the last several years can be attributed to design changes including electrical, uplands and parking, as well as survey work for the newly acquired submerged tidelands from the State of Alaska. Plans also include a restroom and increased parking.

Estimated Project & Purchase Timeline

Pre Design: FY19

Engineering/Design: FY23

Purchase/Construction: FY26

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Grant	0	5,000,000	0	0	0	0	0	0	0	0	0	5,000,000
Ports Proprietary Fund	6,695,000	3,390,110	0	0	0	0	0	0	0	0	0	10,085,110
Total	6,695,000	8,390,110	0	0	0	0	0	0	0	0	0	15,085,110

FY26-35 CMMP

Spit Dock Fender Replacement and Utility Upgrade Project

Ports

Project Description: This maintenance project will design replacement fendering and upgrade the electrical and water utilities at the Spit Dock.

Project Need: Existing fenders have reached the end of their useful life. The electric service is aging and the water system is compromised.

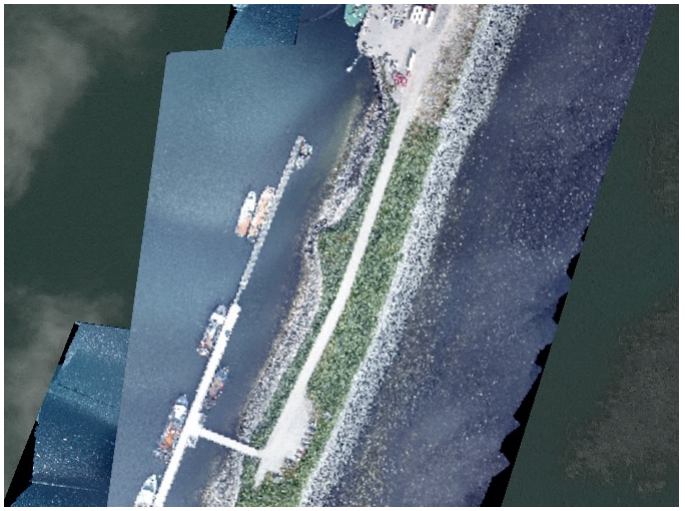
Development Plan & Status : Funding proposed for FY26 would assess condition and begin design. Construction costs are an estimate, and Staff intends to apply for grant funding for construction once design nears completion.

Estimated Project & Purchase Timeline

Pre Design: FY26

Engineering/Design: FY27

Purchase/Construction: FY28



Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Grant	0	0	0	11,300,000	0	0	0	0	0	0	0	11,300,000
Ports Proprietary Fund	0	500,000	630,000	0	0	0	0	0	0	0	0	1,130,000
Total	0	500,000	630,000	11,300,000	0	0	0	0	0	0	0	12,430,000

FY26-35 CMMP

UMC Positions 5-7 Resurfacing and Repair

Ports

Project Description: This project includes resurfacing the dock at positions 5-7, replacing the old crane tie-downs and replacing the old crane stop. It also will pave the backreach with Pavers.

Project Need: Unalaska Marine Center opened for business in 1992 and over the last 31 years of cargo operations there has been settling of the compacted rock beneath the concrete surface. This has caused undulating surface, drainage issues and should it continue settle this cold impact the integrity of the tale walls. The concrete needs to be removed, more rock added and compacted, drainage addressed, and resurfaced. Crane rails will also be inspected and repaired if necessary during this project. This is not unexpected maintenance. With the proven benefit of concrete pavers this project can now be done without significant impact to cargo operations at less expense.

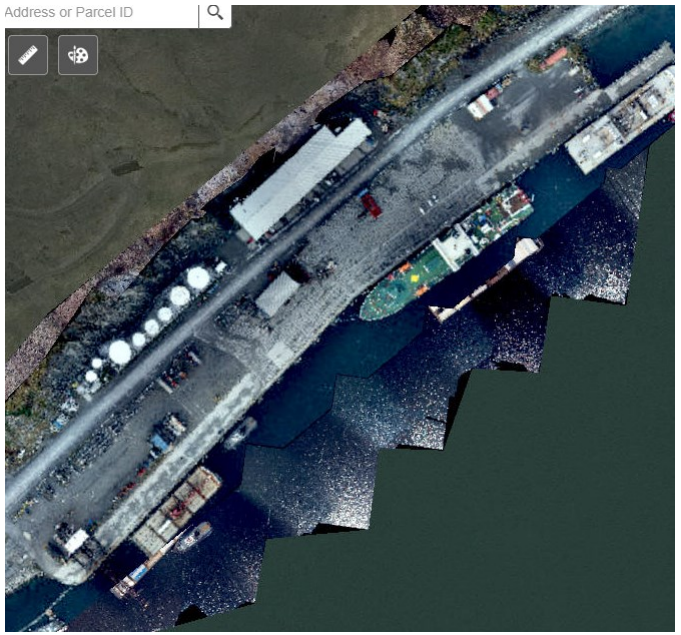
Development Plan & Status : Matson and the City partnered on a Ports Infrastructure Development Program (PIDP) grant last fiscal year, and the application advanced to the Secretary's desk. The team has been strongly encouraged to reapply with a more developed design. The City is in the process of applying for the PIDP and Council has authorized negotiations and MOU for engineering. The City will end up owning the project and wants the new systems to be compatible with the current dock structure and for this reason is budgeting for engineering. The PIDP grant will cover the entire cost of construction if awarded.

Estimated Project & Purchase Timeline

Pre Design: FY24

Engineering/Design: FY26

Purchase/Construction: FY27



Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Grant	0	0	20,305,000	0	0	0	0	0	0	0	0	20,305,000
Ports Proprietary Fund	0	1,695,000	0	0	0	0	0	0	0	0	0	1,695,000
Total	0	1,695,000	20,305,000	0	0	0	0	0	0	0	0	22,000,000

FY26-35 CMMP

Baler Belt Replacement

Solid Waste

Project Description: This project would replace the belt which feeds the baler. The typical lifetime of the belt is 10 years, the belt was last replaced in 2014. Recent inspections show excess wear that if not addressed could lead to additional damage to the surrounding structure. Funds will cover cost of conveyor, labor and shipping.

Project Need: The belt system plays a crucial role in the efficient operation of the baler system at the landfill. As the solid waste staff sort through the feedstock, it is placed onto the conveyor belt, which transports it directly into the baling system. A prolonged breakdown of this system would impose significant financial and operation challenges on the division. However, with proper maintenance and oversight, the division can ensure uninterrupted service delivery for this essential function.

Development Plan & Status : This project will be funded by the Solid Waste Proprietary Fund.

Estimated Project & Purchase Timeline

Pre Design: FY26

Engineering/Design: FY26

Purchase/Construction: FY26

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Solid Waste Proprietary Fund	0	90,000	0	0	0	0	0	0	0	0	0	90,000
Total	0	90,000	0	0	0	0	0	0	0	0	0	90,000

FY26-35 CMMP

Scale Replacement

Solid Waste

Project Description: The replacement of the Solid Waste facility weighing/scale system. This project would cover materials cost, installation and commissioning.

Project Need: The current scale/weighing system at the Landfill is reaching the end of its lifetime. Since installed in 1997 the scale system has required minimal maintenance and repairs; however, due to its age and environmental conditions, a replacement will be needed in the near future. If a major breakdown were to occur, the Solid Waste Division would have to use an alternative measuring method for receiving solid waste at the City's Landfill (cubic yards). The following key points are provided to reference the current condition of the scale/weighing system:

- Cell covers have been rebuilt several times due to excess rust.
- Top plates, expansion plates are worn to the point of replacement.
- Conduits, conduit holding racks have been damaged throughout years of use and maintenance.
- Overall structural integrity has diminished due to excess rust.

Development Plan & Status : Funding for this project will come from the Solid Waste Proprietary Fund. The budget for this project was estimated based on quotes provided by vendors in past years. Once materials are procured, City staff will work with contractor to complete the replacement and commissioning.

Estimated Project & Purchase Timeline

Pre Design: FY25

Engineering/Design: FY26

Purchase/Construction: FY26

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Solid Waste Proprietary Fund	0	175,000	0	0	0	0	0	0	0	0	0	175,000
Total	0	175,000	0	0	0	0	0	0	0	0	0	175,000

FY26-35 CMMP

Solid Waste Gasifier

Solid Waste

Project Description: The pre-design, design, and construction of a Gasifier to incinerate garbage.

Project Need: The Landfill cells are reaching capacity. If the current cells reach capacity, new ones will need to be opened. Thermal processing of solid waste is the future of Landfills. Gasification is a process that uses a feedstock, often municipal or industrial waste, for a thermo chemical conversion of waste in high heat. This is done in a low oxygen environment and causes material breakdown at the molecular level. Once the molecular breakdown occurs, the gasification process recombines them to form a syngas, a gas similar to natural gas.

Development Plan & Status : Staff will conduct a feasibility study to better understand sizing and a practical design that can be integrated into the landfill.

Estimated Project & Purchase Timeline

Pre Design: FY25

Engineering/Design: FY26

Purchase/Construction: FY28

Cost Assumptions

Engineering, Design, Const Admin	800,000
Other Professional Services	100,000
Construction Services	3,000,000
Machinery & Equipment	2,500,000
Subtotal	6,400,000
Contingency (set at 30%)	1,920,000
TOTAL	**8,320,000**

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Solid Waste Proprietary Fund	700,000	0	0	7,620,000	0	0	0	0	0	0	0	8,320,000
Total	700,000	0	0	7,620,000	0	0	0	0	0	0	0	8,320,000

FY26-35 CMMP

Captains Bay Road Wastewater Line Installation

Wastewater

Project Description: This project will extend 2.5 miles of wastewater line from Airport Beach Road to OSI.

Project Need: Captains Bay Road is the logical location for future commercial and residential expansion for the community of Unalaska. Captains Bay has the docking facilities and space for equipment storage to accommodate this and other industrial growth. Oil companies have expressed interest in Unalaska's deep-water port as a resupply port for their northern seas oil exploration and drilling operations. Construction of the road and utility improvements needs to begin now so Unalaska can meet the current and future needs of the community.

Development Plan & Status : Captains Bay Road currently has sewer line services from the intersection of Airport Beach Road to Westward Seafoods, a distance of one mile. This project will eventually install a new wastewater line from Westward Seafoods entirely to OSI.

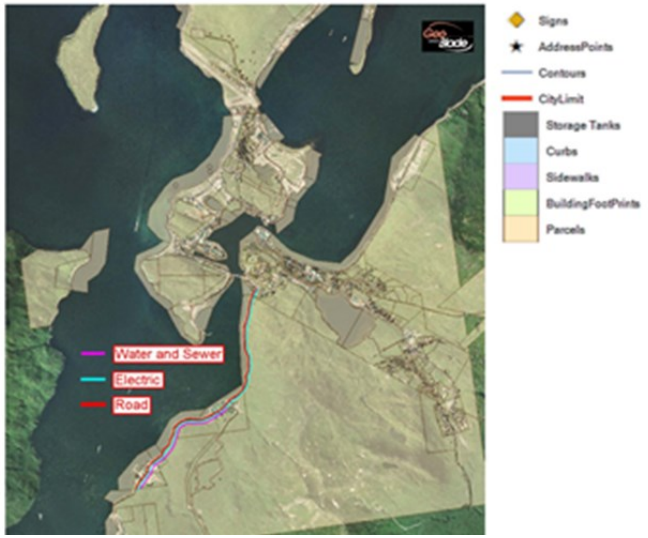
Estimated Project & Purchase Timeline

Pre Design: FY24

Engineering/Design: FY26

Purchase/Construction: FY27

Captains Bay Road and Utilities



Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Grant	0	0	11,187,600	0	0	0	0	0	0	0	0	11,187,600
Wastewater Proprietary Fund	50,000	0	0	0	0	0	0	0	0	0	0	50,000
Total	50,000	0	11,187,600	0	0	0	0	0	0	0	0	11,237,600

FY26-35 CMMP

Lift Station Improvements

Wastewater

Project Description:

FY27: The USCG lift station, located at the Unalaska Marine Center dock, and the landfill lift station, both require upgrades to improve pump station reliability and emergency alarm response. The upgrades would provide monitoring through the Wastewater Division's SCADA system.

FY28: This project would repair the interior wet-well piping and valving of Lift Station 7, located on Ballyhoo Road.

Project Need:

FY27: Both lift stations have no monitoring devices, installing communications and monitoring devices will enhance efficiency, allow real-time monitoring, improving emergency response and protect the community from potential hazards associated with wastewater collection system failures.

FY28: The interior piping and valving of Lift Station 7 shows signs of corrosion. Additionally, monitoring shows potential reverse flow caused by leaking lift station check valves. If not addressed, these issues present in the lift station will lead to unnecessary operational strain on the motors, increasing power consumption.

Development Plan & Status : This project will be funded through the Wastewater Proprietary Fund

Estimated Project & Purchase Timeline

Pre Design: FY26

Engineering/Design: FY26

Purchase/Construction: FY27

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Wastewater Proprietary Fund	0	150,000	250,000	250,000	0	0	0	0	0	0	0	650,000
Total	0	150,000	250,000	250,000	0	0	0	0	0	0	0	650,000

FY26-35 CMMP

Biorka Drive Cast Iron Waterline Replacement

Water

Project Description: This project will replace approximately 600 linear feet of cast iron pipe segment under Biorka Drive with ductile iron. The replacement of this pipe was designed already by Regan Engineering, but the project was dropped when paving of Biorka Drive, which was the driving factor, was shelved.

Project Need: This section of water pipe was installed in the 1940's with cast iron pipe, the last section of cast iron pipe in Unalaska's water system. This line has been repaired in the past and has been is service longer than its life expectancy. Cast iron is a brittle material that is also susceptible to corrosion. Cast iron pipe often fails catastrophically when subjected to excessive pressure surge or ground movement. Pipe failure becomes more frequent with a cast iron pipe as it ages and loses wall thickness to corrosion. Emergency repairs after an unexpected catastrophic pipe failure are usually many times more expensive than proactive pipe replacement due to incidental damage, overtime, lack of in-stock repair materials, and general disruption of utility operations. Preventative replacement of pipes with high failure risks is a good practice in order to avoid the more costly emergency repair situation brought by a pipe failure.

Development Plan & Status : The budget for this project was estimated from the Water Master Plan and is an estimate at this point in the process. A more accurate budget will be determined during the design phase of the project. Funding for this project will come from the Water Proprietary Fund. Total cost for this project is estimated at $396,500.

Estimated Project & Purchase Timeline

Pre Design: FY28

Engineering/Design: FY28

Purchase/Construction: FY29

Cost Assumptions		
	Engineering, Design, Construction Admin	$30,000
	Other Professional Services	
	Construction Services	
	Machinery & Equipment	$275,000
	Subtotal	$305,000
	Contingency (30%)	$91,000
	Total Funding Request	$396,500

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Water Proprietary Fund	0	0	0	396,500	0	0	0	0	0	0	0	396,500
Total	0	0	0	396,500	0	0	0	0	0	0	0	396,500

FY26-35 CMMP

Icy Creek Reservoir Dredging

Water

Project Description: This project aims to address the maintenance and dredging of the Icy Creek Reservoir, which has accumulated a significant amount of aggregate due to run-off over the recent years. If left unaddressed, the excess aggregate could compromise water quality, posing risks to public health and safety as well the utility's Filtration Avoidance operation. The project is split into two phases: an evaluation phase and a construction phase.

Project Need: The Icy Creek Reservoir is the City's main water source. It can store up to 8 MGD of raw water under optimal conditions, the water division can also utilize this water for distribution if it meets the filtration avoidance parameters. However, silt and aggregate accumulation can lead to water quality issues as well as reduce available storage, both which can be avoided with proper maintenance.

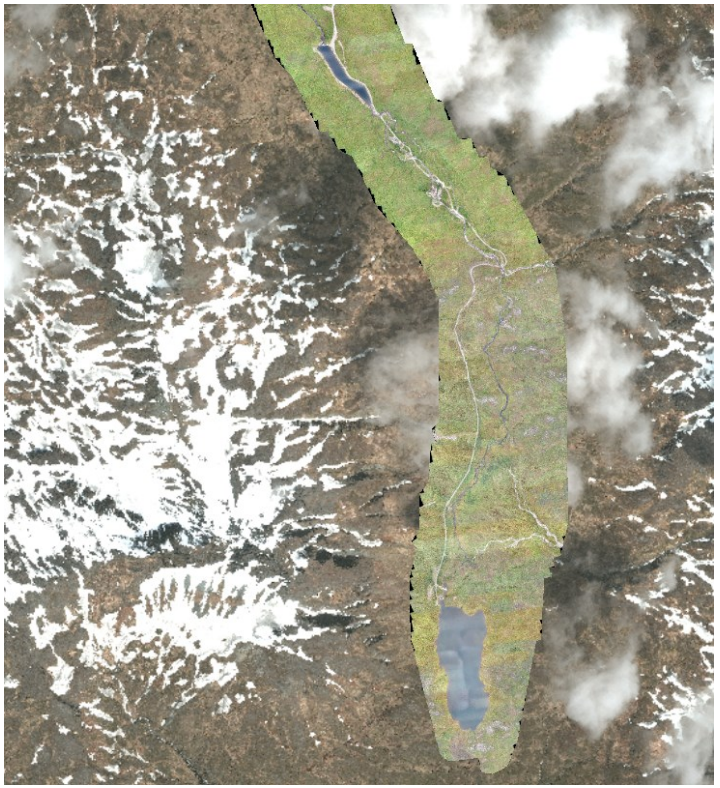
Development Plan & Status : This project will be funded through the Water Proprietary Fund.

Estimated Project & Purchase Timeline

Pre Design: FY27

Engineering/Design: FY27

Purchase/Construction: FY28



Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Water Proprietary Fund	0	0	100,000	500,000	0	0	0	0	0	0	0	600,000
Total	0	0	100,000	500,000	0	0	0	0	0	0	0	600,000

FY26-35 CMMP

Icy Lake Capacity Increase & Snow Basin Diversion

Water

Project Description: This project will increase the height of the existing dam on the north side of Icy Lake and construct a new dam on the south end of Icy Lake.
· The existing sheet pile dam at the north end of the lake would be raised 5 feet and the dam length increased from 67 to 98 feet.
· A new sheet pile dam, approximately 6 feet tall by 193 feet long would be built at the south end of the lake.
· Additional grading and riprap would be required for a larger spillway apron at the north dam.
· Riprap would be required for wave erosion protection of the south dam.· Grouting at the north and south dams would be required to seal fractured bedrock.

Project Need: Additional capacity for raw water storage at Icy Lake would be beneficial to help span processing seasons that occur during the more prolonged and frequent dry weather periods. Water system operators use the lake to "bank" surplus water between processing seasons when demand is low, with the intent that by the beginning of a processing season the utility is starting out with a full lake. During heavy processing the lake level gradually drops as demands exceed the combined capacity of Icy Creek and the wells and operators release lake water into Icy Creek. This operational strategy has been stressed in recent years when dry weather coincides with processing seasons and the lake is drawn nearly empty. If the lake is run empty and the water system is not able to meet demands, then the result would be water rationing and having to reduce fish processing throughput or diverting fish to processors in other communities.

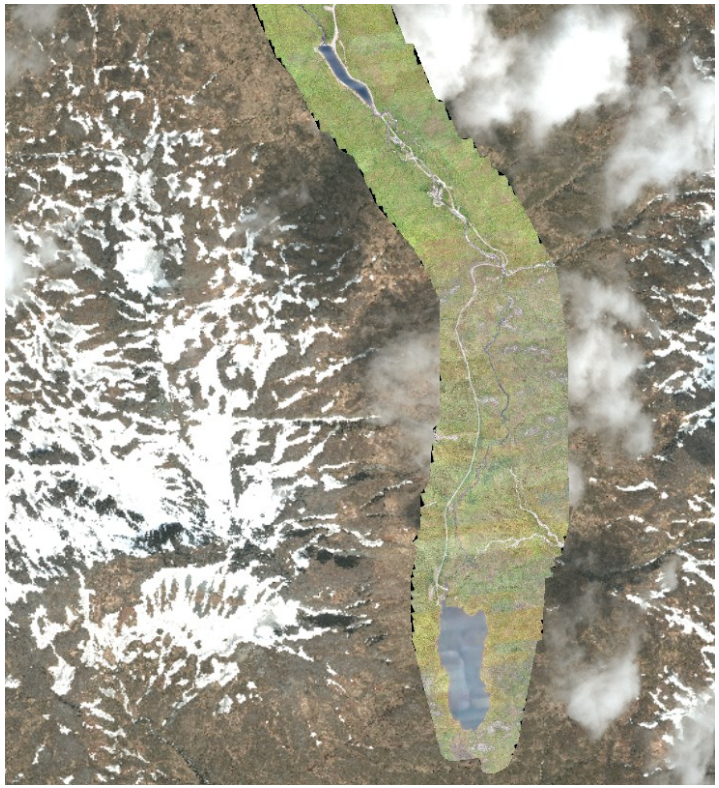
Development Plan & Status : The budget for this project was estimated from the Water Master Plan and is a approximate guess at this point in the process. A more accurate budget will be determined during the design phase of the project.

Estimated Project & Purchase Timeline

Pre Design: FY30

Engineering/Design: FY31

Purchase/Construction: FY31



Cost Assumptions	
Engineering, Design, Construction Admin	$150,000
Other Professional Services	$30,000
Construction Services	$2,020,000
Machinery & Equipment	
Subtotal	2,200,000
Contingency (30%)	$660,000
Total Funding Request	2,860,000

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Water Proprietary Fund	0	0	0	0	0	0	2,860,000	0	0	0	0	2,860,000
Total	0	0	0	0	0	0	2,860,000	0	0	0	0	2,860,000

FY26-35 CMMP

Installation of Meter and Booster Pump at Agnes Beach PRV Station

Water

Project Description: This recommended project would add water metering and a booster pump system at the Agnes Beach PRV station. The water metering will aid in leak detection, and utility management and understanding of where water is being used and when. The booster pump will provide water supply redundancy to Westward Seafoods, one of the largest customers in the water system, as well as redundancy to any further development along Captain's Bay Road.

Project Need: The Agnes Beach PRV station drops the pressure of water from Pressure Zone 2 (Captains Bay Road) to Pressure Zone 3 (Town) hydraulic grade. The station also allows for water to flow to the higher elevation areas of Haystack Hill with an option to allow external boosting in the event of a fire demand on Haystack Hill. The current PRV set up does not allow any method of measuring water flow through the station and severely limits the ability to reverse flow from the wells in the lower pressure Zone 3 to higher pressure Zone 2 (Westward Seafoods). A booster pump will allow for the pumping of water from the lower pressure zone to the higher pressure zone in the event of a shutdown of the Pyramid Water Treatment Plant due to, for example, high turbidity.

Development Plan & Status : The budget for this project was estimated from the Water Master Plan and is a WAG at this point in the process. A more accurate budget will be determined during the design phase of the project. Funding for the project will come from the Water proprietary Fund.

Estimated Project & Purchase Timeline

Pre Design: FY28

Engineering/Design: FY29

Purchase/Construction: FY30

Cost Assumptions		
	Engineering, Design, Construction Admin	$50,000
	Other Professional Services	$20,000
	Construction Services	$160,000
	Machinery & Equipment	$70,000
	Subtotal	$300,000
	Contingency (30%)	$90,000
	Total Funding Request	$390,000

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Water Proprietary Fund	0	0	0	0	70,000	320,000	0	0	0	0	0	390,000
Total	0	0	0	0	70,000	320,000	0	0	0	0	0	390,000

FY26-35 CMMP

Pyramid Water Storage Tank

Water

Project Description: This project will construct a second 2.6 million gallon Chlorine Contact Tank (CT Tank) next to the existing CT Tank. It will provide much needed clear water storage and enable maintenance to be done on the interior of either tank regardless of process seasons or weather. The project will require the installation of approximately 200 ft. of 16" DI water main, 200 ft. of 8" DI drain line, and 100 ft. each of 1" sample line and control wiring

Project Need: Additional storage provided by this tank will help to meet many of the issues mentioned in the 2004 Water Master Plan. Even in the Water Distribution System's current configuration, this new tank will provide an additional 960,000 gallons of the additional 4 MG of finished water storage recommended in the Master Plan. When planned future development is completed on Captain's Bay Road, over 2.2 MG of water storage will be available at the maximum Pyramid Water Treatment Plant capacity of 9 MGD. The additional storage will provide a much needed buffer, allowing time to troubleshoot and repair problems in the event of an equipment failure or system malfunction. It will reduce the likelihood of water shortages and/or outages during the Pollock Processing seasons. Additional benefits include:

- Reduce service interruption, boil water notices, and risk of system contamination during maintenance.
- Allow routine maintenance to be done on the interior or exterior of either tank during any season, prolonging the life of these tanks.
- Expand and upgrade both the water treatment and distribution systems, using the full 9 MGD design capacity of the new water treatment plant will be possible.
- Improve the flow characteristics of the Pyramid Water Treatment Plant. Plant operators will be able to allow the tanks to absorb the high and low flows, maintaining a more stabilized treatment process and allowing the UV treatment process to operate more efficiently.

Estimated Project & Purchase Timeline

Pre Design: FY14

Engineering/Design: FY26

Purchase/Construction: FY27

Development Plan & Status : A "Certificate to Construct" and a "Certificate to Operate" are required from ADEC, obtained through application by the designing engineer.

Engineering, Design, Const Admin	647,000
Other Professional Services	-
Construction Services	6,379,879
Machinery & Equipment	-
Subtotal	**7,026,879**
Contingency (set at 30%)	2,108,064
TOTAL	**9,134,943**
Less Other Funding Sources (Grants, etc.)	-

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Water Proprietary Fund	1,228,750	0	7,906,193	0	0	0	0	0	0	0	0	9,134,943
Total	1,228,750	0	7,906,193	0	0	0	0	0	0	0	0	9,134,943

FY26-35 CMMP

Sediment Traps Between Icy Lake and Icy Creek Reservoir

Water

Project Description: This project consists of constructing one or more sediment traps in Icy Creek upstream of the reservoir. The sediment trap system should essentially be a series of deep, wide step pools with rock check dams along the creek that decrease the flow velocity and allow rocks and sediment to settle out. The sediment traps should also create a location for rocks and sediment to accumulate that would be easier for heavy equipment to access, easier to clean out, and potentially allow the reservoir and Pyramid WTP to remain in service while the upstream sediment traps are being cleaned. Although the sediment traps will not eliminate shutdown of the Pyramid WTP due to turbidity spikes during high flow events, it could reduce the occurrence and duration of shutdowns.

Project Need: Large amounts of rock and sediment move downstream along Icy Creek during high flow events. The rocks accumulate at the inlet end of the Icy Creek Reservoir as seen in Figure 30 and heavier sediment accumulates behind the dam. The rocks and sediment reduce the capacity of the reservoir. Draining of the reservoir and removal of rocks and sediment is a challenging exercise that is required periodically and also requires a lengthy shutdown of the Pyramid WTP. Turbidity issues due to suspended fine-grained sediments during high flow events also regularly cause shutdown of the Pyramid Water Treatment Plant.

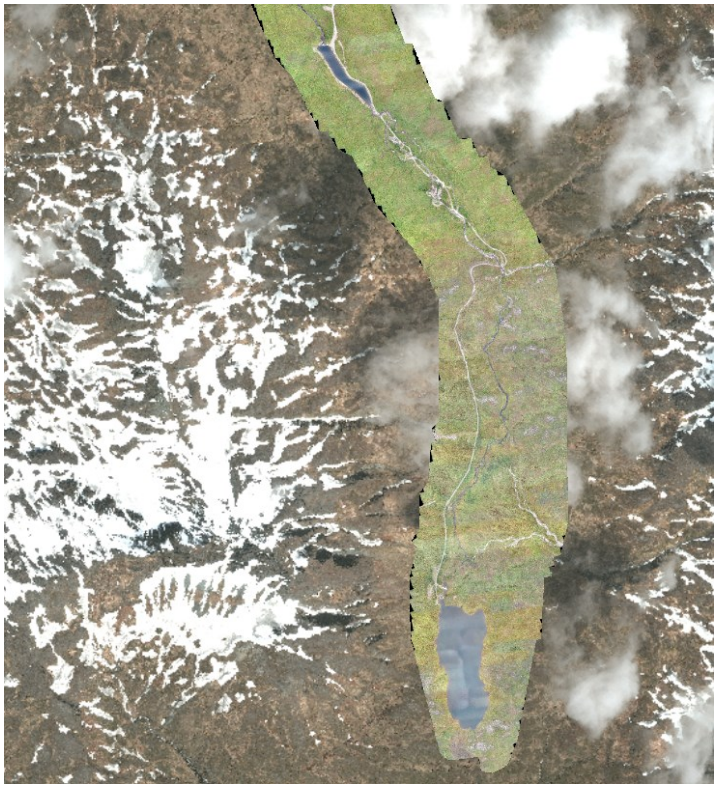
Development Plan & Status : The budget for this project was estimated from the Water Master Plan. A more accurate budget will be determined during the design phase of the project. Funding for this Project will come from the Water Proprietary Fund.

Estimated Project & Purchase Timeline

Pre Design: FY26

Engineering/Design: FY26

Purchase/Construction: FY27



Cost Assumptions	
Engineering, Design, Construction Admin	$50,000
Other Professional Services	$50,000
Construction Services	$400,000
Machinery & Equipment	
Subtotal	$500,000
Contingency (30%)	$150,000
Total Funding Request	$650,000

Source	Appropriated	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Water Proprietary Fund	0	650,000	0	0	0	0	0	0	0	0	0	650,000
Total	0	650,000	0	0	0	0	0	0	0	0	0	650,000

CITY OF UNALASKA
UNALASKA, ALASKA

RESOLUTION 2025-16

A RESOLUTION OF THE UNALASKA CITY COUNCIL ADOPTING THE COMPREHENSIVE PARK AND RECREATION MASTER PLAN

WHEREAS, the Comprehensive Park and Recreation Master Plan, prepared by Berry Dunn LLC, was presented to City Council on February 25, 2025; and

WHEREAS, the Comprehensive Park and Recreation Master Plan is the framework for the City's park development, maintenance, and recreational programming efforts over the next 10 to 20 years, and displays a commitment to the flourishing of both individual community members and our collective community; and

WHEREAS, the plan is not merely a document, it is an essential tool for guiding the City through a period of profound change, ensuring that our parks and recreational facilities grow to meet the needs of our community members now and into the future; and

WHEREAS, over the past year, through a thoughtful and rigorous collaboration between PCR staff and Berry Dunn LLC, has engaged community members in a meaningful way, reaching 218 members of our population and gathering insight from 106 teenagers, ensuring that this plan is deeply rooted in the values and needs of our citizens; and

WHEREAS, a statistically valid survey of 101 households, conducted in conjunction with the plan, further solidifies understanding of our citizens' perspectives, enriching this plan with data and insight that will guide us forward; and

WHEREAS, the Comprehensive Park and Recreation Master Plan is designed to be a strategic and authoritative guide, not just for City staff and administration, but for all those involved in shaping the future of Unalaska's recreational opportunities, promoting an environment in which people can thrive, develop, and connect with one another; and

WHEREAS, the plan is built upon six central goals and strategies, each one being a step toward improving the City's park systems and expanding the opportunities for recreation for all members of the community, ensuring that the vision is both clear and executable; and

WHEREAS, upon adoption, the plan will be incorporated into the City's Comprehensive Master Plan, seamlessly aligning park and recreational development within the broader goals of the City's long-term strategic planning.

NOW, THEREFORE, BE IT RESOLVED that the City Council of Unalaska, recognizing the profound importance of this plan for the well-being and growth of the community, does hereby endorse and adopt the Unalaska Parks, Culture and Recreation PARK AND RECREATION COMPREHENSIVE MASTER PLAN, as a foundational step toward securing a better, more vibrant future for our City and its citizens.

BE IT FURTHER RESOLVED, this resolution affirms the Unalaska City Council's commitment to ensuring that our parks and recreational facilities will serve as lasting spaces for growth, connection, and community well-being for the citizens of Unalaska.

PASSED AND ADOPTED by a duly constituted quorum of the Unalaska City Council on March 11, 2025.

_____
Vincent M. Tutiakoff, Sr.
Mayor

ATTEST:

_____
Estkarlen P. Magdaong, CMC
City Clerk

MEMORANDUM TO COUNCIL

To: Mayor and City Council Members
From: Roger Blakeley, PCR Director
Through: Marjie Veeder, Acting City Manager
Date: March 11, 2025
Re: Resolution 2025-16, Adopting the Comprehensive Park and Recreation Master Plan

SUMMARY: On February 25, 2025, Art Thatcher of Berry Dunn presented the Comprehensive Park and Recreation Master Plan to the City Council during a work session. The Comprehensive Park and Recreation Master Plan is poised to serve as the guiding framework for the development, maintenance, and programming for Unalaska's parks and recreational facilities for the next 10 to 20 years. Staff recommends adoption.

PREVIOUS COUNCIL ACTION: On November 28, 2023, Council adopted Resolution 2023-44 Authorizing the City Manager to enter into a contract with Berry Dunn to provide services for a Park and Recreation Master Plan. On February 25, 2025, the Comprehensive Park and Recreation Master Plan was presented to Council in Work Session.

BACKGROUND: The purpose of the master plan is to guide the development of recreational needs in Unalaska for the next 10-20 years. Additionally, outside funding sources oftentimes require a Council-approved comprehensive master plan to award funds.

Over the past year, PCR, in collaboration with Berry Dunn, has been deeply engaged in the Parks and Recreation Master Plan process. This process included a robust public engagement effort, reaching 218 community members directly and engaging 106 teenagers. In addition, a statistically valid survey was conducted, where 101 households provided their perspectives on various aspects of park and recreation services. This data collection has been essential in shaping the recommendations and strategies outlined in the plan.

DISCUSSION: The Master Plan is designed to be an authoritative guide for both city staff and administration in terms of project development and programmatic initiatives over the next decade and beyond. The plan is structured around six primary goals and strategies, each aimed at advancing the park system and enhancing recreational opportunities for the community. Upon approval, this plan will be incorporated into the City's Comprehensive Master Plan, ensuring that park and recreational development aligns with broader city planning objectives.

ALTERNATIVES: Council may choose to adopt the plan, or not. Adoption of the Master Plan will establish a clear framework to guide capital improvement projects and will provide a basis for securing funding for larger initiatives through alternative funding sources. If Council does not choose to adopt the plan, while still providing valuable data and insights into the state of the City's parks and recreation facilities and programs, not adopting the plan will prevent the establishment of a cohesive framework for long-term planning and may hamper any award of grant funding.

FINANCIAL IMPLICATIONS: While the Parks and Recreation Master Plan identifies numerous potential projects for inclusion in the City's Comprehensive Master Plan and the Capital and Major

Maintenance Plan (CMMP), the approval of the plan itself carries no immediate financial obligations. Each proposed project will be subject to separate approval by the City Council, including detailed financial evaluations, before any appropriations are made.

LEGAL: There are no legal ramifications associated with the adoption of the Comprehensive Park and Recreation Master Plan.

STAFF RECOMMENDATION: Staff recommends the adoption of Resolution 2025-16 to formally integrate the Comprehensive Park and Recreation Master Plan into the City's broader planning framework.

PROPOSED MOTION: I move to adopt Resolution 2025-16.

CITY MANAGER COMMENTS: I support the Staff Recommendation.

ATTACHMENTS:

PCR Master Plan

UNALASKA

PARKS, CULTURE AND RECREATION

Park and Recreation Comprehensive Master Plan

Acknowledgments

UNALASKA CITY COUNCIL

Mayor
Vincent M. Tutiakoff, Sr.

City Council Members
Thomas D. Bell
Darin Nicholson
Daneen Looby
Anthony Longo
Alejandro “Bong” Tungul
Shari Coleman

PARKS, CULTURE AND RECREATION, ADVISORY COMMISSION

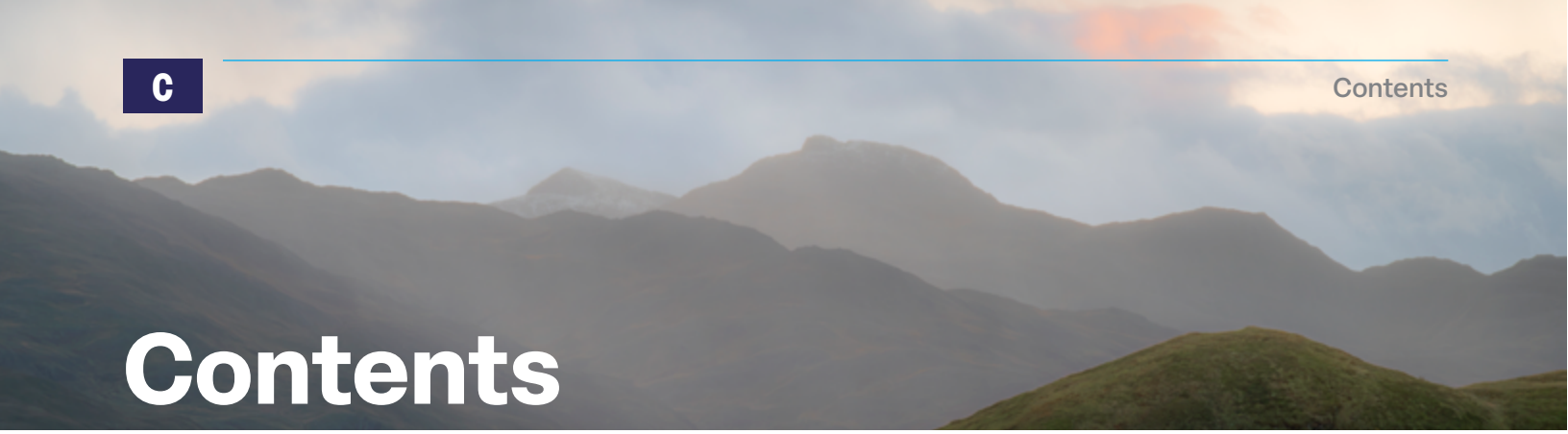
Chair Thomas Roufos
Greg Peters
Ben Knowles
Jill Spetz
Avril Straub
Kim Hankins

UNALASKA COMPREHENSIVE MASTER PLAN PROJECT TEAM

Roger Blakeley
Parks, Culture, and Recreation Director
Jolene Longo
Business and Operations Manager
Albert Burnham
Recreation Manager
Karen Kresh
City Librarian
Amanda Schmahl
Aquatics Manager

CONSULTANTS

BerryDunn, LLC
Bettisworth North
ETC Institute



Contents

SECTION ES

EXECUTIVE SUMMARY

This Executive Summary illustrates key portions of the Parks, Culture and Recreation (PCR) Park and Recreation Comprehensive Master Plan (PRMP), providing an understanding of the plan, process, and research. Each section should be reviewed along with the appendix documents that include data used to develop the PRMP.

Purpose of the PRMP

This plan is intended to be a road map for PCR to provide parks and recreation services for the next five to ten years and beyond. The plan is based on extensive community engagement, with goals, strategies, and action items developed based on data reported in the plan.

Planning Process

Developing the PRMP took 12 months and was undertaken by City of Unalaska leadership and staff, community members, and the BerryDunn consulting team, assisted by ETC Institute, a national survey firm, and Bettisworth North, an Anchorage-based planning and landscape architecture firm. The collaborative approach helped create a plan based on local knowledge of staff and community members, and the consultants' expertise. Each section of the plan included data that came from the Unalaska community's input. See Figure 1.

Development of this plan included the following tasks:

- Document collection and review
- Demographics and trends analysis
- Community engagement process
- A needs assessment survey
- A park and open space inventory and level-of-service (LOS) analysis
- A recreation assessment
- A financial analysis
- A maintenance and operations analysis
- Recommendations–guiding principles (GPs), goals, strategies, actions, and a capital project list

Figure 1: Key Elements of the Planning Process

Engaging the Unalaska Community

Many Unalaska community members participated in the development of the PRMP, as shown in Table 1.

Table 1: Engagement with Unalaska Community

Engagement Type	No. of Community Participants
Focus group and stakeholder meetings	110
Youth and teen survey, interviews, and classroom projects	141
Digital engagement through Social Pinpoint	75
Open house event	59
Spring festival intercept event	134
Heart of the Aleutians intercept event	85
Statistically valid survey	101

Overall, 705 interactions helped shape the plan. Unalaska residents either visited the project's Social Pinpoint website, shared priorities by participating in a focus group or intercept event/activity, or completed a survey. An assumption is made that approximately 650 of the 705 interactions came from unique individuals who represented 16% of Unalaska's population.

Parks LOS Summary

The PCR is responsible for parks that collectively provide 41 components made up of playgrounds, walking paths, ballfields, and other park amenities. The components are distributed into four community parks, two special use parks, and four neighborhood parks. The system provides 6.4 acres per 1,000 residents. When the number of residents per park is considered, PCR provides 410, about one third of the density of park use compared to the national average. Within the system, most park components are in good shape and serviceable. Of the 42 components, 16 are in need of upgrade or replacement.

Recreation facilities are discussed at length in the PRMP. The Aquatic Center requires renovation; community members prioritized new weight rooms and an indoor field house.

PRMP Goals and Strategies

In addition to 15 GPs identified in Section 8, six goals are identified, each with strategies and action items. The actions are identified as low, medium, and high priorities.

	GOAL 1: Deliver high-quality recreation facilities that provide the greatest level of support for residents and the seasonal fishing industry
1.1	**Strategy:** Provide improved indoor recreation facilities
1.2	**Strategy:** Provide additional indoor recreation facilities
	GOAL 2: Provide high-quality aquatics facilities that support recreation and the safety of Unalaska residents
2.1	**Strategy:** Replace existing aquatic center with new 25-yard by 25-meter competition and recreation aquatic facility
	GOAL 3: Deliver recreation programs that continue to build a sense of community as the focal point for Unalaska residents' and visitors' quality of life
3.1	**Strategy:** Apply data-driven decision-making to programming to address community member participation capacity
3.2	**Strategy:** Conduct continual program evaluation
3.3	**Strategy:** Consider additional program support for youth and teens, ages 13–18
3.4	**Strategy:** Consider mobile recreation programming
3.5	**Strategy:** Improve fitness and wellness opportunities in Unalaska
	GOAL 4: Maintain, preserve, and enhance safe parks and park experiences
4.1	**Strategy:** Provide improved outdoor sports opportunities
4.2	**Strategy:** Provide additional outdoor park opportunities
4.3	**Strategy:** Provide improved playground opportunities
4.4	**Strategy:** Improve LOS by adding components
4.5	**Strategy:** Create additional walking opportunities in parks and around the city
4.6	**Strategy**: Move or update the skate park to an all-wheels park
	GOAL 5: Deliver parks and recreation services in a financially resilient and sustainable manner
5.1	**Strategy:** Focus on methods of formal communication
5.2	**Strategy:** Work to improve access to recreation programs
	GOAL 6: Provide library services that connect residents to educational opportunities, digital literacy, and the power of reading
6.1	**Strategy:** Place a greater focus on adult and child programs

SECTION 01

DEVELOPING THE PRMP

Developing the PRMP was accomplished by a combination of the PCR staff and the BerryDunn consulting team, assisted by ETC Institute, a national survey firm, and Bettisworth North, architects and planners. Unalaska community members included youth and teens, adults, program participants, recreation facility users, and seniors who provided invaluable input at each stage of the planning process.

Unalaska's unique community required a great amount of local knowledge and input of staff, appointed and elected city leadership, and many stakeholders. The consultants applied their expertise and best practices reflective of other similar communities.

The key elements of the planning process are illustrated in Figure 1 in the Executive Summary.

Communication between the consultants and the city's project team was key to the successful planning process and included biweekly project management check-in meetings, and multiple input opportunities for the community and the PCR Advisory Committee that included project updates and status.

PRMP Project Objectives

The city defined project objectives, which set the foundation for the planning process. The objectives set the stage for the PRMP that is intended to position PCR to meet the needs of Unalaska residents and visitors through 2034 and beyond. The PRMP is intended to help ensure PCR offers opportunities for families and guests to enjoy well-placed and maintained playground equipment, maximize outdoor recreation opportunities, and help position the PCR to be as effective as possible in providing recreation delivery.

The PRMP was intended to identify ways to improve access and opportunities for recreation for residents, regardless of demographic and socioeconomic status.

The following objectives were established as critical success factors for the project:

Describe existing, new, and pending regulations and their impacts to PCR. Provide recommendations about regulatory required and non-regulatory changes and improvements.

Provide a Capital Improvements Program, prioritizing new recommended systems or processes as well as current and future rehabilitation and replacement needs in short-, medium-, or long-term phases.

- Evaluate current LOS for parks and with appropriate recommendations for improvements.
- Complete an assessment of PCR's budget, operations, and staffing that includes employee training and O&M needs.
- Provide an assessment of recreation program and facilities, including the Unalaska Public Library.
- Complete a demand and needs assessment, demographics, and trends analysis.
- Benchmark PCR with at least three similar communities.

PCR's Mission and Values

The PRMP considered the PCR mission statement and aspirational values at each step.

PCR MISSION STATEMENT

"To enrich our diverse community by providing exemplary, accessible, and safe cultural, leisure, and recreation facilities and services that nurture youth development and inspire people to learn, play, and engage with our unique and welcoming environment."

ASPIRATIONAL VALUES

CREATE INSPIRING PROGRAMMING

ENGAGE OUR COMMUNITY

ENSURE ACCESSIBILITY TO ALL COMMUNITY MEMBERS

PROVIDE EXEMPLARY SERVICE TO DELIVER OUR PROGRAMS AND SERVICES

PCR Services Profile

The PCR department was established in 1980 and provides a 30,000-square-foot community center, aquatic center, and public library as well as eight parks, Burma Road Chapel, the Henry Swanson House, and two school facilities. The community provides important economic impact and support for the fishing industry in the remote location 800 miles south of Anchorage in the north Pacific and Bering Sea.

Unalaska's economy is based on commercial fishing, seafood processing, fleet services, and marine transportation, contributing approximately 1.7 billion pounds of frozen seafood to the United States and worldwide. Quality of life of those who work and support this industry is greatly impacted by the critical facilities and services the PCR provides.

The PCR provides 26.1 acres of parkland in eight parks and two school facilities that include 42 park components such as playgrounds, sports fields, open turf areas, etc.

Related Planning Efforts and Integration

To gain a thorough understanding of PCR's challenges and opportunities, BerryDunn reviewed previous planning efforts. This summary review provided background and perspective used throughout development of the PRMP. The consultants recognize and acknowledge PCR's work in developing the business plans described in this section.

Comprehensive Plan 2020 Unalaska, Alaska (adopted 2011)

This plan, prepared by the City of Unalaska and adopted in 2011, is the road map for future development within the city. The city considered the health and safety of residents, businesses, and visitors. Some notable actions that have implications for the current PCR master planning effort are as follows:

- Overall Quality of Life. Secondary action #4, make community more bike friendly.
- Construct additional restrooms along walk/bike trails.
- Erect additional/better signage along trails, walkways, and public facilities and leading to community parks, sites, and services.
- Consideration should also be given to the strategic placement of bike storage racks at heavily visited attractions, such as schools, the library, retail shops, tourist attractions, etc.
- Overall Quality of Life. Secondary action #5, embrace our ethnic diversity.
- Support the Qawalangin Tribe's efforts to safeguard and support the Unanagan language, culture, customs, and traditions.
- Education, Art, Culture, and Entertainment. Secondary action #5, continue the development of park, cultural, and recreation facilities and offering of programs.
- The City of Unalaska Parks, Culture and Recreation 2005–2009 Master Plan revealed that the top three PCR facilities were all-purpose trails, a fitness center, and expansion of the community center.
- Complete all-purpose trails to and from the Unalaska spit, from the Port of Dutch Harbor to Unalaska, and connect to trails in Unalaska.
- Connect the Carl E. Moses Boat Harbor to existing trails.
- Construct additional restrooms along walk/bike trails.
- Erect additional/better signage along trails, walkways, and public facilities and leading to community parks, sites, and services.
- Provide additional recreational services on Amaknak Island as land availability and affordability allows.
- Expand activities and programs (bowling, tumbling, dance, climbing wall, and ropes course, put diving board back in pool, pitch and putt).
- Develop ski/rope tow area.
- Purchase/lease property at Tutiakoff Park.
- Build a large pavilion-style structure for outdoor events.
- Build an additional community gymnasium.
- Expand Community Park.
- Create dock/trail at Margaret's Bay fishing area.
- Maintain new Iliuliuk Creek float next to Alyeska Seafoods plant.
- Land Use, Transportation, and Infrastructure.
- Identified apparent land use conflicts/opportunities for improvements: placement of a children's play area adjacent to an industrial zone.

Parks and Operations Fiscal Year (FY) 2025 Business Plans July 1, 2024 - June 30, 2025 (2024).

Prepared by the PCR, these documents strive to align budget with PCR goals and objectives, clarify the goals and objectives for the City Council members and the community, assess and adapt to resident and visitor needs, and enhance outdoor experiences. These reports provide an overview of existing facilities as well as near-term projects including:

- **Ounalashka Community Park:** Potential to relocate the skate park to this park and expand

to an all-wheels park or pump track. New equipment for the soccer fields can be overlaid in the outfield. An additional goal is to update the kitchen to get more vendor participation.

- **Skate Park:** Potentially relocate park due to the expansion of the adjacent clinic.
- **Expedition Park:** Replace site amenities such as benches and grills.
- **Sitka Spruce Park:** Add new grills that were removed during the playground construction.
- **Ideas:** Add a rental shop at the Burma Road Chapel (camping gear, fishing, bike or electric scooters, wildlife viewing equipment, kayak/paddleboard/canoe, local artisan souvenirs).

Unalaska Land Use Plan (2015)

Written as a component of the Unalaska Comprehensive Plan (2011), this document provides guidance for the development of the city based on land use. The City of Unalaska is considered by neighborhood, providing existing uses, recommended uses, and specific notes. Two applicable sections are as follows:

- Standard Oil Hill Subarea: Shows industrial storage adjacent to Sitka Spruce Park. This is not an ideal adjacency. The plans recommend reducing the amount of industrial storage from 10% to 5%. There is also a recommendation to increase public open space from 15% to 16%
- Downtown/Unalaska Townsite Subarea: Industrial storage is sandwiched by institutional uses (including the library). The plan's recommendation is to remove all industrial storage from this area. The stated goal of this area is to be walker-friendly, youth-oriented, and a central focal point of the community.

Transportation Study 2017– 2018, City of Unalaska Planning Department (2018)

This study assessed the feasibility of a public transit system for the City of Unalaska. During the August–September study period, 92% of trips were made by car or truck, with pedestrians and bikers only accounting for 1%. The Planning Department suggests this is because distances are far between amenities and the weather is unpredictable. Of the 190 Bus Study Survey responses, 45% of respondents reported they do not have their driver's license. The report states that most of this unlicensed population works in the processing plants and stays close to the plants and the on-site bunkhouses.

Commission for Accreditation of Parks and Recreation Agencies (CAPRA), Standards for Accreditation

CAPRA provides 68 standards that are fundamental to the success of all parks and recreation agencies across the United States. Achieving accreditation is a long and challenging process. BerryDunn recommends that PCR become highly familiar with the standards. This recommendation is not meant to recommend immediate action toward accreditation but rather to utilize these standards as guides to best practices. The standards are grouped as follows:

- Agency Mission and Purpose
- Administration and Organizational Resources
- Community and Park Planning
- Human Resources Planning, Workforce Development, and Culture
- Financial Management, Responsibility, and Accountability
- Programs and Services Management
- Facilities and Land Use Management
- Law, Risk Management, Safety, and Security
- Marketing, Communications, and Community Engagement
- Evaluation, Assessment, and Research

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SECTION 02

COMMUNITY PROFILE

Demographic Profile

BerryDunn conducted a thorough demographic assessment for the City of Unalaska as part of the master planning process, focusing on household and economic data. This analysis offers valuable insights into potential markets for community amenities such as parks, trails, waterways, and recreational and library services, highlighting how the community may develop.

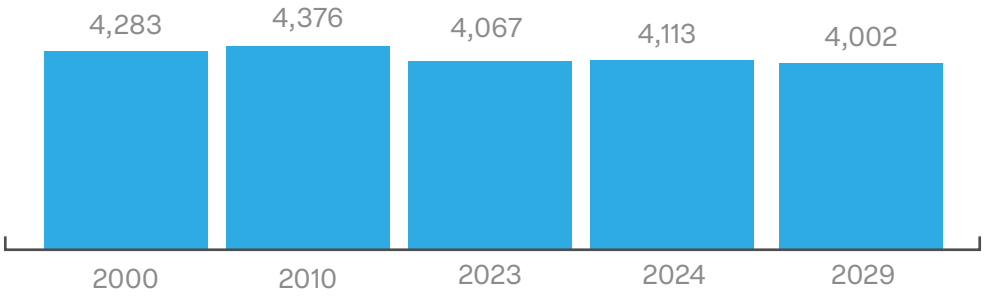
To compile this analysis, BerryDunn gathered population statistics from the State of Alaska, examining age distributions, income levels, racial and ethnic demographics, and other household characteristics using ArcGIS Business Analyst with U.S. Census estimates from April and July 2024. The review focused on Unalaska's boundaries and included relevant comparisons with data from Alaska and the United States to enhance contextual understanding.

Unalaska features a robust commercial fishing industry, leading to a notable increase in both population and diversity during fishing seasons. While the workforce in the fishing industry may not be considered part of the permanent demographic makeup, their presence significantly impacts the parks and recreation system.

Population Characteristics

In 2023, the population of Unalaska was approximately 4,067 residents, marking a minor decrease from 2010 (Figure 2). However, in 2024, there was a small increase in population. Projections indicate a relatively stable population. It is crucial to consider population forecasts alongside shifts in the local fishing industry.

Figure 2: Population Change (2000–2029)



The State of Alaska Department of Labor and Workforce Development, Research and Analysis Section provides population projections to 2050 based on census data. Unalaska makes up greater than 80% of the Western Aleutians population category tracked by the state. While the projections include areas outside Unalaska, the trends show anticipated increases. It is important to acknowledge that youth account for an increase of only 42 residents, anticipated by 2050. See Table 2.

Table 2: State of Alaska Western Aleutians Population Projections 2023–2050

Year	Population
2023	4,894
2025	5,024
2030	5,138
2035	5,252
2040	5,349
2045	5,425
2050	5,486

Population Growth Rate

The city's population annual growth rate from 2010 to 2020 was -0.28%. According to projections from Esri Business Analyst, the city was expected to see a decline of 1.37% from 2020 to 2024 but was adjusted to -0.67% based on updated population forecasts generated in July 2024. From 2024 to 2029, the population is expected to stay at a similar rate at a decline of 0.65%. See Table 3.

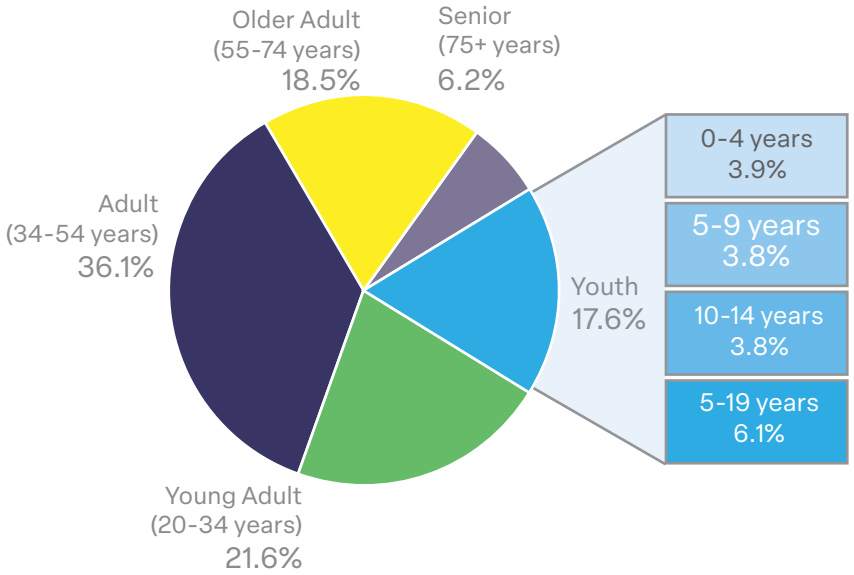
Table 3: Compound Annual Growth Rate (2010–2029)

Unalaska	
2010–2020 Compound Annual Growth Rate	-0.28%
2020–2024 Compound Annual Growth Rate	-0.67%
2024–2029 Compound Annual Growth Rate	-0.65%

Age Distribution

The median age of residents is 41.9 years, which is slightly higher than the median age of both Alaska (36.1) and the United States (39.1). The age groups composing the largest percentages of Unalaska's population are adults (35–54 years) at 36.1%, young adults (20–34 years) at 21.6, and older adults (55–74 years) at 18.5%. See Figure 3.

Figure 3: Age Distribution (2023)



Age Change Over Time

By 2028, the youth and adult populations are projected to decrease minimally, while the senior and young adult populations will increase slightly. Overall, Unalaska's population in each age group is projected to remain stable into 2028.

Household Characteristics

Figure 4 illustrates the median household income and the incidence of poverty among households in the city, comparing these figures to those of Alaska and the United States. The data indicates Unalaska has a higher median household income than that of both Alaska and the national average. Furthermore, Unalaska shows a lower percentage of households living in poverty compared to households in both Alaska and the United States.

Figure 4: Household Characteristics (2023)

UNITED STATES

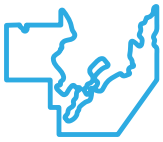
$72,603
Median Household Income

12.4%
Households in Poverty

ALASKA

$80,114
Median Household Income

9.6%
Households in Poverty



UNALASKA

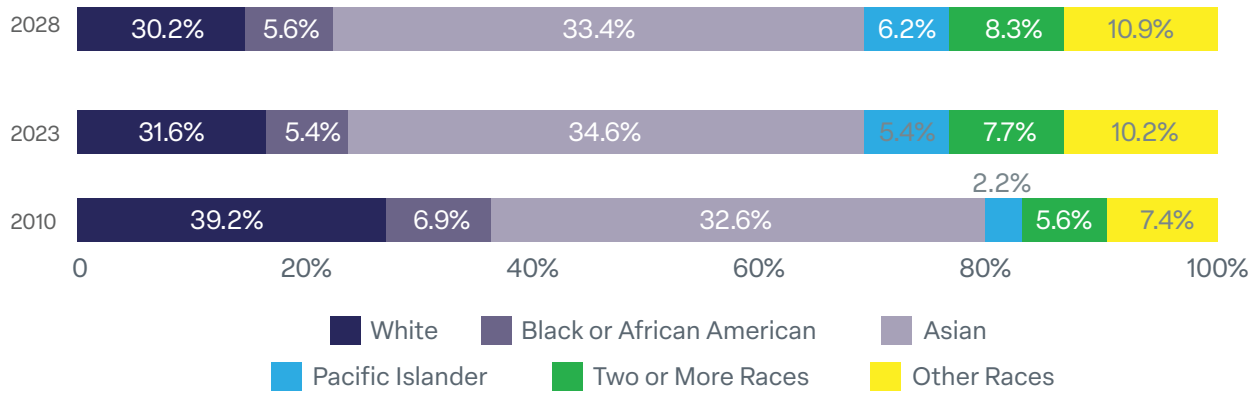
$104,175
Median Household Income

2.3%
Households in Poverty

Racial Diversity

Between 2010 and 2023, Unalaska experienced a shift toward greater diversity, marked by a 7.6% decline in the white population and a 3.2% increase in the Pacific Islander community. By 2023, the proportion of residents identifying as Hispanic (regardless of race) reached 14.5%. Predictions indicate minor changes in racial demographics from 2023 to 2028, with the most significant shift being a 1.4% decrease in the white population. For more details, see Figure 5.

Figure 5: Racial Diversity (2010–2028)



Local, Regional, and National Recreation Participation and Trends

Introduction

Recreational trends and preferences change over time. This report outlines the current parks and recreation trends across the United States, drawing from several annual reports:

- Academy of Sports Medicine (ACSM), "Worldwide Fitness Trends," 2024
- National Parks and Recreation Association (NRPA), "Top Trends in Parks and Recreation," 2024
- NRPA, "Engagement with Parks Report," 2023
- NRPA, "Agency Performance Review," 2023
- Sports and Fitness Industry Association (SFIA), "Topline Participation Report," 2024

The purpose of this report is to provide Unalaska with a thorough overview of the state of parks and recreation nationwide, focusing on trends in the following areas:

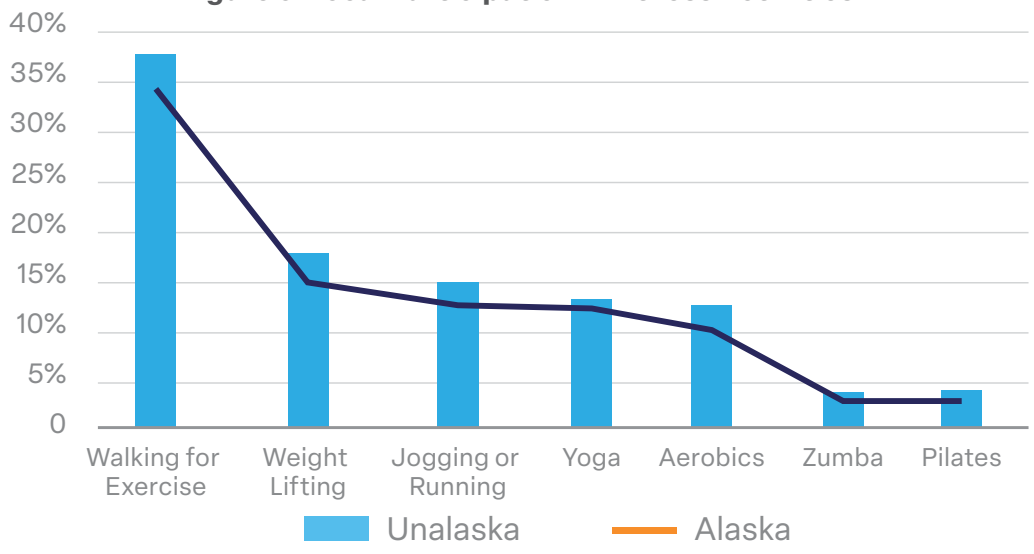
- Recreation participation
- Facilities
- Local recreation programming
- Policies and procedures
- Americans with Disabilities Act (ADA) compliance
- Dog parks
- Inclusive playgrounds
- Water activities
- Recreation trends by age group

By examining these trends, PCR can gain valuable insights into evolving community habits and preferences in recreation. This information can help identify potential areas for growth, opportunities for improvement, and ways to enhance inclusivity.

Estimated Local Participation in Recreation Programs

Figure 6 compares adult participation levels for fitness, sport, and outdoor activities for both the city and Alaska. The activities with the highest participation in Unalaska are walking for exercise, weightlifting, and jogging or running.

Figure 6: Local Participation in Fitness Activities



Trends in Recreation Facilities

Per NRPA, a typical parks and recreation agency will manage approximately 22 parks and seven buildings. The type and number of facilities and parks an agency can manage vary greatly; however, the NRPA Agency Performance Review for 2024 provides insight into what most agencies offered across the nation in 2023.[1] See Table 4.

Table 4: Typical Facilities Offered in the United States in 2023

Type of Facility	% of Agencies Offering	Type of Facility	% of Agencies Offering
Playgrounds	93%	Swimming Pools	49%
Baseball Fields	85%	Skate Parks	46%
Soccer Fields	83%	Multiuse Courts (Basketball, Volleyball)	42%
Basketball Courts	84%	Pickleball Courts	42%
Tennis Courts (Outdoor)	72%	18-Hole Golf Course	29%
Dog Parks	68%	Synthetic Fields (Multipurpose)	25%
Tot Lots	53%	Fitness Zones/Exercise Stations	22%
Community Gardens	52%	Ice Rink (Outdoor)	19%

Trends in Recreation Programming

Per the 2024 "NRPA Agency Performance Review," a typical parks and recreation agency will offer approximately 200 programs annually.[2] Table 5 depicts the most common types of programs offered by parks and recreation agencies and what percentage of agencies nationwide are offering those programs.

1 NRPA. 2024. "NRPA Agency Performance Review." National Recreation and Park Association. Accessed April 8, 2024. *NRPA Agency Performance Review*

2 NRPA. 2024. "NRPA Agency Performance Review." National Recreation and Park Association. Accessed April 8, 2024. *NRPA Agency Performance Review*

Table 5: Typical Programming Offered in 2023

Type of Program	% of Agencies Offering	Type of Program	% of Agencies Offering
Themed Special Events	89%	Cultural Crafts	63%
Social Recreation Events	88%	Visual Arts	62%
Team Sports	86%	Trips and Tours	62%
Fitness Enhancement Classes	82%	Performing Arts	62%
Health and Wellness Education	80%	Martial Arts	56%
Individual Sports	76%	Running/Cycling Races	53%
Racquet Sports	70%	After School Programming	52%
Safety Training	68%	Golf	49%
Aquatics	66%	Esports/E-Gaming	26%
Natural and Cultural History Activities	63%		

In addition to these trends, NRPA publishes top trends to consider for each year. For 2023, NRPA highlighted the following programming trends:[3]

Walking activity has declined 36% since 2019.

Pickleball is the fastest growing recreational sport; however, noise complaints have become a major sore spot for nearby residents. USA Pickleball recently approved sound-eliminating equipment, which could help reduce noise by up to 50%.

Cricket is on the rise in some areas, notably among the Southeast Asian population.

Special events—such as family nights, seasonal festivals, and holiday karaoke—are on the rise.

Dog ownership rocketed during the pandemic, which led to a rise in dog parks. Dog parks are now the fastest growing park type, with off-leash dog parks leading the pack.

3 Dolesh, R. December 21, 2023. "Top Trends in Parks and Recreation for 2024." National Recreation and Park Association. Accessed April 8, 2024. *https://www.nrpa.org/parks-recreation-magazine/2024/january/top-trends-in-parks-and-recreation-for-2024/*

Fitness Trends

Each year, the ACSM surveys global fitness trends, now in its 18th year. The ACSM distributes an electronic survey to thousands of fitness professionals worldwide to identify key health and fitness trends. The following are the top 10 fitness trends for 2024:

1. WEARABLE TECHNOLOGY

These devices track various metrics, including heart rate, calories burned, and sedentary time.

2. WORKSITE HEALTH PROMOTION

Employers can enhance health-promoting behaviors like physical activity and preventive screenings, leading to reduced insurance costs, increased productivity, and improved mental health.

3. FITNESS PROGRAMS FOR OLDER ADULTS

As people age, they become more susceptible to chronic illnesses and cognitive decline. Regular aerobic and strength-training exercises are vital for mitigating these risks and maintaining independence.

4. EXERCISE FOR WEIGHT LOSS

Exercise helps preserve lean body mass during weight loss, emphasizing its importance in long-term weight management strategies.

5. REIMBURSEMENT FOR QUALIFIED EXERCISE PROFESSIONALS (QEPS)

This trend shifts focus from advocating for licensure of QEPs—previously hampered by policy challenges—to reimbursement for services provided by professionals like personal trainers and exercise physiologists, recognizing their value in healthcare.

Employing Certified Exercise Professionals
Hiring certified professionals is a top trend, as companies realize the importance of trained individuals leading fitness programs. Accredited certifications help ensure consumers of professionals' expertise in helping them achieve fitness goals safely.

6. MOBILE EXERCISE APPS

These apps provide flexible program delivery and have shown effectiveness in increasing users' physical activity levels through diverse options.

7. EXERCISE FOR MENTAL HEALTH

With mental health challenges affecting about one in eight people globally, this trend highlights the importance of integrating physical activity into mental health support. ACSM resources assist exercise professionals in promoting this holistic approach to wellness.

8. YOUTH ATHLETIC DEVELOPMENT

Initiatives aimed at teaching fundamental movement patterns prepare young individuals for skill acquisition, emphasizing the need for specialized training among exercise professionals working with youth.

9. PERSONAL TRAINING

Personal training services provide valuable support for effective exercise selection, safety protocols, and recovery techniques. Professionals with nationally accredited credentials, such as those from ACSM, are well-equipped to meet diverse client needs, highlighting the importance of certification in helping ensure quality service delivery.

Trends in Policies and Procedures

The following policies and procedures highlighted from the "NRPA Agency Performance Review" for 2023 can help Unalaska shape policies and procedures based on national trends.[4]

4 NRPA. 2023. "NRPA Agency Performance Review." National Recreation and Park Association. Accessed April 8, 2024. *NRPA Agency Performance Review*

66% of agencies offer health food options at vending machines or concession stands

86% of agencies charge fees to enter some of their parks

16% of agencies have parking fees at some of their facilities

Recreation Participation Trends in 2024

This section aims to identify and analyze current trends in sports and recreation, with a particular focus on participation trends derived from the SFIA 2024 Report.[5] Understanding the latest trends in sports is crucial for Unalaska to effectively plan and develop programs and use space in a way that reflects participation data.

Mosts Popular Sports and Activities

Basketball is the most popular team sport with 29.7 million participants.

Tennis is the most popular racquet sport with 23.8 million participants.

Pickleball continues to grow rapidly with participation growing by 51.8% in 2023.

Increase in Popularity

Walking for fitness is the most prevalent form of aerobic exercise.

Tai chi saw a 16.3% increase in participation in one year; however, yoga continues to lead in popularity for conditioning activities.

Dance, step, and other choreographed exercises have grown by 3.3% since 2018, attracting 26.2 million participants each year.

Decline in Participation

Ultimate Frisbee has experienced a significant decline in participation (-4.9% since 2018).

Stationary cycling (group exercise) has been heavily impacted by at-home fitness equipment, declining by 6.2% in five years with 6.2 million participants.

5 SFIA. February 27, 2024. "SFIA's Topline Participation Report Shows Strong Positive Trends Across All Sports and Fitness Categories." Sports & Fitness Industry Association. Accessed April 8, 2024. *SFIA's Topline Participation Report Shows Strong Positive Trends Across All Sports and Fitness Categories*

Top Trending Activities and Five-Year Growth

Figure 7 demonstrates the total U.S. participation rates in different sport categories for those ages six years and older from 2018 and 2023. Fitness has led in popularity the last five years.

Figure 7: United States Sports Participation, 2018 vs. 2023

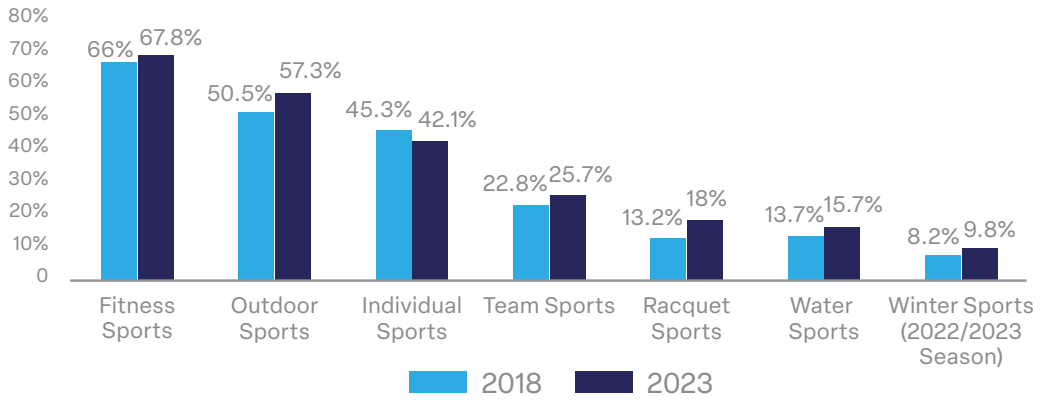


Table 6 shows the top activities by participation and growth rate over the past five years (2018–2023) from the latest SFIA report.

Table 6: United States Sports Participation by Activity

	2023 Participation (Millions)	Five-Year Growth (2018–2023)
TEAM SPORTS		
Basketball	29.7 M	+4.3%
Baseball	16.6 M	+1.0%
Football (Flag)	7.2 M	+2.0%
Football (Tackle)	5.6 M	+1.8%
Football (7-on-7)	2.6 M	0.0%
Lacrosse	1.9 M	-1.0%
Roller Hockey	1.2 M	-6.5%
Soccer (Outdoor)	14 M	+4.3%
Softball (Fast-Pitch)	2.3 M	+0.9%
Swimming on a Team	3.3 M	+2.1%
Volleyball (Court)	6.9 M	+2.3%
RACQUET SPORTS		

	2023 Participation (Millions)	Five-Year Growth (2018–2023)
Badminton	6.5 M	+0.6%
Pickleball	13.5 M	+35.7%
Tennis	23.8 M	+6.3%
STRENGTH AND CONDITIONING		
Free Weights	53.8 M	+1.0%
Weight-Resistance Machines	29.4 M	+1.0%
Yoga	34.2 M	+3.6%
AEROBIC EXERCISE		
Running/Jogging	48.3 M	-0.5%
Stationary Cycling (Recumbent/Upright)	32.6 M	-2.0%
Treadmill	54.8 M	+0.7%
INDIVIDUAL ACTIVITIES		
Golf (On- or Off-Course)	45 M	+6.1%
Skateboarding	8.9 M	+7.3%
Trail Running	14.8 M	+8.3%
Triathlon (Non-Traditional/Off-Road)	1.3 M	-2.9%
Triathlon (Traditional/Road)	1.7 M	-4.3%
OUTDOOR ACTIVITIES		
Bicycling (BMX)	4.4 M	+5.4%
Bicycling (Mountain/Non-Paved Surface)	9.2 M	+1.4%
Bicycling (Road/Paved Surface)	42.2 M	+1.8%
Camping (RV)	16.4 M	+1.0%
Fishing (Freshwater/Other)	42.6 M	+1.9%
Fishing (Saltwater)	15 M	+3.3%
Hiking (Day)	61.4 M	+5.3%

Inactive Americans' Aspirational Activities by Age

The SFIA report provides data related to what inactive Americans were most interested in participating in by age. Unalaska has a median age of 41.9. By comparing the SFIA inactive aspirational activities by age, the top activities for most residents (falling in the category of 35–54 years) may include working out with weights, fishing, working out using machines, and cardio fitness. See Table 7.

Table 7: SFIA Inactive Americans' Aspirational Activities by Age

6–12 Years	13–17 Years	18–24 Years	25–34 Years
1. Fishing 2. Running/jogging 3. Bicycling 4. Sledding 5. Swimming for fitness 6. Cardio fitness 7. Yoga 8. Camping 9. Soccer 10. Tennis	1. Fishing 2. Running/jogging 3. Swimming for fitness 4. Working out with weights 5. Camping 6. Cardio fitness 7. Bicycling 8. Working out using machines 9. Hiking 10. Skateboarding	1. Running/jogging 2. Working out with weights 3. Cardio fitness 4. Working out using machines 5. Bicycling 6. Swimming for fitness 7. Camping 8. Fishing 9. Yoga 10. Trail running	1. Working out with weights 2. Working out using machines 3. Cardio fitness 4. Camping 5. Yoga 6. Fishing 7. Running/jogging 8. Hiking 9. Swimming for fitness 10. Bicycling
35–44 Years	**45–54 Years**	**55–64 Years**	**65+ Years**
1. Working out with weights 2. Cardio fitness 3. Fishing 4. Working out using machines 5. Swimming for fitness 6. Running/jogging 7. Camping 8. Yoga 9. Hiking 10. Shooting	1. Fishing 2. Working out with weights 3. Camping 4. Working out using machines 5. Cardio fitness 6. Hiking 7. Yoga 8. Shooting 9. Swimming for fitness 10. Running/jogging	1. Fishing 2. Camping 3. Working out with weights 4. Working out using machines 5. Cardio fitness 6. Swimming for fitness 7. Shooting 8. Hiking 9. Yoga 10. Running/jogging	1. Fishing 2. Working out using machines 3. Camping 4. Working out with weights 5. Swimming for fitness 6. Cardio fitness 7. Shooting 8. Yoga 9. Hiking 10. Hunting

ADA Compliance

On July 26, 1990, the ADA officially acknowledged the needs of individuals with disabilities at the federal level. This civil rights legislation broadened the rights for activities and services provided by state and local governmental entities (Title II) as well as non-profit/for-profit entities (Title III). Parks and recreation agencies are mandated to comply with this legal directive, which entails removing physical barriers to help ensure access to facilities and offering reasonable accommodations for recreational programs through inclusive policies and procedures.

Agencies are required to develop and uphold an ADA transition plan, outlining the steps to eliminate physical and structural barriers to facilitate access to programs and services. Additionally, the transition plan serves as a tool for planning, budgeting, and helping to ensure accountability.

Accessibility studies serve as invaluable resources for parks and recreation agencies. Specialists conduct thorough inventories of facilities and parks, examining building codes and regulatory requirements to create a prioritized list of projects aimed at enhancing accessibility.

Dog Parks

A dog park offers an excellent opportunity for people to enjoy some fresh air, bond with their furry companions, and foster community ties. With approximately 90 million dogs across the United States, dog parks are witnessing rapid growth, particularly in urban areas, making them the fastest-growing type of park, as reported by NRPA. While not everyone desires to have a dog park in their neighborhood, these parks are sought after in nearly every community.

According to an article in Recreation Management titled "Four-Legged-Friendly Parks," dog parks contribute to community cohesion and can attract potential new residents and tourists traveling with pets (2016). They are viewed as a cost-effective means of providing a highly frequented and popular amenity to the community. Dog parks range from simple fenced areas to more elaborate setups featuring amenities tailored for dogs, such as water fountains, agility equipment, and pet wash stations. Some even incorporate spray grounds designed specifically for dogs. Moreover, dog parks serve as social hubs where people can connect with others while enjoying the outdoors.

The best dog parks prioritize both human and canine comfort and enjoyment, often incorporating various design features and creative programming. Ideal amenities in a dog park may include:

- Benches, shade, and water stations for both dogs and their owners
- A spacious area of at least one acre with proper drainage
- Double-gated entry for safety
- Ample waste stations stocked with bags
- Sandy beaches or sand bunker areas for digging
- Custom-designed splash pads for dogs of all sizes

Additional amenities catering to human needs, such as walking trails, restroom facilities, picnic areas, and dog wash stations

Water-Related Activities

Annually, the SFIA issues the "Sports, Fitness, and Leisure Activities Topline Participation Report." According to the SFIA report, water sports have seen the most substantial increase in participation across all seven sports categories.

Table 8 below illustrates the changes in water-related activities between 2016 and 2021. It charts the one-year, two-year, and five-year average annual growth (AAG) rates to indicate the degree of change for boardsailing/windsurfing, canoeing, jet skiing, kayaking, sailing, standup paddling, and water skiing.

Between 2020 and 2021, the water sports that experienced the highest overall growth were boardsailing/windsurfing (+9.9%), kayaking–sea/touring (+5.6%), and water skiing (+4.7%). Conversely, kayaking–recreational (-14.6%), canoeing (-6.4%), and sailing (-3.6%) saw the most significant decreases in participation during the same period. See Table 8.

Table 8: Water Sport Overall Participation 2016–2021
Source: SFIA Topline Report, 2022

	One-Year Change 2021	Two-Year Change 2020	Five-Year AAG 2016
Boardsailing/Windsurfing	2.3%	-7.6%	-5.5%
Canoeing	-4.1%	2.3%	-1.6%
Jet Skiing	3.3%	-0.9%	-2.6%
Kayaking (Recreational)	2.7%	17.3%	6.0%
Kayaking (Sea/Touring)	3.1%	-2.5%	-3.6%
Sailing	-0.7%	-4.3%	-3.3%
Standup Paddling	1.8%	5.0%	3.0%
Water Skiing	0.2%	-4.5%	-3.7%

Recreation Trends Applicable to Age Groups

Separating recreation trends by age group can be helpful when determining an appropriate program mix.

Trends for Youth Ages 13 and Younger

STEAM PROGRAMS

The popularity of STEAM programs, which encompass arts programming, is on the rise. Examples include coding workshops, video game design, Minecraft creations, Roblox game development, robotics engineering, 3D printing, and laptop building.

SUMMER AND SCHOOL BREAK CAMPS

Participation in youth camp programs offered by parks and recreation departments remains robust, with these programs.

YOUTH FITNESS

Reimagine Play has identified the following top eight trends in youth fitness, drawing from sources such as the ACSM's Worldwide Survey of Fitness Trends, ACE Fitness, and SHAPE America:

- Shift from sports-focused physical education to physical literacy curricula emphasizing fundamental movement skills and healthy eating
- High-Intensity Interval Training (HIIT) classes featuring brief bursts of intense exercise followed by short rest periods, typically lasting 30 minutes or less
- Adoption of wearable technology and digital fitness media, including activity trackers, smartwatches, heartrate monitors, GPS trackers, and virtual reality headsets
- Emergence of ninja warrior training and gyms, inspired by popular television shows like American Ninja Warrior and Spartan Race

- Increasing interest in outdoor recreational activities such as running, jogging, trail running, and BMX biking
- Growing popularity of family (intergenerational) fitness classes, such as family fitness fairs, escape rooms, and obstacle races, catering to Generation X and Generation Y families valuing quality family time
- Kids' obstacle races held alongside adult races
- Establishment of youth running clubs that not only promote physical fitness but also teach valuable life skills such as risk-taking, goal-setting, and teamwork

Trends for Teens/Younger Adults Ages 13 – 24

Local parks and recreation agencies are increasingly tasked with providing diverse programming options for teenagers beyond traditional youth sports. Given that suicide ranks as the second leading cause of death among U.S. teens, mental health remains a pressing concern for this demographic.

Activities such as meditation, yoga, sports, art, and civic engagement can serve as outlets for teens to develop life skills and enhance cognitive functions. Many agencies are also exploring innovative multigenerational activities, wherein seniors and teens collaborate to learn life skills together. Agencies that offer support for teens in career development and continuing education tend to achieve positive outcomes and mitigate at-risk behaviors effectively.

PARKOUR

Parkour, a physical training discipline inspired by military obstacle courses, challenges participants to navigate urban environments using body movements like running, jumping, and swinging.

OUTDOOR ACTIVE RECREATION

Outdoor activities such as kayaking, canoeing, standup paddleboarding, mountain biking, and climbing have seen increased popularity since the onset of the COVID-19 pandemic. Rentals are often available for those interested in trying out these activities before committing to purchasing equipment.

LIFE SPORTS

A trend identified in the Learning Resources Network's article "Top Trends in Recreation Programming, Marketing, and Management" is the prioritization of "life sports." These activities, such as archery, biking, kayaking, tennis, golf, swimming, and jogging/walking, aim to foster lifelong interests in physical fitness and recreation.

HOLISTIC HEALTH

Parks and recreation agencies are increasingly recognized for their role in promoting holistic lifestyles. Individuals are seeking opportunities to practice mindfulness, embrace authentic living, and disconnect from electronic media. Programs supporting mental health, including those addressing anxiety, perfectionism, and substance abuse among youth and young adults, are in growing demand. The United Nations has urged governments worldwide to prioritize mental health support in response to the mental health implications of the COVID-19 pandemic.

Trends for Adults Ages 25–54

AEROBIC ACTIVITIES

Swimming for fitness and weight training remain the top choices for most age groups, with running, walking, and biking also experiencing consistent growth. To stay current with trends, it is essential to offer a balanced mix of equipment and classes. The priority investment rating (PIR) considers both the demand for a particular activity among households and the unmet needs within the community.

FUN FITNESS

"Fun" fitness programs have emerged as a prominent trend. Exercise routines like P90X®, Insanity®, and CrossFit® have demonstrated that extensive equipment is not necessary to achieve fitness goals. As these programs gain popularity, newer versions are being introduced, some of which promise quicker results. Expect to see continued growth in these types of classes at recreation departments and fitness centers.

GROUP CYCLING

Group cycling remains popular, particularly among younger fitness enthusiasts. High-performance group cycling sessions and tailored programs designed for beginners are attracting participants of all levels.

CORNHOLE (OR BAGS)

Cornhole is a low-impact, budget-friendly activity suitable for all ages. Young adults are increasingly joining leagues, which can be hosted indoors or outdoors throughout the year. Easy to learn and highly social, cornhole appeals to both recreational and competitive players.

Trends for Adults Ages 55 and Over

LIFELONG LEARNING

According to a survey by the Pew Research Center, 73% of adults identify as lifelong learners. DIY project classes and programs aimed at personal enrichment are gaining popularity, with consumers increasingly turning to the internet for how-to information. Courses addressing online privacy protection are also in demand.

FITNESS AND WELLNESS

Programs like yoga, Pilates, tai chi, balance training, chair exercises, and others remain popular among older adults seeking to maintain their health and well-being.

ENCORE PROGRAMMING

Designed for soon-to-be-retired baby boomers, encore programming covers a wide range of topics to help individuals transition into retirement activities. Popular offerings for the 55+ demographic include fitness and wellness classes (including yoga, mindfulness, tai chi, relaxation, and personal training), art courses (such as drawing, painting, and photography), language classes, writing workshops, technology courses, social media tutorials, cooking classes, mahjong, card games, and volunteer opportunities.

SPECIALIZED TOURS

Participants are increasingly interested in day trips that offer unique local experiences or focus on historical themes. Themes such as cultural food tours, guided night walks, bike tours, explorations of specific artists' work, and ghost walks are particularly sought after.

SECTION 03

COMMUNITY ENGAGEMENT

Engagement Process

The findings and recommendations in this PRMP are primarily derived from input from the Unalaska community. BerryDunn facilitated various types of public engagement opportunities, including discovery sessions (focus group meetings and interviews with key stakeholders), surveys, community workshops, and intercept opportunities at events like PCR's Spring Festival and Heart of the Aleutians events. The engagement process generated 720 interactions. Community members shared numerous challenges and opportunities throughout the engagement process. This section summarizes the feedback received, while Section 4 presents the results of the statistically valid survey. Appendix 1 includes the engagement summary and Appendix 2 includes the needs assessment survey report.

Focus Group and Stakeholder Discovery Sessions

In addition to various logistical challenges related to shipping supplies for facilities and events and recruiting and retaining quality employees, PCR must also consider Unalaska residents limited discretionary leisure time. As a "working community," many residents hold multiple jobs, which can affect participation in programs. Expanding any program areas may impact others.

THE KEY ISSUES IDENTIFIED DURING THIS ENGAGEMENT INCLUDE:

- Resource and staff availability
- Logistics of providing services in the remote location
- Future health of the fishing industry
- Capacity for community members' leisure time
- Weather patterns that affect outdoor participation

SERVICE CHALLENGES INCLUDE:

- Lack of child care for infants and young children
- Need for storage for program materials
- Limitations on restroom hours of operation
- Requirement to relocate the skatepark
- Absence of sufficient spectator viewing areas at the Aquatic Center

Youth and Teen Needs Assessments

The youth and teen needs assessments were conducted in May and June 2024, with 141 participants. Including the perspectives of young people in the master planning process is vital to help ensure that facilities and programs meet the needs of this primary user group. Engaging youth in planning fosters a sense of ownership, encourages healthy lifestyles, and promotes overall well-being.

One key goal of this engagement was to identify gaps that adults might overlook. In Unalaska, approximately 715 youth and teens comprise 17.6% of the total population. With limited recreational and social opportunities available to them, the programs and facilities PCR offers are especially important.

Kindergarten Playground Ideas

Kindergarten students were asked to share their ideas for playground equipment. The most common requests included features for climbing, trampolines, and bouncy houses. The kindergarteners identified the following desired playground features:

- Swings
- Trampolines
- Zipline
- Slides of various sizes
- Climbing wall
- Crawling wall
- Swirly slide
- Garden
- Hut or hideaway
- Musical instruments
- Monkey bars
- Climb and steppingstones
- Shared swing
- Bouncy castle and water slide
- Interlinking parks
- Gymnastic bars
- Sandbox
- Seating
- Bumpy slide with truck faces

Letters From First-Grade Students

Fifteen letters were received from first-grade students in Unalaska. The most frequently requested features included taller slides, new monkey bars, and bouncy equipment. Their complete list of requests reflected those of the kindergarteners, with added suggestions for snake slides, merry-go-rounds, covered playhouses, and ninja rope courses.

Letters From Fourth-Grade Students

Thirteen letters were received from fourth-grade students outlining improvements they would like to see at the PCR. The most common request was for better maintenance of the Eagles View soccer field, including properly marked lines, goal nets, and grass instead of mud, so they would not have to use the basketball court for soccer. They also requested better lines on the outdoor basketball courts. Students suggested a variety of modern playground features, with "accelerator swings" being the most popular. Other requests included spiral slides, "noodle climbers," trampolines, and monkey bars/rings. One student proposed adding spring-mounted animals for younger children.

Teen Engagement

BerryDunn used a SurveyMonkey tool to evaluate the needs and preferences of teens, complementing the individual and group interviews conducted during the stakeholder engagement efforts. The survey was completed by 106 participants aged 12 to 21, representing more than 25% of Unalaska's teen population. All respondents were in Grades 7 to 12 (see Figures 8 and 9).

Figure 8: Survey Responses by Age

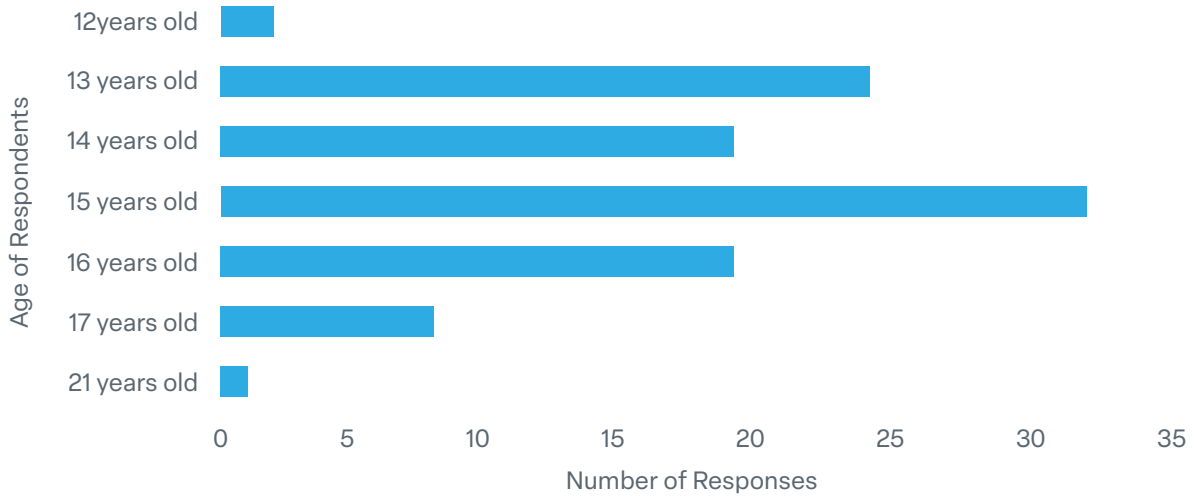
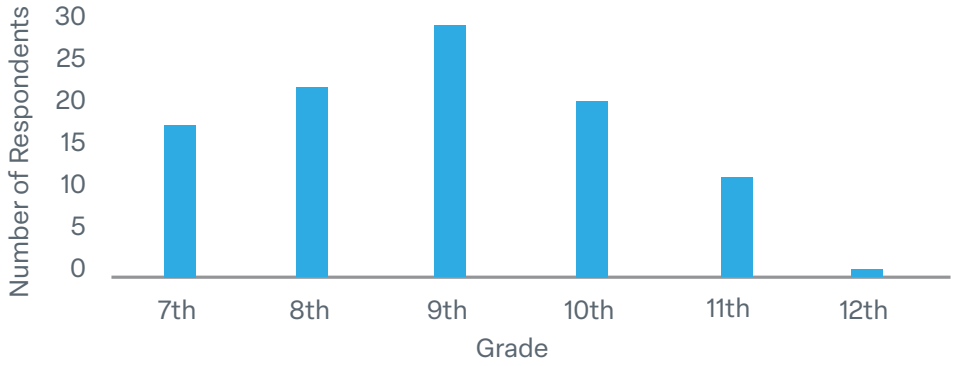


Figure 9: Survey Responses by Grade



The survey featured several questions, including one asking participants to identify their favorite park or facility and how often they visit. Most teens reported that the community center, particularly the teen room, was their most frequented location, followed by the Aquatic Center and the library. Nearly all respondents indicated they use their favorite facilities at least once a week (see Figures 10 and 11).

Figure 10: Favorite Parks Facility

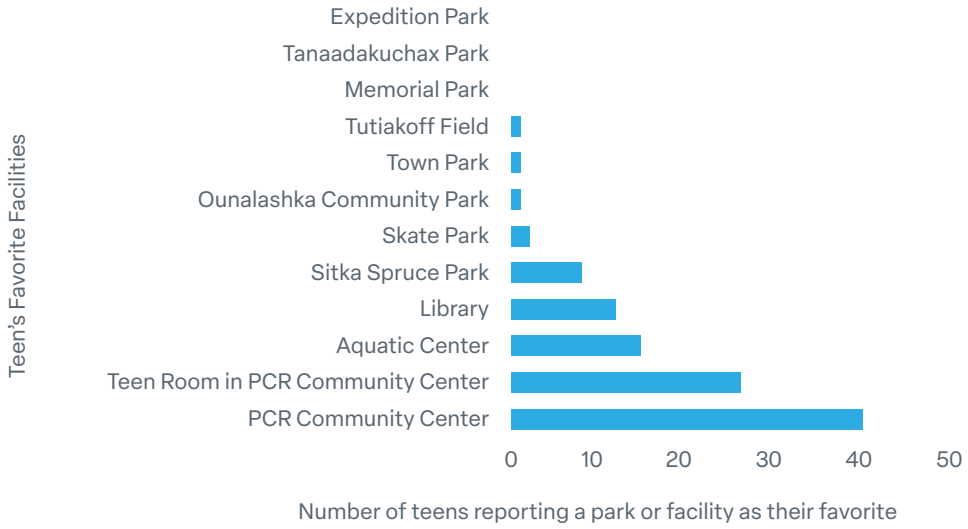
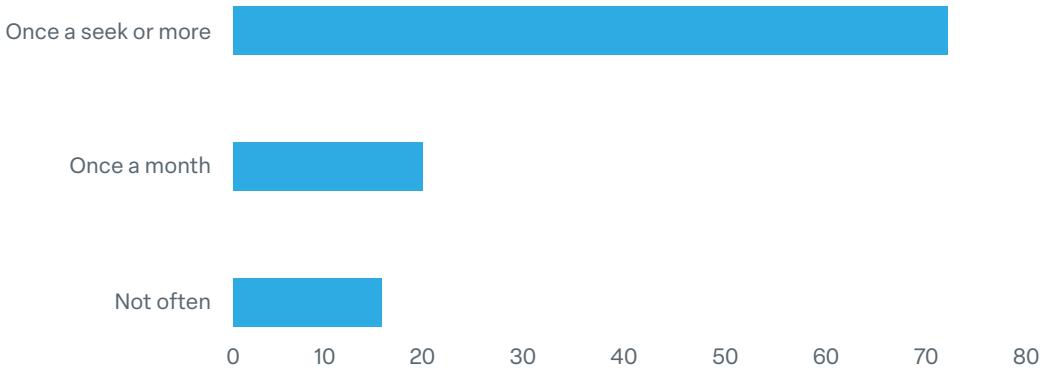


Figure 11: Frequency of Use



Teens were asked to explain the reasons for any limited use of parks and facilities. The most commonly cited reason was their busy schedules, which are filled with school and family responsibilities, leaving little free time. While many factors affecting usage are beyond PCR's control, the top needs identified were improved transportation options and better-quality facilities (see Figure 12).

Interestingly, only 28 teens responded to the question about barriers to using the facilities, while over 100 participants answered the questions immediately before and after it.

When asked about desired activities, teens expressed a strong preference for organized, team-based sports, with football, baseball, and wrestling being the top requests. Individual sports like martial arts, climbing, and ice skating were also popular. Additionally, various classes, such as art, dance, and cooking, were requested (see Figure 13).

Figure 12: Factors Limiting Use of Facilities

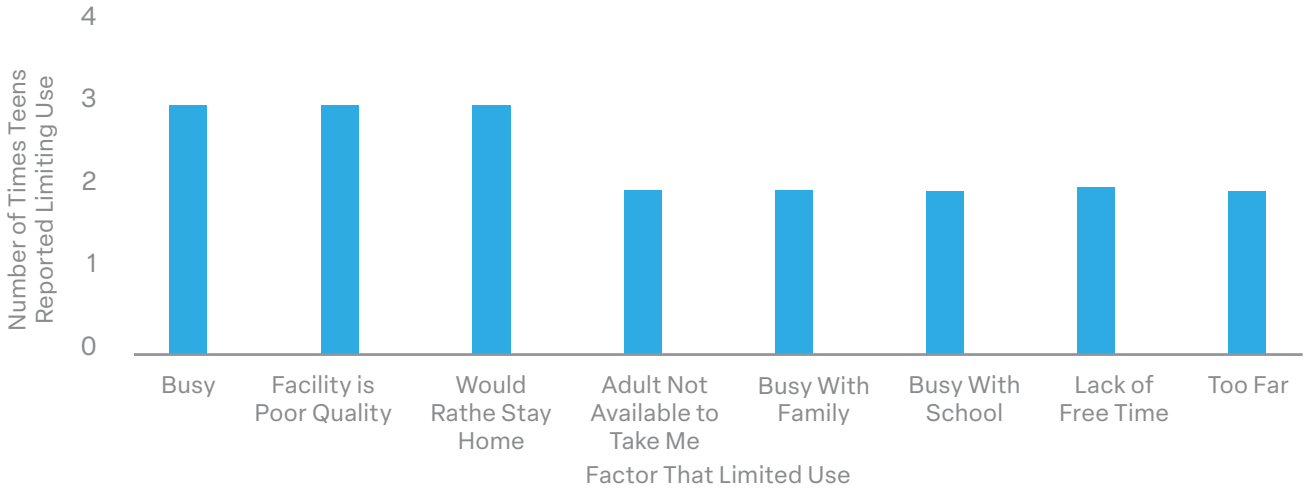
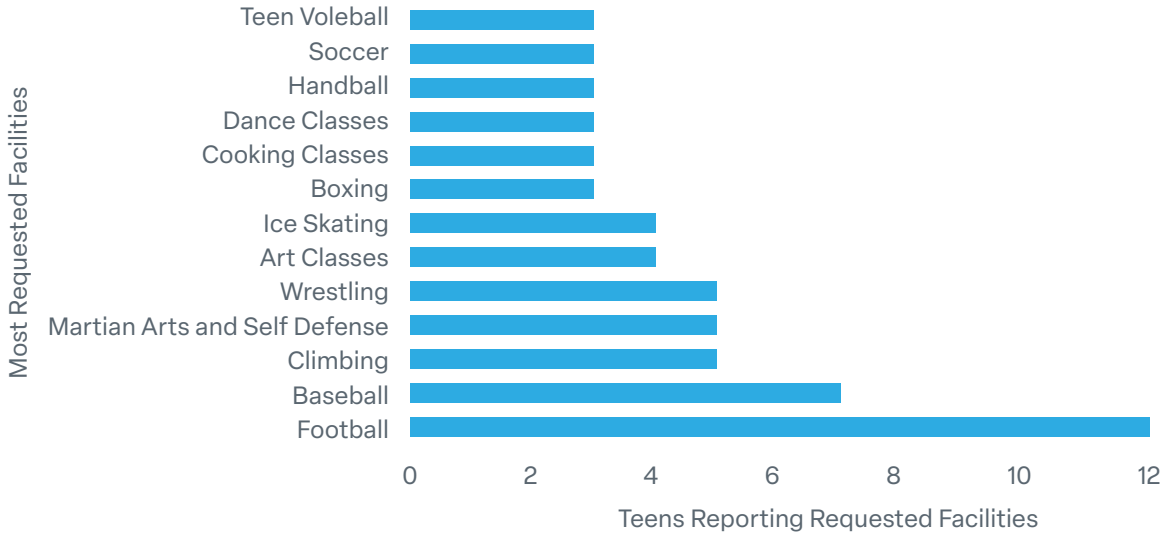
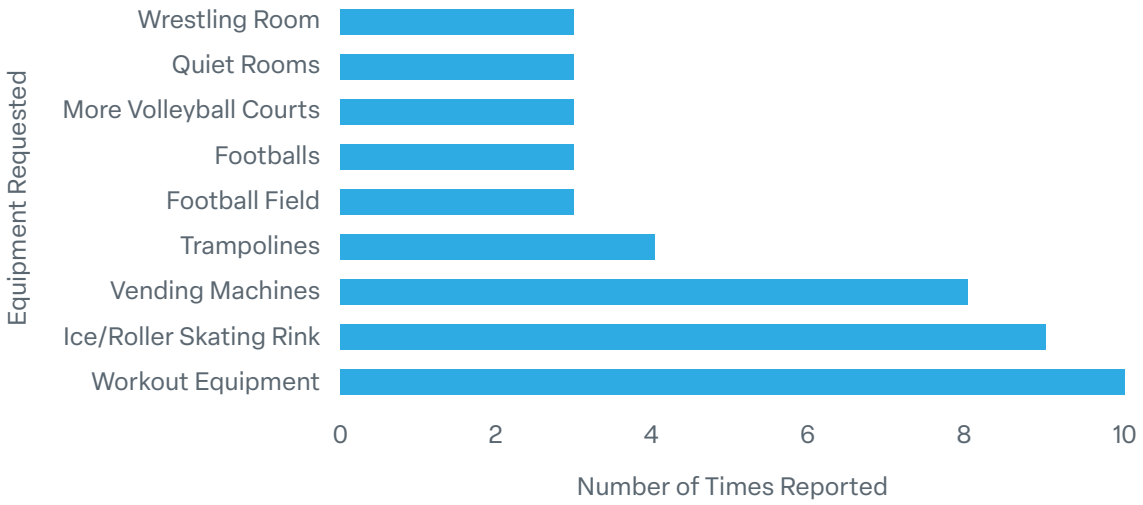


Figure 13: Teens' Most Requested Facilities



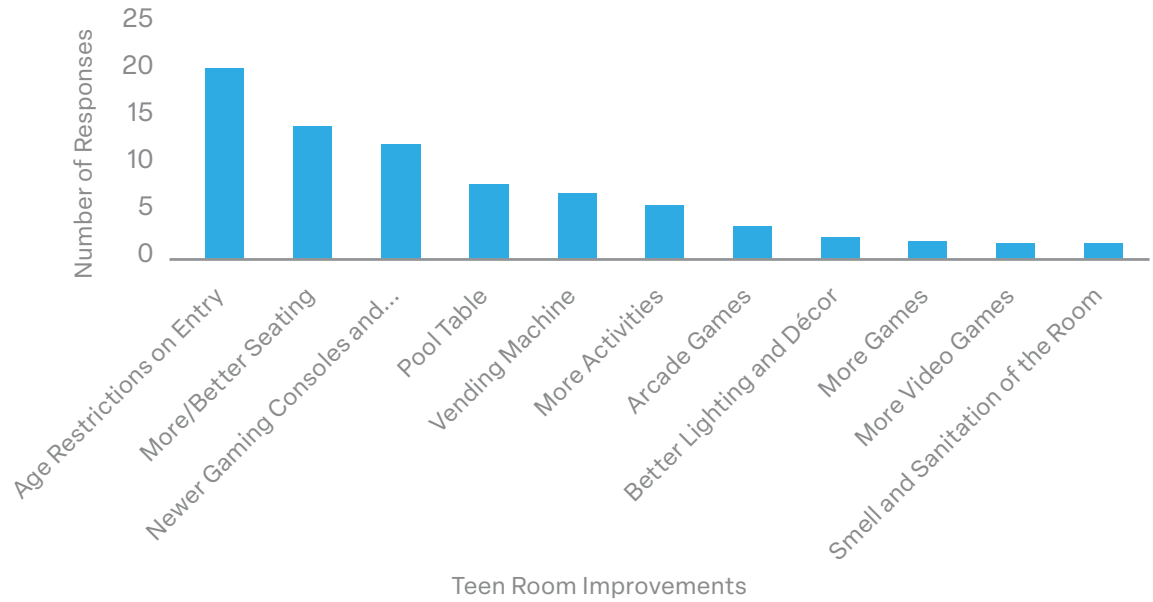
Teens were asked to identify equipment and spaces they would like that are not currently offered. Additional weight and cardio exercise equipment, a skating rink, and vending machines were the most requested features (see Figure 14).

Figure 14: Equipment and Spaces Requested



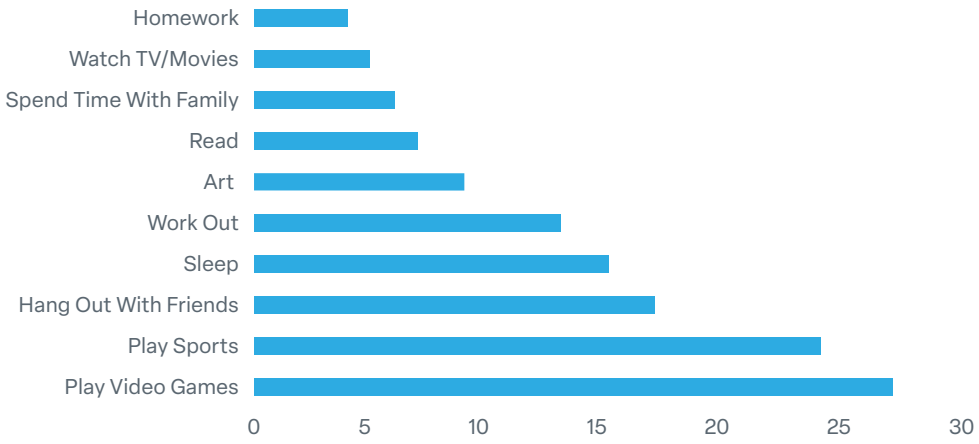
Teens identified the teen room as one of their two favorite spaces in the community. When asked about improvements that could increase its usage, they expressed a desire for stricter age limits, believing that allowing 10- to 12-year-olds undermines the purpose of a "teen room." Additionally, they highlighted the need for more comfortable seating, a pool table, vending machines, and updated gaming equipment as priorities (see Figure 15).

Figure 15: Desired Improvements to the PCR Teen Room



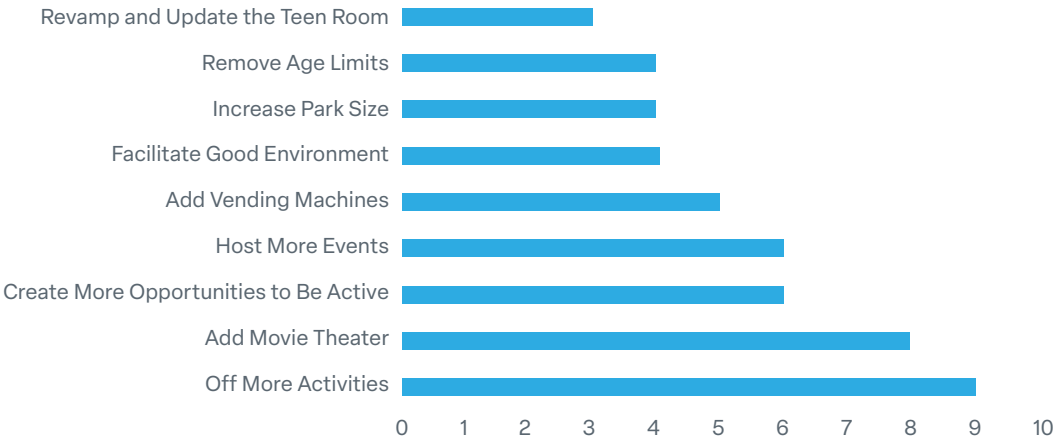
Understanding teens' use of leisure time adds an important perspective. The teens surveyed spend most of their free time playing video games, playing sports, or hanging out with friends (see Figure 16).

Figure 16: Spare Time Usage



Understanding requested improvements to teens' quality of life offers an important perspective. Teen respondents overwhelmingly wanted a movie theater, as well as "more opportunities to be active" and additional "activities." Quality of Life Improvements are shown in Figure 17.[6]

Figure 17: Requested Quality of Life Improvements



Key Findings from the Youth Engagement Process

Unalaska's young children (Grades K–4) expressed a strong desire for a variety of modern playground equipment, including new slides, multi-person round swings, spinning and climbing features, and, most importantly, jumping or bouncing equipment. They also emphasized the need for well-maintained and properly lined soccer fields and painted basketball courts. Many noted that the Eagles View Soccer Field was often too muddy to use, which forced them to play soccer on the basketball court.

6 Removing age limits refers to the PCR and weight rooms

The survey of teenagers revealed the most requested activities included football, baseball, wrestling, and various enrichment classes such as art, dance, ice skating, and cooking, all of which require instructors or coaches and careful scheduling. Teens also expressed interest in individual activities, updated gaming and exercise equipment, access to a pool table, and an ice skating rink. Additionally, many felt that the teen room did not adequately serve its purpose, as it was frequently occupied by younger children.

Social PinPoint Digital Input

The digital website offered an additional way for input to be provided. Visitors to the website included 29 unique individuals who collectiely visited 75 times.

ENGAGEMENT SUMMARY

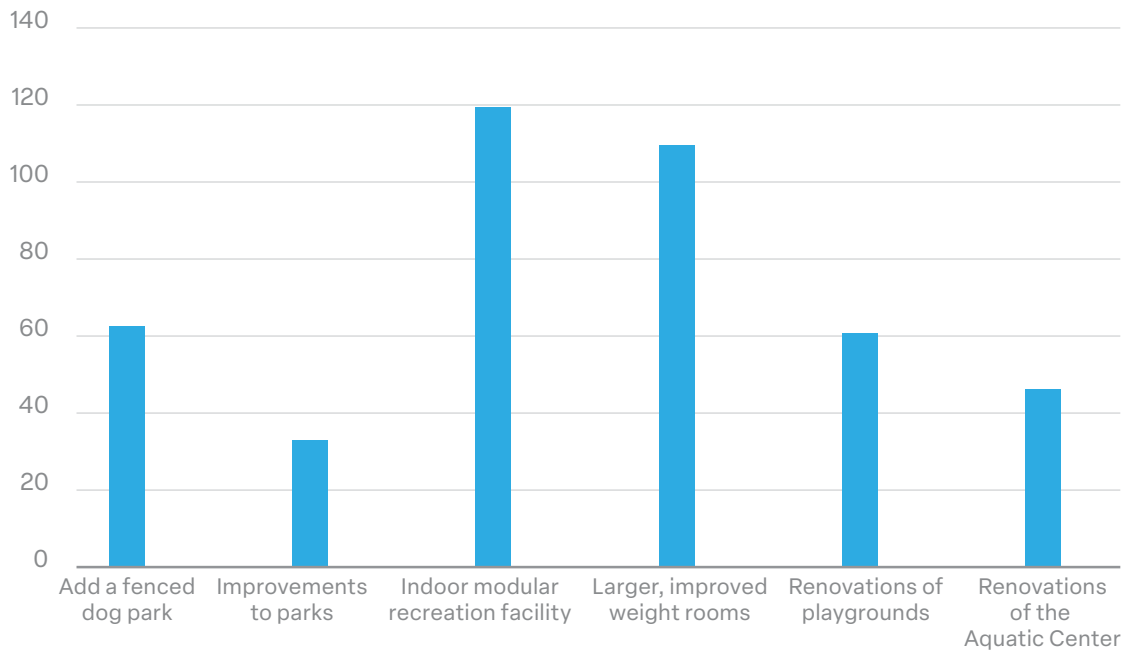
75	26	4:14	3
TOTAL VISITS	UNIQUE USERS	AVERAGE TIME (MIN)	UNIQUE STAKEHOLDERS

COMMENTS INCLUDED:

- I think it might be nice to stream the school's away games for everybody to watch together. We all watch them, just separately.
- Town Park could really use a bathroom. It is a well-loved park, but the porta-potties there are pretty gross. I have had kids pee their pants rather than step inside them.
- It would be nice to have a bigger gym and additional newer equipment to use. As a person who loves going to the gym, I have observed that more people work out today than they used in the past. The gym has always been packed, and there's no available equipment to use.
- I love the idea of a walking trail/boardwalk around Unalaska Lake.
- I would love to see a covered playground facility. It does not need to be fully indoors but somewhere my kids could play out of the rain with some good wind-blocking barriers.

An exercise was also offered to distribute $100 between seven priority areas. Five community members participated and results are in Figure 18.

Figure 18: Social PinPoint Budget Exercise Results



Open House–April 2024

Fifty-nine community members took part with top priorities identified as follows:

- Hockey Rink
- Indoor Sports Facility
- Indoor Batting Cage
- Pump Track
- Climbing Walls
- Outdoor Winter Activities
- Recreation Equipment Rental

Intercept Opportunities

Spring Festival–April 2024

Storyboards were used at the festival to help prioritize new amenities (134 community members participating):

- New Playground at the Eagle Elementary School
- Indoor Sports Facility
- Outdoor Winter Activities
- Tool Lending Library
- Recreation Equipment Rental
- Indoor Batting Cage
- Climbing Walls

Heart of the Aleutians Festival–August 2024

Storyboards were used at the festival to help prioritize new amenities (85 community members participating).

THE MOST IMPORTANT PARKS OR FACILITIES (204 PRIORITY VOTES ON A STORYBOARD) WERE:

- Aquatic Center 37
- Off-Leash Dog Park 31
- Community Center 24
- Library 20
- Covered Outdoor Spaces 20
- Community/City Parks 16
- Bike/Walking Trails 14
- Weight Room 13
- Walking Paths 10
- Multiuse Hiking 9
- Other
  - » Hockey Rink 9
  - » Trampoline Park 1

DESIRED LIBRARY SERVICES (135 PRIORITY VOTES ON A STORYBOARD):

- Game Night 27
- Tween/Teen Programs 20
- 3D Printer for Public Use 18
- Children's Programs 17
- Student Tutoring/Homework Help 14
- ESL Classes 13
- Tech Equipment for Checkout 6
- Online Access to Local Archives 6
- Summer Reading Competitions 6
- Community-Wide Reading Events 3

Additional Engagement Themes

The following themes emerged from the focus group, stakeholder meetings, youth engagement process, digital engagement, open house, and intercept events.

Changes to the Fishing Industry

The commercial fishing industry fuels the economy and life on the island. Since 2013, climate changes have negatively impacted the fishing industry in Alaska. Since Unalaska is the top-performing fishing port in the United States over the last 20 years, climate change is particularly challenging. Species of fish and crab are changing and no longer as prevalent. As the fishing industry goes, so will the city. City administrators are keeping a watchful eye out for this impact.

More is Not Necessarily Better

Given capacity challenges, the consultants heard that the quality of facilities and programs is more important that quantity. Improving existing facilities or creating a limited number of new opportunities can greatly impact quality of life on the island. The consultants recommend that decisions regarding priorities consider:

- Resource and staff availability
- Future health of the fishing industry
- Capacity of residents' leisure time
- Weather patterns impacting outdoor participation
- Opportunities to efficiently improve existing facilities
- Local, regional, and national recreation trends

PCR's Strengths

PCR's greatest strength is the library building. Special events and the longevity of the events were considered a strength as was the well-used and well-designed Community Center. The Aquatics Center and swim lessons are favorites on the island.

Improvement Opportunities for PCR

To improve parks and recreation services, the community feels there are needs and preferences for:

- Another indoor facility (turf soccer, roller hockey, soccer, gymnastics, indoor playground, etc.)
- Better sports fields
- Better spectator seating for swim meets
- Renovation of the Aquatic Center
- More skilled instructors: cannot get "off island" staff, traveling artists, leads to inconsistent service

Vision for the Role Parks and Recreation Should Play in Unalaska

The vision is one that is flexible, inclusive, brings the community together via a mixture of indoor/outdoor activities and variety for all ages, and provides safe and positive places for children to go after school.

Greatest Needs and Priorities for Parks and Recreation in Unalaska

The greatest needs/priority is for a multipurpose facility with additional activities for all to enjoy. Suggestions for activities included bowling, soccer, a golf simulator, and art classes. Next in line in regard to priority is a community garden and/or greenhouse as well as additional trails and trail maintenance. Specific priorities are:

- Improved playgrounds
- Updated aquatic center
- Additional program focus for teens 14–18
- Covered activity spaces
- Hockey opportunities
- Addressing dog concerns in the parks
- Lending opportunities
- New or enhanced walking trails and paths

Desired New Parks and Recreation Amenities

The most suggested amenity to add was an indoor/multipurpose facility. There was also emphasis on additional bike trails, a dog park, and a regulation size tennis court. There were also suggestions to aquatics center amenities including replacing the slide with a splash pad and adding a hot tub. Lastly, there were several suggestions to add walking trails as well as a walkway around the lake.

SECTION 04

STATISTICALLY VALID SURVEY

Overview

ETC Institute administered a parks and recreation needs assessment survey for the City of Unalaska during the winter and spring of 2024. The purpose of the survey was to help determine parks and recreation priorities for the community.

Methodology

ETC Institute mailed a survey packet to a random number of households in the Unalaska area. Each survey packet contained a cover letter, a copy of the survey, and a postage- paid return envelope. Residents who received the survey were given the option of returning the survey by mail or completing it online at unalaskasurvey.org.

After the surveys were mailed, ETC Institute followed up with residents to encourage participation. To help prevent people who were not residents of Unalaska from participating, everyone who completed the survey online was required to enter their home address prior to submitting their survey. ETC Institute then matched the addresses entered online with the addresses originally selected for the random sample. If the address from a survey completed online did not match one of the addresses selected for the sample, the online survey was not included in the final database for this report.

The survey aimed to collect a minimum of 100 completed responses from residents, and this target was surpassed with 101 completed surveys collected.

In addition to the summarized survey results in this section, the survey report in Appendix 2 contains:

- Charts showing the overall results of the survey
- The facilities and programs most needed in the community
- Tabular data showing the results for all questions on the survey
- A copy of the cover letter and survey instrument

Survey Findings

The major findings of the survey are summarized for communication; benefit, importance, and improvements to parks and recreation; facilities/ amenities needs and priorities; and recreation programs/activities needs and priorities.

Communication

Respondents were asked about the ways they learned about PCR services. The most common sources selected were: word of mouth (69%), social media (55%), and flyers (50%). Based on the sum of the top three choices, the sources that respondents want the city to use the most are: social media (65%), flyers (44%), and recreation activity brochure –web and application based (34%).

Benefits, Importance, and Improvements to Parks and Recreation

Overall Parks and Recreation Facilities Use: Respondents were asked which parks/facilities they use the most (based on the sum of the top three choices). The parks/facilities that were picked the most were: Community center (75%), the Aquatic Center (53%), and the library (45%). Respondents were also asked to select barriers that kept them from visiting facilities more often. The common barriers to use were: too busy/not enough time (34%), lack of amenities we want to use (33%), and lack of restrooms (23%).

Potential Benefits: Respondents were asked to rate their level of agreement with statements about some potential benefits of the city's parks and recreation services. The statements respondents agreed on the most were: provides positive social interactions for me (my household/family) (87%), improves my (my household's) physical health & fitness (86%), and makes Unalaska a more desirable place to live (82%).

Facilities/Amenities Needs and Priorities

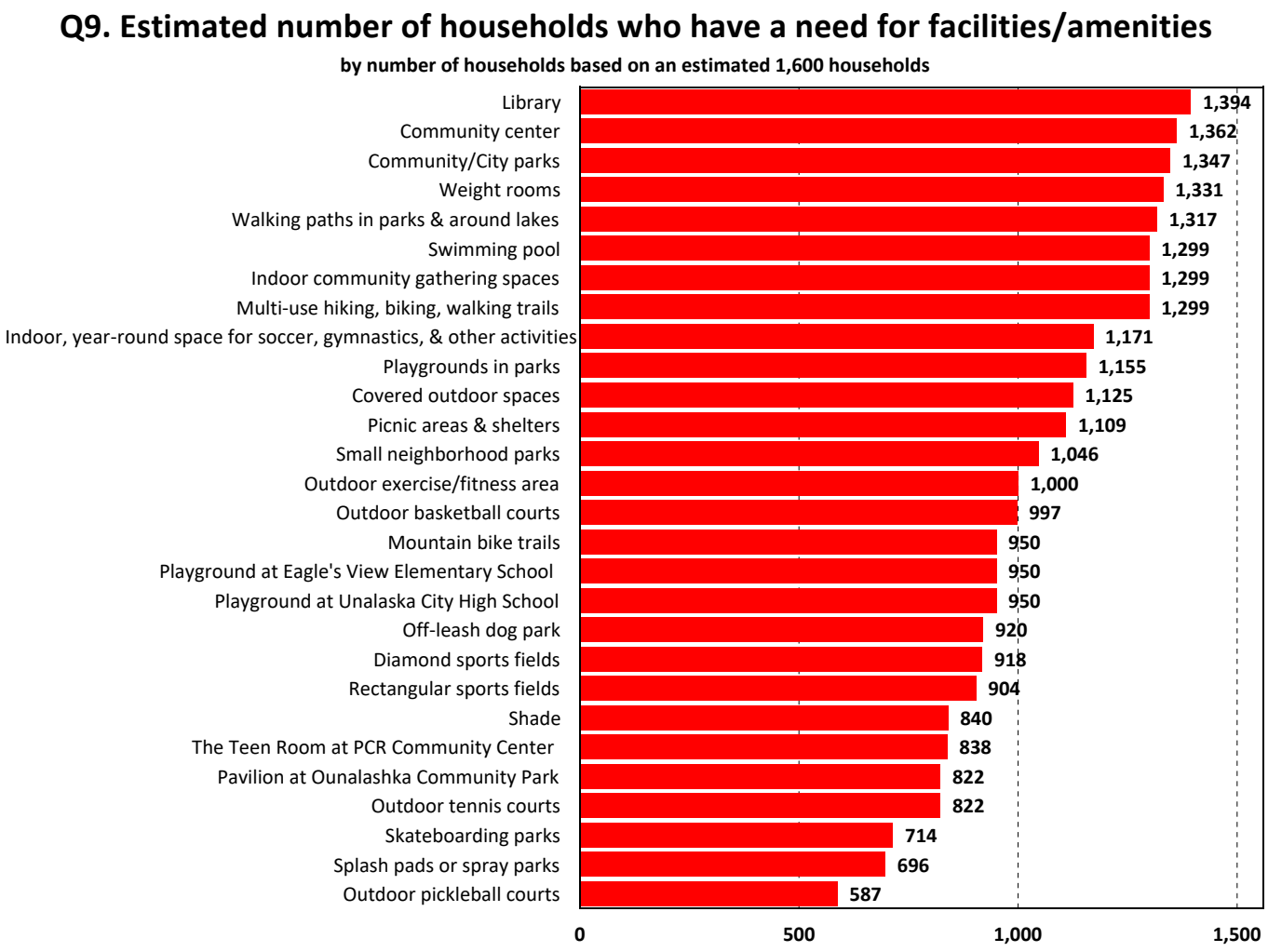
Facility Needs: Respondents were asked to identify whether their household had a need for 28 facilities and to rate how well their needs for each were currently being met. Based on this analysis, ETC Institute was able to estimate the number of households in the community that had the greatest "unmet" need for facilities.

The three facilities with the highest percentage of households that have an unmet need:

1. Library–1,394 households
2. Community center–1,362 households
3. Community/city parks–1,347 households

The estimated number of households that have unmet needs for each of the 28 facilities assessed is shown in Figure 19.

Figure 19: Estimated Households Who Have a Need for Facilities/Amenities

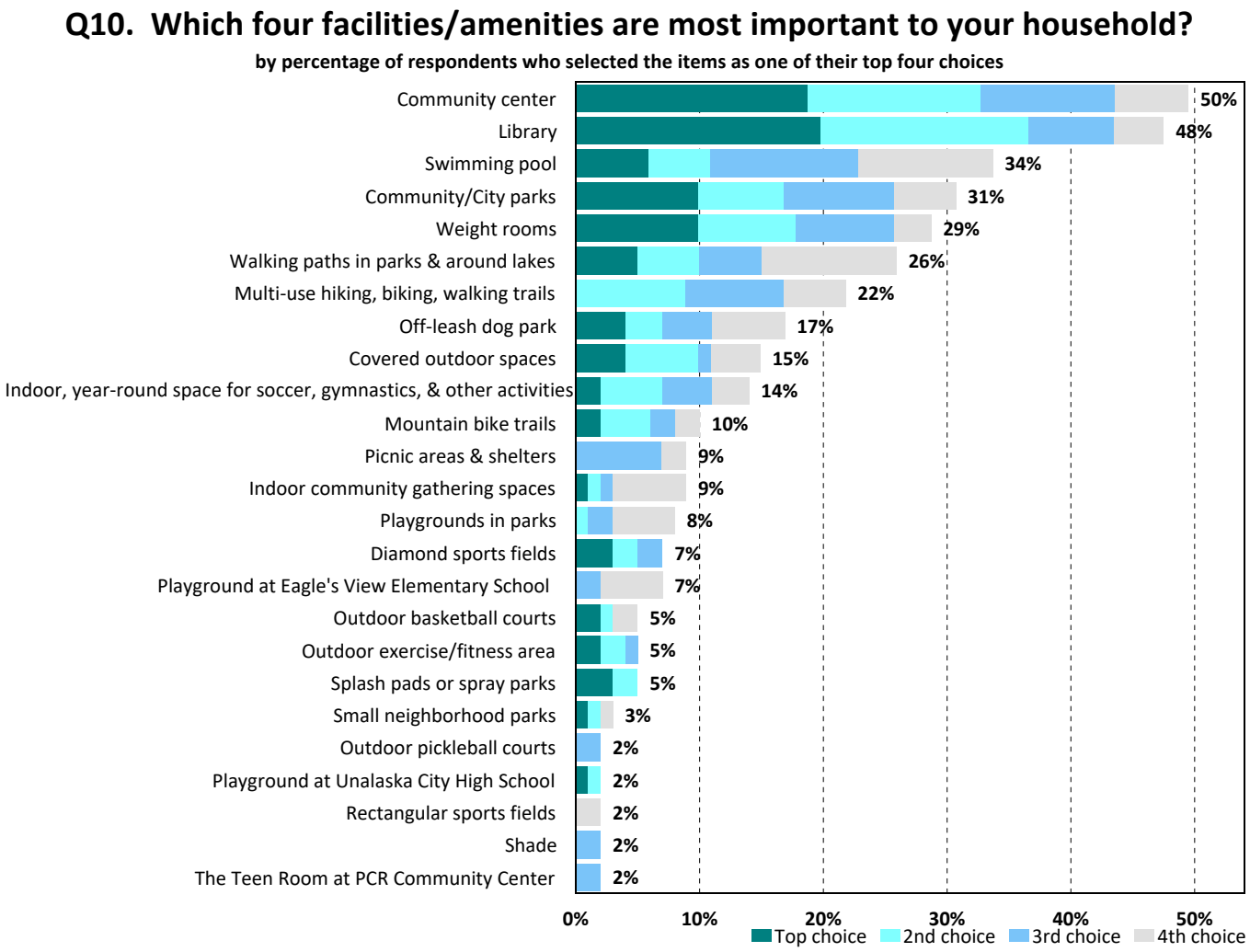


Facility Importance: In addition to assessing the needs for each facility, ETC Institute also assessed the importance that residents placed on each item. Based on the sum of respondents' top four choices, these were the four facilities that ranked most important to residents:

1. Community center (50%)
2. Library (48%)
3. Swimming pool (34%)
4. Community/city parks (31%)

The percentage of residents who selected each facility as one of their top four choices is shown in Figure 20.

Figure 20: Facilities/amenities Most Important to Households



Priorities for Facility Investments: ETC Institute developed priority investment rankings (PIR) to provide organizations with an objective tool for evaluating the priority that should be placed on recreation and parks investments. The PIR equally weighs (1) the importance that residents place on facilities and (2) how many residents have unmet needs for the facilities.

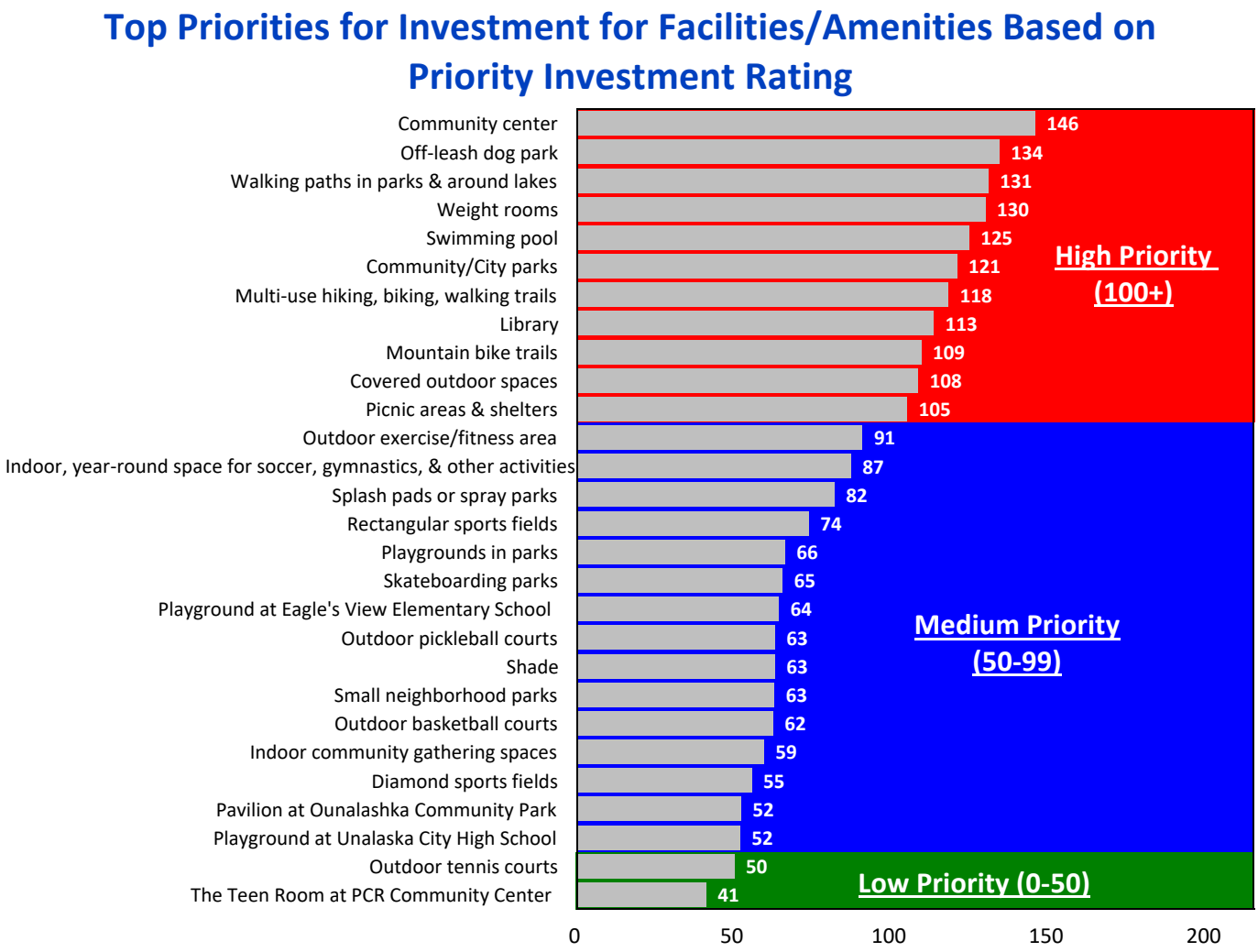
Based the PIR, the following facilities were rated as high priorities for investment:

- Community center (PIR=146)
- Off-leash dog park (PIR=134)
- Walking paths in parks & around lakes (PIR=131)
- Weight rooms (PIR=130)
- Swimming pool (Aquatic Center) (PIR=125)
- Community/city parks (PIR=121)
- Multiuse hiking, biking, walking trails (PIR=118)
- Library (PIR=113)

Note that teens showed preferences for the dedication space in the community center.

Figure 21 shows the PIR for each of the 28 facilities assessed in the survey.

Figure 21: Top Priorities for Investment for Facilities/Amenities Based on PIR



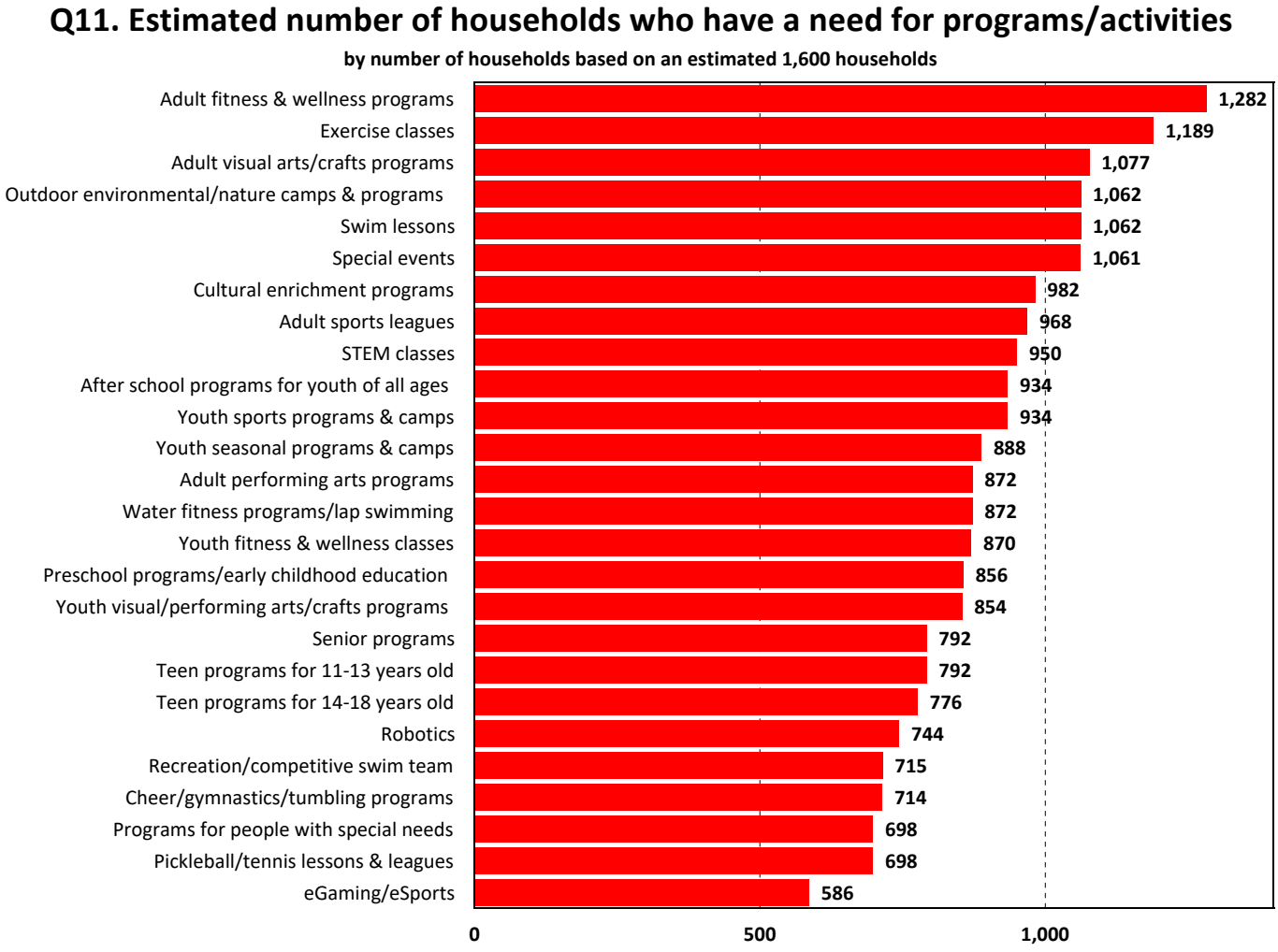
Recreation Programs/Activities Needs and Priorities

Overall Parks and Recreation Programs/Events Use: Respondents were asked why they do not participate in programs more often. The most common barriers were: too busy (23%), I do not know what is offered (21%), and program times are not convenient (12%).

Program Needs: Respondents were asked to identify if their household had a need for 26 recreation programs and to rate how well their needs for each were currently being met. Based on this analysis, ETC Institute was able to estimate the number of households in the community that had the greatest "unmet" need for various programs.

The programs with the highest percentage of households that have an unmet need are shown in Figure 22.

Figure 22: Estimated Number of Households Who Have a Need for Programs/Activities



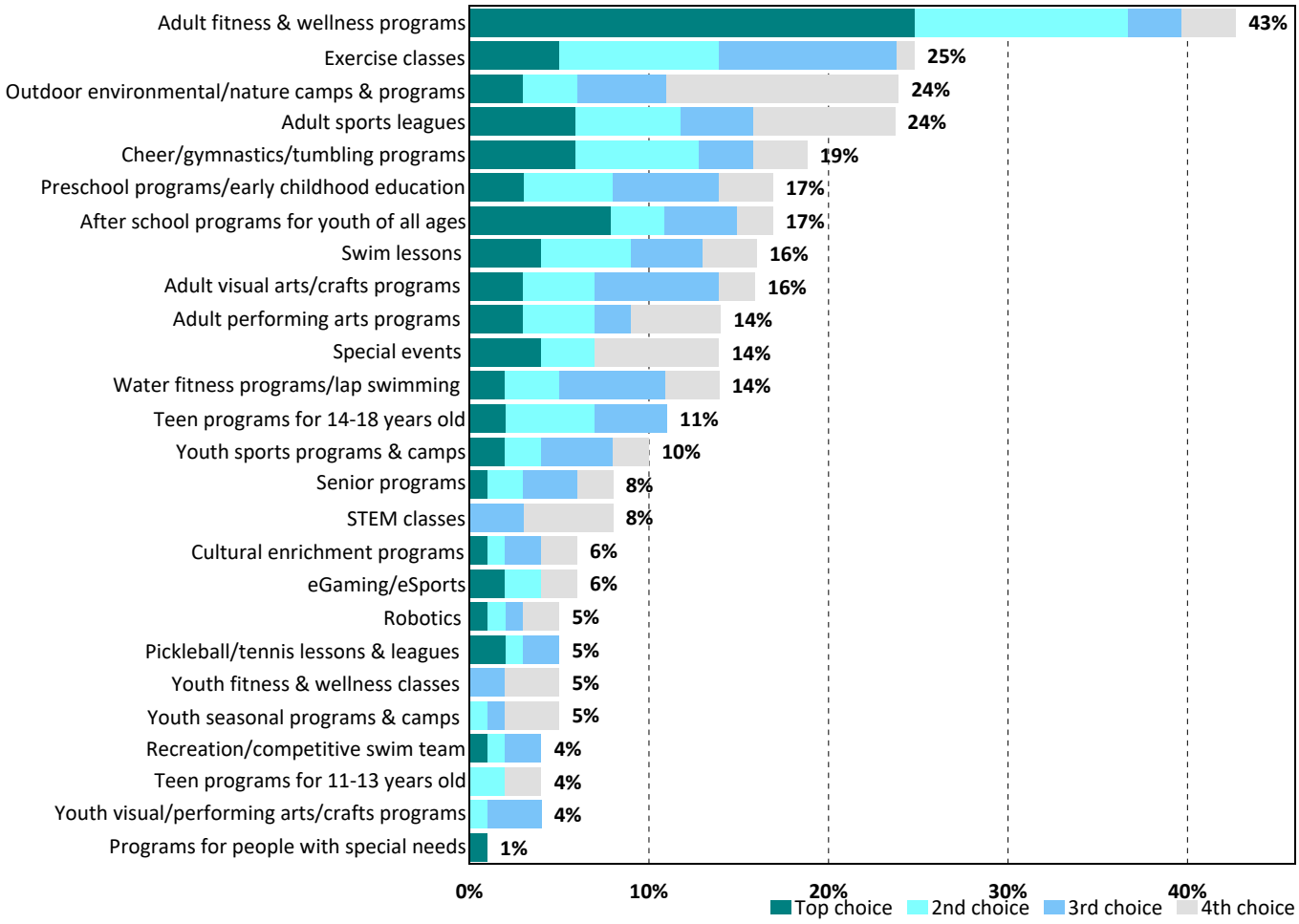
Program Importance: In addition to assessing the needs for each program, ETC Institute also assessed the importance that residents placed on each item. Based on the sum of respondents' top four choices, these were the four programs that ranked most important to residents:

- Adult fitness & wellness programs (43%)
- Exercise classes (25%)
- Outdoor environmental/nature camps & programs (24%)
- Adult sports leagues (24%)

The percentage of residents who selected each program as one of their top four choices is shown in the chart below. It is important to note that Teens, when surveyed independent of the household survey reported that access to the teen room at the community center was their 2nd most important need/priority. The overall survey ranking of teen programs being most important to only 4% of residents fails to accurately describe true teen needs and desires.

Q12. Which four programs/activities are most important to your household?

by percentage of respondents who selected the items as one of their top four choices



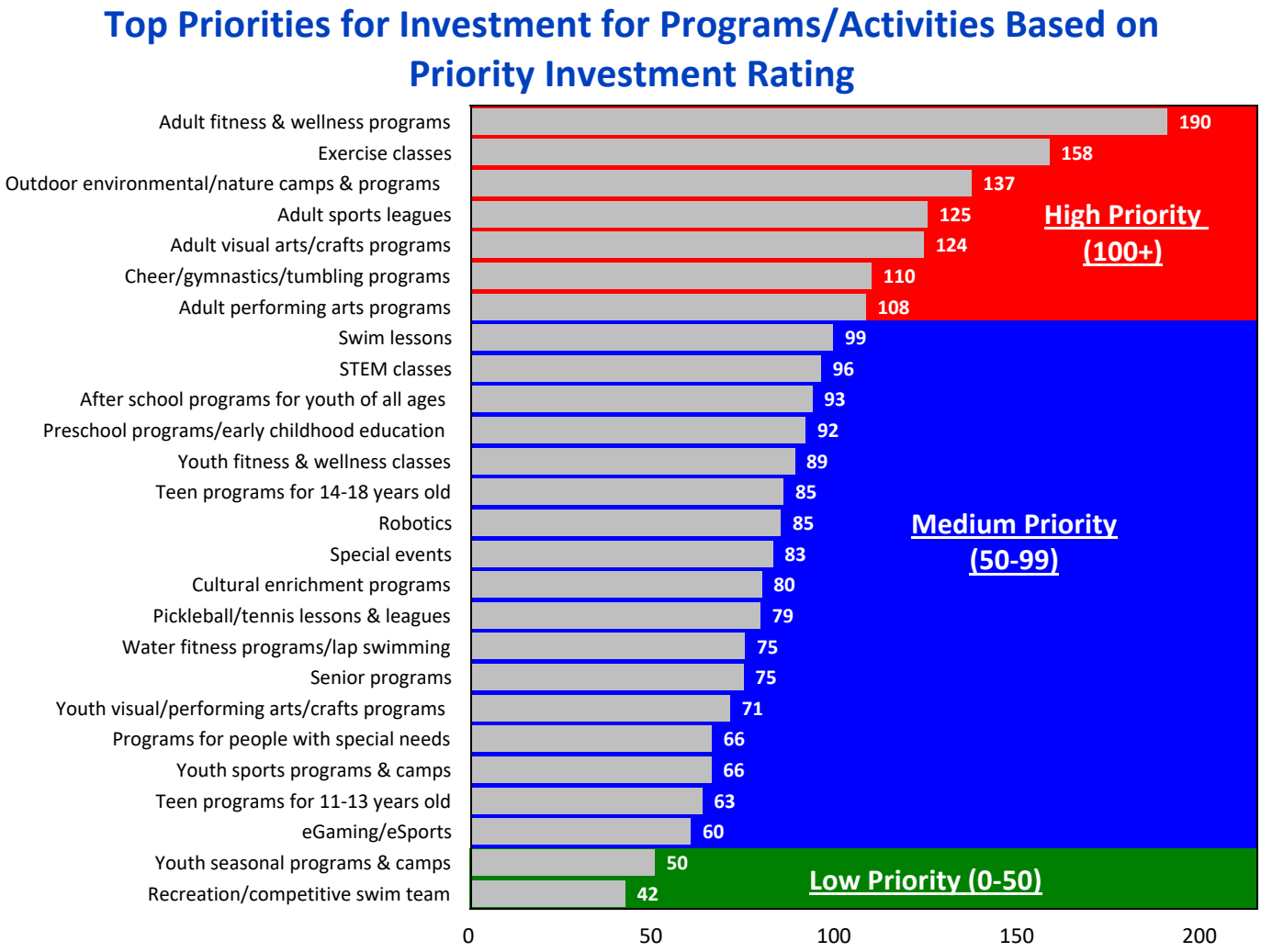
Priorities for Program Investments:

Based on PIR, the following programs were rated as high priorities for investment:

- Adult fitness & wellness programs (PIR=190)
- Exercise classes (PIR=158)
- Outdoor environmental/nature camps & programs (PIR=137)
- Adult sports leagues (PIR=125)
- Adult visual arts/crafts programs (PIR=124)
- Cheer/gymnastics/tumbling programs (PIR=110)

Figure 24 shows the PIR for each of the 28 programs assessed in the survey.

Figure 24: Top Priorities for Investment for Programs/Activities



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SECTION 05

FACILITY INVENTORY AND LEVEL OF SERVICE (LOS) ANALYSIS

This LOS analysis outlines how Unalaska's parks and recreation system serves its residents with recreational resources and facilities. LOS signifies the extent to which individuals have access to engage with nature and embrace active lifestyles. LOS in a municipality or region often mirrors community ideals. LOS of recreation systems impacts communities' health, wellness, local economy, and overall quality of life.

Standards and Guidelines

Many professionals in parks and recreation aim to use national standards as benchmarks for their planning efforts. These standards typically outline recommendations for the optimal acreage and amenities, such as ballfields, pools, and playgrounds, that a community should have. The roots of these standards trace back to 1906, when the Playground Association of America proposed allocating 30 square feet per child for playground space.

In the 1970s and 1980s, more comprehensive publications on these subjects began to emerge. One notable example is Roger Lancaster's 1983 book, Recreation, Park and Open Space Standards and Guidelines, which suggested a foundational parkland system consisting of 6.25 to 10.5 acres of developed open space per 1,000 residents. While these guidelines were not formally endorsed by the National Recreation and Park Association (NRPA), a guideline of 10 acres of parkland per 1,000 people has gained widespread acceptance.

These standards may not be universally applicable. Various factors, including the presence of amenities like trails, indoor facilities, and public art, as well as the unique characteristics of each community, can significantly impact ideal standards. Additionally, the quality and maintenance levels of recreational facilities are crucial considerations when assessing their adequacy. Furthermore, as in the case of Unalaska, there may be abundant open space that is not under city jurisdiction and therefore is not factored into LOS assessments but do contribute to the services residents have access to.

Geo-Referenced Composite Values Approach

Parks, trails, recreational areas, and open spaces constitute crucial components of a community's infrastructure, encompassing diverse elements like playgrounds, multipurpose fields, and passive areas. Establishing a methodology to determine the LOS is vital for addressing the value of the amenities to the park user's experience. Composite value methods offer a suitable approach for assessing the services provided by the Unalaska parks and recreation system.

Composite values methodology involves documenting the geographic location, quantity, and capacity of each park component. It also considers factors such as comfort, convenience, and ambiance, which contribute to the overall context and atmosphere of a component. While these qualities are not inherent to the element itself, their presence enhances its value. Typically, the process begins by identifying relevant components, accurately inventorying them, and then conducting thorough analysis.

Inventory Methods and Process

In April 2024, Bettisworth North visited Unalaska to conduct site assessments of the parks and open spaces managed by PCR (either ownership or maintenance). The inventory for this study focused primarily on components at outdoor public spaces. Bettisworth North collected the following information during site visits:

- Component type and geo-location (GIS)
- Component functionality
- Assessment scoring, based on the condition, size, site capacity, and overall quality

The inventory team used the following four-tier rating system to evaluate park components:

- 0 = Nonfunctioning
- 1 = Below Expectations
- 2 = Meets Expectations
- 3 = Exceeds Expectations

Site Amenities

In addition to standard components, the inventory also evaluated features that provide comfort and convenience to users. These are things a user might not go to the parks specifically to use, but are aspects that enhance their experience by making it a nicer place to be. Amenities encourage people to stay longer and enjoy the components more fully. These features are scored as described above on the 0–3 scale. Scoring of amenities focuses on service to the user rather than the quantity.

After the site visits, Bettisworth North created a scorecard (see the example in Figure 25) and an inventory map (example in Figure 26) for each park. Each map outlined the park boundary using a green polygon, with component locations marked with purple circles. The Inventory Atlas (Atlas), included as a supplemental document to the PRMP, encompasses all parks and facilities (refer to Appendix 3).

Figure 25: Example Scorecard

Memorial Park

ADDRESS: Memorial Park, Unalaska, AK 99685
GIS ACRES: 8.2
CLASSIFICATION: Special Use
INVENTORY DATE: 04/04/2024

PARK OVERVIEW:
This park celebrates and honors the military history of Unalaska. It has beautiful views of the ocean and is adjacent the cemetery. The parking is unorganized and there are opportunities with different seating options and interpretive signage about the history and monuments.

DESIGN AND AMBIANCE SCORES:

BIKE PARKING:	0	ORNAMENTAL PLANTINGS:	0	RESTROOMS:	0	SHADE:	0
BBQ GRILLS:	0	PARK ACCESS:	2	SEASONAL PLANTINGS:	0	TRAIL CONNECTION:	0
DOG STATION:	2	PARKING:	1	SEATING:	1	SIGNAGE:	1
DRINKING FOUNTAINS:	0	PICNIC TABLES:	0	SECURITY LIGHTING:	0		

COMPONENTS:	MAP ID	SCORE	QTY	LIGHTS	OBSERVATIONS
HISTORICAL FEATURE	M1	2	1	Decorative	
PASSIVE NODES	M2	1	1	No	Some benches are in poor shape. Not facing the views of the water or monuments.

Figure 26: Example Inventory Map

Memorial Park
Inventory Map

Bettisworth North summarized the following general observations of Unalaska parks:

- The standard amenities (signage, benches, dog stations, etc.) were generally in good shape and were available at all parks, giving visitors a sense of familiarity and comfort because they know what they can expect
- Connectivity to parks is good, as there are sidewalks along all the major roads (with gaps along Airport Beach Road)
- Most of the playgrounds look to be in good shape and/or new
- There is little connection to the parks and Unalaska's unique culture, history, or nature
- While there are no trails on City of Unalaska land, there are ample trails on Ounalashka Corporation (OC) land
- There is generally good access to parks for the residents of Unalaska; however, access for transient residents is more difficult, due to locations as well as some workers not having means of transportation. Residents would benefit from a park in the Westward area.

Park Classifications

While NRPA provides definitions for park classifications, it also acknowledges that each community is unique in terms of geographical, cultural, and socioeconomic makeup. As such, each community or park agency should develop its own standards for recreation, parks, and open space, with NRPA definitions as a guide. However, classifying parks allows the ability to compare similar-sized parks (with a similar intent) to other parks within the same classification. For example, the intent and goals of Tanaadakuchax Park (neighborhood park) are different from those of Ounalashka Park (community park).

As a means of organizing the city's public open space facilities, park areas are classified according to a hierarchy that provides for a comprehensive system of interrelated parks. All parks can be placed into specific categories or classifications. Some parks that meet neighborhood needs and have specialized amenities could be placed into more than one classification but are placed in the classification that meets the broadest definition. The park classifications that are appropriate for PCR do not necessarily meet the NRPA guidelines in a strict sense as far as size or amenities are concerned, but they are appropriate to the overall offerings of the city. The PCR classifications are as follows:

- Neighborhood parks
- Community parks
- Special use parks

Neighborhood Parks

Unalaska has four neighborhood parks: Expedition Park, Town Park, Tutiakoff Park, and Tanaadakuchax Park (Figures 27–30). These parks serve an area within a 10-minute walk or half-mile radius uninterrupted by major roads or other barriers, and act as a gathering space for local residents or an opportunity for recreation. Some features of these parks include:

- Playground (local)
- Open turf
- Basketball (practice pad)
- Shelter
- Benches
- Dog stations
- Picnic tables

Figure 27: Expedition Park

Figure 28: Town Park

Figure 29: Tutiakoff Park

Figure 30: Tanaadakuchax Park

Community Parks

Community parks differ from neighborhood parks in their broader scope and purpose. While they may offer similar amenities to neighborhood parks, community parks prioritize meeting the recreational, athletic, and open space needs of the entire community. Additionally, community parks may host activities or amenities with broad appeal to the community that do not fit into specialized categories.

Typically serving multiple neighborhoods, community parks provide special amenities that benefit all residents of the city. Although these parks are generally large, special amenities or athletic fields designed for community-wide use may be accommodated on smaller sites. In Unalaska, four parks are classified as community parks, including two on school sites. These are Ounalashka Park, Sitka Spruce Park, Unalaska City School District (UCSD) Park, and Eagle's View Elementary School (Figures 31–34). Some features of these parks include:

- Playgrounds
- Baseball
- Basketball (full-size court)
- Volleyball
- Tennis trails
- Concessions
- Large shelter and picnic facilities

Figure 31: Ounalashka Park

Figure 32: Sitka Spruce Park

Figure 33: UCSD Park

Figure 34: Eagle's View Elementary School

Special Use Parks

Special use parks encompass a wide array of recreation areas tailored to specific purposes, typically focusing on a singular major activity. Examples of special use parks include golf courses, historical landmarks, sports complexes, and other facilities with distinct functions. While these parks may incorporate elements found in neighborhood or community parks, they often boast amenities that draw visitors from beyond city limits. The size of these parks or facilities can vary greatly depending on their intended usage. Unalaska's special use parks include the Skate Park and Memorial Park (see Figures 35–36).

Figure 35: Skate Park

Figure 36: Memorial Park

Unalaska Park Component Scores

Component scoring measures how the parks and components serve residents and users. These scores often make the most sense when compared within the same classification (i.e., when comparing one neighborhood park to another). It may be reasonable that there is a wide range of scores within a category. Component scores sorted by park classification are shown in Table 9. Figures 37 and 38 show the breakdown by park classification to demonstrate how one park within a class compares to others. Note there is little benefit to comparing special use parks because of their nature as unique types of parks.

Component scores show opportunities to provide a higher LOS to neighborhoods or the greater community.

For example, Unalaska's neighborhood parks have an average of 2.25 components per park, so Tutiakoff Memorial Park (one component) and Expedition Park (two components) should be considered potential sites to add components.

Table 9: Park Inventory, Classification, and Total Components

Facility	Park Classification	Total Components	Acres
Tutiakoff Memorial Park	Neighborhood Park	1	.8
Town Park	Neighborhood Park	3	0.4
Expedition Park	Neighborhood Park	2	1.5
Tanaadakuchax Park	Neighborhood Park	3	.6
Ounalashka Park	Community Park	14	6.4
Sitka Spruce Park	Community Park	6	4.5
UCSD Park	Community Park	5	1.8
Eagle's View Elem	Community Park	5	1.8
Skate Park	Special Use Park	1	0.1
Memorial Park	Special Use Park	2	8.2
Totals		**42**	**26.1**

Figure 37: Number of Components in Neighborhood Parks

The average number of components in neighborhood parks is 2.25.

Figure 38: Number of Components in Community Parks

The average number of components in community parks is 7.5.

Other Recreation Providers Beyond the City of Unalaska PCR

While the City of Unalaska provides the majority of recreational facilities for residents, the OC provides additional recreational opportunities. The OC is the major landholder in the area, and it allows shareholders, tribal members, and non-shareholders access to its 115,000 acres (on Unalaska, Amaknak, and Sedanka Islands) for recreational and subsistence activities. A permit is required for anyone to be on the land; however, only non-shareholders or non-descendants need to pay for the permit. All of the area's hiking trails are on OC land, as well as opportunities for fishing and foraging seafoods and wild edible plants.

The City of Unalaska has a network of paved paths that also function as recreational opportunities. There are approximately seven miles of sidewalks adjacent to paved roads, with only a few gaps along Airport Beach Road.

Level of Service

To analyze the LOS of PCR assets, the inventory team used a component-based LOS analysis. The process yields analytical maps and data that show access to recreation across a study area. This analysis also combines the inventory with GIS software to produce analytic maps and data that show the quality and distribution of parks and recreation services across the city. The ability to show where the LOS is adequate or inadequate is an advantage of GIS analysis. This is done by defining a service area and using park scores to establish a reasonable number of components residents should have access to within the service area defined as the target value.

Condition Audit

In April 2024, Bettisworth North used a mobile audit tool to assess every park and the two school playgrounds. This tool evaluated and scored both the functionality and quality of:

- Components–features within parks meant for use, such as playgrounds, tennis courts, and picnic shelters (Appendix 3 contains a comprehensive list of components along with their definitions)
- Comfort and Convenience Amenities–elements that improve comfort and convenience, like shade, drinking fountains, and restrooms

Each park site, component, and amenity was assigned a quality value ranging from 0 to 3. This enabled comparison between sites and facilitated analysis of the overall LOS offered by the Unalaska PCR system.

Component scores analysis suggest a reasonable LOS for Unalaska residents is three recreational components (rounded up from 2.25). The target value is comparable to a typical neighborhood park, which usually offers between one and three components (and is rounded up). For example, within PCR, Town Park and Tanaadakuchax Park would meet the target value, but Expedition Park and Tutiakoff Park are opportunities for higher LOS. Likewise, Unalaska's community parks offer an average of eight components (rounded up from 7.5). Within this classification, only Ounalashka Park meets the target value.

SCORING SYSTEM:

0 = Not Functioning

1 = Below Expectations

2 = Meets Expectations

3 = Exceeds Expectations

An overview of the park assessments, including the scorecard and GIS Inventory Map for each park, can be found in Appendix 3.

Overall, component scoring in Unalaska is similar to that of parks BerryDunn has assessed and tracked in its national database, relative to distribution of scores (see Table 10). BerryDunn's database maintains information on hundreds of parks and thousands of components across the United States.

Table 10: PCR Component Scores Versus National Data Set

PCR Scores		National Data Set Scores	
Scores	**%**	**Scores**	**%**
0	0%	0	3%
1	14%	1	10%
2	63%	2	79%
3	16%	3	8%

Unalaska Park System

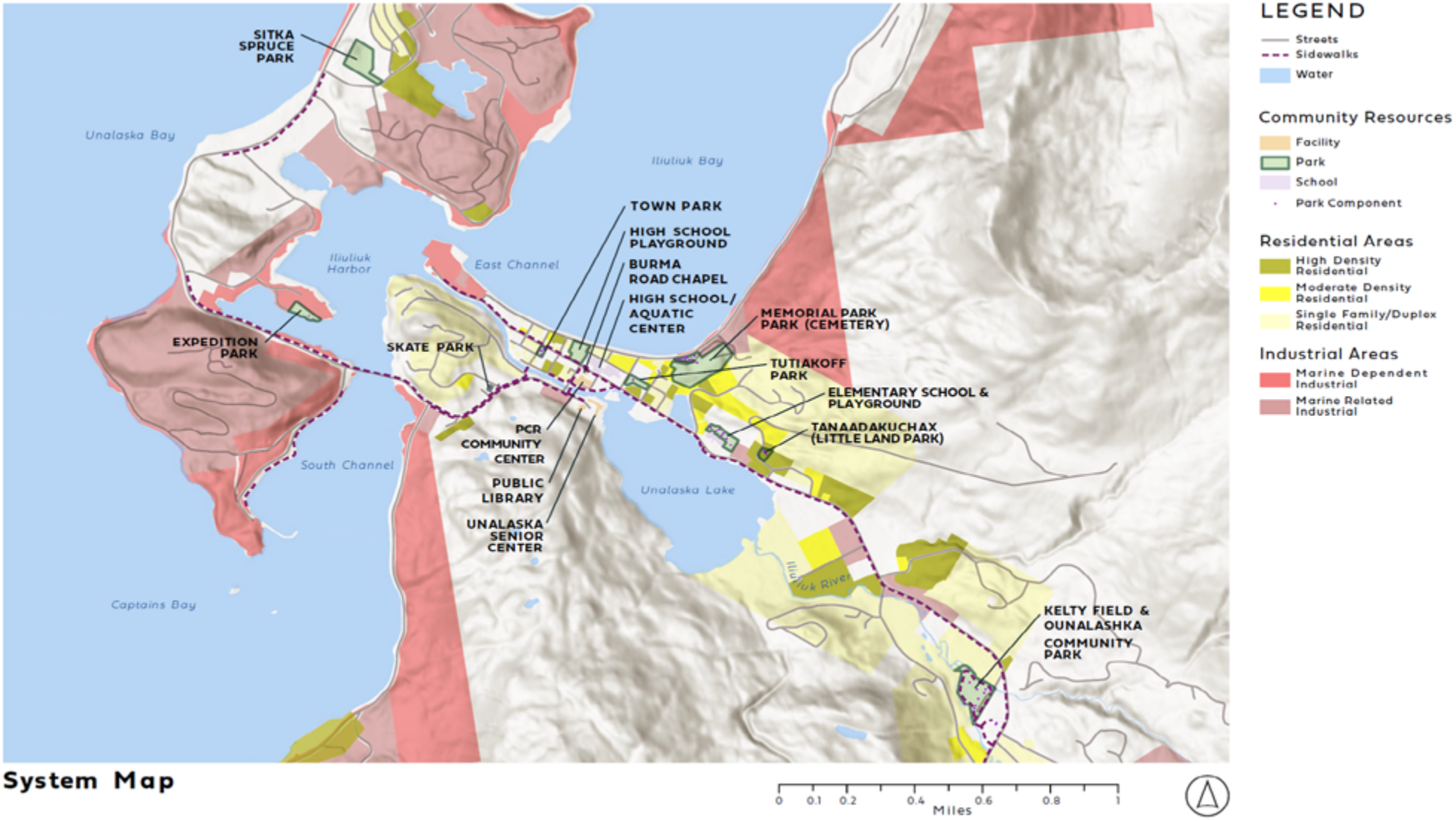
As discussed in the public engagement summary, strengths of the Unalaska parks system are that children can access them safely via sidewalks by walking or biking, and some of the parks have been recently updated. Figure 39 shows examples of additional park components.

Generally, Unalaska parks tend to have newer equipment (score of 3) than do parks in other cities across the country. There was also less equipment that was not functioning (score of 0), but more that was below expectation (score of 1).

The system inventory map (Figure 40) shows the relative size and distribution of existing parks and recreation facilities in the city. Green parcels represent parks. Table 11 shows all the components systemwide.

Figure 39: PCR Park Components

Figure 40: System Map



System Map

Table 11: Components in the PCR System

	Ounalashka Park	Sitka Spruce Park	Tutiakoff Park	Town Park	Memorial Park	Skate Park	Expedition Park	Tanaadakuchax Park	USCD Playground	Eagles View Elem. School	Total Components in system
Basketball Court	1								1	1	3
Basketball, Practice		1						1			2
Concessions	1										1
Diamond Field	1										1
Educational Experience		1									1
Fitness Course	1										1
Historic Feature					1						1
Horseshoe Court	1										1
Loop Walk									1		1
Multi-use Pad									1	1	2
Open Turf	1	1		1							3
Passive Nodes					1						1
Playground , Destination	1	1							1	1	4
Playground, Local				1				1			2
Rectangular Field, Multiple			1								1
Rectangular Field, Overlay	4										4
Rectangular Field, Small										1	1
Shelter, Large	1									1	2
Shelter, small				1			1				2
Skate Park						1					1
Tennis Court	1										1
Trail, Primitive		1									1
Volleyball Court									1		1
Water Feature							1				1
Water, Open	1	1									2
Total Components/ Park	**14**	**6**	**1**	**3**	**2**	**1**	**2**	**2**	**5**	**5**	**41**

Park Metrics Analysis

The Park Metrics Analysis compares PCR-owned and -maintained facilities to recent NRPA national statistics from its 2023 Agency Performance Review. For the following comparisons, BerryDunn used the 2024 population count of 4,113 permanent residents.

The metrics analysis shows that PCR is below the NRPA median for park acres per capita, with 6.4 acres per 1,000 residents, versus the NRPA median of 11.2 acres.[7] However, where the national average of residents per park is 1,172, Unalaska boasts only 410 residents per park. This does not take into account OC land that is available to residents.

When comparing specific components to the NRPA Park Metrics, PCR meets the median in most categories. Tennis courts, diamond fields, dog parks, tot lots (playgrounds for six months–five years old), and community gardens are the exceptions. Park Metrics are not intended to represent any standards against which each parks and recreation agency should measure itself. There is not one single set of standards for parks and recreation, because different agencies serve different communities with unique needs, desires, and challenges.

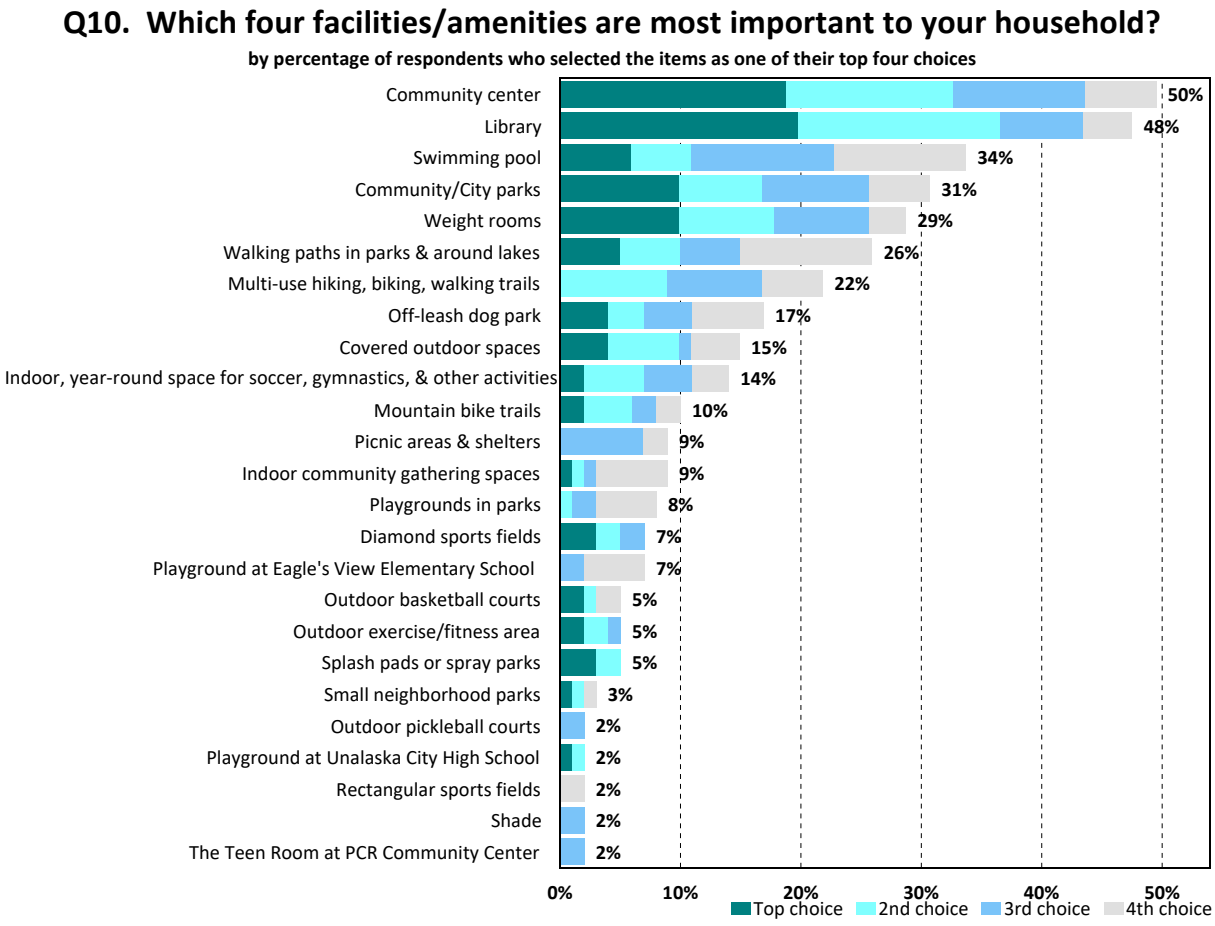
For example, in Unalaska where it is very windy, another tennis court may not be the best use of space or money. Table 12 provides an NRPA Park Metrics comparison, but the community survey findings shown in Figure 41 provide greater understanding of the importance of components and amenities to PCR residents. The public engagement input shows a priority for a year-round indoor space, activities, trails and trail maintenance, community gardens and/or greenhouses, a covered space, a hockey rink, walking paths, a climbing wall, field space, and a dog park.

Table 12: Park Metrics Analysis

Outdoor Facility	Agencies Offering This Facility	Median Number of Residents per Facility	PCR Current Quantity	PCR Residents per Facility	Need to Add to Meet NRPA Median
Playgrounds	93%	1,990	6	684	0
Multiuse Courts (Basketball, Volleyball)	42%	5,248	5	820	0
Tennis Courts	72%	3,074	1	4,100	+1
Diamond Fields	85%	1,833	1	4,100	+1
Rectangular Fields: Multipurpose	83%	2,493	6	684	0
Dog Parks	68%	10,327	0	N/A	+1
Fitness Course	19%	5,459	1	4,100	0
Skate Parks	46%	11,284	1	4,100	0
Community Gardens	52%	8,800	0	N/A	+1
Tot Lots	53%	5,323	0	N/A	+1

7 The NRPA Park Metrics analysis for acres per 1,000 used 2023 data self-reported from 401 parks and recreation municipalities and special parks and recreation districts.

Figure 41: Community Survey: Facility Importance

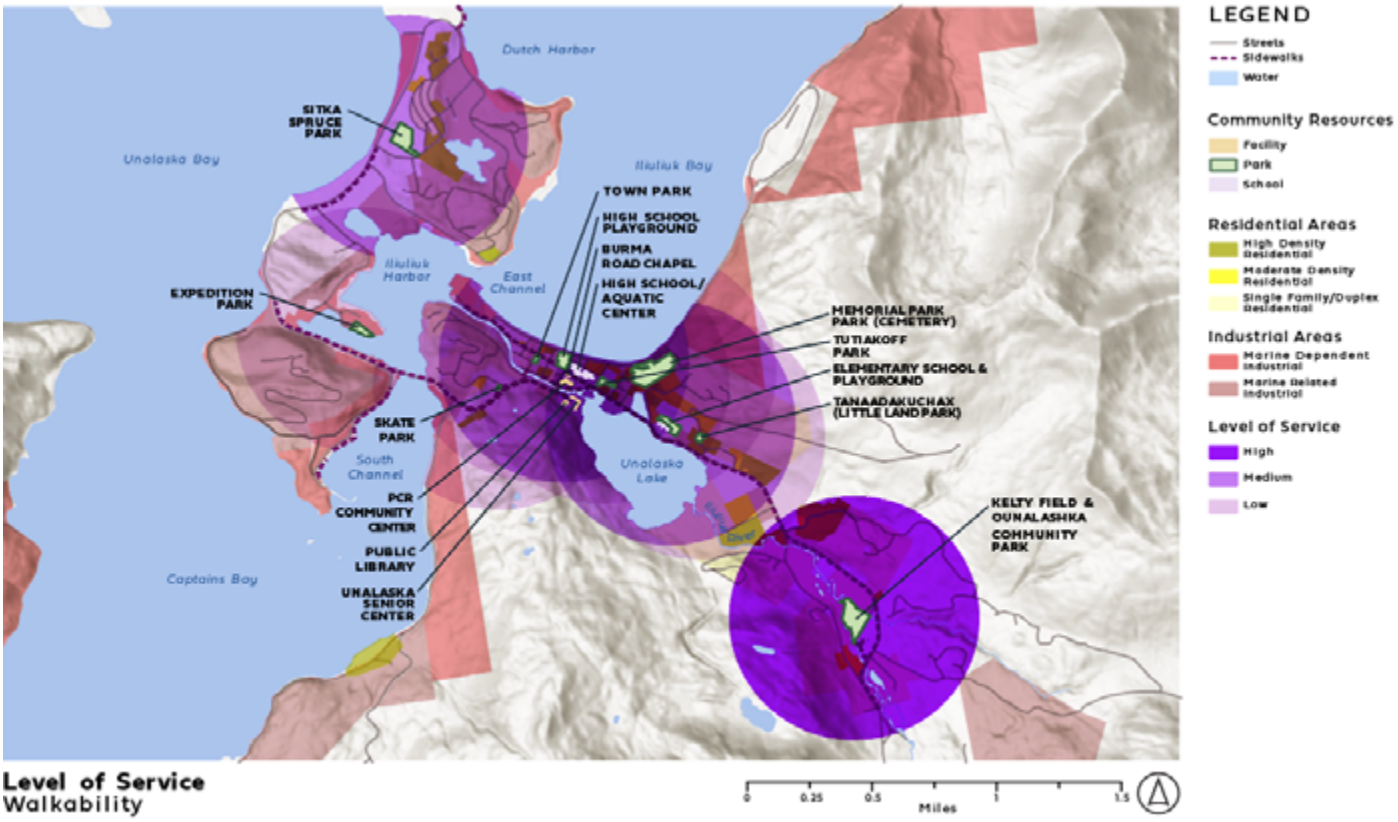


Walkability Analysis

A walkability analysis measures how conducive the built environment is to walk from home to a park or from park to park. Because all the major roads in Unalaska have sidewalks, there are very few pedestrian barriers. The rivers running through town are the only barriers, and while they may lengthen a resident's walk, they do not prevent walkability to any of the parks. In Figure 42, half-mile buffers (representing a 10-minute walk) have been placed around each park and shaded purple based on the number of components at each park. This 10-minute standard is consistent with that of other national organizations, such as the Trust for Public Land and the NRPA. Green parcels represent park properties.

Furthermore, Figure 42 considers the LOS provided at each park through the number of components PCR provides, including the schools. The darker purple gradient areas indicate access to a greater number of recreation components. All areas not shaded fall outside a 10-minute walk. While there is a lot of unshaded area, the area of residential land outside the shaded areas is minimal. The walkability analysis depicts the distribution and equity of service across the community. As the map shows, the vast majority of homes are within walking distance of a high LOS. Most of the areas with low or no LOS are industrial lands (which may include fishing-industry housing) or undeveloped land.

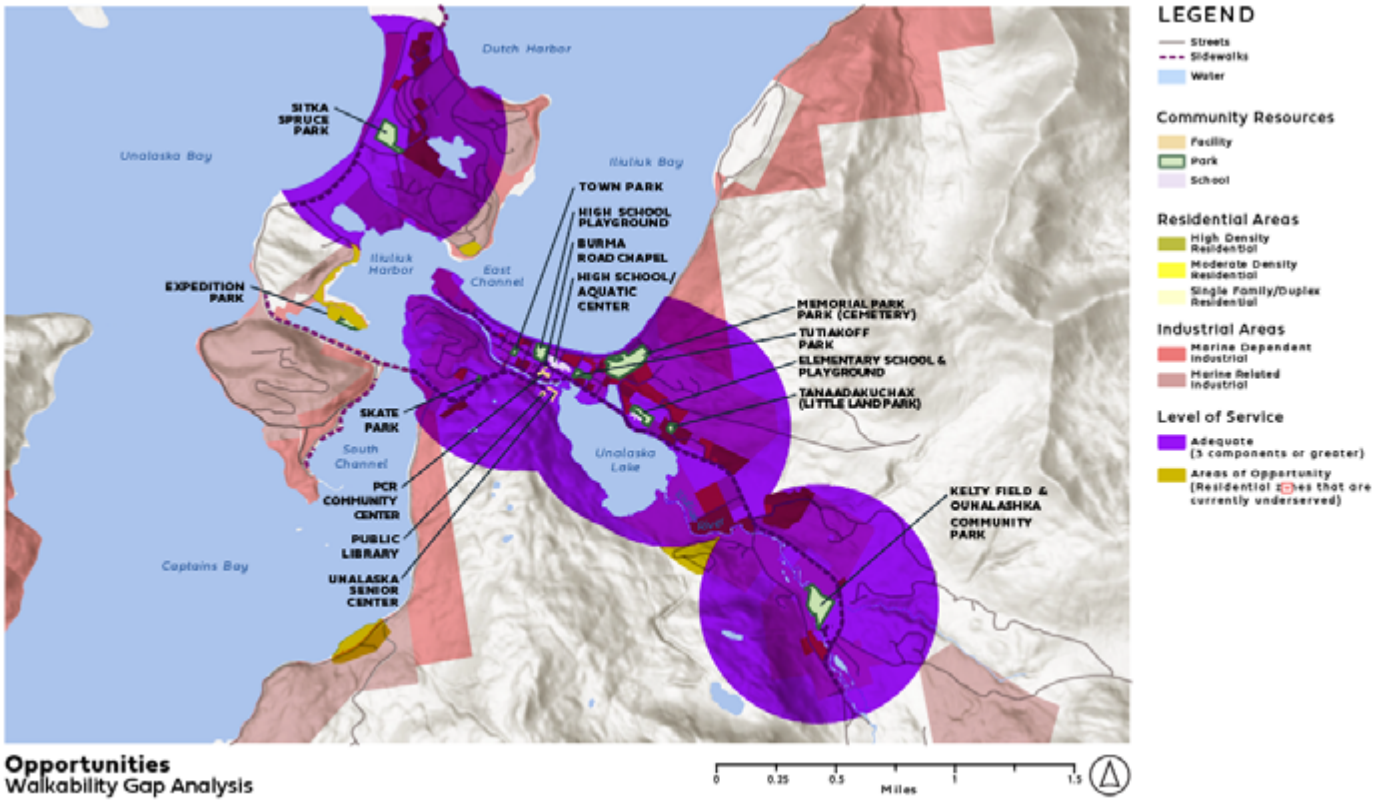
Figure 42: Walkability Analysis



Walkability Gap Analysis

Based on the inventory, a goal of every resident being within walking distance of three components was established. The following map (Figure 43) illustrates where that goal is met and where there is opportunity for improvement. The map illustrates two tiers of service represented by distinct colors. These colors signify regions offering satisfactory or superior service (purple), and those with limited service (golden). In this case, parks having at least three components are considered superior service areas (purple). Golden-shaded areas on the map indicate potential areas for improvement. The map illustrates that the goal of being within walking distance of three components is achieved in the majority of cases in Unalaska.

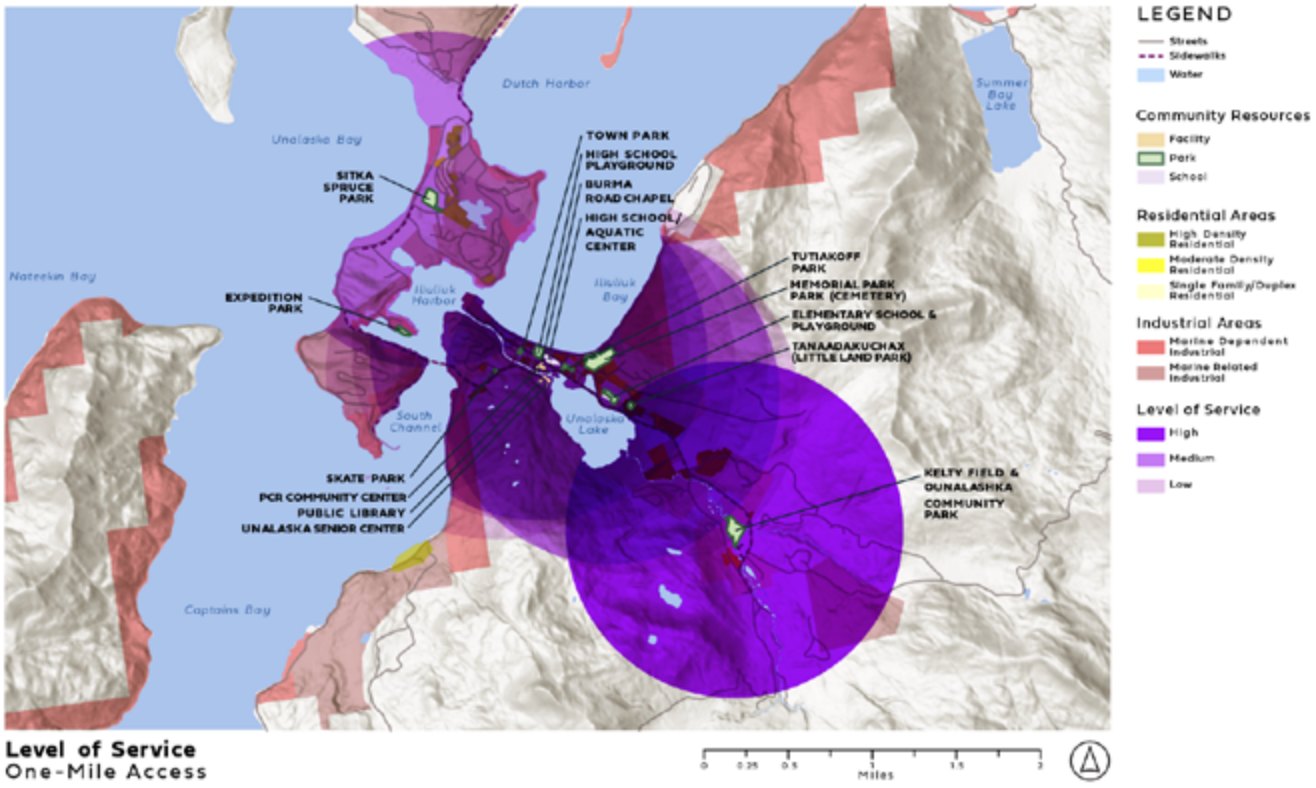
Figure 43: Walkability Gap Analysis



One-Mile Gap Analysis

Due to weather, most trips in Unalaska are by personal vehicle, as discussed in the Transportation Study 2017–2018. Thus, a one-mile (or driving) radius was also considered. In Figure 44, darker purple areas indicate a higher volume of opportunities. As can be seen on the map, all residential areas within the City of Unalaska have a medium-to-high LOS within a one-mile area.

Figure 44: One-Mile Access to Outdoor Recreation

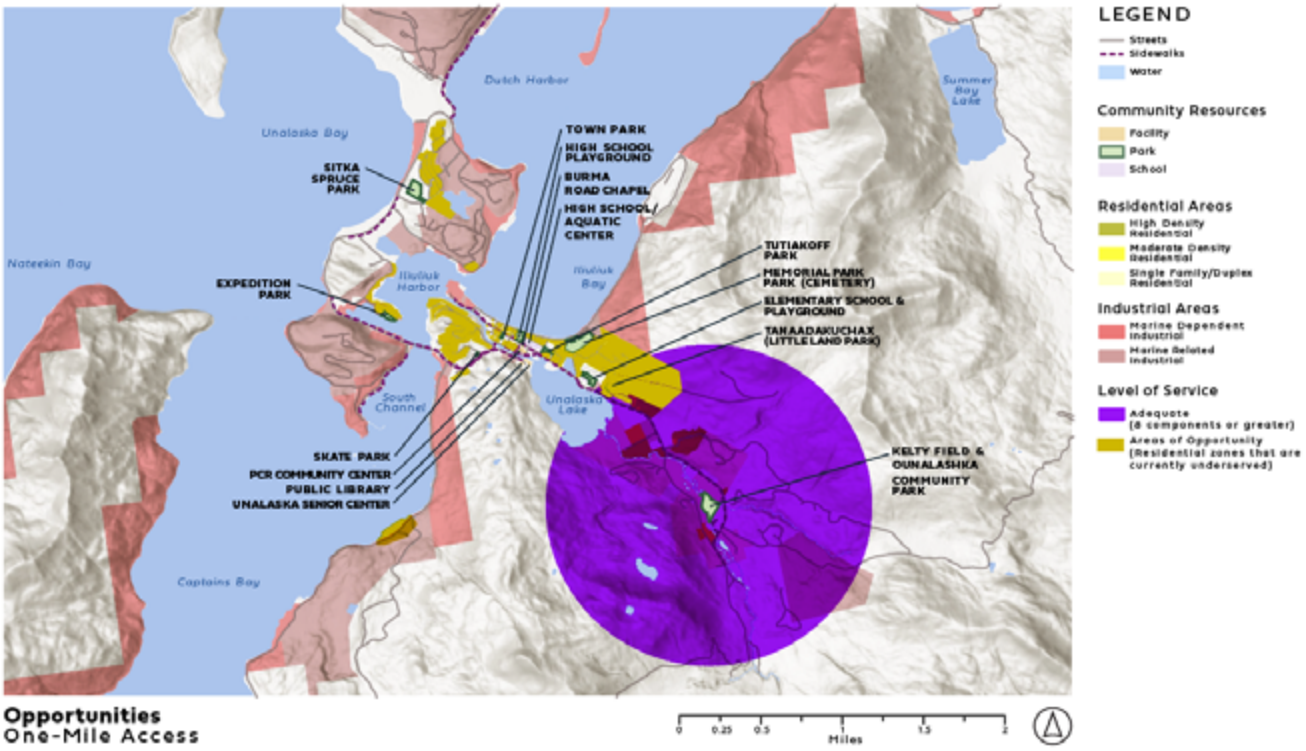


However, when the target number of components (eight for a community park based on the average of existing park components) are considered, opportunities can be seen for additions to existing parks. In addition, when looking at the one-mile/ driving radius, it should be noted that users are less likely to drive from park to park to gain access to a higher number of components (like they would if they were walking), so in this case, parks are considered individually.

Figure 45 reflects access to the LOS target value within a one-mile drive. Purple indicates where LOS values meet or exceed the target value (eight components at one park); all residential areas outside the purple zone, shaded golden, are areas that are below the goal level.

Indoor facilities were not included in this gap analysis, but it should be noted that if the public library, community center, and the aquatic center were included, the analysis would show that almost all residents, except those in the Standard Oil Hill area, are within one mile of a high-component facility. However, if only parks are considered, options to fill the gaps include adding two components to Sitka Spruce Park or adding three more components to UCSD Park, which would put the vast majority of residents within a one-mile drive of a community park with eight components.

Figure 45: One-Mile Gap Access



LOS Key Findings and Discussion

The following highlight BerryDunn's key findings and discussion points:

- The city should adopt a LOS standard of three recreational components in a half-mile proximity and eight components at a single park within a one-mile drive. While many children walk and bike to parks, as described in the engagement section of the PRMP, the Transportation Study 2017–2018 showed that 99% of trips were made by car, truck, or taxi—hence the importance of the one-mile drive to a community park.

- Adding amenities at existing parks to support and enhance a diversity of outdoor activities will significantly increase LOS. The consultants analysis suggests a need for an additional basketball court (1), a dog park (1), a community garden (1), and a tot lot (1). Community input and stakeholder feedback showed particularly strong support for a community greenhouse and a dog park. While some play equipment caters to younger age groups (bucket swings, the train at Town Park), the vast majority of play equipment is rated for 5- to 12-year-olds. Providing additional play equipment for the 6-month-old to 2-year-old and the 2- to 5-year-old ranges is recommended.

- A dog park ranked as highly desired among the stakeholder groups providing input at the Spring Festival, and is recommended based on the Park Metric Analysis. There are estimated to be between 400 and 450 dogs owned in Unalaska. Dog parks are typically at least one acre, but due to Unalaska's small population, a smaller dog park might suffice.

- The most cost-effective location for both a dog park and/or a multi-purpose facility would be at Ounalashka Park, southwest of the tennis court. This area is about half an acre. This places it on the outskirts of the city, which is more ideal than being in one of the many parks in the core area. Noise at dog parks is a common complaint, so a barking policy and hours should be enforced to respect the surrounding neighbors. Other options might include:
- Tanaadakuchax Park; however, this park is very close to residential areas, the size would be limited to 1/3 acre, and all other equipment (playground, grills, basketball) would need to be removed to achieve the maximum size
- Purchase additional land at Sitka Spruce Park as an option, if available
- Tutiakoff Park could support a half-acre dog park, but like Tanaadakuchax Park, it is very close to residential areas
- To progress toward achieving the goal of eight components at a park within a one-mile drive, the city should consider that Sitka Spruce Park demonstrates potential for further development, enhancing amenities for Amaknak Island residents. See Figure 46.

Figure 46: View Looking Northeast from Bench at Sitka Spruce Park Pond

- Other options to increase LOS include adding components to either of the schools. Eagle's View Elementary is talked about in detail below. Options at the Unalaska City High School would be to include some components that support winter programming. Hockey boards could be installed around the basketball court to provide an opportunity for hockey or ice skating. When snow is present, a loop around the playground could be groomed by snowmachine for skiing, which would further diversify recreational opportunities.
- Another identified need from the Park Metric Analysis and during the public engagement process is a community garden/greenhouse. The city-owned land near the library would be an excellent location for this. Centrally located, the facility can share some services (utilities, parking) with the library. The residents of the senior housing development would be within easy walking distance as well.

- A tot lot was recommended by the park metric analysis and in conversations with parents at the open gym during the site visits. Tutiakoff Park would provide a centrally located site, which is also adjacent to a low-income housing development. The field has drainage issues, which makes it unusable at times, but cannot be corrected because it is owned by the Unalaska United Methodist Church. Adding a tot lot would allow greater usability on the city-owned portion of the park. A shelter over the tot lot would provide greater year-round use.
- Eagle's View Elementary School's playground equipment rated low relative to the other play equipment in Unalaska. Most of the play equipment in the city is in very good to excellent condition, whereas the elementary school's equipment is showing its age through rust, missing parts, and fading. A general overview of equipment is as follows:
  - » There are many opportunities for climbing and sliding on the traditional post and deck play equipment
  - » The swings are well-used, as observed during the site visit
  - » There is a balancing beam or area to promote confidence and agility
  - » The preschool has its own fenced-in play area
  - » Many benches are provided for caregivers
  - » The pavilion offers opportunities for play and gatherings when it is raining
  - » The basketball court is popular
  - » The lack of fencing creates a safety hazard and should be remedied.

There are many elements that are working well at the elementary school, and one solution for helping improve the playground's rating would be to remove some of the redundant and aged equipment and infill with new pieces that focus on:

- » Imaginary play (playhouse, kitchens)
- » Sensory play (music)
- » Vestibular (rotating, bouncing)

A saucer swing could be added that is accessible and allows several children at a time to play on it.

Furthermore, modifying the soccer field to artificial turf would provide an even, low-maintenance playing surface.

- There are 16 low-scoring components at six locations. The following represent needed improvements from the LOS analysis. Low-scoring components identified in the inventory are shown in Table 13. These are components that scored a "1" (Below Expectation).

Table 13: PCR Low-Scoring Park Components

Park Name	Component	Notes
Sitka Spruce Park	Signage	Site sign needs to be reset. Interpretive signage could use updating.
Tutiakoff Park	Parking	Off-street parking along King Street is not marked.
Town Park	Bike Parking	Bike rack is very rusty.
	Parking	There are two parking stalls off 3rd Street; is this sufficient?
	Seating	Seating needs to be reset or relocated on level ground.

Park Name	Component	Notes
Memorial Park	Parking	Parking is unorganized and confusing.
	Seating	Many benches are in very poor shape and do not face views.
	Signage	There are opportunities for signage about monuments and/or history.
Expedition Park	Park Access	Park is not accessible and hard to get to.
	Parking	There are two parking spots; one van was camped out in one space.
	Picnic Tables	Park has only one picnic table. With so many grills, consider adding a second table.
	Restrooms	Restrooms are lacking; park only has a porta-potty.
	Seating	Bench is in poor shape.
	Signage	Signage at west entry is very cluttered.
Tanaadakuchax Park	Bike Parking	Boards underneath the bike rack are rotting.
	Seating	Benches are bent and rusty.

An indoor fieldhouse facility is needed, and there may be future opportunities at Ounalashika Community Park for this facility. The facility could double as an emergency shelter and may be eligible for Federal Emergency Management Agency (FEMA) or other state funding. This would through, require movement of tennis and basketball courts to another location.

It is important to note that the OC intends to build a cultural center near the site.

Figure 47: Ounalashika Community Park

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SECTION 06

COMPARATIVE ANALYSIS

Comparative analysis, or benchmarking, is a recognized tool that helps parks and recreation managers make informed resource-allocation decisions. Understanding the size and scope of similar organizations or those serving comparable populations can provide valuable insights. However, benchmarking should not be the sole criterion for decision-making, as each community has unique ways of accounting for revenues and expenses, and facilities and structures can vary significantly. The results of the comparative analysis are presented in Table 14.

This analysis compares Unalaska's investment in parks and recreation with that of four other small communities in Alaska, three NRPA Gold Medal recognized agencies, and 41 additional small agencies that self-report data through the NRPA Park Metrics program. The data sources are as follows:

- **NRPA Park Metrics:** Agencies with populations of 6,476 or under were identified. Unalaska's population fell slightly in the middle of this range.
- **Small Alaska Communities:** Palmer and Homer provided data, while Valdez and Kodiak did not respond to BerryDunn's request; data from these communities was sourced from their websites and published budgets.

The individual factors reported include:

- **Population:** Unless otherwise provided by PCR, BerryDunn used Esri data from the most recent U.S. Census.
- **Operating Expenditures and Revenues:** These figures reflect operational revenues and expenses, excluding capital expenditures. The facilities are listed at the bottom of the table.
- **Cost Recovery:** This metric represents the percentage of operating costs recovered through non-tax revenues.

The comparisons were calculated using the data in Table 14.

Operating expenses per capita illustrate that Unalaska is a well-funded agency. Expenses per capita are higher than those of the others in the analysis; however, when the seasonal industry population is factored in and the library taken out (most parks and recreation agencies do not fund a library), then the PCR is still funded above average. Revenues per capita are the highest among the Alaskan communities analyzed, although cost recovery is lower. Cost recovery illustrates a service-based program. The amount of park space per 1,000 residents is a function of available, developable land. In this case, acres of park space are lower than that of the other communities.

Table 14: Alaskan Small Community Comparative Analysis

			Small Alaskan Communities			
	Unalaska	NRPA Metrics (41 agencies)	Valdez	Palmer	Homer	Kodiak
Population	4,113	2,800–6,476	3,846	6,218	5,876	5,326
Population density per sq mile	19.4	378–903	18	1,226	400	1,355
Operating expenditures	$4,428,737	N/A	$1,954,432	$1,732,924	$735,357	$2,836,368

			Small Alaskan Communities			
	Unalaska	NRPA Metrics (41 agencies)	Valdez	Palmer	Homer	Kodiak
Operating expenditure per capita	$1,076 ($442 without library and with 6,000 seasonal fishing industry residents)	$59 to $412 ($175 median)	$508	$279	$125	$533
Revenue	$205,200	N/A	$40,000	$418,200	$57,000	$239,811
Revenues per capita	$49.89	$0–$53	$10.40	$67	$9.7	$45
Cost recovery	4.6%	0%–35.7% (8.9% median)	2%	24%	7.7%	8.4%
Acres of park space	26	N/A	423	70	400	302
Acres of park space per 1,000 population	6.3 acres	7.1 to 28.2 acres	112	11	68	57
# Residents per park	514	462–1,297 (711 median)	99	1,036	195	1,331
Department facilities	Community center, library, indoor aquatic center	N/A	Recreation center, aquatic center	Library, community center, events center	Use of an older school property for recreation programs. No other facilities as well as a swimming pool and library	Aquatic center, teen center, gymnasium, library
Recreation program guide	Yes	N/A	Yes	No	No	No

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SECTION 07

DELIVERY OF SERVICES

The purpose of the services assessment section is to explore, evaluate, identify findings, and make recommendations to enhance the operations and recreation delivery of PCR. The services provided by PCR are vital to the Unalaska community and local economy.

This section focuses on four key areas related to daily operations: an organizational and financial analysis, maintenance and operations assessment, recreation and library program analysis, and communication effectiveness.

The services assessment used metrics from the NRPA to determine the appropriate level of investment in recreation services for the community and to compare these services with those offered by similar-sized agencies across the United States.

The NRPA collects metrics data from over 1,000 agencies annually. This self-reported data can vary significantly between agencies, reflecting differences in programs, facilities, services, and accounting methods for revenues and expenses. Despite the unique circumstances faced by PCR, this data provides valuable perspective.

To help ensure meaningful comparisons, it is essential to consider the types of parks and facilities within the community and the agency's position within the population ranges defined by the NRPA metrics. NRPA aggregates and reports data within each population range in three quartiles: low, median, and high.

For this assessment, BerryDunn used data from 41 parks and recreation agencies serving populations of up to 6,476 residents. Although no Alaskan agencies were included in this metrics data set, the comparative analysis in Section 6 of the PRMP did feature four smaller Alaskan cities.

Introduction

BerryDunn assessed PCR's organizational and financial structure, staffing, and its parks and recreation investments to deliver high-quality services to the community. Under the guidance of the City Manager, the PCR Director autonomously oversees daily operations, including the budget, personnel, policy development, parks, recreation programs and facilities, special events, and cultural programs. The Public Works Department is responsible for daily maintenance of the city's parks and open spaces.

Organizational and Financial Analysis

BerryDunn assessed the organizational and financial structure, staffing, and investment the city makes in parks and recreation to deliver services to Unalaska residents and to the seasonal workforce. PCR delivers services through six work units—PCR Administration, Recreation Programs, Community Center, Library, Aquatics, and Parks.

Parks and Recreation Staffing

In 2024, the director is supported by 17.48 full-time equivalent (FTE) positions, which include administrative staff and personnel for aquatics, sports, enrichment classes, and special events. The department employs 5.5 FTE for library operations, while the Public Works Department has 3 FTE dedicated to maintaining parks and facilities.

Data indicates that comparable agencies serving similarly sized communities might invest in up to 21.3 FTE. This suggests that Unalaska's staffing levels are appropriate when compared to 41 similar agencies included in the 2023 park metrics database. However, it is important to consider that many agencies do not directly supervise libraries as PCR does, which suggests there is an argument to be made that PCR may be slightly understaffed.

Another important consideration is the distribution of positions. Typically, agencies allocate about 46% of FTE to park O&M. In contrast, Unalaska dedicates less than 15% of its parks and recreation FTE to these areas. However, this should be viewed alongside Unalaska's low park space per 1,000 residents (6.34 acres), which is slightly below the lower quartile, as well as the seasonal use of parks due to harsh weather conditions. This indicates that the current number of park maintenance FTEs is sufficient for the size of the park system. Additionally, having three FTEs within the Public Works Department adds support from a larger workforce.

Current Circumstances

PCR adopts an annual budget that establishes priorities, directs staff, and allocates the primary resources needed to meet the parks and recreation needs of city residents. The city's general fund serves as the main operating fund, supplemented by minimal revenues generated by PCR.

The revenue growth and increased expense budgets shown in Table 15 reflect a process of "right-sizing" PCR in response to population declines following suspended air travel after a plane crash in 2019, as well as the ongoing challenges related to transportation on and off the island and recovery from the COVID-19 pandemic.

Table 15: PCR Operating Budgets–Trends FY 2021–FY 2024

	2021 Actual	2022 Actual	2023 Actual	2024 Budget	Change Since 2021
PCR Admin	$213,956	$264,619	$286,300	$291,890	+36%
Recreation Programs	$636,565	$674,238	$800,998	$1,015,885	+60%
Community Center	$869,513	$932,418	$1,106,343	$1,252,469	+44%
Library	$817,276	$898,096	$945,391	$1,119,375	+63%
Aquatics	$479,379	$504,889	$474,131	$699,018	+14%
Parks	$1,566,534	$1,601,448	$1,846,979	$1,962,235	+25%
Total	**$4,583,223**	**$4,875,708**	**$5,460,142**	**$6,340,872**	**+38%**

Department revenues in 2024 are budgeted to increase by 48% compared to 2020. See Table 16.

Table 16: PCR Revenues in 2024

	2024 Budget	Growth Since 2020
Facility Passes	$110,000	162%
Recreation Program Fees	$68,000	168%
Facility Rental Fees	$6,500	39%
Equipment Rental Fees	$500	-96%
Other PCR Fees	$5,500	42%
Library Fees	$14,700	38%
Total	**$205,200**	**48%**

Capital improvements such as the library renovation were funded locally and without a need to use bonds or finance improvements.

Measuring the Financial Health of the Department

The contributions made by PCR in support of quality of life in the remote area play a direct and vital role in the local economy. Without PCR programs and facilities, the local fishing industry and economy may be significantly and adversely impacted.

Comparing revenues to expenses provides insight into the cost recovery for the PCR. Comparable departments may recover between 0% (low) to 35.7% (high) or a median of 8.9%. This is fairly low compared to that of overall agencies, but illustrative of the much smaller departments serving 7,000 or less population. PCR's total cost recovery is calculated used 2024 budgets to be projected at 4.6% in 2024, typical of a service-based and well-funded parks and recreation agency.

UNALASKA OPERATING EXPENDITURES PER CAPITA: $442/Year

Source: 2021 NRPA Agency Performance Review

Operating Expenditures per Capita

Another metric NRPA aggregates and reports on annually is operating expenditures per capita. In 2023, the typical small parks and recreation agency similar in size to Unalaska's spent between $22 and $184 or a median of $83 per capita. For the purposes of this assessment, a population number of 10,000 was used to account for the approximate 6,000 temporary and seasonal population PCR serves.

In 2023, the city spent $367 per person and is budgeted to spend $442 per capita. Without the transient workforce, spending per capita in 2024 is over $1,076 in 2024.While this demonstrates the importance and necessity of the recreation and park services the PCR provides, it also illustrates the high cost of providing services in an extremely remote location.

Traditional Parks and Recreation Operations and Capital Development Funding Sources

Local governments can employ a variety of mechanisms to provide services and make public improvements. Parks and recreation operating and capital development funding typically comes from conventional sources such as sales, use, and property tax referenda voted upon by the community, along with developer exactions. Operating funds may fluctuate based on the economy, public spending, or assessed valuation and may not always keep up with inflationary factors.

Additional funding opportunities are noted in Appendix 4, including:

- Traditional tax and exactions-based funding resources
- Development funding
- Fees and charges
- Alternative operations and capital development funding sources
- Loan mechanisms
- Alternative service delivery and funding structures
- Partnership opportunities
- Community resources
- Grants
- Philanthropy
- Community services fees and assessments
- Permits, licensing rights, and use of collateral assets
- Funding resources and other options
- Cost-saving measures
- Green trends and practices

Park Operations & Maintenance (O&M) Assessment

BerryDunn evaluated the resources and practices related to parks maintenance and operations to assist the City of Unalaska in efficiently managing its parks, trails, and open spaces. This assessment identifies best practices, efficiencies, and recommendations that align with the current needs and management of park spaces, as identified in the needs assessment survey and community engagement components of this PRMP.

Maintaining Unalaska's eight parks is challenging due to the island's harsh weather conditions. Grass maintenance is difficult given the limited growing season and variable precipitation.

The responsibility for parks maintenance lies with the Public Works Department, which funds three FTEs working a five-day-per-week schedule. The department provides support through various trade positions, including carpentry, mechanical functions, and facility maintenance. Custodial services are contracted to a local vendor. The consultant observed that the maintenance team performs admirably despite these challenges.

Additionally, it is important to note that many common issues faced by parks and recreation agencies elsewhere do not significantly affect Unalaska. Graffiti, vandalism, restroom camping, and homelessness do not pose major challenges for the community.

Park Operations and Maintenance (O&M) of City Parks and Open Spaces

Currently, Unalaska operates and maintains 26.1 acres of park space and 41 park components. The components include:

- Basketball Court
- Basketball, Practice
- Concessions
- Diamond Field
- Educational Experience
- Fitness Course
- Historic Feature
- Horseshoe Court
- Loop Walk
- Multiuse Pad
- Open Turf
- Passive Nodes
- Playground, Destination
- Playground, Local
- Rectangular Field, Multiple
- Rectangular Field, Overlay
- Rectangular Field, Small
- Shelter, Large
- Shelter, Small
- Skate Park
- Tennis Court
- Trail, Primitive
- Volleyball Court
- Water Feature
- Water, Open

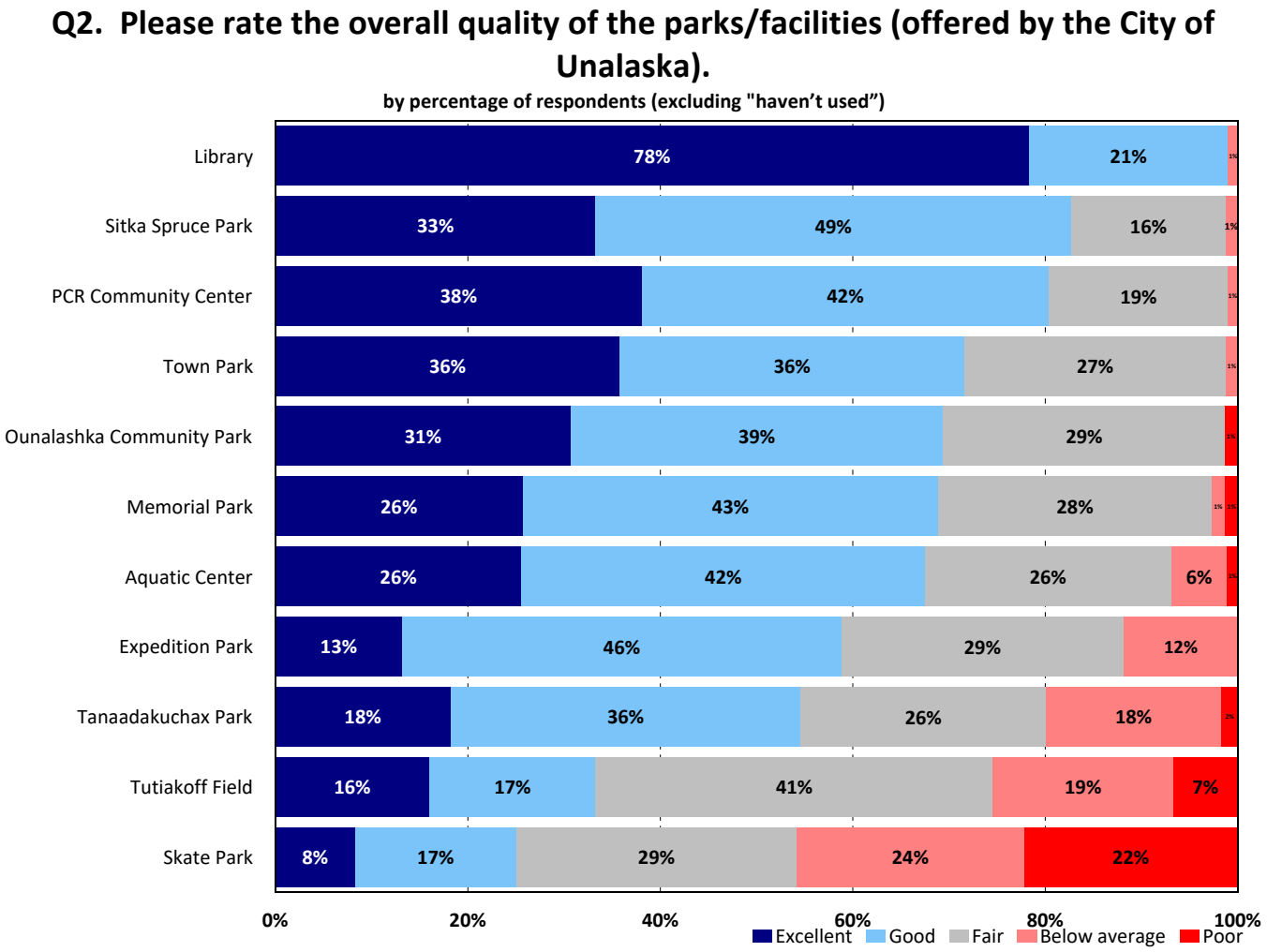
Public works, in close coordination with PCR also maintains the library, aquatic center, and the PCR recreation center.

Community Satisfaction With Parks

The needs assessment survey revealed that many Unalaska residents rate the quality of the parks as excellent or good. The highest ratings were for Sitka Spruce Park (82%), Town Park (72%), Ounalashka Community Park (70%), and Memorial Park (69%). In contrast, Tanaadakuchax Park and Tutiakoff Field both received below-average/poor ratings of 25%, while the Skate Park had a rating of 46%. Notably, only the Skate Park received more below-average and poor ratings than excellent and good ratings.

When respondents were asked to select their top four priorities from a broader list of parks, facilities, and park components, 31% identified city parks among their top choices. Additionally, survey data indicated that only 12% of respondents felt that parks and facilities were not well maintained.

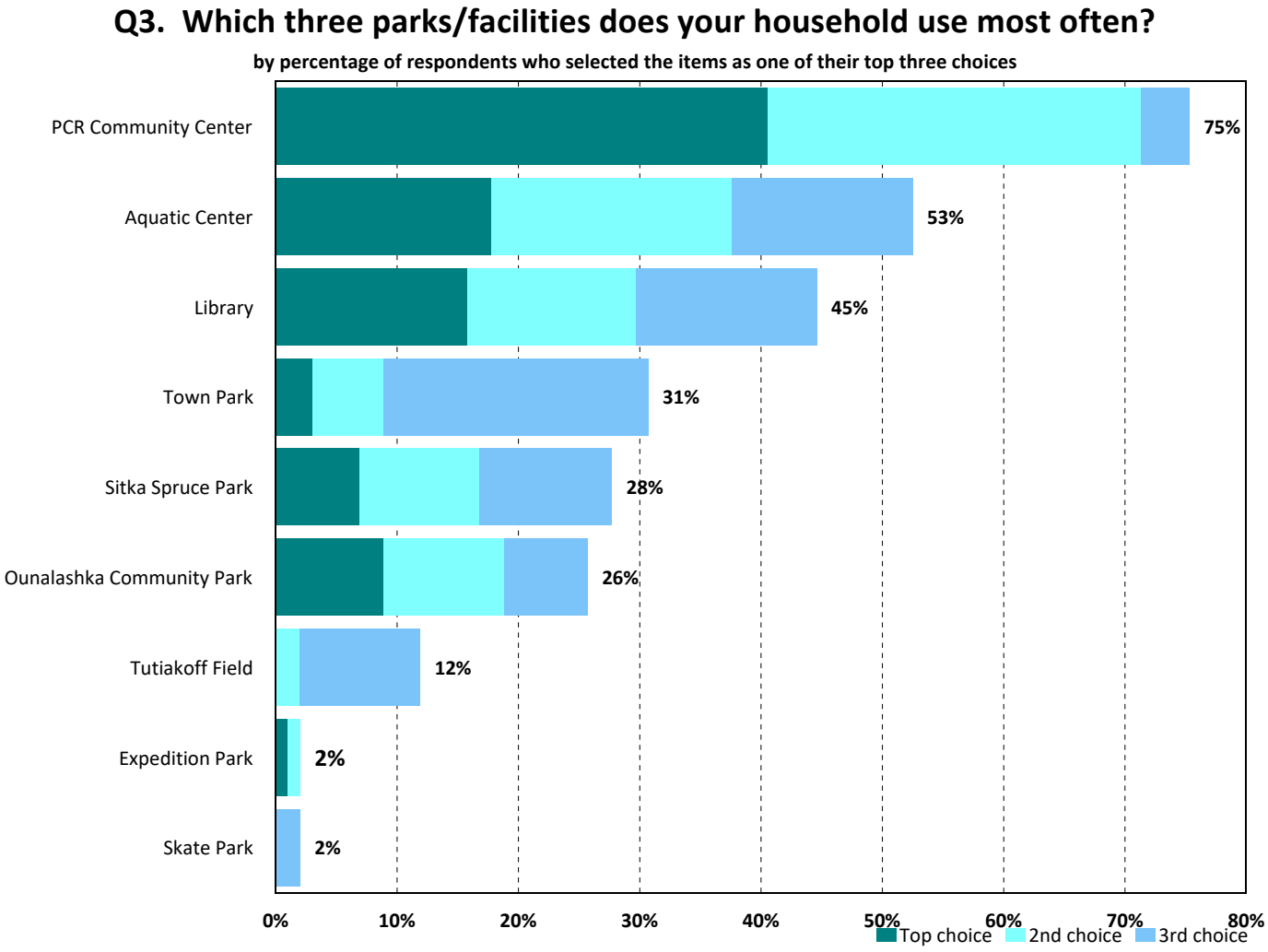
Figure 48: Satisfaction with Unalaska Parks and Facilities



Park Use

Use of parks can help prioritize maintenance functions. The most-used parks are shown in Figure 49.

Figure 49: Most-Used Parks in Unalaska



Importance of Quality Park Maintenance

Proper parks maintenance can create positive user experiences while poor maintenance can lead to accelerated depreciation of park components and amenities. The quality of park maintenance is often dependent upon the level of financial investment in park maintenance.

Financial Resources and Staffing

Table 17 shows park maintenance and operations funding between FY 2021 and FY 2024.

Table 17: Unalaska Parks Maintenance and Operations Budgets FY 2019–FY 2024

Park Maintenance and Operations Funding	FY 21	FY 22	FY 23	FY 24	% Change from 2021 to 2024
Labor	$1,298,024	$1,348,257	$1,618,286	$1,724,942	+33%
Utilities	$65,012	$68,608	$34,797	$56,479	-13%
Supplies and Commodities/Other	$203,498	$184,583	$193,896	$180,814	-11%
Total	**$1,566,534**	**$1,601,448**	**$1,846,979**	**$1,962,235**	**+25%**

To evaluate funding levels, it is helpful to benchmark against other typical agencies with similar populations. The NRPA metrics data suggests that agencies typically invest 46% of their operating budgets in park maintenance. In Unalaska, the maintenance budget accounts for 34% of the total investment in parks and recreation. Given the months with severe weather, this appears to be reasonable and appropriate.

Staff Resources and Maintenance Equipment

Another way to assess the city's investment in the O&M of the parks is to look at staffing. Comparable agencies may typically invest approximately 21.6 FTE per 10,000 residents. The city invests 7.47 FTE per 10,000 residents, or about one third of what other agencies may invest. This can be accounted for by the seasonal use and maintenance of the parks due to the harsh weather.

- Maintenance equipment is generally sufficient; however, turf equipment may be needed, including loaders and batwing mowers

Developing the Maintenance Program Plan

While no universal standards exist for park maintenance, the NRPA publishes guidance in the Management of Park and Recreation Agencies, 4th Edition[8] that provides some helpful guidelines:

- The system must be well organized based on the needs of the organization
- Maintenance goals, objectives, and standards should be established
- Use time, personnel, equipment, and materials efficiently and effectively
- Develop work schedules based on established policies and priorities
- Emphasize preventive maintenance
- Make sure adequate resources to get the job done are available
- Incorporate environmental stewardship in the maintenance program
- Assume responsibility for visitor and employee safety
- Ensure compliance with federal, state, and local laws and regulations
- Make maintenance a primary consideration during design and construction

Recreation and Library Program Analysis

Recreation Program Analysis

BerryDunn conducted an analysis of the recreation program to evaluate the effectiveness of its community recreation facilities and services. This evaluation aimed to answer several key questions about the city's programs and services:

- What are the core programs, and do they align with community desires and does the mix of recreation programs meet community needs?
- How effective are the facilities and what changes to existing facilities should be considered? What new facilities, if any, should be considered?
- What challenges might hinder the city from delivering high-quality programs and services?

To help ensure an accurate assessment, BerryDunn used the most recent participation data from 2023. The PCR compiled a program inventory using registration data, program guides, and other marketing materials, allowing BerryDunn to analyze how recreation programs are delivered.

The PCR recreation programs are guided by annual business plans that are inclusive of many areas, generally reviewed and analyzed in a master plan recreation assessment. As a result, the business plans for FY 2025 will be referenced in this assessment and can be found in Appendix 5.

The evaluation concluded that the recreation program is highly functional and successfully delivers high-quality programs and services. These services are great contributors to the physical and mental health of Unalaska residents and play a significant role in the local economy.

8 Management of Park and Recreation Agencies, 4th Edition, Edited by Merry Moiseichik, 2016.

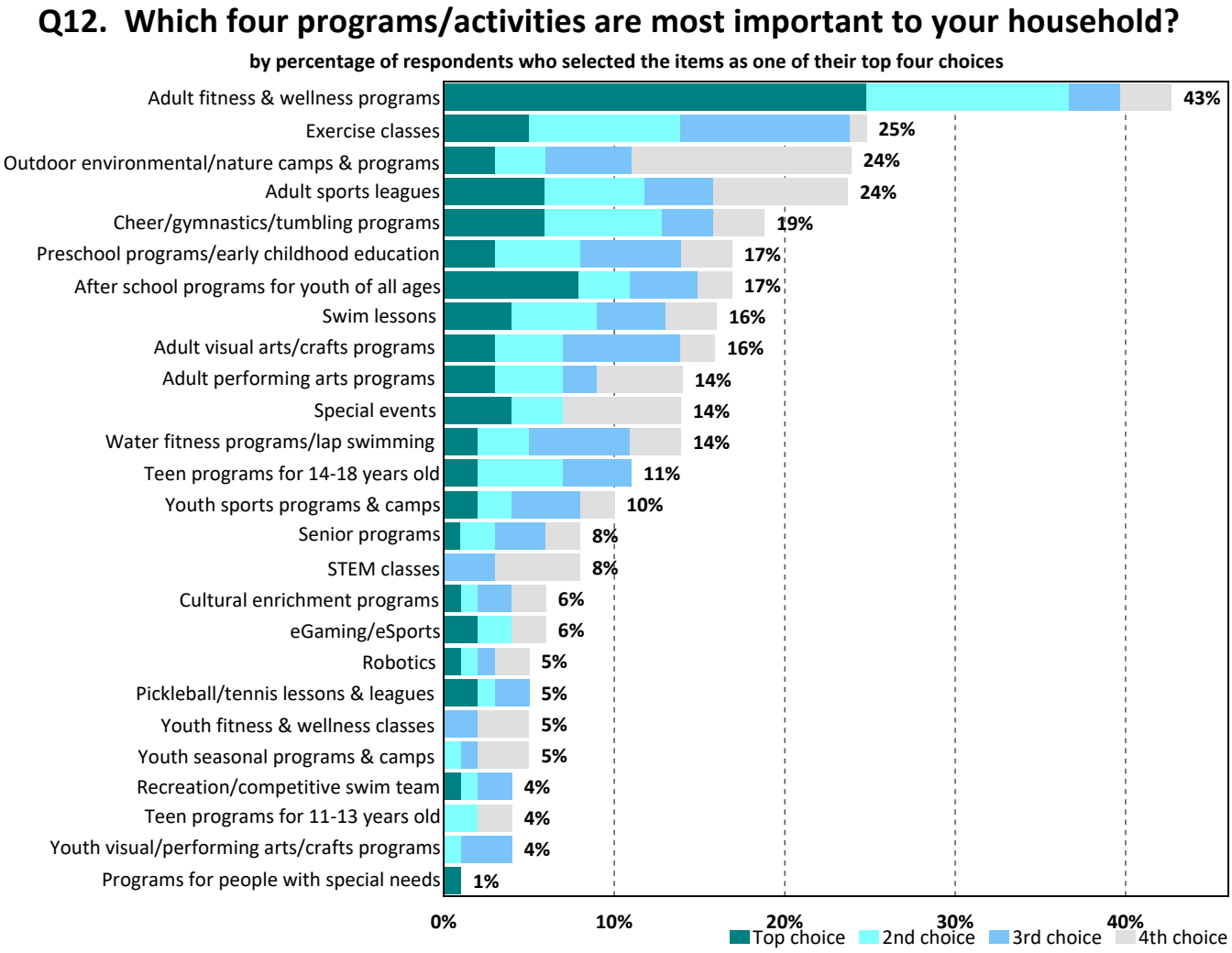
ORGANIZATION OF RECREATION PROGRAMS AND SERVICES

The city delivers recreation services in a variety of program areas, primarily through the Aquatics Center, Community Center, and Public Library. A senior center is available in Unalaska but operates independently of the PCR. The recreation program operates under the supervision of the Recreation Manager in cooperation with the other PCR managers reporting to the PCR Director.

DELIVERY OF CORE SERVICES– RECREATION PROGRAMS

The needs assessment survey revealed that the most important public recreation activities desired by the Unalaska community are adult fitness and wellness programs, exercise classes, outdoor environmental/nature camps and programs, and adult sports leagues. The needs assessment survey results show that when asked to rank the top four program opportunities, over 24% of households confirm the importance of these program areas. Adult fitness and wellness programs were by far the most important as the top choice and received priority among 43% of all Unalaska households. See Figure 50.

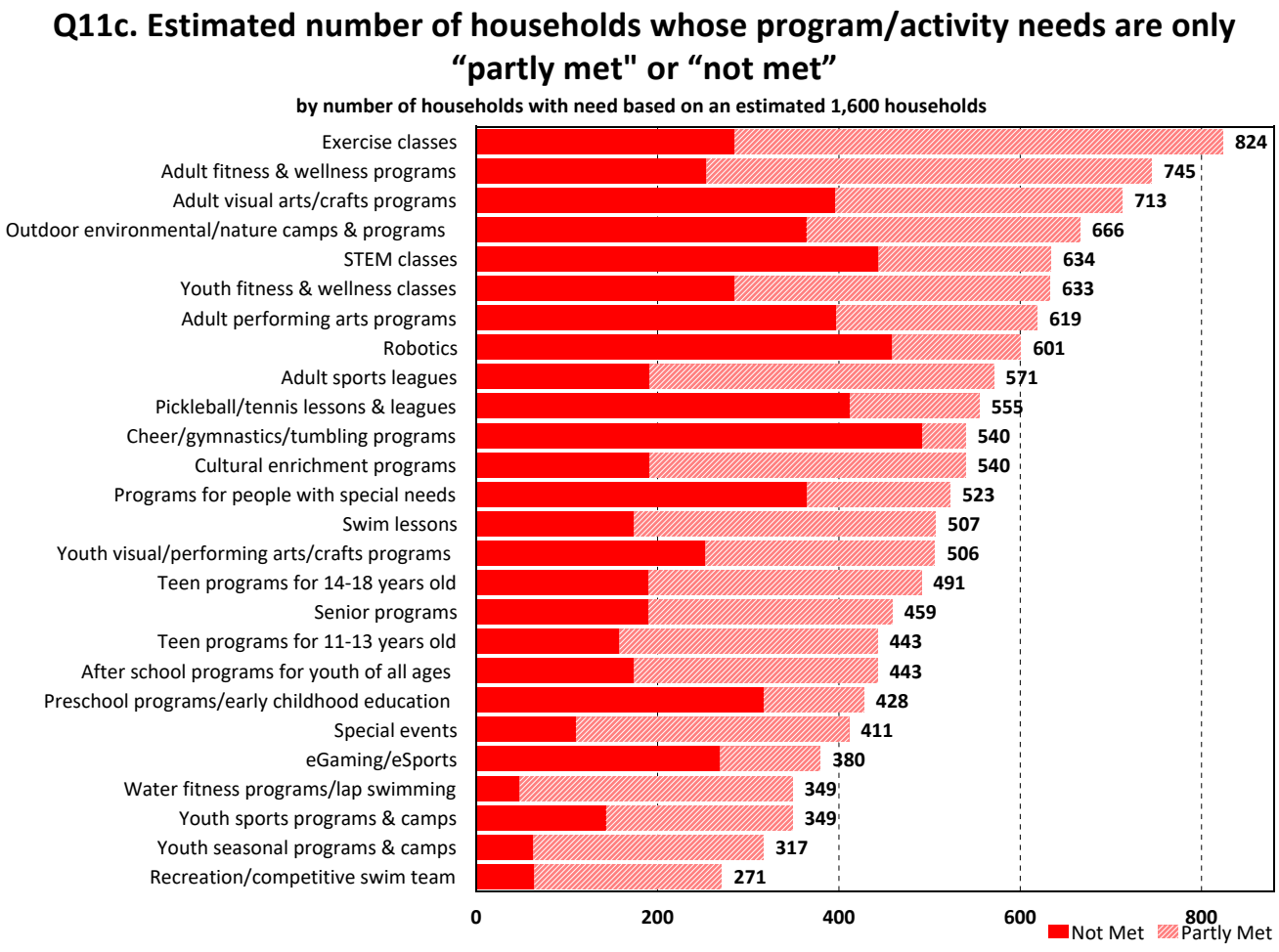
Figure 50: Most Important Recreation Activities



Another perspective is to look at unmet need for programs. Figure 51 illustrates Unalaska households have the most unmet need for the following programs:

- Exercise classes
- Adult fitness and wellness programs
- Adult visual arts/crafts programs
- Outdoor environmental/nature camps and programs
- STEM classes
- Youth fitness and wellness classes
- Adult performing arts programs
- Robotics
- Adult sports leagues
- Program areas with the least unmet need include:
- Recreation/competitive swim team
- Youth seasonal programs and camps
- Youth sports programs and camps
- Water fitness programs/lap swimming
- Special events

Figure 51: Unalaska Households with Unmet Needs for Recreation Programs



GAPS IN RECREATION PROGRAM SERVICE

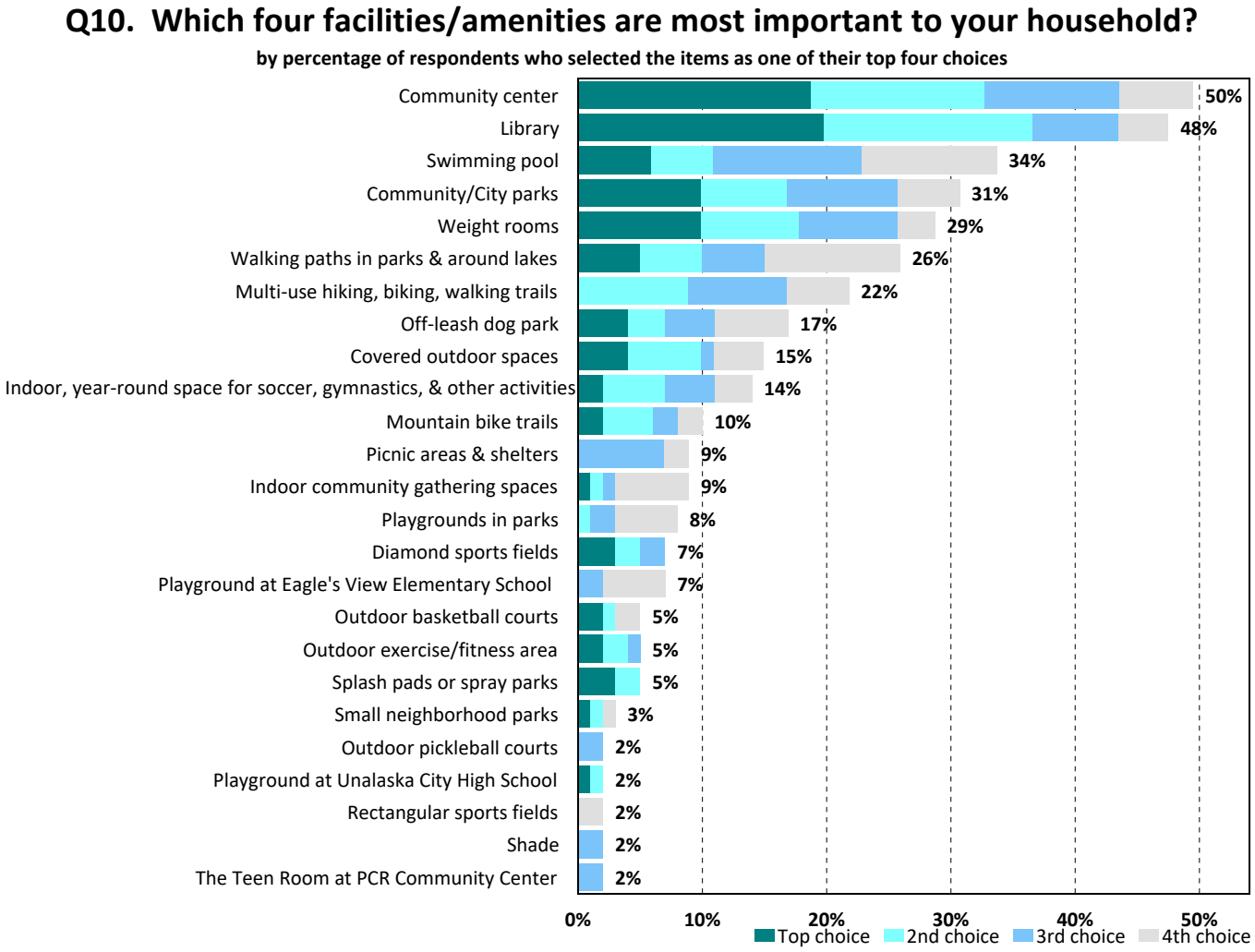
Figures 50 and 51 collectively illustrate the following gaps in program service:

- Exercise classes
- Adult fitness and wellness programs
- Adult visual arts/crafts programs
- Outdoor environmental/nature camps and programs

DELIVERY OF CORE SERVICES–RECREATION FACILITIES/AMENITIES

The needs assessment survey also illustrated the importance and unmet needs for recreation facilities. The most important facility needs match those offered by the PCR and are the community center, library, aquatic center, and community/city parks. Similarly important to the survey respondents were weight rooms and walking paths in parks and around lakes. See Figure 52.

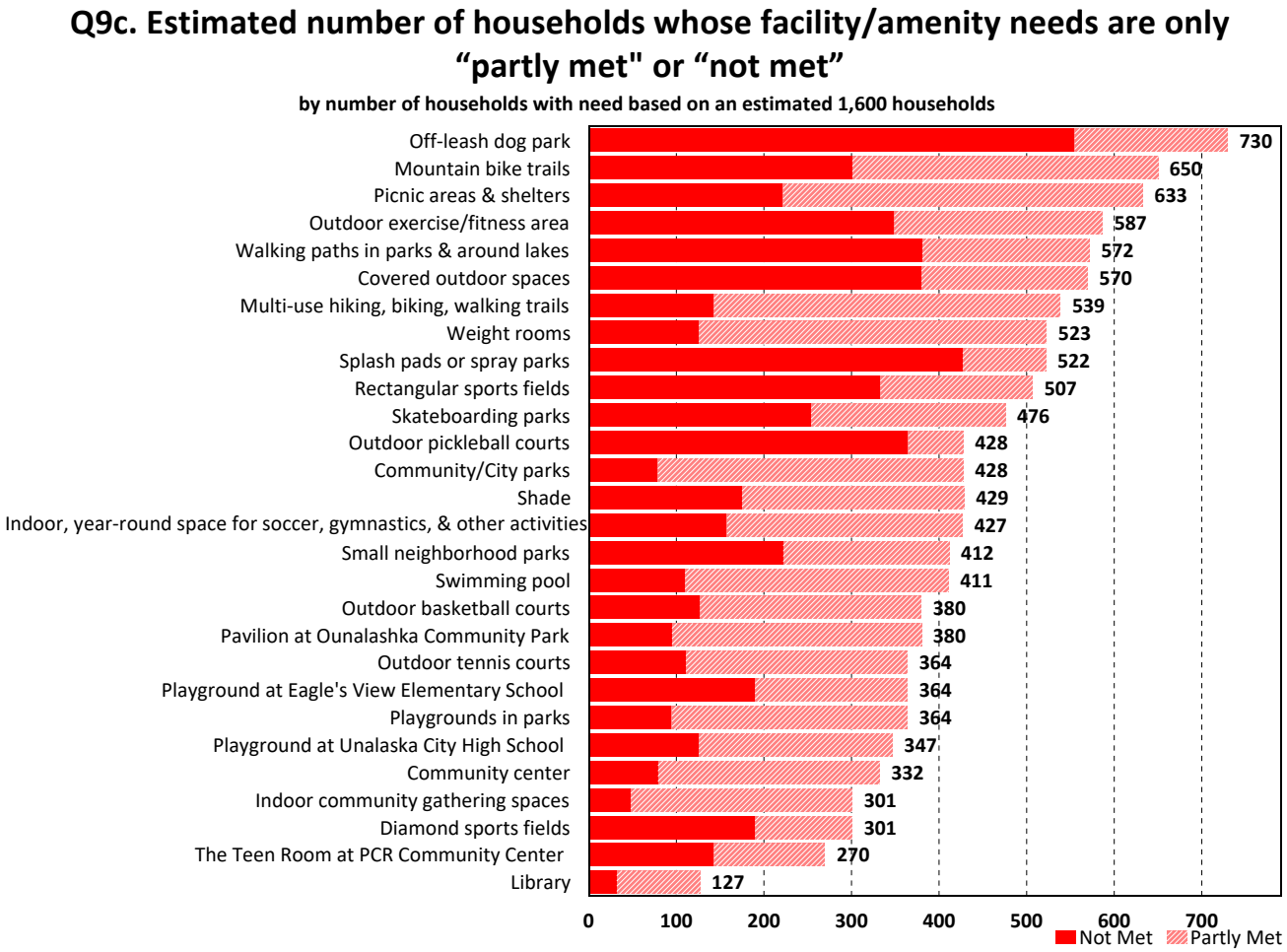
Figure 52: Most Important Recreation Facilities



Regarding unmet need for facilities, Figure 53 illustrates that there are households with the greatest unmet need for many outdoor facilities/ amenities that include the list below. The indoor recreation facilities with the greatest number of households that have unmet need are weight rooms and an indoor, year-round space for soccer, gymnastics, and other activities.

- Off-leash dog park
- Mountain bike trails
- Picnic areas and shelters
- Outdoor exercise/fitness areas
- Walking paths in parks and around lakes
- Covered outdoor spaces

Figure 53: Unalaska Households with the Greatest Needs for Facilities and Amenities



The survey compared the importance residents place on recreation facilities for which their needs are unmet. This analysis demonstrates a gap in service in program areas that are both important and have significant unmet need. These are areas that should be prioritized as planning decisions are made.

GAPS IN RECREATION FACILITIES/AMENITIES

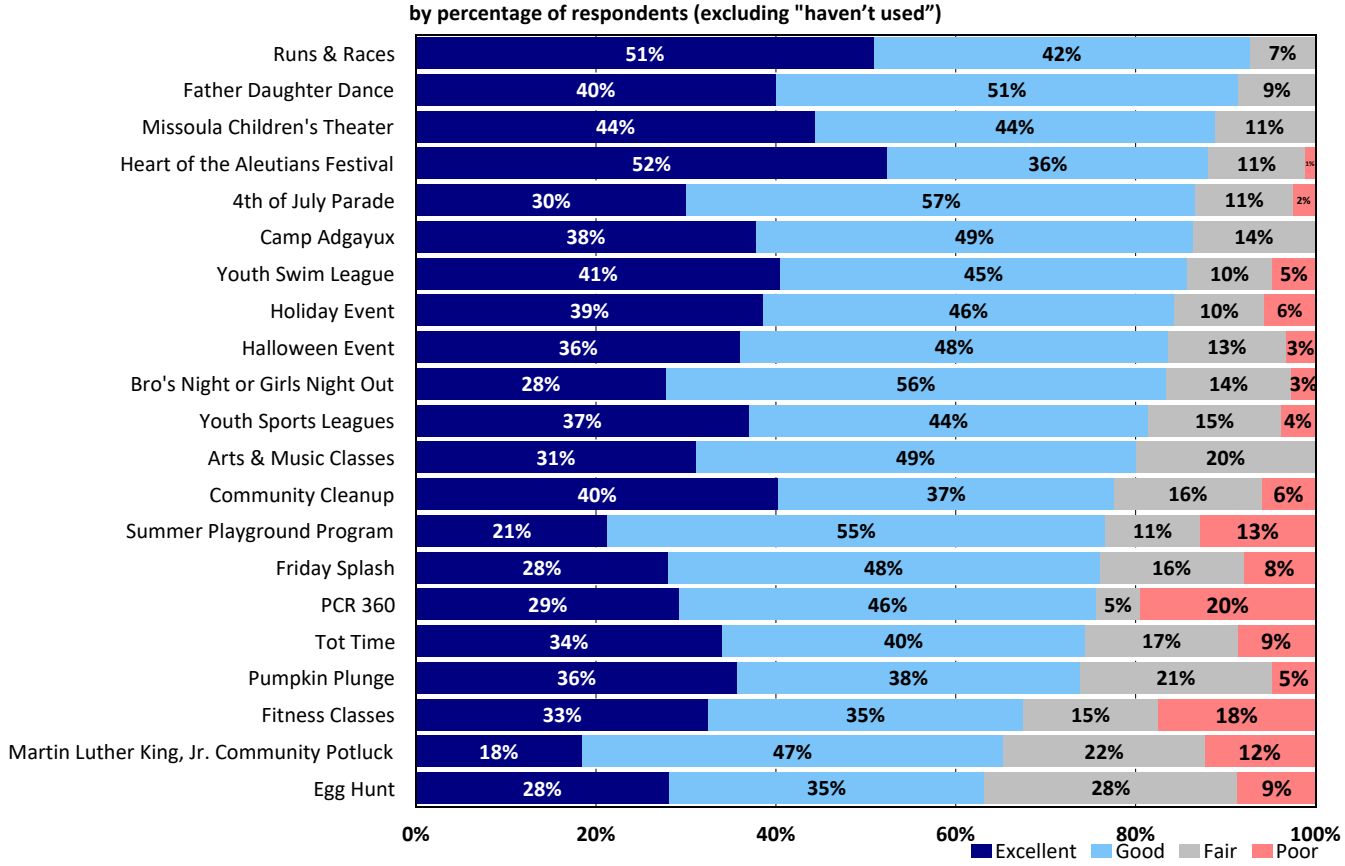
Figures 52 and 53 collectively suggest the following gaps in facilities offered:

- Weight rooms
- Indoor year-round space for soccer, gymnastics, and other activities

QUALITY OF PROGRAMS AND FACILITIES

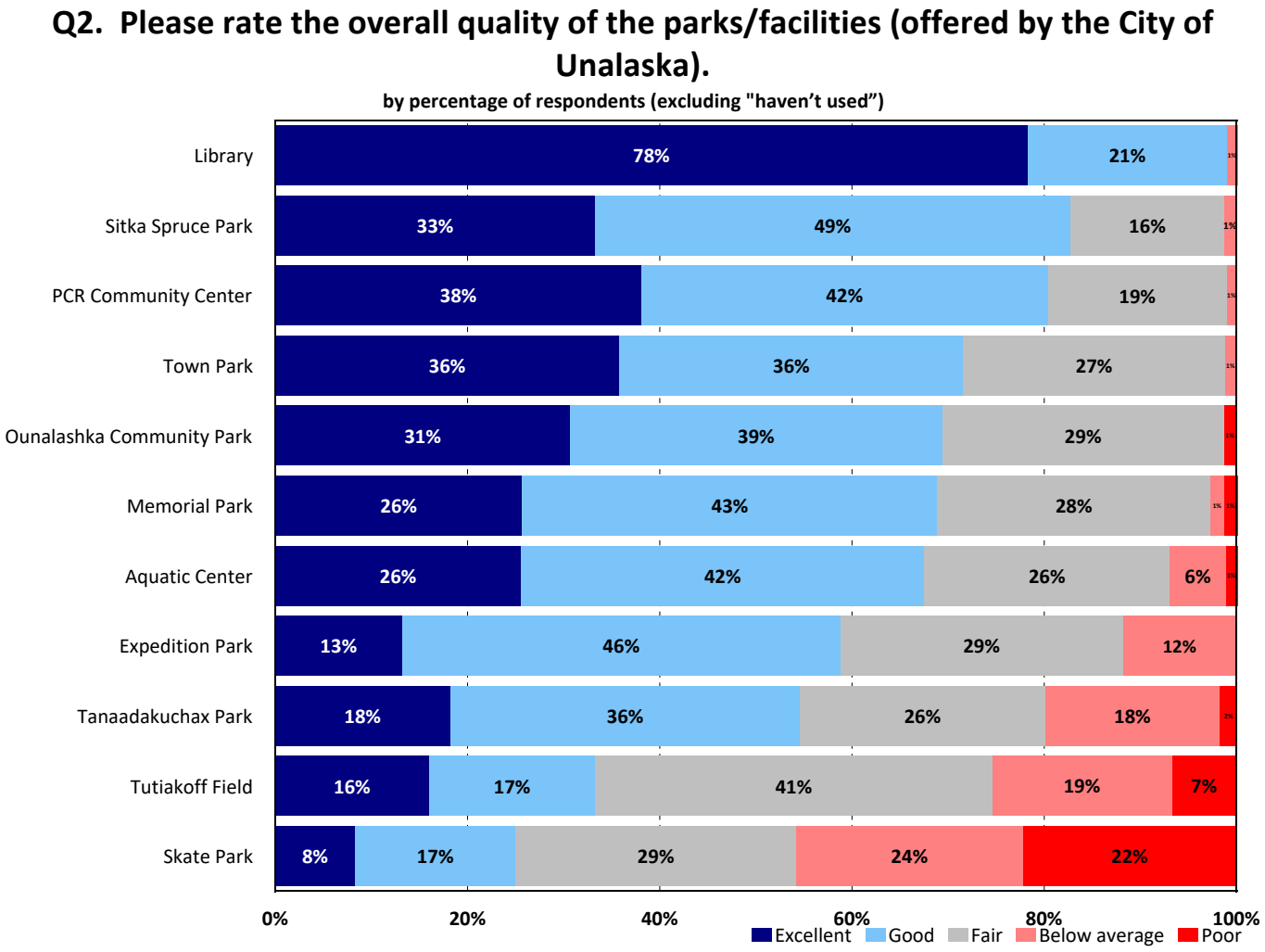
Looking at the quality of both programs and facilities is also an important determinant of high-quality recreation program delivery. Figure 54 demonstrates that Runs and Races, Father Daughter Dance, Missoula Children's Theater, and the Heart of the Aleutians Festival are rated as being of very high-quality, with a good or excellent rating ranging from 88% to 93%. The lowest-ranking program (Easter Egg Hunt) received a quality score of 63%. Note that 18% of respondents rated fitness classes, among the most important program offerings, as of poor quality.

Figure 54: Quality of Programs and Activities



Recreation facilities were mostly rated high-quality. The library was the highest rated; 99% of respondents suggested the library facility was good or excellent. Sitka Spruce Park and the community center received high-quality ratings as well. The Aquatic Center was rated by 68% as good or excellent. However, due to its high importance rating, the data suggests a gap in service level. This gap was also clearly demonstrated during other parts of the engagement process. The only facility/amenity with notable poor rating was the skate park, which city leadership is already considering removing or rebuilding. See Figure 55.

Figure 55: Quality of Parks and Recreation Facilities



RECREATION PARTICIPATION

A key part of this assessment is to evaluate participation against the needs and desires expressed in the engagement process and survey.

Table 18 shows the program and activity registration for special event participation and all other registered activities. During 2023, the department provided activities to over 5,000 community members. Fifty-nine percent were from the very successful special events.

Table 18: PCR 2023 Program/Activity Registration

Core Program Service Area	Program/Activity Registration
Special Events	3,075
Arts & Culture	120
Sports, Fitness & Wellness	745
Youth, Teen & Leisure	260
Drop-In Self-Directed	N/A
Aquatics Programs	563
Library Programs and Services	454
Total	**5,217**

RECREATION SPECIAL EVENTS

Special events are a key part of the recreation program and achieve very high participation for a small community. Collectively, the seven annual special events the PCR offers boast over 3,000 individual participants. Note that reporting special events participation is not an exact science although most event staff can approximate participation with reasonable results.

- Egg Hunt and Activities 200
- Community Cleanup 250
- 4th of July Parade 750
- Halloween Event 525
- Holiday Event 400
- Heart of the Aleutians Festival 575
- Spring Festival 375

To accurately count participation in each of the program service areas, BerryDunn analyzed both unique registrations and actual participation. Actual participation is counted in participant contacts, which are the number of times the individual took part in the class or activity. For instance, one child registering for a camp that meets five times would be one registration and five contact hours. Contact hours can provide a better perspective and a much clearer picture of the effort required to provide a service than individual registrations. This was possible for both library services and aquatics.

AQUATIC CENTER FACILITY AND PROGRAMS

The aquatics program provided over 6,000 contact hours of program support, which is good for a community the size of Unalaska. Note that contact hours do not include drop-in, self-directed activities, such as use of the sauna.

Table 19 shows the core aquatics programs offered, along with registration, contact hours, and program efficiency (the greatest participation with the least staff investment). Note that green is very efficient, yellow is marginally efficient, and red may be considered somewhat inefficient.

The program with the greatest participation is the Eagle's View Elementary School Swimming Lessons. Programs that require the greatest staff investment are youth swim league, Movie Nights, and Friday Splash. The most efficient programs are the Pumpkin Plunge, St. Patty's Day Dive Day, and swimming lessons. The most inefficient programs are Tot-time Swim and Aqua-Fit.

Table 19: Unalaska Aquatic Registration, Contact Hours, and Program Efficiency

Unalaska Aquatics Programs	Registrations	Contact Hours	Program Efficiency
Youth Swim League	50	1200	24
Movie Nights	50	1200	24
Friday Splash	30	1080	36
Eagles View Elementary School Swim Lessons	150	750	5
Tot-time Swim	8	600	75
Youth Swimming Practice	30	360	12
Girls Night Out	70	280	4
Lifeguard Certification Class	12	240	20
Bros Night Out	40	160	4
Aqua-Fit	5	150	30
Pumpkin Plunge	60	120	2
Jr. Lifeguard Classes and Programs	10	100	10
Yoga	8	40	5
Water Polo Camp	8	32	4
Swim Instructor Class	3	30	10
Special Education Swim Lessons	5	30	6
St. Paddy's Day Dive	12	24	2
Swimming Lessons	8	20	2.5
Water Exploration and Safety Class	4	6	1.5
TOTAL	**563**	**6422**	**11**

AQUATIC CENTER FACILITY NEEDS

The Aquatic Center provides a number of important community programs that not only contribute to quality of life in Unalaska but also are critical in the well-being and safety of residents. While the facility remains popular, well-used, and well-liked, a number of needs should be considered. Those needs are illustrated in the FY25 Aquatic Center Business Plan and during the master planning process. The following are observations related to the Aquatic Center:

- It is near the end of the facility's useful life and will need to be replaced
- The facility roof leaks and requires a major investment
- The pump room equipment is obsolete
- Rebar in the pool has rusted and is leaking through the bottom of the pool
- The air quality is low and needs HVAC enhancements, repairs, or replacement
- The sauna is too small for demand
- The recreation slide is poorly placed in the facility and creates viewing challenges
- The weight rooms, although improved in the recent past, require significant enhancements

Library Program Analysis

LIBRARY FACILITY AND PROGRAMS

Participation in library programs is significant and is noted in Table 20. A majority of programming is self-directed (57%). Over 175 hours of programming are offered, resulting in 2,432 contact hours—the greatest number being PCR 360 library time and family story time. Not surprising, 70% of program contacts support youth.

Table 20: Unalaska Library Facility and Programs

Unalaska Library Programs and Services	Registrations	Number of Contact Hours
PCR 360 Library Time	20	600
Family Story Time	15	540
Special All-Ages Programs	50	400
LEGO® Club–Younger	8	240
LEGO® Club–Older	5	200
Special Adult Programs	20	160
Special Story Times	25	100
Cookbook Club	8	80
Book Club	6	54
Filipino Story Time	12	36
Author Signings/Readings	15	22.5

Unalaska Library Programs and Services	Registrations	Number of Contact Hours
School Fields Trips & Outreach	30	Varies
Summer Reading Program	50	Self-Directed
1,000 Books Before Kindergarten	5	
20-20 Reading Challenge	20	
Book Bingo	25	
Book & Treat (Halloween)	100	
Seasonal Self-Directed Crafts	40	

Library Peer Comparisons

As part of the recreation assessment, BerryDunn conducted a peer comparison of library services. Comparing a library with similar institutions is a common method for evaluating performance. Libraries regularly use industry standards to measure and compare data with others to identify best practices. This helps highlight performance indicators and pinpoint strengths and weaknesses for setting strategic goals.

Peer comparisons are a valuable tool for assessing library performance, but it is important to recognize their limitations. Variations in community needs, funding, and organizational structures can affect the outcomes and may not fully capture the unique context of each library. Despite this, peer comparisons offer useful insights and serve as a foundation for further exploration. They can help inform management discussions, identify areas for improvement, and provide a broader perspective when developing strategic goals.

PEER LIBRARY SYSTEMS AND DATA SOURCE

Unalaska recommended the following libraries for peer comparisons based on type of library organization, population size, or geographic location:

- Bethel-Kuskokwim Consortium Library
- Big Lake Public Library
- Kodiak Public Library
- Nome-Kegoayah Kozga Library
- Palmer Public Library
- Petersburg Public Library
- Soldotna-Joyce K. Carver Soldotna Public Library
- Utgiagvik-Tuzzy Consortium Library
- Valdez Consortium Library

The reviewed data is only a selection of what the Alaska State Library collects. Full data sets and additional information are available on the Alaska State Library Statistics website. All data used comes from the Alaska State Library Public Library Statistics, for the most recently available reporting period, FY 2022 (Home - Alaska Public Library Statistics: FY1987 - Date - Libraries, Archives, Museums at Alaska State Library; last accessed July 31, 2024).

When comparing with the nine peer libraries, the rankings are shown as “[2/10]” meaning that Unalaska is second out of the 10 total libraries, from high to low. When shown with a number less than 10, it means that a peer or peers did not report data in that category.

POPULATION SERVED AND REGISTERED BORROWERS–FINDINGS AND RECOMMENDATIONS

The following metrics were assessed to gauge the library's reach in the community:

- Population served
- Registered borrowers

Unalaska ranked seventh out of 10 in population served, with 4,766 people. However, it ranked second in registered borrowers, with 10,459 users, nearly double the size of its population. The high number of registered users relative to the population suggests that Unalaska Library has strong community engagement, indicating effective outreach and service offerings despite serving a smaller community. Table 21 and Table 22 below show the full rankings for population served and registered borrowers.

Table 21: Population Served

Library Peer Comparisons	
Library	**Population Served**
Palmer Public Library	28,295
Kodiak Public Library	12,761
Utgiagvik-Tuzzy Consortium Library	11,031
Big Lake Public Library	10,066
Bethel-Kuskokwim Consortium Library	6,325
Unalaska Public Library	**4,766**
Soldotna-Joyce K, Carver Soldotna Public Library	4,342
Valdez Consortium Library	3,985
Nome-Kegoayah Kozga Library	3,699
Petersburg Public Library	3,398

Table 22: Registered Borrowers

Library Peer Comparisons	
Library	**Registered Users**
Soldotna-Joyce K. Carver Soldotna Public Library	10,860
Unalaska Public Library	**10,459**
Palmer Public Library	9,784
Kodiak Public Library	9,360
Valdez Consortium Library	3,880
Nome-Kegoayah Kozga Library	2,944
Petersburg Public Library	2,897
Big Lake Public Library	2,867
Utgiagvik-Tuzzy Consortium Library	2,232
Bethel-Kuskokwim Consortium Library	2,062

OPERATIONS - FINDINGS AND RECOMMENDATIONS

The following metrics were reviewed to assess the library's operations:

- Number of employees
- Annual operating expenditures
- Total collection use
- Attendance (library visits)

These metrics can provide insights into the library's operational capacity, resource management, and community impact. They help assess how well the library is staffed, how much is being invested in its operations, and how engaged the community is with its services.

Within its peer comparison group, Unalaska ranks sixth in staffing, with 5.25 FTE employees. Kodiak Public Library has the most employees (9.0 FTE), and Nome-Kegoayah Kozga Library has the fewest (2.25 FTE). Ranking sixth in staffing suggests that Unalaska is mid-range in its capacity to support services and programs. This indicates that the library may have enough staff to meet current needs but could be limited in expanding services compared to libraries with more staff. Table 23 shows the full rankings for number of employees.

Table 23: Number of Employees FTE

Library Peer Comparisons	
Library	**Number of Employees FTE**
Kodiak Public Library	9.00
Palmer Public Library	6.25
Big Lake Public Library	6.00
Soldotna-Joyce K. Carver Soldotna Public Library	5.81
Petersburg Public Library	5.80
Unalaska Public Library	**5.25**
Utgiagvik-Tuzzy Consortium Library	5.00
Valdez Consortium Library	5.00
Bethel-Kuskokwim Consortium Library	2.50
Nome-Kegoayah Kozga Library	2.25

For operating expenditures, Unalaska ranks third with $874,938. Valdez Consortium Library spends the most ($1,085,713), and Bethel-Kuskokwim Consortium Library spends the least ($241,204). Ranking third in operating expenditures suggests that Unalaska has significant financial resources, allowing better funding of programs, materials, and services. This relatively high ranking implies that the library is well-funded compared to most of its peers, which could help balance its moderate staffing levels. Table 24 below shows rankings for operating expenditures.

Table 24: Operating Expenditures

Library Peer Comparisons

Library	Operating Expenditures
Valdez Consortium Library	$ 1,085,713
Kodiak Public Library	$ 911,658
Unalaska Public Library	**$ 874,938**
Soldotna-Joyce K. Carver Soldotna Public Library	$ 847,949
Palmer Public Library	$ 626,633
Utgiagvik-Tuzzy Consortium Library	$ 546,157
Petersburg Public Library	$ 436,363
Big Lake Public Library	$ 394,686
Nome-Kegoayah Kozga Library	$ 372,643
Bethel-Kuskokwim Consortium Library	$ 241,204

For collection use, Unalaska ranks fifth, with 43,060 items circulated. Palmer Public Library leads with 222,959 items, while Nome-Kegoayah Kozga Library has the lowest usage (10,685). Unalaska's fifth-place ranking in collection use indicates moderate community engagement with its materials. Since 2022, circulation has decreased due to fewer DVD circulation (impacted by high-speed internet). The library is looking at different types of collections to grow (e.g., games, tools, craft/cooking equipment) in place of this collection, which was once essential but is becoming outdated.

Table 25: Total Collection Use

Library Peer Comparisons

Library	Total Collection Use
Palmer Public Library	222,959
Soldotna-Joyce K. Carver Soldotna Public Library	149,582
Petersburg Public Library	63,337
Kodiak Public Library	62,983
Unalaska Public Library	**43,060**
Big Lake Public Library	36,934
Valdez Consortium Library	24,856
Utgiagvik-Tuzzy Consortium Library	24,053
Bethel-Kuskokwim Consortium Library	15,153
Nome-Kegoayah Kozga Library	10,685

Unalaska ranks eighth in annual attendance, with 15,478 visits. Soldotna-Joyce K. Carver Soldotna Public Library has the most visitors (67,347), while Nome-Kegoayah Kozga Library has the fewest (5,000). Ranking eighth in annual attendance shows that the library sees fewer physical visits compared to its peers. It should be noted that participation figures are from FY22, during part of which the library was under construction. One reason the door count was lower is a result of a temporary closure to relocate to a smaller building. This could indicate a need to strengthen in-person engagement, offer more in-library programs or services, or explore why fewer community members are visiting. Table 26 shows total rankings for total attendance.

Table 26: Total Attendance

Library Peer Comparisons

Library	Total Attendance
Soldotna-Joyce K. Carver Soldotna Public Library	67,347
Palmer Public Library	38,568
Kodiak Public Library	34,780
Petersburg Public Library	30,000
Big Lake Public Library	27,063
Valdez Consortium Library	18,699
Utgiagvik-Tuzzy Consortium Library	17,843
Unalaska Public Library	**15,479**
Bethel-Kuskokwim Consortium Library	12,817
Nome-Kegoayah Kozga Library	5,000

PUBLIC COMPUTERS AND INTERNET USE–FINDINGS AND RECOMMENDATIONS

The following metrics were assessed to gauge the library's role in providing internet access to the community:

- Number of public internet terminals
- Number of public internet terminal sessions
- Number of wireless sessions

These metrics can help evaluate the library's role in providing digital access for its patrons and how well it meets the community's technology needs. The metrics also help gauge the demand for internet services and the library's capacity to support digital inclusion.

Unalaska ranks second for the number of public internet terminals, with 17 computers available. Utgiagvik-Tuzzy Consortium Library has the most (29), while Valdez Consortium Library has the fewest (4). Unalaska's second-place ranking shows it provides a strong level of access to public computers compared to its peers. This is particularly important for patrons who rely on the library for internet access. Table 27 shows the full rankings for public internet terminals.

Table 27: Public Internet Terminals

Library Peer Comparisons

Library	Public Internet Terminals
Utgiagvik-Tuzzy Consortium Library	29
Palmer Public Library	17
Unalaska Public Library	**17**
Petersburg Public Library	15
Soldotna-Joyce K. Carver Soldotna Public Library	13
Kodiak Public Library	10
Bethel-Kuskokwim Consortium Library	8
Big Lake Public Library	7
Nome-Kegoayah Kozga Library	6
Valdez Consortium Library	4

For public internet sessions, Unalaska ranks fourth, with 2,416 sessions. Soldotna-Joyce K. Carver Soldotna Public Library has the most sessions (6,512), and Nome-Kegoayah Kozga Library has the fewest (623). Ranking fourth in the number of sessions indicates steady usage of the library's public computers. Although Unalaska offers a high number of terminals, the slightly lower usage could suggest that while the computers are available, there may be potential to encourage more use or that users prefer other options, like wireless access, or shorter sessions. Table 28 shows the full rankings for public internet sessions.

Table 28: Public Computer Sessions

Library Peer Comparisons

Library	Internet Sessions
Soldotna-Joyce K. Carver Soldotna Public Library	6,512
Big Lake Public Library	4,252
Kodiak Public Library	2,707
Unalaska Public Library	**2,416**
Petersburg Public Library	2,304
Utgiagvik-Tuzzy Consortium Library	2,147
Bethel-Kuskokwim Consortium Library	1,902
Palmer Public Library	1,766
Valdez Consortium Library	1,158
Nome-Kegoayah Kozga Library	623

Unalaska ranks first in wireless sessions, with 22,510, showing strong usage of this service. Nome-Kegoayah Kozga Library has the fewest wireless sessions (310). Leading in wireless sessions shows that Unalaska's Wi-Fi service is highly popular. This suggests that many community members prefer to bring their own devices to use the internet at the library. The strong wireless usage highlights the library's role in supporting digital access beyond simply providing computers. Table 29 shows the full rankings for wireless sessions.

Table 29: Wireless Sessions

Library Peer Comparisons

Library	Wireless Sessions
Unalaska Public Library	**22,510**
Soldotna-Joyce K. Carver Soldotna Public Library	15,000
Petersburg Public Library	14,542
Kodiak Public Library	13,921
Palmer Public Library	11,012
Big Lake Public Library	4,326
Utgiagvik-Tuzzy Consortium Library	4,234
Valdez Consortium Library	3,017
Nome-Kegoayah Kozga Library	310
Bethel-Kuskokwim Consortium Library	-

Table 30: Total Adult Programs

Library Peer Comparisons

Library	Total Adult Programs
Big Lake Public Library	139
Soldotna-Joyce K. Carver Soldotna Public Library	27
Bethel-Kuskokwim Consortium Library	24
Petersburg Public Library	24
Utgiagvik-Tuzzy Consortium Library	17
Palmer Public Library	8
Unalaska Public Library	**7**
Valdez Consortium Library	5
Kodiak Public Library	4
Nome-Kegoayah Kozga Library	1

PROGRAMS–FINDINGS AND RECOMMENDATIONS

The following metrics were assessed to gauge the library's effectiveness with providing adult and children's programming:

- Number of adult programs offered
- Adult program attendance
- Number of children's programs offered
- Children's program attendance

These metrics can assess the library's effectiveness in offering programs that attract participants and meet the educational and recreational needs of both adults and children.

Unalaska ranks eighth in its peer comparison groups for the number of adult programs offered (8), and eighth with total attendance, with 72 attendees. Big Lake Public Library offered the most adult programs (139) and has the highest attendance (1,133). Unalaska's eighth-place ranking in the number of adult programs and low attendance suggests that its adult programming may not be as robust compared to that of peer libraries. The relatively low numbers may indicate a need for expanding adult programming options and improving outreach to better engage adult patrons. Table 30 and Table 31 show the full rankings for adult programming and adult programming attendance.

Table 31: Adult Program Attendance

Library Peer Comparisons

Library	Adult Programs Attendance
Big Lake Public Library	1,133
Palmer Public Library	913
Bethel-Kuskokwim Consortium Library	859
Soldotna-Joyce K. Carver Soldotna Public Library	446
Utgiagvik-Tuzzy Consortium Library	186
Petersburg Public Library	167
Unalaska Public Library	**69**
Nome-Kegoayah Kozga Library	63
Kodiak Public Library	24
Valdez Consortium Library	3

In children's programming, Unalaska ranks sixth in its peer group for both programs, with 50 offered, and program attendees, with 770. Valdez Consortium Library offers the most children's programs (249), while Utgiagvik-Tuzzy Consortium Library offers the fewest (26). Ranking sixth for children's programs and attendance places Unalaska in the mid-range compared to its peers. While the library offers a moderate number of children's programs, it could look to increase offerings and explore ways to boost attendance. Table 32 and Table 33 show the full rankings for children's programming and children's programming attendance.

Table 32: Total Children's Programs

Library Peer Comparisons

Library	Total Children's Programs
Valdez Consortium Library	249
Soldotna-Joyce K. Carver Soldotna Public Library	126
Big Lake Public Library	85
Palmer Public Library	75
Kodiak Public Library	71
Unalaska Public Library	**50**
Bethel-Kuskokwim Consortium Library	42
Petersburg Public Library	35
Nome-Kegoayah Kozga Library	34
Utgiagvik-Tuzzy Consortium Library	26

Table 33: Total Children's Programs Attendance

Library Peer Comparisons

Library	Child. Programs Attendance
Big Lake Public Library	4,847
Valdez Consortium Library	4,598
Palmer Public Library	3,535
Soldotna-Joyce K. Carver Soldotna Public Library	3,354
Kodiak Public Library	2,208
Unalaska Public Library	**770**
Bethel-Kuskokwim Consortium Library	719
Utgiagvik-Tuzzy Consortium Library	712
Nome-Kegoayah Kozga Library	650
Petersburg Public Library	498

BARRIERS TO PARTICIPATION

One of the greatest barriers to participation is the capacity of community members, due a lack of discretionary time due to work, school, etc. Many residents work more than one job, which limits leisure time capacity.

The needs assessment survey demonstrates the greatest barriers to recreation participation, reflected in Table 34.

Table 34: Greatest Barriers to Recreation Participation

Barriers to Participation in Programs, Events, and Activities	Percent of Survey Respondents Who Reported the Barrier
Too Busy	23%
I do not know what is offered	21%
Program times are not convenient	12%
Lack of quality programs	11%
Lack of the right program equipment	9%
Lack of quality instructors	8%

Program Assessment

Assessing the quality of programs is both an ongoing responsibility for recreation staff and an opportunity to help ensure the program remains fresh, relevant, and well received. This is done with after-program surveys and use of tools such as program life cycles and performance measures.

Program Life Cycle

Parks and recreation agencies must acknowledge that certain programs and activities have a finite lifespan and require ongoing evaluation. This assessment found activities offered and advertised in the program guides that did not occur due to lack of program registration.

It is advisable for the city to continue to conduct annual audits of programs. This entails tracking those that did not proceed and, after two or three sessions, considering their removal from the program lineup.

Additionally, implementing a service assessment matrix, such as the McMillen Matrix shown as Figure 56, could prove beneficial in determining whether programs are best suited to be offered by the PCR in partnership with other organizations, or not at all. To facilitate this evaluation, a few simple questions should be posed to both participants and staff regarding each program:

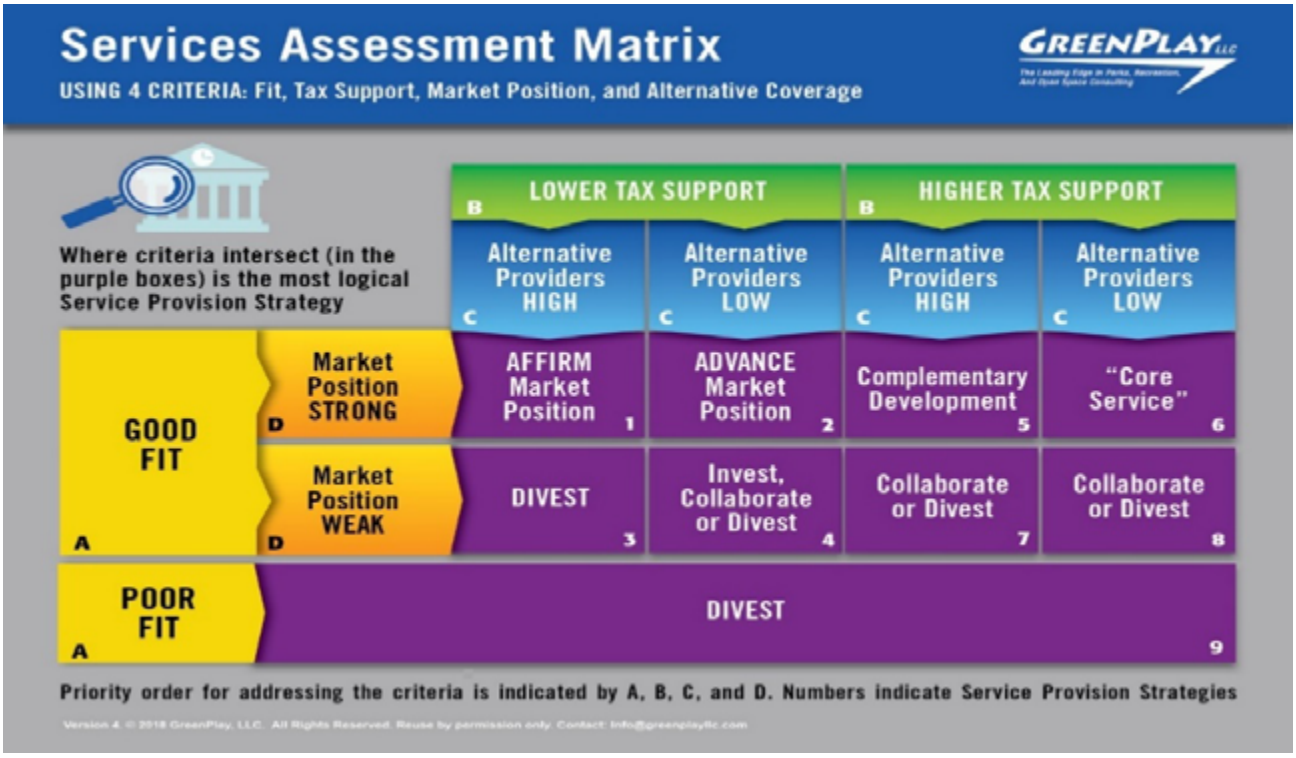
Is participation increasing or decreasing? If participation is increasing, then it could mean that the program should be continued. If participation is decreasing, are there steps to take to increase interest through marketing efforts, changes to the time/day of the program, format, or instructor? If not, it may be time to discontinue the program.

Is there information contained in the participation/staff feedback that can be used to improve the program?

Is there another provider of the program that is more suitable to offer it? If yes, PCR could provide referrals for its customers.

- PCR can also use cancellation rates to help make decisions regarding resource allocation and to focus marketing efforts.

Figure 56: McMillan Service Provision Matrix



PROGRAM EVALUATION AND PERFORMANCE MEASURES

Successful recreation programs typically track and report on performance measures that help to describe successful recreation program delivery. A few examples are included for consideration in Table 35.

Table 35: Performance Measure Examples

Performance Measure	Purpose	Outcome
# Of new classes per quarter	Maintain a fresh and novel recreation program	Attract new and returning participants
# Of program cancellations	Keep programming from stagnating	Make efficient use of coordination time and marketing budget
Participant satisfaction rates	Maintain and attract advocates; strong, sustainable revenues; and word-of-mouth marketing	Encourage high-quality program delivery
Ongoing patron satisfaction surveys	Receive continuing data to improve programs	Survey at least 75% of program participants

Recreation Program Opportunities

Many additional program opportunities are available to consider. Two that were highlighted in the engagement process were:

- Mobile recreation program–opportunities that include mobile climbing walls may be well received at special events and other functions.
- Themed fun runs that may include holiday event runs, mini-triathlons and -biathlons, and coordination with other communities to rate and rank participants over time. Themed events may include tax-time event (depositing a blank tax form at the end of the race), creating a "blarney stone" for runners to run to on St. Patrick's day, New Years Eve run at midnight, Valentine's day run with significant others, Facil-i-thon races between facilities and park components with a treasure hunt style map, and much more. Particularly, 5K races for five dollars in a series over time can be very popular.

Key Findings from the Recreation Assessment

Business plans are published annually, which serve as quality recreation program plans.

Unmet program needs are for exercise classes, adult fitness and wellness programs, adult visual arts and crafts programs, and outdoor environmental/nature camps and programs.

Facility needs to enhance recreation delivery include weight rooms and paths around lakes and in parks. An indoor fieldhouse facility supporting gymnastics, tumbling, soccer, and other turf-related activities would greatly improve recreational opportunities. Opportunities for an indoor fieldhouse facility may be available at Community Park.

The Skate Park is of lower quality and is being considered to be moved or taken offline and replaced.

Programs and high-quality races are rated at the highest point, although a decline in participation

has been seen over the past years. Themed fun runs can be very popular.

Aquatic opportunities receive continual assessment for efficiency. There are opportunities for increased programs, but facility needs must be addressed first.

A series of performance measures should be developed and implemented to better assess and adjust programs on a regular basis.

The PCR annually rents space from the Unalaska United Methodist Church. The amount of time received vs. the cost of over $20,000 is not efficient. A new rental agreement needs to be pursued or the rental and program should be considered for abolishment.

Communication Effectiveness

Survey ratings of the levels of effectiveness of the city's communication indicated that word of mouth is the primary way residents learn of parks and recreation opportunities (69%). However, when compared to preferences for which methods of communication residents would like the PCR to use, word of mouth was preferred by only 16.5% of survey respondents, suggesting a much greater desire for formal communication. Otherwise, there was concurrence between the next three methods which social media, is the most well-used and preferred communication tool.

Figure 57: How Unalaska Residents Receive Information from the PCR

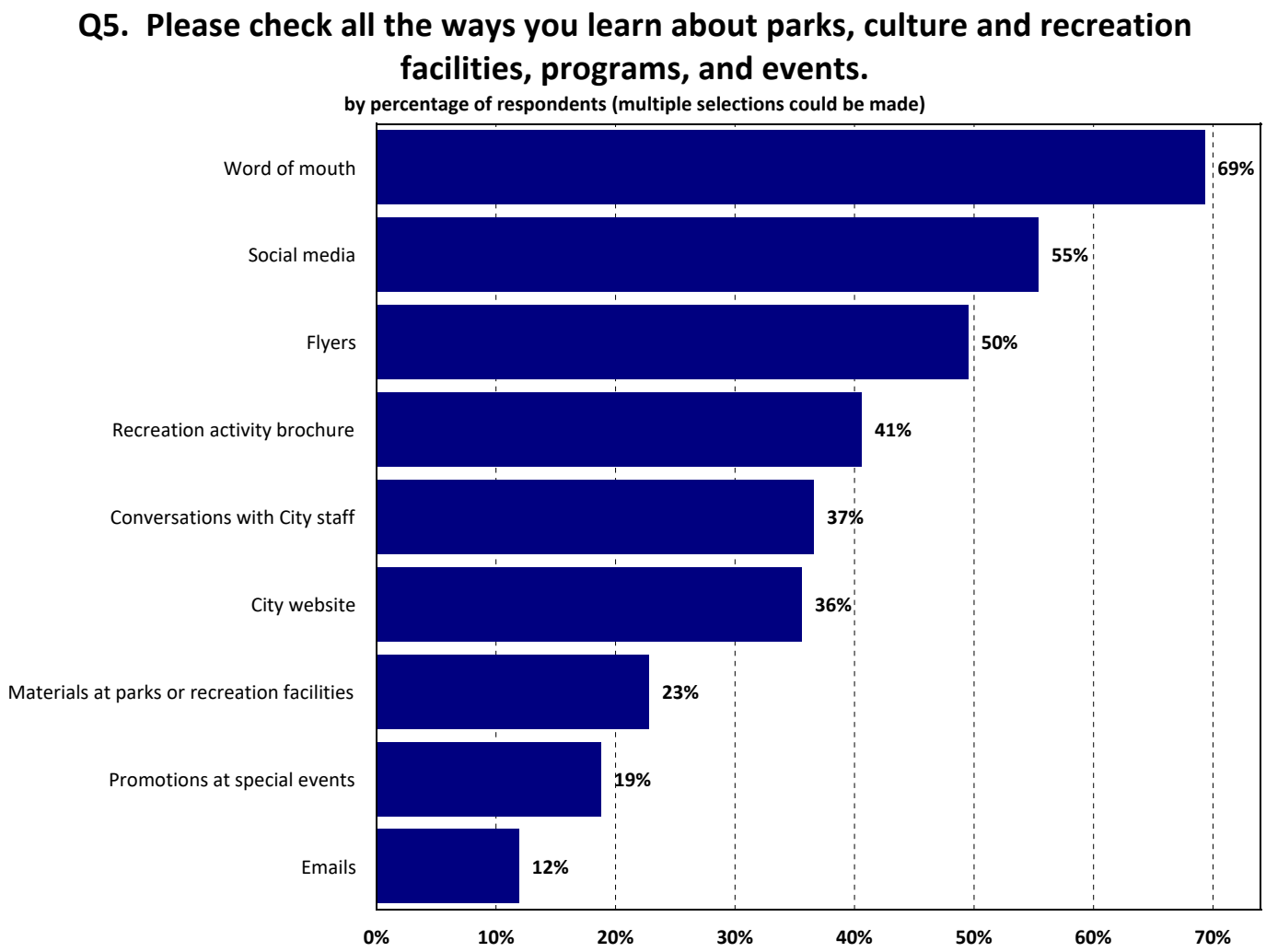
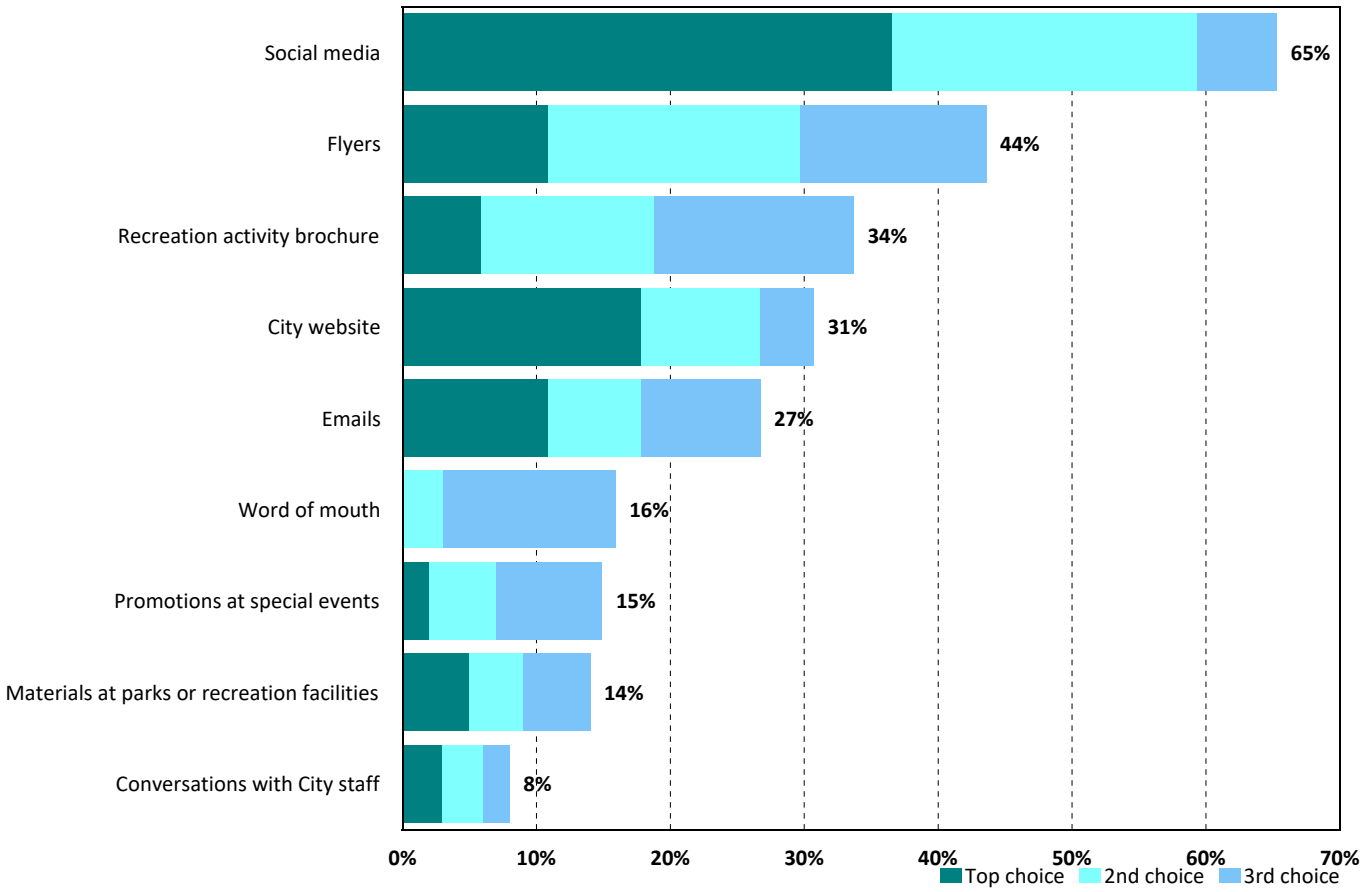


Figure 58: Unalaska Residents' Preferences on How to Receive Information

Q6. Which three methods of communication would you most the City use to communicate with you about parks, recreation facilities, programs, and events?

by percentage of respondents who selected the items as one of their top three choices



Also of interest is that 97% of households speak English as the primary language. Tagalog was spoken in 10.9% of households and Spanish in 5%.

SECTION 08

GUIDING PRINCIPLES (GPS), GOALS, STRATEGIES, AND ACTIONS

This section of the PRMP describes key findings identified during each phase of the project. GPs for the PCR are presented along with goals, strategies, and actions to address the key findings. Collectively, the PRMP GPs and actions help to create a blueprint for the next 10 years and beyond.

The terms used in this section are operationally defined in this PRMP as:

- **GPs:** Values that provide standards that help shape and guide city operations and decision-making
- **GOALS:** Recommended outcomes from the PRMP
- **STRATEGIES:** Individual objectives for eachgoal
- **ACTIONS:** Steps or processes that collectively assist the city to meet goals and strategies

Key Findings Identified During the Planning Process

Key findings were identified throughout the project. Some findings were identified in a key matrix document shown in Appendix 6. The document shows where the key findings matrix were identified, both in qualitative and quantitative data points.

GPs

The following GPs can help direct the city in both day-to-day operations and long-term management. BerryDunn developed the principles from a combination of industry best practices, the PRMP engagement process and needs assessment, and the consultants' expertise.

Follow and adopt NRPA's three pillars to guide current and future parks and program decisions.

- **GP 1.1:** Focus on Health and Well-Being–Creating healthy, connected, and thriving communities.
- **GP 1.2:** Focus on Equity–Fostering social connection and belonging.
- **GP 1.3:** Focus on Environmental Resilience–Stewarding and expanding healthier parks and natural spaces for current and future generations.

Create Opportunities for Equitable Use of Parks, Trails, and Open Space

- **GP 2.1:** Provides an array of service-based activities, funded to maintain fees at a level that all residents can afford.
- **GP 2.2:** Supports accessible recreation opportunities for individuals with disabilities and other members of the city with special needs in accordance with ADA regulatory requirements.

Provide Parks, Trails, and Open Spaces

- **GP 3.1:** Provides parks that invite a variety of uses for the enjoyment of all age groups.
- **GP 3.2:** Provides parks and services in partnership with other Unalaska agencies, most notably the Unalaska School System.
- **GP 3.3:** Support environmentally sustainable actions and the sustainable use of natural resources.
- **GP 3.4:** Parks and recreation facilities will be multigenerational and multifunctional, requiring designs and plans that create spaces to accommodate all users.

Provide Appropriate Administrative Policies

- **GP 4.1:** The PRMP should be reviewed and updated at regular intervals, as a best practice, every 5 to 10 years.
- **GP 4.2:** PCR policies should be reviewed at a minimum of every five years to help ensure alignment with the city's strategic and general planning and available resources.
- **GP 4.3:** PCR policies should be developed using the NPRA accreditation standards as guidelines for administrative plans, policies, and tools.

Provide Parks and Recreation Services in a Sustainable and Resilient Manner

- **GP 5.1:** PCR shall strive to provide services efficiently, working to provide the greatest outcomes in a fiscally resilient and sustainable manner.
- **GP 5.2:** PCR shall maintain up-to-date mission and vision statements, and values. The department should develop and maintain a "tag line" for branding and marketing purposes.
- **GP 5.3:** PCR shall strive to regularly measure community satisfaction with recurring surveys, program assessments, and other forms of applicable evaluation in addition to community outreach efforts.

Goals, Strategies, and Action Items

The PRMP identified six interrelated goals:

GOAL 1: Deliver high-quality recreation facilities that provide the greatest level of support for residents and the seasonal fishing industry

GOAL 2: Provide high-quality aquatics facilities that support recreation and the safety of Unalaska residents

GOAL 3: Deliver recreation programs that continue to build a sense of community as the focal point for Unalaska residents' and visitors' quality of life

GOAL 4: Maintain, preserve, and enhance safe parks and park experiences

GOAL 5: Deliver parks and recreation services in a financially resilient and sustainable manner

GOAL 6: Provide library services that connect residents to educational opportunities, digital literacy, and the power of reading

Park Master Plan Actions With Operating and Capital Costs

One way to prioritize capital projects can be based in part on the LOS and access to parks, trails, and open spaces as well as funding and community priority. Each project includes order of magnitude capital and operating costs and a target time frame in one of the following categories:

- Ongoing
- Short-term (0–3 years)
- Mid-term (4–7 years)
- Long-term (8 years and beyond)

GOAL 1: Deliver high-quality recreation facilities that provide the greatest level of support for residents and the seasonal fishing industry			
	ACTION	**PRIORITY**	**CAPITAL COSTS**
1.1	Strategy: Provide improved indoor recreation facilities		
a	Consider use of the recreation center for additional activities	Mid-term	N/A
b	Improve weight and cardio opportunities in the Community Center and the Aquatic Center	Mid-term	**
1.2	Strategy: Provide additional indoor recreation facilities		
a	Consider development of an indoor ice rink (aspirational action item) at the high school, with use of a thermal conductor system to provide efficiencies	Long-term	Based on size and program of the ice rink. Cost may be approximately @23,100 per square foot (conceptual cost estimate developed for an ice rink in Fairbanks in 2022 with 10% escalator and 30% remote location costs).

** Cost is based on amount and type of equipment, and shipping. An average cost of $5,000 per machine + shipping, 20 may cost up to $130,000.

Equipment Type	Brand Examples	Price Range
Commercial Treadmill	Life Fitness, Precor, Matrix	$2,500 - $10,000+
Commercial Elliptical	Nautilus, Octane, Precor	$2,500 - $6,000+
Commercial Exercise Bike	Schwinn, Keiser, Life Fitness	$1,500 - $4,500+
Commercial Recumbent Bike	Life Fitness, Matrix, Nautilus	$2,500 - $5,500+
Commercial Rowing Machine	Concept2, WaterRower, Stamina	$900 - $2,500+
Commercial Stair Climber	StairMaster, True Fitness, Life Fitness	$3,000 - $7,000+
Commercial Spin Bike	Keiser, Schwinn, Stages	$1,500 - $4,500+

	GOAL 1: Deliver high-quality recreation facilities that provide the greatest level of support for residents and the seasonal fishing industry		
	ACTION	**PRIORITY**	**CAPITAL COSTS**
b	Provide a modular indoor facility for turf, soccer, gymnastics, indoor playground, etc., in part due to weather–located outside the tsunami zone and potentially funded by emergency shelter funds. Potential location is the Community Park by the triangle the OC is developing into a cultural center.	Long-term	Based on size and program, a turfed fieldhouse may cost approximately $1,148 per square foot (conceptual cost estimate developed for an ice rink in Fairbanks in 2022 with 10% escalator and 30% remote location costs).
c	Consider a new aquatic facility	(See Goal 2)	

	GOAL 2: Provide high-quality aquatics facilities that support recreation and the safety of Unalaska residents		
	ACTION	**PRIORITY**	**CAPITAL COSTS**
2.1	Replace existing aquatic center with new 25-yard by 25-meter competition and recreation aquatic facility		
a	Complete a feasibility assessment for a new aquatic center. Consider space at Tutiakoff Park and the adjacent church property for a permanent aquatic facility	Short-term	$150,000-$200,000
b	In the interim, prior to a full aquatic facility replacement, implement correction actions to failing facility equipment that impedes daily operations. These include a new roof, a drain in the sauna, and depending on the length of time before a new or renovated facility is constructed, extensive repairs on erosion cracks throughout the pool and updating the mechanical room equipment.	Short-term	Corrective actions based on implementation decisions but would generally be: Roof replacement - $60-$75 per square foot or approximately $2,400,000, Pool surface $500,000 to $600,000, mechanical room upgrades to new $5,600,000 = $8,600,000. Cost to provide a new drain in the sauna requires additional study and will be based on existing conditions in the center.

	GOAL 2: Provide high-quality aquatics facilities that support recreation and the safety of Unalaska residents		
	ACTION	**PRIORITY**	**CAPITAL COSTS**
c	**Option 1 (Renovation)** Consider a renovated/upgraded aquatic facility that includes: • Renovate the pool » New rebar, gunite, and plaster, making the shallow end deeper for flip turns » Separate the warming alcove and turn it into a hot tub » Remove the slide and add a Splash pad/kiddy pool • Second-floor renovations » Spectator seating » xpanding the Mezzanine to allow for staff offices and additional space for events and workout classes. **Option 2 (Relocation and/or rebuild)** Consider a new location for a new aquatic facility that includes: • 25-yard by 25-meter competition and lap pool • Separate leisure pool area » Instructional pool (three to four lanes) » Lazy river (therapy feature » Hot tub » Sauna(s)–Male and female, large » Splash pad/kiddy pool • Second-floor renovations » Spectator seating » Workout/exercise space with state-of-the art, interactive cardio and weight equipment • Facility staff offices • Additional event space	Long-term	Option 1: Costs based on renovation decisions – Mezzanine expansion: $1,200,000, Splash Pad $750,000, Pool surface $500,000 to $600,000, hot tub $75,000 to $100,000 (Plumbing costs not included – based on existing conditions in the center) Option 2: A 40,000 square foot aquatic center is based on size and program. Costs estimated at $2,970 per square foot and include 10% escalator and 30% remote location costs.

	GOAL 3: Deliver recreation programs that continue to build a sense of community as the focal point for Unalaska residents' and visitors' quality of life		
	ACTION	**PRIORITY**	**CAPITAL COSTS**
3.1	Strategy: Apply data-driven decision-making to programming to address community member participation capacity		
a	Offer programs with the highest prioritization and continue removing programs that have limited community priority	Ongoing	N/A
b	Address unmet need for exercise classes, adult fitness and wellness programs, adult visual arts and crafts programs, and outdoor environmental/nature camps and programs	Ongoing	N/A
c	Implement recreation life cycle analysis on a continual basis	Short-term	N/A
d	Continue to prioritize special events open to the public	Ongoing	N/A
e	Publish a recreation program plan that aligns resources with program desires/set program minimum registration. Use the annual business plans and CAPRA standard for recreation plans as a guide	Short-term	N/A
3.2	Strategy: Conduct continual program evaluation		
a	Complete program surveys for customer satisfaction and input after each program	Ongoing	N/A
b	Implement performance measures (examples shown in the services assessment of the PRMP)	Ongoing	N/A
3.3	Strategy: Consider additional program support for youth and teens, ages 13–18		
a	Consider adjusting hours at the community center teen room so it is open only to 13- to 18-year-olds, and identify hours specific for ages 13–15 and 16–18	Short-term	N/A

	GOAL 3: Deliver recreation programs that continue to build a sense of community as the focal point for Unalaska residents' and visitors' quality of life		
	ACTION	**PRIORITY**	**CAPITAL COSTS**
b	Consider creative ways to offer football, baseball, climbing, and skating opportunities for teens, e.g., flag football leagues–6-on-6	Short-term	N/A
c	Consider providing additional and enhanced exercise equipment that teens prefer and adding vending machines in facilities	Short-term	Based on equipment chosen, $6,500 per cardio-exercise machine.
d	Consider e-gaming opportunities in the community center space	Short-term	Costs based on a per station – four stations that each include gaming PCs, Monitors, and other peripherals, furniture, etc. Cost is $36,400 including escalator and remote location costs.
e	Consider additional national program opportunities using traveling sports and theater camps	Short-term	N/A

	GOAL 3: Deliver recreation programs that continue to build a sense of community as the focal point for Unalaska residents' and visitors' quality of life		
	ACTION	**PRIORITY**	**CAPITAL COSTS**
3.4	Strategy: Consider mobile recreation programming		
a	Develop a mobile equipment lending space. Stock with outdoor adventure recreation equipment for rent or programming that may include: • Kayaks, standup paddleboards • Mountain bikes • Fishing equipment	Mid-term	Space costs based on size and location; equipment ~$10,000
b	Consider purchasing a portable climbing wall for: • Programs • Use at events • Use at after-school activities	Mid-term	$60,000–$80,000 includes shipping costs
3.5	Strategy: Improve fitness and wellness opportunities in Unalaska		
a	Offer 3K to 5K fun runs with creative themes, and mini-biathlons and -triathlons to use existing facilities and attempt to reverse a decline in participation	Ongoing	N/A
b	Prioritize introductory cheer/gymnastics/ tumbling programs and after-school programs for youth of all ages (as a staple of a new indoor recreation facility)	Ongoing	N/A

GOAL 4: Maintain, preserve, and enhance safe parks and park experiences			
	ACTION	**PRIORITY**	**CAPITAL COSTS**
4.1	Strategy: Provide improved outdoor sports opportunities		
a	Prioritize improved maintenance of sports fields	Short-term	$100,000–$200,000.
b	Convert sports fields at Kelty field and at UCSD fields to artificial turf	Long-term	$1,500,000–$2,000,000
4.2	Strategy: Provide additional outdoor park opportunities		
a	Provide one new dog off-leash area	Long-term	$60,000
4.3	Strategy: Provide improved playground opportunities		
a	Renovate playground at Eagle's View Elementary School	Short-term	$1,750,000–$2,800,000
b	Consider all-inclusive and culturally relevant playground equipment as current equipment ages and requires replacement	Mid-term	Based on components. Typical component may cost `$10,000 including shipping

GOAL 4: Maintain, preserve, and enhance safe parks and park experiences

	ACTION	PRIORITY	CAPITAL COSTS
4.4	Strategy: Improve LOS by adding components		
a	Upgrade low-scoring components and amenities in parks with immediate need: • Sitka Spruce Park » Reset site sign » Update interpretive signage • Tutiakoff Park » Sign parking (off-street along King Street) • Town Park » Replace bike rack » Relocate and install bench seating to a more level space • Memorial Park » Replace benches that are in poor shape and align the benches with better viewing opportunities » Consider opportunities for interpretive signage » Consider separation of park and cemetery property and update GIS data for this park • Expedition Park » Add picnic tables (2) » Replace bench seating » Replace signage at west entry • Tanaadakuchax » Replace bike parking and rotting boards » Replace benches • High School Park » Pave track/walking path • Eagle's View Elementary School–Improve the following spaces used for recreational use: » Upgrade basketball backboards, court area, and add lines for multiple sports and activities • Replace picnic tables as needed	Short-term	$1,000 $12,000 $7,000 $5,200 Staff costs $19,200 $12,000 Staff Costs $10,000 $6,400 $4,000 $6,400 $4,000 $400,000 See 4.3a

	GOAL 4: Maintain, preserve, and enhance safe parks and park experiences		
	ACTION	**PRIORITY**	**CAPITAL COSTS**
b	Add additional components to Expedition Park, which has few components; adding components could create a greater LOS. This is one of the only parks within walking distance to some transient worker-housing. Consider adding: A fit lot (adult exercise equipment), which would provide exercise options for local cannery workers who cannot otherwise get to the rec center An outdoor game such as corn hole or futsal (outdoorconcretegames.com), which would add interest for teenagers or adults; a covered equipment box would be needed for loose parts	Mid-term	$45,000–$75,000 $15,000
c	Add additional component to Tuitiakoff Memorial Park (on city property) to create a greater LOS. Consider adding: A covered tot lot (for ages 2–5), which would provide a year-round play opportunity for an under-served age group. This location is ideal because of the adjacent below-market value housing	Long-term	$1,000,000
d	Upgrade low-scoring components and amenities in parks: Sitka Spruce Park–Consider a covered pavilion to support outdoor picnic opportunities Town Park–Replace portable restroom with permanent restroom Memorial Park–Organize parking for greater access Expedition Park–Consider improvements that create better park access and parking opportunities; add a permanent restroom Eagle's View Elementary School–Improve the spaces used for recreational use: Replace all playground elements and consider reimagining the space for better usage Renovate the shelter, install plexiglass for wind and rain Convert the playing field to synthetic turf	Long-term	$200,000 $40,000 $700,000 See 4.3a above

	GOAL 4: Maintain, preserve, and enhance safe parks and park experiences		
	ACTION	**PRIORITY**	**CAPITAL COSTS**
4.5	Strategy: Create additional walking opportunities in parks and around the city		
a	Complete gaps along Airport Beach Road walking paths	Long-term	$800,000
b	Consider walking paths through the cemetery, connecting to Memorial Park. Above-grade steel grate steps and walkway would work to help prevent a need for grading	Long-term	$1,000,000
c	Consider additional trails at Sitka Spruce Park if additional land can be obtained	Long-term	$60 LF for trails, cost also depend on surfacing
d	Consider adding a boardwalk around Lake Unalaska from the city property southeast of the library. This could be a loop connecting with East Broadway or a shorter out-and-back trail. Cost estimate represents entire loop	Long-term	$5,000,000
e	Create a half-mile interpretive walk around the city center with signs about history, climate, and geology. Add additional wayfinding signs to Memorial Park, Town Park, and historic Russian Orthodox Church	Long-term	$18,000
4.6	Strategy: Move or update the skate park to an all-wheels park		
a	Replace with skate spots (one or two elements) and consider an all-wheels park	Short-term	$92,000
b	Relocate the skate park due to the expansion of the adjacent clinic to Ounalashka Community Park	Short-term	$4,000,000

GOAL 5: Deliver parks and recreation services in a financially resilient and sustainable manner			
	ACTION	PRIORITY	CAPITAL COSTS
5.1	Strategy: Focus on methods of formal communication		
a	Use more formal social media and written communication to residents to reduce informal (word of mouth) communication	Short-term	N/A
5.2	Strategy: Work to improve access to high-quality and consistent recreation programs		
a	Improve online program registration system with phone app	Ongoing	N/A
b	Offer incentives (advancement opportunities over time) to help retain recreation coordinators for longer periods	Short-term	N/A
c	Implement a formal succession plan (mentoring, training, and identifying positions) that over time include training positions to address turnover rates among recreation coordinators	Short-term	N/A

GOAL 6: Provide library services that connect residents to educational opportunities, digital literacy, and the power of reading			
	ACTION	PRIORITY	CAPITAL COSTS
6.1	Strategy: Place a greater focus on adult and child programs		
a	Enhance the number of adult programs and participation with a goal of meeting or exceeding other peer library programs among small Alaskan communities	Ongoing	N/A
b	Continue coordination with the community center to avoid programming duplication	Ongoing	N/A
c	Enhance the number of children's programs and participation with a goal of meeting or exceeding other peer library programs among small Alaskan communities	Ongoing	N/A
d	Provide enhanced access to online and alternative collection opportunities	Short-term	N/A

SECTION 09

IMPLEMENTING THE PRMP

Presented in this section are suggestions aimed at helping ensure the successful implementation of the PRMP. These components underscore the dedication and discipline needed to seamlessly integrate the PRMP into planning and daily operations, both currently and in the long-term.

Establish the PRMP as the guiding document for decision-making within PCR. This helps ensure consistency and clarity in responses to community needs and priorities

Incorporate PRMP information into the orientation program for new employees to familiarize them with PCR's strategic direction

Publish the Executive Summary of the plan on the website and regularly update progress to inform the community about strategic goals and achievements. Additionally, consider distributing a concise brochure summarizing the plan to interested parties for quick reference

Appoint a dedicated project manager or champion to oversee the implementation process, working closely with staff, city management, and other departments to integrate the plan effectively

Assign specific staff members or team's responsibility for each recommendation, with designated project leads tracking progress

Provide regular progress reports on plan implementation, dividing tasks into annual milestones and reporting annually on achievements and challenges

Conduct an annual review of the PRMP to adapt objectives and action items according to changing priorities, integrating this process into the annual budgeting cycle

Keep interested parties informed of progress and outcomes annually

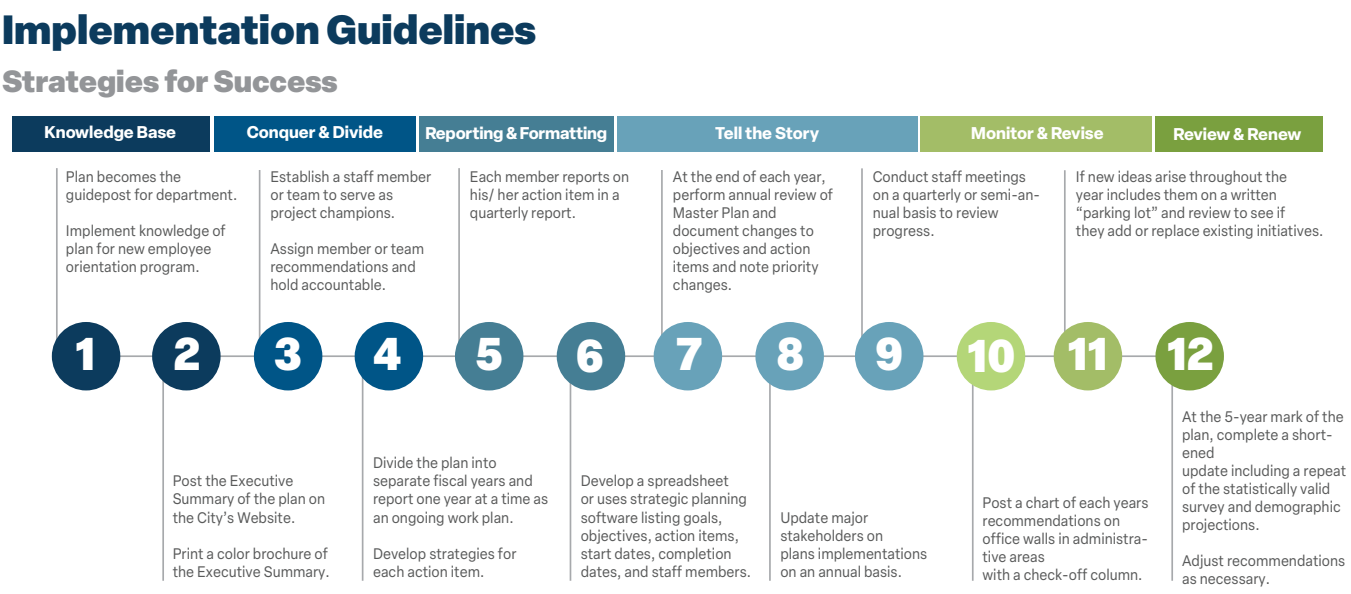
Hold quarterly or semi-annual staff meetings to review progress and address any challenges encountered during implementation

Display a visual representation of each year's recommendations in administrative areas, with a system for tracking completion

Establish a "parking lot" for new ideas and strategies that arise throughout the year, reviewing them annually to incorporate any necessary adjustments

Conduct a comprehensive update at the five-year mark, including revisiting surveys and demographic projections to help ensure alignment with current needs and trends

Figure 59: Implementation Strategies



UNALASKA PARKS, CULTURE AND RECREATION

Park and Recreation Comprehensive Master Plan

BerryDunn

CITY OF UNALASKA
UNALASKA, ALASKA

RESOLUTION 2025-17

A RESOLUTION OF THE UNALASKA CITY COUNCIL ADOPTING THE CITY OF UNALASKA AND QAWALANGIN TRIBE OF UNALASKA MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN 5-YEAR UPDATE

WHEREAS, the City of Unalaska and the Qawalangin Tribe of Unalaska are vulnerable to damages from natural hazard events, which pose a threat to public health and safety and could result in property loss and economic hardship; and

WHEREAS, an All-Hazard Mitigation Plan (the Plan) was developed in 2018 through the work of a planning team and interested parties within the City of Unalaska; and

WHEREAS, the Plan was adopted by the Unalaska City Council in 2018 through Resolution 2018-59, and the Plan must be updated every five (5) years to maintain the city's status as eligible to receive federal assistance in the event of a natural disaster; and

WHEREAS, the Plan recommends hazard mitigation actions that will protect people and property impacted by natural hazards; that will reduce future public, private, community and personal costs of disaster response and recovery; and that will reinforce the City and Tribe's leadership in emergency preparedness efforts; and

WHEREAS, Section 409 of the Stafford Act and Section 322 of DMA 2000, and 44 CFR §201.6(c)(5), require the City of Unalaska to formally adopt a Hazard Mitigation Plan subject to the approval of the Federal Emergency Management Agency to be eligible for federal hazard mitigation projects and activities funds; and

WHEREAS, the City and the Tribe hereby present proposed updates as required in the Plan's Maintenance Section (Chapter 6) to occur no less frequently than every five years.

NOW THEREFORE, BE IT RESOLVED that the City Council adopts the City of Unalaska and Qawalangin Tribe of Unalaska Multi-Jurisdictional Hazard Mitigation Plan.

PASSED AND ADOPTED by a duly constituted quorum of the Unalaska City Council on March 11, 2025.

_____
Vincent M. Tutiakoff, Sr.
Mayor

ATTEST:

_____
Estkarlen P. Magdaong, CMC
City Clerk

MEMORANDUM TO COUNCIL

TO: Mayor and City Council Members
FROM: Ben Knowles, Fire Chief
THRU: Marjie Veeder, Acting City Manager
DATE: March 11, 2025
RE: Resolution 2025-17, Adopting the City of Unalaska and Qawalangin Tribe of Unalaska Multi-Jurisdictional Hazard Mitigation Plan

SUMMARY: Resolution 2025-17 is the City Council's adoption of the City of Unalaska and Qawalangin Tribe of Unalaska's Multi-Jurisdictional Hazard Mitigation Plan (MJHMP). The hazard mitigation plan is a comprehensive, proactive strategy designed to reduce or eliminate the long-term risk to human life and property from natural and man-made hazards. It identifies potential hazards, assesses vulnerabilities, and outlines mitigation actions to minimize the impacts of future disasters. Staff recommends adoption.

PREVIOUS COUNCIL ACTION: There has been no action on the present plan update. In 2018 Council adopted the Multi-jurisdictional Hazard Mitigation Plan by Resolution 2018-59.

BACKGROUND & DISCUSSION: The development of this MJHMP began in mid-2021 under the previous fire chief. During the initial review and conclusion phase, several deficiencies and disparities were identified by the Qawalangin Tribe of Unalaska (see attached letter). Under direction of the City Manager, the current fire administration prioritized addressing these issues to create a comprehensive and accurate plan suitable for adoption.

Over the past eight months, a significant effort was made by both the City of Unalaska (City) and the Qawalangin Tribe of Unalaska (Q-Tribe) to rectify these issues. A primary focus was on ensuring robust public engagement through multiple public meetings and stakeholder input sessions. Additionally, a thorough review and correction of data points, including historical events, was conducted. This involved close collaboration with agencies such as NOAA National Weather Service Anchorage, the Alaska Earthquake Center, and the Alaska Tsunami Warning Center to ensure accurate representation of our region's hazard profile.

We are proud to introduce a significantly improved MJHMP that has been submitted for review to FEMA and State representatives. We are currently in the review period for plan approval and have worked closely with both state and federal planners, as well as Tribal planners, to ensure the plan's validity and completeness.

Both the Federal Emergency Management Agency (FEMA) and the State of Alaska Department of Homeland Security and Emergency Management (DHS&EM) hazard mitigation planners have strongly suggested that the City Council pre-emptively adopt a resolution of intent to adopt the MJHMP. This proactive step will significantly streamline the final approval process once FEMA and the State have completed their review, preventing potential delays and ensuring timely implementation of critical mitigation measures.

The Qawalangin Tribe of Unalaska will be reviewing the plan and placing a resolution for adoption on their council agenda on March 27, 2025.

It is important to note that this MJHMP will be subject to a five-year revision cycle. To ensure a more efficient and effective process, we intend to implement an annual review and update system. This will prevent the need for extensive data collection and revision at the end of the five-year period, allowing for continuous improvement and adaptation of the plan.

We extend our sincere gratitude to the City of Unalaska directors, community members, and community stakeholders for their invaluable input and participation throughout this process.

ALTERNATIVES: Failure to adopt the MJHMP carries significant repercussions, including the loss of eligibility for critical FEMA hazard mitigation grants, increased community vulnerability to disasters, potential delays in disaster recovery funding, rising insurance costs, negative impacts on flood insurance discounts through the Community Rating System, potential delays in future development, strained relationships with state and federal agencies, and most importantly, increased public safety concerns due to a lack of a proactive mitigation strategy.

STAFF RECOMMENDATION: Staff recommends adoption of Resolution 2025-17.

PROPOSED MOTION: I move to adopt Resolution 2025-17.

CITY MANAGER'S COMMENTS: Fire Chief Ben Knowles has been working diligently for many months to get this crucial plan updated and submitted to FEMA for review. The Q-Tribe council is scheduled to review and adopt the plan later this month. Both FEMA and State DHS&EM personnel recommend that the Unalaska City Council pre-emptively adopt the plan in part to streamline FEMA review and approval. For these reasons, as well as the repercussions of not having an adopted hazard mitigation plan, I encourage Council's adoption of Resolution 2025-17.

ATTACHMENT:

- May 5, 2022 Q-Tribe letter to State DHS&EM
- Unalaska Multi-Jurisdictional Hazard Mitigation Plan

ATTACHEMENT A

QAWALANGIN
Tribe of Unalaska

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Office of the COO

Erin M. Leaders
Hazard Mitigation Plan Manager
Emergency Management Specialist II
Department of Military and Veterans Affairs (DMVA)
Division of Homeland Security and Emergency Management (DHS&EM)
PO Box 5750
JBER, AK 99505-5750

May 5, 2022

Re: City of Unalaska/Qawalangin Tribe of Unalaska Multijurisdictional Hazard Mitigation Plan

Dear Ms. Leaders,

This letter serves as a follow-up to our conversation on May 5, 2022, regarding your email sent to Qawalangin Tribe of Unalaska's (QTU) CEO, Chris Price requesting Tribal Resolution for the Multijurisdictional Hazard Mitigation Plan previously submitted to the State of Alaska and FEMA by the City of Unalaska.

To reiterate, it is my belief and position that the Tribe and its community members were significantly underrepresented in this Multijurisdictional Hazard Mitigation Plan Update. I further believe the Tribe's Sovereign Authority has been severely compromised as the result of this underrepresentation, and as such we have weighty pause in approving the plan update as written. It is our hope that the State of Alaska and FEMA can assist, or give the Tribe direction as to how to correct the issues outlined below:

I. The City of Unalaska, The Qawalangin Tribe of Unalaska and the Ounalashka Corporation have a Trilateral Agreement (MOU). The only persons associated with the Tribe who have the authority to engage in legally binding agreements are the Tribal Council President, Harriet Berikoff, the Tribe's CEO, Chris Price, and in his absence and under implied authority, the COO, Tanaya Horne. It should be noted that the COO authority is only recently granted. All other authority would require written approval.

   It has come to my attention that Rachel E. Ramirez, aka Elena Ramirez, represented herself as the authority on this agreement rather than our CEO, Chris Price. I was advised that Ms. Ramirez's authority was used in October 2021, November 2021, and February 2022 to approve and submit the final draft of the MHMP, however, Ms. Ramirez's employment terminated in July of 2021. There was no authority to submit or for any entity to act on behalf of the Tribe during the periods in question.

Review of the MHMP by the Tribe did not occur prior to submission to the State or FEMA.

II. (1.4) Planning

The City of Unalaska had ten representatives in the planning team. The Ounalashka Corporation, The Tribal Corporation for the region, had one representative. The Tribe had one representative who was not an active participant as she was not employed with the Tribe during the periods in question. The Community Clinic for the City of Unalaska had one representative. The Tribal Community Clinic had no representation.

The Tribe was not advised that the Hazard Mitigation Planning public meetings, included the Qawalangin Tribe of Unalaska. As such, Tribal Members were not advised, and their voices not heard. This severely impacts our Tribal Sovereignty

III. (2.3) Government

The Island of Unalaska has two Federally Recognized Governments. The Response Group recognized the City of Unalaska as the sole Government entity on island. It failed to recognize the Tribe as Government entity. This severely compromises the Tribe's Sovereign Authority. By passing the MHMP as written, the Tribe would be forced to acknowledge the City as the sole governing body on the Island of Unalaska. The result of which would be denying its own Tribal Sovereignty which could lead to the dissolution of the Tribe.

IV. (2.4) Demographics

The MHMP recognizes the City of Unalaska's Economic Demographics however, it fails to recognize the distinction between the city and the Tribe's economic demographics. The City's economic demographics typically incorporates the Fishing Industry and City employees and are considerably higher ($94,750) than the Tribe's community economic demographics, which estimated to be between $14,000 and $50,000. This is quite a large disparity and without appropriate recognition, prevents the Tribal Community from seeking grants for economically disparaged communities and negatively impacts our Tribal Sovereignty.

V. (3.1.2) Medical Care

The MHMP, as written, fails to represent the Tribal Community's Indian Health Services (HIS) designated healthcare provider, Aleutian Pribilof Island Association (APIA), and focuses solely on the Iliuliuk Family and Health Services, Inc. (IFHS). APIA was not asked to participate in this process. Tribal Members are not authorized to seek medical care at IFHS on their own accord. A true Multijurisdictional Hazard Mitigation Plan on the Island of Unalaska mandates the inclusion of both healthcare facilities, as *both* healthcare facilities are affected by hazard mitigation risk factors.

The Qawalangin Tribe of Unalaska's appointed healthcare clinic is the HUB for the Aleutian Islands. In addition, APIA is the only Veteran Administration authorized contracted primary care facility on the island. Had APIA been a participant, The Response Group would have understood the unique challenges the Unangan people in the Aleutian Island Chain face. Removal of our Tribal

designated healthcare facility compromised the integrity of Tribal Sovereignty and significantly impaired the Tribe's ability to seek funding for risk mitigation improvements to its own Healthcare Facility.

VI. (3.1.3;3.1.4; 3.1.4.2) Fire Department, Law Enforcement, Patrol, Corrections

These sections, as written, presume final authority belongs to city entities. Acknowledgement that these entities operate under implied Tribal permission needs to be included as the Tribal Government has authority to own and operate its own Justice Programs exclusive of the City of Unalaska. Currently, the Tribe is investigating Department of Justice opportunities to create its own Justice Programs. The wording of these sections compromises the integrity of QTU's Tribal Sovereignty.

VII. (3.1.5; 3.1.6; 3.1.7) Water Sources; Wastewater Treatment; Electricity

These sections, as written, presume the Tribe and Ounalashka Corporation are not authorized to provide these utilities to Tribal Members separate and apart from the City of Unalaska. As the entire Island of Unalaska is considered Tribal lands, this impedes Tribal Sovereignty on Tribal Lands. It further impedes the Tribe and OC's ability to secure funding for these services.

It should be noted that these sections explicitly cite the City's goal "to increase its infrastructure to provide on-island support to all consumers," but fails to cite OC and the Tribe's goals for Utility Infrastructure.

VIII. (3.1.8; 3.1.9; 3.1.10) Roads, Airport, Harbor and Ports

These sections, as written, presume the Tribe and Ounalashka Corporation have no stake in the Islands roads, airport or harbor and ports. However, the Tribe has a BIA Roads program that assists with the maintenance of city and Tribal lands, and the OC directly owns the Airport lands and all the surrounding lands. In addition, the study fails to cite the port that is maintained by the Ounalashka Corporation, nor does it recognize it. This is contrary to Tribal Sovereignty and severely impedes the Tribe and OC's ability to obtain future funding for its programs.

IX. (4.1.1; 4.1.2) Earthquakes and Tsunamis

This study failed to include the most significant recent earthquakes in Unalaska and along the Aleutian Island chain that would have a direct impact to Unalaska. The most recent Earthquake listed was 2010-08-23. In fact, there were significant earthquakes (above 5.0) that could produce Tsunami waves from 2019 – 2022. The most recent activity measured 6.2, 5.0, 5.1, 5.1. The Tribal community are largely located in Tsunami zones. They are more likely to be negatively impacted by the effects of earthquakes, thus this information needs to be as accurate as possible for us to be able to obtain risk mitigation funding.

In addition, the study cites 5 Government Facilities, which only incorporates the City of Unalaska. The Tribe's infrastructure was not represented. This is antithetical to our Federal designation as a Tribal Government and thus compromises our Tribal Sovereignty.

X. (5.1) Hazard Mitigation Goals and Objectives

Goal 3. This goal focuses solely on the City of Unalaska's municipal needs and fails to include the Tribe's needs.

Open Space Preservation: The phrase "A municipal government may acquire the property from a private property owner…" is antithetical and contradictory to Federal laws that protect the Tribe and the Ounalashka Corporation's right to Tribal lands. The City of Unalaska does not have authority over Tribal lands, which are privately held by the OC. Wording to exclude these lands must be included. Similar wording would be required for the Relocation section.

XI. (6.1) Plan Adoption

The Tribe finds the wording in this section antithetical to its Tribal Sovereignty, specifically, "The Qawalangin Tribe of Unalaska will continue to comply with all applicable Federal statutes and regulations during the periods for which it receives grant funding, in compliance with 44 CFR 13.1 (c), and will amend its plan whenever necessary to reflect changes in tribal or Federal laws and statutes as required in 44 CFR 13.11(d)."

This language, as written compromises Tribal Sovereignty. Instead, the paragraph should read as follows, "The Qawalangin Tribe of Unalaska, a federally recognized sovereign nation, will pattern its Tribal regulations to be in accordance with 44 CFR 13.11 (c) and 44 CFR 13.11 (d), and will amend Tribal laws as needed to be in compliance with funding sources."

At no time shall the Tribe relinquish its Sovereign Authority through utilization of the words "comply," but rather will adopt similar language to federal laws and regulations as necessary.

XII. (6.3) Plan Monitoring and Evaluation

The plan was not prepared as a collaborative effort nor is the Tribe currently represented in a fair and equitable fashion. This section cites the Director of Planning will work with the Tribal Operations Director/Lands & Infrastructure Director and makes them primary contacts. The primary contact for the Tribe is always the CEO, or a formally delegated officer.

The Plan Review Schedule only cites the City of Unalaska's approval. It does not indicate Tribal approval. This is contrary to Tribal Sovereignty as it relinquishes the Tribe's authority to the city government.

Following a Major Disaster: This section grants all authority to post-disaster planning to the City Manager and removes the Tribe's authorization to act as a Tribal Government. This is contrary to Tribal Sovereignty as it forces the Tribe to relinquish its authority to the city government.

Formal Plan Update: This section grants authority solely to the City Council, with no consideration for Tribal Council adoption. This is contrary to Tribal Sovereignty as it relinquishes the Tribe's authority to the city government.

Mitigation Action Status and Tracking Loss Reduction: This section grants authority solely to city departments and removes the Tribe's authorization to act as a Tribal Government. This is contrary to Tribal Sovereignty as it forces the Tribe to relinquish its departments' authority to the city departments.

Incorporation of Existing Planning Mechanisms: This section authorizes the Planning Department to act on behalf of the Tribe with no formal authority to do so. This is contrary to Tribal Sovereignty as it forces the Tribe to relinquish its ability to create long-term planning and budget documents to granting agencies on behalf of the Tribe. It further addresses only the capital plans which are specific to the City of Unalaska and does not detail those that are specific to the Tribe.

Continued Public Involvement: Copies of the MHMP are only available at City of Unalaska buildings. This is contrary to Tribal Sovereignty as our members have the right to visit their government center to obtain copies.

XIII. Appendix B – Funding Resources

The City erroneously cites that the Tribe does not have grant writers and relies on city administration to act on its behalf for grants management and planning capabilities. This is contrary to the truth. The Tribe is 100% grant funded. The city has not written one grant that provides our operational budget. Additionally, at the time of this planning, the Tribe wrote and was approved for a FEMA grant to engage in Hazard Mitigation Planning. In addition, it has a more recent grant into FEMA for consideration.

The Tribe is full capable and authorized to write, submit and administer any and all grants as a Sovereign Nation. The wording throughout this Appendix is not only contrary to our Tribal Sovereign rights, but blatantly attempts to take away our ability to seek funding that would benefit our Tribe and its members.

XIV. Appendix C – Critical Facilities

This section fails to report the Tribal Government Center as critical infrastructure.

The Multijurisdictional Hazard Mitigation Plan, as submitted, fails to accurately uphold The Qawalangin Tribe of Unalaska's Tribal Sovereignty. It does not accurately reflect the needs of the Tribal Community and seeks to solely represent the City of Unalaska while forcing the Tribe to give up its federally granted sovereignty. The Tribe cannot adopt this plan as presently written for the issues outlined above.

Please advise what steps we need to take to rectify this as the Tribe did not authorize this document to be submitted to the state, nor to FEMA for approval. It is our since hope that we can find a resolution to this issue through either correction of the issues listed above, or completion of a new updated plan.

Sincere Regards,

Tanaya Horne, COO
Qawalangin Tribe of Unalaska
PO Box 334
Unalaska, AK 99685
907-581-2920 (Unalaska Office)
907-359-3295 (remote cell)

Unalaska Multi-Jurisdictional Hazard Mitigation Plan

QAWALANGIN Tribe of Unalaska

CITY OF UNALASKA INTERNATIONAL PORT OF DUTCH HARBOR 53° 54' N 166° 32' W

January 1, 2025

Prepared for:
City of Unalaska and
Qawalangin Tribe of Unalaska

By: katmai SOLUTIONS

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Chapter 1 - Introduction

1.1 Background

The City of Unalaska is vulnerable to a wide range of natural, technological, and human hazards. These hazards can affect the safety of residents, damage or destroy public and private property, disrupt the local economy, and negatively impact the quality of life.

Typically, hazards cannot be eliminated, but theses hazards can lessen their impact by participating in hazard mitigation. Hazard mitigation is any action taken to reduce or eliminate the long-term risk to property and human life from hazards.

There is a wide variety of hazard mitigation activities available. They can be structural in nature, such as reinforcing a building's foundation. Mitigation activities can focus on preventing the damage from occurring in the first place (by limiting development in hazard-prone areas), or by protecting against damage (strengthening existing or future development so that it is not damaged by a hazard event). More information about hazard mitigation activities can be found in Chapter 5.

One of the most effective tools to reduce vulnerability to hazards is a local hazard mitigation plan. A hazard mitigation plan identifies what hazards exist in the community and establishes goals and specific mitigation activities to be undertaken.

To encourage communities to develop hazard mitigation plans, the United States Congress passed the Disaster Mitigation Act of 2000 (DMA 2000). This Act requires local governments to have a Federal Emergency Management Agency (FEMA)-approved mitigation plan by November 2004 to remain eligible for FEMA Hazard Mitigation Grant Program (HMGP) funding and Pre-Disaster Mitigation (PDM) grants. This plan for the City of Unalaska has been prepared in coordination with the State of Alaska (SOA) Division of Homeland Security and Emergency Management (DHS&EM) to ensure it meets all applicable DMA 2000 requirements. FEMA's Local Mitigation Plan Crosswalk, found in Appendix A, provides a summary of federal and state minimum standards and documents where each requirement is met within the plan.

1.2 Purpose

The purpose of the HMGP (Program) is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. Projects must provide a long-term solution to a problem, for example, elevation of a home to reduce the risk of flood damages as opposed to buying sandbags and pumps to fight the flood. In addition, a project's potential savings must be more than the cost of implementing the project. Funds may be used to protect either public or private property or to purchase property that has been subjected to, or is in danger of, repetitive damage. The amount of funding available for the Program under a particular disaster declaration is limited. FEMA may provide a State or Tribe with up to 20% of the total aggregate disaster damage costs to fund the Program Projects or Planning Grants. The cost-share for these grants is 75% Federal/25% non-Federal. Communities

that fulfill "Impoverished Community" criteria and receive FEMA Regional Administrator approval may be funded at 90% Federal/10% non- Federal.

The mitigation grant program provides funds to State, Tribes, and Local entities, for hazard mitigation planning and mitigation project implementation prior to a disaster event. These grants are awarded on a nationally competitive basis. The Program project's potential savings must be more than the cost of implementing the project. In addition, funds may be used to protect either public or private property or to purchase property that has been subjected to, or is in danger of, repetitive damage. The total amount of pre-disaster mitigation funding available is appropriated by Congress on an annual basis. In FY 2019, pre-disaster mitigation program funding totaled approximately $250 million. Federal funding was available for up to 75 percent of the eligible activity costs. Small, impoverished communities may be eligible for up to a 90 percent federal cost share in accordance with the Section 203(h) of the Stafford Act. The remaining eligible activity costs must be derived from non-federal sources.

The goal of the FMA grant program is to reduce or eliminate flood insurance claims under the NFIP. Emphasis for this program is placed on mitigating repetitive loss (RL) properties. The primary source of funding for this program is the National Flood Insurance Fund with funding available for planning and project grants. Project grants typically use most of the program's total funding. States, Tribes, and Local entities apply to implement mitigation measures that potentially reduce flood losses to NFIP insured properties. It should be noted the City of Unalaska does not currently participate in the NFIP, and is therefore, ineligible for National Flood Insurance Act Grant Programs.

1.3 Plan Organization

The City of Unalaska's Hazard Mitigation Plan is organized into seven chapters and its appendices:

Chapter 1 - Introduction

Chapter 1 will introduce the plan and includes the purpose, scope, and organization of the plan, as well as a description of the planning process.

Chapter 2 – Community Profile

Chapter 2 is a general history and background of the City of Unalaska (City) and the Qawalangin Tribe of Unalaska (Tribe), as well as the Ounalashka Corporation, whom are all part of the Trilateral Commission.This Chapter includes historical trends for population, and the demographic and economic conditions that have shaped the area.

Chapter 3 – Asset Inventory

Chapter 3 is an asset inventory identifying what development could be vulnerable to a hazard event.

Chapter 4 – Hazards in the City of Unalaska

Chapter 4 provides details about the hazards that can occur in Unalaska. For each hazard, there is a description of the hazard's characteristics, the location where the hazard can occur, previous occurrences of the hazard, and what is vulnerable to the hazard. Where possible, the location of the hazard area has been mapped.

Chapter 5 – Mitigation Strategy

Chapter 5 contains the City of Unalaska's mitigation strategy, including mitigation goals, objectives, and action items. This chapter also contains information about how the mitigation measures will be implemented.

Chapter 6 – Plan Maintenance

This chapter is devoted to the maintenance, evaluation, and updating of the plan.

Appendices

The appendices contain the plan's supporting documentation.

1.4 Planning Process

The initial Planning Process which began in 2021 was led by the Unalaska Fire Chief Patrick Shipp. Facilitation and guidance were provided by The Response Group for development. Planning Team Members included:

Table 1: 2021 Planning Team

2021 Hazard Mitigation Planning Team			
Name	**Title**	**Organization**	**Key Input**
Scott Brown	Port Deputy Director	City of Unalaska	Planning Team Member
Bob Cummings	City Engineering	City of Unalaska	Planning Team Member
Mark Descoteaux	Wastewater Supervisor	City of Unalaska	Planning Team Member
Bil Homka	Planning Director	City of Unalaska	Planning Team Member
Jay King	Police Chief	City of Unalaska	Planning Team Member
Ben Knowles	Fire Captain	City of Unalaska	Planning Team Member
Jeremiah Kirchofer	Water Supervisor	City of Unalaska	Planning Team Member
Ferdinand Lopez	Safety Security Director	Unisea	Planning Team Member
Peggy McLaughlin	Port Director	City of Unalaska	Planning Team Member
Elena Ramirez	Operations Director/Lands & Infrastructure Director	Qawalangin Tribe of Unalaska	Planning Team Member
Chris Salt	CEO	Ounalashka Corporation	Planning Team Member
Patrick Shipp	Fire Chief	City of Unalaska	Planning Team Member
Steve Tompkins	Public Utilities Deputy Director	City of Unalaska	Planning Team Member
Dan Winters	Public Works Director	City of Unalaska	Planning Team Member

Chief Shipp left Unalaska in August of 2022 prior to finalization of the project. Chief Ben Knowles picked up the project after his appointment to the Fire Chief position in June 2023 and discovered that Tribal Stakeholders were significantly under-represented during the 2021 update process.

After speaking with AK DHS&EM and FEMA representatives it was decided to review and revise the 2021 draft update with additional effort to capture the input and needs of Tribal stakeholders. In February of 2024 Chief Knowles engaged the services of Katmai Preparedness Solutions to assist with revision, finalization and adoption of the work that was started in 2021. The 2024 Planning Team Members include:

Table 2: 2024 Planning Team

2024 Hazard Mitigation Planning Team			
Name	**Title**	**Organization**	**Key Input**
Ben Knowles	Fire Chief	City of Unalaska	Planning Team Member
Chris Price	CEO	Qawalangin Tribe of Unalaska	Planning Team Member
Tanaya Horne	COO	Qawalangin Tribe of Unalaska	Planning Team Member
Natasha Swint	Finance and Administration Manager	Qawalangin Tribe of Unalaska	Planning Team Member
Payola Kennedy		Qawalangin Tribe of Unalaska	Planning Team Member
Laresa Syverson	Technical Lands Manager	Ounalashka Corporation	Planning Team Member
Karen Pletnikoff	Environment & Safety Administrator	Aleutian Pribilof Islands Association (APIA)	Planning Team Member
Christy Fassbender	DNP	IFHS	Planning Team Member

2021 Efforts:

Per 44 CFR Part 201 et seq., public involvement is encouraged. Public meetings were arranged, and publications were distributed. Public involvement on the 2021 update was conducted via public meetings and surveys. Two public meetings on the HMP were held on August 17, 2021 at 2:00 PM and 6:00 PM.

The planning team – the consultant, staff core team, and other interested city staff - met May 18, June 22, and August 18, 2021 to develop the mitigation strategy. Public notice for the meetings were advertised in accordance with Unalaska General Code requirements. Meeting agendas and minutes are in the Appendix, as is a comprehensive matrix detailing all public comments received, their disposition, and how they were resolved or considered. All meetings were advertised and open to the public, using normal public notice procedures.

2024 Efforts:

The 2021 public input survey was recreated in 2024 and was distributed to capture additional public/stakeholder input from those that did not have the opportunity to participate in the 2021 survey.

The 2024 planning team met Bi-Weekly from August 1, 2024 through October 10, 2024 to review and revise the 2021 draft plan. After the completed revisions to the plan and mitigation strategy an additional public meeting was held on Tuesday, December 3rd, 2024 from 3:00PM to 6:00PM public notice for the meeting was advertised in accordance with City and Tribal public notice requirements.

The MJHMP Planning Process is surmised in the following illustration:

Figure 1: MJHMP Planning Process

Chapter 2 – Community Profile

2.1 Location and Geography

Unalaska overlooks Iliuliuk Bay and Dutch Harbor on Unalaska Island in the Aleutian Chain. It lies 800 air miles from Anchorage and 1,700 miles northwest of Seattle. The name Dutch Harbor is often applied to the portion of the city on Amaknak Island, which is connected to Unalaska Island by bridge. Dutch Harbor is within the boundaries of the City of Unalaska. Unalaska lies at approximately 53.873610 North Latitude and 166.536670 West Longitude.

May 9, 2023 the City of Unalaska formally entered into the Trilateral Coalition, a MOA of the City, the Qawalangin Tribe and the Ounalashka Corporation. The goal of the Trilateral Coalition remains to diversify the Unalaska community, to improve communication among the Trilateral Coalition members and coordinate an appropriate response to issues on the island involving public health, public administration, environmental management, economic development public works and utilities and public communications, among others.

The Qawalangin Tribal website provides a brief history of present-day Unalaska:

“The word Aleutian and the name "Aleut" was given to the indigenous people by the first Russian explorers to visit the Aleutian Islands. It is a carryover from what the Russian explorers called the indigenous peoples of the Kamchatka Peninsula and Commander Islands, but the indigenous people of the Unangam Tanangin (Aleutian and Pribiliof Islands) have always referred to themselves as Unangax^ and continue to do so today. , Roughly translated, Unangax^ means the people of the passes. In the dialect of the Eastern Aleutian Islands, the self-given term for this group ofIndigenous peoples is Unangan; in the western dialect, Unangas. Collectively, Unangaŝ is the proper term for the indigenous people of the Aleutian region. This group of hunters, whalers, and fishers are the original inhabitants of the Aleutian Island Chain, predating the Russian settlement of the region by thousands of years.

Resources from the sea provided a livelihood for the Unangax^ people and still does today, for not only the Unangax^, but also many residents of Unalaska. The harsh climate and unforgiving topography of the islands created a Unangax^ culture both rich in art and oral tradition that lives today and continues to grow and flourish in the present generation of Unangax^ People.

Language, Unangax^ dance, and medicinal plants are being brought back and used as they always were over thousands of years. The Unangan People are mostly widely known for their ultra-fine grass basketry, sleek and efficient wood-frame iqyan (skin boats made of wood frames and marine mammal skin) and mastery in handling these skin boats at sea. The Unangan People are also well-known for their excellence as marine mammal hunters, superior skin sewing and embroidery techniques, and beautiful, streamlined bentwood hats and visors. Historically, the Aleutian Island of Unalaska has been home to the Unangan People, who through oral history have documented an estimated 8,000 years of trade and travel.

Archaeological investigation in the Unalaska area gives evidence that the Unangan people have inhabited the Aleutian Islands for at least 9,000 years. Artifacts found in the archaeological site at Margaret Bay on the Island of Unalaska were ancient at the time the Egyptians were building the

first step pyramids. By 1745, the Unangan People had meet Russian explorers, fur traders and hunters who came across the Bering Straits to the Aleutian Islands such as Unalaska. There were inevitable clashes between the Russians and the native islanders, as the Russian's treatment of the Unangan was less than favorable. At this time, the explorers branded the Unangan/Unangas people with the name, "Aleut", a word of uncertain meaning and origin that has become a catchall name for various Alaska Native groups.

International commerce began in 1759 when Stephan Glotov and accompanying fur hunters spent two years on Unalaska and nearby Umnak Island. Soon under Russian control, the Unangan People were consolidated into fewer and fewer communities to accelerate the efficiency in which the Russians could take advantage of their hunting skills. The decline of the Unangan population was rapid and occurred for varied reasons, from genocide to contact diseases brought by the Russian newcomers. According to Unalaska resident Moses Dirks, a linguist specialist and teacher of the Unangan Language at the high school in Unalaska, the word Unangan means people of the passes. The Aleutian Islands are home to the earliest known continually inhabited coastal site in North America" (Qawalangin 2012).

The City of Unalaska's Comprehensive Plan 2020 (2020 Plan) provides some historical background for their community as: "Unalaska (Iluulux) in Aleut; (Уналашка) in Russian) is a city in the Aleutians West Census Area of the Unorganized Borough of the State of Alaska and is located on Unalaska Island and neighboring Amaknak Island in the Aleutian Islands off of mainland Alaska. The Unangan people, who were the first to inhabit the island of Unalaska, named it "Ounalashka" meaning "Near the Peninsula". The name Unalaska is probably an English variation of this name. The regional native corporation has adopted this moniker and is known as the Ounalashka Corporation. Dutch Harbor was so named by the Russians because they believed that a Dutch vessel was the first European ship to enter the harbor" (UCP 2011).

Figure 2: Unalaska Location within Alaska

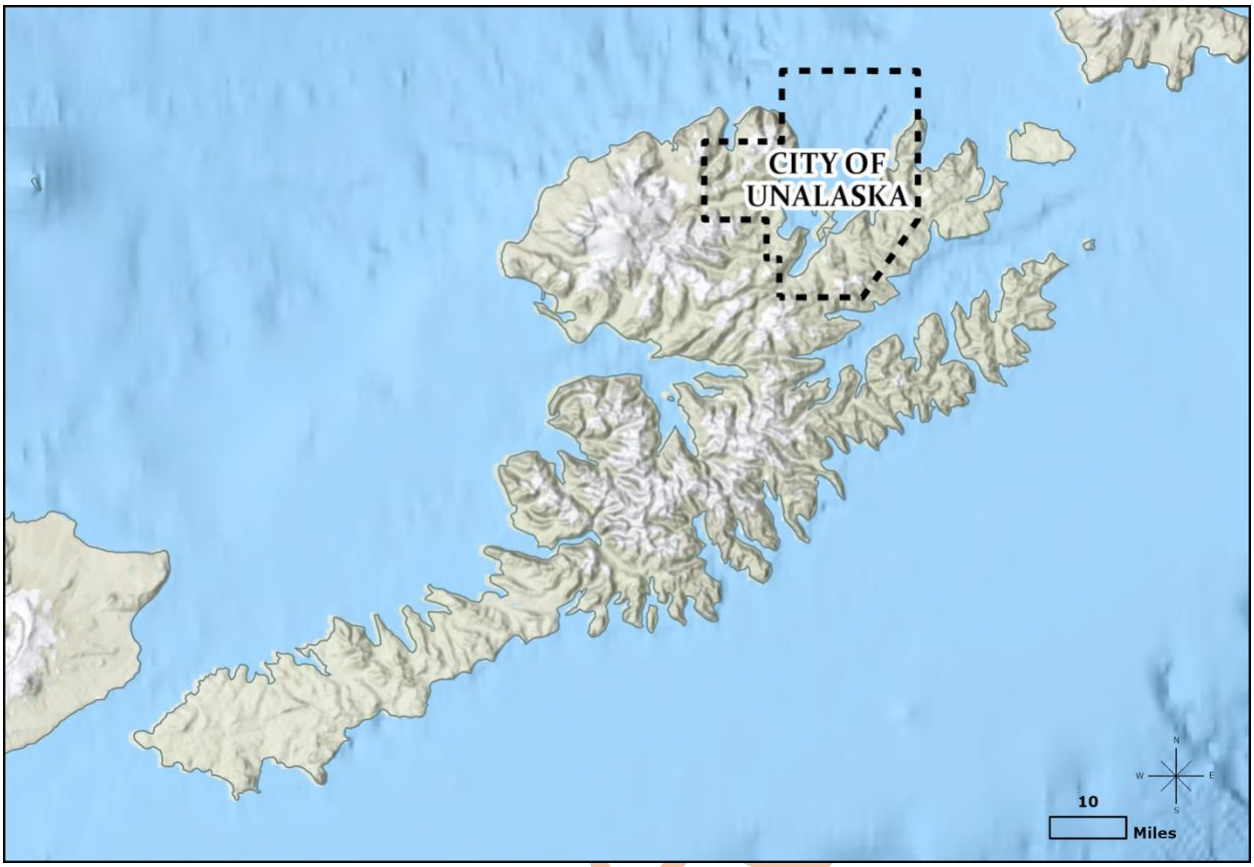

Figure 3: Unalaska Location on Unalaska Island

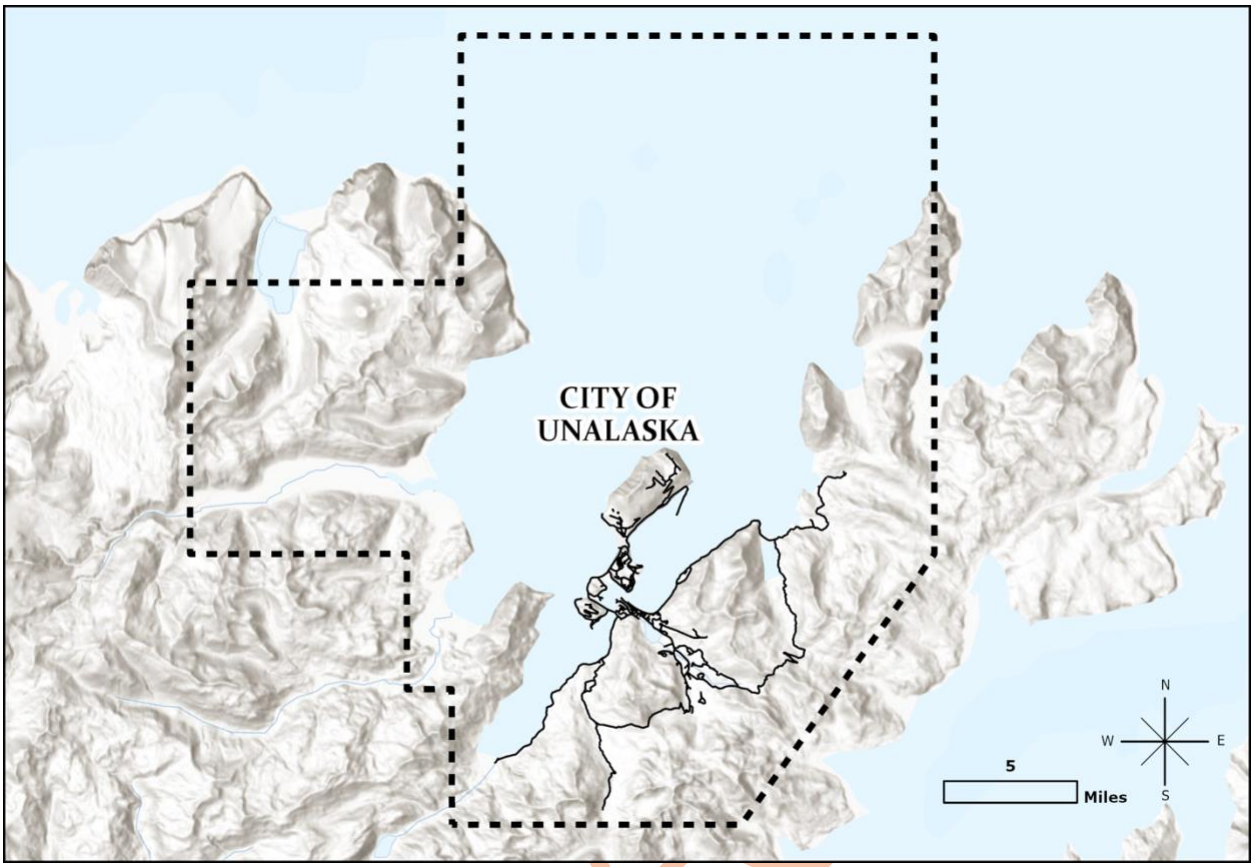

Figure 4: Unalaska City Limits

2.2 History

The history of the Unalaska region is rich and multifaceted, marked by significant events and developments over thousands of years.

15-20,000 Years Ago:

The first people to inhabit the Unalaska region are believed to have crossed into Alaska from Siberia via the Bering Land Bridge. These early settlers, known as the Unangan people (today's Aleuts), established a deep connection with the land and the sea, developing a rich culture and lifestyle centered around fishing, hunting, and gathering.

1741:

Russian ships first reached the Aleutian Islands. Fur hunters exploited the region's abundant resources, and Russians enslaved many Unangan inhabitants, disrupting their traditional way of life and introducing foreign diseases that significantly reduced the population.

1759:

Approximately 3,000 Unangan people utilized 24 locations on Unalaska and Amaknak Islands. During this period, international commerce began as Unangan people worked with Russian explorer Stephan Glotov and accompanying fur hunters.

1867:

The United States purchased Alaska from Russia, ending Russian control. This transfer of power brought new governance and economic opportunities to the region, although it also led to further exploitation of the Unangan people and their resources.

1880:

The Methodist Church opened a school, clinic, and the Jesse Lee Home for Orphans in Unalaska. These institutions provided much-needed services to the local population, including education and healthcare.

1880s:

Dutch Harbor flourished as a hub for coal and commercial trade, attracting settlers and businesses to the region.

1890s:

The Klondike Gold Rush brought many through the Unimak Pass, using it as a gateway to the northwest Alaska gold fields. This influx of prospectors and adventurers significantly impacted the local economy and infrastructure.

1900s:

Seafood processing plants were established to process herring, salmon, and whale meat, laying the foundation for Unalaska's future as a major seafood processing center.

1910:

Fox farming provided economic benefits to the area as the coal trade diminished due to the rise of oil use. This period saw diversification in the local economy.

1930s:

The Great Depression caused the collapse of the fur industry, leading to economic hardship for many in the region.

1942:

Military defense installations proved wise when Japanese aircraft attacked Dutch Harbor during World War II. This event marked Unalaska's significant role in the Aleutian Campaign and led to further militarization of the region. In response to Japanese aggression in the Aleutians during World War II, U.S. authorities evacuated 881 Unangax̂ from nine villages. They were herded from their homes onto cramped transport ships and taken to Southeast Alaska and abandoned at

dilapidated canneries, a herring saltery, and gold mine camp-rotting facilities with no plumbing, electricity or toilets. Pneumonia and tuberculosis took the very young and the old. Thirty-two died at the Funter Bay camp, seventeen at Killisnoo, twenty at Ward Lake, five at Burnett Inlet. With the death of the elders so, too, passed their knowledge of traditional Unangaŝ ways. (NPS) When the Unangax^ were allowed to return three years later, many of their homes had been ransacked or burned.

1950:

The Aleutians renewed interest in fish processing with a focus on halibut, salmon, and king crab, revitalizing the local economy and establishing Unalaska as a key player in the seafood industry.

1960:

The king crab industry improved significantly, bringing prosperity to the region and attracting workers and businesses from around the world.

1971:

The Alaska Native Claims Settlement Act of 1971 (ANCSA) was a new approach by Congress to federal Indian policy. ANCSA extinguished aboriginal land title in Alaska. It divided the state into twelve distinct regions and mandated the creation of twelve private, for-profit Alaska Native regional corporations and over 200 private, for-profit Alaska Native village corporations. The Ounalashka Corporation was established in 1973 under the Alaska Native Claims Settlement Act of 1971, and the Ounalashka Corporation (OC) now stewards our lands and brings value to almost 500 shareholders and descendants.

1989:

The Qawalangin Tribe of Unalaska was federally recognized as a sovereign nation of the United States. This recognition affirmed the Tribe's rights and sovereignty, allowing it to pursue self-governance and development initiatives to benefit its members.

1989 to Today:

For the Qawalangin Tribe:

Since gaining federal recognition in 1989, the Qawalangin Tribe of Unalaska has made significant strides in various areas to enhance the well-being of its members and the community. The Tribe has focused on cultural preservation, economic development, and social services, working to sustain and revitalize Unangan traditions and practices.

In the 1990s, the Tribe began to develop its administrative capacity, securing grants and funding to support health, education, and housing programs. The Tribe has been instrumental in advocating for the rights and needs of the Unangan people, ensuring that their voice is heard in local, state, and federal matters.

The early 2000s saw continued growth and development, with the Tribe expanding its services and infrastructure. This period included the establishment of community health initiatives, cultural programs, and environmental stewardship efforts. The Tribe also strengthened its partnerships with local, state, and federal agencies to enhance its capacity to serve its members.

In recent years, the Qawalangin Tribe has continued to advance its strategic goals. The Tribe has focused on economic development projects, including exploring opportunities in tourism, fisheries, and renewable energy. These initiatives aim to create sustainable economic growth and provide employment opportunities for Tribal members.

The Tribe has also prioritized education and youth programs, recognizing the importance of nurturing the next generation of leaders. By providing scholarships, educational support, and cultural programs, the Tribe ensures that young Unangans have the resources and opportunities to succeed.

The Tribe's efforts in healthcare have also been notable, with the establishment of the Aleutian Pribilof Island Association (APIA) clinic, which provides comprehensive healthcare services to Tribal members. This facility ensures that the community has access to quality healthcare, addressing both physical and mental health needs.

Overall, the Qawalangin Tribe of Unalaska has made significant progress in asserting its sovereignty and improving the quality of life for its members. By focusing on cultural preservation, economic development, and social services, the Tribe continues to build a strong and resilient community.

For the City of Unalaska:

Since 1989, the City of Unalaska has experienced substantial growth and development, becoming a crucial hub for the fishing industry and other economic activities.

1990s:

The City continued to expand its infrastructure to support the growing seafood industry, which remains a vital part of the local economy. Investments were made in port facilities, roads, and public services to accommodate the increasing demands of commercial fishing and processing.

2000s:

The early 2000s saw significant improvements in public services and infrastructure. The City invested in modernizing its utilities, including water and wastewater systems, to support the growing population and industrial activities. Educational institutions also saw enhancements, with local schools receiving upgrades to better serve the community's youth.

2010s:

The City of Unalaska focused on sustainability and resilience. Environmental initiatives were launched to protect the local ecosystem, which is critical to the fishing industry. The City also

worked on improving its emergency preparedness and response capabilities, recognizing the unique challenges posed by its remote location and harsh weather conditions.

2020s:

In the 2020s, the City has continued to prioritize infrastructure and economic development. The completion of the Aleutian Fiber Project by GCI in 2022 brought high-speed internet to the island, significantly enhancing connectivity for residents and businesses. This development has opened new opportunities for education, healthcare, and commerce.

The City also remains a leader in the seafood industry. Dutch Harbor consistently ranks as one of the top fishing ports in the United States, contributing significantly to the national seafood supply. The City's harbor and port facilities have been continually upgraded to support this thriving industry.

In recent years, the City has focused on diversifying its economy to reduce reliance on seafood processing. Efforts have been made to explore tourism and renewable energy as potential growth sectors. Additionally, the City has worked closely with the Qawalangin Tribe to ensure that development initiatives respect and integrate the cultural and historical significance of the area.

The partnership between the City of Unalaska and the Qawalangin Tribe has strengthened over the years, with both entities working together to enhance the well-being of all residents. This collaborative approach has ensured that Unalaska remains a vibrant and resilient community, capable of adapting to changing economic and environmental conditions.

(UCP 2011, Qawalangin 2012, DCRA 2012)

2.3 Government

The Qawalangin Tribe of Unalaska and the City of Unalaska collaborate closely to enhance the well-being and prosperity of the local community. This partnership includes joint efforts in areas such as cultural preservation, environmental stewardship, and economic development. Both entities prioritize maintaining the rich heritage and traditions of the region while fostering growth and resilience. Regular meetings and open communication channels ensure that both the City and the Tribe can address shared challenges and opportunities effectively, working together to create a vibrant and sustainable future for all residents.

The City of Unalaska was organized as a First Class City in 1942. Unalaska consists of a mayor and six council members, elected by the citizens. The vice mayor is selected to serve a one year term from among the council members shortly after the elections. Municipal elections are held the first Tuesday of October and each council member elected serves a three-year term. The Council meets for regularly scheduled meetings the second and fourth Tuesdays of each month.

The Qawalangin Tribe of Unalaska was federally recognized in 1971. The Tribe operates under a constitution and bylaws, governed by a Tribal Council consisting of seven members elected by the Tribe's citizens. Each council member serves a staggered three-year term, ensuring continuity within the governing body. Elections are held annually on the second Tuesday of October. The

Tribal Council meets regularly on the first and third Wednesdays of each month to discuss and decide on matters important to the community and its members.

2.4 Demographics

Every June, the Commissioner of the Department of Commerce Community Economic Development certifies the community population figures. The 2010 population was 4,376 residents with a median age of 40.2.

The 2010 U.S. Census revealed that there are 927 households with the average household having approximately two individuals.2

Table 3: Demographics

Demographics	
Population by Race	
American Indian or AK Native	4.3%
Asian	43.27%
Black or African American	5.97%
Native Hawaiian or Pacific Islander	2.25%
White	31.59%
Other	6.65%
Two or More Races	5.9%
Population by Age	
Under 5	3.06%
5 to 9	5.84%
10 to 14	4.18%
15 to 19	4.97%
20 to 24	8.85%
25 to 34	19/24%
35 to 44	16.86%
45 to 54	19.36%
55 to 59	6.28%
60 to 64	6.11%
65 to 74	4.46%
75 to 84	0.55%
Over 85	0.0%
Sex	
Male	37.56%
Female	62.44%

According to the 2020 U.S. Census, the median household income in Unalaska was $94,750 with a per capita income of $35,461. Approximately 5.7% were reported to be living below the poverty level. The potential work force (those aged 16 years or older) in the City was estimated to be 3,850, of which 3,938 were actively employed. In 2010, the unemployment rate was 2.1%. However, this included part-time and seasonal jobs, and practical unemployment or underemployment is likely to be significantly higher.

It is important to recognize the distinction between the City of Unalaska's economic demographics and those of the Qawalangin Tribe of Unalaska. The City's economic data, heavily influenced by the fishing industry and city employees, shows a median household income of $94,750. In contrast, the Tribe's community economic demographics are considerably lower, estimated to be between $14,000 and $50,000. This significant disparity highlights the economic challenges faced by the Tribal community and underscores the importance of recognizing these differences for grant opportunities and the support of economically disadvantaged communities, thereby preserving Tribal Sovereignty.

2.5 Economy

Unalaska's economy is robust and multifaceted, with a strong foundation in the commercial fishing industry, supported by a diverse range of other economic activities.

Commercial Fishing and Seafood Processing

The commercial fishing industry is the cornerstone of Unalaska's economy. Dutch Harbor, a part of Unalaska, has consistently ranked as one of the top fishing ports in the United States by volume of seafood landed. The rich fishing grounds surrounding the Aleutian Islands provide abundant stocks of pollock, cod, halibut, crab, and other species.

Unalaska's seafood processing plants, including Westward Seafoods, Alyeska Seafoods, and UniSea, are major employers in the region, providing jobs for thousands of workers both year-round and seasonally. These facilities process millions of pounds of seafood annually, which are then distributed to markets worldwide. The industry not only supports local employment but also contributes significantly to the national seafood supply.

Port and Marine Services

Unalaska's strategic location and well-developed port facilities make it a critical hub for marine services. The Port of Dutch Harbor provides essential services to the commercial fishing fleet, including docking, refueling, maintenance, and repair. The port also serves as a transshipment point for goods and supplies destined for other parts of Alaska and the North Pacific.

The Department of Ports and Harbors manages and operates six city-owned marine facilities, including the United States Coast Guard (USCG) Dock, the Unalaska Marine Center (UMC) Dock, the Spit Dock, the Light Cargo Dock (LCD), the Robert Storrs International Small Boat Harbor (SBH), and Carl E. Moses Boat Harbor (CEM). These facilities are crucial for supporting the commercial fishing industry and other maritime activities.

Transportation and Logistics

Given its remote location, Unalaska relies heavily on air and sea transportation for the movement of people and goods. The Unalaska/Dutch Harbor Airport provides critical air links to the mainland, facilitating passenger travel and the shipment of high-value goods, including seafood. The airport's strategic importance is underscored by ongoing efforts to enhance its infrastructure and service capabilities.

The marine transportation sector is also vital, with regular cargo shipments arriving from the mainland United States and other regions. Companies like Horizon Lines and American President Lines (APL) play a key role in maintaining the flow of goods necessary for daily life and industrial operations in Unalaska.

Tourism

Tourism is a growing sector in Unalaska's economy, attracting visitors with its stunning natural landscapes, rich cultural heritage, and opportunities for outdoor recreation. Activities such as

wildlife viewing, birdwatching, hiking, and exploring historical sites related to World War II draw tourists from around the world. The Qawalangin Tribe of Unalaska and other local organizations are working to develop sustainable tourism initiatives that benefit the community while preserving the natural environment and cultural sites.

Renewable Energy

Unalaska is exploring renewable energy opportunities to diversify its economy and enhance sustainability. Wind and tidal energy projects are under consideration, leveraging the region's natural resources to reduce reliance on imported fuels and lower energy costs. These initiatives align with broader efforts to address climate change and promote environmental stewardship.

Collaboration with the Qawalangin Tribe

The Qawalangin Tribe of Unalaska plays a significant role in the local economy, particularly through initiatives aimed at economic development, cultural preservation, and social services. The Tribe's efforts in securing grants and funding for various projects contribute to the overall economic health and resilience of the community. Collaboration between the City of Unalaska and the Tribe ensures that economic development strategies are inclusive and beneficial to all residents.

Economic Challenges and Opportunities

Despite its strengths, Unalaska's economy faces challenges such as fluctuations in fish populations, the impacts of climate change, and the logistical complexities of its remote location. However, the community's resilience, strategic initiatives, and diversification efforts position it well to adapt to these challenges and seize new opportunities for growth.

Unalaska's economy remains dynamic and vital, driven by its natural resources, strategic location, and the ingenuity of its residents. The continued development of diverse economic sectors ensures a sustainable and prosperous future for the community.

2.6 Climate

Unalaska, located in the Aleutian Islands, experiences a maritime climate characterized by relatively moderate temperatures, high humidity, wind storms, and significant precipitation throughout the year. The climate is heavily influenced by the surrounding North Pacific Ocean and Bering Sea, which contribute to the area's unique weather patterns.

2.6.1 Temperature

The temperature in Unalaska tends to be mild, with small variations between summer and winter. Average high temperatures in the summer months (June through August) range from 50°F to 60°F (10°C to 16°C), while winter temperatures (December through February) typically range from 30°F to 40°F (-1°C to 4°C). Extreme temperatures are rare, and the maritime influence prevents both severe cold and intense heat.

Table 4: Unalaska Mean Temperature by Month

Month	Mean Max Temperature Normal (°F)	Mean Min Temperature Normal (°F)	Mean Avg Temperature Normal (°F)
January	37.3	28.7	33.0
February	38.6	29.4	34.0
March	38.9	29.2	34.1
April	41.8	32.5	37.1
May	46.7	37.4	42.0
June	52.3	42.4	47.3
July	57.4	46.6	52.0
August	59.3	48.1	53.7
September	54.6	44.2	49.4
October	48.1	38.4	43.2
November	43.3	33.2	38.2
December	39.3	30.6	35.0
Annual	46.5	36.7	41.6

2.6.2 Precipitation

Unalaska receives a substantial amount of precipitation, averaging around 60 inches (1524 mm) annually. This precipitation is relatively evenly distributed throughout the year, though the fall months tend to be the wettest (with 5 to 8 inches averaged a month) and summer months the driest (with 2-3 inches averaged a month). Rain is the most common form of precipitation, but snow can occur in the winter months (mainly falling between December and March), with about 80 inches (2032 mm) of annual snowfall received. The high levels of precipitation contribute to the lush, green landscapes that characterize the region.

Table 5: Unalaska Precipitation by Month

Month	Total Precipitation Normal (inches)
January	6.79
February	5.18
March	4.65
April	3.47
May	4.20
June	2.52
July	2.30
August	2.86
September	5.73
October	7.89
November	6.66
December	7.88
Annual	60.13

2.6.3 Wind

Strong winds are a common feature of Unalaska's climate, particularly during the fall and winter months. The region frequently experiences gale-force winds (35 knots (40mph) or more), and individual storms can bring even stronger gusts. These winds are a result of the area's position along the North Pacific storm track, where low-pressure systems regularly pass through.

2.6.4 Fog

Fog is another frequent occurrence in Unalaska, especially in the summer months. The interaction between the cool ocean waters and the relatively warmer air masses often leads to the formation of dense fog, which reduces visibility and impacts transportation and daily activities.

2.6.5 Climate Change Impact

Climate change poses potential challenges for Unalaska, as rising global temperatures and changing weather patterns may affect the region's natural environment and the livelihoods of its residents. Potential impacts include changes in fish populations, shifts in weather patterns, and increased frequency of extreme weather events. Both the City of Unalaska and the Qawalangin Tribe are actively monitoring these changes and developing strategies to mitigate their effects and enhance community resilience.

Overall, Unalaska's climate is a defining feature of the region, shaping its natural environment, lifestyle, and economic activities. The community's ability to adapt to and thrive in these conditions is a testament to the resilience and resourcefulness of its residents.

Chapter 3 – Asset Inventory

Before a community can develop its mitigation strategy, it needs to know what should be protected. The purpose of this chapter is to identify what needs to be protected, including Unalaska critical facilities. Unalaska has many other assets that should be protected, including its infrastructure and existing development.

3.1 Infrastructure

Infrastructure is the basic facilities and services needed for a community. Unalaska's infrastructure includes roads, water supplies, wastewater treatment plants, water and wastewater pipes, power plants, electrical lines, bridges, ports, airports, telecommunications equipment, schools, etc.

3.1.1 Education

Due to the size of Unalaska, there are three primary schools that serve the educational needs of the community's younger residents. In addition to these, there is also a higher education institution that provides opportunities for adult and continuing education.

3.1.1.1 Unalaska Schools

Table 6: Educational Facilities

Unalaska Schools	
School	Grades
Unalaska High School	5th – 12th
Eagles View Elementary	K – 4th
Unalaska Preschool	Pre-K/Pre-School

3.1.1.2 Higher Education

University of Alaska Fairbanks - Unalaska Learning Center: This learning center is part of the University of Alaska Fairbanks Bristol Bay Campus. It offers a variety of courses and programs tailored to the needs of the local community, providing opportunities for higher education and professional development. The center supports students in achieving their educational and career goals through access to university resources and personalized instruction.

These educational institutions collectively support the diverse learning needs of Unalaska's residents, from early childhood through adulthood, fostering a culture of lifelong learning and community development.

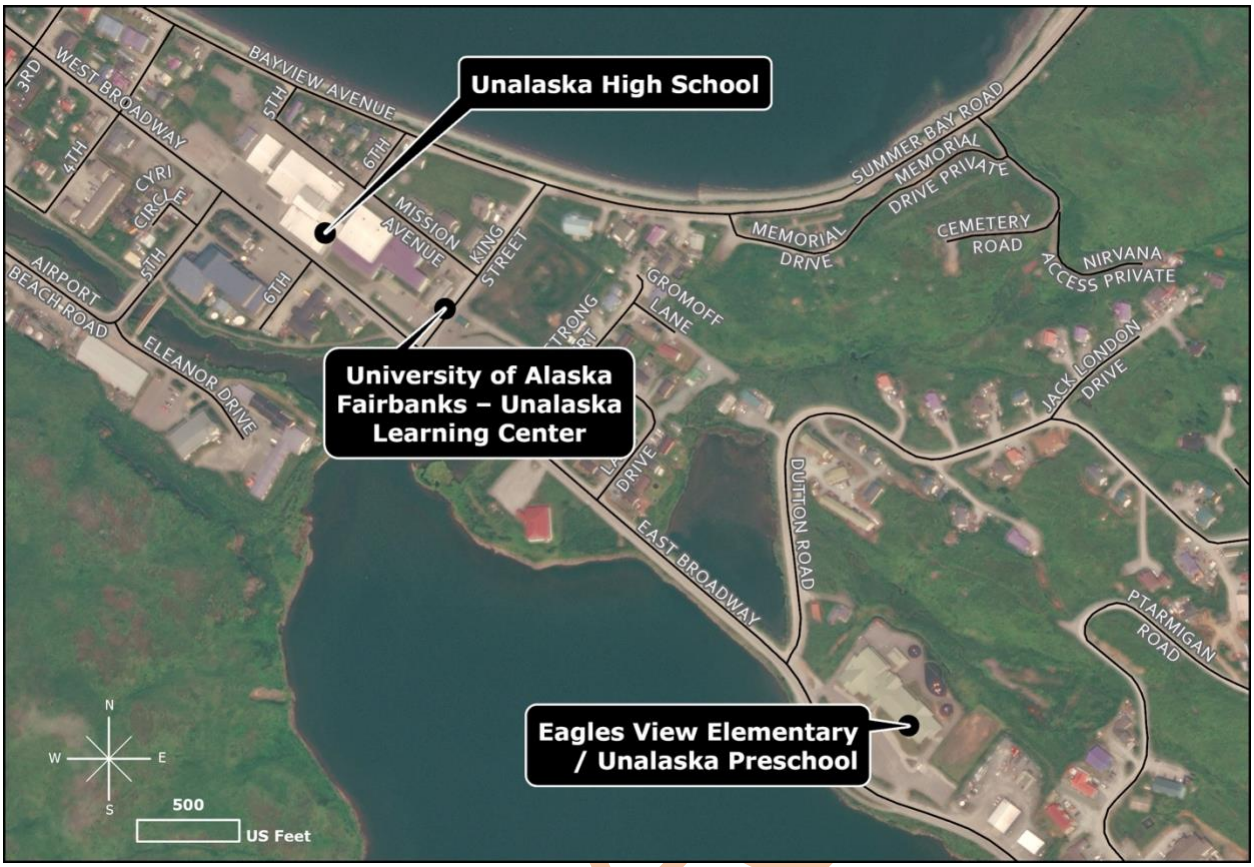

Figure 5: Map of Educational Facilities

3.1.2 Medical Care

The community's health care services are primarily provided by two key organizations: Iliuliuk Family & Health Services, Inc. (IFHS) and Aleutian Pribilof Island Association (APIA).

3.1.2.1 Iliuliuk Family & Health Services, Inc. (IFHS)

IFHS operates the local clinic for residents of Unalaska and the fishing fleet of the Bering Sea. They provide comprehensive primary medical care and behavioral health care. IFHS offers a full range of primary care services which include a diagnostic laboratory, preventive health care, urgent care and emergency services, alternative medicine options, mental health services, x-ray, ultrasound, prenatal care, postnatal home visits, domestic violence counseling, and health education and outreach. The clinic is staffed by family practice physicians, physician assistants, and family nurse practitioners. The medical support staff includes registered nurses, a case management team, medical assistants, emergency medical technicians/paramedics, and x-ray/lab technicians. Oral health care is provided through referrals to local dental providers. IFHS collaborates with local behavioral health counseling services to address community behavioral health needs. Primary care services provided by IFHS are on a sliding fee scale based on family size and household income.

3.1.2.2 Aleutian Pribilof Island Association (APIA)

APIA is the Indian Health Services (IHS) designated healthcare provider for the Qawalangin Tribe of Unalaska and serves as the HUB for the Aleutian Islands. Tribal members are required to seek medical care through APIA rather than IFHS. APIA is also the only Veteran Administration authorized contracted primary care facility on the island, addressing the unique healthcare needs of veterans within the community. APIA's inclusion in the Multijurisdictional Hazard Mitigation Plan is crucial as both IFHS and APIA are affected by hazard mitigation risk factors. Recognizing APIA's role ensures a comprehensive understanding of the healthcare landscape and supports the Tribe's ability to secure funding for risk mitigation improvements to its healthcare facility.

APIA operates the Oonalaska Wellness Center at

3.1.2.3 Additional Healthcare Services

In addition to the services provided by IFHS and APIA, two dentists visit the community on a regular basis throughout the year. Two chiropractic clinics also provide services to the people of the community, and an optometrist comes to Unalaska on a regular basis to address the vision needs of the community.

3.1.2.4 Medical Evacuation Services

LifeMed Alaska, a for profit private air medical transportation company, is the primary provider of air medical transport for patients from Unalaska to definitive care in Anchorage. LifeMed Alaska has a dedicated "Dutch Med Team" that resides in Unalaska 365 days a year.

Other agencies such as Guardian, Medevac Alaska, and the United States Coast Guard can be called in should LifeMed Alaska be unavailable on a different mission.

Table 7: Medical Facilities

Unalaska Medical Facilities	
Facility Name	**Address**
IFHS Clinic	34 Lavelle Ct.
APIA Oonalaska Wellness Center	34 Lavelle Ct. #A
APIA Behaviorial Health Clinic	205 W Broadway Ave.
Dutch Harbor Dental Clinic	179 Gilman Way #201
Aleutian Family Dentistry	159 Riverside Dr.
Arctic Chiropractic Unalaska	372 Bayview Ave
Arctic Chiropractic Dutch Harbor	125 Raven Way

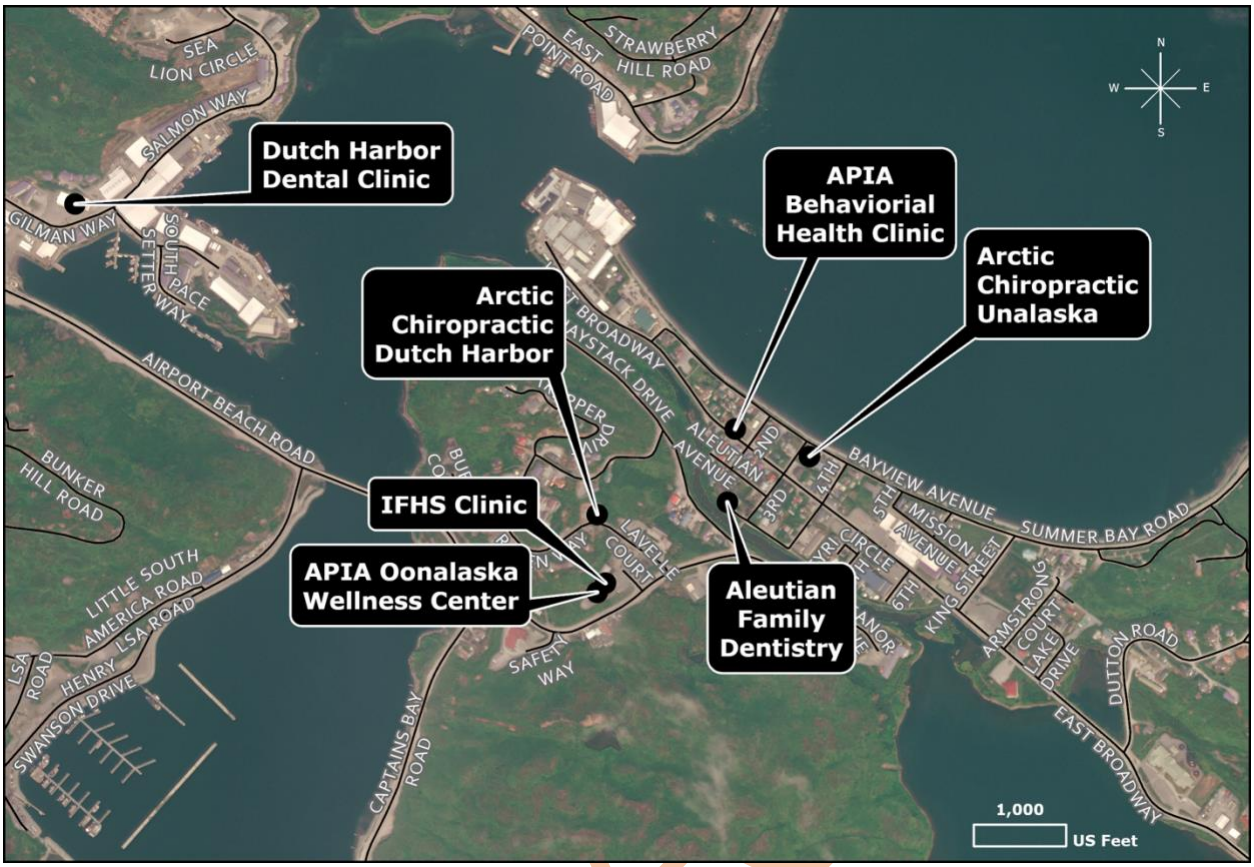

Figure 6: Map of Medical Facilities

3.1.3 Public Safety

3.1.3.1 Fire Department

Fire and Emergency Medical Services are provided by the City of Unalaska Fire Department, currently employing six career firefighters, an administrative assistant and a fire chief. Station 1 is staffed seven days a week from 0800 – 1800, with on-call response from the respective shift on duty from home. The fire department also have a volunteer roster of up to 40 members. The City of Unalaska Fire Department is a licensed advanced life support ground ambulance service and registered fire department.

3.1.3.2 Law Enforcement

Police protection is provided by the Unalaska Police Department and the Alaska State Troopers.

Patrol

The Patrol Division is the primary law enforcement entity for the City of Unalaska and the International Port of Dutch Harbor.

Corrections

The Unalaska City Jail is a temporary holding facility, owned and operated by the City of Unalaska. The jail has nine beds and is operated 24 hours a day, 365 days per year.

3.1.3.3 Tribal Authority

The Qawalangin Tribe of Unalaska holds the authority to own and operate its own justice programs exclusive of the City of Unalaska. Currently, the Tribe is investigating Department of Justice opportunities to create its own justice programs. Although the Tribe has not yet implemented these services, it retains the sovereign right to develop and manage public safety and justice services independently. The current operation of fire and law enforcement services by city entities is conducted under implied permission from the Tribe. Recognizing this authority is essential to maintaining the integrity of Tribal Sovereignty and supporting the Tribe's future initiatives in public safety and justice.

Table 8: Public Safety Facilities

Public Safety Locations	
Facility Name	Address
Fire Station 1	29 Safety Way
Fire Station 2	2713 Airport Beach Road
Police Department	29 Safety Way
Jail	29 Safety Way
Court Magistrate	204 W Broadway
Alaska Wildlife Troopers	2315 Airport Beach Rd. #101

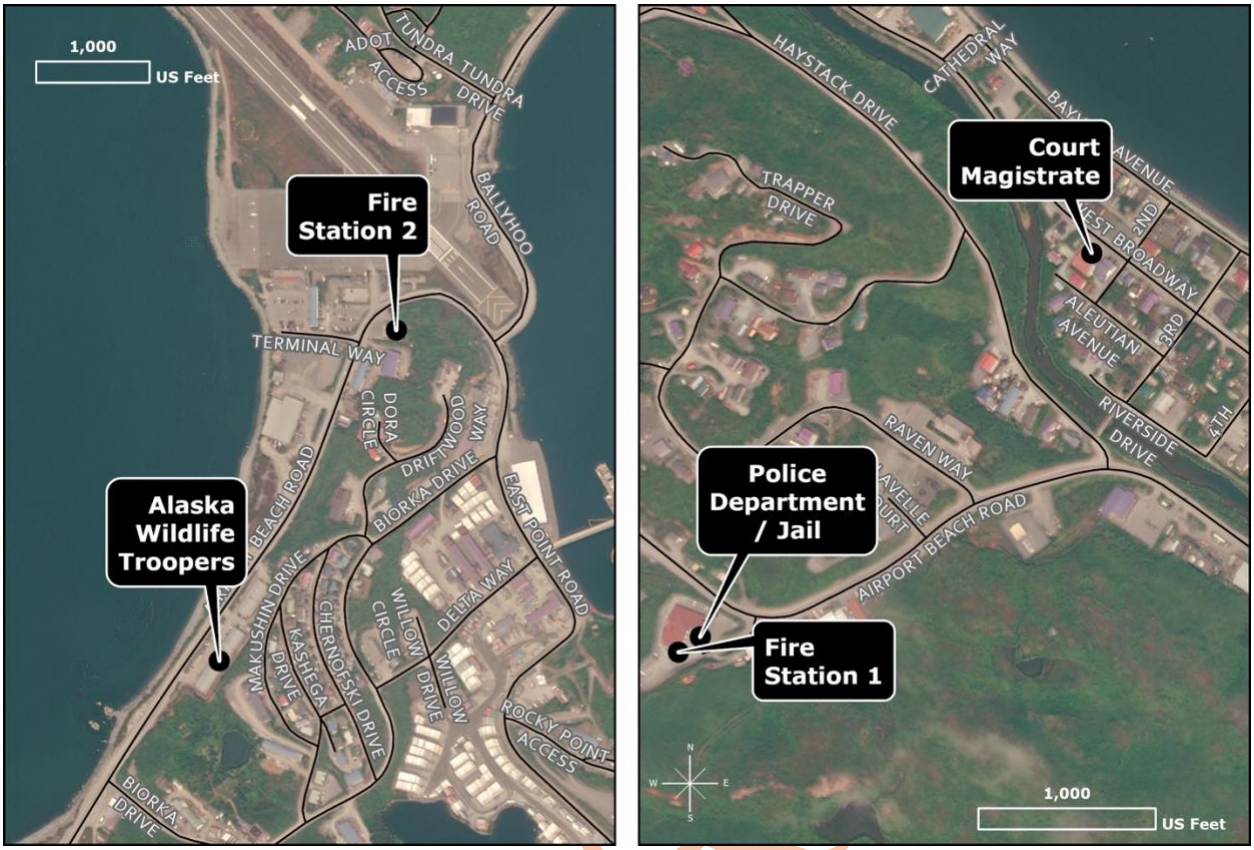

Figure 7: Map of Public Safety Facilities

3.1.4 Utilities

3.1.4.1 Water

The City of Unalaska water system provides drinking water to approximately 4,592 permanent residents within the City, as well as numerous fish processing facilities and industries. The water system currently has over 20 miles of water distribution main and approximately 572 metered water systems. Potable water is produced at the 6 million gallons per day (MGD) Pyramid Water Treatment Plant (WTP), which treats local surface water. Water for the treatment is collected from impoundments along the Icy Creek, known as Icy Lake and Icy Reservoir, and have a capacity of 57 and 9.62 million gallons (MG) respectively. In addition to surface water, the City also has four active well sites with a combined production capacity of 2,800 gallons per Page 34 of 70 minute (GPM). The City also has a fully operational Supervisory Control and Data Acquisition (SCADA) system that enables both remote monitoring and control over assets.

The City's historical water demands present a unique operational challenge owing to seasonal influx of transient population and fish processor water demands throughout the year. Between 5,000 to 6,000 transient people come to Unalaska during peak fishing season and processing times. This significant influx coupled with the increased water demand by industry causes large peaks and valleys in water demands. Demands can peak at nearly 7.25 MGD and drop as low as 1.5

MGD during off-peak seasons. For this reason, it is necessary for the City to have large untreated raw water storage capacity available to offset the peak demands throughout the year.

3.1.4.2 Wastewater

The City of Unalaska wastewater collection system consists of 18 miles of gravity sewer and force mains with 12 lift stations that transport wastewater to a chemically enhanced primary treatment facility before discharging into South Unalaska Bay. The City's wastewater treatment plant (WWTP) serves both the City of Unalaska and Amaknak Island. It is a primary treatment facility that removes solids from domestic and industrial wastewater with a rotary sheer screen, followed by disinfection using ultraviolet radiation. Screened solids are disposed of at the City's municipal landfill. The City's landfill contributes leachate to the collection system and is a source of biochemical oxygen demand (BOD) loading to the facility.

Based on historical data wastewater average day flow is 0.41 million gallons per day (MGD) with a maximum daily flow of 0.90 MGD, resulting in a peaking factor of approximately 2.17. The peaks and lows in wastewater production are less dramatic than observed in the water production as can be seen in figure on the following page, which is likely due to a number of the fish processing facilities having their own discharge permits. The wastewater influent to the WWTP is projected to have a minor increase over the next 20 years to approximately 0.49 MGD average day flow and a peak flow of 1.06 MGD.

3.1.4.3 Electricity

The City of Unalaska operates two co-located power plants and one remote mobile power module. The primary facility, NPH, was built in 2011 and contains four diesel 4.16 kV generators. These units comprise the only power generation the City operates to meet its current demand. The four generating units consist of two Wartsila 12V32 units rated at 5.2 megawatts (MW) each and two Caterpillar C280-16 units rated at 4.4 MW each, for a total nominal output of 19.2 MW.

The City of Unalaska is home to many large industrial customers including Westward Seafoods, Alyeska Seafoods, UniSea, Horizon Lines, American President Lines (APL). Historically, these customers have provided their own power as the City did not have the generation and distribution capacity to support them. However, the City has built up its electrical infrastructure and is now supporting a large portion of the fishing industry. It is the City's goal to increase its infrastructure to provide on-Island support to all consumers.

3.1.4.4 Tribal Authority

The Qawalangin Tribe of Unalaska and the Ounalashka Corporation (OC) retain the authority to provide utilities to Tribal Members separate and apart from the City of Unalaska. As the entire Island of Unalaska is considered Tribal lands, this acknowledgment is crucial for preserving Tribal Sovereignty. The Tribe and OC are actively pursuing opportunities to develop and enhance their own utility infrastructure to better serve their communities. Recognizing the goals of the Tribe and OC alongside the City's infrastructure plans ensures a comprehensive approach to utility services on the island, supporting the Tribe's ability to secure funding for utility infrastructure improvements and maintaining the integrity of Tribal Sovereignty.

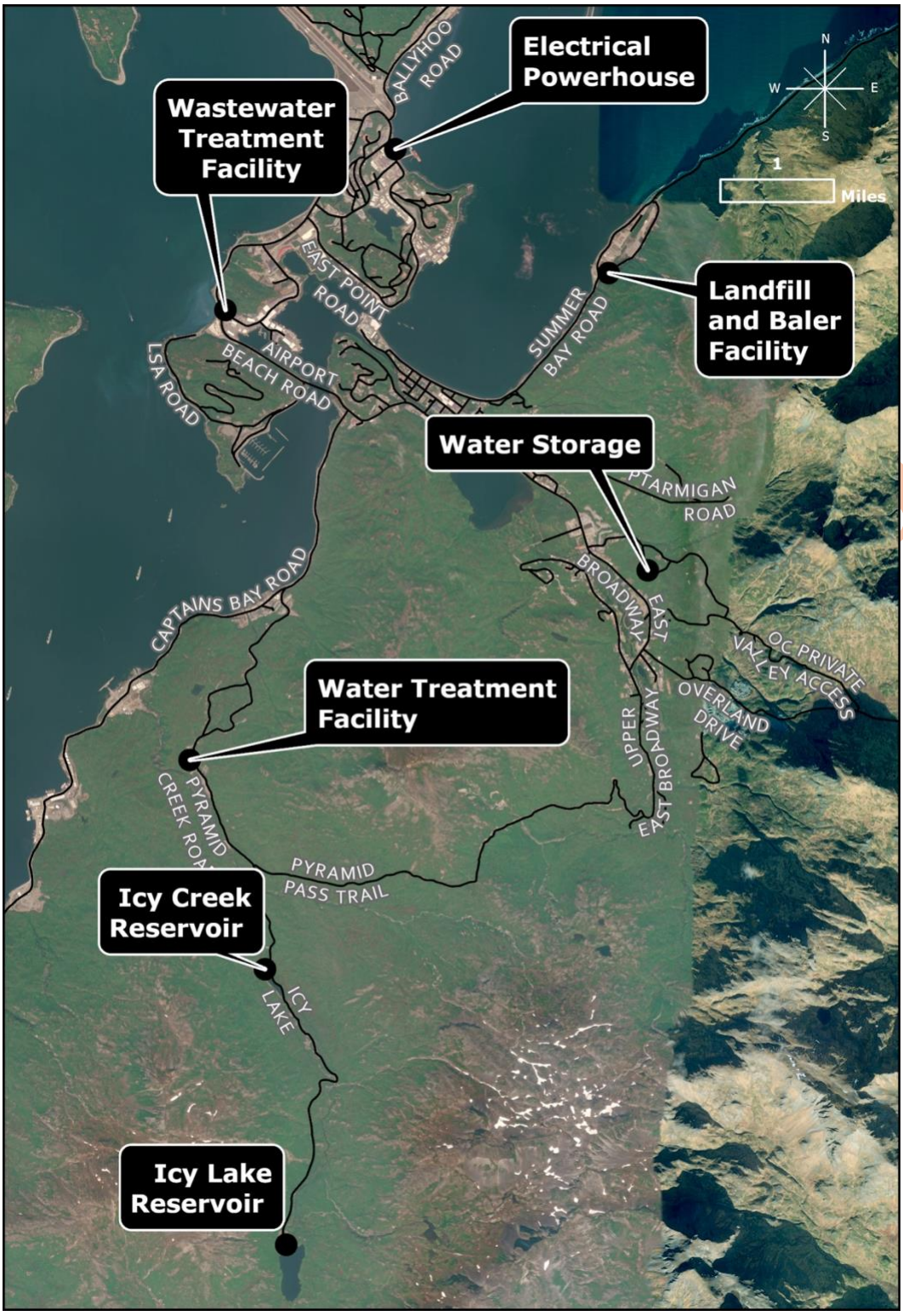

Figure 8: Map of Utilities Facilities

3.1.5 Transporation

3.1.5.1 Roads

The City of Unalaska has 42 miles of road in the existing roadway network. The Roads Public Works Department (PWD) identifies 6.6 miles of road as paved, with the remaining 35.4 miles of road consisting of unpaved or having a class 2 gravel surface. However, high costs for construction and weather conditions relevant to the island's remote location demands a more realistic approach for the PWD to gradually increase the paved roads inventory while effectively maintaining the level of service for existing facilities.

In addition to the City's efforts, the Qawalangin Tribe of Unalaska operates a Bureau of Indian Affairs (BIA) Roads program, which assists with the maintenance of both city and Tribal lands. This collaborative effort is essential for the comprehensive maintenance and development of the island's road infrastructure.

3.1.5.2 Airport

The Unalaska/Dutch Harbor Airport, also commonly known as "Tom Madsen Airport," began as part of the Naval Air station commissioned in September of 1941 during WWII. In June of 1942, work started with a gravel runway, 500 feet wide by 4,358 feet long, along Mount Ballyhoo's southern foot. The first record of a plane landing occurred on July 3, 1942. This runway continues to support peninsula air travel to this day for the community. The City wants to improve direct service by allowing for larger aircraft with daily scheduled service.

The Ounalashka Corporation (OC) directly owns the airport lands and all the surrounding lands, playing a critical role in the management and future development of the airport. Recognizing OC's ownership and involvement is crucial for supporting the overall transportation infrastructure on the island.

3.1.5.3 Harbor and Ports

For more than 30 years, Unalaska's economy has been primarily driven by commercial fishing, seafood processing, and providing marine services. According to a 2018 study conducted by the National Oceanic and Atmospheric Administration (NOAA), Unalaska's Port of Dutch Harbor has been a significant contributor to the U.S. Commercial Fisheries and Seafood Industry for 22 consecutive years. Unalaska's Port of Dutch Harbor led the nation, producing 763 million pounds of seafood, constituting 14.5% of the national totals valued at more than USD 180M. The goals for Harbor & Port Operations moving forward are to continue leading the nation in production, continuing to find opportunities to build and expand operations, and diversify port support services.

Currently, the Department of Ports and Harbors manages, maintains, and operates six City owned marine facilities: The United States Coast Guard (USCG) Dock, the Unalaska Marine Center (UMC) Dock, the Spit Dock, the Light Cargo Dock (LC D), the Robert Storrs International Small Boat Harbor (SBH), and Carl E. Moses Boat Harbor (CEM).

Additionally, the Ounalashka Corporation (OC) maintains and operates a port facility, contributing significantly to the island's marine infrastructure. Acknowledging OC's role in port operations is essential for a comprehensive understanding of the island's transportation and economic landscape. This recognition also supports the Tribe and OC's efforts to obtain future funding for their programs, maintaining the integrity of Tribal Sovereignty.

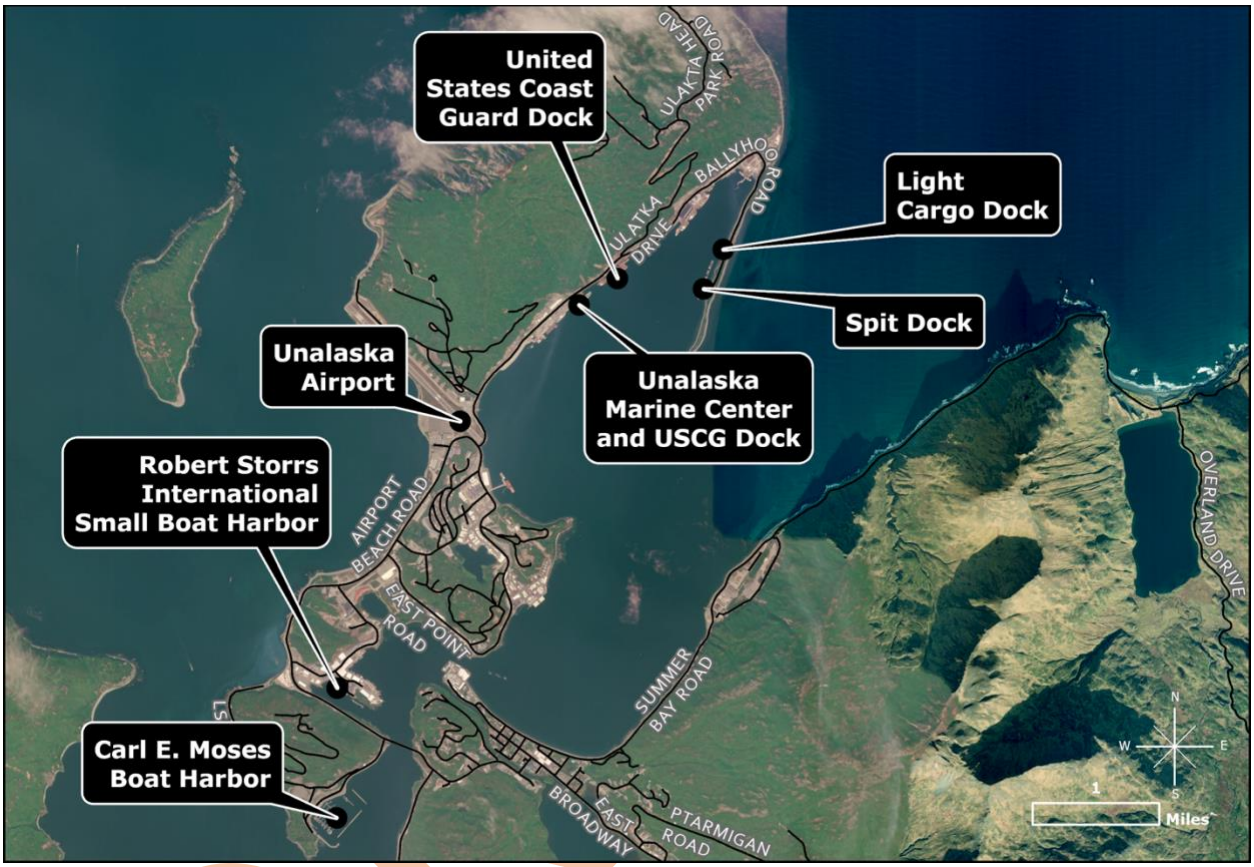

Figure 9: Map of Transportation Facilities

3.1.6 Communications

The City of Unalaska has recently made significant strides in improving its communications infrastructure. In late 2022, GCI completed the Aleutian Fiber Project, turning on 2.5GB internet service, which has dramatically enhanced broadband internet access on the island. This new fiber optic connection has brought reliable and high-speed internet to Unalaska, addressing the previous limitations and helping the community keep pace with global digital transformation.

In addition to GCI, other telecom and internet service providers play vital roles in ensuring comprehensive communications services for the residents of Unalaska and Dutch Harbor:

TelAlaska provides a range of telecommunications services, including local and long-distance telephone service, as well as internet access.

Starlink, the satellite internet service from SpaceX, offers high-speed satellite internet options, providing an alternative solution for areas that might still experience connectivity challenges.

OptimERA is another key provider, offering broadband internet services and working to improve the overall connectivity on the island. OptimERA has been instrumental in deploying wireless internet solutions and continues to expand its service coverage to meet the growing demands of the community.

These advancements in communications infrastructure are crucial for supporting the economic, educational, and social needs of the community. The combined efforts of GCI, TelAlaska, Starlink, and OptimERA ensure that Unalaska's residents and businesses have access to the modern telecommunications services necessary for a connected and resilient future.

3.1.7 Tribal Facilities

The tribal facilities for the Qawalangin Tribe of Unalaska include the main Administration office, which also houses Cultural Programs, Roads Programs, Environmental Programs, and Recycling. at 1235 E. Broadway, Ave. Unalaska AK. 99685 and the Food Bank at 68 Makushin Dr., Dutch Harbor, AK 99593.

3.1.8 Historical Sites

According to the National Register Information System, the City of Unalaska has the following sites listed on the National Register of Historic Places. The State Historic Preservation Office's (SHPO) Alaska Heritage Resources Survey (AHRS) has many more sites considered historically significant within Unalaska. Because the AHRS has numerous entries and is not available to the public, information about these sites is not listed here.

Table 9: Historic Sites

National Register of Historic Places		
Name	Address	National Register Information System ID
Holy Ascension Orthodox Church	265 West Broadway Avenue	70000112
Sitka Spruce Plantation	N/A	78000513
Dutch Harbor Naval Operating Base and Fort Mears, U.S. Army	Amaknak Island	85002733

Figure 10: Map of Historic Site Locations

Chapter 4 – Hazards in the City of Unalaska

One of the requirements of a hazard mitigation plan is that it describes the hazards that affect a jurisdiction. This chapter profiles the hazards that occur in the within the area by identifying each hazard's location, extent, previous occurrences, and the likelihood of future events. The City and Tribe are collocated within the City of Unalaska. The Tribe does not own land within the City but provides operational funding to Tribal facilities within the City. Additionally, the population of the Tribe lives within the City.

It is important to remember that the information listed in this chapter is meant to provide an overview of each hazard. While based on the best available information, the information is for planning purposes and should not be used for purposes which it was not intended such as securing permits, or for construction.

As part of this update, the City of Unalaska Departments, along with several state and federal agencies, were contacted to find out if new information was available. When available, the additional information was incorporated into the plan. Each hazard is assigned a rating based on the following criteria for probability.

Table 10: Hazard Probability

Hazard Probability	
Probability	**Criteria**
Highly Likely	• Event is probably within the calendar year • Event has up to 1 in 1 year's chance of occurring (1/1=100%) • History of events is greater than 33% likely per year • Event is "Highly Likely" to occur.
Likely	• Event is probable within the next three years • Event has up to 1 in 3 year's chance of occurring (1/3=33%) likely per year. • History of events is greater than 20% but less than or equal to 33% likely per year. • Event is "Likely" to occur
Possible	• Event is probable within the next five years. • Event has up to 1 in 5 years' chance of occurring (1/5=20%). • History of events is greater than 10% but less than or equal to 25% likely per year. • Event could "Possibly" occur.
Unlikely	• Event is possible within the next 10 years. • Event has up to 1 in 10 year's chance of occurring (1/10=10%). • History of events is less than or equal to 10% likely per year. • Event is "Unlikely" but is possible to occur.

Table 11: Hazard Magnitude

Hazard Magnitude	
Magnitude	**Criteria**
Catastrophic	• Multiple deaths. • Complete shutdown of critical facilities for 30 or more days. • More than 50% of property is severely damaged.
Critical	• Injuries and/or illnesses result in permanent disability. • Complete shutdown of critical facilities for at least two weeks. • More than 25% of property is severely damaged.
Limited	• Injuries and/or illnesses do not result in permanent disability. • Complete shutdown of critical facilities for more than one week. • More than 10% of property is severely damaged.
Negligible	• Injuries and/or illnesses are treatable with first aid. • Minor quality of life lost. • Shutdown of critical facilities and services for 24 hours or less. • Less than 10%of property is severely damaged.

4.1 Natural Hazards

Natural hazards are unexpected or uncontrollable events caused by nature, such as earthquakes, floods, or volcanic eruptions. In some cases, although rare, they can be human triggered, such as a human-triggered avalanche. The impacts of a natural hazard can also be worse based on human development and changes to the landscape.

4.1.1 Earthquakes

An earthquake is the shaking of the Earth's surface caused by the sudden release of energy in the Earth's crust. Most large earthquakes result from the release of accumulated stresses as tectonic plates move against each other. Additionally, earthquakes can occur along faults within these plates. The primary dangers associated with earthquakes include ground shaking, ground failure, surface faulting, and secondary hazards such as landslides and tsunamis.

Ground Shaking

Ground shaking is the primary cause of damage during an earthquake. It results from seismic waves generated by the earthquake. There are three main types of seismic waves:

- **Primary waves (P waves):** These are the fastest seismic waves, often felt as a sharp jolt.
- **Secondary waves (S waves):** These waves travel slower than P waves and produce a side-to-side motion. They can be particularly damaging because structures are generally more vulnerable to horizontal than vertical motion.

- **Surface waves:** Although the slowest, these waves often carry the bulk of the energy in a large earthquake and can cause significant damage.

The intensity of ground shaking depends on various factors, including the earthquake's magnitude, the geology of the area, distance from the epicenter, building design, and local construction practices. The extent of damage to buildings depends on how the characteristics of each incoming wave interact with the building's height, shape, and construction materials.

Surface Faulting

Surface faulting occurs when the Earth's surface experiences differential movement along a fault line. There are three primary types of faults:

- **Strike-slip faults:** Horizontal movement occurs on either side of the fault.
- **Normal faults:** One side of the fault drops down relative to the other.
- **Thrust (reverse) faults:** One side of the fault is pushed up and over the other.

Secondary Hazards

Secondary hazards from an earthquake can include seismically induced ground failure, snow avalanches, tsunamis, landslides, and infrastructure failure. These will be discussed in greater detail in other sections of the plan.

Magnitude and Intensity

Earthquakes are measured by their magnitude and intensity:

- **Magnitude** refers to the amount of energy released during an event. It is usually reported using the Richter scale (ML) for small to moderate earthquakes and the moment-magnitude scale (MW) for larger events.
- **Intensity** refers to the effects on people and structures at a particular location. It is usually reported using the Modified Mercalli Intensity (MMI) scale, which has 12 categories ranging from not felt to destruction. Different MMI values can be recorded at different locations for the same event, depending on local factors such as distance from the epicenter and building practices.

Location

According to the Alaska Earthquake Center, Unalaska faces a significant threat from earthquakes, particularly from the subduction of the Pacific Plate beneath the North American Plate.

History

The U.S. Geological Survey (USGS) database lists 32,342 earthquakes that have occurred within 100 miles (160 km) of Unalaska in the past 100 years, since 1924. Unalaska also experiences shaking from more distant earthquakes, but this analysis focuses on events within 100 miles of the city.

The three most significant earthquakes during this period were:

- A magnitude 7.8 earthquake located 76 km east of Nikolski in 1965,
- A magnitude 7.1 earthquake located 39 km south of Akutan in 1957,
- A magnitude 6.9 earthquake located 67 km southwest of Unalaska in 1987.

The U.S. Geological Survey (USGS) database lists 171 earthquakes of magnitude 5.0 or greater that have occurred within 100 miles (160 km) of Unalaska since 1924. The following table highlights the 20 largest of these events, ordered by magnitude.

Table 12: Top 20 Largest Earthquakes Within 100 Miles of Unalaska

Top 20 Largest Earthquakes (Magnitude 5.0 and Above) Within 100 Miles of Unalaska (1924–Present)

Date Time (UTC)	Latitude	Longitude	Depth	Magnitude
1965-07-02T20:58:40.260Z	52.99	-167.739	45	7.8
1957-03-22T14:21:15.060Z	53.778	-165.771	46.6	7.07
1980-03-24T03:59:51.300Z	52.969	-167.67	33	6.9
1987-02-27T08:31:54.400Z	53.47	-167.291	10	6.9
1957-03-29T05:10:33.600Z	53.312	-166.949	25	6.84
1955-01-13T02:03:48.850Z	53.141	-167.701	17.6	6.82
2003-02-19T03:32:36.360Z	53.645	-164.643	19	6.6
1946-10-30T07:47:37.440Z	53.714	-164.714	30	6.55
2009-10-13T05:37:23.690Z	52.754	-166.997	24	6.5
1974-02-06T04:04:07.200Z	53.799	-164.672	2	6.5
1955-01-13T02:35:51.810Z	53.031	-167.613	40	6.45
1944-07-27T00:04:28.470Z	54.487	-165.08	65	6.43
1957-03-17T22:44:53.780Z	53.823	-165.218	45	6.42
1957-03-15T02:52:14.680Z	52.762	-167.129	25	6.41
2009-10-13T20:21:53.200Z	52.604	-167.118	14	6.4
1957-11-20T12:40:31.150Z	53.756	-164.648	25	6.4
1952-01-12T20:11:43.690Z	52.64	-166.906	25	6.31
1958-06-12T20:53:05.930Z	52.658	-166.983	35	6.31
1975-11-30T20:30:17.000Z	52.599	-167.184	24	6.3
1989-05-19T02:21:56.380Z	54.305	-165.574	104	6.3

Vulnerability

An earthquake has the potential to significantly impact the City of Unalaska. The extent of damage to structures and infrastructure will depend on several factors, including the earthquake's magnitude, location, and frequency. Building type also plays a crucial role in determining vulnerability; for example, unreinforced masonry buildings are generally more susceptible to

earthquake damage compared to wood-framed structures. Additionally, critical infrastructure such as roads, bridges, and utilities are at risk, with disruptions potentially hindering emergency response efforts.

The entire population of Unalaska, including existing residents, transient populations, and future inhabitants, as well as residential structures and critical facilities, is exposed to the effects of a catastrophic earthquake. For this vulnerability assessment, it is estimated that 50% of the population, residences, and facilities would be affected in the event of a significant earthquake. The following table quantifies the potential impacts on Unalaska's population, facilities, and infrastructure in the event of a significant earthquake.

Table 13: Earthquake Community Affects

Community Affects from an Earthquake		
Affected	Facilities	Approximate Value
2,171 persons	553 Residences	$104,959,400
125 persons	6 Government Facilities	$9,098,690
25 persons	4 Emergency Facilities	$14,568,669
504 persons	6 Educational Facilities	$29,466,700
>560 persons	20 Community Facilities	$>99,987,330
41 miles	Asphalt and Gravel Roads	$3,813,330
Bridges	4 Bridges	$41,846,933
450 persons	10 Transportation Facilities	$160,907,231
26 persons	13 Utilities	$185,060,000

Future impacts on populations, residential structures, critical facilities, and infrastructure are anticipated to mirror historical levels of impact. Details on existing infrastructure are provided in Chapter 3.

Probability of Future Events

Unalaska experiences an average of three earthquakes exceeding magnitude 5.0 each year. Additionally, earthquakes of magnitude 6.0 or greater have historically occurred within a 24-month period. This represents a significant threat, as damage to aircraft and marine infrastructure could isolate the community from emergency response efforts and critically needed assistance.

While it is impossible to predict the exact timing of an earthquake, the USGS Earthquake Hazard Mapping model indicates that Unalaska has a 2% probability of experiencing ground acceleration between 0.80 and 1.20 g within the next 50 years. This level of ground shaking could result in severe damage, emphasizing the need for ongoing preparedness and mitigation efforts.

4.1.2 Tsunami

Location

The UAF/GI indicates there is a minimal threat from distant source tsunamis; however, they indicated an Aleutian Trench generated tsunami could generate a two-meter-high tsunami that could come into Unalaska Bay. (UAF/GI 2012).

The State of Alaska, the University of Alaska Fairbanks, Geophysical Institute (UAF/GI), and the National Oceanic and Atmospheric Administration's (NOAA) Pacific Marine Environmental Laboratory indicate that Unalaska has a minor tsunami impact threat. Many believe their relatively-protected location on the northern side of the island – away from Aleutian Trench created tsunami sources would protect them from severe impacts. However, the UAF/GI conducted tsunami models that demonstrates the harbor and airport areas may receive significant water current impacts with whirlpools as depicted in Figure 5-9, the UAF/GI's "specific scenario" model sequence - 65 minutes to 105 minutes series.

Table 14: Tsunami Wave Heights at Dutch Harbor

Aleutian Tsunamis – Waves at Dutch Harbor

Date	Location	Earthquake Magnitude	Wave Height in Meters	Source Latitude	Source Longitude
November 10, 1938	Alaska Peninsula	8.2	0.1	54.48	-158.37
April 1, 1946	Near Unimak Island, Eastern Aleutian Islands, AK	8.6	Unknown	25.8	-163.50
March 9, 1957	South of Andreanof Islands, Central Aleutian Islands, AK	8.3	Unknown	51.5	-175.70
March 27, 1964	Prince William Sound	9.2	0.35	61.05	
February 4, 1965	Rat Islands, Western Aleutian Islands, AK	8.7	0.1	51.29	-178.49
May 7, 1986	Central Aleutian Islands, AK	8.0	0.15	51.52	-166.54
February 21, 1991	Bering Sea	6.7	0.15	58.43	-175.54
June 10, 1996	Central Aleutian Islands, AK	7.9	0.6	51.56	-177.63

On January 23, 2018, a 7.9 magnitude earthquake occurred near Kodiak, and a tsunami warning was issued. A buoy in Unalaska predicted a 30-foot tsunami wave, but the wave was a few inches in reality.

Vulnerability

Potentially, threatened facilities located below the 30 ft elevation.

Table 15: Tsunami Community Affects

Community Affects from a Tsunami		
Affected	Facilities	Approximate Value
70 persons	5 Government Facilities	$194,935
10 persons	2 Emergency Facilities	$33,434
482 persons	6 Educational Facilities	$1,473,335
380 persons	14 Community Facilities	$3,521,579
Bridges	2 Bridges	$1,501,426
410 persons	9 Transportation Facilities	$7,186,866
12 persons	3 Utilities	$398,991
40 persons	1 Medical Facility	$85,470

Probability of Future Events

Unalaska has a minor tsunami impact history. While it is not possible to predict when a tsunami will occur, Dr. Elena Sulemani, University of Alaska Fairbanks' tsunami threat assessment supports NOAA's SIFT model. Therefore, a distant source tsunami is "Possible" to occur, but the recurrence interval is unknown. Too many factors determine when the next event will occur, as supported by known bathymetric conditions surrounding Unalaska Island.

Based on historic earthquake events, UAF/GI, the University of Washington, and the Pacific Marine Environmental Laboratory information, the magnitude and severity of earthquake impacts to Unalaska are considered "Limited" with injuries and/or illnesses that do not result in permanent disability; complete critical facility shutdown for more than one week, and more than 10% of property could be severely damaged.

Impacts to future populations, residential structures, critical facilities, and infrastructure are unpredictable due to several complex factors, such as tsunami generating source, distance from community and originating direction of source wave.

4.1.3 Wildfires

A wildfire is an uncontrolled fire spreading through wildland vegetative fuels and/or urban interface areas where fuels may include structures. They often begin unnoticed, spread quickly, and are often generating smoke that may fill the area for miles around. Wildfires can be human caused through acts such as arson or campfires or can be caused by natural events such as lightning. If not promptly controlled, wildfires may develop into an emergency. Even small fires can threaten lives, resources, and destroy improved properties.

The indirect effects of wildfires can also be catastrophic. In addition to stripping the land of vegetation and destroying forest resources and personal property, large, intense fires can harm the soil and waterways. Soil exposed to intense heat may temporarily lose its capability to absorb

moisture and support life. Exposed soils in denuded watersheds erode quickly and are easily transported to rivers and streams thereby enhancing flood potential, harming aquatic life, and degrading water quality. Lands stripped of vegetation are also subject to increased landslide hazards.

History

The City faced unprecedented back-to-back wildfires in April 2020- Spilt Top Mountain on April 17th and Mt. Ballyhoo on April 29th.

Figure 11: Split Top Mountain brush fire – April 17, 2020

Figure 12: Mt. Ballyhoo brush fire – April 29, 2020

Vulnerability

The precise location of structures affected by wildfires will vary based on their size and proximity. Unalaska, a sparsely populated island with limited forests, primarily consists of a tundra ecosystem characterized by mosses, grasses, and low shrubs and bushes, such as blueberries. Consequently, large, fast-moving wildfires are unlikely to occur due to the prevailing winds. However, large, slow-moving tundra fires are possible and pose significant challenges in extinguishing.

The direct vulnerability of most structures is limited. Typically, extensive lot clearing required for construction eliminates tundra vegetation, exposing structures to a combination of bedrock, gravel, or crushed rock. Only a few critical facilities are directly exposed to wildfire, as outlined in Appendix C.

The primary vulnerability of Unalaska lies in the potential for large, uncontrolled tundra fires. Such fires could generate smoke that reduces visibility, potentially disrupting the airport's operations for an extended period. The airport relies on air deliveries for essential supplies and perishable food, making it susceptible to disruptions caused by wildfire smoke.

Probability of Future Events

The probability of wildfire incidents for Unalaska are influenced by numerous factors including vegetation densities, climatic conditions such as temperature, humidity, and wind, ignition source (human or natural), topographic aspect and slope, and remoteness of area. Although Unalaska has had 2 wildfires in 2019, not to mention within days of each other, the probability is "Possible" for future events.

Table 16: Wildfire Community Affects

Community Affects from a Wildfire		
Affected	Facilities	Approximate Value
2,171 persons	553 Residences	$104,959,400
125 persons	6 Government Facilities	$9,098,690
25 persons	4 Emergency Facilities	$14,568,669
504 persons	6 Educational Facilities	$29,466,700
>560 persons	20 Community Facilities	$>99,987,330
450 persons	10 Transportation Facilities	$160,907,231
26 persons	13 Utilities	$185,060,000

4.1.4 Extreme Weather

Extreme weather is a broad category that includes snow, heavy rain, extreme cold, ice storms, high winds, flood, avalanche, and landslides. High winds, ice storms, and heavy snow are the most likely types of extreme weather in the Unalaska.

4.1.4.1 Snow

The National Weather Service defines heavy snow as snowfall accumulating to four inched or more in depth in twelve hours or less or snowfall accumulating to six inches or more in depth in twenty-four hours or less.4

Until the snow can be removed, airports and roadways experience delay, or are closed completely, stopping the flow of traffic, supplies and disrupting emergency and medical services. Heavy snow loads can damage light aircraft and sink small boats. It can also cause roofs to collapse and knock down trees and power lines.

Heavy snowfalls can cause secondary hazards. In the mountains, heavy snow can lead to avalanches. A quick thaw can cause flooding, especially along small streams and in urban areas. The cost of snow removal, repairing damages, and the loss of business can have severe economic impacts.

Location

Impacts to Unalaska are considered “Limited” with injuries and/or illnesses that do not result in permanent disability; complete critical facility shutdown for more than one week, and more than 10% of property could be severely damaged.

History

Average snow fall for the area is 92.3 inches per year.

Table 17: Heavy Snow Events

Heavy Snow Events			
Time	Date	Inches	Location
1333	March 7, 2018	10	Alaska Peninsula
0500	March 9, 2018	14	Alaska Peninsula

4.1.4.2 Heavy Rain

Heavy rain is defined as rainfall of three inches or greater in a twelve-hour period or six inches at two or more selected stations or six inches or more in a twelve-hour period or less at a single station.

Location

The occurrence of heavy rain depends on various weather conditions. Low pressure over the Bearing Sea, El Nino or La Nina conditions or the direction the storm is coming from. A warm weather rain event during the winter can cause flooding due to the snow melt, the inability of the water to infiltrate into the ground and decreased ability of the stream channels and storm drains to pass the runoff.

History

Average rainfall for the area is 5.05 inches per year.

There were no heavy rain events since 2018.

Vulnerability/Probability of Future Events

Impacts to Unalaska are considered “Limited” with injuries and/or illnesses that do not result in permanent disability; complete critical facility shutdown for more than one week, and more than 10% of property could be severely damaged.

4.1.4.3 Extreme Cold

Extreme Cold varies according to the normal climate of a region. In areas unaccustomed to winter weather, near freezing temperatures are considered “extreme”. What is considered an excessively cold temperature varies according to the normal climate of a region. In areas unaccustomed to winter weather, near freezing temperatures are considered "extreme cold." In Alaska, extreme cold usually involves temperatures below –40º Fahrenheit (F). Excessive cold may accompany winter storms, be left in their wake, or can occur without storm activity.

Extreme cold can also bring transportation to a halt for days or weeks at a time. Aircraft may be grounded due to extreme cold and ice fog conditions. Long cold spells can cause rivers to freeze which increases the likelihood of ice jams and ice jam related flooding. If extreme cold conditions

are combined with low or no snow cover, the ground's frost depth can increase, and disturb buried utility pipes.

The greatest danger from extreme cold is to people. Prolonged exposure to the cold can cause frostbite or hypothermia and become life threatening, especially for infants and the elderly. Carbon monoxide (CO) poisonings also increase as people use supplemental heating devices.

History

Low cold temperatures average 35.9°F.

There were no extreme cold events since 2018.

Vulnerability/Probability of Future Events

Impacts to Unalaska are considered "Limited" with injuries and/or illnesses that do not result in permanent disability; complete critical facility shutdown for more than one week, and more than 10% of property could be severely damaged.

4.1.4.4 Ice Storms

Ice storm is the term used to describe occasions when damaging accumulations of ice are expected during freezing rain situations. Ice storms result from the accumulation of freezing rain (rain that becomes super cooled and freezes upon impact with cold surfaces). Freezing rain most commonly occurs in a narrow band within a winter storm that is also producing heavy amounts of snow and sleet in other locations. Ice storms can be devastating and are often the cause of automobile accidents, power outages and personal injuries.

History

There were no ice storm events since 2018.

Vulnerability/Probability of Future Events

Based on past severe weather events, the extent of severe weather is considered "Limited" where injuries do not result in permanent disability, complete shutdown of critical facilities occurs for more than one week, and more than 10% of property is severely damaged.

4.1.4.5 High Winds

High Winds occur in Alaska when there are winter low-pressure systems in the North Pacific Ocean and the Gulf of Alaska. Alaska's high winds can equal hurricane force but fall under a different classification because they are not cyclonic nor possess other hurricane characteristics. In Alaska, high winds (winds more than 60 MPH) occur rather frequently over the coastal areas along the Bering Sea and the Gulf of Alaska. High winds are a severe threat to Unalaska.

Location

Strong winds occasionally occur over the interior due to strong pressure differences, especially where influenced by mountainous terrain, but the windiest places in Alaska are generally along the coastlines. Should time permit, the National Weather Service may issue a Wind Advisory which is defined as sustained winds of 31 to 39 mph for better than one hour and/or wind gusts 46 to 57 mph for any duration.6

History

The following table depicts sustained gusts of 46 mph or greater observed at the Unalaska Airport.

Table 18: High Wind Events

High Wind Events			
Time	Date	Windspeed in mph	Location
1345	May 10, 2018	125	East
0220	October 15, 2019	55	West
1456	December 22, 2019	53	Southwest
0121	December 25, 2019	52	North
2256	January 16, 2020	56	Southeast
0025	March 1, 2020	62	Southwest
0756	August 30, 2020	73	Southwest
0856	October 22, 2020	61	East
1451	November 10, 2020	50	Southwest
0556	November 11, 2020	55	West
2056	November 22, 2020	62	Northwest
2210	November 30, 2020	64	Northeast
0834	December 10, 2020	63	Southeast
0756	December 26, 2020	52	Southeast
1113	January 9, 2021	67	East
0856	February 6, 2021	63	East
1256	April 7, 2021	51	Southwest
0207	June 30, 2021	59	Southeast

Vulnerability

Based on past severe weather events, the extent of severe weather is considered “Limited” where injuries do not result in permanent disability, complete shutdown of critical facilities occurs for more than one week, and more than 10% of property is severely damaged.

Probability of Future Events

Based on previous occurrences and the criteria identified, it is highly likely severe storm events of snow, heavy rain, extreme cold, ice storms and high winds will occur in the next year (event has up to 1 in 1 year’s chance of occurring) as the history of events is greater than 33% likely per year

4.1.5.6 Flood

Flooding occurs when weather, geology, and hydrology combine to create conditions where river and stream waters flow outside of their usual course and "spill" beyond their banks. Primary factors in the amount of precipitation and area will receive are elevation and slope aspect, or direction. There are several types of flooding.

Table 19: Types of Flooding

Types of Flooding	
River Flood	occurs when water levels rise over the top of riverbanks due to excessive rain, persistent thunderstorms over the same area for extended periods of time, combined rainfall and snowmelt, or an ice jam.
Coastal Flood	caused by higher-than-average high tide and worsened by heavy rainfall and onshore winds, i.e., wind blowing landward from the ocean.
Storm Surge	abnormal rise in water level in coastal areas, over and above the regular astronomical tide, caused by forces generated from a severe storm's wind, waves, and low atmospheric pressure. Storm surge is extremely dangerous because it is capable of flooding large coastal areas. Extreme flooding can occur in coastal areas particularly when storm surge coincides with normal high tide, resulting in storm tides reaching up to 20 feet or more in some cases.
Inland Flooding	moderate precipitation accumulates over several days, intense precipitation falls over a short period, or a river overflow because of an ice or debris jam or dam or levee failure.
Flash Flood	is caused by heavy or excessive rainfall in a short period of time, generally less than six hours. Flash floods are usually characterized by raging torrents after heavy rains that rip through riverbeds, urban streets, or mountain canyons. They can occur within minutes or a few hours of excessive rainfall. They can also occur even if no rain has fallen, for instance after a levee or dam has failed, or after a sudden release of water by a debris or ice jam.

Typical flood impacts associated with flooding is water damage to structures and contents, roadbed erosion and damage, boat stranding, areas of standing water in roadways, and damage or displacement of fuel tanks, power lines, or other infrastructure. Buildings on slab foundations, not located on raised foundations, and/or not constructed with materials designed to withstand flooding events (e.g., cross vents to allow water to pass through an open area under the main floor of a building) are more vulnerable to the impacts of flooding.

Location

The Planning Team indicated that Unalaska has minor flooding impacts; most of which occur from rainfall and snowmelt run-off. Water collects in low terrain depressions and may rise to just below

a structures first step with no water intrusion on the first floor. The typical minor flood locations are:

- Iliuliuk River;
- Iliuliuk Lake;
- Lake Ilulaq;
- Summers Bay;
- Captain's Bay;
- Broad Bay; and
- Nateekin Bay.

History

Table 20: Flood Events

Flood Events			
Location	Year	Event Type	Extent
Unalaska	1985	Flood	11' of rain in 24-hours
Unalaska	1991	Heavy Rainfall Flood	Iliuliuk River flooded Public Works Area
Unalaska	2007	Winter Storm Flood	Impacted neighborhoods

Vulnerability

Floods also result in economic losses through business and government facility closure, communications, utility (such as water and sewer), and transportation services disruptions. Floods result in excessive expenditures for emergency response, and generally disrupt the normal function of a community.

Deposition is the accumulation of soil, silt, and other particles on a river bottom or delta. Deposition leads to the destruction of fish habitat, presents a challenge for navigational purposes, and prevents access to historical boat and barge landing areas. Deposition also reduces channel capacity, resulting in increased flooding or bank erosion. Stream bank erosion involves the removal of material from the stream bank. When bank erosion is excessive, it becomes a concern because it results in loss of streamside vegetation, loss of fish habitat, and loss of land and property.

Nationwide, floods result in more deaths than any other natural hazard. Physical damage from floods include:

- Structure flood inundation, causing water damage to structural elements and contents.
- Erosion or scouring of stream banks, roadway embankments, foundations, footings for bridge piers, and other features
- Damage to structures, roads, bridges, culverts, and other features from high- velocity flow and debris carried by floodwaters. Such debris may also accumulate on bridge piers and in culverts, increasing loads on these features or causing overtopping or backwater damages.

- Sewage and hazardous or toxic materials released as wastewater treatment plants or sewage lagoons are inundated, storage tanks are damaged, and pipelines are severed.

Table 21: Flooding Community Affects

Community Affects from Flooding		
Affected	Facilities	Approximate Value
112 persons	56 Residences	$10,495,940
55 persons	3 Government Facilities	$454,935

Unalaska does not participate in the NFIP; neither do they have a repetitive flood property inventory that meets NFIP criteria as the loss thresholds are substantially below FEMA values.8

Based on past flood events, the extent of severe weather is considered "Limited" where injuries do not result in permanent disability, complete shutdown of critical facilities occurs for more than one week, and more than 10% of property is severely damaged.

Probability of Future Events

Future events, based on previous occurrences, there is a 1 in 1 year's chance of occurring (1/1=100%) in the valley. History of events is greater than 33%. There is no data identifying a 500-year (0.2% chance of occurring in a given year) flood threat in Unalaska.

4.1.5.7 Avalanche

An avalanche is a rapid flow of snow down a hill or mountainside. Although avalanches can occur on any steep slope given the right conditions, certain times of the year and types of locations are naturally more dangerous. While avalanches are sudden there are typically several warning signs you can look for or feel before one occurs. In ninety percent of avalanches, the snow slides are triggered by the victim or someone in the victim's party. Avalanches kill more than one-hundred fifty people worldwide each year. The National Weather Service provides current weather conditions and forecast information to regional avalanche forecast centers that in-turn issue avalanche forecast. Loose Snow Avalanches and Slab Avalanches are the two main types.

Table 22: Types of Avalanches

Types of Avalanches	
Loose-snow	Also called sluffs, are made up of surface and/or near-surface snow that is not well-bonded. They begin at a single point, gathering more loosely bonded snow crystals from the surface of the snowpack as they descend, gradually fanning out. After the fact, you can recognize them by their inverted "V" pattern, starting from a point and spreading out downhill.
Slab	Occurs when a layer somewhere beneath the surface layer fails, and the cohesive layer(s) above it fracture into a block (or blocks) and slide downhill

History

In March of 2020, a snowmobiler was killed due to a loose snow avalanche.

Vulnerability

Based on past avalanche events, the extent of severe weather is considered “Limited” where injuries do not result in permanent disability, complete shutdown of critical facilities occurs for more than one week, and more than 10% of property is severely damaged.

Probability of Future Events

Even though there are few written records defining ground failure impacts for Unalaska, the Planning Committee has anecdotal evidence of their recurring landslide, rockfall, avalanche, and ground failure damages throughout the community – to structures, roads, harbor areas, and the airport. The Planning Team believes the future damage probability resulting from ground failure is likely in the next three years (event has up to 1 in 3 year’s chance of occurring) as the history of events is greater than 20% but less than 33% likely per year.

4.1.5.8 Landslide

A landslide is the movement of a mass of rock, debris, or earth down a slope. Landslides are a form of “mass wasting,” which refers to any downward movement of soil and rock under the direct influence of gravity. The term “landslide” encompasses five modes of slope movement: falls, topples, slides, spreads, and flows, which can be further classified by the type of geologic material involved (bedrock, debris, or earth). Common types of landslides include debris flows (often referred to as mudflows or mudslides) and rock falls.

Most landslides have multiple contributing factors. Slope movement occurs when the forces acting downslope (primarily due to gravity) exceed the strength of the earth materials that compose the slope. Contributing factors include conditions that increase the effects of downslope forces and those that reduce the slope’s material strength. Landslides can be triggered by rainfall, snowmelt,

changes in water levels, stream erosion, changes in groundwater, earthquakes, volcanic activity, and human activities, often in combination. Earthquakes and other factors can also trigger underwater landslides, known as submarine landslides, which can sometimes generate tsunamis that threaten coastal areas.

Location

Landslides can occur in various locations on Unalaska Island. Contributing factors include volcanic activity from Makushin Volcano, glacial impacts, and human development. Steep, nearly vertical terrain is particularly susceptible to landslides and snow avalanches, especially in areas adjacent to the road system that encircles Unalaska's bays and coves.

History

While written records of ground failure impacts are limited, the 2016 DHS&EM Disaster Cost Index documents one historical ground failure event affecting Unalaska: On December 13, 1985, a severe windstorm caused mudslides, road and port damage, and damage to public buildings. Public disaster assistance supplemented insurance settlements to aid in recovery.

Additionally, the National Weather Service (NWS) recorded a ground failure event that caused property damage in the Dutch Harbor area (Alaska Zone 185) on February 13, 2006. During this event, an intense storm moved rapidly from the North Pacific into the Bering Sea, creating an extreme pressure gradient that produced high winds across the central Aleutians. Wind speeds peaked at 123 knots in Akutan and 120 knots in Dutch Harbor. Along with the high winds, heavy rain occurred following a prolonged period of cold weather and above-average snowfall. Several landslides occurred, with one completely destroying a building and its contents, and another pushing a building off its foundation.

Vulnerability

The exact impact of a landslide on Unalaska will depend on the size and location of the event. The entire population of Unalaska—residents, transient populations, and future inhabitants—as well as residential structures and critical facilities, is exposed to the potential effects of a severe landslide. For this vulnerability assessment, it is estimated that 50% of the population, residences, and facilities could be affected by a significant landslide. The following table summarizes the potential impacts on the community.

Table 23: Landslide Community Affects

Community Affects from a Landslide		
Affected	Facilities	Approximate Value
2,171 persons	553 Residences	$104,959,400
125 persons	6 Government Facilities	$9,098,690
25 persons	4 Emergency Facilities	$14,568,669
504 persons	6 Educational Facilities	$29,466,700
>560 persons	20 Community Facilities	$>99,987,330
41 miles	Asphalt and Gravel Roads	$3,813,330
Bridges	4 Bridges	$41,846,933
450 persons	10 Transportation Facilities	$160,907,231
26 persons	13 Utilities	$185,060,000

Based on past landslide events, the extent of damage from severe weather is considered "Limited." This means that injuries are unlikely to result in permanent disability, critical facilities may be completely shut down for more than a week, and more than 10% of property could be severely damaged.

Probability of Future Events

The Planning Committee has anecdotal evidence of recurring landslides, rockfalls, avalanches, and ground failures affecting structures, roads, harbor areas, and the airport throughout the community. The Planning Team believes that future damage from ground failures is likely within the next three years, with an estimated probability of 1 in 3 years (33%) based on historical events. The likelihood of such events occurring annually is greater than 20% but less than 33%.

Table 24: Unalaska Climate Summary by Month

Unalaska Climate Summary					
Month	Average Min Temperature	Average Max Temperature	Average Precipitation	Average Snowfall	Average Snow Depth
January	28.0	36.7	7.13	23.8	4
February	27.8	37.4	6.20	19.6	4
March	28.2	38.5	5.25	16.8	3
April	31.4	40.8	3.42	6.8	1
May	36.7	46.0	3.98	0.2	0
June	41.8	51.5	2.50	0.0	0
July	45.9	56.8	2.21	0.0	0
August	47.6	58.8	2.76	0.0	0
September	43.5	53.9	5.54	0.0	0
October	37.3	47.3	7.09	0.5	0
November	32.1	42.5	6.66	7.1	0
December	30.3	39.0	7.90	17.4	3

4.1.5 Volcanic Activity

A volcano is defined as a vent in the surface of the Earth through which magma associated gases and ash erupt; also, the form or structure (usually conical) that is produced by the ejected material.13

Alaska contains over 130 volcanoes and volcanic fields which have been active within the last two million years. Of these volcanoes, about 90 have been active within the last 10,000 years (and might be expected to erupt again), and more than 50 have been active within historical time (since about 1760, for Alaska).

Although the historical record in Alaska goes back to around 1760, the task of counting known eruptions and calculating an eruption frequency is complicated inaccurate older accounts. Many times, a volcano is reported as "smoking" without further clarification of what that smoke may have been - a real eruption, normal fumarolic activity, or even atypically tall clouds rising above a summit because of unstable weather conditions. The term "eruption" as used here includes vigorous explosions which may not contain fresh (juvenile) magma, as well as magmatic explosions and the effusion of lava as flows and domes.

Since 1760, 30 Alaskan volcanoes have had more than 240 confirmed eruptions averaging one volcanic eruption per year.14

History

Table 25: Volcanic Activity History

Volcano Activity History

Volcano	Date
Mt. Redoubt	December 20, 1989
Mt. Redoubt	January 11, 1990
Mt. Spurr	September 21, 1992
Mt. Redoubt	March 31, 2009

The nearest volcano to Unalaska is Makushin. Located sixteen miles from Unalaska, its most recent activity was January 30, 1995. From McGimsey and Neal (1996): "On 12:46 pm AST on Monday, January 30, 1995, USCG C-130 pilots reported a small steam and ash cloud from Makushin Volcano. The cloud rose to 8000 ft., and was carried northeast from the volcano, prompting NWS to issue a SIGMET (Significant Meteorological Information) that ran until 5 pm AST. Over the next hour, several pilots reported seeing a dispersing light brown ash plume at Makushin. All activity subsided shortly thereafter as confirmed by a satellite image recorded at 1:45 pm AST, which showed no sign of the eruption."15

Vulnerability

There are a variety of hazards associated with a volcanic eruption, but the primary hazard is volcanic ash fall. Volcanic ash consists of small, jagged pieces (less than 1/12 inch in diameter) of rocks, minerals, and volcanic glass sent into the air by a volcano. Volcanic ash is created during an explosive volcanic eruption. Alaska's volcanic activity is dominated by explosive volcanism.

Volcanic ash can accumulate on roof tops, or on other structures causing them to collapse. Wet ash can conduct electricity and may cause short circuits or the failure of electrical components. Ash fall may interfere with telephone and radio communications. Ash can also interfere with the operation of mechanical equipment, including aircraft. In Alaska, this is a major problem, as many major flight routes are near historically active volcanoes.

Table 26: Volcano Community Affects

Community Affects from Volcano		
Affected	Facilities	Approximate Value
2,171 persons	553 Residences	$104,959,400
125 persons	6 Government Facilities	$9,098,690
25 persons	4 Emergency Facilities	$14,568,669
504 persons	6 Educational Facilities	$29,466,700
>560 persons	20 Community Facilities	$>99,987,330
41 miles	Asphalt and Gravel Roads	$3,813,330
Bridges	4 Bridges	$41,846,933
450 persons	10 Transportation Facilities	$160,907,231
26 persons	13 Utilities	$185,060,000

Probability of Future Events

It is "Likely" for a volcanic eruption to occur within the next three years. The event has up to 1 in 3 year's chance of occurring (1/3=33%). History of events is greater than 20% but less than or equal to 33% likely per year. Vulnerability depends on the type of activity and current weather, especially wind patterns.

Geologists can make general forecasts of long-term activity associated with individual volcanoes by carefully analyzing past activity, but these are on the order of trends and likelihood, rather than specific events or timelines. Short-range forecasts are often possible with greater accuracy. Several signs of increasing activity can indicate that an eruption will follow within weeks or months. Magma moving upward into a volcano often causes a significant increase in small, localized earthquakes, and measurable carbon dioxide and compounds of sulfur and chlorine emissions increases. Shifts in magma depth and location can cause ground level elevation changes that can be detected through ground instrumentation or remote sensing.

4.1.6 Erosion

Erosion rates can vary significantly because erosion can occur quite quickly as the result of a flash flood, coastal storm, or other event. It can also occur slowly, as the result of long-term environmental changes. Erosion is a natural process, but its effects can be exacerbated by human activity.

Location

Erosion rarely causes death or injury. However, erosion causes the destruction of property, development, and infrastructure. In Alaska, coastal erosion is the most destructive. Coastal and riverine erosion are problems for communities where disappearing land threatens development and infrastructure.

History

Although erosion evolves over time, there are no historic records to depict this. Rather, areas that have sloughed are listed below.

Areas of the Upper Iliuliuk River has eroded over time. This is an important anadromous fish system in the Unalaska Bay area, and due to its location within the village of Unalaska is of high value for recreational and subsistence users.

The single-most commonly identified issue for the community of Unalaska is the lack of storm water run-off control and associated problems with erosion and sedimentation. In areas of unstable soils or steep slopes, heavy accumulations of snow or intense rainfall contribute to erosion, mudslides, landslides, debris flow, and avalanches. There are currently storm drains along Unalaska Lake, Summer Bay Road and Ballyhoo Road. Although progress has been made to pave roads and install catch basins to manage storm water run-off and sedimentation, the majority of the road system remains un-paved and surface water run-off flows directly into the rivers, lakes, and nearshore marine waters.

Most of the roads in the Unalaska area (Airport Road, Captains Bay Road, Front Street, Summer Bay Road, etc.) follow the coastline often impinging on the back-beach zone. The compacted roadbed material does not provide a good substrate for natural colonization of vegetation, and therefore remains mostly unvegetated and is an area of active erosion. Also, the absence of vegetation allows the storm water sediment to be transported and discharged into receiving waters.

Broad Bay is located on the west side of Unalaska Bay at the mouth of the Makushin River. The area is zoned “subsistence tidelands” with adjacent “marine dependent industrial.” Furthermore, the AWCRSA Coastal Management Plan has designated a portion of this area for recreational and subsistence use as follows: Broad Bay - The area within 1000 feet of either side of the ordinary high-water mark of the Makushin River. The designated area extends 300 feet offshore and 250 feet inland as measured from mean high water.

Nateekin Bay is located on the west side of Unalaska Bay at the mouth of the Nateekin River. The area is zoned “developable tidelands” with adjacent “marine dependent industrial”. Furthermore,

the AWCRSA Coastal Management Plan has designated a portion of this area for recreational subsistence use as follows: Nateekin Bay - The area within 1000 feet of either side of the ordinary high-water mark of the Nateekin River. The designated area extends 300 feet offshore and 250 feet inland as measured from mean high water.

Coastal erosion is a major erosion threat to Unalaska as it threatens the embankment, structures, and utilities of its residents. Sometimes referred to as tidal, bluff, or beach erosion, may other times encompass different categories altogether. For this profile, tidal, bluff and beach erosion are nested within the term erosion.

Table 27: Coastal Erosion Characteristics

Coastal Erosion Characteristics
The attrition of land resulting in loss of beach, shoreline, or dune material from natural activity or human influences.
Occurs over the area roughly from the top of the bluff out into the near-shore region to about the 30-foot water depth.
Recession is the most visible aspect of coastal erosion because of the dramatic change it causes to the landscape.
Forces of erosion are embodied in waves, currents, and winds on the coast.
Surface and ground water flow, and freeze-thaw cycles may also play a role.
Can occur from rapid, short-term daily, seasonal, or annual natural events such as waves, storm surge, wind, coastal storms, and flooding, or from human activities including boat wakes and dredging.
The most dramatic erosion often occurs during storms, particularly because the highest energy waves are generated under storm conditions.

Riverine erosion results from the force of flowing water and ice formations in and adjacent to river channels. This erosion affects the bed and banks of the channel and can alter or preclude any channel navigation or riverbank development. In less-stable braided channel reaches, erosion and material deposition are constant issues. In more-stable meandering channels, erosion episodes may only occasionally occur.

History

Table 28: Erosion Community Affects

Community Affects from Erosion		
Affected	Facilities	Approximate Value
112 persons	56 Residences	$10,495,940
55 persons	3 Government Facilities	$454,935

Vulnerability

Based on past erosion events, the magnitude and severity of erosion impacts in Unalaska are considered "limited" with potential for critical facilities to be shut down for more than a week, and more than 10% of property or critical infrastructure being severely damaged.

Probability of Future Events

Based on historical impacts, it is likely that erosion will occur in the next three years (event has up to 1 in 3 year's chance of occurring) as the history of events is greater than 20% but less than or equal to 33% likely per year.

4.2 Technology Hazards

Technological hazards are hazards originating from technological or industrial accidents, dangerous procedures, infrastructure failures, or human error or omission.

4.2.1 Dam Failure

Alaska Statute 46.17.900(3) defines a dam as, "artificial barrier and its appurtenant works, which may impound or divert water." Dam safety is regulated by Alaska Statute 46.17 and 11 Alaska Administrative Code 93 Article 3, Dam Safety, which became effective in May 1987. Dam failures involve the unintended release of impounded water. A dam failure does not always involve a total collapse of the dam. Dams may fail due to structural deficiencies, poor initial design or construction, lack of maintenance or repair, weakening of the dam through aging, debris blocking the spillway, other disasters such as earthquakes, improper operation, or vandalism.

There is one reservoir dam which serves the City of Unalaska, Icy Creek Reservoir Dam (AK00265). Classified as a Hazard Class II dam, it was constructed in 1976 with a 12-foot and satisfies regulations covered under Title 11, Chapter 93, Article 3 of Alaska Administrative Code (11 AAC 93), which addresses the safety of all non-federally regulated dams in Alaska. The dam is a maximum 25 feet high on the downstream side with a crest elevation of 521.0 feet. The sheet pile dam, which is about 281 feet long, is supported by a combination of steel I-beam whalers and braces with concrete footings. Concrete retaining walls provide additional support at each abutment. Outside of the abutment, the sheet pile is covered by shot rock riprap. The dam is founded and keyed into bedrock. The sheet piles and concrete footings are also anchored into bedrock.

The principal spillway, which is located on the left side of the dam, has two weir elevations: the right side is 26 feet wide at an elevation of 517.0 feet and the left side is 32 feet wide at an elevation of 517.3 feet. A secondary spillway, which is 30 feet wide at an elevation of 520.0 feet, is located on the right side of the dam.

4.2.2 Energy Management

An energy emergency refers to the inability to produce and transmit enough energy to the public, businesses, and industry. It can involve one or more energy resources such as heating oil, natural gas, gasoline, coal, or electricity.

An energy emergency can develop quickly. For example, a storm could cause a power line to break. It could also develop over days or weeks. For example, during the 1973 OPEC (Oil Producing and Exporting Countries) embargo, gasoline, fuel oil, and other petroleum derivatives were in short supply. An energy emergency could even develop over years or decades. For example, increased development puts pressure on the amount of energy needed; if a utility company expands to meet that need but the revenue is not sufficient, the utility company could potentially close.

4.2.3 Urban Fire

An urban fire is one involving a structure or property within an urban or developed area. For the purposes of this plan, urban fires are defined as major fires affecting (or with the potential to affect) multiple properties. These types of fires are rare in modern, developed cities but could happen if associated with another disaster such as an earthquake, secondary to an aircraft crash, during civil unrest, where multiple ignitions could occur simultaneously, overwhelming the fire department's ability to respond.

4.2.4 Hazardous Materials Release

In general, a hazardous material is any substance or a material that has the potential to harm humans, animals, or the environment. A hazardous materials incident is the intentional or accidental release of toxic, combustible, illegal, or dangerous nuclear, biological, or chemical agents into the environment. The types of material that can cause a hazardous materials incident are wide ranging. Examples include materials such as chlorine, sulfuric acid, gasoline, medical/biological waste, etc. Many accidents happen at fixed sites, but incidents may also occur during transportation. Incidents are more likely to be at fixed facility at a processing facility.

Hazardous materials incidents are more likely to occur where hazardous materials are located. Facilities that meet certain requirements are required to report information regarding the type and volume of hazardous materials to the State of Alaska and to the Unalaska Fire and EMS.

4.2.5 Transportation Incidents

The transportation system in the City of Unalaska consists of air, road, and marine systems. All these modes have the potential for accidents that could lead to a disaster. For this plan, a transportation accident is any aircraft, vehicular, or marine accident, i.e., one that is not handled on a day-to-day basis by emergency responders.

Unalaska has one airport, The Unalaska/Dutch Harbor Airport, also commonly known as "Tom Madsen Airport,". Named in honor of Charles Thomas Madsen Sr. in 2002, Madsen was a Bush pilot who was known as the "Aleutian Aviator", and spent many years delivering cargo and

passengers to Kodiak, Cordova, the North Slope, Juneau and the Aleutian and Pribilof Islands. Scheduled taxi planes from Cold Bay and Anchorage traverse passengers. Peninsula Airways, a code share partner of Alaska Airlines, had daily flights from Dutch Harbor/Unalaska to Anchorage, Alaska year-round until the COVID-19 Pandemic; at which time they were forced to stop operations. Grant Aviation offers service between Unalaska/Dutch Harbor and Atka, Akun and Nikolski. Services available at the Tom Madsen Airport include a restaurant, travel agencies, vehicle rentals and air cargo.

The City of Unalaska is vulnerable to air transportation accidents such as a crash involving a passenger aircraft, a crash involving cargo aircraft and a crash causing casualties on the ground. Mid-air collisions between two aircrafts are also possible.

The City of Unalaska has a strong fishing presence due to its location and has the potential for marine accidents. The International Port of Dutch Harbor is considered an Artic Port; however, its strong suit is serving as the most southern port that is non-ice and deep-water. Additionally, the Port of Dutch Harbor may act as a port of refuge as the North Pacific Great Circle Route connects the west coast of the United States with major ports in Asia transits directly through the Aleutians. Each year, several thousand large, deep-draft vessels make this voyage, sailing through Unimak Pass on the eastern end of the Aleutians, and using one of several different passes to the west.

4.2.6 Communications

A communications failure is the interruption or loss of communications systems including transmission lines, communications satellites, and associated hardware and software necessary for the communications system to function. A communications failure may be the result of an equipment failure, human acts- deliberate or accidental- or the result of another hazard event.

When a communications failure occurs, it can have a wide range of affects. A failure that results in a small delay in response times by emergency service providers might have a minimal impact on the community in general even though it may be problematic to individuals who require those services.

Based on previous occurrences and the criteria identified in Table 5-2, it is possible a technological and manmade hazard will occur in the next five years (event has up to 1 in 5 year's chance of occurring) as the history of events is greater than 10% likely per year but less than or equal to 20% likely per year.

4.3 Vulnerability Exposure Analysis

The City of Unalaska provided extensive area-wide GIS data, which formed the basis for the City's critical facilities and critical infrastructure hazard exposure analysis. The following table presents potential loss estimation data. Section 6.7.1 Exposure Analysis – Hazard Narrative Summaries provides an explanatory description of the tabulated exposure analysis.

As part of the review process, an evaluation of changes in development within hazard-prone areas since the previous plan was approved was conducted. This review included an assessment of new developments, land use changes, and building permits. The analysis determined that no significant

changes have occurred, which would either significantly increase or decrease the community's vulnerability to identified hazards.

Probability of Future Events

Inclement weather, topography, and human influence are the usual causes for transportation and utility system failure events. Increased usage (portrayed by heavy traffic periods or increased utility needs such as winter heating) can exacerbate or accelerate these systems' failure rates. Consequently, Unalaska may periodically experience episodic utility failure.

Based on previous occurrences and the criteria identified, it is possible a technological and manmade hazard will occur in the next five years (event has up to 1 in 5 year's chance of occurring) as the history of events is greater than 10% likely per year but less than or equal to 20% likely per year.

Table 29: Vulnerability Exposure Analysis

Vulnerability Exposure Analysis

Hazard Type	Earthquake	Erosion	Flood	Ground Failure	Ground Failure	Tsunami	Tsunami	Tsunami	Volcano	Severe Weather
Methodology	>40-60% (g)	Within 300' of erosion	--	>14-32 degrees	>32-56 degrees	100' Elevation	50' Elevation	30' Elevation	--	--
Hazard Severity	Severe	--	--	Moderate	High	Low	Medium	High	--	--
Government Buildings/Occupants	6/125	3/55	3/55	--	2/45	6/120	6/120	5/70	6/125	6/125
Government Value ($)	9,098,690	4,954,935	4,954,935	--	4,954,935	9,098,690	9,098,690	3,898,690	9,398	9,398,090
Public Safety Buildings/Occupants	4/25	--	--	--	--	3/25	2/10	2/10	4/25	4/25
Public Safety Value ($)	14,568,669	--	--	--	--	4,822,599	668,669	668,669	14,568,669	14,568,669
Education Buildings/Occupants	6/504	--	--	--	--	6/482	6/482	6/482	6/482	6/482
Education Value ($)	29,466,700	--	--	--	--	29,466,700	29,466,700	29,466,700	29,466,700	29,466,700
Medical Buildings/Occupants	3/880	--	--	--	--	3/80	1/40	1/40	3/80	3/80
Medical Value ($)	701,600	--	--	--	--	7,016,000	1,709,400	1,709,400	7,016,000	7,016,000
Community Buildings/Occupants	20/>560	--	--	--	6/Unknown	14/380	14/380	14/380	19/>560	19/>560
Community Value ($)	>99,987,330	--	--	--	>1,547,100	70,431,575	70,431,575	70,431,575	>99,987,330	>99,987,330
Transportation Buildings/Occupants	10/450	--	--	--	--	9/410	9/411	10/450	10/450	10/450
Transporation Value ($)	160,907,321	--	--	--	--	143,737,321	143,737,321	160,907,321	160,907,321	160,907,321
Utilities Buildings/Occupants	13/26	--	--	--	--	3/12	3/12	--	11/26	11/26
Utilities Value ($)	185,060,000	--	--	--	--	7,979,807	7,979,807	--	100,085,000	100,085,000
Miles of Roads	41	--	--	--	0.5	Unknown	Unknown	Unknown	41	41
Roads Value ($)	3,813,330	--	--	--	Unknown	Unknown	Unknown	Unknown	3,813,330	3,813,330
Number of Bridges	4	--	--	--	--	2	2	4	4	4
Bridges Value ($)	41,846,933	--	--	--	--	30,024,907	30,024,907	41,846,933	41,846,933	41,846,933

Chapter 5 – Mitigation Strategy

The purpose of this chapter is to document the Unalaska's mitigation strategy, which is based on the findings presented in the preceding chapters. This chapter is divided into the following sections:

- 5.1.1 Hazard Mitigation Goals and Objectives
- 5.1.2 Hazard Mitigation Strategies
- 5.1.3 Action Plan

The goals, objectives, and action items in this chapter are intended to guide everyday activities and provide a long-term hazard mitigation approach for the City and Tribe to follow. The intent is that these goals, objectives, and action items will be incorporated into future plans, policies, and projects. The goals are broad statements to achieve in terms of hazard mitigation. Objectives identify how to achieve those goals. The Action Plan items are specific actions that will be taken or projects that will be built to implement this mitigation plan.

A review of the goals, objectives and action items was conducted as part of this plan the planning group has twice to discuss the goals, objectives and action items and has provided written and verbal input.

Table 30: Hazard Mitigation Goals and Objectives

Hazard Mitigation Goals and Objectives	
Goal 1 - Implement and maintain the All Hazards Mitigation Plan.	
Objective #	Description
Objective 1.1	Ensure City and Tribe involvement by appointed personnel in this plan.
Objective 1.2	Require periodic meetings with City personnel, Tribe and the public.
Goal 2 - Inform the community on the local hazards and ways to be prepapred if a hazardoud event occurs.	
Objective #	Description
Objective 2.1	Educate individuals and businesses about hazards, disaster preparedness, and mitigation.
Objective 2.2	Increase coordination between hazard mitigation goals and existing and future, including the incorporation of effective hazard mitigation strategies into the Capital Improvement Program.
Objective 2.3	Educate public officials, developers, realtors, contractors, building owners, and the public about hazard risks and building requirements.
Objective 2.4	Partner with Municipal Departments and other agencies serving vulnerable populations to minimize harm in the event of an emergency.
Objective 2.5	Ensure hazard information/maps are easy to access and up to date in the municipal GIS database.
Objective 2.6	Partner with private sector to promote employee education about disaster preparedness while on the job and at home.
Goal 3 - Increase the survivability and resilience of municipal structures and functions for local hazards.	
Objective #	Description
Objective 3.1	Conduct surveys of essential municipal building and infrastructure to determine if seismic and life safety retrofits are required.
Objective 3.2	As surveys are completed prioritize the municipal facilities to receive upgrades.
Objective 3.3	Implement the facility upgrades as funding becomes available.
Objective 3.4	Incorporate non-structural mitigation into existing buildings.
Objective 3.5	Create redundancies for critical networks such as water, sewer, digital data, power, and communications.
Goal 4 - Improve the resiliency of essential private sector functions.	
Objective #	Description
Objective 4.1	Create a planning document to determine which private sector facilities should be prioritized for assistance in disaster recovery.
Objective 4.2	Develop a recovery plan for essential private sector functions such as health care or food distribution facilities.
Objective 4.3	Minimize economic loss.

Goal 5 - Create and maintain a community where people and property are safe.	
Objective #	Description
Objective 5.1	Develop mechanisms in advance of a major emergency to cope with subsequent rebuilding and recovery phases.
Objective 5.2	Plan for and respond to the secondary effects of disasters, such as hazardous waste and hazardous materials spills, when planning and developing mitigation projects.
Objective 5.3	Promote disaster contingency planning and facility safety among institutions that provide essential services.
Objective 5.4	Improve disaster warning systems.

5.1 Hazard Mitigation Strategies

The City and Tribe will implement the mitigation measures identified in this plan by using the comprehensive plan, Capital Improvement Plan, and other hazard mitigation tools they have at their disposal.

While there are many ways to mitigate hazards, not all are appropriate for all situations. Each situation must be evaluated to decide what activities are the most appropriate. General strategies that can be used to mitigate hazards, several options are discussed.

5.1.1 Structural Features

Structural features are designed to control the hazard and restrict the exposed area. The construction of a structure such as a dam, levee, or avalanche deflection wall can lessen the impact of a hazard event. Structures can be incorporated into new development, but this should be discouraged in hazard-prone areas.

5.1.2 Land Use Planning

Land use planning can guide development away from hazard-prone areas.3 Planning is more effective at protecting future development.

5.1.3 Zoning

Zoning ordinances regulate development by dividing a community into areas and by establishing development criteria for each area. They may restrict certain uses in hazard- prone areas or add restrictions such as minimum elevations. Zoning is more effective with future development.

5.1.4 Capital Improvement Plan

A Capital Improvement Plan is used to guide major public expenditures for physical improvements over a given period. These expenditures can be used to mitigate existing and future development. Examples include funding to retrofit an existing structure, build a new levee, or purchase property. The lack of investment in infrastructure in hazard-prone areas may also act to restrict development, as it is too costly for a private developer to build the necessary improvements.

5.1.5 Open Space Preservation

Open space preservation is a tool to keep existing open spaces in hazard-prone areas from being developed. This prevents putting more people and facilities at risk. A municipal government may acquire the property from a private property owner, excluding Tribal lands held by the Qawalangin Tribe and the Ounalashka Corporation. The property then becomes zoned as open space, which limits the future development of the property.

5.1.6 Acquisition

Acquisition involves purchasing property in high-risk areas and demolishing any structures on it to prevent the structure from being damaged during a hazard event. The structure is demolished to ensure that it is not re-used in the future. This technique is appropriate for mitigation of existing structures. It can also be used to buy vacant land in high-risk areas to prevent development. This excludes Tribal lands held by the Qawalangin Tribe and the Ounalashka Corporation.

5.1.7 Relocation

Relocation is like acquisition, except that any structures on the property are relocated out of a hazard-prone area. Most appropriate for existing structures, the structure may be relocated to a different parcel or within the same parcel. This excludes Tribal lands held by the Qawalangin Tribe and the Ounalashka Corporation.

5.1.8 Building Codes

Building codes are a compilation of laws, regulations, ordinances, or other statutory requirements adopted by a government legislative authority relating to the physical structure of buildings. They establish minimum requirements regarding the construction of a structure to protect public health, safety, and welfare. They apply to new buildings as well as those existing development. Enforcement is essential for building codes to be an effective hazard mitigation tool. It is also less expensive and easier to incorporate mitigation measures into new structures than it is to retrofit existing ones.

5.1.9 Insurance

Insurance provides funding to rebuild a structure and replace its contents after a hazard event. Insurance is appropriate for mitigating existing structures. The problem with insurance is that it can make it easier to rebuild in a hazard-prone area, thus creating a repetitive loss situation.

5.1.10 Education

Education involves teaching the public about potential natural hazards, the importance of mitigation, and how to prepare for emergency situations. It is used to inform residents, business owners, visitors, etc. about the hazards in the area and what they can do to protect themselves and

their property. Examples include real estate disclosure, homeowner wildfire reduction publications, and training.

5.2 Action Plan

The Action Plan consists of specific activities and projects designed to implement the goals and objectives of this Hazard Mitigation Plan. Each action item is categorized by the specific hazard it addresses, with items that address multiple hazards grouped under a multi-hazard category.

5.2.1 Updates and Community Priorities

In revising the Action Plan, we conducted a comprehensive review of community priorities. This involved an analysis of shifts in community needs and aligning those with the proposed action items. Any required adjustments to the plan have been made to ensure it reflects the most current and relevant priorities of our community.

5.2.2 Status Updates

Table 32: Mitigation Action Plan includes a dedicated "Update" column, which has been populated with the latest available status for each action item. This ensures transparency and allows for tracking progress over time, highlighting completed actions, ongoing projects, and deferred initiatives due to funding limitations.

5.2.3 Funding and Timelines

It is important to note that many of the items in the Action Plan currently lack identified funding sources. Consequently, the timelines for these actions are contingent upon securing necessary funding. Once funding is procured, more specific timelines will be established to guide implementation efforts.

5.2.4 Future Development

The Action Plan is in its early stages of development, signifying its iterative nature. It will be updated as needed, ensuring responsiveness to evolving community needs and enhancement of hazard mitigation strategies. Each action item is characterized by several attributes, including its status, priority ranking, and potential lead agencies responsible for implementation.

Table 31: Action Plan Hazard Abbreviations

Hazard Abbreviations			
Abbreviation	Hazard	Abbreviation	Hazard
MH	Multi-Hazard	UTD	Utility Disruption
EQ	Earthquake	LS	Landslide
FL	Flood	WF	Wildfire
GF	Ground Failure	HM	Hazardous Materials
TS	Tsunami	AV	Avalanche
VOL	Volcano	CL	Coastal/Littoral Erosion
SW	Severe Weather	SWI	Storm Water Inundation
SLR	Sea Level Rise	DF	Dam Failure
SC	Subsidence/Collapse (ground)	WE	Winter Event
CM	Cybersecurity	FZ	Freezing-infrastructure impact

Table 32: Mitigation Action Plan

Mitigation Action Plan							
Action Item Number	Description	Priority	Responsible Party	Potential Funding Source(s)	Timeframe	Benefit Costs (BC)/Technical Feasibility	Update
MH 1.1	Identify and pursue funding opportunities to implement mitigation actions.	High	City of Unalaska (City) Qawalangin Tribal Council (Tribe)	City, Tribe	1-3 Years	BC: This ongoing activity is essential for the City and Tribe as there are limited funds available to accomplish effective mitigation actions. TF: This is an ongoing activity demonstrating its feasibility.	The City and Tribe are continually seeking funding to implement mitigation actions. The City funded projects to implement riverbank protection and storm drain improvements since the last plan updates.
MH 1.2	Develop, produce, and distribute information materials concerning mitigation, preparedness, and safety procedures for all identified natural hazards.	Low	City LEPC, City Fire Chief and Police Chief, Tribal Operations Director/Lands & Infrastructure Director	City, Tribe	Ongoing	BC: FEMA provides free publications for community education purposes. TF: This activity is an ongoing	The LEPC has produced and distributes a disaster preparedness guide and Tsunami inundation and evacuation map. Low to no cost outreach efforts makes this a very feasible project to successfully educate large populations.

MH 1.3	Based on known high-risk hazard areas, identify hazardspecific signage needs, and purchase and install hazard warning signs near these areas to notify and educate the public of potential hazards	Medium	City Fire Chief and Police Chief, Tribal Operations Director/Lands & Infrastructure Director	City, Tribe, Denali Commission, DCRA, DOF, DHS&EM Mitigation & Preparedness Sections	Completed	B/C: This project will ensure the community looks closely at their identified hazard areas to ensure they can safely evacuate their residents and visitors during a natural hazard event. TF: This is an ongoing technically feasible activity using existing city resources.	The City has posted signs about the Tsunami hazard and evacuation route, which is part of their certification as a Tsunami Ready community. Additionally, the outdoor warning system is being replaced at the time of this plan.
MH 2.2	The City and Tribe will aggressively manage their existing plans to ensure they incorporate mitigation planning provisions into all community planning processes such as comprehensive, capital improvement, and land use plans, etc. to demonstrate multi- benefit considerations and facilitate using multiple funding sources.	Medium	City Planning Department, Tribal Operations Director/Lands & Infrastructure Director	City, Tribe	3-5 Years	BC: Coordinated planning ensures effective damage abatement and ensures proper attention is assigned to reduce losses and damage to structures and residents. TF: This is feasible to accomplish as cost can be associated with plan reviews and updates. The action relies on staff and planning committee availability a	The City has a consolidated Planning Department which works to incorporate mitigation planning into the community planning process.
MH 2.3	Construct a reception center above fifty-foot (50') MSL for safe haven for residents during tsunami and/or flooding events. One reception center would be needed on each island. Center could also act as multipurpose for point of distribution, point of dispensing (medical events),	Medium	Public Safety, City Planning, Tribal Operations Director/Lands & Infrastructure Director	City, Tribe, EMPG, USDA	1-3 Years	BC: Ensuring the residents have a safe haven during a tsunami and/or flooding events. Additionally, would serve as secondary town hall. TF: The City and Tribe could support some funding. However, additional funding would have to sought.	New project from the planning committee after discussion of where residents should report to in the event of a tsunami warning.

	and secondary town hall.						
MH 2.4	Install flood and erosion mitigation actions to reduce storm water related erosion, mudslides, landslides, debris flows, and avalanches by extending pavement and ditching along gravel roads and installing catchment basins, sediment traps, and retention ponds to control sediment entry into community waterways.	Low	City Public Works Department, USACE, NRCS	City, Tribe, FHWA, DOT/PF, USACE, NRCS	3-5 Years	B/C: Improving water flow capability will greatly reduce potential infrastructure and residential losses. Project costs would outweigh replacement costs of lost facilities. TF: The Community has the skill to implement this action. Specialized skills may need to be contracted-out with materials and equipment barged in depending on the method selected.	Completed
MH 3.3	Purchase and install generators with main power distribution disconnect switches for identified and prioritized critical facilities susceptible to short-term power disruption (i.e. first responder and medical facilities, schools, correctional facilities, and water and sewage treatment plants, etc.).	Medium	City Public Utilities Department	City, Tribe, Lindbergh, HMGP, FP&S, SAFER, ANA, CCP, EMPG, EOC	Completed	BC: Emergency power generation is a minor cost to ensure their availability for use after a hazard strike. TF: Installing emergency generators is technically feasible for this Community as they already have staff to maintain existing community power generation facilities. *This project typically needs to be associated with essential facility upgrades for FEMA funding.	The generators were purchased and installed in 2021.
MH 3.5	Perform hydrologic and hydraulic engineering, and drainage studies and analyses. Use information obtained for feasibility determination and project design. This information	Low	City Public Works Department, Tribal Operations Director/Lands & Infrastructure Director, USACE	City, Tribe, NRCS, USACE, USDA/EWP, USDA/ECP, DCRA/ ACCIMP	1-3 Years	BC: Flood hazard mitigation is among FEMA's highest national priorities. FEMA desires communities focus on repetitive flood loss properties. This activity will ensure the City and Tribal Councils focus on priority	The City commissioned a study in 2016 to look for alternative water supplies outside of Pyramid Valley or raise the dam because of the high demand of

	should be a key component, directly related to implementing a proposed project identified from the study.					flood locations and projects. TF: The City has the technical capability to manage and conduct this project. Hiring contractors to accomplish specialized studies is expected in rural/remote Alaska.	water by fish processors.
EQ 4.1	Evaluate critical public facility seismic performance for fire stations, public works buildings, potable water systems, wastewater systems, electric power systems, and bridges within the jurisdiction.	Medium	City Public Works Department, Tribal Operations Director/Lands & Infrastructure Director	City, Tribe, ANA, EFSP, DOT/PF	3-5 Years	BC: Retrofit projects can be very cost-effective methods for bush communities as materials and shipping costs are very high. Project viability is dependent on the cost and extent of modifications. A comprehensive BCA will need to be conducted for each facility to validate this activity. TF: The Community has the skill to implement this action. Specialized skills may need to be contracted-out with materials and equipment barged in depending on the method selected.	The Summer Bay bridge was recently replaced with seismic considerations in the construction, including steel piles socketed into bedrock to prevent damage in the event of soil liquefaction.
ER 5.6	Install bank protection such as rip-rap (large rocks), sheet pilings, gabion baskets, articulated matting, concrete, asphalt, vegetation, or other armoring or protective materials to provide river bank protection.	Medium	City Public Works Department, Tribal Operations Director/Lands & Infrastructure Director	City, Tribe, ANA, NRCS, USACE, USDA/EWP, USDA/ECP, DCRA/ACCIMP	1-3 Years	BC: Improving embankment and slope stability will greatly reduce potential infrastructure and residential losses. Project costs would outweigh replacement costs of lost facilities. TF: The Community has the skill and resources to implement this action.	The City is working to install riverbank protection. Since the last Plan update, the Public Works Department planted vegetation along the Lower Iliuliuk River to prevent erosion. The community is working on installing more riverbank protection.

ER 5.7	Install embankment protection along Icy Dam reservoir.	High	City Public Works Department, Tribal Operations Director/Lands & Infrastructure Director	City, Tribe, NRCS, USACE, USDA/EWP, USDA/ECP, DCRA/ ACCIMP	3-5 Years	BC: Improving embankment and slope stability will greatly reduce potential infrastructure and residential losses. Project costs would outweigh replacement costs of lost facilities. TF: The community has the skill and resources to implement this action.	This action has been delayed by technical problems with sediment related to the Dam and Reservoir that the Community is working to solve.
FL 6.1	Develop, revise, adopt, and enforce storm water ordinances and regulations to manage run-off from new development, including buffers and retention ponds.	Medium	City Mayor, City Council, Tribal Operations Director/Lands & Infrastructure Director	City, Tribe, ANA, DEC/WSRF	3-5 Years	BC: Storm water management plans are an essential disaster management tool. Focused and coordinated planning enables effective damage abatement and ensures proper attention is assigned to reduce losses, damage, and materials management. TF: This action is feasible with limited fund expenditures.	The Community has focused on higher priority actions and has not yet developed storm water ordinances.
FL 6.2	Create detention storage basins, ponds, reservoirs etc. to allow water to temporarily accumulate to reduce pressure on culverts and low water crossings allowing water to ultimately return to its watercourse at a reduced flow rate.	Medium	City Public Works, Tribal Operations Director/Lands & Infrastructure Director	City, Tribe, ANA, Denali Commission, NRCS, USACE, USDA/EWP, USDA/ECP, DCRA/ ACCIMP	3-5 Years	BC: Improving water flow capability will greatly reduce potential infrastructure and residential losses. Project costs would outweigh replacement costs of lost facilities. TF: The community has the skills and resources to implement this action.	The community is working to improve storm water drainage. A drainage pond was installed, and more work is planned to reduce sediment entry into lakes.
TS 8.2	Develop a public education effort to reduce the public health and safety risks for this hazard.	High	City LEPC, City Fire Chief and Police Chief, Tribal Operations Director/Lands & Infrastructure Director	City, Tribe	Ongoing	BC: Sustained mitigation outreach programs have minimal cost and will help build and support community capacity enabling the public to appropriately prepare for, respond	The LEPC promotes public education efforts through distributing Tsunami information. The High school also hosts the annual Tsunami Bowl, which encourages high

						to, and recover from disasters. TF: This project is technically feasible using existing City and Tribal staff.	schoolers to learn about ocean science and Tsunami hazards.
VOL 9.1	Update public emergency notification procedures and develop an outreach program for ash fall events.	High	City LEPC, City Fire Chief and Police Chief, Tribal Operations Director/La	City, Tribe, DHS&EM, USGS, AVO, DOC/NOAA, RCASP, NWS, Denali Commission	In-Process	BC: Sustained emergency warning, response planning, and mitigation outreach programs enable communities to plan for, warn, and protect their hazard threatened populations. Each project type is cost dependent, but for the most part is cost effective and will help build and support community capacity enabling the public to prepare for, respond to, and recover from disasters. TF: This project is technically feasible using existing City staff.	The LEPC has completed this action and has a set of established procedures for ashfall events. The LEPC would like to purchase 5,000 emergency kits for distribution in the community to help residents prepare for disasters and is looking for funding to complete this.
VOL 9.2	Evaluate capability of water treatment plants to deal with high turbidity from ash fall events	High	City Public Utilities Department, Tribal Operations Director/Lands & Infrastructure Director	City, Tribe, ANA, EPA, DEC/CWSRF	1-3 Years	BC: Water Plant Protection plans are an essential disaster management tool. Focused and coordinated planning enables effective damage abatement and ensures proper attention is assigned to reduce losses, damage, and materials management. TF: This action is feasible with limited fund expenditures	The City has determined that ash fall events will shut down the open reservoirs at the Pyramid Water plant and the City will have to rely on enclosed reservoirs and wells until the ash issue is resolved. The City believes a sand filter may mitigate the risk of ash clogging the system.
VOL 9.7	Install sand filter at Pyramid Valley water treatment plant to filter ash from water reservoir in the event of ashfall event.	Medium	City Public Utilities Department, City Public Works Department	City, Tribe, USDA	3-5 Years	BC: Adding additional filtration for water coming from the reservoir will reduce the likelihood of shutdown in the event of an ashfall event and help the City maintain a clean water supply.	

						TF: This project is technically feasible, but may require outside funding	
UTD 11.1	Develop redundant communications capability for the City and the Tribe to the outside world as well as all critical facilities	Medium	City Fire Chief and Police Chief	City, Tribe, Lindbergh Grants Program, FP&S, SAFER, ANA, EMPG, EOC	1-3 Years	BC: Sustained emergency warning, communication, and response activity capabilities enable communities to warn and protect their hazard threatened populations. This project is dependent on emerging technology. The City is researching options to replace satellite communications (such as fiber optic undersea cabling) and their viability for development and implementation. This project will help build and support community capacity enabling the public to prepare for, respond to, and recover from disasters. TF: This project is technically feasible using existing City staff.	In addition to regular phone and internet access, the City has access to Satellite phones, HAM radios, and single band radios on marine vessels.

After the adoption of the MJHMP, each Planning Team Member will ensure that the MJHMP, in particular each Mitigation Action Project, is incorporated into existing planning mechanisms. Each member of the Planning Team will achieve this incorporation by undertaking the following activities.

- Review the community-specific regulatory tools to determine where to integrate the mitigation philosophy and implementable initiatives.
- Work with pertinent community departments to increase awareness for implementing the philosophies and identified initiatives. Aid with integrating the mitigation strategy (including the Mitigation Action Plan) into relevant planning mechanisms (i.e., Comprehensive Plan, Capital Improvement Project List, Transportation Improvement Plan, etc.).
- Implementing this philosophy and activities may require updating or amending specific planning mechanisms.

The City's and Tribe's capability assessment reviews the technical and fiscal resources available to the community. The following tables clarifies the resources available to Unalaska for mitigation and mitigation-related funding and training.

Table 33: Unalaska Regulatory Tools

Unalaska Regulatory Tools		
Regulatory Tool	Existing	Comments
Comprehensive Plan	Yes	2020 Comprehensive Plan. Explains the City's land use initiatives and natural hazard impacts.
Land Use Plan	Yes	The City's Land Use Plan explains the City's community development goals and initiatives.
Tribal Corporation Land Use Plan	Yes	The Qawalangin Tribe of Unalaska Land Use Plan, 1999. Describes the Tribe's development goals and initiatives.
Emergency Response Plan	No	In Production.
Building Codes	Yes	Title 17 Unalaska Municipal Code of Ordinances. IBC.
Zoning Ordinances	Yes	Title 8.12 UCO. City Council Ordinance 2012-07.
Subdivision Ordinances or Regulations	Yes	Title 8.08 UCO. City Council Ordinance 2012-07.
Special Purpose Ordinances	Yes	The City can exercise this authority

Chapter 6 – Plan Maintenance

This Plan is intended to be a "living" document that will help inform all interested parties about the community's hazard mitigation policies and projects. It will be reviewed and updated on a regular basis. The mitigation strategy identified will act as a guide for City departments in determining projects for which to seek FEMA assistance and other mitigation funds from outside sources.

6.1 Plan Adoption

The City and Tribe of Unalaska are represented in this MJHMP and meet the requirements of Section 409 of the Stafford Act and Section 322 of DMA 2000, and 44 CFR §201.6(c)(5). The MJHMP was submitted to FEMA and received a status of "Approvable Pending Adoption" on **(insert date).** The Unalaska City Council adopted the MJHMP on The plan was submitted to FEMA and received a status of "Approvable Pending Adoption" on **(insert date),** and the Qawalangin Tribe of Unalaska adopted the MJHMP on **(insert date).** Copies of the resoulutions were submitted to the AK DHS&EM and FEMA on **(insert date)**.

The Qawalangin Tribe of Unalaska, a federally recognized sovereign nation, will pattern its Tribal regulations to be in accordance with 44 CFR 13.11(c) and 44 CFR 13.11(d), and will amend Tribal laws as needed to be in compliance with funding sources. At no time shall the Tribe relinquish its Sovereign Authority through utilization of the words "comply," but rather will adopt similar language to federal laws and regulations as necessary.

6.2 Plan Implementation

Once the Plan is community-adopted and receives FEMA's final approval, each Planning Team Member ensures the Plan, in particular each Mitigation Action Project, is incorporated into existing planning mechanisms whenever possible. Each member of the Planning Team has the responsibility of undertaking the following activities.

• Conduct a review of the community-specific regulatory tools to assess the integration of the mitigation strategy. These regulatory tools are identified in the following capability assessment section.

• Work with the community to increase awareness of the Plan and aid in integrating the mitigation strategy into relevant planning mechanisms. Implementation of these requirements may require updating or amending specific planning mechanisms.

6.3 Plan Monitoring and Evaluation

This Plan was prepared as a collaborative effort. To maintain momentum and build upon previous hazard mitigation planning efforts and successes, the City and Tribe will continue to use the Planning Team to monitor, evaluate, and update the Plan. Each authority identified in the Mitigation Action Plan will be responsible for implementing the Mitigation Action Plan and determining whether their respective actions were effectively implemented. The Director of Planning and Tribal Operations Director/Lands & Infrastructure Director will serve as the primary

points of contact and will coordinate local efforts to monitor, evaluate, revise, and tabulate Plan actions' status.

The Annual Review Questionnaire provides the basis for future Plan evaluations by guiding the Planning Team with identifying new or more threatening hazards, adjusting to changes to, or increases in, resource allocations, and garnering additional support for Plan implementation.

The Planning Team Leader will initiate the annual review two months prior to the scheduled planning meeting date to ensure that all data is assembled for discussion with the Planning Team. The findings from these reviews will be presented at the annual Planning Team Meeting. Each review, as shown on the Annual Review Worksheet, will include an evaluation of the following:

- Determine authorities, outside agencies, stakeholders, and residents' participation in MJHMP implementation success.
- Identify notable risk changes for each identified and newly considered natural or human caused hazards.
- Consider land development activities and related programs' impacts on hazard mitigation.
- Mitigation Action Plan implementation progress (identify problems and suggest improvements as necessary).
- Evaluate the Plan's local resource implementation for Plan identified activities. For FEMA supported projects, progress reports are required on a quarterly basis throughout the project duration. The degree of quarterly reporting will be dependent upon the type of project, its funding source, and the associated requirements. At a minimum, the quarterly report shall address:
- Project Completion Status
- Project Challenges/Issues (If any)
- Budgetary Considerations (Cost Overruns or Underruns)
- Detailed Documentation of Expenditures

Upon completion of projects, the Fire Chief and the Police Chief will visit the project location to view the final results. A closed project will also change status to "Completed" and will then be monitored for effectiveness in the intended area of mitigation. FEMA supported project closeouts will include an audit of the project financials as well as other guidelines/requirements set forth under the funding or grant rules, and any attendant administrative plans developed by the Tribe.

6.4 Continued Public Involvement

The City and Tribe are committed to involving the public in the ongoing process of reshaping and updating the Hazard Mitigation Plan. To facilitate this, a paper copy of the Plan, along with any proposed changes, will be accessible at various locations including the City and Tribal Offices, Planning Department, Fire Department, Public Works Department, City Clerk's Office, and the Library. Contact information for the Planning Team Leaders, who will address public comments and concerns, will also be available at these locations.

Public involvement is a crucial component of both the implementation and the periodic update of the Plan. Each year, in the first quarter, the Planning Team will conduct a comprehensive survey

focused on natural hazards. The results of this survey will be stored in the annual Plan files and will be evaluated during each five-year review cycle.

To ensure transparency and public engagement, the City will prepare and disseminate updates regarding the implementation of the current mitigation measures. These updates will include detailed reports on each mitigation measure being implemented, as well as stakeholder comments received, which will be considered for enhancements in the Plan during five-year updates.

The Planning Commission will conduct an annual review of the Plan, with this process being clearly advertised to the public using the established public involvement methodology outlined in this section. Community feedback collected during this period, along with ongoing input during the plan's implementation, will be carefully reviewed by the Planning Team and integrated into the Plan's annual updates wherever appropriate.

By maintaining open channels for public input and ensuring regular assessments, the City and Tribe aim to continuously improve the Plan, fostering a collaborative approach to hazard mitigation planning.

Table 34: MJHMP Review Schedule

Plan Review Schedule	
Year 1	
X	This is the beginning of the 5 Year Cycle. The Plan has been approved and was adopted by all participating jurisdictions.
Year 2	
X	Annual Review of the Plan
X	Report any changes to the Planning Team
Year 3	
X	1st Quarter – Contact Alaska DHS&EM regarding Plan update funding availability.
X	3rd Quarter – Contract for Profession Update Services if they will be used.
X	4th Quarter – Annual Review of the Plan by the Planning Committee
Year 4	
X	Annual Review of the Plan
X	Develop a detailed update timeline
X	Begin working on updates
Year 5	
X	Complete updates started in Yr 4
X	State and FEMA Review
X	Make any revisions required by State or FEMA
X	Participating jurisdictions adopt the updated plan

6.5 Annual

The City and Tribe will annually review the HMP and update the Plan every five years (or when significant changes are made) by having the Planning Team review the considerations below, to determine the success of implementing the HMP's Mitigation Action Plan. The Annual Review Questionnaire will enable the Team to identify possible changes in the Plan by refocusing on new or more threatening hazards, resource availability, and acquiring stakeholder support for the Plan project implementation.

Table 35: Annual Review Considerations

Considerations for Annual Review	
X	Progress made on plan recommendations during the previous 12 months.
X	Mitigation accomplishments in projects, programs, and policies.
X	Actual losses avoided by implementation of mitigation actions.
X	Emergency disaster damage trends and repetitive losses.
X	Identification of new mitigation needs
X	Cancellation of planned initiatives, and the justification for doing so.
X	Changes in membership to the planning team.

No later than the beginning of the fourth year following the Plan's adoption, the Planning Team will undertake the following activities:

- Request grant assistance from DHS&EM to update the Plan.
- Ensure that each authority administering a mitigation project will submit a Progress Report to the Planning Team.
- Develop a chart to identify those Plan sections that need improvement, the section and page number of their location within the Plan and describe the proposed changes
- Thoroughly update the natural hazard risks.
- Determine the current status of the mitigation projects.
- Identify the proposed Mitigation Plan Actions (projects) that were completed, deleted, or delayed. Each action should include a description of whether the project should remain on the list, be deleted because the action is no longer feasible, or reasons for the delay.
- Describe how each action's priority status has changed since the Plan was originally developed and subsequently approved by FEMA.
- Determine whether or not the project has helped achieve the appropriate goals identified in the Plan.
- Describe whether the community has experienced any barriers preventing them from implementing their mitigation actions (projects) such as financial, legal, and/or political restrictions and stating appropriate strategies to overcome them.
- Update ongoing processes, and to change the proposed implementation date/duration timeline if delayed actions the City of Unalaska still desires to implement.
- Prepare a new Draft Plan Update.
- Submit the Draft Plan Update to DHS&EM and FEMA for review and approval

6.6 Following a Major Disaster

After a major disaster, the City Manager, or his/her designee, will convene the planning team to conduct a review like the annual update. The planning team will consider the implications of long-term recovery and may opt to establish regular meetings while the recovery process is taking place.

Table 36: Post Disaster Considerations

Considerations After a Major Disaster	
X	Document "Lessons Learned" from the disaster and what new initiatives should be added to the plan to help reduce the likelihood of similar damage in the future.
X	Follow up required on any relevant mitigation items.
X	Action items from after-action reports.
X	Integration of mitigation into the recovery process and coordination with recovery efforts conducted by other agencies and jurisdictions.

6.7 Formal Plan Update

Every five years, the plan will be re-submitted for adoption to the City Council. Prior to this, the City Manager, or his/her designee, may use the following table to assist in that all relevant parties are involved.

Table 37: Formal Plan Update Considerations

Considerations for Formal Plan Updates	
X	Conduct regular reviews of the plan as described above and incorporate feedback from those reviews into the planning document.
X	Conduct public engagement activities and initiate meetings with identified groups of interested parties and outside organizations to gain input and feedback.
X	Integrate relevant feedback and circulate revised plan to planning team for approval.
X	Submit Plan to each jurisdiction elected or appointed body for adoption by resolution.

It is anticipated that the next full update of this plan will take place in 2023 for the planning period of 2022 through 2028.

6.8 Mitigation Action Status and Tracking Loss Reduction

All City Departments are tasked with tracking the ongoing status of the mitigation projects to which they are assigned the lead. The following table is examples of tracking items.

Table 38: Tracking Ongoing Projects Considerations

Considerations for Tracking Ongoing Projects	
X	Project Progress, including status of project funding and ongoing needs.
X	Actual losses mitigated by project implementation.
X	Project needs that may be addressed in the next mitigation planning cycle.

6.9 Incorporation of Existing Planning Mechanisms

The Planning Department will coordinate with departments that have jurisdiction over mitigation action implementation areas to incorporate the plan into standard policies and procedures as well as long-term planning documents and budgets.

Short term operational changes that address and consider hazard mitigation may include job description updates, work plans, site reviews, and staff training. Long-term changes may include revisions to existing comprehensive plans, capital improvement plans, zoning and building codes, permitting, and other planning tools.

Additional considerations to long term strategy and to enhance cost effectiveness include ensuring that mitigation projects are present in annual departmental budgets rather than relying solely on grant programs and integrating hazard mitigation into future land use and comprehensive and strategic planning.

Appendix A – Record of Changes

Record of Changes	
Section	Summary of Change

Appendix B – Funding Resources

B.1 Federal Funding Resources

FEMA Hazard Mitigation Assistance (HMA) grant programs provide funding to States, Tribes, and Local entities that have a FEMA-approved State, Tribal, or Local Hazard Mitigation Plan (HMP). The Qawalangin Tribe of Unalaska and the City of Unalaska have their own grant writers and independently manage their respective grant applications and planning capabilities. The Tribe is fully capable and authorized to write, submit, and administer any and all grants as a Sovereign Nation.

Two of the grants are authorized under the Stafford Act and the Disaster Mitigation Act of 2000 (DMA 2000), while the remaining one is authorized under the National Flood Insurance Act and the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act. The Hazard Mitigation Grant Program (HMGP) is a competitive, disaster-funded grant program, whereas the other Unified Mitigation Assistance (UMA) Programs: Pre-Disaster Mitigation (PDM) and Flood Mitigation Assistance (FMA) programs, although competitive, rely on specific pre-disaster grant funding sources, sharing several common elements.

The Tribe has successfully written and been approved for FEMA grants to engage in Hazard Mitigation Planning and has additional grant applications under consideration by FEMA. The City of Unalaska and the Qawalangin Tribe of Unalaska both pursue funding opportunities to benefit their respective communities, ensuring that all necessary resources are secured to enhance resilience and mitigate hazards effectively.

The Federal government requires local governments to have a HMP in place to be eligible for mitigation funding opportunities through FEMA such as the UHMA Programs and the HMGP. The Mitigation Technical Assistance Programs available to local governments are also a valuable resource. FEMA may also provide temporary housing assistance through rental assistance, mobile homes, furniture rental, mortgage assistance, and emergency home repairs. The Disaster Preparedness Improvement Grant also promotes educational opportunities with respect to hazard awareness and mitigation.

- FEMA, through its Emergency Management Institute, offers training in many aspects of emergency management, including hazard mitigation. FEMA has also developed many documents that address implementing hazard mitigation at the local level. Five key resource documents are available from FEMA Publication Warehouse (1-800-480- 2520) and are briefly described here:
    - How-to Guides. FEMA has developed a series of how-to guides to assist states, communities, and tribes in enhancing their hazard mitigation planning capabilities. The first four guides describe the four major phases of hazard mitigation planning. The last five how-to guides address special topics that arise in hazard mitigation planning such as conducting cost-benefit analysis and preparing multi-jurisdictional plans. The use of worksheets, checklists, and tables make these guides a practical source of guidance to address all stages of the hazard mitigation planning process. They also include special tips on meeting DMA 2000 requirements.

  - Post-Disaster Hazard Mitigation Planning Guidance for State and Local Governments. FEMA DAP-12, September 1990. This handbook explains the basic concepts of hazard mitigation and shows state and local governments how they can develop and achieve mitigation goals within the context of FEMA's postdisaster hazard mitigation planning requirements. The handbook focuses on approaches to mitigation, with an emphasis on multi-objective planning.
  - A Guide to Recovery Programs FEMA 229(4), September 2005. The programs described in this guide may all be of assistance during disaster incident recovery. Some are available only after a Presidential declaration of disaster, but others are available without a declaration. Please see the individual program descriptions for details.
  - The Emergency Management Guide for Business and Industry. FEMA 141, October 1993. This guide provides a step-by-step approach to emergency management planning, response, and recovery. It also details a planning process that businesses can follow to better prepare for a wide range of hazards and emergency events. This effort can enhance a business's ability to recover from financial losses, loss of market share, damages to equipment, and product or business interruptions. This guide could be of great assistance to a community's industries and businesses located in hazard prone areas.
  - The FEMA Hazard Mitigation Assistance (HMA Unified Guidance, June 1, 2010. The guidance introduces the five HMA grant programs, funding opportunities, award information, eligibility, application and submission information, application review process, administering the grant, contracts, additional program guidance, additional project guidance, and contains information and resource appendices (FEMA 2009).

- FEMA also administers emergency management grants (http://www.fema.gov/help/site.shtm) and various firefighter grant programs (http://www.firegrantsupport.com/) such as:
  - Emergency Management Performance Grant (EMPG). This is a pass-through grant. The amount is determined by the State. The grant is intended to support critical assistance to sustain and enhance State and local emergency management capabilities at the State and local levels for all-hazard mitigation, preparedness, response, and recovery including coordination of intergovernmental (Federal, State, regional, local, and tribal) resources, joint operations, and mutual aid compacts state-to-state and nationwide. Subrecipients must be compliant with National Incident Management System (NIMS) implementation as a condition for receiving funds. Requires 50% match.
  - Assistance to Fire Fighters Grant (AFG), Fire Prevention and Safety (FP&S), Staffing for Adequate Fire and Emergency Response Grants (SAFER), and Assistance to Firefighters Station Construction Grant programs.
- Department of Homeland Security (DHS) provides the following grants:
  - Homeland Security Grant Program (HSGP), State Homeland Security Program (SHSP) are 80% pass through grants. SHSP supports implementing the State Homeland Security Strategies to address identified planning, organization, equipment, training, and exercise needs for acts of terrorism and other catastrophic events. In addition, SHSP supports implementing the National Preparedness

Guidelines, the NIMS, and the National Response Framework (NRF). Must ensure at least 25% of funds are dedicated towards law enforcement terrorism prevention-oriented activities.

- Citizen Corps Program (CCP). The Citizen Corps mission is to bring community and government leaders together to coordinate involving community members in emergency preparedness, planning, mitigation, response, and recovery activities.
- Emergency Operations Center (EOC) This program is intended to improve emergency management and preparedness capabilities by supporting flexible, sustainable, secure, strategically located, and fully interoperable Emergency Operations Centers (EOCs) with a focus on addressing identified deficiencies and needs. Fully capable emergency operations facilities at the State and local levels are an essential element of a comprehensive national emergency management system and are necessary to ensure continuity of operations and continuity of government in major disasters or emergencies caused by any hazard. Requires 25% match.
- U.S. Department of Commerce's grant programs include: Remote Community Alert Systems (RCASP) grant for outdoor alerting technologies in remote communities effectively underserved by commercial mobile service for the purpose of enabling residents of those communities to receive emergency messages. This program is a contributing element of the Warning, Alert, and Response Network (WARN) Act.
- National Oceanic and Atmospheric Administration (NOAA), provides funds to the State of Alaska due to Alaska's high threat for tsunami. The allocation supports the promotion of local, regional, and state level tsunami mitigation and preparedness. installation of warning communications systems; installation of warning communications systems; installation of tsunami signage; promotion of the Tsunami Ready Program in Alaska; development of inundation models; and delivery of inundation maps and decision-support tools to communities in Alaska.

- Department of Agriculture (USDA). Disaster assistance provided includes: Emergency Conservation Program, Non-Insured Assistance, Emergency Forest Restoration Program, Emergency Watershed Protection, Rural Housing Service, Rural Utilities Service, and Rural Business and Cooperative Service.
- Department of Energy (DOE), Office of Energy Efficiency and Renewable Energy, Weatherization Assistance Program. This program minimizes the adverse effects of high energy costs on low-income, elderly, and handicapped citizens through client education activities and weatherization services such as an all-around safety check of major energy systems, including heating system modifications and insulation checks.
  - The Tribal Energy Program offers financial and technical assistance to Indian tribes to help them create sustainable renewable energy installations on their lands. This program promotes tribal energy self-sufficiency and fosters employment and economic development on America's tribal lands.
- US Environmental Protection Agency (EPA). Under EPA's CWSRF program, each state maintains a revolving loan fund to provide independent and permanent sources of low cost financing for a wide range of water quality infrastructure projects, including: municipal wastewater treatment projects; non-point source projects; watershed protection or restoration projects; and estuary management projects.

  - Public Works and Development Facilities Program. This program aids help distressed communities attract new industry, encourage business expansion, diversify local economies, and generate long-term, private sector jobs. Among the types of projects funded are water and sewer facilities, primarily serving industry and commerce; access roads to industrial parks or sites; port improvements; business incubator facilities; technology infrastructure; sustainable development activities; export programs; brownfields redevelopment; aquaculture facilities; and other infrastructure projects. Specific activities may include demolition, renovation, and construction of public facilities; provision of water or sewer infrastructure; or the development of stormwater control mechanisms (e.g., a retention pond) as part of an industrial park or other eligible project.
- Department of Health and Human Services, Administration of Children & Families, Administration for Native Americans (ANA). The ANA awards funds through grants to American Indians, Native Americans, Native Alaskans, Native Hawaiians, and Pacific Islanders. These grants are awarded to individual organizations that successfully apply for discretionary funds. ANA publishes in the Federal Register an announcement of funds available, the primary areas of focus, review criteria, and the method of application.
- Department of Housing and Urban Development (HUD) provides a variety of disaster resources. They also partner with Federal and state agencies to help implement disaster recovery assistance. Under the National Response Framework, the FEMA and the Small Business Administration (SBA) offer initial recovery assistance.
  - HUD, Office of Homes and Communities, Section 108 Loan Guarantee Programs. This program provides loan guarantees as security for Federal loans for acquisition, rehabilitation, relocation, clearance, site preparation, special economic development activities, and construction of certain public facilities and housing.
  - HUD, Office of Homes and Communities, Section 184 Indian Home Loan Guarantee Programs (IHLGP). The Section 184 Indian Home Loan Guarantee Program is a home mortgage specifically designed for American Indian and Alaska Native families, Alaska Villages, Tribes, or Tribally Designated Housing Entities. Section 184 loans can be used, both on and off native lands, for new construction, rehabilitation, purchase of an existing home, or refinance.
  - Because of the unique status of Indian lands being held in Trust, Native American homeownership has historically been an underserved market. Working with an expanding network of private sector and tribal partners, the Section 184 Program endeavors to increase access to capital for Native Americans and provide private funding opportunities for tribal housing agencies with the Section 184 Program.
  - HUD/CDBG provides grant assistance and technical assistance to aid communities in planning activities that address issues detrimental to the health and safety of local residents, such as housing rehabilitation, public services, community facilities, and infrastructure improvements that would primarily benefit low-and moderate-income persons.
- Department of Labor (DOL), Employment and Training Administration, Disaster Unemployment Assistance. Provides weekly unemployment subsistence grants for those who become unemployed because of a major disaster or emergency. Applicants must have exhausted all benefits for which they would normally be eligible.

  - The Workforce Investment Act contains provisions aimed at supporting employment and training activities for Indian, Alaska Native, and Native Hawaiian individuals. The Department of Labor's Indian and Native American Programs (INAP) funds grant programs that provide training opportunities at the local level for this target population.
- U.S. Department of Transportation (DOT), Hazardous Materials Emergency Preparedness Grant. DOT increases State, Territorial, Tribal and local effectiveness in safely and efficiently handling hazardous materials accidents and incidents, enhances implementation of the Emergency Planning and Community Right-to-Know Act of 1986, and encourages a comprehensive approach to emergency training and planning by incorporating the unique challenges of responses to transportation situations, through planning and training. Requires a 20% local match.
- Federal Financial Institutions. Member banks of Federal Deposit Insurance Corporation, Financial Reporting Standards or Federal Home Loan Bank Board may be permitted to waive early withdrawal penalties for Certificates of Deposit and Individual Retirement Accounts.
- Internal Revenue Service (IRS), Disaster Tax Relief. Provides extensions to current year's tax return, allows deductions for disaster losses, and allows amendment of previous year's tax returns.
- Natural Resources Conservation Service (NRCS) has several funding sources to fulfill mitigation needs. The Emergency Watershed Protection Program (EWP). This funding source is designed is to undertake emergency measures, including the purchase of flood plain easements, for runoff retardation and soil erosion prevention to safeguard lives and property from floods, drought, and the products of erosion on any watershed whenever fire, flood or any other natural occurrence is causing or has caused a sudden impairment of the watershed.
  - WHIP. This is a voluntary program for conservation-minded landowners who want to develop and improve wildlife habitat on agricultural land, nonindustrial private forest land, and Indian land.
  - Watershed Planning. NRCS watershed activities in Alaska are voluntary efforts requested through conservation districts and units of government and/or tribes. The watershed activities are lead locally by a "watershed management committee" that is comprised of local interest groups, local units of government, local tribal representatives and any organization that has a vested interest in the watershed planning activity. This committee provides direction to the process as well as provides the decision-making necessary to implement the process. Technical assistance is provided to the watershed management committee through a "technical advisory committee" comprised of local, state, and federal technical specialist. These specialists provide information to the watershed management committee as needed to make sound decisions. NRCS also provides training on watershed planning organization and process.
- U.S. Small Business Administration (SBA) Disaster Assistance provides information concerning disaster assistance, preparedness, planning, cleanup, and recovery planning.
  - May provide low-interest disaster loans to individuals and businesses that have suffered a loss due to a disaster. Requests for SBA loan assistance should be submitted to DHS&EM.

- United States Army Corps of Engineers (USACE) Alaska District's Civil Works Branch studies potential water resource projects in Alaska. These studies analyze and solve water resource issues of concern to the local communities. These issues may involve navigational improvements, flood control or ecosystem restoration. The agency also tracks flood hazard data for over 300 Alaskan communities on floodplains or the seacoast. These data help local communities assess the risk of floods to their communities and prepare for potential future floods. The USACE is a member and cochair of the Alaska Climate Change Sub-Cabinet.

B.2 State Funding Resources

- Department of Military and Veterans Affairs (DMVA): Provides damage appraisals and settlements for VA-insured homes and assists with filing of survivor benefits.
    - DHS&EM within DMVA is responsible for improving hazard mitigation technical assistance for local governments for the State of Alaska. Providing hazard mitigation training, current hazard information and communication facilitation with other agencies will enhance local hazard mitigation efforts. DHS&EM administers FEMA mitigation grants to mitigate future disaster damages such as those that may affect infrastructure including elevating, relocating, or acquiring hazard-prone properties.
    - DHS&EM also provides mitigation funding resources for mitigation planning on their Web site at http://www.ready.alaska.gov.
- Division of Senior Services (DSS): Provides special outreach services for seniors, including food, shelter, and clothing.
- Division of Insurance (DOI): Aids in obtaining copies of policies and provides information regarding filing claims.
- DCRA within the DCCED administers the HUD/CDBG, FMA Program, and the Climate Change Sub-Cabinet's Interagency Working Group's program funds and administers various flood and erosion mitigation projects, including the elevation, relocation, or acquisition of flood-prone homes and businesses throughout the State. This division also administers programs for State's" distressed" and "targeted" communities.
    - DCRA Planning and Land Management staff provide Alaska Climate Change Impact Mitigation Program (ACCIMP) funding to Alaskan communities that meet one or more of the following criteria related to flooding, erosion, melting permafrost, or other climate change-related phenomena: Life/safety risk during storm/flood events; loss of critical infrastructure; public health threats; and loss of 10% of residential dwellings.
    - The Hazard Impact Assessment is the first step in the ACCIMP process. The HIA identifies and defines the climate change-related hazards in the community, establishes current and predicted impacts, and provides recommendations to the community on alternatives to mitigate the impact. The community may then pursue these recommendations through an ACCIMP Community Planning Grant.
- Department of Environmental Conservation (DEC). DEC's primary roles and responsibilities concerning hazards mitigation are ensuring safe food and safe water, and pollution prevention and pollution response. DEC ensures water treatment plants, landfills, and bulk fuel storage tank farms are safely constructed and operated in communities.

Agency and facility response plans include hazards identification and pollution prevention and response strategies.

- The Division of Water's Village Safe Water Program works with rural communities to develop sustainable sanitation facilities. Communities apply each year to VSW for grants for sanitation projects. Federal and state funding for this program is administered and managed by the State of Alaska's Village Safe Water (VSW) program. VSW provides technical and financial support to Alaska's smallest communities to design and construct water and wastewater systems. In some cases, funding is awarded by VSW through the Alaska Native Tribal Health Consortium, who in turn assist communities in design and construct of sanitation projects.
- Municipal Grants and Loans Program. The Department of Environmental Conservation / Division of Water administer the Alaska Clean Water Fund (ACWF) and the Alaska Drinking Water Fund (ADWF). The division is fiscally responsible to the Environmental Protection Agency (EPA) to administer the loan funds as the EPA provides capitalization grants to the division for each of the loan funds. In addition, it is prudent upon the division to administer the funds in a manner that ensures their continued viability.
- Under EPA's CWSRF program, each state maintains a revolving loan fund to provide independent and permanent sources of low-cost financing for a wide range of water quality infrastructure projects, including: municipal wastewater treatment projects; non-point source projects; watershed protection or restoration projects; and estuary management, [and stormwater management] projects. Alaska's Revolving Loan Fund Program, prescribed by Title VI of the Clean Water Act as amended by the Water Quality Act of 1987, Public Law 100- 4. DEC will use the ACWF account to administer the loan fund. This Agreement will continue from year-to-year and will be incorporated by reference into the annual capitalization grant agreement between EPA and the DEC. DEC will use a fiscal year of July 1 to June 30 for reporting purposes.

- Department of Transportation and Public Facilities (DOT/PF) personnel provide technical assistance to the various emergency management programs, to include mitigation. This assistance is addressed in the DHS&EM-DOT/PF Memorandum of Agreement and includes but is not limited to, environmental reviews, archaeological surveys, and historic preservation reviews.
  - DOT/PF and DHS&EM coordinate buy-out projects to ensure that there are no potential right-of-way conflicts with future use of land for bridge and highway projects and collaborate on earthquake mitigation. Additionally, DOT/PF provides the safe, efficient, economical, and effective State highway, harbor, and airport operation. DOT/PF uses it's Planning, Design and Engineering, Maintenance and Operations, and Intelligent Transportation Systems resources to identify hazards, plan and initiate mitigation activities to meet the transportation needs of Alaskans, and make Alaska a better place to live and work. DOT/PF budgets for temporary bridge replacements and materials necessary to make the multi-modal transportation system operational following natural disaster events.
- DNR administers various projects designed to reduce stream bank erosion, reduce localized flooding, improve drainage, and improve discharge water quality through the storm water grant program funds.

- The Division of Geological and Geophysical Survey (DGGS) is responsible Alaska's mineral, land, and water resources use, development, and earthquake mitigation collaboration. Their geologists and support staff are leaders in researching Alaska's geology and implementing technological tools to collect, interpret, publish, archive, and disseminate information to the public most efficiently.
- The DNR's Division of Forestry (DOF) participates in a statewide wildfire control program in cooperation with the forest industry, rural fire departments and other agencies. Prescribed burning may increase the risks of fire hazards; however, prescribed burning reduces the availability of fire fuels and therefore the potential for future, more serious fires.
- DOF also manages various wildland fire programs, activities, and grant programs such as the FireWise Program, Community Forestry Program (CFP), Assistance to Fire Fighters Grant (AFG), Fire Prevention and Safety (FP&S), Staffing for Adequate Fire and Emergency Response Grants (SAFER), and Volunteer Fire Assistance and Rural Fire Assistance Grant (VFA-RFA) programs.

B.3 Other Funding Resources

The following provide focused access to valuable planning resources for communities interested in sustainable development activities.

- FEMA, http://www.fema.gov - includes links to information, resources, and grants that communities can use in planning and implementation of sustainable measures.
- American Planning Association (APA), http://www.planning.org - a non-profit professional association that serves as a resource for planners, elected officials, and citizens concerned with planning and growth initiatives.
- Institute for Business and Home Safety (IBHS), http://ibhs.org - an initiative of the insurance industry to reduce deaths, injuries, property damage, economic losses, and human suffering caused by natural disasters.
- American Red Cross (ARC). Provides for the critical needs of individuals such as food, clothing, shelter, and supplemental medical needs. Provides recovery needs such as furniture, home repair, home purchasing, essential tools, and some bill payment may be provided.
- Crisis Counseling Program. Provides grants to State and Borough Mental Health Departments, which in turn provide training for screening, diagnosing, and counseling techniques. Also provides funds for counseling, outreach, and consultation for those affected by disaster.
- Denali Commission – www.denali.gov - Introduced by Congress in 1998, the Denali Commission is an independent federal agency designed to provide critical utilities, infrastructure, and economic support throughout Alaska. With the creation of the Denali Commission, Congress acknowledged the need for increased inter-agency cooperation and focus on Alaska's remote communities. Since its first meeting in April 1999, the Commission is credited with providing numerous cost-shared infrastructure projects across the State that exemplifies effective and efficient partnership between federal and state agencies, and the private sector.

- The Energy Program primarily funds design and construction of replacement bulk fuel storage facilities, upgrades to community power generation and distribution systems, alternative-renewable energy projects, and some energy cost reduction projects. The Commission works with the Alaska Energy Authority (AEA), Alaska Village Electric Cooperative (AVEC), Alaska Power and Telephone and other partners to meet rural communities' fuel storage and power generation needs.
- The goal of the solid waste program at the Denali Commission is to provide funding to address deficiencies in solid waste disposal sites which threaten to contaminate rural drinking water supplies.

Appendix C – Critical Facilities Hazard Exposure

Natural Hazards									
Type - Facility	Ground Failure / Landslide	Earthquake	Extreme Weather	Volcanic Ashfall	Tsunami	Avalanche	Flooding	Erosion	Wildfire
Education - Unalaska High School	X	X	X	X	X				
Education - Eagles View Elementary	X	X	X	X	X				
Education - Unalaska Preschool	X	X	X	X	X				
Education - UAF Unalska Learning Center	X	X	X	X	X				
Medical - IFHS Clinic	X	X	X	X					
Medical - APIA Oonalaska Wellness Center	X	X	X	X					
Medical - APIA Behaviorial Health Clinic	X	X	X	X	X				
Medical - Dutch Harbor Dental Clinic	X	X	X	X	X				
Medical - Aleutian Family Dentistry	X	X	X	X	X				
Medical - Arctic Chiropractic Unalaska	X	X	X	X	X				
Medical - Arctic Chiropractic Dutch Harbor	X	X	X	X					
Public Safety - Fire Station 1	X	X	X	X		X			
Public Safety - Fire Station 2	X	X	X	X		X			
Public Safety - Police Department	X	X	X	X		X			
Public Safety - Jail	X	X	X	X		X			
Public Safety - Alaska Wildlife Troopers	X	X	X	X	X				
Public Safety - Court Magistrate	X	X	X	X	X				
Utility - Electric Powerhouse	X	X	X	X	X	X			
Utility - Wastewater Treatment Facility	X	X	X	X		X	X	X	
Utility - Landfill and Baler Facility	X	X	X	X	X	X			
Utility - Water Storage	X	X	X	X					X
Utility - Water Treatment Facility	X	X	X	X		X			X
Utility - Icy Creek Reservoir	X	X	X	X		X			X
Utility - Icy Lake Reservoir	X	X	X	X		X			X
Transporation - USCG Dock	X	X	X	X	X		X	X	
Transportation - Unalaska Airport	X	X	X	X	X		X	X	
Transporation - Unalaska Marine Center	X	X	X	X	X		X	X	
Transporation - Light Cargo Dock	X	X	X	X	X		X	X	
Transporation - Spit Dock	X	X	X	X	X		X	X	
Transporation - Robert Storrs International Small Boat Harbor	X	X	X	X	X		X	X	
Transportation - Carl E. Moses Boat Harbor	X	X	X	X	X		X	X	
Historic Site - Holy Ascension Orthodox Church	X	X	X	X	X		X		
Historic Site - Sitka Spruce Plantation	X	X	X	X				X	X
Historic Site - Dutch Harbor Naval Operating Base and Fort Mears, US Army	X	X	X	X				X	X
Roads - All	X	X	X	X	X	X	X	X	
Bridges - All	X	X	X	X	X	X	X	X	

Appendix D – Public Involvement

D.1 Public Input Survey

In 2021 residents were sent a survey via Survey Monkey. In 2024 the same survey questions were published a second time to additional stakeholders and anyone who did not participate in the first survey. The questions and combined results are below.

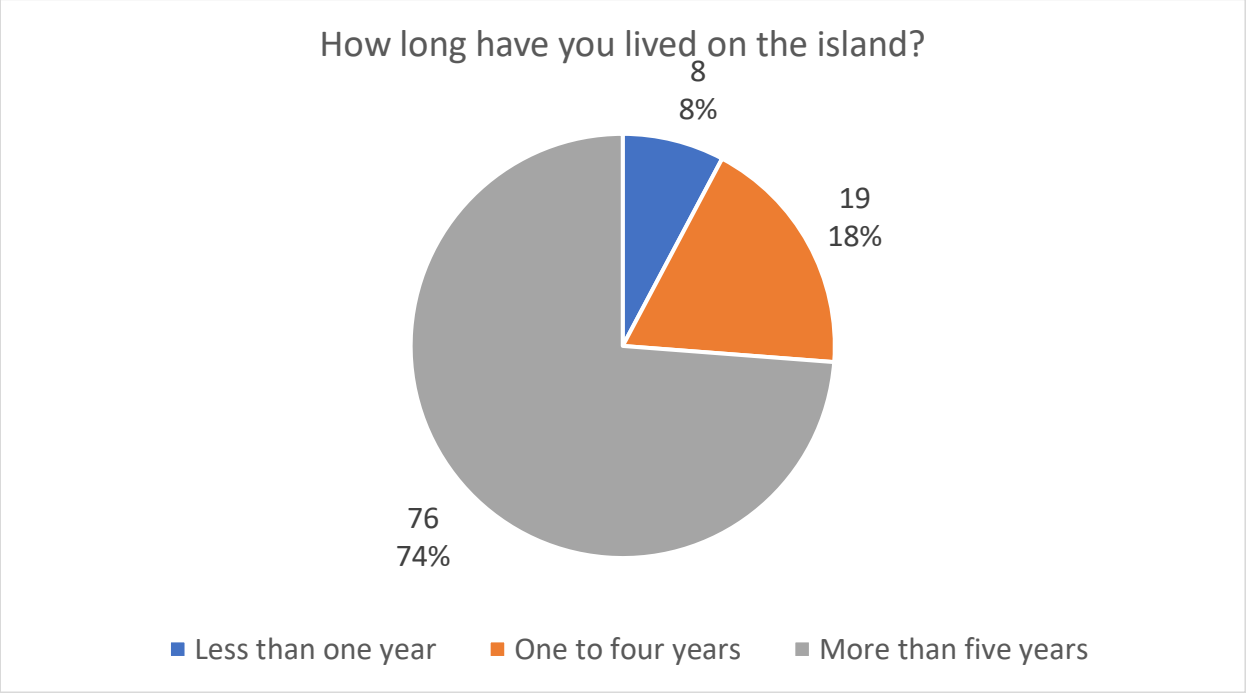

Figure 13: Public Survey Question 1 Results

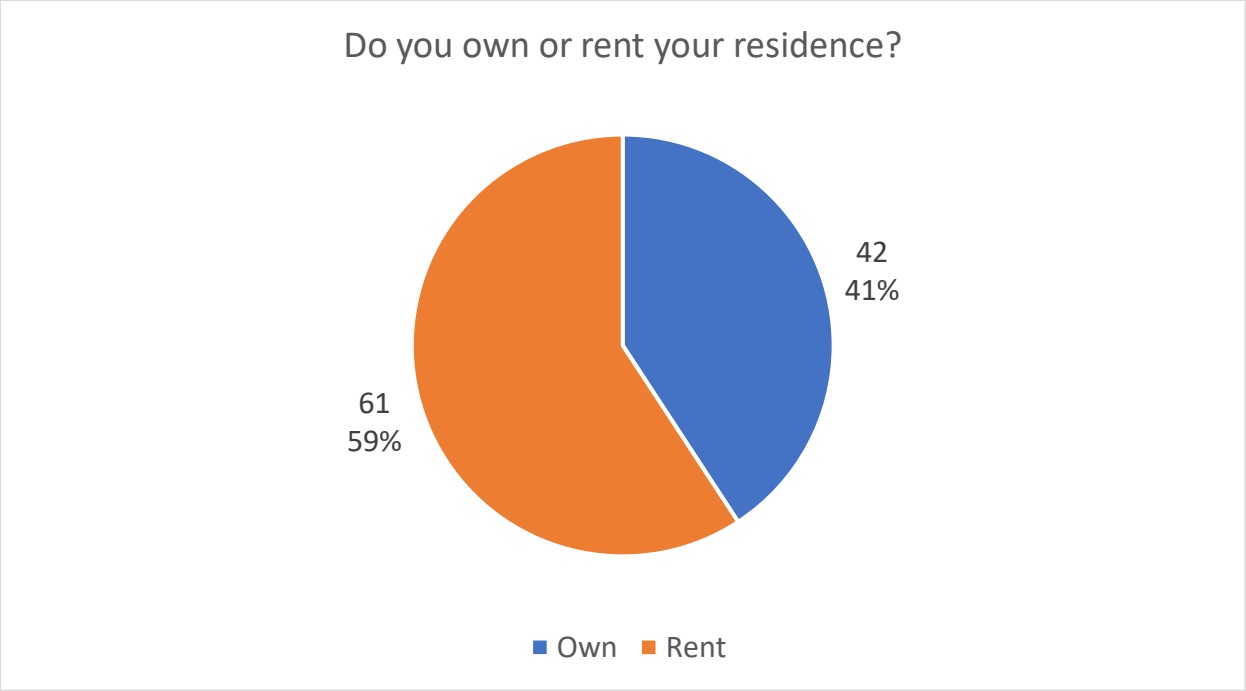

Figure 14: Public Survey Question 2 Results

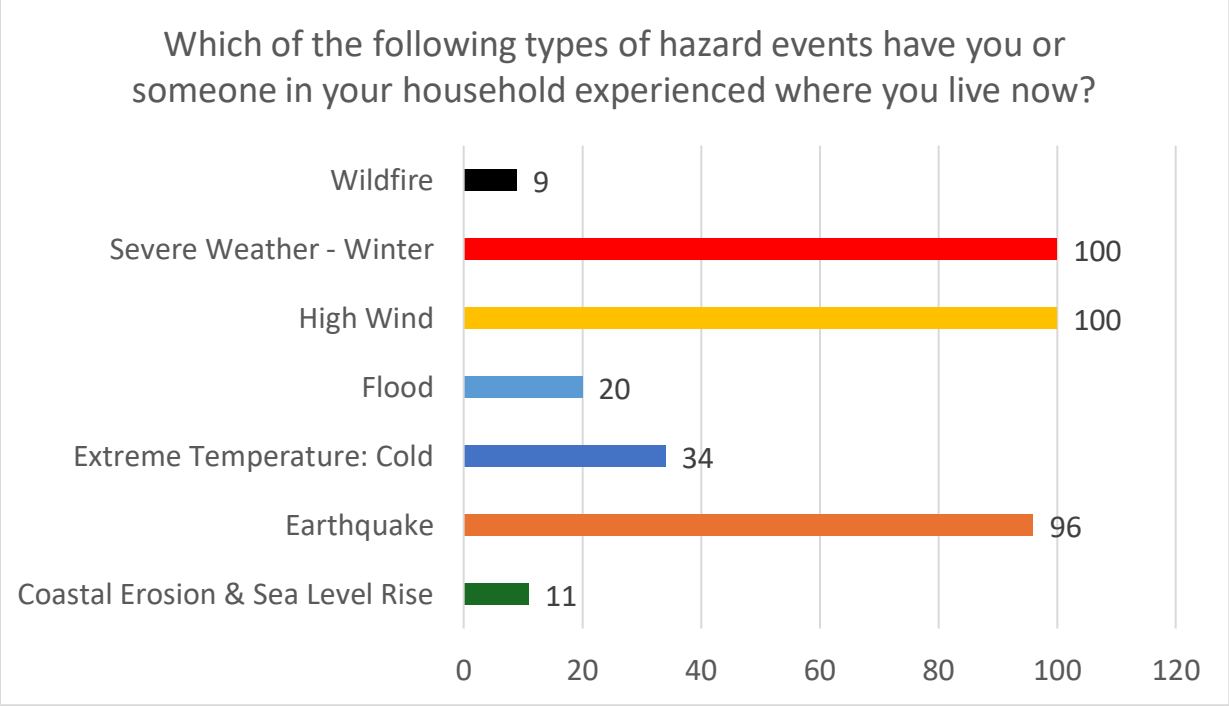

Figure 15: Public Survey Question 3 Results

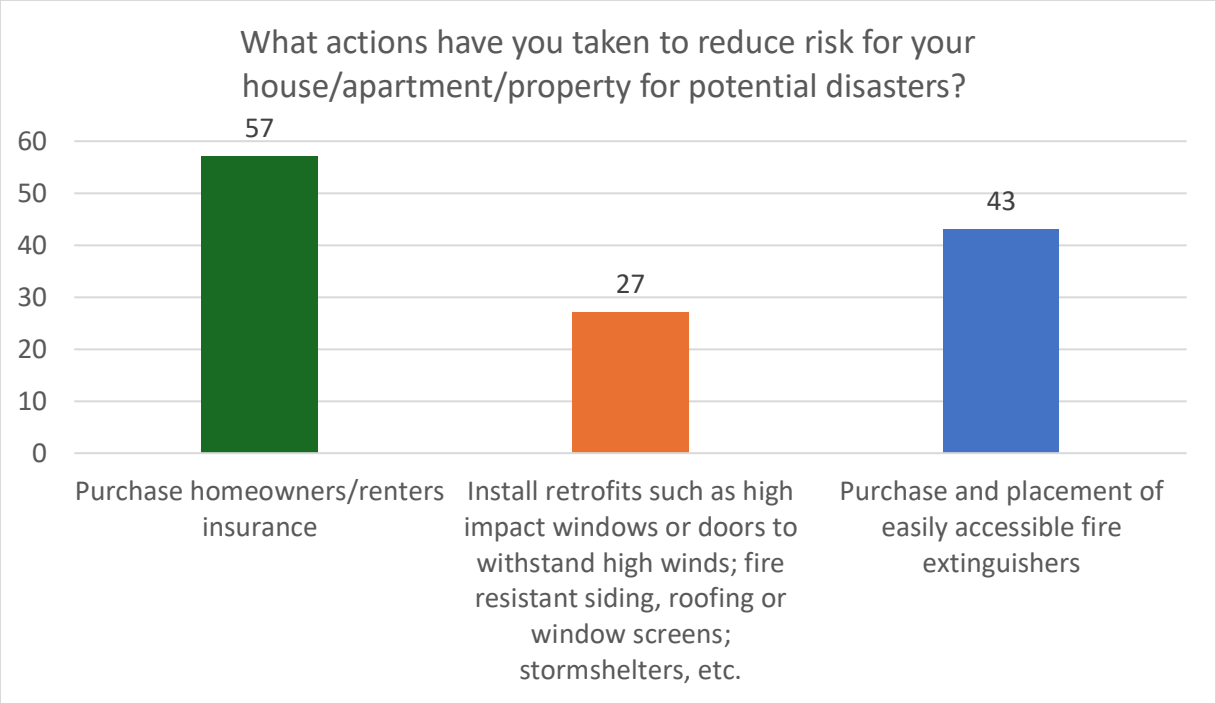

Figure 16: Public Survey Question 4 Results

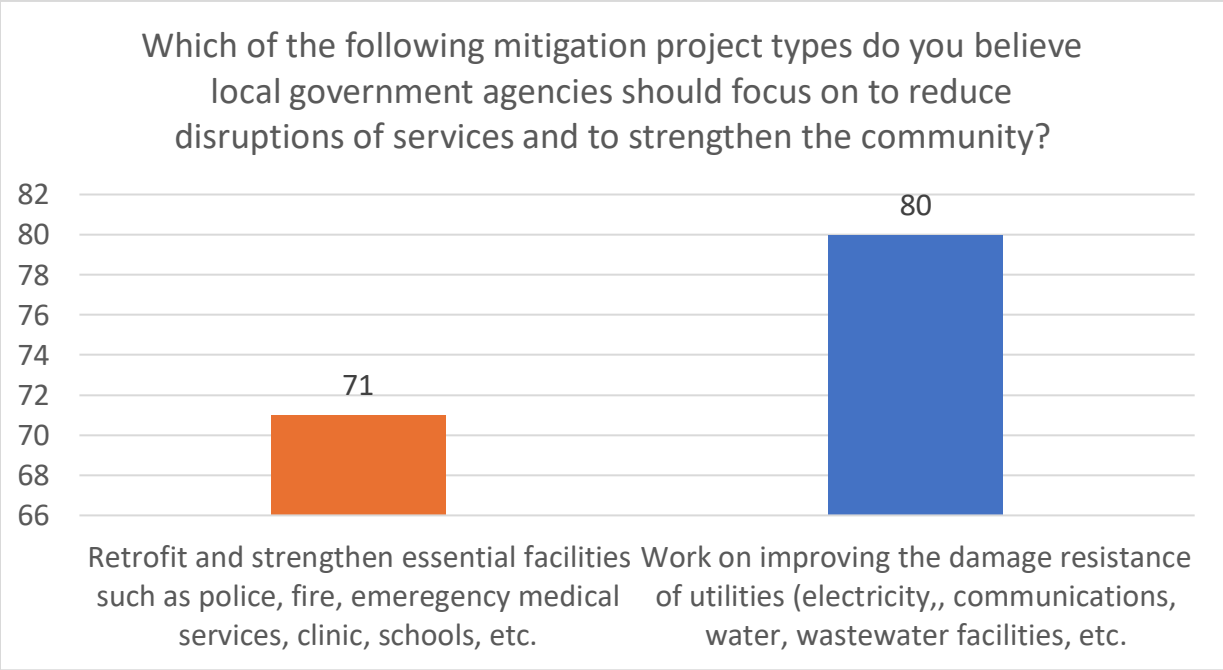

Figure 17: Public Survey Question 5 Results

D.2 Planning Team and Public Input

Section 1.4 of the plan lists the Hazard Mitigation Planning Team that participated in 2021 as well as the additional members that participated in 2024. The public was engaged to participate by completing the Public Input Survey and a total of 103 responses were received.

D.3 Public Meetings

Two meetings were held for public input during 2021 on August 17, 2021 at 2 PM and 6PM. Notices were posted as outlined in the below email from Marjorie Veeder.

From: Marjorie Veeder
Sent: Wednesday, August 4, 2021 9:37 AM
To: Patrick Shipp <pshipp@ci.unalaska.ak.us>
Subject: RE: Unalaska Site Visit

Hey Patrick:

The notice is attached.

- Posted on City Website: https://www.ci.unalaska.ak.us/fire/page/public-meeting-hazard-mitigation-plan-update 8/4/2021
- Posted on City Facebook page and Unalaska Friends & Events FB Group 8/4/2021
- Posted at City Hall 8/4/2021
- Blast Fax 8/4/2021
- Will be posted around town on 8/10/2021

Marjie Veeder
City Clerk
CITY OF UNALASKA
(907) 581-1251 ext. 2104

Despite these notices no members of the public participated in the 2021 public meetings.

Physical copies were made available at the Clerk's office in City Hall and Fire Station 1. Electronic copies were made available online on the City's website. The public was also given the opportunity to make in-person appointments within the public comment period.

One additional meeting was held for public input during 2024 on Tuesday, December 3rd, 2024 from 3:00PM to 6:00PM. This meeting was attended by 0 members of the public which is defined as any tribal or community member that is not part of the planning team. During the public comment period, 2 members of the public requested physical copies of the MJHMP, but were unable to attend the in-person meeting.

Public notice for the 2024 meeting was posted as outlined below:

- Dutch Harbor Post Office
- Unalaska Post Office
- Airport
- Safeway (both entrances)
- Three Bears
- Posted on City Website on 12/2/2024: https://www.ci.unalaska.ak.us/fire/page/city-unalaska-and-qawalangin-tribe-unalaskas-multi-jurisdictional-hazard-mitigation-plan
- Clerk's Office Blast Fax 12/2/2024

City of Unalaska and Qawalangin Tribe of Unalaska's Multi-Jurisdictional Hazard Mitigation Plan

PUBLIC COMMENT PERIOD

December 2-6, 2024

Physical Copies Available for Pick-Up at the Following Locations:
City Hall Clerk's Office: 43 Raven Way, Unalaska, AK 99685
Fire Station 1: 29 Safety Way, Unalaska, AK 99685

Digital Viewing is Accessible on the City of Unalaska's Website at:
https://www.ci.unalaska.ak.us/

Tribal and City Contacts:
Qawalangin Tribe Contact:
Katherine McGlashan
katherine@qawalangin.com
City Contact:
Ben Knowles
bknowles@ci.unalaska.ak.us

In-Person Meetings:
The public may schedule an appointment to discuss the plan in person during the comment period from 9:00 AM to 5:00 PM.
To schedule an in person meeting please contact Fire Department Administrative Assistant Angela Mountain at
fireadmin@ci.unalaska.ak.us

Pre-Scheduled In-Person Meeting:
Will be held on Tuesday, 12/03/2024 at Fire Station 1 from 3:00PM to 6:00PM

D.4 Public Comment

Following the public meeting the public was provided a final opportunity to provide written comment prior to sending the draft plan to the Alaska State Hazard Mitigation Officer. The Draft Plan was available for viewing from December 2, 2024 through December 6, 2024 at City Hall, Fire Station 1, and online at the City's website.

Appendix E – Prioritization

It is acknowledged that there will be many projects that should be undertaken but there is a limited amount of resources available. Given that, projects must be prioritized to determine how to allocate resources.

The prioritization will be done by the planning committee and will be based on several criteria including:

- Life safety
- Compliance with an existing program/regulation
- Cost Benefit Analysis
- Coordination with existing documents/programs

E.1 Life Safety

Activities that protect human lives will have priority over those that solely protect property.

E.2 Compliance

The failure to comply with existing requirements could have wide ranging consequences such as the ineligibility to participate in funding programs.

E.3 Cost Benefit Analysis

When possible, FEMA's cost-benefit analysis tools will be used to determine a project's cost benefit ratio. Those projects with a higher cost benefit ratio will be given a higher priority. A cost benefit analysis provides a common basis that can be used to compare projects. When calculating a cost benefit ratio, the cost amount includes funds spent by FEMA, state, local, tribal, private, and other dollars. It should include administrative and maintenance costs as well as indirect costs. Examples of costs include:

- Direct expenditures of construction materials
- Costs to develop and administer a new overlay zone
- Increased business operation costs to comply with mitigation requirement

The benefits must be estimated. The calculation includes direct and indirect benefits. Examples of benefits include the losses avoided due to mitigation activities, avoided loss of life, injury, property damage, environmental damage, community disruption and response costs avoided.

E.4 Calculating the Benefit-Cost-Ratio

Cost-effectiveness is determined by comparing the project cost, to the value of damages prevented after the mitigation measure. Because the dollar-value of benefits exceeds the costs of funding the project, the project is cost-effective. This relationship is depicted numerically by dividing the benefits by the costs, resulting in a benefit-cost ratio (BCR). The BCR is simply a way of stating

whether benefits exceed project costs, and by how much. To derive the BCR, divide the benefits by the cost. If the result is 1.0 or greater, then the project is cost-effective. By conducting a benefit-cost analysis, you determine one of two things: either the project is cost-effective (BCR > 1.0) or it is not (BCR < 1.0). If the project is cost-effective, then no further work or analysis needs to be done; there is no third step other than to move the project to the next phase in the approval process. If, however, the project is not cost-effective, then it is not eligible for funding.

FEMA utilizes a computer software program to calculate a project's cost-effectiveness. The following is a technical illustration of how benefit-cost analysis works. There are four key elements to all benefit-cost analyses of hazard mitigation projects:

- an estimate of damages and losses before mitigation
- an estimate of damages and losses after mitigation
- an estimate of the frequency and severity of the hazard causing damages
- the economic factors of the analysis (i.e. discount rate and mitigation project useful lifetime)

If the pre-mitigation damages are frequent and/or severe, then the project is more likely to be cost-effective. Even minor damage that occurs frequently can exceed, over the life of a project, the up-front costs of implementing a mitigation measure. FEMA is trying to maximize its investment in damage reduction by focusing mitigation resources on those projects that have the best chance of making an impact on losses in property and life. Determining cost effectiveness of mitigation projects is of critical importance, therefore, to ensure that FEMA is fulfilling its mission of not just responding to disasters, but also in reducing the economic loss and suffering that they bring.

A project that is integrated into several plans, has gone through the public involvement process will have a higher priority as they reflect the desires of multiple departments and the public. Projects that have been contained within a single plan or has no public involvement may not reflect the wider viewpoint.

The following table shows how the criteria will be considered using a point system to give each project a score. This score will then be used to rank the projects. The department responsible for the project will initially develop the score for the project. The scores will then be evaluated by the Hazard Mitigation Planning Team to ensure that the projects are being consistently scored.

For the purposes of this plan, action items will be given a prioritization of high, medium, or low. A high value represents a score above 72 while a medium is between 37 and 72 and low is 36 or below. For each project, additional factors to be considered can be listed. At their discretion, the Hazard Mitigation Planning Team can evaluate these factors and alter the project's priority. Once the priority has been determined, the action items in order of their priority.

Prioritization of Projects					
Criteria	Weighting	Score			Total Points Weight x Score
		Low 1-3 Possible	Medium 4-6 Possible	High 7-9 Possible	
Life Safety	4	No People at Risk	Fewer than 9 People Affected	More than 10 People Affected	
Compliance with Existing Programs /Regulations	3	Not Needed	Encouraged	Required	
Cost-Benfit	2	No Cost-Benefit Analysis performed or results less than 1	Cost-Benefit between 1 and 2	Cost-Benefit Greater than 2	
Coordination with Existing Plans	1	No Ties to Existing Plans	Mentioned in one or tow plans. Plans without public involvement	Well integrated in Plans. Plans have gone through public input process	

E.5 Potential Funding Sources

Potential funding sources are noted in Appendix B.

Appendix F – Reference

Alaska Disaster Act (AS 26.23.10 to AS 26.23.900)
https://www.touchngo.com/lglcntr/akstats/statutes/title26/chapter23.htm

Alaska Volcano Observatory
https://www.avo.alaska.edu/

City of Unalaska
https://www.ci.unalaska.ak.us/

City of Unalaska and Qawalangin Tribe of Unalaska
Multi-Jurisdiction Hazard Mitigation Plan Update

Unalaska Innovative Readiness Training Report September 2020
https://www.ci.unalaska.ak.us/sites/default/files/fileattachments/mayor_and_city_council/meeting/9570/10a_work_session_-_irt.pdf

Unalaska City School District
https://www.ucsd.net/

Acronyms – Abbreviations

Acronyms/Abbreviations	
°F	Degrees Fahrenheit
ACCIMP	Alaska Climate Change Impact Mitigation Program
ACWF	Alaska Clean Water Fund
ADWF	Alaska Drinking Water Fund
AEA	Alaska Energy Authority
AEEE	Alternative Energy and Energy Efficiency
AFG	Assistance to Firefighters Grant
AHFC	Alaska Housing Finance Corporation
AIDEA	Alaska Industrial Development and Export Authority
AK	Alaska
ANA	Administration for Native Americans
ANCSA	Alaska Native Claims Settlement Act
ARC	American Red Cross
AVEC	Alaska Village Electric Cooperative
AVO	Alaska Volcano Observatory
BIA	Bureau of Indian Affairs
CCP	Citizen Corps Program
CDBG	Community Development Block Grant
CFR	Code of Federal Regulations
CFP	Community Forestry Program
CGP	Comprehensive Grant Program
City	City of Unalaska
CUTOD	Community & Utility Towers Overlay District
CWSRF	Clean Water State Revolving Fund
DCCED	Department of Commerce, Community and Economic Development
DCRA	Division of Community and Regional Affairs
DEC	Department of Environmental Conservation
Denali	Denali Commission
DHS	Department of Homeland Security
DHS&EM	Division of Homeland Security and Emergency Management
DHSS	Department of Health and Social Services
DGGS	Division of Geological and Geophysical Survey
DMA 2000	Disaster Mitigation Act of 2000
DMVA	Department of Military and Veterans Affairs
DNR	Department of Natural Resources
DOE	Department of Energy
DOF	Division of Forestry
DOI	Division of Insurance
DOL	Department of Labor
DOT/PF	Department of Transportation and Public Facilities
DPS	Director of Public Safety
DSS	Division of Senior Services
EOC	Emergency Operations Center
EMPG	Emergency Management Performance Grant
EPA	Environmental Protection Agency

EQ	Earthquake
ER	Erosion
EWP	Emergency Watershed Protection Program
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FL	Flood
FMA	Flood Mitigation Assistance
FP&S	Fire Prevention and Safety
ft	Feet
FY	Fiscal Year
g	Gravity
GF	Ground Failure
GIS	Geospatial Information System
Hazus-MH	Hazard United States – Multi-Hazard Software
HMA	Hazard Mitigation Assistance
HMGP	Hazard Mitigation Grant Program
HMP	Hazard Mitigation Plan
HSGP	Homeland Security Grant Program
HUD	Housing and Urban Development
IHBG	Indian Housing Block Grant
IHLGP	Indian Home Loan Guarantee Program
INAP	Indian And Native American Programs
IRS	Internal Revenue Service
Kts	Knots
LEPC	Local Emergency Planning Committee
M	Magnitude
MAP	Mitigation Action Plan
MPH	Miles Per Hour
msl	Mean Sea Level
NAHASDA	Native American Housing Assistance and Self Determination Act
NFIP	National Flood Insurance Program
NIMS	National Incident Management System
NOAA	National Oceanic and Atmospheric Administration
NRF	National Response Framework
NRCS	Natural Resources Conservation Service
NWS	National Weather Service
OC	Ounalashka Corporation
PCR	Parks Culture & Recreation Center
PDM	Pre-Disaster Mitigation
RL	Repetitive Loss
RFC	Repetitive Flood Claim
SAFER	Staffing for Adequate Fire and Emergency Response
SBA	U.S. Small Business Administration
SHMP	Alaska State Hazard Mitigation Plan
SHSP	State Homeland Security Program
Stafford Act	Robert T. Stafford Disaster Relief and Emergency Assistance Act

Tribe	Qawalangin Tribe of Unalaska
UCP	City of Unalaska's Comprehensive Plan, 2020
UMA	Unified Mitigation Assistance
US	United States
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USGS	United States Geological Survey
WARN	Warning, Alert, And Response Network
WX	Weather

CITY OF UNALASKA
UNALASKA, ALASKA

RESOLUTION 2025-18

A RESOLUTION OF THE UNALASKA CITY COUNCIL TO PLACE ON THE 2025 GENERAL ELECTION BALLOT AN ADVISORY VOTE ON REPEALING ORDINANCE 2024-15

WHEREAS, Ordinance 2024-15 amended Title 14 of the Unalaska Code of Ordinances to regulate the use of off-road or all purpose vehicles within city limits;

WHEREAS, the primary purpose of Ordinance 2024-15 is to allow all purpose vehicles, or "APVs", to be used on City of Unalaska roads, which was previously prohibited by UCO 14.08.020(B); and

WHEREAS, upon the Mayor's recommendation, the City Council has determined that City of Unalaska voters should advise on whether the City Council should repeal Ordinance 2024-15.

NOW THEREFORE BE IT RESOLVED by the Unalaska City Council that the City shall submit the following proposition to the qualified voters of the City at the regular election to be held in the City on October 7, 2025:

PROPOSITION NO. 1

AN ADVISORY VOTE ON WHETHER THE CITY COUNCIL SHOULD REPEAL ORDINANCE 2024-15

Should the City Council repeal Ordinance 2024-15, which authorizes the use of all purpose vehicles on public roads in the City of Unalaska?

PROPOSITION NO. 1

O YES

O NO

"Yes" means that the City Council should repeal Ordinance 2024-15. Therefore, the City Council should prohibit the use of all purpose vehicles on public roads.

"No" means that the City Council should NOT repeal Ordinance 2024-15. Therefore, the City Council should not prohibit the use of all purpose vehicles on public roads.

BE IT FURTHER RESOLVED that the ballot proposition contained in this resolution is an advisory vote only. It shall advise the City Council of the voters' preference whether the City Council should repeal Ordinance 2024-15. No legislation or code amendment shall be automatically enacted or affected by the advisory vote.

PASSED AND ADOPTED by a duly constituted quorum of the Unalaska City Council on March 11, 2025.

_____
Vincent M. Tutiakoff, Sr.
Mayor

ATTEST:

_____
Estkarlen P. Magdaong, CMC
City Clerk

MCS
MUNSON, CACCIOLA & SEVERIN, LLP

MEMORANDUM

TO: Mayor Vincent M. Tutiakoff, Sr.
Unalaska City Council

FROM: Charles A. Cacciola

RE: Ballot Question on APV Ordinance Repeal

DATE: March 4, 2025

This memo explains proposed Resolution No. 2025-18, which calls for an advisory ballot question on repeal of Ordinance 2024-15. It also explains the alternative option for a binding ballot question.

Background

Council adopted Ordinance 2024-15 on January 14, 2025. Before the ordinance was adopted, all-terrain vehicles/all purpose vehicles ("APVs") were prohibited on public roads in Unalaska. In 2022, state regulations were amended to allow all-purpose vehicles to operate on public roadways *unless* prohibited by local ordinance. The primary purpose of Ordinance 2024-15 was to allow APVs to be used on public roads by removing the code's prohibition on that use. Ordinance 2024-15 adopted other code changes to implement this primary purpose, such as changing the code definition "all-terrain vehicles" to "all purpose vehicles" and updating the minor offense fine schedule.

Mayor Tutiakoff vetoed Ordinance 2024-15. His veto states that he would support a resolution to put this code amendment on the ballot at the next municipal election. If council did not override his veto, the ballot question would be whether the city should adopt the code amendments set forth in Ordinance 2024-15. If council did override his veto, the ballot question would be whether Ordinance 2024-15 should be repealed. The mayor's veto was overridden by a 5-1 vote.

Resolution 2025-18

Resolution 2025-18, if adopted, would put an advisory question on the ballot at the City's October 2025 regular election. As an advisory question, the election result is not binding. The question would go on the ballot asking City of Unalaska voters if they think that *council* should repeal Ordinance 2024-15 and therefore continue to prohibit APVs on public roads.

The result of the election would not change any ordinance or code provision. The result is effectively a formal poll: City voters give their collective opinion as to whether APVs should be allowed on public roads in Unalaska. There is no legal effect regardless of the election results. It would be up to council to act (or not act) as it deems appropriate based on the election results. If council decides that the city code regarding APVs should change

because of the election result, council would need to adopt an appropriate ordinance to make those changes.

One advantage to an advisory question is that it allows council to "fine-tune" any code changes *if council decides to amend the code following the election*. While Ordinance 2024-15 and Resolution 2025-18 focus on whether APVs should be allowed on public roads, Ordinance 2024-15 enacted additional code changes. For example, if council decides to *prohibit* APVs on public roads based on the election results, council could still keep the definition change from "all-terrain vehicles" to "all purpose vehicles" that was effected by Ordinance 2024-15.[1]

Under Resolution 2025-18, the question that would go on the 2025 regular election ballot is advisory. Even if 99% of city voters favor repeal, council could decide that Ordinance 2024-15 should stay on the books. And if 99% of city voters favor allowing APVs on public roads, council could still prohibit it. The purpose of an advisory vote is so that council knows where the voting public stands on an issue. Obviously, the idea is that council's policy-making will be informed by voters' opinions but, what, if any, code changes should be made in response is entirely at council's discretion and would require council to adopt an ordinance to create those code changes.

A Binding Ballot Question

A city ballot can have a binding question regarding changes to the city code. This would require council to adopt an ordinance, which would have two distinct parts.

The first part of the ordinance would be a code ordinance. This first part would state the changes to the city's ordinances the same as other ordinances that amend the city code. However, these code amendments would *not* be effective when council passes the ordinance. The ordinance would state that the code amendment contained in the ordinance is not effective *until ratified by a majority of the city's voters*.

The second part of this ordinance would relate to obtaining voter ratification at an election. Essentially, it would say that the question of whether the city should adopt the code changes contained in first part of the ordinance will go on the October 2025 ballot. If a majority of the votes cast are "Yes," then the code changes are automatically effective upon certification of the election result. If the majority of votes cast are no, the code changes do not go into effect.

Please let us know if you have any further questions regarding this matter.

[1] Our opinion is that this definition should stay in the code because it mirrors the state law definition. Regardless of whether the city allows or prohibits APVs on public roads, it is better for terms defined in the city's ordinances to have the same definitions as are given in state law.