

**ASSEMBLY STANDING COMMITTEE
PUBLIC WORKS AND FACILITIES COMMITTEE
THE CITY AND BOROUGH OF JUNEAU, ALASKA**

July 29, 2019 12:00 PM
Assembly Chambers - Municipal Building

I. CALL TO ORDER

II. APPROVAL OF AGENDA

- A. PWFC Agenda

III. APPROVAL OF MINUTES

- A. July 1, 2019 - Regular Meeting Minutes

IV. PUBLIC PARTICIPATION on NON-AGENDA ITEMS

V. ITEMS FOR ACTION

- A. Transfer Request: Salmon Creek Water Plant Improvements
- B. Amalga Harbor Float Funds - ADF&G
- C. Heart\$mart funding request

VI. INFORMATION ITEMS

- A. JRES Implementation CIP Fund Allocations
- B. JCOS 2020 Recommendations for Renewable Energy Strategy

VII. CONTRACTS DIVISION ACTIVITY REPORT

- A. June 28 - July 24, 2019 Contracts Division Activity Report

VIII. ADJOURNMENT

- A. Next Meeting is Scheduled for August 26, 2019

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

Public Works & Facilities Committee

Monday, July 29, 2019

12:00 – 1:00 PM

Assembly Chambers

I. Call to Order

II. Approval of Minutes

A. July 1, 2019 – Regular Meeting

III. Public Participation on Non-Agenda Items

IV. Items for Action

A. Transfer Request: Salmon Creek Water Plant Improvements

B. Amalga Harbor Float Funds – ADF&G

C. Heat\$mart funding request

V. Information Items

A. JRES Implementation CIP Fund Allocations

B. JCOS 2020 Recommendations for Renewable Energy Strategy

VI. Contracts Division Activity Report

A. June 28, 2019 – July 24, 2019

VII. Adjournment – Next Meeting is scheduled for:

August 26, 2019 - Assembly Chambers

**PUBLIC WORKS AND FACILITIES COMMITTEE
REGULAR MEETING – ASSEMBLY CHAMBERS
JULY 1, 2019 – 12:00 NOON**

I. CALL TO ORDER

Meeting called to order at 12:05 PM

Members Present: Ms. Hale, Mr. Bryson, Ms. Triem, Mr. Edwardson, Mr. Jones, Ms. Hughes-Skandijs – Assembly Members also present.

Staff Present: Mike Vigue, Janet Sanbei, Mila Cosgrove, Erich Schaal, Gary Gillette, Carl Uchytel, Lisa EaganLagerquist, Jill Maclean, Eileen Gallion, Alan Steffert, Bob Bartholomew, Jeff Rogers, and Patty Wahto/Catherine Fritz by phone.

II. APPROVAL OF MINUTES

A. June 10, 2019 – Regular Meeting

Mr. Edwardson moved to adopt minutes as written. Motion passed

III. PUBLIC PARTICIPATION on NON-AGENDA ITEMS

None.

IV. ITEMS FOR ACTION

A. Downtown Wayfinding Grant Appropriations and Transfers

Mr. Vigue gave some brief background information as to the grants application and purpose. He explained that the Committee approved staff to pursue the grants in August 2018. He asked the Committee to approve the appropriation of the grants and CIP fund transfers in order to meet the match of the grants.

Discussion ensued.

Ms. Triem moved the appropriation of the 2 grants as outlined in the memo and the transfer of funds as outlined in the memo to the full Assembly for approval and asked for unanimous consent.

Motion passed.

B. 1% for Art Selections, JNU North Terminal Project

Ms. Wahto presented the packet memo and some background regarding the 1% for Art Selection process and the need for the Committee to forward to the Assembly the request for approval of the artists discussed in the memo.

Discussion ensued.

Mr. Edwardson moved PWFC forward the 1% for Art recommendation from the Airport Board to the Assembly and requested unanimous consent.

Motion passed.

C. Centennial Hall/New JACC

Ms. Hale gave a brief background explanation of this project and its purpose.

Mr. Vigue stated the additional information to the packet is the same as was issued at the June 25, 2019, meeting. It has been rearranged to be in priority order based on public input. There has been a lot of discussion about the needs of the building and the costs for these needs. It has been broken down in order to approve smaller portions up to as large a project as is necessary.

Discussion ensued.

Members asked for a potential time-line for construction and the possibility of promoting the building even when it is closed.

Mr. Edwardson moved the Centennial Hall project be forwarded to the Committee of the Whole for discussion.

Ms. Hale amended the Motion to forward both full Centennial Hall rebuild proposals to the Committee of the Whole (COW), with a specific recommendation the COW consider the revised second proposal estimate through item 4, with a budget of \$4, 157,00, with funding from a Government Obligation Bond, with a Ballot Measure to go on the October election.

Ms. Triem and Mr. Edwardson objected to Ms. Hale's modification.

Ms. Hale gave an explanation for her modification.

Mr. Bryson – No

Ms. Hale – Yes

Ms. Triem – No

Mr. Edwardson – No

Ms. Hale's amendment to Mr. Edwardson's motion failed.

Mr. Edwardson restated his motion, he moved that Public Works and Facilities Committee forward the discussion on the Centennial Hall Renovation to the Committee of the Whole for discussion, and asked for unanimous consent.

No objection – motion passed.

Mr. Bryson moved the Public Works and Facilities Committee moved the current JACC proposal to the Committee of the Whole for discussion and asked for unanimous consent.

No objection, Motion passed.

V. INFORMATION ITEMS

A. Pedestrian Stanchions on South Franklin Street

Mr. Vigue gave a short explanation of the purpose for the stanchions along South Franklin Street. He stated this is a pilot program to help alleviate pedestrian traffic in the South Franklin right-of-way. The ultimate goal is to help car traffic move better and pedestrian safety along the corridor.

Discussion ensued.

B. Archipelago Update

Mr. Uchytel gave a brief update of the Archipelago project.

Discussion ensued.

Mark Morris, Morris Engineering, gave some explanation as to whether charging stations would be useful to small vehicles as well as large vehicles.

C. Eaglecrest Summer Operations Development Plan

Dave Scanlan, Eaglecrest General Manager, briefed the Committee as to some ideas for future summer revenue operations plans at Eaglecrest.

Discussion ensued.

VI. CONTRACTS DIVISION ACTIVITY REPORT

No questions from the Committee

VII. ADJOURNMENT

Meeting adjourned at 1:14 PM. The next meeting will be July 29, 2019, 12:00 PM in the Assembly Chambers.



Engineering & Public Works Department

155 South Seward Street

Juneau, Alaska 99801

Phone: 907-586-0800 | Fax: 907-463-2606

DATE: July 24, 2019

TO: Michelle Hale, Chair
Public Works and Facilities Committee

FROM: John Bohan, Chief CIP Engineer and Water Superintendent

SUBJECT: Transfer Request: Salmon Creek Water Plant Improvements

Staff requests a transfer of \$80k of Water Utility funds from the Douglas Highway Water replacement project to provide the additional CBJ grant match funds needed to complete the remaining work on the Salmon Creek Filter plant improvements.

The additional funding is needed to cover costs due to the project coming in approximately \$200k over the engineers estimate and unplanned costs that were not eligible for grant funding. The project was partially funded by an Alaska Department of Environmental Conservation (ADEC) Municipal Matching Grant which requires a 40% match. This project is completing the plant upgrade work not completed during the original Salmon Creek Filter Plant project due to budget concerns. The work will bring the Salmon Creek controls and equipment to 21st Century technology.

The transfer of \$80k of Water Utility funds from the Douglas Highway Water replacement CIP will not impede the completion of the current project, with approximately \$520k of contingency funds remaining to cover any additional work and / or unforeseen conditions in the project.

Transfer detail:

<u>Transfer From</u>	<u>Amount</u>	<u>CIP End Balance</u>
W75-054 – Douglas Hwy Water Replacement	\$80k	\$520k

<u>Transfer to</u>	<u>Amount</u>	<u>CIP End Balance</u>
W75-055 – Salmon Creek Filtration Project	\$80k	\$390k **

**300k of the balance is remaining Grant funding

Recommendation

Staff requests the above transfer be forwarded to the Full Assembly for approval.



Port of Juneau

155 S. Seward Street • Juneau, AK 99801
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From: *Carl J. Uchytel*
Carl Uchytel, P.E.
Port Director

To: Public Works & Facilities Committee

Via: Docks & Harbor Board

Date: July 24th, 2019

Re: Amalga Harbor Fish Cleaning Float – ADFG Grant Agreement

1. The Docks & Harbor Board has completed additional public outreach consistent with the direction of the Public Works & Facility Committee, outlined herein, and requests authority to accept additional ADFG grant funding.
2. At its December 20th meeting, the Docks & Harbors Board referred approval of accepting a \$230K ADFG grant and recommends the Assembly adopt Ordinance 2018-11(Y). At the January 7th Assembly meeting, the City Manager referred Ordinance 2018-11(Y) to the PWFC. This ordinance would appropriate Alaska Department of Fish and Game grant funding to the Manager up to \$230,000 as Funding for Phase II of the Amalga Fish Cleaning Station Project. At the January 14th PWFC meeting, after hearing testimony:

“Ms. Hale moved to advise the Assembly to postpone the Ordinance until after Docks and Harbors has had a chance to have a public meeting to discuss this further both with the public and Fish and Game.”
3. The City and Borough of Juneau owns and operates the Amalga Harbor Launch Ramp facility constructed with local match funds and Alaska Department of Fish and Game, Division of Sport Fish, Sport Fish Access funds. The facility is a high use area and users have identified a conflict at the facility between fish cleaning and launch/retrieve activities. To address this issue, an agreement was executed November 21, 2014 between the Alaska Department of Fish and Game, Division of Sport Fish and the City and Borough of Juneau. The goal of the agreement was:

“To determine the most appropriate and feasible floating fish cleaning station that would service boaters at Amalga Harbor, and construct the station, if feasible. Traffic flow and boat/vehicle congestion in the area of the load and lunch ramps may also be reviewed to determine if there are any other feasible solutions that may help. This agreement covers the feasibility study, preliminary design and permitting, if applicable (Phase I) of the Amalga Harbor Fish Cleaning Float project. This agreement will be amended to add funds in order to complete Phase II, construction if a feasible solution is vetted through the Phase I process.”

4. In November 2014, ADF&G provided \$50K for preliminary feasibility and planning purposes. The additional \$230K proposed under amendment #1 to the original grant agreement would cover the final design, permitting, bidding, and construction of improvements at Amalga Harbor.
5. A public input meeting was held on June 22nd, 2015 and Feasibility Study was completed by Docks & Harbors staff on December 16, 2015. Upon review of the Feasibility Study, the Board elected to evaluate the usage at Amalga Harbor following the 2017 completion of the Statter Harbor Launch Ramp to determine if improvements at Amalga Harbor were still warranted. A public meeting, held on October 22nd, 2018, yielded a recommendation that an extension to the existing Amalga Harbor boarding float was desired as well as support for a navigation aid marking a boat hazard.
6. Following the direction from the January 14th PWFC, Docks & Harbors contracted with its civil engineering term consultant to conduct additional public outreach and review the previous efforts conducted by in-house Docks & Harbors staff. The ADFG grant coordinator also concurred with this direction and indicated new grant money would be provided for the additional work. The consultant engineers completed their review and led a public meeting at the Mendenhall Valley Library on April 2nd. Over 30 members of the public attended that meeting with the vast majority supporting the “no improvement option” with many recommending removal of the existing fish cleaning station.
7. Following the April 2nd meeting, the Docks & Harbors Board evaluated the question of infrastructure improvement at Amalga Harbor for the public good at practically all of its Operations-Planning Committee and Regular Board meetings in April, May and June. The Board heard testimony from residents of the Huffman Cove/Amalga Harbor community as well as from harbor patrons who regularly use the facility.
8. At the June 27th Regular Docks & Harbors Board, the following motion was approved:

TO MOVE FORWARD WITH THE CONSTRUCTION OF THE DOCK EXTENSION FOR THE PURPOSE OF ALLEVIATING THE CROWDING AND REMOVE THE FISH CLEANING STATION THERE CURRENTLY AND PROVIDE SIGNAGE AND WORK ON CREATING AN ENFORCEMENT FOR THE ABILITY TO FINE PEOPLE FOR UNAUTHORIZED FISH CLEANING.
9. It is recommended that the PWFC approve the request to accept the \$230K in ADFG grant funding to pay for the additional study completed and to advance the design as reviewed by the Docks & Harbors Board.

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Copy: Alaska Department of Fish & Game - Division of Sport Fish

Accelerating Renewable Heating in Juneau Residences

July 24, 2019

PROJECT REQUEST. Alaska Heat \$mart, a Juneau nonprofit, seeks CBJ funding of \$147,190 for FY20 to assist Juneau households in reducing energy costs. This program will provide critical data and experience needed to successfully accelerate heat pump adoption in Juneau.

The program seeks to make Juneau housing more affordable while helping to implement the Juneau Renewable Energy Strategy (JRES). Air source heat pumps (ASHP) are far more efficient than traditional oil or electric heating systems, and many Juneau residents can already attest to the savings and reliability of this proven technology. Every unit of heat from a heat pump costs 40-70% less than the oil or electric resistance heat it replaces.

The benefits of converting to heat pumps are potentially substantial, but it will take consumer assistance, financing, and cost-reducing efficiencies to make ASHP the default heating choice in new construction and retrofits. This program's advisory services will help overcome the barrier of uncertainty and confusion about energy efficiency and heat pump options.

PROJECT DEVELOPMENT. Work on an action plan began in spring 2018 with a series of public meetings and workshops on implementing the JRES. JEDC's Renewable Energy Cluster Working Group continued to develop the project. A steering committee created in December included JCOS, JEDC, AEL&P, Renewable Juneau, and the building industry. In May 2019 this group established Alaska Heat \$mart as an Alaska nonprofit corporation.

Consultant Pat Keegan is assisting in developing the program. A variety of experts and organizations, including energy and housing specialists, builders, CBJ staff, AHFC, THRHA, local heat pump installers, and local financial institutions have provided input.

OBJECTIVES. Alaska Heat \$mart targets three primary outcomes:

1. Facilitate installation of heat pumps to create initial economic benefits of scale and expertise, thereby supporting broader adoption.
2. Use first-year expertise and energy savings data to refine the optimum approach and broaden funding and loan financing options for a long-term program that will deliver the greatest benefit to Juneau for reduced heating costs and carbon emissions.
3. Provide data needed to more clearly identify the impact on electrical demand and infrastructure of converting Juneau heating systems to heat pumps.

PROJECT APPROACH. The project design is informed by lessons learned from similar programs in New England, the Pacific Northwest, and other areas, and includes the following key functions in FY20:

1, Public Engagement. Program success will require making Alaska Heat \$mart and its offerings visible in the community, so we will create a strong media and web presence to introduce

Alaska Heat \$mart's services. An Energy Advisor will provide consumers with "one-stop" assistance to determine a housing unit's suitability for ASHP conversion, recommend an effective approach to conversion, provide a uniform bid sheet to make it easier for homeowners to evaluate competing bids, and follow-up on operation.

Alaska Heat \$mart will offer water-efficiency kits to residents who sign up for an energy assessment and consultation. Domestic hot water is the second greatest use of energy in residences, and reduced water consumption in residences provides additional savings to the CBJ water and wastewater utilities. The energy advisor will deliver the water efficiency kit and act as a consultant to the homeowner, providing information and assistance in all stages of decision-making, financing, installation and operation of heat pumps.

2. Data Collection: A key deliverable will be data gained from all aspects of the program. This data will assist in tailoring the program to Juneau realities, confirming costs and benefits, building a compelling case for future funding and financing options, establishing successful tools for broad-based Juneau adoption, and determining net effects on Juneau's existing electrical infrastructure.

3. Program Management: The board of Alaska Heat \$mart, which includes representatives from JCOS, AEL&P, JEDC, Renewable Juneau, and Juneau builders and architects, will actively assist and oversee the program. As required and budget allows, the board will hire or contract with a program manager.

ALASKA HEAT \$SMART BUDGET SUMMARY (10/01/19-6/30/20):

Personnel Expenses	\$	87,340.00	59.3%
Professional Services		22,250.00	15.1%
Advertising & Promotion		15,000.00	10.2%
Operating Expenses		13,600.00	9.2%
Program Equipment & Supplies		9,000.00	6.1%
TOTAL	\$	147,190	100.0%

- Original budget request (\$180,000) assumed a full fiscal year.
- Budget assumes additional start-up assistance from EESI and consultant Pat Keegan, and substantial volunteer time from Alaska Heat \$mart board members.
- A proposal to the federal Dept. of Energy is being prepared which would provide funding for a 3 year, \$625,000 project. Other funding options are also being explored.

**Engineering & Public Works Department**

155 South Seward Street

Juneau, Alaska 99801

Phone: 907-586-0800 | Fax: 907-463-2606

DATE: July 29, 2019

TO: Michelle Hale, Chair
Public Works and Facilities Committee

FROM: Mike Vigue, Director
Engineering & Public Works

SUBJECT: JRES Implementation CIP

The 2020 Capital Improvement Program approved by the Assembly contained a project for \$250,000 titled Juneau Renewable Energy Strategy (JRES). There were several reasons why I asked for this to be included in the 2020 CIP. The first was Resolution 2808, approved by the Assembly on February 12, 2018, adopting the Juneau Renewable Energy Strategy (JRES). As you know, the JRES contains four broad strategies for achieving the recommended target of 80% of all Juneau's energy use to be provided by renewable sources by 2045. One of those strategies is "reduce Juneau's dependence on fossil fuels for transportation". This strategy aligns with the Assembly's Sustainable Community goal, specifically Implementing Action D, "Develop steps to shift public and private transportation toward renewable energy sources".

Plans: CBJ lacks an electric vehicle (EV) plan that identifies EV charging infrastructure needs. Questions regarding how many, locations, and types of charging stations, and fee structures for those EV charging stations need to be answered. In addition to charging infrastructure, dedicated parking spots and enforcement need to be addressed as parking spaces with EV charging stations need to be dedicated to EVs. Working with CBJ Community Development and JCOS, a scope of work will be developed and a consultant hired to complete the plan. Additionally, the Juneau Climate Action and Implementation Plan was completed in 2011 using data collected in 2008 and 2010. Updating this plan to reflect current GHG emission and energy use inventories will provide better information for strategy setting and decision-making. This is consistent with the Assembly's Sustainable Community goal Implementing Action E, "Develop and implement/update a climate change impact and mitigation plan".

I am estimating that \$45,000 should be sufficient funding from the CIP to hire a consultant to engage the public and complete the EV plan and \$5,000 for the update to the Juneau Climate Action and Implementation Plan.

Engineering staff time is always charged to CIP projects. At this time, I do not have any staff person with assigned responsibilities for sustainability issues. When engineering staff work to support efforts related to sustainability and renewable energy it is always a struggle to identify appropriate CIP projects to charge. An example is our recent success

securing FTA grants for electric buses to replace the aging diesel buses. FTA applications and VW settlement fund applications require a substantial time investment to complete. The results we have seen are compelling, three FTA grants for electric buses totaling more than \$4.5 million and we are expecting success with our recent VW settlement grant application. I am estimating that \$50,000 for various staff to work on these efforts and coordination with the multitude of advocacy groups in town who are involved in sustainability and renewable resources is a good investment that will provide benefits going forward.

Overall, I believe Engineering can use \$100,000 from the \$250,000 that was programmed in the JRES Implementation for these efforts. Engineering staff should be involved in supporting these efforts and must have appropriate financial resources available to make that successful. They are important pieces for the CBJ to move forward with, especially as EV adoption rapidly continues in Juneau.



**Juneau Commission
on Sustainability**

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155 S. Seward Street • Juneau, AK 99801

To: Michelle Bonnet Hale, Chair, CBJ Assembly Public Works Committee
Rorie Watt, CBJ City Manager
Mike Vigue, Director, CBJ Engineering and Public Works Department

From: Duff Mitchell, Chair Juneau Commission on Sustainability

Subject: JCOS 2020 “Go Forward” Recommendations on Implementation of the Juneau Renewable Energy Strategy

Date: July 16, 2019

Dear Chair Bonnet Hale, Manager Watt, and Director Vigue,

Please find attached to this transmittal memo background information and recommended priorities for implementation of the Juneau Renewable Energy Strategy in FY 2019/2020. This resulted from a substantial number of hours of research, planning and discussion by the JCOS Energy Committee. Their recommendations were reviewed and refined by the JCOS body with the final recommendations unanimously approved at our July 10, 2019 meeting.

If you have any questions, I am available to facilitate discussion with our Energy Committee.

We appreciate your consideration of our recommended requests.

Duff Mitchell
Chair



Juneau Commission on Sustainability

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To: Michelle Bonnet Hale, Chair, CBJ Assembly Public Works Committee
Rorie Watt, CBJ City Manager
Mike Vigue, Director, CBJ Engineering and Public Works Department

From: Duff Mitchell, Chair Juneau Commission on Sustainability

Subject: JCOS 2020 “Go Forward” Recommendations on Implementation of the Juneau Renewable Energy Strategy

Date: July 15, 2019

EXECUTIVE SUMMARY

This memo summarizes the Juneau Commission on Sustainability’s (JCOS) 2019-2020 priority recommendations to the CBJ Assembly for implementing the Juneau Renewable Energy Strategy (JRES) in 2019-2020, plus it provides a snapshot of recent and ongoing actions and additional suggestions under the four JRES strategies.

The JRES identifies transportation and space heating as Juneau’s largest users of fossil fuels. In each area, there are major opportunities for Juneau residents to reduce costs, create new economic opportunities, and keep more money in the local economy. The JRES “Implementation” section also notes the importance of building on existing community efforts. Therefore JCOS recommends two priorities for FY 2020 funding:

1. **Support and fund Electric Vehicle planning and promotion.** This action addresses two of the JRES strategies: *implement a CBJ energy management program* and *reduce Juneau’s dependence on fossil fuels for transportation*. Increasing EV adoption will also reduce operating and maintenance costs for the CBJ and for individuals and businesses.
2. **Support and fund the “Juneau Residential Air-Source Heat Pump Conversion Project”.** This action addresses the JRES strategy to *reduce Juneau’s dependence on fossil fuels for space heating*. Heat pumps provide one of the biggest bangs for the buck in improving energy efficiency, cost savings, and reducing GHG emissions

in Juneau. This project is designed to reduce barriers to greater adoption by consumers.

BACKGROUND ON JUNEAU RENEWABLE ENERGY STRATEGY

The Juneau Renewable Energy Strategy (JRES), adopted February 2018, recommends the following actions to move forward in implementing the identified priority strategies (see Appendix 1 for a full description of these actions):

1. Adopt a community target of transforming Juneau's energy use to 80% renewables by 2045.
2. Develop action plans for each of the strategies identified and begin implementing priority near-term actions using the priority action list as a guide to direct early efforts.
3. Implement a CBJ energy management program.
4. Monitor total community energy use by updating the Juneau Climate Action and Implementation Plan (JCAIP), Energy and GHG Emissions Inventory.
5. Provide funding direction and CBJ staff allocations.
6. Review progress annually.

This memo addresses Action # 2, above, which recommends a two-part approach; fully develop action plans for each of the four broad strategies identified in Section 5.2 of the JRES, and at the same time take near-term priority actions in each area.

It is recognized by JCOS that some actions are already underway to deliver the strategies and by the CBJ other parties in response to individual or group initiatives, market forces, and grant funding opportunities (see below). In the past, the CBJ has undertaken efforts that are consistent with the JCAIP and the JRES, such as installing cost-saving ground-source heat pumps at the Juneau Airport and the Mendenhall Valley library. During the past year, CBJ has increasingly looked to the JRES for guidance on how to reach the JRES goal of 80% renewable energy by 2045.

It is also important to note that while the City and Borough of Juneau (CBJ) is a key player, the JRES identifies a wide range of individuals, businesses, and organizations that must be involved in order to achieve the significant target of 80% renewable energy by 2045. Both the JCAIP and the JRES indicate that the CBJ might participate in, or support, public-private-nonprofit partnerships that address, for example, adoption of EV's, or the conversion of existing housing to more energy-efficient space heating. The CBJ can also lead by example by taking actions to manage and reduce its own energy usage more effectively. It can also create incentives and reduce barriers to private actions that contribute to the goals of the JRES. And the CBJ represents the public's interests when it identifies new energy demands that lead to the need for new energy sources.

JRES IMPLEMENTATION STRATEGIES - THE FOUR BOXES:

The Chair of the Assembly Public Works and Facilities Committee has been developing a framework to review actions for the implementations of JRES. This is a depiction of the four strategy areas – the diagram has been informally named ‘the four boxes’ – see below.

The four strategy boxes obviously overlap and interconnect. For example, the CBJ’s actions to manage its own energy use can reinforce or support community-wide efforts related to shifting transportation and space heating away from dependence on fossil fuels.



Draft figure by Michelle Hale, Assembly Member, 5-29-19

A summary of work that has already begun in each of these four strategy areas can be found below.

Strategy A. Implement CBJ Energy Management Program**Ongoing/recent activities**

- Addition of several EVs (Chevy Bolts) to the city small vehicle fleet.
- Review of opportunities for fleet consolidation and electrification
- Application for federal funding and purchase of electric buses and support infrastructure for Capital Transit.
- 2020 CIP funding for bus charging planning: \$150K
- JCOS interviews of CBJ departments about their energy use and energy management (spring, 2018).
- JCOS 2020 CIP recommendations to develop a tracking system to monitor and report CBJ energy use and costs, and to benchmark energy use in CBJ buildings and facilities and develop a plan for audits and recommissioning.

Recommendations

- Develop a CBJ energy management program.

As recommended in the JRES, and by JCOS, this would enable CBJ to systematically track its energy use and costs, identify and prioritize energy-saving actions for management and funding decisions, institute energy-efficient practices and procedures across all city departments, measure improved energy performance, and report to the community. The JRES points to typical annual energy cost savings of 1 – 2.5% possible through systematic energy management programs.

Strategy B. Reduce Juneau’s Dependence on Fossil Fuels for Space Heating**Ongoing/recent activities**

- JCOS met with Building Code Advisory Committee to begin discussions about adopting the latest energy code (spring 2018).
- JCOS convened two public sessions on space heating (spring 2018) and identified energy efficiency and electrification of space heating as major opportunities.
- The JEDC Renewable Energy Cluster Working Group, from fall 2018 to spring 2019 brought together a wide range of organizations to discuss options for accelerating air-source heat pump adoption, leading to the development of a pilot project and a new non-profit, Alaska Heat\$mart.
- This community stakeholder group requested \$225,000 CBJ funding for heat pump conversion pilot project (Feb. 2019), and reduced request to \$180,000 (March 2019).

Recommendations

- Provide funding for the “Juneau Residential Air-Source Heat Pump Conversion Project” (see **Appendix 2**). Heat pumps provide one of the biggest bangs for the buck in improving energy efficiency, cost savings, and reducing GHG emissions in Juneau. This project is designed to reduce barriers to greater adoption by providing consumers with information about options, developing easy financing, and compiling data that can be used to develop a long-term program.

Strategy B continued:

- Develop an action plan with a target date for implementation for supporting energy efficiency in public buildings and businesses.
- Begin the process with a target date to update energy efficiency provisions in the CBJ building code.
- Develop and promote a higher energy efficiency standard for buildings heated with electric resistance.
- CBJ building permits should provide new information on, and promote, energy efficiency options where relevant.

Strategy C. Reduce Juneau's Dependence on fossil fuels for transportation**Recent/ongoing activities**

- Funding and installation of public EV chargers through public/private/nonprofit partnership.
- CIP funding for EV chargers
- Staff identification of, and planning for, public EV charging opportunities in new capital projects (e.g. Valley Transit Center).
- Electrification of CBJ bus and small vehicle fleets, as noted under Strategy A. Two successful grant applications to acquire electric buses, with JCOS assistance on grant applications.
- Staff and JCOS developed comments on State of Alaska's VW settlement grant program.
- JCOS developed CBJ comments to the USFS on Mendenhall Glacier Recreation Area long-range planning, including electric transportation
- JCOS and staff developed a draft outline of the Juneau EV plan (see Appendix 3).

Recommendations

- The CBJ should initiate a community-wide strategy and planning process for reducing dependence on fossil fuels for public and private transportation.

Many communities and national organizations have detailed plans and programs of assistance that could be of value to Juneau. Juneau should join with and learn from these efforts. Juneau's successful public/private/nonprofit cooperative plan to support EV adoption is a unique strategy that could be shared with other communities. Some useful steps toward the JRES transportation strategy have occurred through a collaboration of CBJ, JCOS, and broader community efforts. Following public sessions organized by JCOS and a public comment period in June-July 2018, some progress was made by the Public Works Committee to develop CBJ policies for EV parking, signage, and EV charger locations. JCOS and staff have been working toward a recommendation on the development of a CBJ EV Plan (**see Appendix 3**). CBJ has begun procurement of one electric bus and progress continues, but an action plan/timeline to convert all buses and paratransit vehicles would be a useful planning document to assist in obtaining grants from federal agencies, court settlements or foundations.

Strategy D. Support Efforts to Provide New Renewable Energy Supplies

Ongoing/recent efforts

- JCOS convened several sustainability sessions on energy demands and supplies in late 2017, moderated by the CBJ City Manager.
- CBJ participated in the 2018 review of, and development of conditions for, the now-defunct sale of AVISTA/AEL&P to HydroOne.
- CBJ began discussions with AEL&P about how to meet capacity and infrastructure needs to provide additional cruise ship shore power.

Recommendations

- The CBJ, through JCOS and other organizations, should help provide the public with information on renewable energy issues and opportunities.

As both a major customer and the public representative of consumers, CBJ's role is to identify community uses of energy and demand and to advocate for these interests. The private electric utility's role is to identify how it will meet Juneau's current and future electrical needs, incorporating community plans and values, such as the JRES.

Appendices

Appendix 1: Exert from Juneau Renewable Energy Strategy - Section 5.7: Recommendations

- 1. Adopt a community target of transforming Juneau ' s energy use to 80% renewable sources by the year 2045. This guideline will provide direction for further planning and action, position Juneau as a national leader in the transition to renewable energy, and support CBJ, business, and government efforts to obtain financing, including grant assistance, for these purposes.*
- 2. Require development of action plans for each of the strategies identified, and to begin implementing priority near-term actions using the priority action list as a guide to direct early efforts. Direct the Juneau Commission on Sustainability, with CBJ staff help, to seek assistance from the public, JEDC, Juneau Chamber of Commerce, and other organizations to develop and obtain support for these plans*
- 3. Direct the CBJ organization to implement a formal energy management program. This recommendation will require all departments and independent boards to identify and monitor energy use and costs; evaluate potential energy savings and implement cost effective efficiency measures; explicitly incorporate energy usage into operational decision making and the Capital Improvement Program (CIP), as recommended in the CBJ Comprehensive Plan and the JCAIP; and implement a Sustainable Indicators program for energy use, consistent with Policy 2.2 of the Comprehensive Plan. A proposal for a CBJ Energy Management Program is included in Appendix E.*
- 4. Direct the CBJ, through the JCOS, to monitor community energy use as a whole, by updating the JCAIP Energy and GHG Emissions Inventory at least every three years. Develop a mechanism to gather fuel sales data.*
- 5. Provide funding direction and CBJ staff allocations to accomplish these recommendations, with the understanding that committed and effective management will ensure that energy savings and energy-related grants will more than offset additional expenses.*
- 6. Direct JCOS, with CBJ staff assistance, to review progress annually on these recommendations, highlighting successful community achievements, dynamically incorporating lessons learned to become more successful in meeting our community energy values as expressed in the JRES and reporting to the Assembly and to the public.*

Appendix 2: Memo to Chair of PWFC from Steve Behnke regarding HeatSmart Alaska

Juneau Residential Air-Source Heat Pump Conversion Project

May 11, 2019 (updated from original March 20 request for \$250,000)

PROJECT REQUEST. HeatSmart Alaska, a Juneau non-profit, seeks CBJ funding of \$180,000 for FY20, to assist Juneau households in reducing heating costs by converting from electric resistance heating and oil heating to Air Source Heat Pump (ASHP) systems. This project will convert a number of heating systems while providing critical data and experience needed to successfully accelerate heat pump adoption in Juneau over the next decade.

The program seeks to make Juneau housing more affordable while helping to implement the Juneau Renewable Energy Strategy (JRES). ASHPs are far more efficient than traditional oil or electric heating systems, and Juneau's mild, cool climate is ideal for this proven technology. Heat pumps can cut heating costs by 40-70%. An average Juneau home which uses about 830 gallons of heating oil annually can save \$1,000-\$1,800/year by converting to heat pumps. Converting from electric resistance heating can save even more.

With almost 10,000 homes heating mostly with oil, the benefits of converting to heat pumps are potentially substantial. Large-scale conversions could retain nearly \$10,000,000 each year that presently leaves the Juneau economy in heating oil payments. Increasing numbers of heat pumps are being installed in Juneau, but it will take consumer assistance, financing and cost-reducing efficiencies to make ASHP the default heating choice over the next decade.

PROJECT DEVELOPMENT. Work on an action plan began in spring 2018 with a series of public meetings and workshops. A key planning workshop took place in November. A project steering committee established in December includes JCOS, JEDC, AEL&P, Renewable Juneau, and the building industry.

Consultant Pat Keegan, of Collaborative Efficiency, is assisting in developing the program. Input has been sought from a variety of experts and organizations, including energy and housing specialists, builders, Alaska Housing Finance Corporation, local heat pump installers, and local financial institutions.

OBJECTIVES. The Juneau ASHP Project targets three primary outcomes:

1. Facilitate the installation of a sufficient number of heat pumps in the community to create initial economic benefits of scale and expertise, thereby supporting broader adoption.
2. Use first-year expertise and energy savings data to refine the optimum approach and broaden funding for a long-term program that will deliver the greatest benefit to Juneau for reduced heating costs and carbon emissions.
3. Provide data needed to more clearly identify the impact on electrical demand and infrastructure of converting Juneau heating systems to heat pumps.

PROJECT APPROACH. The project design is informed by lessons learned from similar programs in New England, the Pacific NW, and other areas, and includes the following key functions:

1. **Energy Advisor:** A central feature of the program will be providing consumers with “one-stop” assistance to determine a housing unit’s suitability for ASHP conversion, provide equipment recommendations, and follow up on operation. The program’s energy advisor will act as a consultant to the homeowner, providing information and assistance in all stages of decision-making, financing, installation, and operation.
2. **Financing Incentives:** An easy, lower interest loan program will be available for heat pump installations and associated minor energy efficiency upgrades. Limited incentives will be provided for a subset of important, but hard-to-engage, targets, including lower-income and multi-family rental properties.
3. **Data Collection:** A key deliverable will be data gained from all aspects of the program. This data will assist in tailoring the program to Juneau realities, confirming costs and benefits, building a compelling case for future funding sources, establishing successful tools for broad-based Juneau adoption, and determining net effects on Juneau’s existing electrical demand and infrastructure.
4. **Project Management:** The board of Alaska Heat \$mart will oversee the project. This includes representatives from JCOS, AEL&P, JEDC, CBJ, Renewable Juneau, and Juneau builders and architects. The board will contract with and supervise a project manager. Finances will be handled through JEDC.

JUNEAU ASHP PROJECT BUDGET SUMMARY

Contract Services	
Project Manager	\$60,000
Energy Advisor(s) (3 hours/client @ \$75/hr x 200)	\$45,000
Website/database development	\$7,500
Data Collection/Analysis	\$10,000
Administrative Support/Financial Management	\$15,000
Equipment/Supplies/Software	\$3,500
Office Expense (phone, insurance, etc.)	\$2,500
Marketing/Promotion	\$10,000
Training	\$1,500
Financing Incentives	\$25,000
TOTAL	\$180,000

Appendix 3: JCOS Energy Sub-committee internal working paper on Electric Vehicle Adoption

Why Juneau should support EVs, and why the CBJ should adopt an EV plan.

DRAFT February 1, 2018

JCOS Energy Committee

EV's are good for Juneau

"With battery prices coming down, EVs are already among the [lowest total cost of ownership vehicles](#) in the passenger car market and will continue to become more affordable for the average consumer. In addition to low maintenance and fuel costs, EVs also offer quiet operation and zero tailpipe emissions, making them a popular choice for both environmentally and economically savvy consumers. Moreover, EVs can help cities meet air quality goals (particularly in low-income neighborhoods along major highways and freeways), save money in city fleets, put downward pressure on taxes, limit cities' exposure to volatile oil and gasoline prices, and more. In an era where an increasing number of cities are setting local goals for reducing energy use and greenhouse gas emissions, facilitating EV deployment is becoming a vital tool in cities' toolbox to achieve energy and sustainability goals." <http://www.driveelectricmn.org/making-your-city-ev-ready/>

EV's are one key to helping Juneau meet the goals of the JRES.

"The right thing to do, as good neighbors" — Bill Legere

"EV chargers are a public good, like our trail system — and work best through combination of private and public investment."

At least 50% cost savings on operating and maintenance— estimated savings of at least \$1000/year per vehicle — with additional community benefits from more \$\$ circulating locally.

In the past 4 years Juneau has built out a limited, but basic EV charging system through an extremely cost-effective cooperative effort between private businesses, non-profits, CBJ, and other agencies — at a fraction of the cost of a single gas station.

There are significant opportunities to bring in outside grant funding — VW settlement, federal grants, etc.

Recommendations for CBJ

I. Continue and expand the successful cooperative public/private approach to support for EV's.

Support/encourage workplace charging (for CBJ itself, school district, hospital, etc., for other agencies, and for businesses) CBJ should also recommend State provide workplace charging; feds have a policy supporting workplace charging: <https://www.energy.gov/eere/vehicles/workplace-charging-federal-facilities>

Develop incentives for businesses to provide public chargers. (tax incentives? share fees? good publicity, other?)

In the long run, there may be enough EV's to justify and support a pay-for-power system — but in the meantime, the successful public/private partnership should continue.

EV's can save \$\$ for non-profits and social services — saving public \$\$ — Juneau Community Fund (JCF) project.

II. Lead by example, as inspiration and catalyst for public and private investment in EV's and charging infrastructure.

Save public \$\$, while supporting climate action and JRES goals.

Focus on fleets: CBJ, state, fed., taxi, rentals — Demonstrate EV viability in public fleets and facilities

The CBJ can boost EV adoption in the private sector by demonstrating how EVs work in its own fleet. This will save money over the life of the vehicle, put downward pressure on local taxes, reduce air pollution, and increase energy independence. Integrating EVs into public fleets demonstrates the market readiness of EVs. The public investment demonstrates that EVs can replace conventional cars.

III. Specific policies supporting EV's

Plan for EV Charger Infrastructure - how many EV chargers are needed? More chargers are needed as use expands in order to provide predictability. Calif. study says 1 workplace charger/5 EVs. Does Juneau need fewer because of our short distances, and because newer vehicles have longer range?

Help standardize policies on charger use: 1 or 2-hour charging limit; enforce parking regs; provide standard signage.

Support and plan for curbside charging — new street work in areas with multi-family housing and little offsite parking should provide for curbside charging — street light chargers, power pole chargers, curbside fast chargers.

Institute codes and standards for new buildings to require them to install chargers or “make-ready” wiring. Building codes could require developers to install not only the conduit but charging equipment in new workplace buildings, as discussed previously. The code could also require

that any reconstruction of parking lots must include charging infrastructure. Seattle is developing requirements for EV infrastructure in new buildings (<https://www.smartcitiesdive.com/news/seattle-new-buildings-electric-vehicles-readiness-requirement/548846/>).

IV. Learn from other communities.

Saint Paul, Minnesota. In Spring 2017, the Minnesota Department of Administration partnered with the University of Minnesota, the Metropolitan Council, Ramsey County, and the City of Minneapolis to [purchase 22 Chevy Bolt EVs](#) at a discounted price. Commissioner Matt Massman of the Department of Admin expects that the state will save \$5,000 per vehicle in operating expenses over the life of the vehicles. Local governments in Minnesota are now able to purchase a variety of EV models at the discounted price through the state contract.

New Bedford, Massachusetts. In 2016, [New Bedford](#) applied for and received \$206,000 in grant funding through Massachusetts' Electric Vehicle Incentive Program to increase EVs in its fleet by 25 percent. At the time, this move gave the city naming rights to proclaim it the largest electric-vehicle fleet of any municipality in Massachusetts. Out of 70 vehicles, 19 were leased Nissan LEAFs used by the health and school departments.

Many local governments have incorporated required EV-ready parking standards in local ordinances, including both large cities and small cities and counties. The [City of Mountlake Terrace](#) takes requires new development (larger than 10,000 sq. ft of building space) to go beyond being EV-ready and include EV charging in a specific percentage of parking spaces (ranging from 1-10%, depending on the type of facility). Other communities take the simpler, required approach by creating a clear as-of-right path for installing EV charging infrastructure. Some communities also require signage identifying EV charging locations and restrict who can use those parking spaces.

Several cities in Minnesota are starting to incorporate or encourage EVSE installation requirements in large commercial or mixed-use development. The City of Golden Valley recently modified its Planned Unit Development (PUD) ordinance (City Code Section 11.55) to include amenity points for electric charging infrastructure and required a recent project to include EV charging as a condition of design approval. Saint Paul's [Sustainable Building Policy](#) requires all new building or rehab projects receiving more than \$200,000 in public assistance to meet an approved sustainable building rating system. These rating systems ([LEED](#), [Minnesota B3](#)) encourage or require a set number or percentage of parking to have electric charging.

<http://www.driveelectricmn.org/making-your-city-ev-ready/>

City Fleets

EVs save communities [fueling and maintenance costs](#) in addition to reducing pollution. This is why [New York City](#) has integrated more than 600 plug-in electric vehicles into its fleet of Fire, Sanitation, and Parks & Recreation Department vehicles. Smaller cities are getting in the game

too; Somerville, Mass., [is adding 16 EVs to its municipal fleet](#). In February, Seneca, South Carolina, [announced that it logged over 100,000 miles with six electric Proterra buses](#), the only all-electric transit bus fleet in the country.

Registration and Parking Incentives

Since 2005, New Haven, Connecticut, has [provided free metered parking for hybrids and EVs](#). Cincinnati EV drivers [get free parking at any meter in the city](#) and at two city-owned parking garages. [Warren](#), Rhode Island, and [Washington, DC](#), offer their residents with plug-in cars an excise tax exemption and reduced registration.

Public Charging Stations

In February, Jacksonville, Florida, unveiled [Chargewell](#), a program setting up 30 charging stations throughout the city through a partnership with the N. Florida Transportation Planning Organization and the Jacksonville Electric Authority. Austin, Texas, [provides unlimited charging](#) for under \$5 a month at over 170 public charging stations. Last summer, Palo Alto, California, [passed an ordinance](#) that requires all new apartments, commercial buildings, and hotels to have charging stations.

Public Education

Cities could do a much better job on EV web sites. But many mayors have been getting behind EVs by attending and promoting EV awareness events, [like at National Drive Electric Week activities last September](#) when Stephanie Rawlings-Blake of Baltimore and Eric Garcetti of Los Angeles were among many mayors who issued 'drive electric' proclamations. Portland, Oregon's [Electric Avenue](#), the city's program that partnered with Portland State University to provide EV charging stations, raised public awareness by holding a ribbon cutting with the Mayor and [staging a flash mob](#). Their efforts paid off - the program was featured in more than 200 news stories.

Links

<https://content.sierraclub.org/evguide/blog/2015/04/best-city-programs-promoting-electric-cars>

<http://www.drivetricelectricmn.org/making-your-city-ev-ready/>



MEMORANDUM

TO: Mike Vigue
Engineering & Public Works Director

FROM: Greg Smith
Contract Administrator

Date: July 24, 2019

SUBJECT: Contracts Division Activity
June 26, 2019, to July 23, 2019

Current Bids – Construction Projects >\$50,000

DH19 -050	Cruise Ship Security Checkpoint	Estimate \$225,000, Bids due 10/3/19.
BE19-217	JNU Terminal Recon. Electrical Service	Estimate \$1,300,000. 5 bids received. Alaska Electric low bidder, \$944,240. Award in progress.
DH18-013	Statter Harbor Improvements	Estimate \$2,957,900. 3 bids received. Pacific Pile & Marine low bidder. \$4,061,000. Issued Notice of Intent 07/23/2019.
BE19-250	Lee Street Pump Station Renovation	Estimate \$294,985, 1 bid received. Schmolck Mechanical. \$445,310. Award delayed.
BE19-225	MRCS Playground Renovations	Admiralty Construction, \$83,200. NTP issued 6/18/19.
DH19-014	Downtown Waterfront Improvements Phase I	Estimate \$13,623,730. Bids due 7/16/19, 3 bids received. Trucano Construction low bidder. \$12,367,699. Issued Notice of Intent 7/23/19
BE19-252	Mendenhall Blvd Paving – Poplar to Loop	NTP issued to SECON on 7/3/19 for \$329,314
BE20-023	Jensen-Olson Arboretum Generator Shed Renovation	Estimate \$60,000 base bid, Alt. 1 \$1,000. bid opening 7/24/19. 2 bids received. Silver Bow Construction low bidder. Base \$59,000, Alt 1 \$3,300.
MR BE19-177	Kaxdigoowu Heen Dei Trail Relocation	Estimate \$346,000, bid opening 8/1/19

Current RFP's – Services

RFP E19-228	CA&I for 2019 Area Wide Paving	NTP issued to Wilson Engineering on 6/27/19 for \$67,020.
RFP E19-267	Emergency and Maintenance Service for Public Works Utilities and WWT SCADA System	2 proposals received. RMC Engineering selected. In negotiations.
RFP MR E20-031	Hagevig Fire Training Center PFOS Environmental Services	Proposals due 7/25/19
RFP E20-053	BRH Outpatient Psychiatric Services Facility Replacement	Proposals due 8/14/19

Current RFQ's

	None	
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Other Projects – Professional Services – Contracts, Amendments & MR's >\$20,000

E17-270	Design for JNU Taxiway A Rehab and Taxiway E Realignment	A-3, \$64,078, NTP Issued to PDC on 6/27/19,
E14-198	Pederson Hill Subdivision Design	A-9, \$33,617, NTP issued 07/23/2019 to DOWL

Contracts Division Activity
June 26, 2019 to July 23, 2019

MR19-282	Downtown Audio Wayfinding	\$55,000, Agreement sent for signature.
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Term Contracts for Electrical Services (>\$20,000)

PA 6 to E18-164(AB)	Marie Drake School Flood Electrical Gear Replacement	NTP issued to Anderson Brothers on 7/8/19 for \$73,000
PA 6 to E18-164(AKE)	JNU North Terminal Temp Heating	NTP issued on 7/15/19 to Alaska Electric for \$31,280

Term Contracts for General Construction Services (>\$20,000)

PA 4 to E19-122(C)	Mayflower Stairs Replacement	NTP issued to Carver on 7/19/19 for \$31,318
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Term Contracts for Sportsfields Surface Maintenance (>\$20,000)

	None	
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Utility Agreements (AEL&P)

	None	
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Term Contracts for Material Sources (>\$20,000)

	None	
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Term Contracts for Plumbing Services (>\$20,000)

PA 7 to E17-172(BM)	MD School Bruner Replacement	NTP issued to Behrends Mechanical on 7/8/19 for \$40,822
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Construction Change Orders (>\$20,000)

BE17-029	Valley Court Force Main	CO 5; \$74,869. Additional sewer line work.
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MR E17-166 – Term Contract for Professional Services. This solicitation is open for a three-year period. Consultants continue to submit proposals. Contracts are in progress and underway.

Key for Abbreviations and Acronyms

A	Amendment to PA or Professional Services Contract
CA	Contract Administration1
CO	Change Order to construction contract or RFQ
MR	Modification Request – for exceptions to competitive procurement procedures
NTE	Not-to-exceed
NTP	Notice to Proceed
PA	Project Agreement - to either term contracts or utility agreements
RFP	Request for Proposals, solicitation for professional services
RFQ	Request for Quotes (for construction projects <\$50,000)
RSA	Reimbursable Services Agreement
SA	Supplemental Agreement