

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

September 20, 2021 12:00 PM

Zoom Webinar

To participate via zoom please use this link: <https://juneau.zoom.us/j/91849897300> Or
iPhone one-tap: US: +16699006833, 91849897300# or +12532158782, 91849897300# Or
Telephone: Dial (for higher quality, dial a number based on your current location): US:
+1 669 900 6833 or +1 253 215 8782 or +1 346 248 7799 or +1 929 436 2866 or +1 301
715 8592 Or +1 312 626 6799 Webinar ID: 918 4989 7300

I. CALL TO ORDER

II. APPROVAL OF MINUTES

A. August 30, 2021 - Regular Meeting

III. PUBLIC PARTICIPATION of NON-AGENDA ITEMS

The Committee will follow COVID protocols in accordance with CDC guidelines, CBJ ordinances & resolutions, and COVID mitigation strategies at the time of the meeting. **Committee members will be meeting in person, to the extent possible. In-person public participation will be limited on a first come, first served basis to no more than 8 persons in the public audience seats. Masks are required for anyone in the room who is not fully vaccinated. Attendees in excess of that number will be requested to participate via Zoom webinar.**

Testimony time will be limited by the Committee Chair based on the number of participants. Members of the public are encouraged to send their comments in advance of the meeting to BoroughAssembly@juneau.org.

When attending the zoom webinar (login info listed at top of agenda) to speak on an item up for public hearing or a non-agenda item, please hit the 'raise hand' button if participating via a computer/tablet; if participating by phone press *9 on your phone; this will place a 'raised hand' icon next to your phone number and will add you to the queue.

IV. ITEMS FOR ACTION

- A. \$200,000 Transfer for Hospital Water Main Replacement**
- B. \$150,000 to Capital Avenue Reconstruction for Contaminated Soil Disposal**
- C. Proposed Passenger Fee Projects**
- D. Green House Gas Data Update and Renewable Energy Pathway Model**

V. INFORMATION ITEMS

- A. Streets & Utility Projects Delayed by Material Supply Issues**
- B. Draft Engineering and Public Works Annual Sustainability Report**

VI. UPDATE ON PWFC ACTION ITEMS TO ADVANCE 2021 ASSEMBLY GOALS

- A. Assembly Goal Update Table**

VII. CONTRACTS DIVISION ACTIVITY REPORT

- A. August 27, 2021 to September 15, 2021**

VIII. NEXT MEETING DATE

- A. November 1, 2021 - 12:00 Noon**

IX. ADJOURNMENT

ADA accommodations available upon request: Please contact the Clerk's office 36 hours prior to any meeting so arrangements can be made for closed captioning or sign language interpreter services depending on the meeting format. The Clerk's office telephone number is 586-5278, TDD 586-5351, e-mail: city.clerk@juneau.org

**PUBLIC WORKS & FACILITIES COMMITTEE
DRAFT MINUTES – REGULAR MEETING
Assembly Chambers/Zoom Webinar
August 30, 2021**

I. CALL TO ORDER

The meeting was called to order at 12:03 PM.

Members Present: Ms. Hale, Ms. Triem, Christine Woll, Ms. Hughes-Skandijs, Paul Voelckers via Zoom. Mayor Beth Weldon and Assembly Member Loren Jones were also in attendance.

Staff Members Present: Katie Koester, Denise Koch, Deputy City Clerk Di Cathcart, Greg Smith, Caleb Comas, Janet Sanbei, and Lori Sowa.

II. APPROVAL OF MINUTES

A. August 9, 2021 – Regular Meeting

No objection, minutes passed.

III. PUBLIC PARTICIPATION & NON-AGENDA ITEMS

None.

IV. ITEMS FOR ACTION

None.

V. INFORMATION ITEMS

A. Solid Waste Presentations

1. AKDEC – Zach Gianotti, Environmental Specialist and Doug Buteyn, Solid Waste Regional Manager

Ms. Koester turned the presentations over to staff from Alaska State Department of Environmental Conservation and Waste Management.

Doug Buteyn explained the limits of regulation are for non-hazardous waste landfills. He stated the municipal landfills are classed based on the amount of waste they receive per day.

Zach Gianotti stated the Juneau landfill is a Class I landfill receiving more than 20 tons of waste per day. All landfills require a permit. Landfills are inspected annually to determine if they meet the requirements of their permit.

Doug Buteyn explained the need to close the landfill is based on the footprint of the landfill and the slope permitted. This will determine how tall the landfill can go. After closure of the landfill, the landfill operator is required to monitor the landfill for 30 years to be sure the landfill continues to meet the permit requirements, and does not leach any toxic waste into the environment. It is important for the

community to understand the landfill owner's responsibility does not stop at the closure of the landfill.

Discussion ensued.

2. Waste Management – Jim Denson, PNW/BC Environmental Protection Manager

Jim Denson gave a short presentation based on concerns the Committee has vocalized over the past few months. He introduced the new staff coming to the Juneau office. He spoke regarding good cover for the facility, and that they have improved the cover for the working space. He stated Waste Management feels odor is not OK. They strive to keep odors down to the best of their ability. The odor that occurred during this past winter was due to that fact that a compressor went down, and the flare was unable to flame. There are 2 different types of odors, gas odors and trash odors. Both of these were contributors this past winter. The landfill has added 3 gas collectors to help alleviate odors. Some equipment will be installed which will also help distribute the collected gas. Wet environments are more difficult environments to run a landfill in. They have added additional safety requirements when using the landfill. Mr. Denson feels the landfill should last more than 20 years. There is really no exact number of years, but the estimate is 20-24 years.

Discussion ensued.

B. New City Hall

Ms. Koester explained the revised timeline for presenting to the public and the Committee to build a new city hall or renovate an existing building for the new city hall. This is truly preliminary and "ground zero" in nature. A longer timeline does allow for public comment and other committee comment. The shorter timeline will not have a final design at the time of the vote, but investing in a detailed design may not be needed until this is approved by the voters. Existing maintenance needs for the current City Hall add up to \$6M in renovations. She stated in past history when businesses moved out of Marine View Building, those spaces were converted back into apartments. The current City Hall, it was assumed would be sold or demolished.

Discussion ensued.

Ms. Triem moved forward to a body containing all 9 members a recommendation for October 2022.

Ms. Hughes-Skandijs objected to the motion.

Discussion ensued.

Ms. Hale passed the Gavel to Ms. Woll.

Ms. Hale proposed an amendment recommending sending the request for the 2022 timeline, but contain information about the 2023 timeline that has been reviewed by the Public Works & Facilities Committee, and the pros and cons.

Ms. Triem - yes

Ms. Hughes-Skandijs - no

Ms. Woll - yes

Ms. Hale - yes

Motion passed as amended.

- C. Provide Direction on Format for “PWFC Solid Waste Plan Recommendations” for 9-20-21 COW

Ms. Koester stated the memo in the packet is to update the Committee and inform them she will be working with Ms. Hale on a presentation for the COW which will follow the items outlined in the packet.

VI. UPDATE on PWFC ACTION ITEMS to ADVANCE 2021 ASSEMBLY GOALS

- A. Goal Update Table

Ms. Koester updated the Committee on what the Engineering & Public Works Department has been working on since the last meeting.

VII. CONTRACTS DIVISION ACTIVITY REPORT

- A. August 4, 2021 to August 25, 2021

VIII. NEXT MEETING DATE

- A. Next Regular Meeting will be September 20, 2021 – 12:00 Noon

IX. ADJOURNMENT

The meeting adjourned at 1:26 PM.



DATE: September 15, 2021
TO: Michelle Hale, Chair Public Works and Facilities Committee
THROUGH: Katie Koester, Director of Engineering and Public Works
FROM: John Bohan, Chief CIP Engineer
SUBJECT: Transfer of \$200,000 of Water Funds for Hospital Water Main Replacement

Staff requests a transfer of \$200,000 of Water Utility funds from the Douglas Highway Water system replacement CIP (W75-061) to the Hospital Drive and Site Improvements CIP (R72-141) to facilitate the replacement of an aging water main connecting the Salmon Creek Water Filter Plant and the BRH campus. The replacement of the water main was not included in the original project scope, but due to changes in the facility design and the proximity to the line to the new Bartlett Behavioral Health building, replacement is the most prudent course of action.

This aging water main is the main feed to the Bartlett Hospital Campus and is also the backup routing for water supply from Salmon Creek Filter Plant to Lemon Creek, Mendenhall Valley and out the road. The existing pipe is near the end of its design life and in very close proximity to the new facility's foundation. The pipe should be replaced in conjunction with the construction of the new building to avoid having to excavate and replace the new amenities and site improvements constructed with the new Behavioral Health Facility.

The Douglas Highway Water replacement project is completed and has water utility funds available to transfer to cover this necessary work.

REQUESTED ACTION

Staff requests the Public Works and Facilities Committee forward the above requested transfer of \$200,000 to the full Assembly for action.



DATE: September 16, 2021

TO: Michelle Hale, Chair Public Works and Facilities Committee

THROUGH: Katie Koester, Director of Engineering and Public Works

FROM: John Bohan, Chief CIP Engineer

SUBJECT: Transfer of \$150,000 for Contaminated Soil Disposal on the Capital Avenue Reconstruction Project

Staff requests a transfer of \$150,000 for the disposal of contaminated soil discovered in Capital Avenue during this summer's reconstruction project. It is hoped to be less, but the disposal effort is still in the estimate stage and actual final costs will not be known until the material is disposed of.

The Capital Avenue Reconstruction project keeps giving. The fuel contaminated soil that was uncovered during the summer and optimistically hoped to be addressed with the additional funding requested in the June transfer. The initial estimate planned for the fuel contaminated soil to be remediated locally, as most local fuel contaminated soil has been. Unfortunately, the soil was found to have lead and mercury contamination on top of the fuel contamination and Alaska Department of Environmental Conservation, (ADEC) will not let it be treated locally, meaning it has to be barged and trucked to the appropriate landfill in Washington or Oregon. The estimated disposal costs, based on a preliminary quote are around \$120,000 to \$140,000, with the significant amount of the costs being freight, due to shipping contaminated soil – ie. hazardous waste shipping tariff.

The \$150,000 additional funding is requested to be transferred from the Areawide Drainage Improvements (CIP R72-136). While taking funding from the Areawide Drainage CIP is not ideal, it currently has scalable projects that can be reprioritized to make funding available to cover the contaminated soil disposal costs. Any funds remaining after the soil disposal can be returned back to the Areawide Drainage CIP.

REQUESTED ACTION

Staff requests the Public Works and Facilities Committee forward the above requested transfer of \$150,000 to the full Assembly for action.



MEMORANDUM

DATE: September 17, 2021

TO: Chair Hale and CBJ Public Works and Facilities Committee

FROM: Katie Koester, Engineering & Public Works Director

SUBJECT: Proposed Passenger Fee Projects

At the August 18th Finance Committee meeting the body heard an update from Director Rogers on Passenger Fee projections for FY2022. The state allocated approximately \$12m in ARPA funds as hold-harmless payments for lost state passenger fee revenue over the past two fiscal years. Unlike typical passenger fees, these funds are not restricted to the requirements of the CLIAA settlement. Nevertheless, we believe it would be prudent to adhere to the intent of the settlement with these funds. Because there are no shortage of needs related to waterfront tourism, this should not be difficult.

After updates to forecast revenue that eliminates negative passenger fund balance there is approximately \$10.5m in unallocated passenger fees available through the end of the current fiscal year (2022). Together with the Manager's office, Docks and Harbors, and Finance, we recommend appropriating \$8.4m to the projects listed on the Table 1, leaving \$2.1m in fund balance (equivalent to one year of debt service on the 16B docks).

Per CBJ Code Title 69, Chapter 20.120(b)(3), the City Manager is required to solicit requests for passenger fee funding and share them with the Assembly. Submissions for 2021, and manager's recommendations can be found [here](#). At the time, the manager recommended expending passenger fees in FY22 on debt service and the cost of core city services out of an abundance of caution.

Projects submitted by the public for review include operational requests from 3rd parties, Docks and Harbors, and capital projects including AJ Dock improvements, Franklin Dock maintenance and the Seawalk Safety Rail (the safety rail is funded included in this proposal). Docks and Harbors advocated for passenger fee funding being distributed to the Dock Enterprise Fund; this proposal transfers \$1m to that fund.

Recommendation: Move to introduce an ordinance at the next regular meeting appropriating the \$8.4m in passenger fees/ARPA.

TABLE 1: \$8.4m Recommended Project Spending for ARPA/ Remaining Passenger Fees

\$1m	Transfer to Docks and Harbors	Docks Enterprise revenue is 100% generated from cruise ship fees. From October 2019 to July 2021 there was no appreciable revenue to the Dock Fund. The projected losses are in excess of \$1m to cover fixed expenditure in the Docks Enterprise. The proposed transfer with help ameliorate the Dock Enterprise bottom-line.
\$1m	Seawalk Safety Rail	This project would install continuous pedestrian safety railing along the face of the seawalk which is currently protected by low bullrails between Marine Park and Cruise Ship Terminal Dock. This safety measure was not possible before the installation of two floating cruise ship berths in 2017. The railing will match the standard railing details that have been installed on the recent downtown dock construction projects with horizontal wire railing and wooden top handrail.
\$3m	Statter Harbor Phase IIIC	<p>This project will complete the implementation of the Statter Harbor Master plan by executing Phase IIIC:</p> <ul style="list-style-type: none"> • Grading and paving of the uplands to better serve tour bus loading and unloading • Construction of the remaining segment of baywalk to connect the Harbor office to Glacier Highway • Completion of a kayak launch ramp • Construction of a new mixed use building at the top of the gangway which will include restrooms, a covered waiting area, and provisions for a future 2nd story for retail space. <p>Phases I – IIIB have been completed over the last 8 years and include the new launch ramp, baywalk and vehicle and boat trailer parking areas, blasting and dredging of a new harbor basin, and installation of new passenger for hire floats, seawall, gangway and uplands grading.</p>
\$3.4m	Seawalk	<p>\$2.2m would deck over a triangular shaped portion of marine walk in front of Marine Park. This is a complex project for a small footprint: it involves demolishing and rebuilding a portion of old dock to maintain ADA compliant grades between the wharf and Marine Park and supporting a storm drain outfall running through the most complicated part of the new dock. The end product will be an extension of the grassy area behind Bernadette's food cart, a second, sloped timber dock that transitions between the Wharf elevation and the Marine Park elevation, and a third small triangular structure that extends Marine Park to meet the timber dock.</p> <p>Remaining funds will be used to advance extension of the marine walk and other improvements to the seawalk.</p>



DATE: September 20, 2021

TO: Michelle Hale, Chair Public Works and Facilities Committee

THROUGH: Katie Koester, Director of Engineering and Public Works

FROM: Denise Koch, Deputy Director of Engineering and Public Works

SUBJECT: Green House Gas Data Update and Renewable Energy Pathway Model

Background

The Assembly established Goal 5.B. “to make a long term plan to achieve reliance on 80% renewable energy sources by 2045.”

The Juneau Commission on Sustainability (JCOS) recommends that CBJ fund a contract for up to \$40,000 to update data and develop an energy modeling tool. The tool would be used to develop a scorecard to measure the level of progress the community is making towards meeting the Assembly’s goal of 80% renewable energy by 2045. The tool would also be used to compare the cost and fuel use and greenhouse gas reduction potential of alternative projects in order to guide decision making.

There are several benefits to this approach. It provides the Assembly and community a big picture view on community progress. It provides holistic information on energy use in multiple sectors. The tool would also provide an objective way to weigh the benefits of alternative projects. For example, the tool could be used to guide whether finite monies get directed to replacing CBJ owned petroleum vehicles with electric vehicles versus funding the installation of air source heat pumps in the community.

An alternative to developing the energy modeling tool would be to use the funds to implement renewable energy projects in the transportation and building sector now. The CBJ “2010 Greenhouse Gas Emissions Inventory” and inventories done in other Alaska communities such as Anchorage all point to the highway transportation sector and building as the two largest sources of emissions. An update will probably show the same pattern. CBJ has already taken steps to track energy use at our facilities and implement projects that replace petroleum with renewable energy. The Engineering & Public Works Department is capturing those efforts in a Sustainability report. We will continue to quantify future projects in this report.

Recommendation:

Discuss Green House Gas Data Update and Renewable Energy Pathway Model proposal as presented by JCOS. Make a funding recommendation to the full Assembly.

Janet Sanbei

From: Steve Behnke <steven.r.behnke@gmail.com>
Sent: Thursday, September 16, 2021 11:57 AM
To: Michelle Hale
Cc: Katie Koester; Denise Koch; Gretchen Keiser
Subject: Proposal to fund a Juneau energy "pathways" data update and modeling tool

EXTERNAL E-MAIL: BE CAUTIOUS WHEN OPENING FILES OR FOLLOWING LINKS

To: Michelle Hale, Chair, CBJ Public Works and Facilities Committee
From: Steve Behnke, Chair, Energy Committee, Juneau Commission on Sustainability

The Juneau Commission on Sustainability recommends that the CBJ fund a contract for up to \$40,000 to update data and develop an energy "pathways" modeling tool.

This will make a major contribution to the Assembly's Goal 5.B. "to make a long term plan to achieve reliance on 80% renewable energy sources by 2045".

The CBJ and others are taking significant actions that contribute to Juneau's sustainability, but we don't have a way to track progress or evaluate alternatives. Existing plans identify hundreds of potential actions to reduce energy use and convert to renewable energy. Some of these require CBJ decisions and investments -- others depend on actions and decisions by individuals, businesses, and other organizations. All of these decision makers need better ways to evaluate which actions will be most effective, to establish priorities, and see how actions fit together over time to achieve community goals.

Community climate action and energy plans typically develop one or more scenarios illustrating how community goals can be achieved. These provide broad, general guidance, but as we've seen over the past decade, changes in technology and priorities can quickly make them outdated. We believe that a dynamic modeling tool would give JCOS, staff, and the public a way to ask "what if" questions and see the effects of proposed actions, while allowing updating over time.

This spreadsheet based modeling tool can be used for a variety of purposes:

1) Answering "what-if" questions about Juneau's energy future. For example, what contribution to climate and energy goals would be made, and what would be the effect on demands for electricity, if:

- Juneau residents adopt EV's at, or above, national averages over the next 25 years?
- The CBJ replaces some, or all, of it's transit fleet with electric vehicles?
- Current rates of heat pump adoption continue or increase?
- The Kensington mine's electricity was provided by hydropower instead of diesel?
- An energy code for commercial construction was adopted?
- Additional shore power opportunities were provided for cruise ships?
- The CBJ initiated a comprehensive energy management program for its operations and facilities?

2) Evaluating alternative actions and public/private investments. Which actions would provide the greatest bang for the buck?

3) Analyzing and illustrating the relationship between energy demands and energy supply.

For example, there are a wide range of estimates of how much hydropower, or other renewable energy sources, will be needed to meet the 80x45 goal, or when they will be needed. This depends on the mix and timing of private and public investments in energy efficiency and beneficial electrification. The model will show what could happen under different scenarios of beneficial electrification.

4) A "scorecard", to show how the community is doing in making progress toward the 80x45 goal.

JCOS has worked for over a year to develop this proposed project. We have considered alternative approaches, compiled existing data, examined related efforts by other communities, consulted with experts in climate action and energy projects, worked with PW&E staff, and presented to the PWFC. We have developed a 14 page background memo and a draft scope of work. JCOS members have committed to helping CBJ staff develop a final scope of work and RFP, and to working closely with a contractor to develop the project and compile local data

The Juneau Commission on Sustainability appreciates the opportunity to discuss this recommendation.



DATE: September 15, 2021

TO: Michelle Hale, Chair Public Works and Facilities Committee

THROUGH: Katie Koester, Director of Engineering and Public Works

FROM: John Bohan, Chief CIP Engineer

SUBJECT: Streets and Utility Projects Delayed by Material Supply Issues

Material shortages have been a significant challenge for CBJ's 2021 construction season. A number of the projects already bid and scheduled for 2021 construction have been delayed because of issues obtaining construction materials and getting them delivered to Juneau in a timely manner.

The availability of plastic pipe (sewer, storm drain and drinking water), precast concrete structures (sewer manholes, storm drain manholes and catch basins), valves and electrical components has been limited or significantly delayed. Lead times for some of these products are 4 to 6 months or greater, when most would typically be available immediately, or within a couple of weeks, in Seattle for delivery to the barge lines. Trucking of the materials from storage yards to the freight and barge terminals are also significantly backlogged, increasing delivery times of materials once they become available.

The projects listed below have experienced significant material supply issues causing them to be delayed into the 2022 construction season:

- Channel Drive and Channel Vista Sewer Pump Stations Upgrades (electrical components)
- Gruening Park Sewer Pump Station Replacement (concrete manholes, plastic sewer pipe, valves electrical components)
- Tongass Boulevard Reconstruction Phase 1 (water, sewer, storm pipe, concrete manholes and drainage structures, water valves)
- Crest Street Reconstruction (water, sewer, storm pipe, concrete manholes and drainage structures, water valves)

The main impacts caused by the delays are twofold:

- 1) **Additional maintenance efforts:** Leaving the outdated infrastructure in service longer will require additional maintenance efforts to keep the infrastructure in service until replacement.
- 2) **Delay of future projects:** There will be an impact in local contractor capacity for the 2022 construction season, creating increases in bid prices and / or having to postpone some of the scheduled upcoming priority projects to the following seasons.



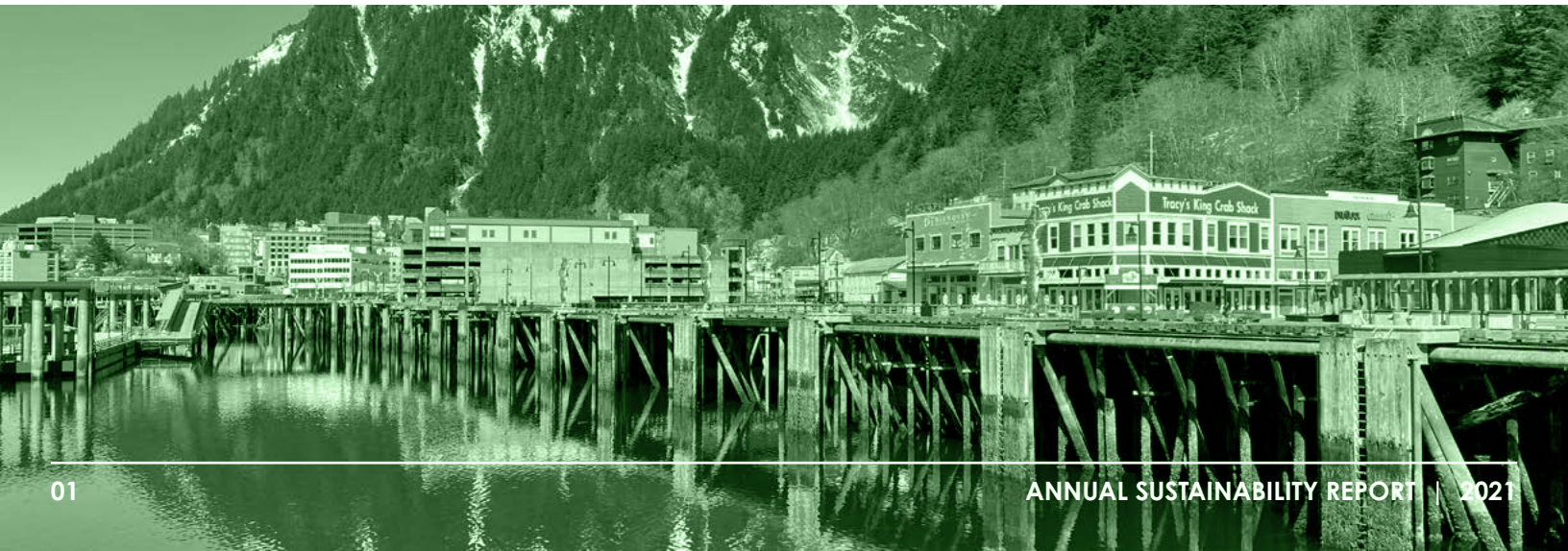
ANNUAL SUSTAINABILITY REPORT

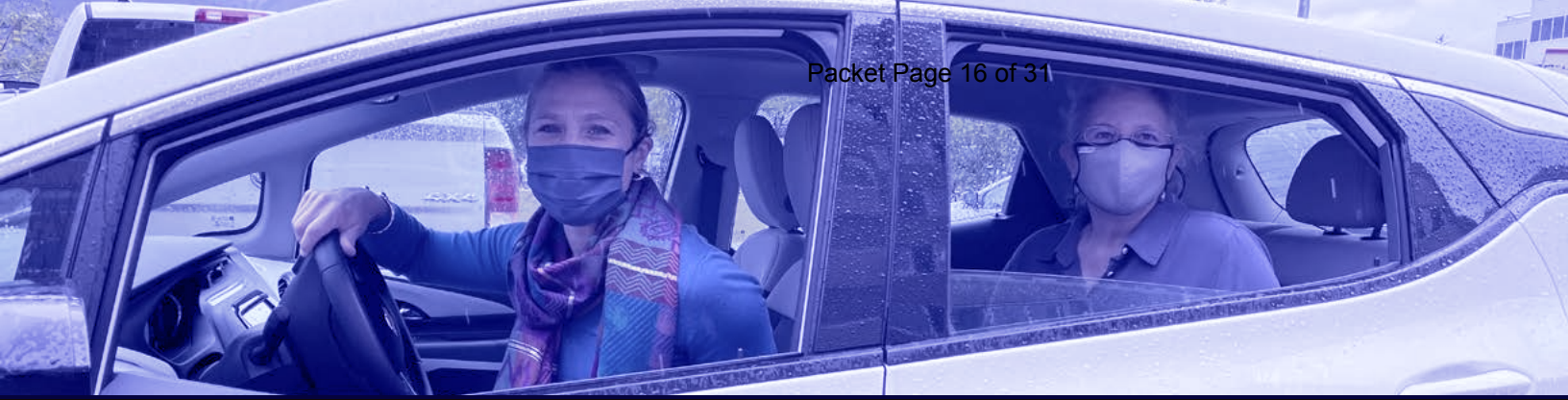
ENGINEERING & PUBLIC WORKS | FISCAL YEAR 2021

2021

ANNUAL SUSTAINABILITY

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INTRODUCTION

Welcome to the Engineering and Public Works (EPW) sustainability report. The intent of the report is to share a snapshot of what EPW, with the leadership and direction of the Public Works and Facilities Committee (PWFC), has done over the 2021 fiscal year to advance CBJ sustainability goals. Our work is rooted in the 2021 CBJ Assembly Sustainable Community goal to maintain a resilient social, economic, and environmental habitat for existing population and future generators.

Sometimes we get so busy getting things done, we forget to take a step back and celebrate how our work fits into the bigger picture of creating a resilient and sustainable community. This report will document CBJ energy usage so we can track our progress over time – both by providing a rolling 5 year history of CBJ wide energy usage and highlighting buildings that are big energy users and due for upgrades. The report also highlights recent projects that have been completed that lower the energy usage of our facilities. Recycleworks is a division of EPW with the mission to provide cost effective and environmentally sound services to help conserve natural resources and minimize the environmental impact of our waste. You will find data on what we recycle or responsibly dispose of, how much, and how that has changed.

I hope you enjoy the report, but more importantly I hope it provokes you to think about how we can work together to make changes, big and small, to sustain our vibrant, healthy and thriving community.

Katie Koester Engineering & Public Works Director

Photo above: PWFC Chair Michelle Hale and EPW Director Katie Koester in one of the department's electric Chevy Bolts



ENERGY OVERVIEW

Usage Tracking Metrics

CBJ BUILDING MAINTENANCE is tracking energy use (including both electricity and fuel) at several CBJ facilities. Having this data available allows us to measure our performance from year to year as we make both small and large energy efficiency adjustments to the facilities. Through the hard work of Building Maintenance, CBJ has recently begun using Energy Star's Portfolio Manager to calculate several metrics that will be invaluable for measuring our facility energy performance. These metrics will also allow us to compare our performance with energy use at similar facilities throughout the nation.

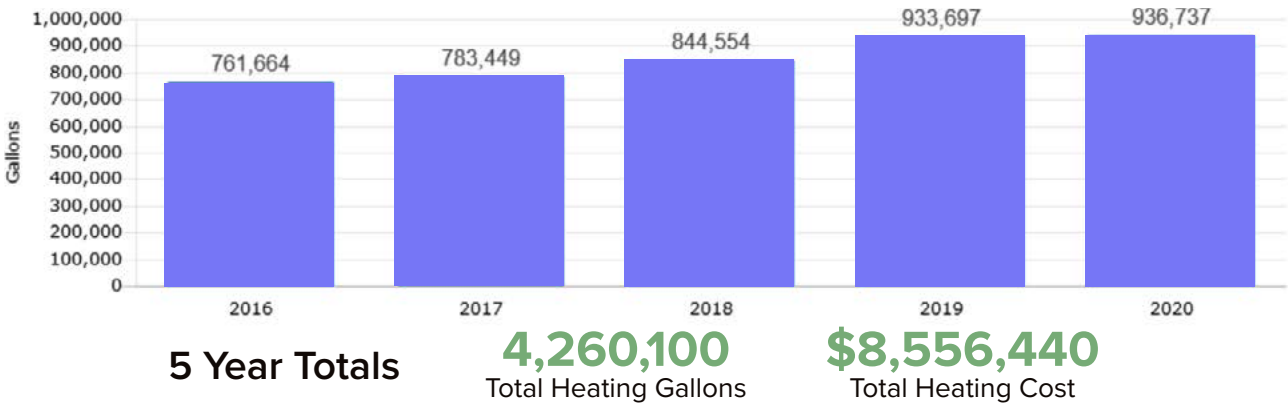
Metric	Feb 2019	Feb 2020	Change
Site EUI (kBtu/ft ²)	148.2	140.8	-7.40 (-5.00%)
Weather Normalized Site EUI (kBtu/ft ²)	150.1	147.0	-3.10 (-2.10%)
Total GHG Emissions Intensity (kgCO ₂ e/ft ²)	6.6	6.6	0.00 (0.00%)
Total GHG Emission (Metric Tons CO ₂ e)	240.3	238.9	-1.40 (-0.60%)

Energy Use Intensity (EUI)

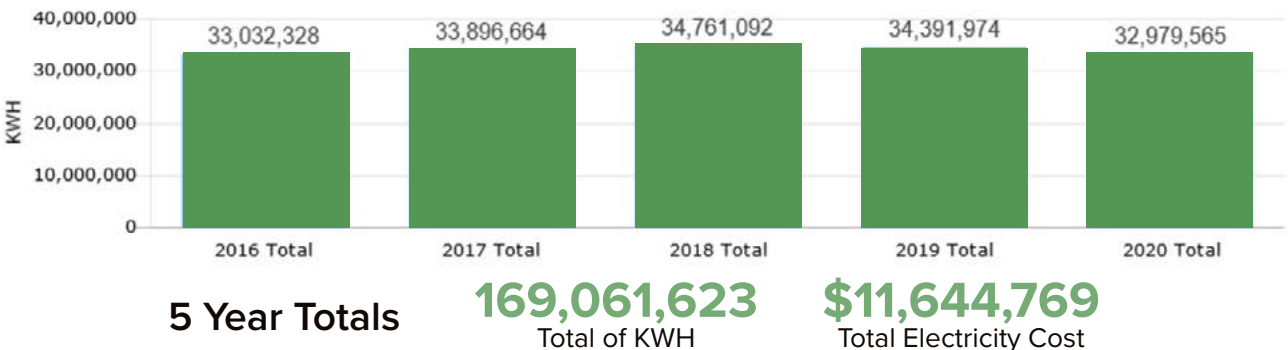
ONE OF THE KEY METRICS being tracked is called Energy Use Intensity (EUI) which measures the total amount of energy used by a facility per square foot of building footprint. We are tracking the EUI for several CBJ facilities with upcoming energy efficiency improvement projects including the Glacier Fire Station and the Eagle Valley Center to get some baseline data we can compare with after the projects are complete. We are also tracking EUI for facilities like City Hall where energy efficiency improvements are sorely needed. To see an example of how the EUI can help measure the impact of efficiency improvements, consider the Treadwell Arena's recent conversion from incandescent to LED lighting. The figure above shows the EUI for the rink before and after the lighting conversion.

The Assembly set a sustainability goal for 2021 to “develop a strategy to measure track and reduce CBJ energy consumption.” The following bar charts demonstrate Borough wide how much we consume in energy. Many factors drive these numbers: adding square footage to a building, heating system upgrades, or even the weather. Nevertheless, the annualized data provides an overview of how we are doing as an organization, helping start conversations about how we can reduce our energy consumption.

Fuel Oil - All CBJ



Electricity - All CBJ



Fleet Gasoline - All CBJ



PROJECT HIGHLIGHTS



Augustus Brown Pool

STRUCTURAL IMPROVEMENTS WITH ENERGY BENEFITS have been key part of capital planning at the City & Borough. Augustus Brown Pool was among these plans, receiving a new roof in 2021. The project removed compromised insulation and replaced it with new and improved insulating materials with 2.5 times the R value resulting in less heat loss through the roof. Further upgrades to the building exterior and mechanical controls have been funded which will further improve efficiency.



Sayéik Gastineau Community School

SAYÉIK GASTINEAU COMMUNITY SCHOOL got a partial roof replacement over the main wing that provides additional insulation to make the building more energy efficient.



Did You Know?

THE CITY & BOROUGH OF JUNEAU recycles all used asphalt when repaving projects? The old asphalt is ground up and used on CBJ roads to fill potholes, as base for road reconstruction, on gravel roads to reduce dust and maintenance and for trail surfacing.

PROJECT HIGHLIGHTS



Building Updates

MARIE DRAKE SCHOOL has made recent improvements that will decrease building energy usage. New HVAC controls were installed that allow for improved control of outdoor air supply, supply air temperature reset, demand control ventilation, and variable speed fan operation. A new domestic hot water heater was also installed. It is a heat pump type water heater that will operate along with an electric water heater, replacing domestic hot water heating previously provided by oil fired boilers. The heat pump water heater in combination with the electric water heater provides an increase in efficiency of over 200% from the domestic hot water heating system.

**WE ARE CONSERVATIVELY
PROJECTING A SAVINGS OF
5,000 GALLONS OF FUEL OIL ANNUALLY**



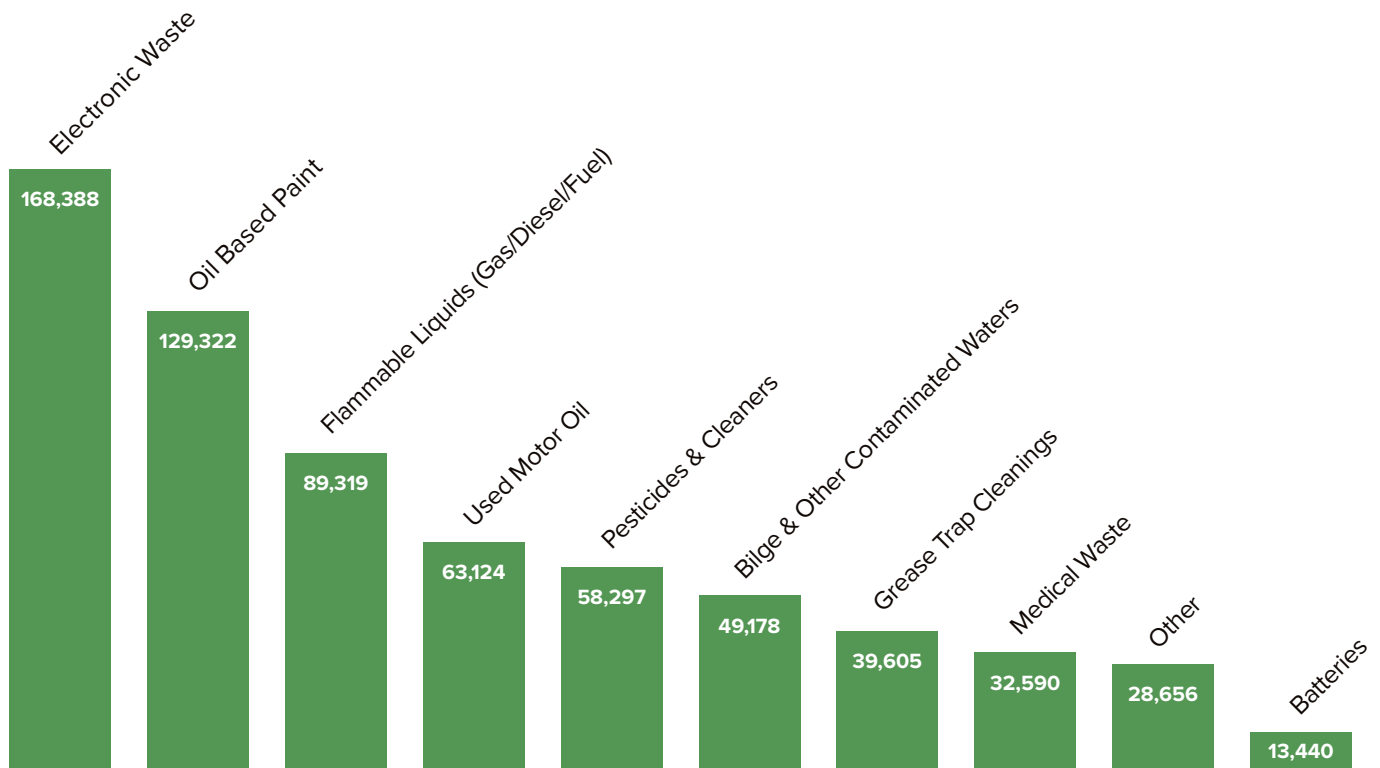
Energy Efficiency Tech

THE JUNEAU POLICE STATION AND DOWNTOWN LIBRARY both have new control software for their HVAC systems, which will allow modern and energy efficient control sequences to reduce ventilation air flow when the occupancy is below peak. With these two projects we are conservatively projecting a savings of 5,000 gallons of fuel oil annually.



The CBJ RecycleWorks program provides recycling, junk vehicle, and household hazardous waste services to residents and businesses in Juneau.

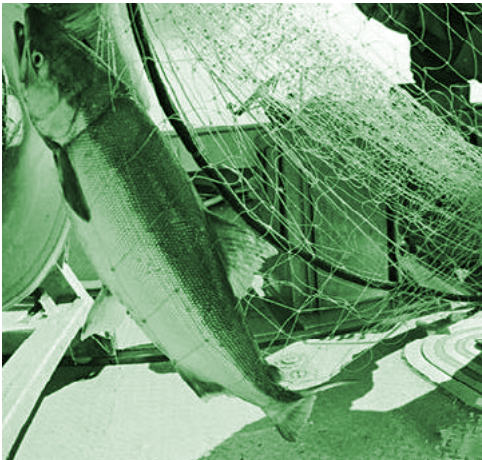
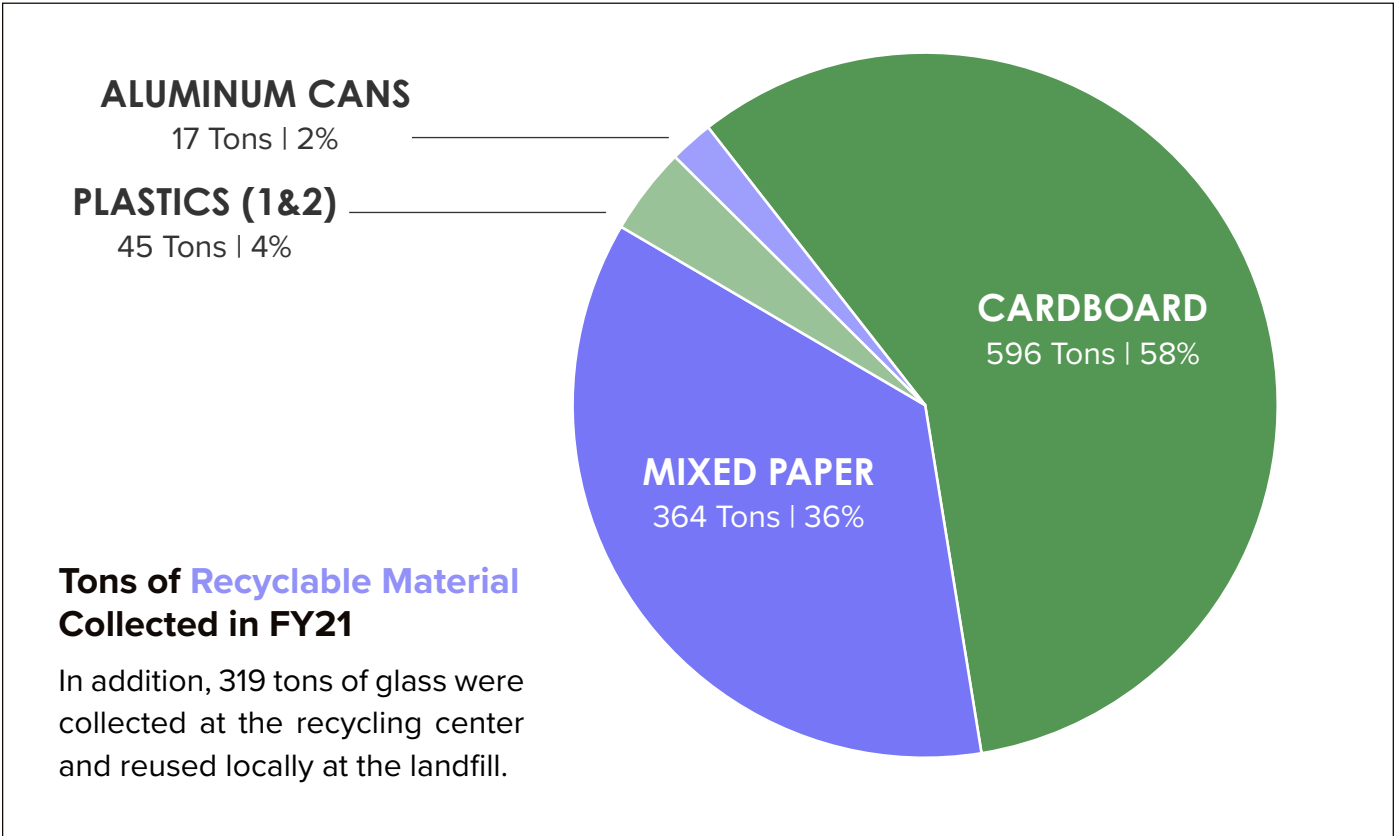
OUR GOAL IS TO PROVIDE **COST EFFECTIVE AND ENVIRONMENTALLY SOUND SERVICES THAT HELP CONSERVE NATURAL RESOURCES AND **MINIMIZE** THE ENVIRONMENTAL IMPACT OF OUR SOLID WASTE.**



Pounds of Household Hazardous and Electronic Waste Collected in FY21

Program Usage

LOOKING BACK OVER THE LAST FOUR YEARS, the usage of the Recycleworks programs varies substantially. It can be difficult to predict program usage as they can rely on a number of factors - it has been particularly challenging considering how the pandemic has shifted the behaviors of the public. We hope by continuing to gather this data and reviewing it alongside relevant conditions, we can establish a model to assist in the accurate projection of program usage. Below, you'll see how the Recycling Program was used in FY21.



Gillnet Collection Program

CBJ IS WORKING WITH Net Your Problem (<https://www.netyourproblem.com/>) to offer free net recycling to local fishers. Derelict fishing gear can have major negative impacts on marine life and the environment if abandoned. This program offers a pathway to give nets a second life.



Capital Transit is dedicated to providing safe, reliable, low cost transportation in Juneau to ensure that all citizens have the ability to engage in the community. Capital Transit provides a reliable alternative to reduce the presence of automobiles.

ELECTRIFICATION OF THE CAPITAL TRANSIT FLEET IS MADE POSSIBLE BY THE STATE OF ALASKA

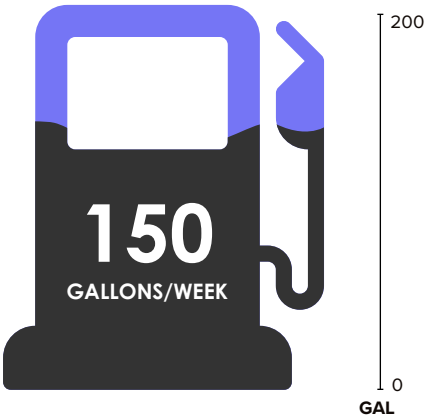


Electric Bus

IN APRIL OF 2020 Mayor Beth Weldon Joined Governor Dunleavy and Juneau sustainability advocates in christening the first electric bus in full service in Alaska. Electrification of the Capital Transit fleet is made possible by the State of Alaska who administers the LoNo grant program, a Federal Transit Authority grant that provides funding for transit agencies for zero emission and low-emission busses and infrastructure.

Energy Consumption

DURING THE SUMMER MONTHS, the Proterra electric bus can travel 170 miles per charge. A diesel bus operates on average 5.8 mile/gallon. That means for every day the electric bus is in service, we save 29 gallons of fuel. Currently the bus runs 5 days a week - a savings of 150 gallons per week.





ON THE HORIZON

There are many exciting projects that the Department has been working on under the leadership and direction of the Public Works and Facilities Committee (PWFC). Look for updates on these efforts in future reports!



Energy Efficiency Upgrades

IN 2020, JUNEAU VOTERS approved a \$15m bond to put Juneau to work by advancing capital improvement projects. The bond prioritized deferred maintenance projects that would improve the energy efficiency of City facilities. Those projects included heat pumps at Glacier Fire Station and Eagle Valley Center, LED lighting replacement at Savikko Park and roof replacements at Treadwell Arena, Dzantik’l Heeni and Riverbed schools. These projects will be completed over the next 2 years and we are looking forward to highlighting them in future Annual Reports.



Electric Vehicle Charging

MORE STATIONS ARE ON THE WAY! Juneau is already a leader in per capita electric vehicle ownership, and more people are choosing to go electric each year. To support the growing needs for charging within the community, we are working with community partners to identify cost effective and convenient locations to install additional public vehicle chargers.

A photograph of a compost pile. On the left, there is a pile of green grass, sticks, and some purple flowers. On the right, there is a pile of dark, rich brown soil. A shovel with a red handle and a metal head is stuck into the soil. A tree branch is visible in the background, leaning against a wooden fence.

Solid Waste

WHAT WE THROW AWAY is part of sustainability and with limited landfill capacity, PWFC has taken a deep dive into how CBJ can influence this without owning the waste stream or the landfill. There is hope! Look for increased communication from Waste Management on odor control measures though PWFC. Longer term, PWFC is hoping to work with the private sector to increase composting and together with the community work on a zero waste plan to reduce what ends up in the landfill in the first place.



CONTACT US

CBJ Engineering & Public Works
907.586.5254

9.20.21 Update on PWFC Action Items for 2021 Assembly Goals

Assembly Goal	Action Item	9.20.21 Progress Report
<u>3a. Maintain Assembly focus on deferred maintenance including BRH and JSD;</u> Responsibility: Assembly, Manager's Office, E&PW, all operating departments with facilities Notes: Short-term	1. Bond package funds many maintenance projects, including JSD	4.12.21: Memo presented to PWFC from Building Maintenance on ongoing efforts to promote this goal and potential next steps.
	2. BRH deferred maintenance efforts supported by Assembly with annual appropriation and staff	3.12.21: CBJ Engineering has ten active BRH projects
	3. Communicate through the CIP process how energy efficiency and costs savings over the life of the project are taken into consideration as project criteria	3.12.21: See 3.15.21 CIP memo on how energy efficiency will be included in the future as selection criteria at Department and Manager's office level. Memo also speaks to how energy efficiency is taken into consideration when designing a project and selecting preferred alternatives
<u>3f. Examine life cycle costs of CBJ facilities including city hall.</u> Responsibility: Assembly, Manager's Office, E&PW Notes: Short term	1. Update internal working document on deferred maintenance for CBJ facilities (excluding BRH and JSD) and present to committee	4.12.21: Memo presented to PWFC from Building Maintenance on ongoing efforts to promote this goal and potential next steps.

Assembly Goal	Action Item	9.20.21 Progress Report
<u>5a. Develop strategy to measure, track and reduce CBJ energy consumption.</u> Responsibility: Assembly, Manager's Office, E&PW Notes: Short term	1. Measure/track: Develop a dashboard using procurement data on how much fuel/ electricity CBJ uses	9.20.21. Draft EPW Annual Sustainability Report with annual CBJ wide energy use data, project and department highlights presented to PWFC
	2. Analyze past energy consumption and track future consumption of one or two facilities that are scheduled for energy efficiency improvements with the recently passed bond package to be able to demonstrate the savings and impact	9.20.21 Draft Annual Report highlights Energy Star data tracking and methodology for tracking CBJ facilities, including Glacier Fire Station, Eagle Valley Center and City Hall.
<u>5b. Make a long term plan to achieve reliance on 80% renewable energy sources by 2045</u> Responsibility: Assembly, Manager's Office, E&PW Notes: Short term	1. Task JCOS with developing a strategy to examine community wide energy use and report back to the committee with a request for proposal for some level of technical assistance	9.20.21 JCOS requests funding support from PWFC for and Energy Pathways modeling tool.
<u>5c. Develop climate change adaptation plan</u> Responsibility: Assembly, Manager's Office Notes: Short term	1. Have committee review revisions to the <u>2007 Juneau Climate Change Report</u> due out spring of 2021 that identifies climate hazards, impact of hazards and mitigation measures. Task JCOS with community outreach and education on report	7.19.21: Updated timeline and working title. Presentation to PWFC anticipated in late summer/fall, working title of draft is "Juneau's Changing Environment: Predictions and Responses to Climate Change"
<u>5d. Develop solid waste strategy including plans to increase recycling and deal with abandoned/junked vehicles.</u> Responsibility: Assembly, Manager's Office, E&PW, JPD Notes: Long term	1. Update to the Committee of the Whole on current solid waste situation in Juneau, history of CBJ research and analysis of the issue, and potential next steps (consider updating action item based on committee discussion)	9.20.21 PWFC presents recommendations, including a PPP composting initiative and developing a zero waste plan to the COW.



MEMORANDUM

TO: Katie Koester
Engineering & Public Works Director

FROM: Greg Smith
Contract Administrator

Date: September 16, 2021

SUBJECT: Contracts Division Activity
August 27, 2021, to September 15, 2021

Current Bids – Construction Projects >\$50,000

BE22-036	Eagle Valley Water Well Drilling	Estimate \$65,000. North40 Construction was the sole bidder, award in progress for \$77,400.
BE22-066	Area Wide Paving Phase II	NTP issued to SEEM 09/02/2021, \$197,745.00
BE22-100	Lemon Creek Pit Asphalt Processing	Estimate \$125,000, two bids received on 8/31/21. NTP issued to SECON on 9/15/21, \$155,000.

Current RFP's – Services

RFP E22-056	Design and CA for BRH Emergency Dept. Addition & Renovation	Four proposals received on 8/3/21. Under evaluation.
RFP E22-101	Design and CA&I for the Treadwell Arena Roof Replacement	One proposals received from JYW, negotiations are in progress.
RFP E22-131	Design for West 3 rd St & Dixon St Reconstruction	Proposals due 9/23/2021
RFP E22-141	Design for Savikko Park Improvements	Proposals due 10/6/2021
RFP E22-167	Design and Survey Services for Misty Lane	Proposals due 10/05/2021

Other Projects – Professional Services – Contracts, Amendments & MR's >\$20,000

Am 3 to E20-215	CA&I for Hospital Dr. Reconstruction – Pre-CA&I for the BRH Site Improvements	NTP issued to GCI on 9/2/21, \$25,000
PA 2 to E20-139(TE)	MR 22-122 for BRH backup generator and boiler fuel line design	NTP issued to DOWL on 9/2/21, \$52,606
Am 1 to E22-029	Design for Meadow Lane Improvements – 100% bid-ready docs	NTP issued to DOWL on 9/7/21, \$146,150
AM7 to E20-133	CCFR Mechanical Upgrades	NTP issued to PDC on 09/15/2021, \$87089.00

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

E21-166(AB) PA 5	Seward Street Lighting	NTP issued to Anderson Brothers on 09/15/2021 in the amount of \$20,000.00
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Term Contracts for Small Civil & Utility Construction Services (>\$20,000)

Am 1 to E19-192(A)	MR21-221 for Thane Warehouse Fuel Cleanup – Crawlspace soils cleanup	NTP issued to Arete Construction on 9/8/21, \$71,445
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Contracts Division Activity
August 27, 2021, to September 15, 2021

Utility Agreements (AEL&P, GCI, & ACS)

Am 1 to UA 2 with GCI	Vault relocation for the BRH Behavioral Health Facility	NTP issued 8/27/21, \$66,079
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MR E20-139 – 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 Administration
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