



WHEN NATURE CALLS...

WHERE DO YOU GO!?

Anchorage Areawide Public Restroom Project

Final Report - October 2024

Anchorage Areawide Public Restroom Project

Final Report

Executive Summary

This report is a summary of the Anchorage Areawide Public Restroom Project. The Anchorage Assembly sought out public involvement efforts to conduct research and analysis for a Municipality wide implementation plan for public restrooms and sanitation in public spaces. The goal of the project was to identify and prioritize permanent public restroom locations throughout the Municipality of Anchorage (MOA) and research potential restroom products to be installed. Throughout the process the project team engaged the public, gathered data, and coordinated with the Municipality's internal project team, as well as other stakeholders and partners.

The primary method of engagement was through the distribution of an areawide survey to the public. The project team sought feedback on the need for public restrooms, desired amenities and locations and public opinion on previously proposed funding. Research was conducted to select several prefabricated units and understand the performance of the installed units. Research efforts also looked into costs of maintenance and construction. The information and data gathered is presented in this report in the following five parts:

1. **Public Involvement**
2. **Community Survey**
3. **Location Selection Analysis**
4. **Product Research and Costing**
5. **Implementation Plan and Map**

The implementation plan and map illustrate the prioritized locations where permanent public restrooms are desired by the public throughout the Municipality. This list includes seven potential locations throughout the MOA and the recommended restroom product that could service the community at that location. Throughout the product research and costing phase, it was determined two products would be recommended, one that could operate without utilities and another product that could be connected to water/sewer/electric.

1. Public Involvement

The project team conducted various public involvement outreach efforts including the creation of a project website, distribution of an informational flyer, a social media campaign, an interactive web map to collect public comment on recommended restroom locations, and a public survey conducted through Survey Monkey. Additional outreach efforts were also conducted through the Federation of Community Councils (FCC), government organizations and stakeholders.

The Public Involvement strategies and activities focused on achieving the project goal: Learn as much as possible about public opinion, desired locations, and types of public restrooms proposed for installation throughout MOA to improve health and sanitation for all people and the environment. *Public Involvement Plan found in the appendix.*

Public Involvement Objectives

1. Improve the public's understanding of how providing public restrooms throughout the MOA can improve the health and sanitation of the city for all people and the environment.
2. Develop a positive message to communicate the desired intent for MOA Public Restrooms that will be used by implementing agencies as well as partner organizations and collaborating stakeholders.
3. Communicate with a broad spectrum of stakeholders (city-wide, regional, and in the immediate vicinity of the project) to inform them about the MOA Public Restroom project.
4. Collaborate with the Anchorage Assembly to collect feedback from the public and project stakeholders.
5. Assess stakeholder perceptions to understand community support and opportunities for improvement.

Public Involvement Outreach Methods

The project team developed a suite of project communication tools used at meetings, events, online, and on social media.

- **Landing Page** – The project website landing page was a hub for project information, and provided visitors with the survey link, interactive web map link, and contact information.
- **Interactive Web Map** – This interactive map showed all existing restroom facilities throughout the MOA and provided a platform for the public to provide a recommended location for a permanent public restroom.
- **Community Survey** – Distributed via poster, social media, FCC email distribution list, and project e-newsletter.
- **Poster Distribution**– Posted on all existing restrooms/port-o-potties within the MOA and on community bulletin boards.
- **E-Newsletter** – Distributed to all stakeholders and partners, including the FCC email distribution list.
- **Social media** – Distributed content for up to four (4) Facebook/Instagram posts.

Comment Collection

Throughout the duration of the project, the public and stakeholders were encouraged to provide comments and concerns to the project team. Most comments were captured through the community survey; however, the project team did receive a number of comments via e-mail and through social media. Although it was not within the scope of this project to document all comments received through social media, a handful of comments were collected and can be found in the appendix. *Additional comments can be found in the appendix.*

2. Community Survey

In collaboration with the Municipality of Anchorage, Anchorage Assembly, a survey for community members and other stakeholders was deployed on June 17th, 2024, to gather input regarding restroom needs, availability, and public funding opinion. The survey was conducted online via Survey Monkey, was open for a total of 29 days, closed on July 15th, 2024, and a total of 4,275 responses were collected.

Survey Objective

The survey was designed to collect public input on restroom locations and user needs as well as understand resistance to public restroom infrastructure and funding. Open ended questions allowed respondents to provide more insight into public perception of public funding being allocated to restrooms. At the close of the survey, respondents were automatically directed to the project's interactive web map. This allowed respondents to suggest restroom locations and note the location of existing public restrooms missing from the map to help determine the most in demand locations of restroom facilities.

General Impression

The general impressions of the Anchorage Areawide Public Restroom Project survey show that the majority of respondents (72%) had experienced a need for a public restroom while visiting a public space or park within the municipality. Of the 72% that had experienced the need, 54% selected that a public restroom was readily available. All respondents were asked if the Municipality needed more public restrooms, to which most respondents answered no (58%). The majority also responded they would not support publicly funded restroom projects in the future (59%).

Throughout the survey, several open-ended responses allowed respondents an opportunity to share more insight. Respondents suggested locations for restrooms throughout the Municipality, and primary locations mentioned included the Coastal Trail, urban areas such as downtown, and major parks such as Westchester Lagoon and Cuddy Family Midtown Park. Comments were also made concerning the safety of restroom facilities due to illegal and destructive uses, as well as lack of cleanliness. Additionally, the costs of constructing and maintaining restroom facilities was a repeated concern voiced in respondent comments.

Generally, respondents appeared apprehensive of the cost of construction and maintenance of public restroom facilities. The majority of respondents felt the current Rent-A-Can system used throughout the Municipality meets the current restroom needs of the public. Primary reservations stem from fears of misuse of facilities and general funding concerns. *The complete summary of the survey results can be found in the appendix.*

3. Location Selection Analysis

Process

The location selection analysis process was completed in three phases: A. Inventory, B. Evaluation, C. Selection. The inventory phase consisted of the project team conducting a thorough record of all existing public restrooms/porta-potties within the MOA and creating a publicly available interactive web map on the project website.

The evaluation phase was a three-part process: 1. conduct an interactive web map survey for the public to identify recommended public restroom locations throughout the Municipality of Anchorage. 2. reference existing Strava Global Heatmap data of high use areas to the recommended locations from the interactive web map. 3. use existing data from the MOA Rent-A-Can usage frequency of service days to rank the proposed locations from the interactive web map. (This refers to the number of days in a week an existing porta-potty (Rent-A-Can) is serviced.)

During the evaluation phase, each of the top two recommended locations in each Anchorage Assembly District were ranked (see evaluation criteria section below) resulting in a priority list of proposed public restrooms for the MOA. Selection of the top six ranked locations were identified in this process, one location in each Assembly District.

Inventoried Existing Public Restrooms

The MOA, Parks and Recreation Department contracts with Rent-A-Can to provide portable sanitation throughout parks and trails during the summer months, which vary from April to May through the end of September or beginning of October. During those months, 144 porta-potties are distributed throughout Anchorage Parks and Trails. Of the 144 Rent-A-Can facilities, 26 are designated for winter use. Utilizing data provided by the Anchorage Parks & Recreation Department, the existing porta-potty locations were mapped using ArcGIS Interactive Web Map and made available to the public via a provided link on the projects' webpage.

Interactive Web Map

During the location selection analysis, the project team wanted to identify the most needed locations for public restrooms throughout the MOA by hearing from the public. Utilizing ArcGIS Interactive Web Mapping software, the project team mapped all existing MOA Rent-A-Can locations and existing indoor public restroom locations throughout the Municipality. The map provided an opportunity for the public to learn where existing public restrooms / porta-potties are located throughout Anchorage, as well as add any missed locations. The public could also recommend new public restroom locations, based on their perceived need.

The ArcGIS Interactive Web Map was available to the public from Monday, June 17 to Monday, July 15, which was a total of 28 days. The web map was posted via a link on the project's website, distributed as a QR code on flyers, and shared via social media and in project E-Newsletters.

The map received a total of 939 recommended public restroom locations within the MOA, however, only 417 suggested locations were on Municipal lands. For the purpose of this project only those recommended locations on Municipal lands were considered as viable locations. [See the appendix for a full list of the recommended locations.](#)

Location Priority Ranking & Scoring System

Each of the 417 recommended public restroom locations were separated by the Assembly Districts of the MOA including District 1: North Anchorage, District 2: Chugiak, Eagle River, District 3: West Anchorage, District 4: Midtown Anchorage, District 5: East Anchorage, and District 6: South Anchorage, Girdwood, Turnagain Arm. Location priorities were divided by Assembly Districts to provide even distribution of recommended public restrooms throughout the Municipality. Each of the recommended locations were then counted and grouped by location/park/trail system and proximity to existing MOA Parks and Recreation lands/facilities.

For each Assembly District, the top two recommended locations were identified to be ranked using the evaluation criteria. Below is a table highlighting which locations within the Municipality ranked highest for number of mentions by the public on the interactive web map.

Public Web Map Suggested Location Recommendations for each MOA Assembly District (Top 2 ranked locations per public recommendation)			
Assembly District		Location (MOA / Parks and Recreation Lands, and Trails)	Number of Mentions
1	North Anchorage	<i>Delaney Park Strip</i>	27
		Margaret E Sullivan Park	21
2	Chugiak, Eagle River, JBER	<i>Mt. Baldy Trailhead</i>	7
		Beach Lake Park	4
3	West Anchorage	<i>Kincaid Park</i>	32
		Earthquake Park	17
4	Midtown Anchorage	<i>Campbell Creek Greenbelt</i>	36
		Far North Bicentennial Park	25
5	East Anchorage	<i>Far North Bicentennial Park</i>	8
		Chanshtnu Muldoon / Windsong Park	6
		Russian Jack Park South	6
6	South Anchorage, Girdwood, Turnagain Arm	<i>Ruth Arcand Park</i>	5
		Forsythe Park/Bob Cross Park	2

Strava Global Heatmap

Strava Global Heatmaps are a public resource that show the popularity of physical activities logged in a specific location over a period of time. The heatmap shows ‘heat’ made by activities of users over the last year of use. The heatmap for the MOA was overlaid with the recommended locations (from the public web map) to identify which areas were the hottest. If the heatmap line was white, it correlated with the most received use, compared to a line that was darker in color (dark blue or purple) receiving fewer users. This information was used as part of the evaluation criteria to help identify which areas of the Municipality receive heavy visitation. It was not a surprise to see the majority of recommended locations were in proximity to high use areas on the heatmap. [A map of the Strava Heatmap is found in the appendix.](#)

MOA Rent-A-Can Usage Frequency

The MOA Parks and Recreation Department is contracted with Rent-A-Can to provide porta-potties and servicing of those units throughout parks and trails. For the purpose of this report and as part of the evaluation criteria, the number of days (in a week) a porta-potty was serviced determined which locations receive heavy visitation. Most recommendations for a permanent public restroom were at locations of an existing Rent-A-Can. Therefore, if a location received 4 or more services days (in a week) it would receive more points than a facility only serviced, one day a week. For those areas where no public restroom is currently located or being serviced it would be ranked 0-1 service days.

Evaluation Criteria

The evaluation criteria to rank the top two recommended locations was based on three sets of evaluation criteria, which were public input from the interactive web map, comparison of Strava heatmaps, and frequency of service to existing Rent-A-Can facilities.

1. **Public Input via the Interactive Web Map**
 - a. Ranking of how many times this location was mentioned on the web map.
 - i. 20+ mentions = 4, 10-20 mentions = 3, 5-9 mentions = 2, 1-4 mentions = 1
2. **High Use Areas based on Strava Heatmaps**
 - a. Utilize Strava Heat Maps to determine where the most park and trail use is occurring.
 - b. Heat Map setting for All Sports.
 - i. “The darker the line, the more often the section of trail is used” taken from the Stava website. Closest route to suggested location
 - ii. White = 4, Light Blue = 3, Dark Blue = 2, Purple = 1
3. **MOA Rent-A-Can Usage Frequency of Service Days**
 - a. Frequency of service days
 - i. 4+ service days = 4, 3 service days = 3, 2 service days = 2, 0-1 service days = 1

Location Criteria for Public Restroom Based on Community Need						
Location: SAMPLE						
Evaluation Criteria	Weight	Points				Weighted Score (weight + points)
		4	3	2	1	
<i>Public Input – Web Map</i>	5	20+ mentions	10-20 mentions	5-9 mentions	1-4 mentions	9
		4				
<i>High Use Areas – Strava Heatmap</i>	3	White	Light Blue	Dark Blue	Purple	7
		4				
<i>MOA Rent-A-Can Service Days</i>	4	4+ service days	3 service days	2 service days	0-1 service days	7
			3		1	
Total Points						23

Based on this sample, the location was mentioned more than 20 times on the web map, giving it 4 points with a weighted score of 9. The location is in a high use area on the Stava Heatmap indicated by the white line on the map, giving this location 4 points with a weighted score of 7. Regarding the final criteria of MOA Rent-A-Can service days, this location has an existing porta-potty and it is serviced three days a week giving it 3 points and a weighted score of 7. The total points for this location scores 23 out of a possible 24 points.

This evaluation was conducted for each of the top two suggested locations in each Assembly District resulting in six prioritized locations (two locations for assembly district 2 – tied score) for permanent public restrooms distributed throughout Anchorage.

Anchorage Areawide Public Restroom Project

Prioritized Public Restroom Locations

Assembly District	Location	Criteria Score (Weighted Score)	Rank
1	Margaret E Sullivan Park – Westchester Lagoon	24	1
2	A. Beach Lake Park – Beach Lake Chalet	19	6
	B. Mt. Baldy Trailhead	19	7
3	Kincaid Park- Raspberry Parking Lot	22	3
4	Campbell Creek Greenbelt – Taku Lake Park North	23	2
5	Far North Bicentennial Park – Bivouac Trailhead	22	4
6	Ruth Arcand Park – Abbott Road Picnic Shelter	21	5

4. Product Research & Costing

A significant aspect of this project was researching alternative public restroom products and the associated costs of purchase/construction, transportation to Alaska, installation, and maintenance. The project team reviewed the existing Assembly research and explored a number of alternatives based on the information gathered from the survey, stakeholders, analysis reports from other municipalities, capital and maintenance costs, and interviews from city departments.

To help guide the product research, data was taken from the community survey. Respondents were asked what would prevent them from using a public restroom. The top responses were cleanliness/lack of maintenance, safety, lack of toilet paper, lighting, and lack of running water. When researching restroom products, the project team looked for facilities that could accommodate the desires of the public. The products researched in this report aim to suggest products that are easy to clean/maintain, provide safety features, and include appropriate lighting and features to ensure the availability of toilet paper.

By reviewing existing facilities throughout the Municipality of Anchorage, it was realized that the Parks and Recreation Department currently relies heavily on Rent-A-Can porta-potties to service parks and trails throughout the extensive network. Most of these facilities are for summer use only and do not provide a flush option or running water for hand washing and proper sanitation. This report compares the existing costs associated with the use of porta-potties to the products researched. The data regarding rental and maintenance costs was provided by the Anchorage Parks and Recreation Department and the Anchorage Park Foundation.

Current MOA Porta-Potty Costs

The Municipality of Anchorage, Parks and Recreation contracts with Rent-A-Can to provide portable sanitation throughout parks and trails. During the summer months, which vary from April to May through the end of September to beginning of October, 144 porta-potties are distributed throughout Anchorage Parks and Trails. Of the 144 Rent-A-Can facilities, 26 are designated winter use. Below is a table of the rental costs from 2018 through October of 2024.

Municipality of Anchorage Rent-A-Can Rental Costs								
Parks and Recreation	2018	2019	2020	2021	2022	2023	2024 (as of 10/2024)	Grand Total
Girdwood Valley Service Area	\$8,178	\$8,060	\$8,731	\$10,269	\$11,827	\$13,002	\$9,757	\$69,823
Anchorage Bowl Parks & Rec.	\$295,108	\$245,048	\$220,307	\$351,452	\$382,864	\$404,241	\$202,050	\$2,101,071
ER/Chugiak Parks & Rec.	\$26,461	\$22,849	\$35,155	\$45,054	\$35,170	\$53,344	\$24,522	\$242,553
YEARLY TOTAL	\$329,747	\$275,957	\$264,193	\$406,775	\$429,862	\$470,587	\$236,329	\$2,413,450

Reviewed Public Restroom Products

As part of the project four public restroom products were reviewed, including the Portland Loo, Green Flush, UrbenBlu, and EcoLoo. The Anchorage Assembly suggested the Portland Loo as a possible option as it is a well-tested public facility designed for safety, cleanliness, and resistance to damage. The other restroom products were considered based on vandal resistant features, winter availability, ease of maintenance, and on/off grid options. [Full product information sheets can be found in the appendix.](#)

The Portland Loo – Product Info

The Portland Loo is a freestanding, public restroom designed to deter criminal activity, resistance to vandalism, and is easy to maintain. They have performed successfully in over 20 cities throughout the US and Canada since first being installed in Portland, Oregon in 2004. These units are ADA-compliant and designed to balance privacy and safety with ground-level visibility to determine if a unit is occupied. They have the option to be connected to sewer and water or stand-alone off-grid.

Green Flush Restrooms – Product Info

Green Flush Restrooms are a vaulted unit that offers a flush toilet option with and without a utilities connection. These restrooms boast that they never smell – neither inside nor out - because of their Green Flush Technologies that make them an earth-friendly modular flush restroom. This prefabricated unit can be installed by connecting to existing utilities or, when not served by utilities, can function with the use of solar power and extreme water-conservation techniques to provide a clean user experience.

UrbenBlu – Product Info

UrbenBlu is a North American manufactured smart, self-cleaning (sanitizing), vandal proof public restroom. It is a prefabricated turnkey solution to lower maintenance costs and designed for winter climates in mind. The unit is rated to -40 degrees Fahrenheit and comes with a heated 12-inch structural concrete pad. The restroom is designed to be contactless to increase hygiene and reduce the spread of any germs and viruses. The units require on site water/well, sewer/septic and electricity as they utilize smart technology to regulate the buildings features.

EcoLoo – Product Info

EcoLoo is a new product designed by Cama'i Enterprises, an Alaska company offering an accessible, durable, and sustainable public restroom facility to compete with The Portland Loo. The EcoLoo offers similar product design to The Portland Loo, however, instead of louvers it uses frosted acrylic window panels to obscure occupants for security and privacy. This allows diffused natural light to enter the restroom while also deterring criminal activity.

Reviewed Products Costs

The Municipality of Anchorage, Parks and Recreation contracts with Rent-A-Can to provide portable sanitation throughout parks and trails. During the summer months, which vary from April to May through end of September to beginning of October, 144 porta-potties are distributed throughout Anchorage Parks and Trails. Of the 144 Rent A Can facilities, 26 are designated winter use. Below is a table of the maintenance costs from 2018 through early 2024.

Reviewed Public Restroom Product Costs					
Product	Size	Water/Sewer/Electric	Electric	Maintenance Costs	Purchase Cost (double unit)
The Portland Loo	Single unit	Required	Solar Available	\$1,200 / month	\$60,000 plus shipping
Green Flush Restrooms	Single & Multi-unit	Not Required	Solar Available	\$0.30 / use – vaulted toilet per 20,000 uses = \$6,000.00	\$80,000 base model, plus shipping
UrbenBlu	Single & Double	Required	Required	\$180.00/ month \$2,160 / year	\$195,000 plus \$66,500 shipping = \$261,500
EcoLoo	Single & Double	Not Required	Solar Available	N/A	\$53,425 + \$5,495 installation = \$58,920
Porta-Potties	Single & ADA Units	Not Required	No	\$89.74 / month \$1,076.88 / year	Rental Units \$825.00 month

Municipal Interview Summary

Anchorage is a unique northern city experiencing extreme cold, record amounts of snow, and long sunny days. As a way to learn more about the reviewed restroom products, the project team conducted a series of municipal interviews. These interviews were geared towards learning more about how the product is performing, the installation process, and the costs associated with maintenance.

Nine interviews were conducted via phone, email or Microsoft Teams throughout the duration of the project to learn more about The Portland Loo, Green Flush, UrbenBlu, and existing brick and mortar restrooms in Anchorage and Seward, Alaska. [Full interview summaries found in the appendix.](#)

Portland Loo- Interviews

Three interviews regarding the Portland Loo were conducted with the Kodiak Harbor Master, the Transit Director of Ketchikan, and with Chris Lawrence the Director of Operations for the Town of Smithers, BC. Below is a summary of those interviews.

The Harbor Master with the Port of Kodiak was interviewed regarding the installation of four Portland Loo restrooms that took place in 2022. Dave reported the Portland Loo does not compare to an indoor facility, however, is it better than a porta-potty. He found The Portland Loo is not designed with coastal Alaska in mind because on windy, rainy days the restroom is not a popular option due to the louvers allowing wind and rain inside the restroom, which also makes it hard to keep the toilet paper dry. Additionally, the hand washing on the outside of toilet isn't nice for after use. The port is spending \$3,000 month on plumbing because vagrants are flushing unnecessarily items down the drain. The restroom is not used year-round, and considers the stainless steel isn't a comfortable option in winter. The community feels that this was not the most successful project. There is a need in the community for more public restrooms for residents and tourists, however, because harbor users are paying for the plumbing fees it's been a difficult project.

Transit Director for Ketchikan, Kyan Reeve was interviewed regarding the installation of The Portland Loo in 2014 near the harbor in Ketchikan. The following is a summary of that phone interview. The city has found the toilet to be easy to clean and they haven't had any rust issues. They find the louvers are great for visibility inside the toilet, as it deters people from sleeping inside, and helps reduce the smell. The city does not keep the restroom open outside of the summer/tourist season as they have had issues maintaining the unit in the winter including freezing of the outside hand wash station.

Smithers, B.C. produced a document in 2020 to provide insight into their experience of installing and maintaining The Portland Loo in an urban area. Follow up questions were sent to the director of operations in Smithers to understand if the winterization efforts outlined in the document were successful and if they would recommend the unit. Smithers has had to resort to more extreme measures to continue operation in the winter, such as continuously running water, creating a PVC liner around the base, and using a blow torch to remove ice buildup. Smithers did not recommend the installation of The Portland Loo.

Green Flush Restrooms - Interviews

Two interviews regarding the Green Flush Restrooms were conducted with the Town of Faser, Colorado and the Village of Wilson in upstate New York.

The Town of Fraser had recently installed a three-room Green Flush Restroom unit with utilities in an urban area. The installation was well received by the public and the city official commented that Green Flush was a great company to work with. Concerns were expressed with the winter hardness of the unit and with the roof construction not providing much snow or rain protection. They had a difficult time with the shipping process and are currently working on repairing a minor leak with Green Flush. Faser would be hesitant to install a Green Flush unit again because they felt there was not a real time or cost savings with the prefabricated unit as opposed to a brick-and-mortar unit.

The Village of Wilson has a Green Flush unit they operate seasonally and that is connected to utilities. The unit is located in a recreational use area and also sees use from nearby vehicular traffic. Wilson is happy with their Green Flush installation and would recommend the company and facilities.

UrbenBlu - Interview

The Municipality of Fruita in Colorado recently installed an UrbenBlu double unit and has been pleased with the performance and features of UrbenBlu facilities. The installation has been well received in the community, although there has been a bit of a learning curve with some of the conservation minded features, particularly how the unit flushes only from the door unlocking. Through the city's research process, Fruita found selecting the UrbenBlu unit saved around \$90,000 over the installation of a brick-and-mortar unit. They would consider installing the product again and would recommend the use of UrbenBlu.

Brick-and-Mortar - Interviews

The project team conducted interviews to learn more about existing brick-and-mortar structures around Southcentral Alaska. Two restrooms were located in Anchorage at the small boat harbor and King's Landing Plaza at Ship Creek, and a third at the Seward Waterfront Park.

King's Landing Plaza at Ship Creek

The Anchorage Downtown Partnership maintains the restroom facilities located at King's Landing at Ship Creek and was contacted to understand their maintenance approach and experiences. Staff opens and cleans the restrooms daily during summer months and perform weekly pressure washing. Ultimately, maintenance is manageable, and the facilities do not experience any significant vandalism, with most vandalism being graffiti.

Anchorage Ship Creek Small Boat Launch

The Port of Alaska owns the restroom facility located at the Ship Creek Small Boat Launch and contracts out the maintenance to C's Services. The facilities are operated during the summer months and include an automatic locking system. After hour illegal activities often result in people relieving themselves outside the building while they are locked. As such, there is more of a burden placed on maintenance staff for cleanup of the surrounding area. Typical vandalism includes graffiti and broken faucets.

Seward Waterfront Park

The City of Seward maintains public restroom facilities at Waterfront Park during summer months. During large events, the majority of maintenance staff transition to restroom cleaning and maintenance. Restrooms are largely used appropriately but regular vandalism does occur. Typical vandalism includes objects like sand and rocks being flushed down the toilet and require additional costs of around \$1,000 monthly for plumbing services. The restrooms are closed and not heated during winter months, typically resulting in fitting and pipe replacements in the spring.

5. Implementation List & Map

In this section are the recommendations for the Anchorage Areawide Public Restroom Project. Below are the recommended public restroom products, their associated purchase, installation, and maintenance costs, a proposed maintenance schedule, and anticipated utilities costs.

Recommended Public Restroom Products

During the product research and costing phase of the project four public restroom products were studied: The Portland Loo, UrbenBlu, Green Flush Restrooms, and EcoLoo. Green Flush Restrooms and UrbenBlu stood out regarding durability, quality of fabrication, ease of installation, and because they can withstand a harsh winter climate. These two products offer options that could work well in urban environments where utilities are available, as well as off grid. Green Flush Restrooms and UrbenBlu are two public restroom products that can offer year-round sanitation to meet the most basic of human needs for the residents and visitors of the Municipality of Anchorage.

Green Flush Restroom

Green Flush Restrooms were chosen because they offer a customizable prefabricated structure that works with green technologies to offer an on and off grid option. Having a restroom product that offers both options working with and without a utilities connection is an important cost savings feature where MOA water/wastewater is not present at a selected location. These structures are prefabricated and can be moved if the Municipality recognizes the need elsewhere.

This product has many environmentally supportive features such as solar power for hot water, a room heater for the winter months and rainwater collection to supplement the flush water supply. The restrooms are engineered to reduce water consumptions up to 70% compared to conventional flush restrooms. Green Flush Restrooms use as little as half a gallon of water per flush, and the limited flow sink faucets and waterless urinals are just a few other great ways these restrooms conserve water. Green Flush guarantees these restrooms to remain odor-free and are relatively low maintenance.

UrbenBlu

UrbenBlu was the second recommended public restroom offering a solution for more urban environments, with the benefits including the utilization of smart technology, a self-clean/sanitation option, automatic locking doors for security, heated floors, and the unit being rated to -40 degrees Fahrenheit.

These fully customizable prefabricated units offer many features that make them a great fit for urban environments, including winter cities. They are fully automated and programmable for operating hours, cleaning cycles, occupancy time, and heating and lighting can be controlled and monitored remotely on a computer or mobile device.

One of the biggest advantages of the UrbenBlu is the sturdiness of the unit, and the choice of materials that makes them vandal-proof. This contactless restroom offers fiber reinforced concrete walls and a sink with an unbreakable stainless-steel mirror. Also, the toilet paper dispenser is sheet by sheet, which reduces the consumables. No moving or sliding parts could break or cause injury or additional maintenance, and all restrooms come with anti-graffiti protection. The units can be easily moved to another location if necessary. These smart restrooms, although they cost more than the Green Flush Restroom, offer the Municipality an option that is more suited for a high use urban environment.

Priority List & Map of Proposed Locations

The objective of this project was to conduct a public process to understand where public restrooms are needed throughout the Municipality of Anchorage. Although the findings of the community survey were heavily against the support of permanent public restrooms, the public was not shy about suggesting locations where they are needed. Over 900 suggested locations were recorded on the interactive web map and many comments were collected in the survey recommending locations where the MOA could benefit from improved facilities.

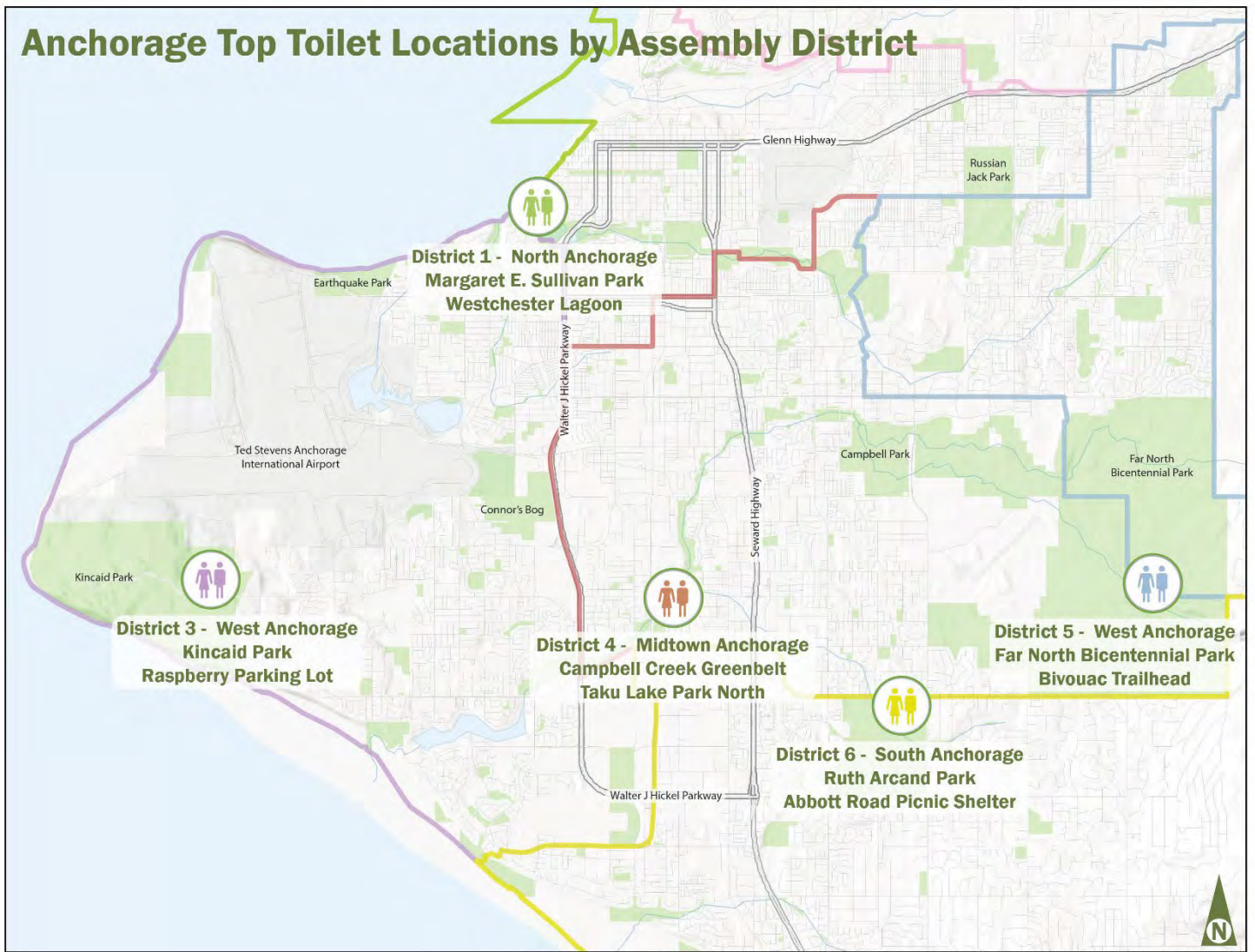
The table below and associated locations maps illustrates the prioritized locations where permanent public restrooms are desired by the public throughout the Municipality. This list includes seven potential locations throughout the MOA, (one Assembly District tied the criteria weighted score) and the recommended restroom product to service the community at that location. Throughout the product research and costing phase it was determined two products (the UrbenBlu and Green Flush Restroom) would be recommended. It was important that one of the selected options could operate without utilities (Green Flush Restroom) and that another product could be connected to water / sewer / electric (UrbenBlu).

Although the Green Flush Restroom can operate with or without utilities it was recommended to use this product where utilities are not present. The UrbenBlu restroom requires a full utility connection and offered amenities compatible with a more urban environment. Depending on the location, availability of utilities, and anticipated number of users, the project team recommended the appropriate product for each location.

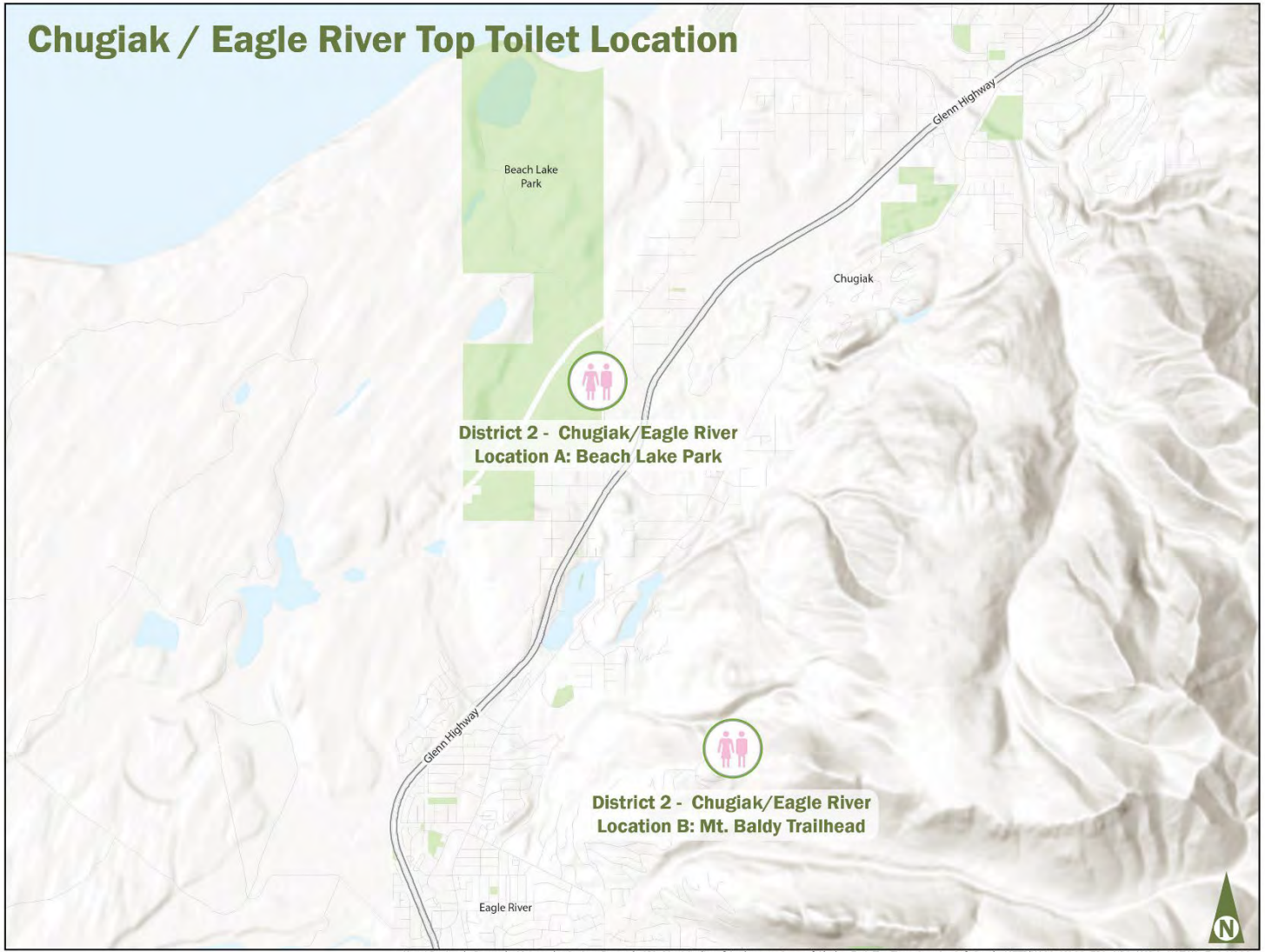
Priority List of proposed locations in each Assembly District

Anchorage Areawide Public Restroom Project					
Prioritized Public Restroom Locations					
Assembly District	Location	Criteria Weighted Score	Utilities (Y/N)	Rank	Recommended Product
1	Margaret E Sullivan Park – Westchester Lagoon	24	Y	1	UrbenBlu
2	C. Beach Lake Park – Beach Lake Chalet	19	N	6	Green Flush
	D. Mt. Baldy Trailhead	19	N	7	Green Flush
3	Kincaid Park- Raspberry Parking Lot	22	N	3	Green Flush
4	Campbell Creek Greenbelt – Taku Lake Park North	23	Y	2	UrbenBlu
5	Far North Bicentennial Park – Bivouac Trailhead	22	N	4	Green Flush
6	Ruth Arcand Park – Abbott Road Picnic Shelter	21	N	5	Green Flush

Map of proposed locations in each Assembly District - Anchorage



Map of proposed locations - Chugiak / Eagle River



Product / Construction Costs

For the two recommended public restroom products, the UrbenBlu and Green Flush Restroom, the project team determined based on existing and future needs of each location a double unit would be needed to accommodate the public’s needs. Below is a preliminary cost estimate including the fabrication cost for a double unit, manufacturer installation supervision & training (if necessary), shipping and installation/construction estimate.

Construction costs were determined using the MOA Project Management and Engineering Bid Tabs. A 10% annual cost increase is included.

Restroom Product Purchase / Construction Costs						
	Double Unit Fabrication Cost	Manufacturer Installation Supervision & Training	Shipping	Construction Estimate (Not including Utilities)	Utilities sewer, water, electric	Total Cost
UrbenBlu	\$295,000.00	\$33,000.00	\$33,500.00	\$29,511.83		\$391,011.83
Margaret E Sullivan Park					\$140,587.73	\$531,599.56
Taku Lake Park North					\$71,544.23	\$462,556.06
Green Flush	\$165,910.00	\$8,000.00	N/A	\$52,166.00	N/A	\$226,076.00

Utility construction costs were determined using the average bid cost collected by MOA Parks and Recreation Department during their Elderberry Park bid process in 2021. A 10% annual cost increase is included.

Maintenance Costs

To help determine the future maintenance costs of the proposed restrooms, the project team reviewed the maintenance and operation costs of the restroom facilities at King’s Landing near Ship Creek and the Ship Creek small boat launch. The Anchorage Downtown Partnership is responsible for the maintenance and operation of King’s Landing and budget for two staff members one hour per day. Maintenance duties include locking and unlocking the facilities, daily cleaning and sanitizing, and weekly pressure washing. Restrooms are available 7 days a week during peak summer visitor season. The port of Alaska owns the restroom facility at the small boat launch and contracts out the maintenance to a local company. This facility operates from June-October, and the Port anticipates a \$100 annual increase in maintenance costs.

Anticipated Proposed Restrooms Maintenance Costs			
	In-House Staff Maintenance Team	Contracted Maintenance Team	Current Rent-A-Can Cost (MOA 2023 per unit)
Monthly	2 Staff (\$18/hr) X 1 Hour/day X 7 days/week= ~ \$1,092.00	\$1,200/ 6 months= \$200.00	\$89.74 per month
Annual	\$13,104.00	\$2,400.00	\$1,076.88

Maintenance Schedule

The Municipality contracts Rent-A-Can service and has seasonal facilities available at several of the locations selected. The maintenance schedule was developed from the maintenance frequency of existing Rent-A-Cans at the proposed locations.

Anchorage Areawide Public Restroom Project Proposed Public Restroom Maintenance Schedule			
Assembly District	Location	Rent-A-Can Maintenance Days	Recommended # of Maintenance Days
1	Margaret E Sullivan Park – Westchester Lagoon	5	7
2	E. Beach Lake Park – Beach Lake Chalet	N/A	1
	F. Mt. Baldy Trailhead	N/A	3
3	Kincaid Park- Raspberry Parking Lot	N/A	3-4
4	Campbell Creek Greenbelt – Taku Lake Park North	3	5
5	Far North Bicentennial Park – Bivouac Trailhead	N/A	3
6	Ruth Arcand Park – Abbott Road Picnic Shelter	3	3-4

As a general guideline, the following should be considered for maintenance of future restroom facilities.

Location Type	Frequency of Maintenance
Urban Areas	Daily
Urban Parks and Trailheads	3-4 Days/week
Neighborhood or Regional Parks and Trailheads	Weekly

Utility Costs

For the two UrbanBlu restrooms located at Margaret E Sullivan Park – Westchester Lagoon and Campbell Creek Greenbelt – Taku Lake Park North it is anticipated the utility costs could be similar to the utility costs of the Ship Creek small boat launch. Although the facility at the port of Alaska is not operational during winter months, the facility remains heated to protect the plumbing.

PORT OF ALASKA Ship Creek Small Boat Launch RESTROOM UTILITY COSTS	
July 2023	\$321.74
August 2023	\$253.11
September 2023	\$276.99
October 2023	\$330.37
November 2023	\$760.09
December 2023	\$1,282.41
January 2024	\$1,439.92
February 2024	\$1,077.30
March 2024	\$936.10
April 2024	\$766.52
May 2024	\$548.37
June 2024	\$333.72
1 year TOTAL	\$8,326.64

Anchorage Areawide Public Restroom Project

Appendix

A. Public Involvement Plan

B. Public Outreach Materials

B.i. Website Landing Page

B.ii. Interactive Web Map

B.iii. Poster for Distribution

B.iv. E-Newsletter

B.v. Social Media Content

C. Public Comments

D. Survey Report Summary

E. Location Selection Analysis

e.vi. Full list of recommended locations

e.vii. Strava Heatmap

e.viii. Evaluation criteria score sheets

F. Product Research & Costing

f.i. Product information sheets

f.ii. Interview summaries

A. Public Involvement Plan

Anchorage Areawide Public Restroom Project

Public Involvement Plan Memo: Anchorage Areawide Public Restroom Project

Prepared by: Lucy Wittlinger, Huddle AK
June 2024

Project Overview

The Anchorage Assembly is seeking public involvement efforts to conduct research and analysis for a Municipality wide implementation plan for public restrooms and sanitation in public spaces. The project will engage the public in data gathering and include coordination with the Municipality's internal project team, as well as other stakeholders and partners.

Project Goals

The Public Involvement Plan strategies and activities are focused on achieving the project goal: *Learn as much as possible about public opinion, desired locations, and types of public restrooms proposed for installation throughout the Municipality of Anchorage to improve health and sanitation for all people and the environment.*

Public Involvement Plan Objectives

1. Improve the public's understanding of how providing public restrooms throughout the Municipality of Anchorage can improve the health and sanitation of the city for all people and the environment.
2. Develop a positive message to communicate the desired intent for MOA Public Restrooms that will be used by implementing agencies as well as partner organizations and collaborating stakeholders.
3. Communicate with a broad spectrum of stakeholders: city-wide, regional and in the immediate vicinity of the project to inform them about the MOA Public Restroom project.
4. Collaborate with the Anchorage Assembly to collect feedback from the public and project stakeholders.
5. Assess stakeholder perceptions to understand community support and opportunities for improvement.

Public Involvement Plan Activities

Public Outreach Methods

Huddle, in coordination with the project team, will develop a suite of project communication tools to be used at meetings, events, online, and on social media. Tools will include:

- **Landing Page** – Create a project website landing page as a central hub for project information, survey link, project map link, and contact information.
- **Project Map** – Create an inventory map of existing facilities throughout the Municipality of Anchorage. The map will also be used to identify needed locations.
- **Community Survey** – Survey will be distributed via poster, social media, FCC email distribution list, and project e-newsletter to gather data regarding need/desire for public restrooms, locations and types of desired facilities.
- **Poster Distribution**– Create a poster for distribution. Post an all-existing restrooms/port-o-potties with the MOA and on community bulletin boards.
- **E-Newsletter** – Create an E-Newsletter for distribution to all stakeholders and partner to share information and community survey.
- **Social media** - Content for Up to Four (4) Facebook/Instagram/Twitter Posts – to be used by project stakeholders.

Project Stakeholders – Identify potential project stakeholders to help with the distribution of information and community survey.

- MOA Parks and Recreation
- Anchorage Health Department
- People Mover
- Anchorage Park Foundation
- Visit Anchorage
- Anchorage Downtown Partnership
- Bike Anchorage
- Single Track Advocates
- Alaska Railroad
- Loussac Library
- Etc.

Comment Collection

During the project, it is anticipated the public and stakeholders will provide comments and concerns to the project team. Comments shall be emailed to Huddle who will collect and compile all feedback received for the duration of the project. Comments will be passed along to Assembly.

Public Involvement Report & Summary

Huddle will document and file all advertisements, telephone calls, letters, e-newsletters, logs of all public and stakeholder meetings, meeting summaries, and email correspondence sent and received during this task. A record of this correspondence will be included in the final summary report and will be presented chronologically to provide future project phases with the complete project history. Comments will be summarized.

B. Public Outreach Materials

B.i. Website Landing Page

B.ii. Interactive Web Map

B.iii. Poster for Distribution

B.iv.E-Newsletter

B.v. Social Media Content

B.i. Website Landing Page

The screenshot shows a web browser window with the URL malkclump/hud8t8tak/insapubtoiletrooms. The page features a header with the project name and two logos. Below the header, a large green banner contains the text "WHEN NATURE CALLS... WHERE DO YOU GO!?" in white. To the left is a 3D rendering of a wooden public restroom building. To the right, a text block reads: "The survey and interactive map are now closed, thank you for your participation!" followed by a paragraph explaining the project's goal. At the bottom right, a small box says "1. Take the survey! Now closed. Thank you for your".

Anchorage Areawide Public Restroom Project

WHEN NATURE CALLS... WHERE DO YOU GO!?

The survey and interactive map are now closed, thank you for your participation!

The Municipality of Anchorage in an effort to learn more about where and what type of public restrooms are needed for residents, park users, and visitors. Our mental well-being is enhanced when we're out with families and friends and know there's a place "to go." The survey and interactive map are now closed.

1. Take the survey!
Now closed. Thank you for your

B.ii. Interactive Web Map

The screenshot shows a web browser window with the URL hud8t8mapsarcgis.com/apps/webappviewer/index.html?id=6480002d426794b0c9d3d8802ab11772. The map is titled "Toilets in the Municipality of Anchorage" and shows a satellite view of the Anchorage area with numerous icons representing public restrooms. A legend on the right side of the map identifies the icons: "Missed Existing Restrooms" (blue male/female icon), "Your Recommended Restroom" (pink male/female icon), "Existing Indoor Restroom" (yellow male/female icon), and "MOA Porta-Potty" (green male/female icon). An "Instructions" pop-up window is visible on the left side of the map, providing details about the project and how to use the map.

Toilets in the Municipality of Anchorage

Welcome to the Anchorage Areawide Public Restroom Project Interactive WebApp!

We want to hear from you! Follow the instructions below to mark on the map where you think Anchorage needs public restrooms. The pink icon represent locations where the community wants to see future public restrooms installed within the Municipality of Anchorage. Inappropriate comments and locations outside of the Municipality of Anchorage will be removed. This map will be active

Map Legend

- Missed Existing Restrooms
- Your Recommended Restroom
- Existing Indoor Restroom
- MOA Porta-Potty

App Store
Click to install the app and help us help you help others when you fall off!

Anchorage Areawide Public Restroom Project

WHEN NATURE CALLS...

WHERE DO YOU GO!?

Scan the QR Code below
for a 3-minute survey.



Your input is greatly needed
& could inform future public
restroom installations!

The Municipality of Anchorage needs your input to learn where and what
type of public restrooms are needed for residents, park users, and visitors.

Let us know what you think!



Scan for more information



[View this email in your browser](#)



Anchorage Areawide Public Restroom Project

When Nature Calls... where do you GO?

The Municipality of Anchorage wants to learn more about where and what type of public restrooms are needed for everyday residents, park users, and visitors. Public restrooms enable us to be physically active and enjoy new experiences when we're away from home. Our mental well-being is enhanced

ANCHORAGE AREA WIDE PUBLIC RESTROOM PROJECT

WHEN NATURE CALLS...
WHERE DO YOU GO!?

The Municipality of Anchorage needs your input to learn where and what type of public restrooms are needed for residents, park users and visitors.

Let us know what you think!
Share your point of view on the **Public Restroom Survey**
Suggest a restroom location on our **Interactive Map**



ANCHORAGE AREA WIDE PUBLIC RESTROOM PROJECT

WHEN NATURE CALLS...
WHERE DO YOU GO!?

Ever been out and about and needed to GO?
Cycling an Anchorage Trail Attending a concert Downtown
Playing at a local park Out walking your pup
Shopping with friends Visiting an outdoor market

Tell us what you think!
Your input could inform future public restroom installations!

Take the Public Restroom Survey



ANCHORAGE AREA WIDE PUBLIC RESTROOM PROJECT

INTERACTIVE MAP



Public Restrooms are for everyone!

Use the interactive map to locate where you think a public restroom is needed within the Municipality of Anchorage



ANCHORAGE AREA WIDE PUBLIC RESTROOM PROJECT

WHEN NATURE CALLS...
WHERE DO YOU GO!?

FINAL WEEK

Let us know what you think!
Share your point of view on the **Public Restroom Survey**
Suggest a restroom location on our **Interactive Map**



C. Public Comments

Anchorage Areawide Public Restroom Project - Public Comments

Timestamp	Received by	Name	Your Comment	Response	Sent
	AMATS Facebook	Traci Mishler Odom	How much will the attendants for those bathrooms cost?		
	AMATS Facebook	Catherine Bliss	We don't want our beautiful city to turn into San Francisco. Please stop wasting taxpayer resources on special interests that ultimately undermine our way of life. This was voted down because we the people don't want it.		
	AMATS Facebook	Anita McKibbon Rosett	Let's place them at the home and business interest of each assembly member..... This will NOT work in Alaska!! Let's take a look back a second- How did that electric bus work? Please do not "waste" (pun intended) more tax payer money by flushing it down the toilet. Let common sense rule for once. Just once.....		
	AMATS Facebook	Brittany Gallagher	We already overwhelmingly voted this down. Why are we wasting taxpayer dollars when there are actual issues to be addressed. Completely infuriating		
	AMATS Facebook	Shari Romer-Prince	No Where!!! This was a hard NO. What's the point of voting if you just do what you want anyways?!		
	AMATS Facebook	Francesca Alle	Asking for a friend..... You saw the results,right?		
	AMATS Facebook	Francesca Alle	I remember a few months ago when bathrooms were voted down. Why are you wasting resources on this still?		
6/22/2024 6:32a	email	Kathy Burgess	<p>If the bond issue went down for the reason most of the people I discussed it with mentioned, it was because it was too big and expensive a start for an unknown quantity. Certainly sturdy public restrooms around the city are a good idea, but it would have been better to test them out with one or two to see what the problems and successes were before splashing out half a million dollars on ten.</p> <p>I think this public involvement effort is a splendid idea, and would have been even better before the proposal of the bond issue. I wish you great success in your research.</p>	<p>Hi Kathy,</p> <p>Thank you so much for this great feedback and for taking the time to share your thoughts. You are very right that a pilot project might be the best way to go now. The reason behind doing a bigger project in the bond was so that the restrooms could be spread out across the municipality and be useful for everyone, not just one part of town or demographic.</p> <p>Hopefully, we're on the right track now with this survey and study and we can get this idea revived in a way that is supported by the public and can be expanded upon in the future.</p> <p>Thanks again,</p> <p>Clare</p>	7/3/2024

	6/25/2024 email	Lucas Wright	<p>My name is Lucas Wright, and I can't make public comments or fill out the survey because I am a reporter.</p> <p>I feel strongly about this because I spent two years driving Uber and Lyft late at night while finishing my degree, and I would lose money and time having to drive to my apartment to use the restroom.</p> <p>I understand the problem with funding the restrooms, and the homeless situation introduces a lot of logistical problems.</p> <p>I lived in Europe for years, and they may be ahead of us on this issue. They have porta potties that people have to pay to use in many public places. They were not quite as ugly or poorly maintained as the ones that we usually see in the States.</p> <p>I just think this may be a tentative answer to the funding problem, and I'd never want to deny a person experiencing homelessness a basic service like a restroom. But punishing everyone for the problems they cause in the restrooms doesn't really work either.</p>		
7/1/2024 4:52pm	email	Stan Brown	What is a "missed public bathroom" on the interactive map/questionnaire?	Thank you for your question, a "missed existing restroom" refers to existing MOA public restrooms that were not identified when creating the interactive map. Example, maybe there exists a Rent-A-Can at a parking area however was not included in the map. Thank you for your question and participation in this project.	7/2/2024

D. Survey Report Summary



Municipality of Anchorage: Anchorage Areawide Public Restroom Project

Survey Report

August 2024

Survey Report Summary

In collaboration with the Municipality of Anchorage (MOA) Assembly, a survey for community members and other stakeholders was deployed on June 17th, 2024, to gather input regarding restroom needs, availability, and public funding opinion. The survey was conducted online via SurveyMonkey, was open for a total of 29 days, closed on July 15th, 2024, and a total of 4,275 responses were collected.

Survey Objective:

The survey was designed to collect public input on restroom locations and user needs as well as understand resistance to public restroom infrastructure and funding. Open ended questions allowed respondents to provide more insight into public perception of public funding being allocated to restrooms. At the close of the survey respondents were automatically directed to the projects interactive web map. This allowed respondents to suggest restroom locations and note the location of existing public restrooms missing from the map to help determine the most in demand locations of restroom facilities.

General Impression Summary:

The general impressions of the Anchorage Areawide Public Restroom Project survey show the majority of respondents (72%) had experienced a need for a public restroom while visiting a public space or park within the municipality. Of the 72% that had experienced the need, 54% selected that a public restroom was readily available. All respondents were asked if the Municipality needed more public restrooms, to which most respondents answered no (58%). The majority also responded they would not support publicly funded restroom projects in the future (59%).

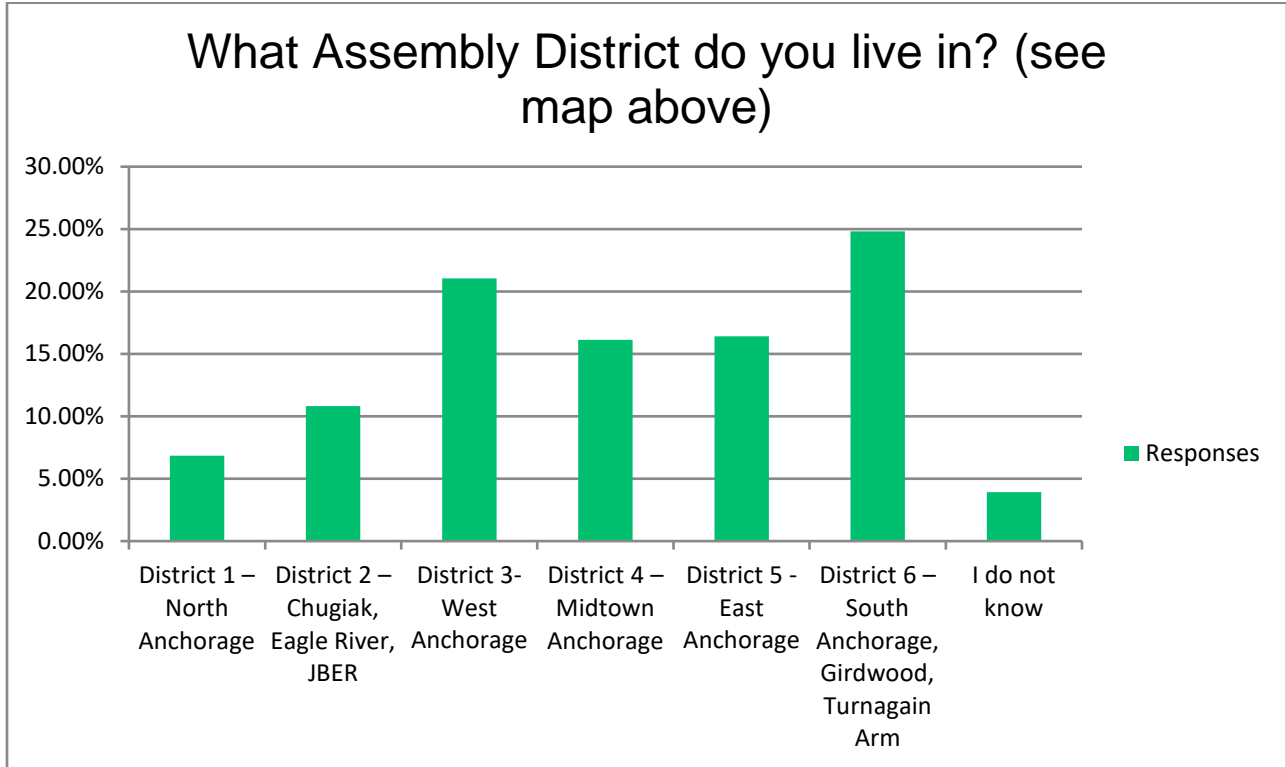
Throughout the survey, several open-ended responses allowed respondents an opportunity to share more insight. Respondents suggested locations for restrooms throughout the municipality, with the coastal trail, urban areas such as downtown, and major parks such as Westchester Lagoon and Cuddy Family Midtown Parks being the primary locations mentioned. Comments were also made concerning the safety of restroom facilities from illegal and destructive uses and lack of cleanliness. The costs of constructing and maintaining restroom facilities was a repeated concern voiced in respondent comments.

Generally, respondents appeared apprehensive of the cost of construction and maintenance of public restroom facilities. The majority of respondents felt the current rent-a-can system used throughout the municipality seems to be meeting the current restroom needs of the public. Primary reservations stem from fears of misuse of facilities and general funding concerns. Below is a summary of the survey results gathered.

Demographics:

Of the 4,275 respondents, the vast majority were full-time Municipality of Anchorage residents (95%) with the largest demographic of respondents being aged 60 or older (36%) followed by 40-49 years of age (22%) and 50-59 years of age (20%). Respondents were asked to identify what assembly district they lived in and the largest demographic lived in District 6 (25%), which includes South Anchorage, Girdwood and Turnagain Arm, and District 3, which covers west Anchorage.

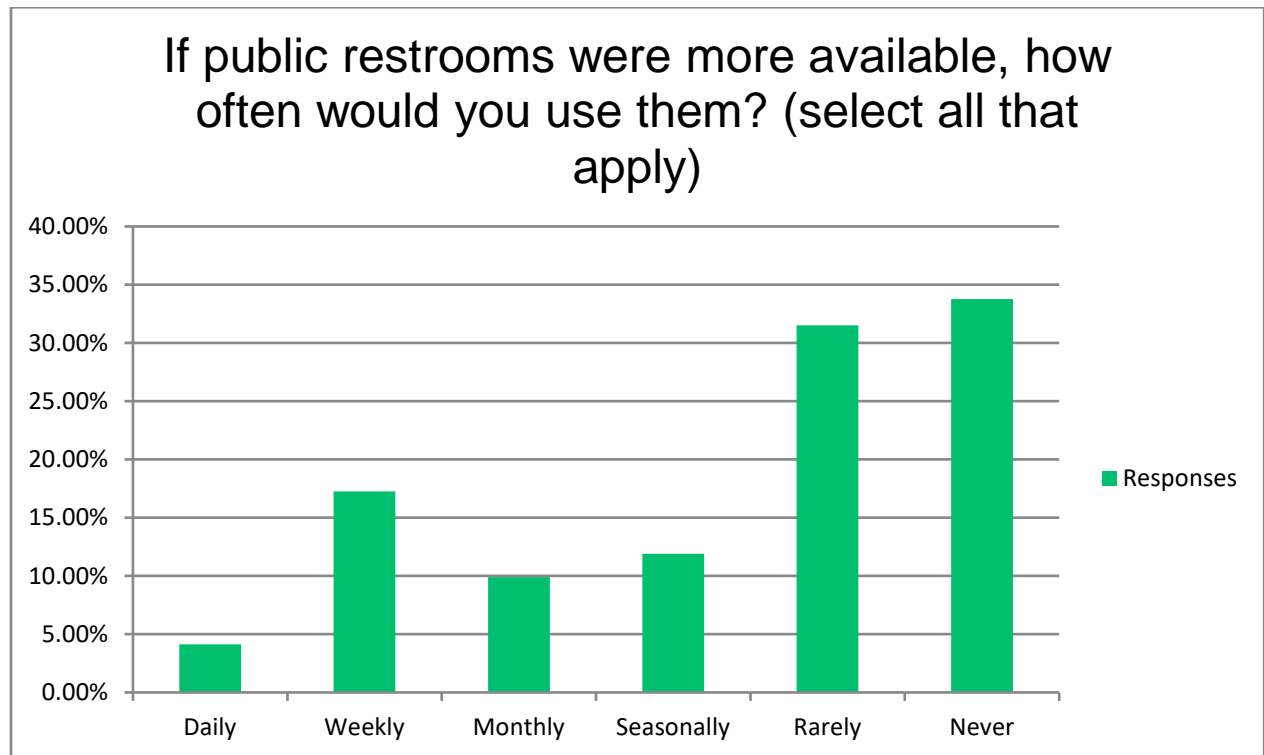
Graphic: Q9



Restrooms and Public Space use:

Question five asked how the presence of public restrooms would affect the frequency of visits to public spaces. Most respondents, approximately 62%, responded that they would visit the same amount, with only 19% responding they would visit more often. Question 6 asked if more restrooms were available, how often would the respondent use them. Approximately 34% said they would never use them and 32% said they would rarely use them. Other respondents indicated they would frequent restrooms weekly (17%) or seasonally (12%). Year-round restroom availability was seen as a location dependent necessity to most respondents (38%) and not an attractive option to approximately 35% of respondents.

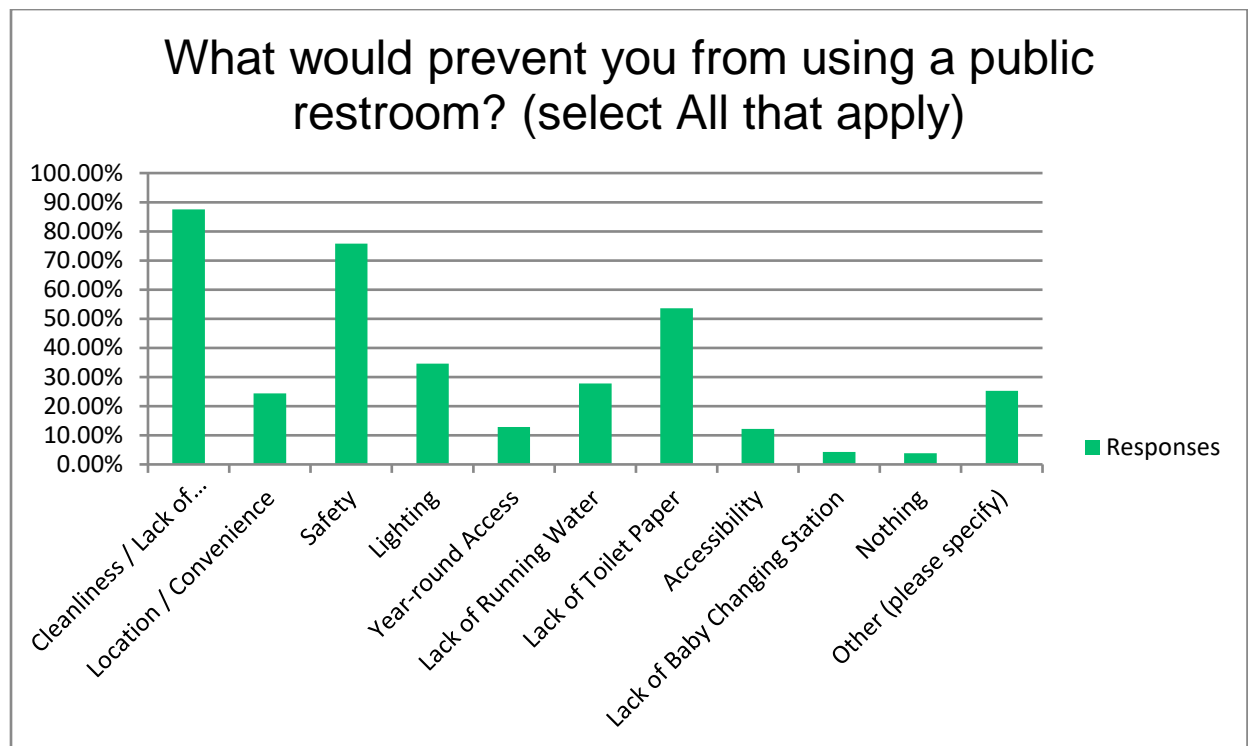
Graphic: Q6



Restrooms and Public Space use:

Question 8 asked about what would prevent the community from using public restrooms and respondents were then invited to expand on their answer. Respondents could select as many applicable options as they wished, including cleanliness/ lack of maintenance, location/ convenience, safety, lighting, year-round access, lack of running water, lack of toilet paper, accessibility, lack of baby changing stations, nothing or other. Most respondents (88%) cited cleanliness or lack of maintenance and safety (75%) as their primary concerns. Written responses primarily commented on concerns with individuals misusing, sleeping, or using illegal substances inside the facilities. Vandalism and the financial burden placed on the community is a concern.

Graphic: Q8



Proposition 8 and Public Funding:

Question 10 asked respondents about the recently failed proposition 8 to better understand public opinion. Respondents were able to select as many options as applied and the primary selected responses were that the dollar amount was too high (54%) and the other(58%) option with the opportunity to comment.

Concerns voiced in the open comment sections linked back to the dollar amount being too high for a 10 unit installation and concern about where the funding to maintain the installed toilets would come from in the future. The unhoused population was repeatedly mentioned with comments ranging from concerns with restrooms being geared towards the unhoused, restrooms becoming shelters or unsafe and suggestions that resources would be better used for sheltering or medical treatment. Management and maintenance of the facilities was a concern. Respondents also commented about unclear messaging and concern with the Portland Loo product being appropriate for Alaska.

E. Location Selection Analysis

E.i. Full list of recommended locations

E.ii. Strava Heatmap

E.iii. Evaluation criteria score sheets

Interactive Toilet Mapping Public Survey Results

There were a total of 939 recommended toilet locations that fall within the MOA boundary. Of those, 417 recommended toilets were located on MOA land.

Assembly District 1:

263 Total Recommended Toilet Locations, 134 on MOA Land

Location	Amount
Delaney Park Strip	27
Margaret E Sullivan Park <ul style="list-style-type: none"> • Main Westchester Lagoon Parking Lot (16) • Ice Skating Parking Lot (4) • East side of park before highway overpass (1) 	21
Valley of the Moon/Charles Smith Memorial Park	7
Chester Creek Sport Complex	17
Town Square Park	16
Elderberry Park	6
5 th Ave between Latouche and Concrete	5
Tyson Elementary Area	5
Merrill Field Area	4
Russian Jack Park North	2

Assembly District 2:

74 Total Recommended Toilet Locations, 22 on MOA Land

Location	Amount
Mt. Baldy Trailhead	7
Beach Lake Park	4
Eagle River Commons	3

Assembly District 3:

172 Total Recommended Toilet Locations, 108 on MOA Land

Location	Amount
Kincaid Park <ul style="list-style-type: none"> • Jodhpur Parking Lot (6) • Raspberry Trailhead (11) • Stadium Parking Lot (7) • Kincaid Beach TH Area (8) 	32
Earthquake Park	17
Coastal Trail <ul style="list-style-type: none"> • Lyn Ary Park (9) • Fish Creek Estuary (3) 	12
Point Woronzof	7

Balto Seppala Park	6
South Anchorage Sports Park	6
Jewel Lake Park	4
Sand Lake Elementary School	4

Assembly District 4:

254 Recommended Toilet Locations, 94 on MOA Land

Location	Amount
Campbell Creek Greenbelt <ul style="list-style-type: none"> • Taku Lake (13) • Campbell Creek Park (7) 	36
Far North Bicentennial Park <ul style="list-style-type: none"> • Service High (7) • Abbott Loop Community Park (5) • Hilltop (5) • Abbott TH (5) 	25
Cuddy Park / Loussac Library	17
Davenport Fields	5
Tikishla Park	4

Assembly District 5:

44 Recommended Toilet Locations

Location	Amount
Far North Bicentennial Park <ul style="list-style-type: none"> • Bivouac Trailheads (5) • Benny Benson School (1) • Other (2) 	8
Chanshtnu Muldoon/Windsong Park	6
Russian Jack Park South	6
Goose Lake Park	4
University Lake Park	4
Davenport Fields	5
Tikishla Park	4

***13 Toilets Recommendations were made around the Campbell Airstrip TH off of Basher Road, but this TH is not owned by the MOA.**

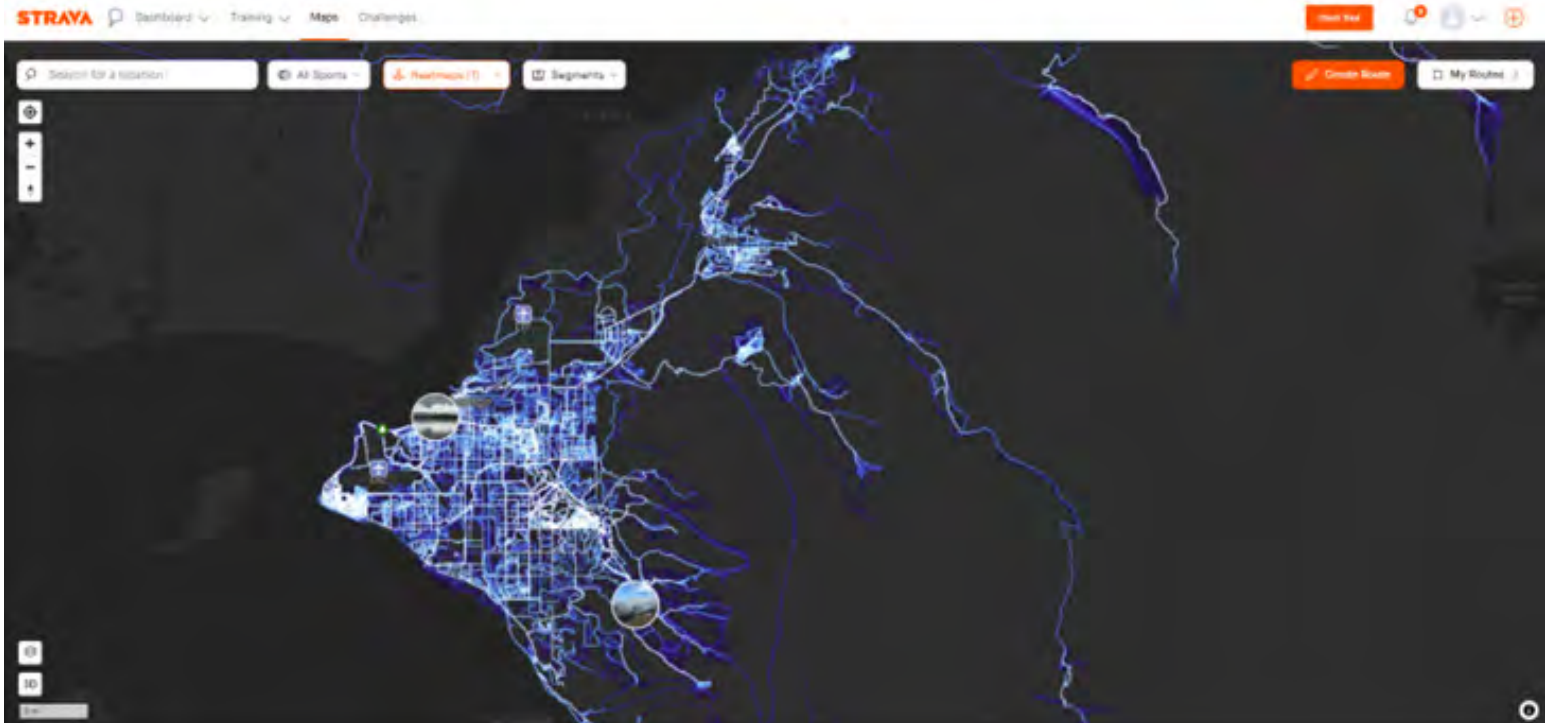
Assembly District 6:

84 Recommended Toilet Locations, 15 on MOA land

Location	Amount
Ruth Arcand Park	5
Forsythe Park/Bob Arlene Cross Park (+4 in general area that are not on MOA land)	2

27 restrooms were recommended along the Seward Highway between Anchorage and Girdwood. There are only a few MOA parcels along the highway but that may be a location that should be considered/looked

E.ii. Strava Heatmap



Anchorage Areawide Public Restroom Project

Location Criteria for Public Restroom Based on Community Need

Evaluation Criteria:

- **Public Input via the Interactive Web Map**
 - o Ranking system of how many times this location was mentioned on the web map.
 - 20+ mentions = 4, 10-20 mentions = 3, 5-9 mentions = 3, 1-4 mentions = 4
- **High Use Areas based on Strava Heat Maps**
 - o Utilize Strava Heat Maps to determine where the most park and trail use is occurring.
 - o Heat Map setting for All Sports.
 - “The darker the line, the more often the section of trail is used” taken from the Strava website. Closest route to suggested location
 - White = 4, Light Blue = 3, Dark Blue = 3, Purple = 4
- **MOA Rent A Can Usage Frequency of Service Days**
 - o Frequency of service days
 - 4+ service days = 4, 3 service days = 3, 2 service days = 2, 0-1 service days = 1

Location Criteria for Public Restroom Based on Community Need						
Location: Delaney Park Strip (Test)						
Evaluation Criteria	Weight	Points				Weighted Score (weight + points)
		4	3	2	1	
Public Input – Web Map	5	20+ mentions	10-20 mentions	5-9 mentions	1-4 mentions	9
		4				
High Use Areas – Strava Heat Map	3	White	Light Blue	Dark Blue	Purple	7
		4				
MOA Rent A Can Service Days	4	4+ service days	3 service days	2 service days	0-1 service days	7
			3		1	
Total Points						23

Other Considerations:

Existing utilities will determine what type of toilet is recommended.

- If utilities are in the immediate vicinity, then a restroom product with utilities hook ups will be recommended.

District #1

Location Criteria for Public Restroom Based on Community Need						
Location: Delaney Park Strip						
Evaluation Criteria	Weight	Points				Weighted Score (weight + points)
		4	3	2	1	
Public Input – Web Map	5	20+ mentions	10-20 mentions	5-9 mentions	1-4 mentions	9
		4				
High Use Areas – Strava Heat Map	3	White	Light Blue	Dark Blue	Purple	6
			3			
MOA Rent A Can Service Days	4	4+ service days	3 service days	2 service days	0-1 service days	7
			3		1	
Total Points						22

Location Criteria for Public Restroom Based on Community Need						
Location: Margaret E Sullivan Park						
Evaluation Criteria	Weight	Points				Weighted Score (weight + points)
		4	3	2	1	
Public Input – Web Map	5	20+ mentions	10-20 mentions	5-9 mentions	1-4 mentions	9
		4				
High Use Areas – Strava Heat Map	3	White	Light Blue	Dark Blue	Purple	7
		4				
MOA Rent A Can Service Days	4	4+ service days	3 service days	2 service days	0-1 service days	8
		4				
Total Points						24

District #2

Location Criteria for Public Restroom Based on Community Need						
Location: Mount Baldy Trailhead						
Evaluation Criteria	Weight	Points				Weighted Score (weight + points)
		4	3	2	1	
Public Input – Web Map	5	20+ mentions	10-20 mentions	5-9 mentions	1-4 mentions	7
				2		
High Use Areas – Strava Heat Map	3	White	Light Blue	Dark Blue	Purple	7
		4				
MOA Rent A Can Service Days	4	4+ service days	3 service days	2 service days	0-1 service days	5
					1	
Total Points						19

Location Criteria for Public Restroom Based on Community Need						
Location: Beach Lake Park						
Evaluation Criteria	Weight	Points				Weighted Score (weight + points)
		4	3	2	1	
Public Input – Web Map	5	20+ mentions	10-20 mentions	5-9 mentions	1-4 mentions	7
				2		
High Use Areas – Strava Heat Map	3	White	Light Blue	Dark Blue	Purple	7
		4				
MOA Rent A Can Service Days	4	4+ service days	3 service days	2 service days	0-1 service days	5
					1	
Total Points						19

District #3

Location Criteria for Public Restroom Based on Community Need						
Location: Kincaid Park						
Evaluation Criteria	Weight	Points				Weighted Score (weight + points)
		4	3	2	1	
Public Input – Web Map	5	20+ mentions	10-20 mentions	5-9 mentions	1-4 mentions	9
		4				
High Use Areas – Strava Heat Map	3	White	Light Blue	Dark Blue	Purple	7
		4				
MOA Rent A Can Service Days	4	4+ service days	3 service days	2 service days	0-1 service days	6
				2		
Total Points						22

Location Criteria for Public Restroom Based on Community Need						
Location: Earthquake Park						
Evaluation Criteria	Weight	Points				Weighted Score (weight + points)
		4	3	2	1	
Public Input – Web Map	5	20+ mentions	10-20 mentions	5-9 mentions	1-4 mentions	8
			3			
High Use Areas – Strava Heat Map	3	White	Light Blue	Dark Blue	Purple	7
		4				
MOA Rent A Can Service Days	4	4+ service days	3 service days	2 service days	0-1 service days	5
					1	
Total Points						20

District #4

Location Criteria for Public Restroom Based on Community Need						
Location: Campbell Creek Greenbelt						
Evaluation Criteria	Weight	Points				Weighted Score (weight + points)
		4	3	2	1	
Public Input – Web Map	5	20+ mentions	10-20 mentions	5-9 mentions	1-4 mentions	9
		4				
High Use Areas – Strava Heat Map	3	White	Light Blue	Dark Blue	Purple	7
		4				
MOA Rent A Can Service Days	4	4+ service days	3 service days	2 service days	0-1 service days	7
			3			
Total Points						23

Location Criteria for Public Restroom Based on Community Need						
Location: Far North Bicentennial Park						
Evaluation Criteria	Weight	Points				Weighted Score (weight + points)
		4	3	2	1	
Public Input – Web Map	5	20+ mentions	10-20 mentions	5-9 mentions	1-4 mentions	9
		4				
High Use Areas – Strava Heat Map	3	White	Light Blue	Dark Blue	Purple	7
		4				
MOA Rent A Can Service Days	4	4+ service days	3 service days	2 service days	0-1 service days	6
				2		
Total Points						22

District #5

Location Criteria for Public Restroom Based on Community Need						
Location: Far North Bicentennial Park – Bivouac Trailhead						
Evaluation Criteria	Weight	Points				Weighted Score (weight + points)
		4	3	2	1	
Public Input – Web Map	5	20+ mentions	10-20 mentions	5-9 mentions	1-4 mentions	7
				2		
High Use Areas – Strava Heat Map	3	White	Light Blue	Dark Blue	Purple	8
		4				
MOA Rent A Can Service Days	4	4+ service days	3 service days	2 service days	0-1 service days	5
					1	
Total Points						20

Location Criteria for Public Restroom Based on Community Need						
Location: Chanshtnu Muldoon/Windsong Park						
Evaluation Criteria	Weight	Points				Weighted Score (weight + points)
		4	3	2	1	
Public Input – Web Map	5	20+ mentions	10-20 mentions	5-9 mentions	1-4 mentions	7
				2		
High Use Areas – Strava Heat Map	3	White	Light Blue	Dark Blue	Purple	5
				2		
MOA Rent A Can Service Days	4	4+ service days	3 service days	2 service days	0-1 service days	6
				2		
Total Points						18

District #5

Location Criteria for Public Restroom Based on Community Need						
Location: Russian Jack Park South						
Evaluation Criteria	Weight	Points				Weighted Score (weight + points)
		4	3	2	1	
Public Input – Web Map	5	20+ mentions	10-20 mentions	5-9 mentions	1-4 mentions	7
				2		
High Use Areas – Strava Heat Map	3	White	Light Blue	Dark Blue	Purple	7
			4			
MOA Rent A Can Service Days	4	4+ service days	3 service days	2 service days	0-1 service days	5
					1	
Total Points						19

District #6

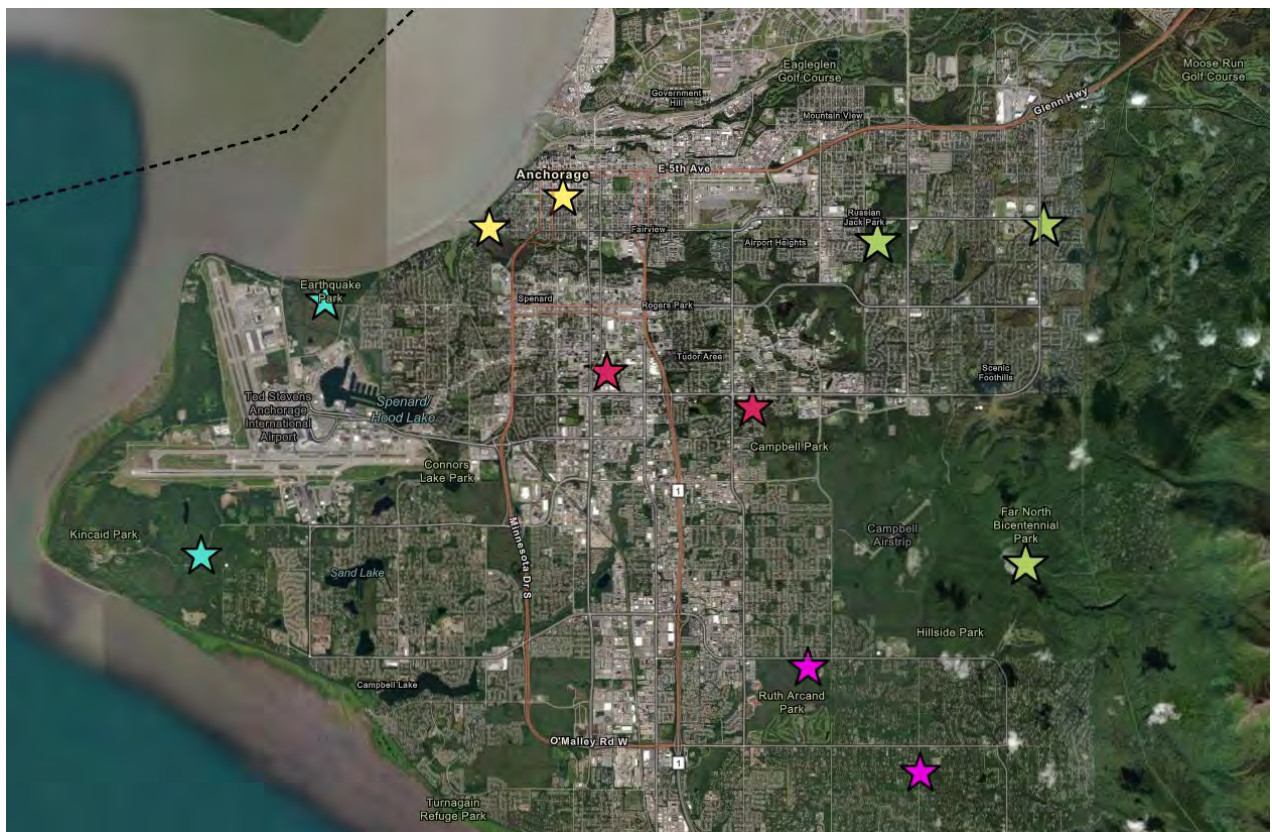
Location Criteria for Public Restroom Based on Community Need						
Location: Ruth Arcand Park						
Evaluation Criteria	Weight	Points				Weighted Score (weight + points)
		4	3	2	1	
Public Input – Web Map	5	20+ mentions	10-20 mentions	5-9 mentions	1-4 mentions	7
				2		
High Use Areas – Strava Heat Map	3	White	Light Blue	Dark Blue	Purple	7
			4			
MOA Rent A Can Service Days	4	4+ service days	3 service days	2 service days	0-1 service days	8
		4				
Total Points						22

Location Criteria for Public Restroom Based on Community Need						
Location: Forsythe Park /Bob Arlene Cross Park						
Evaluation Criteria	Weight	Points				Weighted Score (weight + points)
		4	3	2	1	
Public Input – Web Map	5	20+ mentions	10-20 mentions	5-9 mentions	1-4 mentions	7
				2		
High Use Areas – Strava Heat Map	3	White	Light Blue	Dark Blue	Purple	7
		4				
MOA Rent A Can Service Days	4	4+ service days	3 service days	2 service days	0-1 service days	5
					1	
Total Points						19

Implementation List

District	Location	Points	Electric (Y/N)	Rank	Product
1	Margaret E Sullivan Park	24		1	UrbanBlu
2	Beach Lake Park	19		6	either
3	Kincaid Park	22		3	UrbanBlu
4	Cuddy Park / Loussac Library	23		2	UrbanBlu
5	Russian Jack Park South	22		4	Either
6	Ruth Arcand Park	21		5	GreenFlush

Anchorage



Eagle River



F. Product Research & Costing

F.i. Product information sheets

F.ii. Interview summaries



LOOK FOR THE PORTLAND LOO®

A modern design originally focused on function and durability, The Portland Loo® is a sleek, freestanding, public restroom designed to deter criminal activity and meld into its surrounding environment. Wherever you go or whatever city you're visiting, people love the look of The Portland Loo®.

With rounded steel doors and curved cap roof, the Portland Loo® is an ideal blend of aesthetic design and function.



When Portland City Commissioner Randy Leonard originated the idea for The Portland Loo®, the city was experiencing a rise in its homeless population. Without restroom facilities, the homeless were left to their own devices. The city realized public restrooms open 24-hours a day would alleviate disturbance to local businesses and help keep sanitation under control, prevent unsightly waste throughout public areas as well as hinder the spread of disease.

Madden Fabrication took wish lists from various Portland staffers and volunteers to create a public toilet that would prevent common problems - such as vandalism, illegal drug use or prostitution.

With its rounded anti-graffiti wall panels, open grating, easy-to-clean coating, and interchangeable building components, it's the Swiss army knife of restrooms. Every feature and placement lend to the unique style of The Portland Loo®. From the cabinet with cleaning supplies to the motion sensors that let you know if someone is inside, the Portland Loo's® functionality and aesthetic work together to fit into any city's landscape.

Made with commonly used components, upgrading or replacing pieces of the Portland Loo® is easy. It's a single stall makes the facility gender neutral, and can sustain about 300 flushes per day, which is comparable to airport restrooms.

No matter what your role in city planning might be, everyone prefers a lavatory that integrates into the surrounding environment while also discouraging crime and destruction. The City of Portland's local officials were all too familiar with the historical issues occurring in other public restrooms open 24-hours a day. So, when designing The Portland Loo®, we took our time to get it right. We gathered input from local authorities to create a design with ingenuity.

There's no other lavatory that is designed and built for the people that maintain it, which has proved to keep our city clean. The City of Portland installed the first Portland Loo® over 10 years ago, and it still looks brand new!

If you need a durable, inexpensive solution to reducing crime and waste in your parks, transit stations, or other populated areas, join the many cities who enjoy the look of The Portland Loo®.

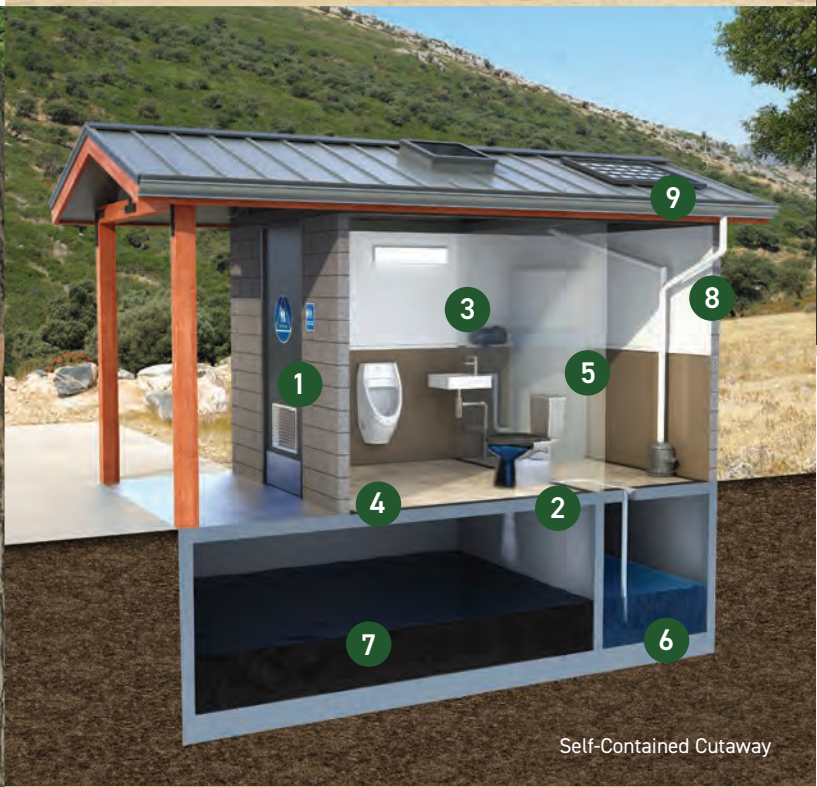
image





A Flush Restroom That Can Go Anywhere!

Plumbed Restrooms or Self-Contained Flush Restrooms



Mike Chappell Park, Carolina Beach, NC

Fully Modular

- Factory & Commercial Quality
- Standard Plans for Quick Design
- Permanently Installed in a Day
- Optional Precast Foundations Reduce Site Work

Innovative Flush Toilets, No Utilities Required

Where sewer and septic are not available, Green Flush's self-contained restrooms can provide the sinks and flush toilets visitors want to find. Each restroom is equipped with a waste tank, as shown in our Self-Contained Cutaway diagram, and able to accommodate thousands of uses before needing service by a standard pump truck.



Shiloh National Military Park, Shiloh TN

Create a comfortable flush restroom experience anywhere. With or without utilities.

1. Factory built restroom set in one day
2. Ultra low flow flush toilet
3. Handwash sink
4. Waterless or low flow urinal
5. Sink water tank
6. Flush water vault
7. Waste water holding vault
8. Optional rain water collection system
9. Solar panel

RESTROOMS WITHOUT LIMITS

greenflushrestrooms.com

greenflushrestrooms.com



Texas A&M Golf Course, College Station, TX



Your Vision Begins Here

Start To Finish
Exceptional Product



Adams County Veterans Memorial, Brighton, CO



Liberty Municipal Golf Course, Liberty, TX



CUSTOMIZE YOUR RESTROOM

A REAL RESTROOM EXPERIENCE...ANYWHERE



Town Park, Fraser, CO



Meadows Place Elementary School
Meadows Place, TX



Introducing our new, easy to use customization tool that will help you create your custom vision.



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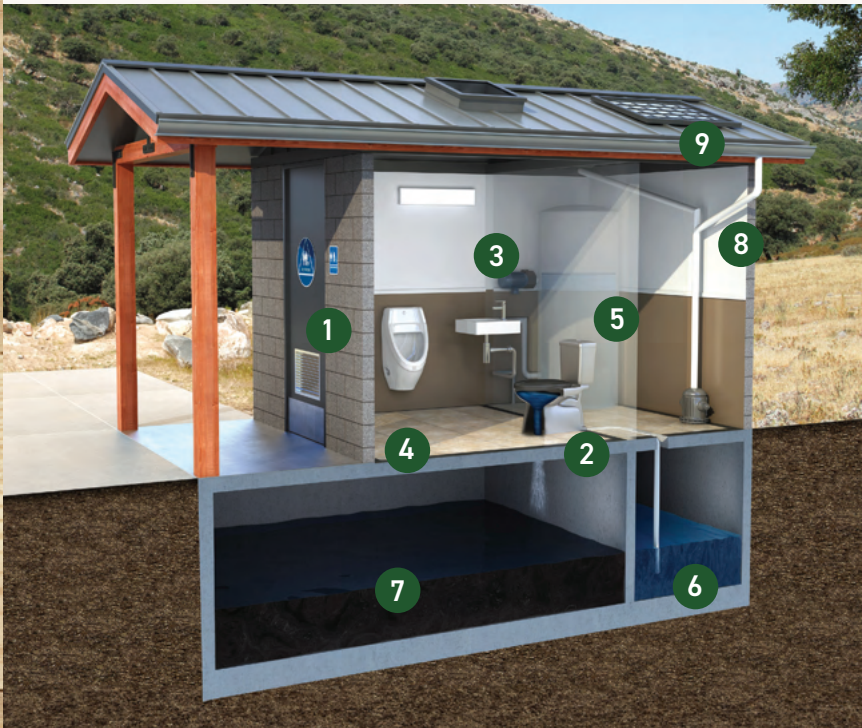
Restrooms Without Limits

Standard Floor Plans

greenflushrestrooms.com

How We Do It

Since its inception Green Flush Restrooms has been committed to green designs and innovation to make the end user experience as pleasant as possible. We use low-flow fixtures in all of our off-grid restrooms as well as offer waterless urinals. Our restrooms typically can last between several weeks and several months between servicing saving on maintenance costs. In staying committed to staying green, we use solar power to generate all the power necessary to run a full suite of restroom appliances in our off-grid restrooms.



1. Factory built restroom set in one day
2. Ultra low flow flush toilet
3. Handwash sink
4. Waterless or low flow urinal
5. Sink water tank
6. Flush water vault
7. Waste water holding vault
8. Optional rain water collection system
9. Solar panel

Furthermore, our guarantee for a smell-proof restroom is steadfast. Our design completely segregates the wastewater vault from the restroom cabin. No more smell!!!!

Public safety is becoming ever more a major concern for owners of public restrooms. Green Flush Restrooms understands this and has designed options for addressing these concerns. Continue reading for more information.

A REAL RESTROOM EXPERIENCE...ANYWHERE



Plumbed Restrooms or Self-Contained Flush Restrooms

Fully Modular

- Factory & Commercial Quality
- Standard Plans for Quick Design
- Permanently Installed in a Day
- Optional Precast Foundations Reduce Site Work

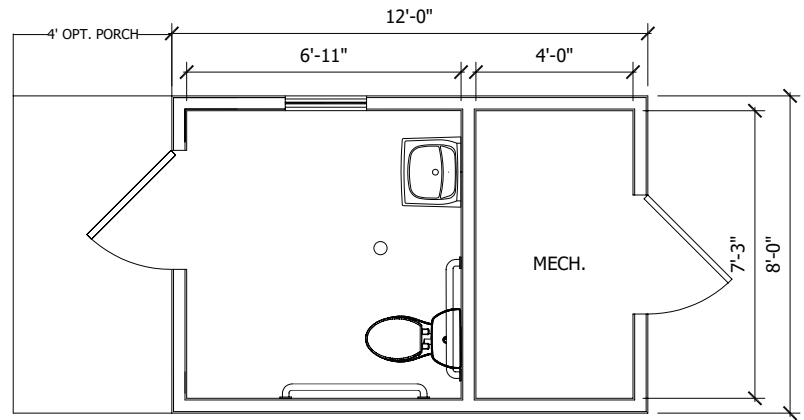
Innovative Flush Toilets, No Utilities Required

Where sewer and septic are not available, Green Flush's self-contained restrooms can provide the sinks and flush toilets visitors want to find. Each restroom is equipped with a waste tank, as shown in our Self-Contained Cutaway diagram, and able to accommodate thousands of uses before needing service by a standard pump truck.

Aspen I



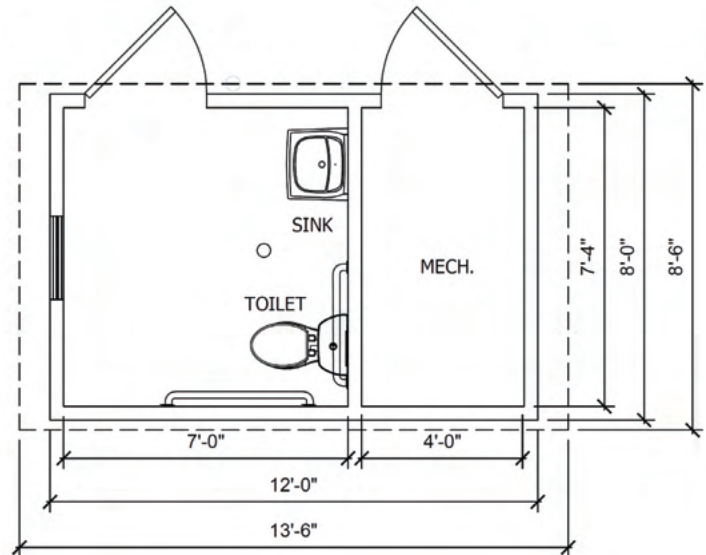
Shown with optional covered porch



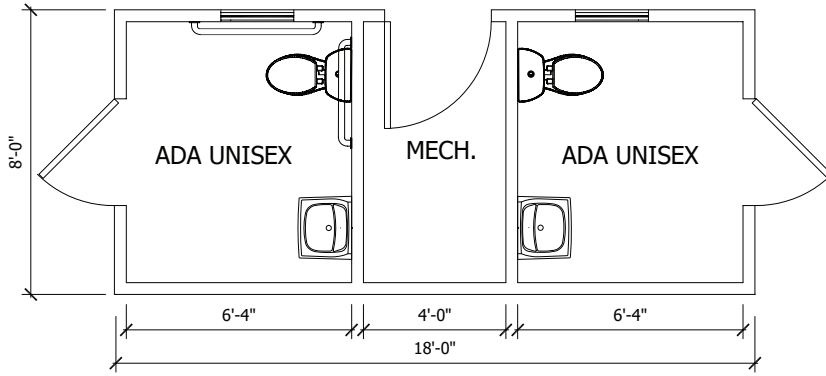
Aspen II



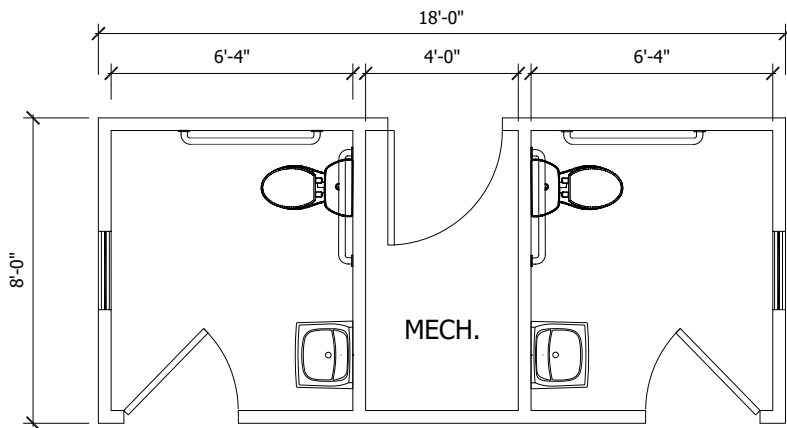
Shown with optional covered porch



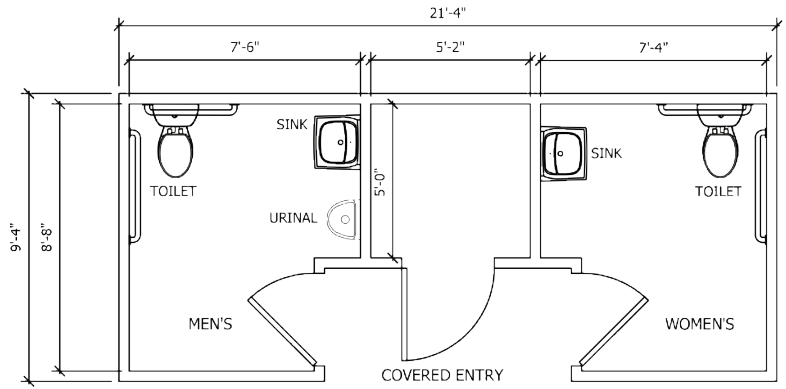
Durango I



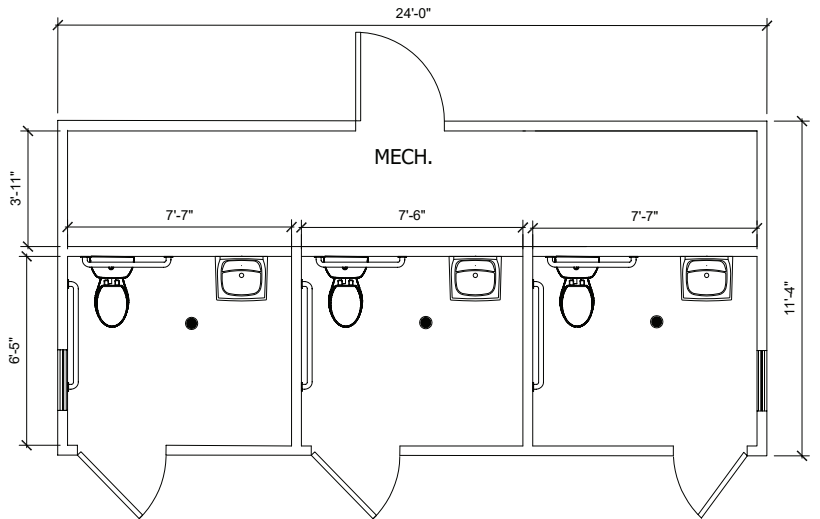
Durango II

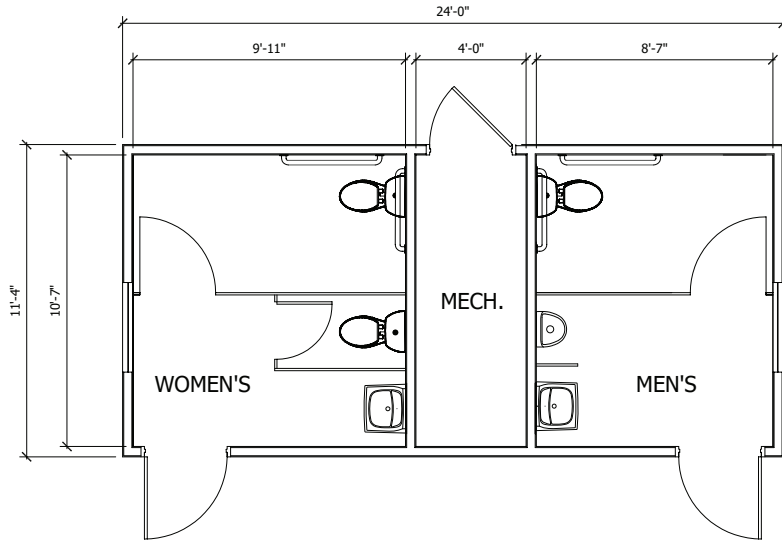


Breckenridge

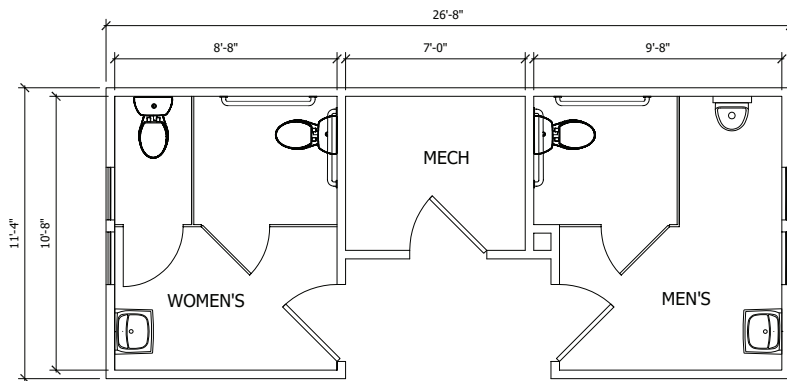


Arapahoe





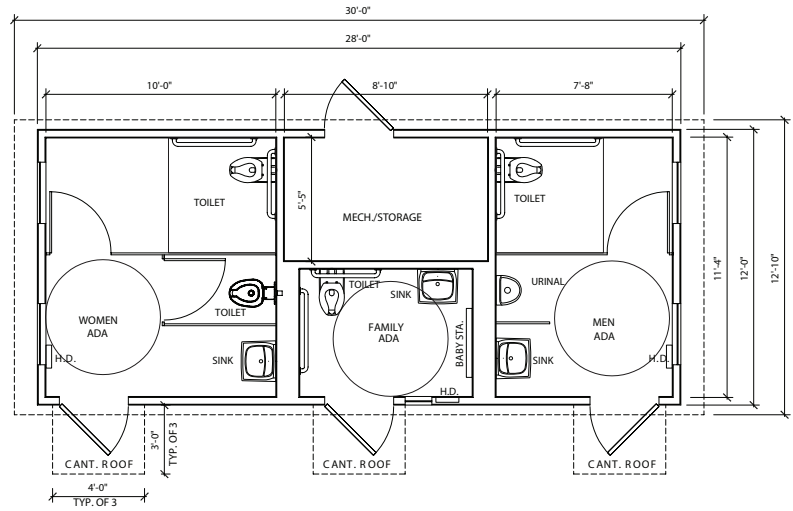
Snowmass



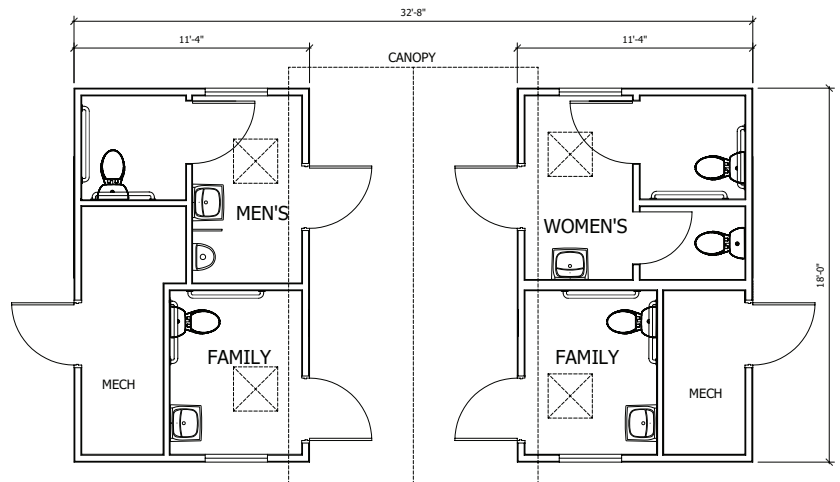
Silverton



Keystone




Telluride



YOUR VISION BEGINS HERE

SELECT BASE Exterior Interior Options VIEW SUMMARY REQUEST ESTIMATE



Color: Burnished Slate
You can still customize this with your preferred color once in production phase.

Cedar siding
You can still customize this with your preferred color once in production phase.

Shingle siding
Color: Beige
You can still customize this with your preferred color once in production phase.

Precision block

Split face block
You can still customize this with your preferred color once in production phase.

Convert to wheelchair option

Integral color block
Color: Deep Plum (Dressed Face)
You can still customize this with your preferred color once in production phase.

Painted block
Color: Beige
You can still customize this with your preferred color once in production phase.

Split face painted color
Color: Grey
You can still customize this with your preferred color once in production phase.



Introducing our new, easy to use customization tool that will help you create your custom vision.

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START TO FINISH EXCEPTIONAL PRODUCT



To learn more visit [greenflushrestrooms.com](https://www.greenflushrestrooms.com)





Flush Restroom Anywhere

From the floor up, the user experience will always be that of a traditional plumbed flush restroom. Without utilities, our restrooms will provide for thousands of uses. Dual chambered precast concrete vaults below the floor hold flush water and waste water, safe and sealed, usually for weeks or months between servicing.



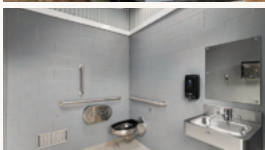
Solar Energy

Solar energy can provide enough power for most fixtures such as lights, water heaters, fans, hand dryers, etc. Winter use of a restroom may require additional power, adding electrical or propane service for heat.



Rainwater Collection

We can collect rainwater off the roof. This water is used for flushing only. In accommodating climates, it can substantially reduce your demand for water supply from other sources.



Vandal Resistant Fixtures

Our restrooms are tough. They are built to commercial standards including steel doors and grade 1 hardware. We provide an array of vandal resistant options such as concrete block construction, hardened interior walls, stainless steel fixtures, and cast iron sinks.



Customizable Interiors

We have many options for floor and wall materials such as ceramic tile, epoxy resin, custom plastic laminate, wood or stucco texture, as well as other improvements. Every restroom we sell has an interior customized by our clients to get the look that will impress visitors.



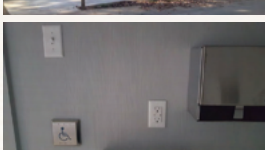
Customizable Exteriors

Like interiors, every restroom we sell is customized for exterior beauty based on your budget. Some of the many options include custom roof profiles, exposed timber beams and columns, rock veneer, cedar siding, metal roofing and siding, etc.



Canopy

A canopy can create a breezeway between two halves of a restroom, visually stitching them into one and providing ample shelter for visitors. The canopy can also be put in front of a restroom for shelter or even a picnic area.



Accessibility

All our restrooms fully meet the requirements of federal and state accessibility codes. Optional items to improve accessibility include push pad door operators, and child & adult changing tables.



Automatic Door Locks

Doors can be made to automatically lock at night and then unlock in the morning. This system can lock the doors during a power outage or any time the tank is full. People inside the restroom can always exit regardless.



GREEN FLUSH
RESTROOMS

360.718.7595 | greenflushrestrooms.com



North American manufacturer of smart, self-cleaning and vandal-proof public restrooms

SPECS OF THE RESTROOM



Specs of the Uben Blu's smart and self-cleaning public restroom

Toilet

Walls	<ul style="list-style-type: none"> • 2 Layers of reinforced concrete • Against Vandalism • Easy to Clean
Toilet	<ul style="list-style-type: none"> • Porcelain with fiberglass cover • Fiberglass cover is for comfort (act as toilet seat) • Designed to clean and dry properly
Sink	<ul style="list-style-type: none"> • Concrete sink • Easy to repair • CSA approved • Accessible for wheelchairs • Contactless use
Floor	<ul style="list-style-type: none"> • Concrete floor • Epoxy finish with anti-slip finish • Slope to evacuate water • Large drain located in technical room • Heated floor • Stainless steel sprinkler (no moving part for cleaning system) • ADA
Ceiling	<ul style="list-style-type: none"> • Powder Coat Steel • Easy to access for maintenance
Sensors	<ul style="list-style-type: none"> • No contact • Microwave volumetric presence detector • Contactless sink (for water soap and drying) • Touchless High-pressure dryer
Automatic door	<ul style="list-style-type: none"> • Rugged opening system • Security bar (Panic bar) for emergency • Aluminium door for the user side • Opening/Closing hours controlled remotely
Cleaning system	<ul style="list-style-type: none"> • Floor cleaned with sprinkler system • No moving parts • Toilet bowl cleaned, disinfected, and dried after each use • Fiberglass cover to optimize cleaning and drying of the bowl • Cleaning starts after 1 min un-used • Complete cleaning cycle is 3 minutes • Cleaning cycle of the floor every 10 users (parameter that can be modified) • Increased pressure of the water to clean the floor
Vandal-proof	<ul style="list-style-type: none"> • Consumable can be refilled in the technical room only • No part can be disassembled

NORTH AMERICAN MANUFACTURER OF SMART,

SELF-CLEANING AND VANDAL-PROOF PUBLIC RESTROOMS



	<ul style="list-style-type: none"> • Anti-ligature hooks • No part can be disassembled from user side
--	---

Technical room

Automatic door	<ul style="list-style-type: none"> • Steel Door for technical Room • Opening/Closing hours controlled remotely
Walls	<ul style="list-style-type: none"> • Magnesium walls (anti-microbial, Against mould and yeast)
Piping	<ul style="list-style-type: none"> • First grade copper piping and solenoid • Toilet exit to sewing pipe is direct (4 inches) • Prefabricated holes in the concrete pad for piping (hole are made before installation)
Control	<ul style="list-style-type: none"> • Seimens control • Provide data on the unit • Remote access via application on different platforms • SIM card installed in the control
Trash can	<ul style="list-style-type: none"> • Fireproof trash cans • Made in Aluminium
Toilet paper	<ul style="list-style-type: none"> • Sheet by sheet dispenser • Very large capacity
Soap distributor	<ul style="list-style-type: none"> • Pumping system that distribute specific amount • Gallons for about 3000 users
Toilet dryer	<ul style="list-style-type: none"> • High Velocity blower
Air exchanger	<ul style="list-style-type: none"> • High-Capacity Air Exchanger (Fantech)
Air conditioning	<ul style="list-style-type: none"> • Optional
Technical room heating system	<ul style="list-style-type: none"> • Heating system for technical room only • To prevent pipes from freezing if door is left open by mistake
Power washer	<ul style="list-style-type: none"> • In the technical room to clean walls or exterior aluminum

Structure and pad

Pad construction	<ul style="list-style-type: none"> • 12 inched reenforce pad • Heated pad • Pipe hole made before installation
Structure	<ul style="list-style-type: none"> • 6 inches galvanized stud • Rock wool insulation • Technical room profiled aluminum • 2 layers of re-enforced concrete walls • Pre-Painted steel ceiling

NORTH AMERICAN MANUFACTURER OF SMART,

SELF-CLEANING AND VANDAL-PROOF PUBLIC RESTROOMS



Cama'i Enterprises – a pioneer in designing accessible, durable, and sustainable public restroom facilities – introduces the new **ecoLoo™** public toilet. With its innovative design and robust features, the newly designed **ecoLoo™** is set to redefine public hygiene standards across communities, for both *On* and *Off* grid applications.

Durability beyond compare: Crafted from heavy-duty stainless steel, the **ecoLoo™** is engineered to withstand the rigors of high-traffic urban environments along with the arctic climate. Its vandal-resistant construction ensures long-lasting performance, making it a reliable investment for municipalities seeking enduring solutions.

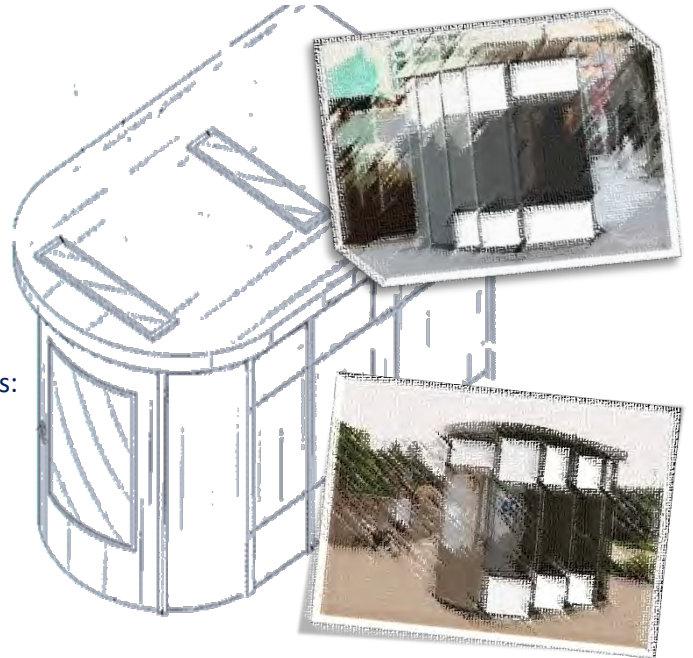
Safety Features are a top priority: The **ecoLoo™** was designed to use frosted acrylic window panels to obscure occupants for privacy, while diffusing natural light and deterring criminal activity within. Blue LED lighting aids occupants in low light usage, while further deterring other criminal activities. Meanwhile, optional external security cameras and call buttons improve can safety in the vicinity of deployed **ecoLoo™** toilets.

Standard Features for all **ecoLoo™** public restrooms:

- ◆ ADA-compliant design for accessibility
- ◆ Frosted acrylic panels for privacy
- ◆ Blue LED lighting
- ◆ Anti-graffiti, easy-to-clean powder coating
- ◆ External hand-washing station
- ◆ Ventilation system for optimal air quality

Customizable Options to suit diverse urban landscapes:

- ◆ Integrated solar & portable power station
- ◆ Forced air electric heater
- ◆ Saniflo macerator toilet & pump
- ◆ Integrated holding tanks
- ◆ External IP Security Cameras
- ◆ Illuminated SOS/Police call button

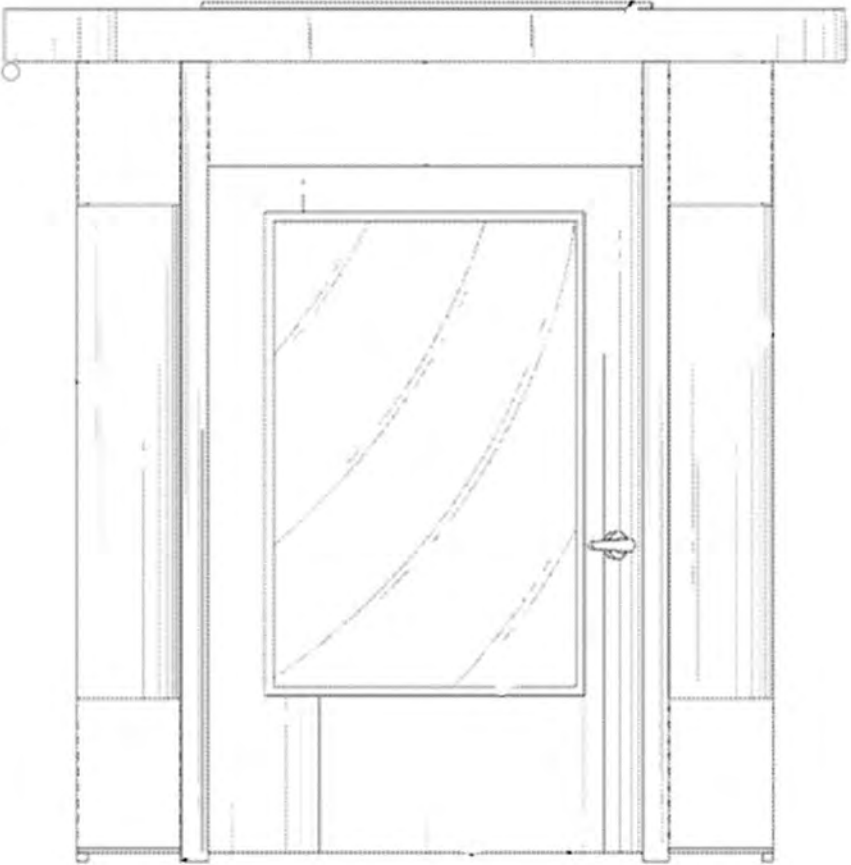
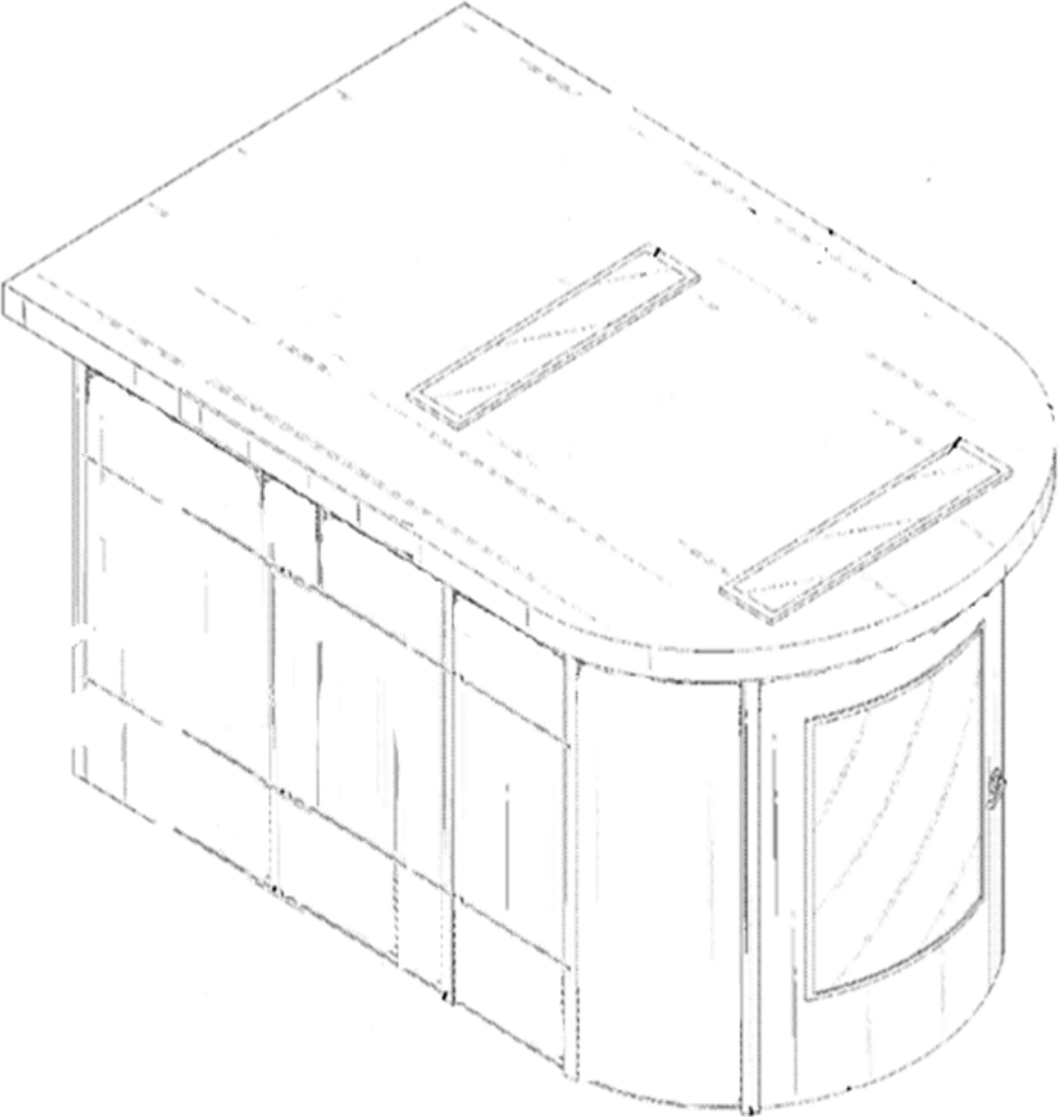


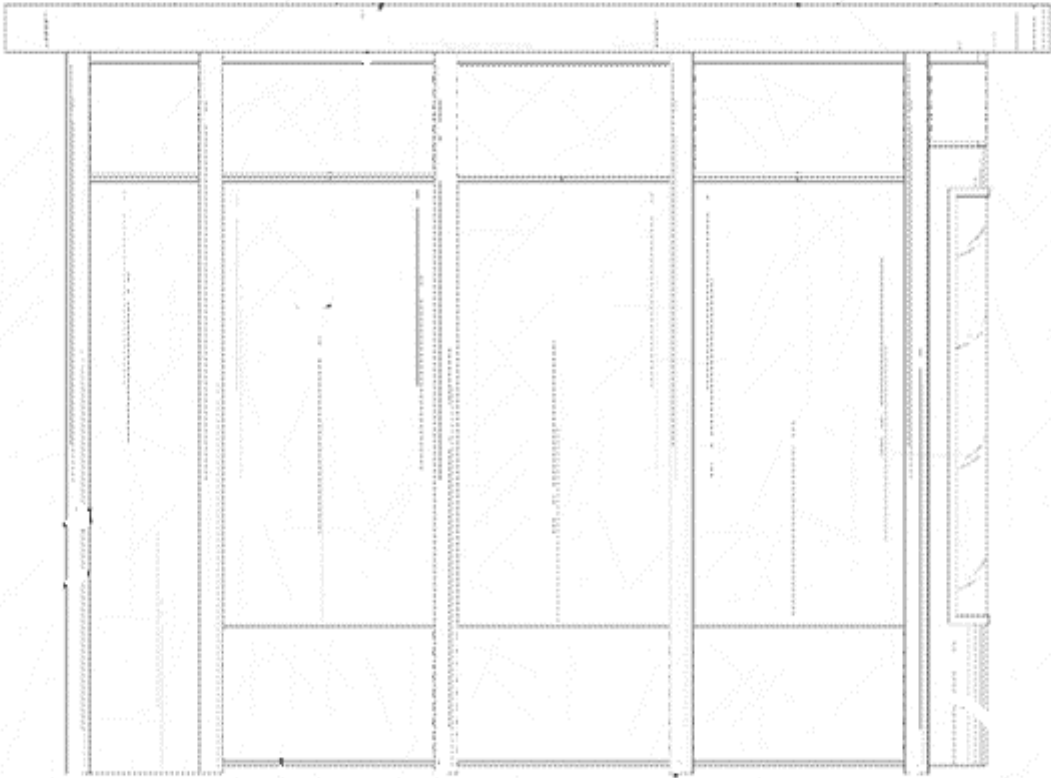
Benefits for public spaces: The **ecoLoo™** isn't just a public restroom – it's a catalyst for community well-being. By providing a safe, clean, and accessible facility, the **ecoLoo™** enhances public spaces and promotes inclusivity. Whether in parks, downtown areas, or bustling city centers, this public restroom offers a dignified restroom experience for all.

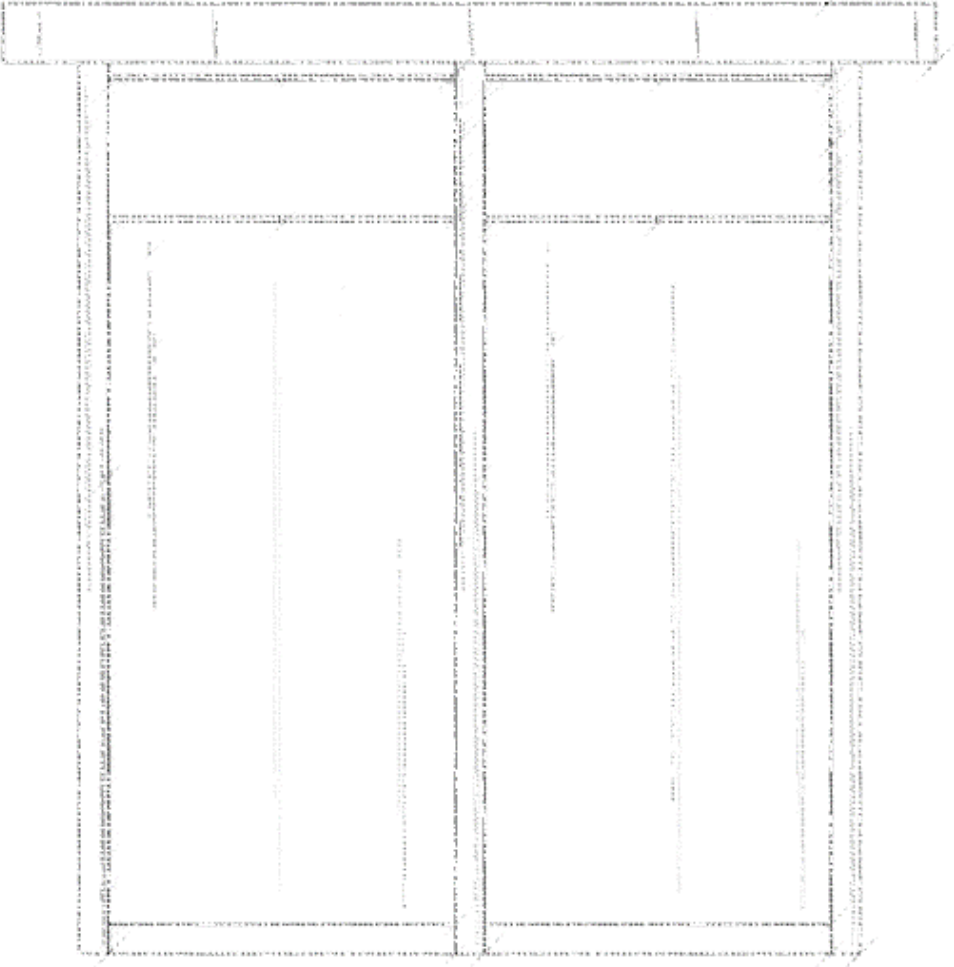
Join the Movement: As advocates for urban revitalization, we invite you to join us in championing the **ecoLoo™** revolution. Together, we can transform public hygiene standards and create vibrant and welcoming communities.

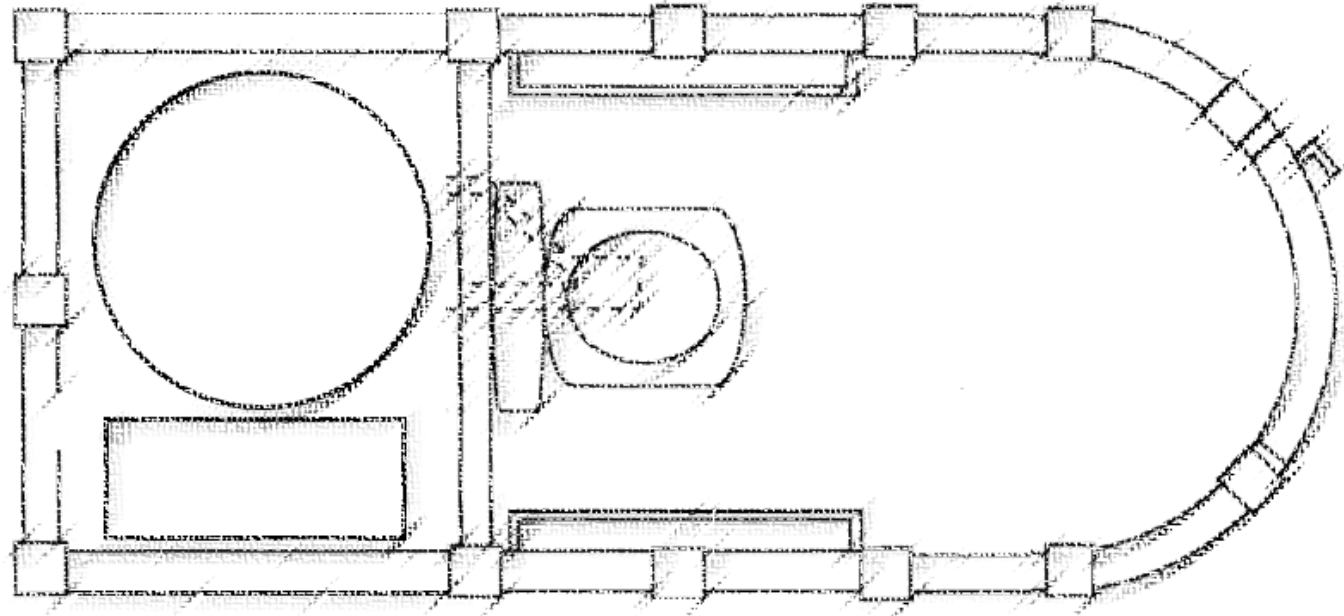
A **DURABLE** and **LOW-COST** approach to public space sanitation.

Visit us at www.Camai-Enterprises.com for more details on products and services offered.











MOA Anchorage Areawide Public Restroom Project Product Review Interviews

Dave Johnson, Kodiak Port Director, Harbor Master
907-654-5994
djohnson@city.kodiak.ak.us

Date: Friday, May 31, 2024

Time: 1:00-1:30pm

Location: Phone

Restroom type: Portland Loo

Notes

Harbor Master, Dave Johnson of the Kodiak Port was interviewed on Friday, May 31 regarding the installation of four Portland Loo restrooms in Kodiak. Below is summary of that phone interview.

Dave reported the Portland Loo does not compare to an indoor facility, however better than Port- O – potty. When asked what is not working with the restroom he responded.

- The Portland Loo is not designed with coastal Alaska in mind.
- On windy, rainy days the restroom is not a popular option because the louvers allow wind and rain inside the restroom, and it is hard to keep the toilet paper dry.
- Hand washing on the outside of toilet isn't nice for after use.
- The port is spending \$3,000 month on plumbing because vagrants are flushing unnecessarily items down the drain.
- Not used year-round, stainless steel isn't a comfortable option in winter.

Installation:

Four units have been installed throughout the city in 2022, all four are not open year-round. The four locations include:

- The Port – Mostly for tourists
 - This restroom was not installed correctly, and water collects in the toilet.
- The Harbor – Used by both locals and tourists.
- Ferry Terminal – Most for tourists.
- Trident Basin Seaplane Base – Mostly for tourists
- The Portland Loo is a good option for tourists, however not the best product for Kodiak.

Community feels the this was not the most successful project. There is a need in the community for most public restrooms for residents and tourist, however because harbor users are paying for the plumbing fees it's been a difficult project.

MOA Anchorage Areawide Public Restroom Project

Product Review Interviews - Dave Johnson, Kodiak Port Director, Harbor Master

Maintenance Costs

- Maintenance costs are paid out of the Tourism Fund. The Portland Loo is more cost effective than a standalone toilet structure. Less vandalism. Staff spent three weeks rebuilding the inside of the restroom and within weeks it was destroyed.
- Serviced with two contracts: One for janitorial and one for maintenance.
- The restrooms are serviced daily.

Installation Cost

- The Cruise Ship Revenue Fund helped with installation funding.
 - Management / Maintenance is funded through the Tourism Development Fund – Bed tax and a local maintenance contract.
 - Contract Price installation for all four units: \$292,000
 - Price for all four units including shipping to Kodiak: \$450,000



MOA Anchorage Areawide Public Restroom Project Product Review Interviews

Kyan Reeve, Ketchikan, Transit Director
907-228-6623
kyanr@kgbak.us

Andrew Hendrickson, Port and Harbor
Maintenance
907-228-5632
andrewhendrickson@ketchikan.gov

Date: Friday, May 31, 2024

Time: 11:30-12:00pm

Location: Phone

Restroom type: Portland Loo

City of Ketchikan Notes

Kyan Reeve

Transit Director for Ketchikan, Kyan Reeve was interviewed on Friday, May 31 regarding the installation of a Portland Loo near the harbor in Ketchikan. Below is summary of that phone interview.

- Ketchikan Gateway Borough installed in 2014, Transit Department installed and owns the toilet.
- Location: Thomas and Stedman Street, Ketchikan, in a historic district.
- City is doing the maintenance and management of the toilet.
- Successful:
 - Ease of maintenance, easy to clean, haven't had rust issues.
 - Louvers are great for visibility inside the toilet, reduce people sleeping inside, and help with smell.
 - Great for areas where you have a large population of unhoused.
 - Ketchikan needed it for tourism to reduce the impact on area businesses.
- Some Issues:
 - Button hand wash on the outside was having an issue with freezing.
 - The Portland Loo was open the first winter, however now it is closed in the winter.
- Also contact the City of Ketchikan Public Works department. 907-228-6670

Ports and Harbors Department Notes

Andrew Hendrickson, Port and Harbor Maintenance

- It is not winterized; they blow the lines in winter and heat it to avoid pipes bursting. The city does not have it open in the winter to reduce the likelihood of the unhoused using it during winter.
- Some issues they've had:
 - Graffiti removal has been a problem.
 - Had to replace the handle on the door.
- Cleaning schedule: During cruise season it's open and serviced every day.



MOA Anchorage Areawide Public Restroom Project Product Review Interviews

Chris Lawrence, Director of Operations
Town of Smithers, British Columbia
clawrence@smithers.ca

Date: Thursday, July 25, 2024
Restroom type: Portland Loo

Notes

Chris Lawrence, the director of operations for the Town of Smithers, British Columbia was contacted July 25th, 2024 in response to a case study received from Portland Loo. The study outlines the utility needs at installation, installation and maintenance costs, winterization process and issues the Town encountered over a three-year period. The last update was in 2020. Chris was contacted via email to understand how the unit has preformed in the four year since the case study was released. The following are the questions sent in black with Chris' responses in italic:

- Are you still operating the Loo year-round?

Yes we are, we do have some issues when we reach -30 c (-22 f) like lines freezing. We have a glycol loop system to operate in colder conditions, but it does not work well. Instead, we let the tap run to lessen the chances of freezing.

- Have any additional modifications had to be made to accommodate winter use?

We have the PVC liner/skirt around the bottom for the winter months.

- Has there been any solutions to the icy floor issue? Difficulty cleaning in the winter? Flow water required in the bowl?

Drain freezes and create an icy floor. We use a tiger torch and sometimes sand to ensure no slips, trips, or falls. Yes, flow water required continuously during colder weather resulting in significant water usage.

- Would you recommend Portland Loo in cold winter climates, or would you explore other options?

- *I would not recommend a Portland Loo for cold climates. Alternative options such as brick and mortar or wood frame are challenging as well. There are more maintenance considerations and additional asset renewal costs.*



**MOA Anchorage Areawide Public Restroom Project
Product Review Interviews**

Brad Rome, Project Manager
Fraser, Colorado
brome@town.fraser.co.us

Date: Friday, August 2, 2024
Restroom type: Green Flush Restroom

Town of Fraser, Colorado
Brad Rome

Brad Rome, a Project Manager for Fraser, Colorado was contacted August 2nd, 2024 to better understand how a recently installed Green Flush unit is functioning in their community and their experience working with the company. The following is a summary of the information gathered from the conversation with Brad:

Fraser, Colorado had a green flush unit installed in January as part of an area improvement project. The unit is on utilities and has 3 rooms- a male, female and family restroom. The unit also has a small maintenance room that has the capacity to store some essential cleaning supplies. Fraser intends to operate the unit year-round and have an automatic locking system, which closes the restrooms in the evenings. The unit is in an urban area and parks maintenance crews check on the unit daily, with a privately contracted crew cleaning the restrooms weekly. Fraser has not had any major vandalism problems with the restrooms and overall, the community has responded positively to the addition of the facility.

The unit has had one minor leak since it been installed. Brad commented that Green Flush has been great to work with through the issue and it has been covered under the warranty. Brad was not involved with the beginning stages of design and stepped in during the shipping and installation. He noted that the shipping process from where the unit was manufactured in the Midwest to Colorado was challenging and slow. Green Flush was very communicative throughout the process.

Brad commented that he does have concerns about the winter hardiness of the unit and the overall construction seems to be geared towards warmer climates. The eaves do not offer protection from rain or snow and the overhang is very minimal. He commented that he has considered constructing a larger overhang to allow snow to shed away from the unit. He would consider looking more into constructing a brick-and-mortar unit before purchasing a Green Flush unit again. Overall, Green flush is a good company to work with, but it seems there may not be much of a cost or time savings.



**MOA Anchorage Areawide Public Restroom Project
Product Review Interviews**

Shawn Galyen, Superintendent of Public Works Chief Operator
sgalyen@villageofwilson.org

Date: Monday, July 22, 2024
Restroom type: Green Flush

Notes

Shawn Galyen, the Superintendent of Public Works for the Village of Wilson, New York was interviewed July 22, 2024, regarding the Green Flush Restroom unit installed at a public pier on Lake Ontario. The following is a summary of the information gathered from the conversation with Shawn:

The area where the Green Flush restroom is located is primarily used for recreational purposes. The restroom is on utilities and has a grinder pump system, which is pulled out when the facility is closed for the winter. Shawn commented that the utility cost is very minimal. Maintenance staff checks the restrooms four times a week. Vandalism is minimal and manageable. The restrooms are available 24/7 in the summer months. Overall, the Village of Wilson has been pleased with their Green Flush Restroom unit and would recommend the installation of a Green Flush restroom.



MOA Anchorage Areawide Public Restroom Project Product Review Interviews

Marc Mancuso, Parks & Recreation Director
mmancuso@fruita.org
Fruita, CO Parks & Recreation

Date: Tuesday, July 23, 2024
Restroom type: UrbenBlu

Notes

Marc Mancuso, the Parks & Recreation Director for the City of Fruita, Colorado was interviewed July 23, 2024 to better understand how a recently installed UrbenBlu units is functioning in their community and their experience working with the company. The following is a summary of the information gathered from the conversation with Marc:

The City of Fruita, Colorado has been operating and maintaining an UrbenBlu Double Unit since the beginning of the summer. UrbenBlu was selected by the city over other options explored because of the following benefits offered:

- No proprietary parts
 - A few small issues have arisen and have been addressed effectively by customer service remotely
- Automated locking system
- Sanitization of floor and toilet bowl between every user with adaptable settings
- Consumable usage notifications
- Ability to operate year round

During their research process, Fruita found that UrbenBlu would be \$90,000 less than traditional block buildings. The neighboring community of Palisade maintains an UrbenBlu unit and was used as a resource for Fruita.

The installation process of the unit was simple and straightforward. Fruita chose to prepare the subgrade, place the unit, and then pour concrete to the edge of the unit. Maintenance staff checks the restrooms daily and performs routine cleaning tasks. During a high traffic weekend, with over 400 flushes recorded in 2 days, the city was pleased with the performance of the unit. Marc mentioned that the storage room is a bit small and other accommodations should be made for consumable product storage. They did not choose the power washer option and have not seen a need for one. There has been a little bit of a learning curve for the community, especially since the unit does not have a flushing button, but generally the installation has been well received. Overall, Fruita is very pleased with the UrbenBlu company and product and would install the product again.



**MOA Anchorage Areawide Public Restroom Project
Product Review Interviews**

Julie Jokinen, Administrative Director
jjokinen@anchoragedowntown.org
Anchorage Downtown Partnership

Restroom type: Brick and mortar structure – King’s Landing Plaza on Ship Creek

Notes

Julie Jokinen, the Administrative Director for the Anchorage Downtown Partnership (ADP) was interviewed July 19, 2024 regarding the restroom facility ADP maintains near Ship Creek in Anchorage. The following is a summary of the information gathered from the conversation with Julie:

The Anchorage Downtown Partnership was contracted to maintain the restroom facility constructed as part of Municipality Park and Recreation project and owned by the Alaska Railroad. The restrooms are opened and cleaned daily by staff and are available to the public from 7am-7pm. Staff also preforms weekly pressure washing. From May-July, the restrooms remain open 7 days a week and staff begin closing the facilities for weekends in August- October. Typically, restrooms are closed for the winter from October- May, depending on weather and freezing/thaw. Vandalism has not been a major concern. There has been a manageable amount of clean up required from graffiti. ADP has had to adapt which type of consumable products are available to minimize overuse. Some lock tampering has occurred during the winter closure months. Overall, maintenance is manageable, and ADP anticipates daily duties require two people one hour per day.



**MOA Anchorage Areawide Public Restroom Project
Product Review Interviews**

Ronnie M. Poole, Operations & Maintenance Superintendent
ronnie.poole@anchorageak.gov
Port of Alaska

Restroom type: Brick and mortar structure – Ship Creek Small Boat Launch

Notes

Ronnie Poole, the Operations & Maintenance Superintendent for the Port of Alaska was contacted and provided information regarding the restroom facility located at the Ship Creek Small Boat Launch. The following is a summary of the information gathered from emails and conversation with Ronnie:

The Port of Alaska owns a restroom facility near Ship Creek and contracts out the maintenance to Cs Services. The restroom facility is available April-October, based on weather. While the restrooms operate seasonally, the building is heated in the winter to prevent pipes from bursting. The facility is located behind a gate that is opened daily and the facility itself is equipped with an automatic locking system that makes the restrooms available for use from 6am to 11pm.

Custodial costs are around \$1,200 for 6 months and the port anticipated a \$100 increase annually. Typical vandalism includes graffiti and broken faucets. Being that the restroom is located in a more removed, remote area, the restroom garners a lot of complaints. After hour illegal activities often result in people relieving themselves outside the building while they are locked. As such, there is more of a burden placed on maintenance staff for cleanup of the surrounding area.

The port also provided a breakdown of the utility cost- see below:

June 2024	\$ 333.72
May 2024	\$ 548.37
April 2024	\$ 766.52
March 2024	\$ 936.10
February 2024	\$1,077.30
January 2024	\$1,439.92
December 2023	\$1,282.41
November 2023	\$ 760.09
October 2023	\$ 330.37
September 2023	\$ 276.99
August 2023	\$ 253.11
July 2023	\$ 321.74
1 year Total	\$8,326.64



**MOA Anchorage Areawide Public Restroom Project
Product Review Interviews**

Benny Flores, Deputy Director
Seward, AK Parks & Recreation
bnflores@cityofseward.net

Restroom type: Brick and mortar structure

Notes

Benny Flores, the Parks & Recreation Duty Director for the City of Seward was contacted to better understand how public restrooms are managed in Seward. Seward has several brick-and-mortar facilities that are available during the summer months. The following is a summary of the information gathered from the conversation with Benny:

The City of Seward has a regular maintenance schedule for their public restrooms. During summer events, such as the fourth of July, the majority of maintenance staff transition to restroom cleaning and maintenance. Emergency maintenance issues also arise regularly and disrupt staff from performing other tasks. Benny commented that the restrooms are largely used appropriately but regular vandalism does occur. Typical vandalism includes objects like sand and rocks being flushed down the toilet, resulting in additional cost of around \$1,000 monthly for plumbing services. Restrooms are manually opened and closed daily by staff and are winterized and closed before freezing. The city typically has additional maintenance costs for burst pipe and fitting replacements in the spring.