COMMISSION REGULAR MEETING AGENDA

August 8, 2023

To be held virtually via MS Teams and in person at the Port of Seattle Headquarters Building – Commission Chambers, Pier 69, 2711 Alaskan Way, Seattle WA. You may view the full meeting live at meetings.portseattle.org. To listen live, call in at +1 (425) 660-9954 or (833) 209-2690 and Conference ID 570 744 120#

ORDER OF BUSINESS

10:30 a.m.

1. **CALL TO ORDER**

2. **EXECUTIVE SESSION** – *if necessary, pursuant to RCW 42.30.110 (executive sessions are not open to the public)*

► **12:00 noon – PUBLIC SESSION**

Reconvene or Call to Order and Pledge of Allegiance

3. **APPROVAL OF THE AGENDA** *(at this time, commissioners may reorder, add, or remove items from the agenda)*

4. **SPECIAL ORDERS OF THE DAY**

5. **EXECUTIVE DIRECTOR'S REPORT**

6. **COMMITTEE REPORTS**

7. **PUBLIC COMMENT** – *procedures available online at https://www.portseattle.org/page/public-comment-port-commission-meetings*

During the regular order of business, those wishing to provide public comment on items related to the conduct of the Port will have the opportunity to:

1) Deliver public comment via email: All written comments received by email to *commission-public-records@portseattle.org* will be distributed to commissioners and attached to the approved minutes.

2) Deliver public comment via phone or Microsoft Teams conference: To take advantage of this option, please email *commission-public-records@portseattle.org* with your name and the topic related to the conduct of the Port you wish to speak to by 10:30 a.m. PT on Tuesday, August 8, 2023. ***(Please be advised that public comment is limited to topics related to the conduct of the Port only.)*** You will then be provided with instructions and a link to join the Teams meeting.

3) Deliver public comment in person by signing up to speak on your arrival to the physical meeting location: To take advantage of this option, please arrive at least 15 minutes prior to the start of any regular meeting to sign-up on the public comment sheet available at the entrance to the meeting room to speak on items related to the conduct of the Port.

For additional information, please contact *commission-public-records@portseattle.org.*

8. CONSENT AGENDA *(consent agenda items are adopted by one motion without discussion)*

8a. Approval of Minutes of the Special Meeting of July 24, 2023, and the Regular Meeting of July 25, 2023. **(no enclosure)** **(p.4)**

8b. Approval of the Claims and Obligations for the Period July 1, 2023, through July 31, 2023, Including Accounts Payable Check Nos. 949129 through 949478 in the Amount of $7,151,246.05; Accounts Payable ACH Nos. 056499 through 057398 in the Amount of $54,324,115.38; Accounts Payable Wire Transfer Nos. 016099 through 016119 in the Amount of $16,194,705.66; Payroll Check Nos. 207861 through 208346 in the Amount of $202,422.09; and Payroll ACH Nos. 1144446 through 1149069 in the Amount of $15,390,429.22, for a Fund Total of $93,262,918.40. **(memo enclosed)** **(p. 13)**

8c. Monthly Notification of Prior Executive Director Delegation Actions July 2023. **(memo enclosed – No action, for information only)** **(p. 16)**

8d. Authorization for the Executive Director to Authorize $3,875,000 for Final Design, Preparation of Construction Bid Documents, and the Procurement of Long-Lead Material Items for the N14 Wide Body and N15 Narrow Body Common-Use Gates at Seattle-Tacoma International Airport, in the Requested Amount of $3,875,000 and a Total Authorization of $4,170,000. (CIP# C801333) **(memo and presentation enclosed)** **(p. 18)**

8e. Authorization for the Executive Director to Execute a Contract for Two New Cruise Passenger Secondary Gangways for the Smith Cove Cruise Terminal at Pier 91 in the Amount of $8,700,000 of a Total Estimated Project Cost of $9,000,000. (CIP# C800129). **(memo and presentation enclosed)** **(p.33)**

10. NEW BUSINESS

10a. Number Not Used.

10b. Commercial Aviation Coordinating Commission Briefing (for information only). **(memo, report, and presentation enclosed)** **(p. 48)**

10c. Authorization for the Executive Director to Enter a Contract for the Procurement of a Proprietary Shore Power System Consisting of Two Mobile Cable Positioning Devices for Pier 91 in the Amount Requested of $2,500,000 of a Total Estimated Project Cost of $2,750,000. (CIP# C801293). **(memo and presentation enclosed)** **(p. 101)**

10d. Authorization for the Executive Director to Advertise, Award, and Execute a Major Works Construction Contract to Complete the Redevelopment of the Terminal 91 Berths 6 and 8, to Utilize a Project Labor Agreement, and to Enter into Agreements in Support of Completion of the Work, including Tribal Agreements, for Terminal 91 Berths 6 and 8 Redevelopment and Additional Stormwater Treatment

Construction Funding in the Amount of $71,825,000 and a Total Estimated Project Cost of $76,000,000. (CIP#s C102475 and C801350). **(memo, design strategy, and presentation enclosed)** **(p. 118)**

10e. Authorization for the Executive Director to Increase the Contract Value for the Existing Service Contracts for Custodial Services at Seattle-Tacoma International Airport by $54,300,000 for a New Total Cumulative value of $149,300,000; to Authorize the Executive Director to Recompete and Execute Up to Two, Five-year Custodial Service Contracts; to Add Waste Removal Services for the Airport Dining and Retail Tenants; and to Add the Commission Public Health and Safety Initiative Service, Complimentary Hygiene Products, at Seattle-Tacoma International Airport. **(memo, map, and presentation enclosed)** **(p. 184)**

10f. Authorization for the Executive Director to Advertise, Award, and Execute a Major Works Construction Contract Utilizing a Project Labor Agreement to Enable Construction of a Package of Improvements to the Fishermen's Terminal Including the Renovation of the Ship Supply Building into the Maritime Innovation Center and a Set of Public Space Improvements to Fishermen's Terminal for a Total Amount Requested of $27,415,415 and a Total Project Authorization of $32,600,000. (CIP#s C801084 and C801211) **(memo, brochure, and presentation enclosed)** **(p. 202)**

11. PRESENTATIONS AND STAFF REPORTS

11a. Q2 2023 Financial Performance Briefing.
(memo, report, and presentation enclosed) **(p. 324)**

12. QUESTIONS on REFERRAL to COMMITTEE and CLOSING COMMENTS

13. ADJOURNMENT

P.O. Box 1209
Seattle, Washington 98111
www.portseattle.org
206.787.3000

APPROVED MINUTES
COMMISSION SPECIAL MEETING JULY 24, 2023

The Port of Seattle Commission met in a special meeting Monday, July 24, 2023. The meeting was held at Cedarbrook Lodge, located at 18525 36th Ave S, Seattle, Washington. Commissioners Calkins, Cho, Felleman, Hasegawa, and Mohamed were present.

CALL to ORDER

Pursuant to RCW 42.30 and Article IV, Section 8, of the commission bylaws, the meeting convened at 10:00 a.m. for the purpose of holding a Commission Organizing and 2024 Budget Retreat. Members of the Executive Leadership Team; Aaron Pritchard, Commission Chief of Staff; LeeAnne Schirato, Deputy Commission Chief of Staff, and Members of the Executive Leadership Team joined for the session.

ITEMS OF BUSINESS

Members of the Commission met Karen Goon, recently hired Deputy Executive Director for the Port of Seattle.

Presentations for the day included:

- an airport financial overview;
- a discussion on Levy scenarios; and
- division budget priorities for 2024.

Members of the Commission also discussed their individual budget priorities with their colleagues; discussed scheduling and travel in 2024; and overviewed the 2024 Commission budget.

ADJOURNMENT

There being no further business, the meeting adjourned at 4:52 p.m.

Prepared: Attest:

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Michelle M. Hart, Commission Clerk Fred Felleman, Commission Secretary

Minutes approved: August 8, 2023.

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Seattle, Washington 98111
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APPROVED MINUTES
COMMISSION SPECIAL MEETING
JULY 25, 2023

The Port of Seattle Commission met in a special meeting Tuesday, July 25, 2023. The meeting was held at the Seattle-Tacoma International Airport Conference Center, located at 17801 International Blvd, Seattle WA, Mezzanine Level, Seattle, Washington, and virtually on Microsoft Teams. Commissioners Cho, Felleman, Hasegawa, and Mohamed were present. Commissioner Calkins was absent and excused from the regular business meeting, however, was in attendance for the Executive Session.

1. CALL to ORDER

The meeting was convened at 9:00 a.m. by Commission President Cho.

2. EXECUTIVE SESSION pursuant to RCW 42.30.110

The public meeting recessed into executive session to discuss one matter regarding litigation/or potential litigation/or legal risk, per RCW 42.30.110(1)(i) and complaints about public officers or employees per RCW 42.30.110(1)(f) for approximately 190 minutes, with the intention of reconvening the public session at 12:00 p.m. Commissioner Hasegawa was recused from participating in the Executive Session. Following the executive session, the public meeting reconvened at 12:10 p.m. Commission President Cho led the flag salute.

3. APPROVAL of the AGENDA

The agenda was approved as presented without objection.

In favor: Cho, Felleman, Hasegawa, and Mohamed (4)
Opposed: (0)

4. SPECIAL ORDERS OF THE DAY

No Special Orders of the Day were presented.

5. EXECUTIVE DIRECTOR'S REPORT

Executive Director Metruck previewed items on the day's agenda and made general and meeting-related announcements.

6. COMMITTEE REPORTS

Commission Strategic Advisor Erica Chung provided committee reports.

Aviation Committee
Commissioner Mohamed and Commissioner Calkins convened the Aviation Committee on July 18, 2023. The committee received briefings on four items, discussing accessible initiatives at the airport, partnership with local governments, and an Order outlining future accessibility goals. An update on the FAA Reauthorization legislation in the Senate and House was also discussed. Other discussion items included: Concourse C retail space lease opportunity and timeline and TNC virtual cue processing - allowing TNC drivers to wait at Lot160 and drive over once a request by a customer is made. The committee concluded with a conversation regarding the public board member's term on the Port's Accessibility Committee, supporting a two-year board term and rotation to make it more equitable and inclusive to broader accessibility communities.

Equity and Workforce Development Committee
Commissioners Hasegawa and Calkins convened the Equity and Workforce Development Committee on July 18, 2023. The Committee discussed: the Port's Anti-Human Trafficking initiative and recent rulings by the US Supreme Court on affirmative action and free speech/LGBTQ rights, and how it may affect the Port. Commissioner Hasegawa requested staff to further examine options to bolster the Port's anti-human trafficking initiative and staff will continue to track and monitor impacts of the recent US Supreme Court rulings.

Joint Advisory Committee
The Joint Advisory Committee (JAC) meeting with the City of SeaTac was held on July 18, 2023, with Commissioners Mohamed and Felleman in attendance. The JAC received an update on the Port Commission's adoption of the Environmental Land Stewardship Principles Order, and SEA land stewardship efforts. The JAC also received an update from Port Senior Federal Government Relations Manager Eric Schinfeld who gave an update on the North SeaTac Park related provision and the four shared StART priorities that are included in the FAA Reauthorization bill.

7. PUBLIC COMMENT

Public comment was received from the following individual(s):

- The following person spoke regarding the impact of cruise on maritime workers and the economic benefits it provides for workers in bunker services: Patrick Dougan, Vain Brothers.
- The following person spoke of cruise, noting the tourism and economic benefits it has to the region: David Blandford, CEO, Washington State Tourism.
- In lieu of spoken comment, written comments from citizens who write to ask the Port Commission to cap the number of 2024 season sailings and passengers at or below 2019 levels, reducing these numbers every year until the industry pollution is eliminated were submitted by: Wendy Ashmun; Ant Blasi; Robin Briggs; Beth Brunton; Valerie Costa; Gregory Denton; Arun Ganti; Derek Gendvil; Angela Germano; Brie Gyncild; Becky Hall; Jared Howe; Esther John; Sophia Keller; David Kipnis; Jason Li; Lorie Lucky; Scott McClay; Rosemary Moore; Barbara O'Steen; Sarah Sanford; Phillip Singer; Janie Starr; Lauren Wilson; Linda Carroll; Kevin Gallagher; Mary Hanson; Andrea O'Ferrall; Karen Cowgill; Ericka Berg;

Anne Robertson; Linda Golley; Gordon Adams; Kathy Pendrss; Cynthia Ervin; Stacy Oaks; Irene Svete; Cheryl Marland; Norma Nielsen; and Jan Florer.

[Clerk's Note: All written comments are combined and attached here as Exhibit A.]

8. CONSENT AGENDA

[Clerk's Note: Items on the Consent Agenda are not individually discussed. Commissioners may remove items for separate discussion and vote when approving the agenda.]

8a. Approval of Minutes of the Special Meeting of July 11, 2023.

8b. Authorization for the Executive Director to Enter into an Interlocal Agreement with Seattle Colleges Cable Television (SCCtv) for Commission Meeting and Other Video Production Services in the Amount of $1,442,000, and a Period of Five Years.

Request document(s) included an agenda memorandum and agreement.

8c. Authorization for the Executive Director to Transfer Drug Forfeiture Funds in the Amount of $300,000 to the Regional Valley SWAT Team, for the Use of Funds as Partial Acquisition Cost for a Police Armored Response and Rescue Vehicle.

Request document(s) included an agenda memorandum.

The motion for approval of consent agenda items 8a, 8b, and 8c carried by the following vote:

In favor: Cho, Felleman, Hasegawa, and Mohamed (4)
Opposed: (0)

10. NEW BUSINESS

10a. Authorization for the Executive Director to Authorize $20,000,000 of the Program Budget for Long Lead Electrical, Mechanical, and Curtain Wall Equipment and Other Long Lead Materials, for the C Concourse Expansion Program. (CIP #C800845)

Request document(s) included an agenda memorandum and presentation.

Presenter(s):
Rick Duncan, Director, AV Business & Properties
Janet Sheerer, Capital Program Leader, AV Project Management Group

Clerk Hart read Item 10a into the record.

Executive Director Metruck introduced the item and presenters.

The presentation addressed:

- the project purpose – to increase airport revenue, improve customer service, and increase economic opportunities;
- sustainability initiatives;
- the project being part of the Upgrade SEA campaign;
- project location, status, and construction progress;
- rendering of the building exterior;
- interior design elements; and
- project schedule and budget.

Discussion ensued regarding:

- whether or not the project is part of the Sustainable Airport Master Plan – it is not;
- installing a handrail in the center of the staircase/bleachers feature;
- smart restrooms and potential conversion from gendered restrooms to non-gendered restrooms;
- inclusion of an infant docking station in the family stall;
- ADA accessibility;
- nursing room facilities and inclusion of an infant docking station as well in that location;
- energy savings included in the plan;
- non-use of natural gas in the project;
- installation of solar cells and how that was accomplished with FAA regulations;
- tenant impacts;
- receiving a transparent breakdown of entire project budget; and
- storage cells for energy creation and storage.

The motion, made by Commissioner Hasegawa, carried by the following vote:
In favor: Cho, Felleman, Hasegawa, and Mohamed (4)
Opposed: (0)

10b. Sound Insulation Program Briefing and Authorization for the Executive Director to Advertise, Award and Execute a Major Public Works Contract, Include a Project Labor Agreement, and Authorize Construction of Phase 2 of the Apartment Program with Previously Authorized Funds and a Total Program Cost of $133,515,000. (CIP #C200096)

Request document(s) included an agenda memorandum and presentation.

Presenter(s):
Stephen St. Louis, Capital Project Manager V, AV Project Management Group
Julie Kinzie, Sound Insulation Manager, Noise Programs
Robert Giacopetti, AV Grants Program Manager, Aviation Finance & Budget
Eric Schinfeld, Senior Manager, Federal & International Government Relations

Clerk Hart read Item 10b into the record.

Executive Director Metruck introduced the item and presenters.

The presentation addressed:

- sound insulation purpose and scope;

- program locations;
- program status and history of the program;
- implementation of equity, diversity, and inclusion recommendations into the program outreach;
- status of eligible homes vs. homes completed through the program for insulation – single family, condominiums, and apartments;
- status of eligible places of worship locations;
- the accelerated schedule for the program;
- subordination agreement enhancements;
- 2023 FAA reauthorization of the program;
- StART advocacy of the program;
- other noise and emissions provisions – including creation of a Chief Noise Officer; prioritization of noise mitigation in the setting of new flight paths; creation of a community taskforce to advise the Federal Aviation Administration (FAA) on noise; and creation of an internal FAA program to coordinate and interact with the taskforce;
- FY24 appropriations and grants;
- FAA noise policy review on sound insulation;
- failing packages of previous insulations'
- cash flows and funding plan;
- program risks; and
- requested Phase 2 construction authorization.

Discussion ensued regarding:

- the amount of program funding spent since 1985;
- use of the program;
- strategy for addressing failing packages;
- conducting the Part 150 Study and associated timeline;
- having a better idea of timeline and scope in September regarding the Part 150 Study;
- potential energy savings to owners that take part in the program;
- opportunities for apprenticeship goals and objectives;
- reasons behind some declinations to use the program;
- providing reliable translation of site and contents for the program resource site; and
- use of multi-language postcards.

The motion, made by Commissioner Mohamed, carried by the following vote:
In favor: Cho, Felleman, Hasegawa, and Mohamed (4)
Opposed: (0)

11. <u>PRESENTATIONS AND STAFF REPORTS</u>

11a. Friends of Waterfront Seattle and City of Seattle Waterfront Briefing.

Presentation document(s) included a presentation.

Presenter(s):
Angela Brady, Director, Office of the Waterfront and Civic Projects, City of Seattle

Joy Shigaki, President & CEO, Friends of Waterfront Seattle

Commission Clerk Michelle Hart read Item 11a into the record.

Executive Director Metruck introduced the item.

Angela Brady, Office of the Waterfront and Civic Projects for the City of Seattle, and Joy Shigaki, President and CEO of Friends of Waterfront Seattle, provided a report to the Commission regarding waterfront redevelopment projects along and leading to Alaskan Way. The presentation addressed:

- project construction schedule;
- funding;
- key construction milestones 2023 planning;
- tribal priorities;
- the seawall project;
- new waterfront renderings;
- use of green stormwater infrastructure;
- functions of the street;
- project-specific overviews;
- aquarium expansion; and
- partnership with Friends of Waterfront Seattle on philanthropy, operations and maintenance, security, and programming;
- Waterfront Park – situated on the land of the Coast Salish Peoples – a historic 20-acre civic investment which will be a catalyst for revitalization and renewal of downtown and the region;
- 2023 major events and programs in partnership with Friends of Waterfront Seattle;
- Friends of Waterfront Seattle's project budget and philanthropic funding received;
- tourism and economic impact;
- investment in public safety; and
- partnership with Seattle Center to bring expertise in complex urban public space management and aligned vision and goals of a safe, welcoming waterfront for everyone.

Members of the Commission and presenters discussed:

- the Waterfront Project being fully funded at this time; and
- any potential of extending maps north to include the Port of Seattle.

Members of the Commission thanked the City and Friends of Waterfront Seattle for their time and presentation.

11b. 2024 Budget Development Briefing.

Presentation document(s) included a presentation.

Presenter(s):
Steve Metruck, Executive Director
Dan Thomas, Chief Financial Officer, Finance and Budget

Commission Clerk Michelle Hart read Item 11b into the record.

Executive Director Metruck provided an overview of 2024 budget development.

The presentation addressed:
- a scan of environmental factors surrounding budget development;
- passenger recovery forecasting for aviation;
- cruise operations levels since 1999 to-date;
- 2024 budget guiding principles and strategies; and
- the 2024 budget calendar.

Members of the Commission thanked Executive Director Metruck for highlighting the aspects of budget development for transparency.

12. QUESTIONS on REFERRAL to COMMITTEE and CLOSING COMMENTS

Commissioner Felleman spoke regarding the Biden national monument to Emmett Till.

Commissioner Hasegawa spoke regarding the recent signing of the City of Seattle's Industrial Lands Policy. She acknowledged Port staff's work over the years, noting that it is a win for communities and businesses.

13. ADJOURNMENT

There was no further business and the meeting adjourned at 3:17 p.m.

Prepared: Attest:

Michelle M. Hart, Commission Clerk Fred Felleman, Commission Secretary

Minutes approved: August 8, 2023

Return to Agenda

COMMISSION
AGENDA MEMORANDUM

Item No. 8b

ACTION ITEM

Date of Meeting August 8, 2023

DATE: August 2, 2023

TO: Steve Metruck, Executive Director

FROM: Eloise Olivar, AFR Senior Manager Disbursements

SUBJECT: **Claims and Obligations –July 2023**

ACTION REQUESTED

Request Port Commission approval of the Port Auditor's payment of the salaries and claims of the Port pursuant to RCW 42.24.180 for payments issued during the period July 1 through 31, 2023 as follows:

Payment Type	Payment Reference Start Number	Payment Reference End Number	Amount
Accounts Payable Checks	949129	949478	$ 7,151,246.05
Accounts Payable ACH	056499	057398	$ 54,324,115.38
Accounts Payable Wire Transfers	016099	016119	$ 16,194,705.66
Payroll Checks	207861	208346	$ 202,422.09
Payroll ACH	1144446	1149069	$ 15,390,429.22
Total Payments			**$93,262,918.40**

Pursuant to RCW 42.24.180, "the Port's legislative body" (the Commission) is required to approve in a public meeting all payments of claims within one month of issuance.

OVERSIGHT

All these payments have been previously authorized either through direct Commission action or delegation of authority to the Executive Director and through his or her staff. Detailed information on Port expenditures is provided to the Commission through comprehensive budget presentations as well as the publicly released Budget Document, which provides an even greater level of detail. The Port's operating and capital budget is approved by resolution in December for the coming fiscal year, and the Commission also approves the Salary and Benefit Resolution around the same time to authorize pay and benefit programs. Notwithstanding the Port's budget approval, individual capital projects and contracts exceeding certain dollar thresholds are also subsequently brought before the Commission for specific authorization prior to commencement of the project or contract—if they are below the thresholds the Executive Director is delegated authority to approve them. Expenditures are monitored against budgets monthly by management and reported comprehensively to the Commission quarterly.

Effective internal controls over all Port procurement, contracting and disbursements are also in place to ensure proper central oversight, delegation of authority, separation of duties, payment approval and documentation, and signed perjury statement certifications for all payments. Port disbursements are also regularly monitored against spending authorizations. All payment transactions and internal controls are subject to periodic Port internal audits and annual external audits conducted by both the State Auditor's Office and the Port's independent auditors.

For the month of July 2023, over $77,670,067.09 in payments were made to nearly 749 vendors, comprised of 2,200 invoices and over 9,996 accounting expense. About 91 percent of the accounts payable payments made in the month fall into the Construction, Employee Benefits, Payroll Taxes, Leasehold Taxes, Contracted Services, Insurance, Utility Expenses, Janitorial Services, Sales Taxes, and Environmental Remediation. Payroll expenses for the month of July were $15,592,851.31.

Top 15 Payment Category Summary:

Category	Payment Amount
Construction	31,132,662.12
Employee Benefits	10,166,309.27
Payroll Taxes	6,109,562.54
Leasehold Taxes	5,072,579.83
Contracted Services	4,859,913.10
Insurance	3,780,279.78
Utility Expenses	3,158,974.09
Janitorial Services	2,898,022.22
Sales Taxes	1,857,061.48
Environmental Remediation	1,280,645.55
Software	876,365.88
Computers &Telephone	825,742.56
Maintenance Inventory	824,864.27
Parking Taxes	714,418.48
Equipment Maintenance	617,570.32
Other Categories Total:	3,495,095.60
Net Payroll	15,592,851.31
Total Payments:	**$93,262,918.40**

Appropriate and effective internal controls are in place to ensure that the above obligations were processed in accordance with Port of Seattle procurement/payment policies and delegation of authority.

Lisa Lam/Port Auditor

At a meeting of the Port Commission held on August 8, 2023, it is hereby moved that, pursuant to RCW 42.24.180, the Port Commission approves the Port Auditor's payment of the above salaries and claims of the Port:

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Port Commission

Return to Agenda

Port of Seattle

COMMISSION
AGENDA MEMORANDUM

FOR INFORMATION ONLY

Item No. 8c

Date of Meeting August 8, 2023

DATE: August 8, 2023

TO: Stephen P. Metruck, Executive Director

FROM: Karen R. Goon, Deputy Executive Director

SUBJECT: Monthly Notification of Prior Executive Director Delegation Actions July 2023

APPROVAL SUMMARY

Notification of the following Executive Director delegated approvals that occurred in July 2023.

Category of Approval	**Request#**	**Description of Approvals July 2023**	**Category Amount**
Projects & Associated Contracts	N/A	No Approvals in July	
Non-Project Procurement of Goods & Purchased Service Contracts, Other Contracts, & Tenant Reimbursement	N/A	No Approvals in July	
Real Property Agreements	N/A	No Approvals in July	
Utilization of Port Crews	N/A	No Approvals in July	
Sale of Surplus Port Property	N/A	No Approvals in July	
Total Value of Executive Director Approvals			

TRANSPARENCY:

In approving the delegations for the Executive Director, the Commission requested that staff ensure transparency is built into the process. As a result, staff will make approvals visible to the public in two ways. First, these types of approvals will be made visible in public Commission meetings via monthly reporting similar to this one. Approvals are both timed and designed to be visible in a similar manner to the monthly Claims and Obligations reporting. Second, staff will publish these delegations in a PeopleSoft formatted report on the Port website in the same manner that all procurements, contracts, and other opportunities are made available to public communities.

BACKGROUND:

On January 24, 2023, the Commission approved and adopted Resolution No. 3810 that repealed related prior resolutions and increased the previously delegated Commission authority to the Executive Director and provided clarity in process directives to port staff. The approval made the Delegation of Responsibility and Authority to the Executive Director (DORA) effective on April 3, 2023.

The foundation for Resolution No. 3810 included significant data analysis, employee surveys, and internal audit recommendation. Resolution No. 3810 also aligns with the Port Century Agenda in that it helps make the Port a more effective public agency. Considerations and checks and balances have been built into the associated processes of Executive Director approvals including a high bar of transparency.

Following significant analysis and multiple Commission reviews, the Commission approved the DORA on January 24, 2023. That reporting memo is available for review on the Port website under the January 24, 2023, Commission public meeting, and it provides detailed reasoning and explanation of Resolution No. 3810.

Return to Agenda

COMMISSION
AGENDA MEMORANDUM | **Item No.** 8d

ACTION ITEM | **Date of Meeting** August 8, 2023

DATE : July 31, 2023

TO: Stephen P. Metruck, Executive Director

FROM: Eileen Francisco, Director Aviation Project management
Laurel Dunphy, Director Airport Operations

SUBJECT: N14 Wide-Body and N15 Narrow-Body Common Use Gates (C801333)

Amount of this request: $3,875,000
Total estimated project cost: $9,380,500

ACTION REQUESTED

Request Commission authorization for the Executive Director to authorize $3,875,000 for final design, preparation of construction bid documents, and the procurement of long-lead material items for the N14 Wide Body and N15 Narrow Body Common-Use Gates at Seattle-Tacoma International Airport (SEA). This request is for $3,875,000 for a total authorization of $4,170,000.

EXECUTIVE SUMMARY

Planned upcoming construction projects will place a premium on the need for Wide-Body (WB) aircraft gates at SEA as several WB gates will be taken out of service. The N14 WB and N15 Narrow-Body (NB) Common Use Gates Project converts Gate N14 to be used for WB aircraft operations including international departures, while allowing Gate N15 to operate as a common-use NB aircraft gate, although not simultaneously. The project will also improve WB aircraft flexibility for Gate N16 through the addition of a starboard fuel hydrant pit (FHP) and associated infrastructure improvements. The long-lead material purchase maintains the construction schedule for Summer/Fall 2024.

JUSTIFICATION

There are limited number of WB aircraft gates at SEA, and several WB gates will be taken out of service because of upcoming planned construction projects, including reconstruction of the S Concourse, which will severely limit flight scheduling flexibility.

This project will help mitigate the impacts of WB aircraft gate outages during planned construction, as it is necessary to meet current airport demand. Gate N14 improvements include apron Portland cement concrete pavement (PCCP) panels, lighting, pre-conditioned air (PCAir), 400 Hz power, Safedock, striping and two fuel hydrant pits and associated infrastructure. Additionally, this project includes adding a starboard fuel hydrant pit (FHP) and associated infrastructure improvements at Gate N16.

The project will improve safety, reduce emissions, and improve operational efficiencies at Gates N14 and N16.

- Safety improvements include the reduction of fuel trucks operating within the congested apron environment.
- Emissions reductions will be realized through upgrading ground power (400 Hz) and PCAir units servicing WB aircraft at Gate N14 allowing airlines to shut down on-board aircraft power units when parked at Gate N14.
- Operational efficiencies will be gained as Gates N14 and N16 will provide all airlines with the ability to fuel either (or both) wing(s) of their WB aircraft, providing necessary gate scheduling flexibility during planned construction projects.

Diversity in Contracting

The project team has been working with the Diversity in Contracting Department and will be returning to the Commission for construction authorization along with an aspirational goal for women and minority business enterprises (WMBE) participation in the construction contract. The design services contract (P-00320884) includes a 15% WMBE participation requirement and is currently trending below the requirement. However, Service Directive (SD) and associated Modification for this project are estimated to provide 30% utilization, which will help the overall Service Agreement utilization. The project management services contract (P-00320718) includes a 16% WMBE participation requirement and is currently trending above the requirement. The SD and associated Modifications for this project are estimated to continue the positive trend with an estimated 23% utilization.

Long-lead Material Procurement

Certain construction materials and necessary project equipment may have lead times exceeding standard contractor mobilization time frames. The project team has been analyzing the construction bidding market to identify these critical material items including, but not limited to utility covers, high mast light poles/luminaires, hydrant fuel pits, PCAir units, and Safedock units. Early procurement of these items as owner furnished/contractor installed (OFCI) items will help maintain the construction schedule and planned gate closures for Summer/Fall 2024. As final design progresses the project team will confirm critical OFCI items and work with the Central Procurement Office (CPO) to develop the most effective path forward.

DETAILS

Final design for the project will investigate "islands" of old pavement surrounded by recently constructed PCCP panels and evaluate the cost-benefits of replacing the pavement now versus deferral. The design team will review pavement markings for standards compliance. Passenger loading bridge (PLB) configurations will be reviewed for WB aircraft at gates N14 and N16. The project will include improved apron lighting along with new high mast light foundation(s). The design team will also provide specifications for temporary lighting, and associated maintenance, during construction.

The project team will design three new FHP locations and associated infrastructure, including emergency shutoff valves. Channel drain locations and alignment within the project limits adjacent to the new FHP locations will be evaluated for efficacy to contain fuel spills.

The following ground support infrastructure will be reviewed and confirmed or designated for improvement through the project:

(1) Potable water connections.
(2) Electric ground support equipment (eGSE) charging stations, including access and staging.
(3) Aircraft fueling systems.
(4) PCAir to accommodate WB aircraft.
(5) 400 Hz power to accommodate WB aircraft.
(6) SafeDock locations and settings to accommodate WB aircraft.

The project will be combined with other airfield projects as a single construction contract for economies of scale, lower administrative costs, and lower impacts to airfield operations than from multiple construction contracts. The project team will be working with the Labor Relations Department and will be returning to the Commission for construction authorization along with a determination of applicability for a Project Labor Agreement (PLA) as part of the construction contract.

Scope of Work

Scope of work for this project is anticipated to include the following improvements:

(1) Apron pavement replacement at Gates N14, N15, and N16.
(2) Supplemental lighting installations at Gate N14.
(3) PCAir unit for WB aircraft at Gate N14.
(4) 400 Hz power unit for WB aircraft at Gate N14.
(5) SafeDock aircraft guidance system unit for WB aircraft at Gate N14.
(6) Airfield markings (striping) at Gates N14, N15, and N16.
(7) Fuel hydrant pits and associated infrastructure.
   a. Two at Gate N14.
   b. One at Gate N16.

Schedule

Activity	
Commission construction authorization	2024 Quarter 1
Construction contract execution	2024 Quarter 2
Construction start	2024 Quarter 3
In-use date	2024 Quarter 4

Cost Breakdown	This Request	Total Project
Design	$1,375,000	$1,670,000
Construction	$2,500,000	$7,710,500
Total	$3,875,000	$9,380,500

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Three alternatives were considered ranging from a no project alternative through the requested authorization for the recommended alternative. Narrative, cost implications, pros, and cons for each alternative are provided below.

Alternative 1 – Status quo (no project alternative). This alternative considers the pros and cons of not moving forward with the project scope described above.

Cost Implications: No capital or expense costs.

Pros:
(1) Gate N14 operations continue without interruption.
(2) Gate N16 operations continue without interruption.

Cons:
(1) Gate N14 not fully capable to accommodate WB aircraft.
(2) No hydrant fueling capability for the current interim WB aircraft parking position at Gate N14.
(3) Gate N16 not fully capable to accommodate WB aircraft.
(4) Slower WB aircraft turns due to slower fueling operations at Gate N16.
(5) Loss of fuel system redundancy in the event the existing FHP at Gate N16 requires maintenance or in the event of aircraft maintenance on the port side of the WB aircraft at Gate N16.

This is not the recommended alternative.

Alternative 2 – N14/N15 Only. (No additional FHP at Gate N16). This alternative considered the full project scope described above, limited to just the work areas for Gate N14 and Gate N15.

Cost Implications: 7,152,300.

Pros:

(1) Gate N14 fully capable of accommodating WB aircraft.
(2) Gate N16 operations continue without interruption.
(3) Potential capital cost savings.

Cons:

(1) Gate N16 not fully capable to accommodate WB aircraft.
(2) Slower WB aircraft turns due to slower fueling operations at Gate N16.
(3) Loss of fuel system redundancy in the event the existing FHP at Gate N16 requires maintenance or in the event of aircraft maintenance on the port side of the WB aircraft at Gate N16.

This is not the recommended alternative.

Alternative 3 – Proposed project. This alternative considered the full project scope described above.

Cost Implications: 9,380,500

Pros:

(1) Gate N14 fully capable of accommodating WB aircraft.
(2) Gate N16 fully capable of accommodating WB aircraft.
(3) Meet current airport operational demand.
(4) Help mitigate the impacts of WB aircraft gate outages during planned construction.

Cons:

(1) Temporary interruption to Gate N14 and Gate N15 operations during phase 1 construction.
(2) Temporary interruption to Gate N16 operations during phase 2 construction.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

Cost Estimate/Authorization Summary	Capital	Expense	Total
COST ESTIMATE			
Original estimate	$7,390,000	$0	$7,390,000
Current change	$1,990,500	0	$1,990,500
Revised estimate	$9,380,500	$0	$9,380,500
AUTHORIZATION			
Previous authorizations	$295,000	0	$295,000
Current request for authorization	$3,875,000	0	3,875,000
Total authorizations, including this request	$4,170,000	0	$4,170,000
Remaining amount to be authorized	$5,210,500	$0	$5,210,500

Annual Budget Status and Source of Funds

The N14 Wide-Body and N15 Narrow-Body Common Use Gates (CIP #C801333) is included in the 2023-2027 capital budget and plan of finance with a budget of $7,390,000. The capital increase of $1,990,500 was transferred from the Aeronautical Allowance[1] CIP C800753 resulting in no net change to the Airport capital budget. The funding sources will be the Airport Development Fund and existing revenue bonds.

Financial Analysis and Summary

Project cost for analysis	$9,380,500
Business Unit (BU)	Gates
Effect on business performance (NOI after depreciation)	NOI after depreciation will increase due to inclusion of capital (and operating) costs in airline rate base.
IRR/NPV (if relevant)	N/A
CPE Impact	$0.03 in 2025

Future Revenues and Expenses (Total cost of ownership)

An increase in annual operating & maintenance (O&M) costs is anticipated as a result of this project providing additional infrastructure to support larger aircraft activity. This will primarily affect the Electronic Technicians, with having an additional SafeDock unit, boarding gate readers, cameras, access controls and common use equipment to maintain in support of widebody operations. This will result in an annual increase of approximately 240 labor hours for Electronic Technicians.

[1] The Aeronautical Allowance is included in the Capital Improvement Plan to ensure funding capacity for unspecified projects, cost increases for existing projects, new initiatives, and unforeseen needs. This ensures funding capacity for unanticipated spending within the dollar amount of the Allowance CIP.

ADDITIONAL BACKGROUND

The Project was originally studied as part of North Satellite Modernization. Due to reduced aviation demand driven by the pandemic, Alaska Airlines previously notified the Port of Seattle (Port) that they did not require all 20 gates at NSAT for their operations when the facility opened. In response, Port staff identified an opportunity to convert four NSAT gates to common-use (CUSE) operations. Gates N1 and N2 would serve CUSE narrow-body (NB) domestic aircraft, and gates N15 and N16 were provisionally selected to accommodate wide-body aircraft for international departures.

Subsequently, *Evaluation of Potential WB & NB CUSE Gates at NSAT*, published by AECOM on September 20, 2021, looked at the potential conversion of N14, N15, or N16 to accommodate WB aircraft. Ultimately the evaluation determined N14 and N16 to be viable candidates for conversion.

ATTACHMENTS TO THIS REQUEST

(1) Presentation slides.

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

None.

Item No.	8d_supp
Date of Meeting	August 8, 2023

N14 Wide-Body and N15 Narrow-Body Common Use Gates (C801333)

Final Design and Long-Lead Material Procurement

Port of Seattle®

Project Purpose & Justification

Purpose

- Convert Gate N14 to be used for Wide-Body aircraft operations including international departures
- Improve Wide-Body aircraft flexibility for Gate N16 through the addition of a starboard fuel hydrant pit (FHP) and associated infrastructure improvements

Justification

- Necessary to meet current airport demand
- Help mitigate the impacts of Wide-Body aircraft gate outages during planned construction projects

Project Location

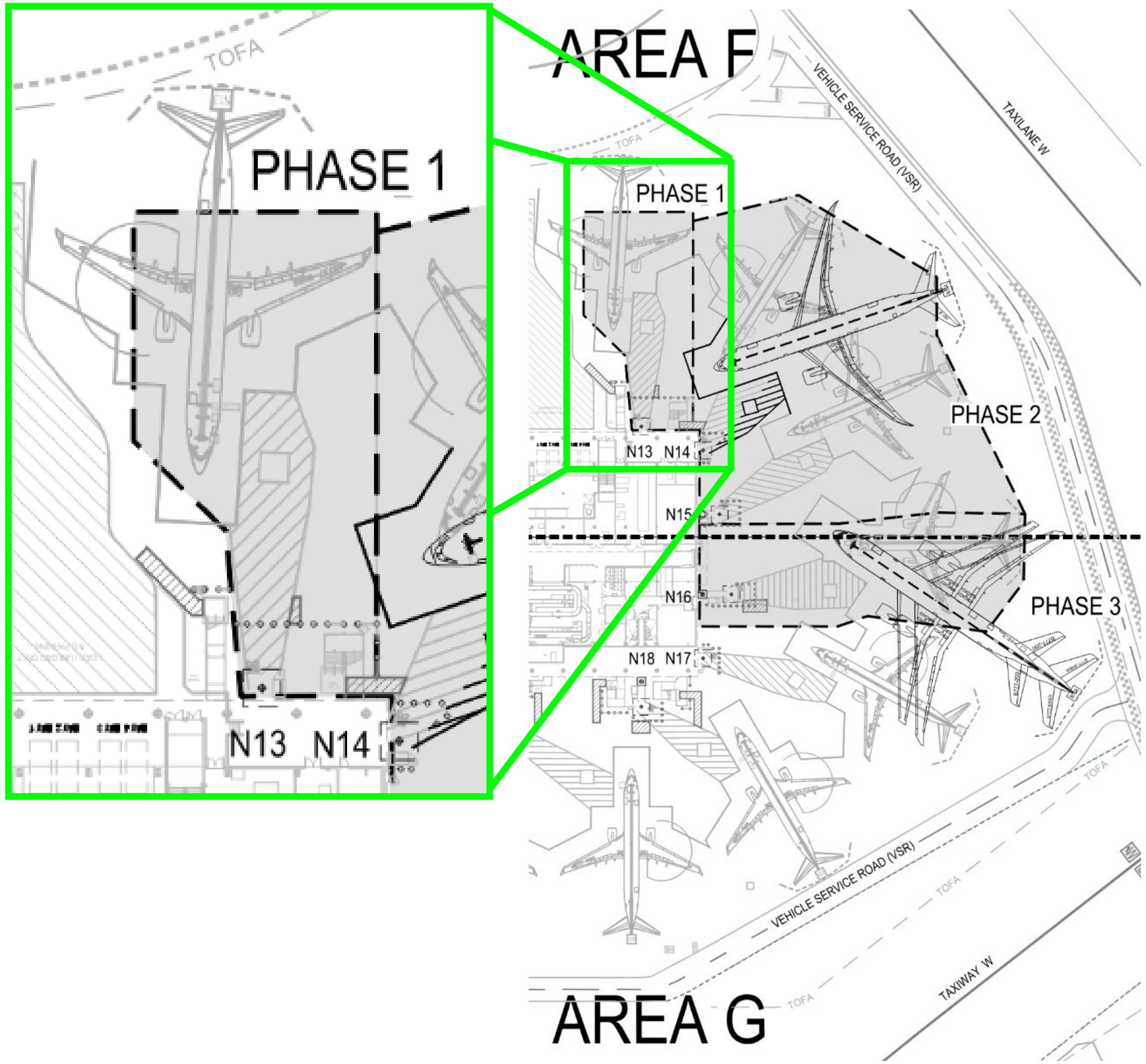
Requested Action

Authorize $3,875,000 for final design, preparation of construction bid documents, and the procurement of long-lead material items for the N14 Wide Body and N15 Narrow Body Common-Use Gates at Seattle-Tacoma International Airport.

Total request for this action is $3,875,000 for a total authorization of $4,170,000.

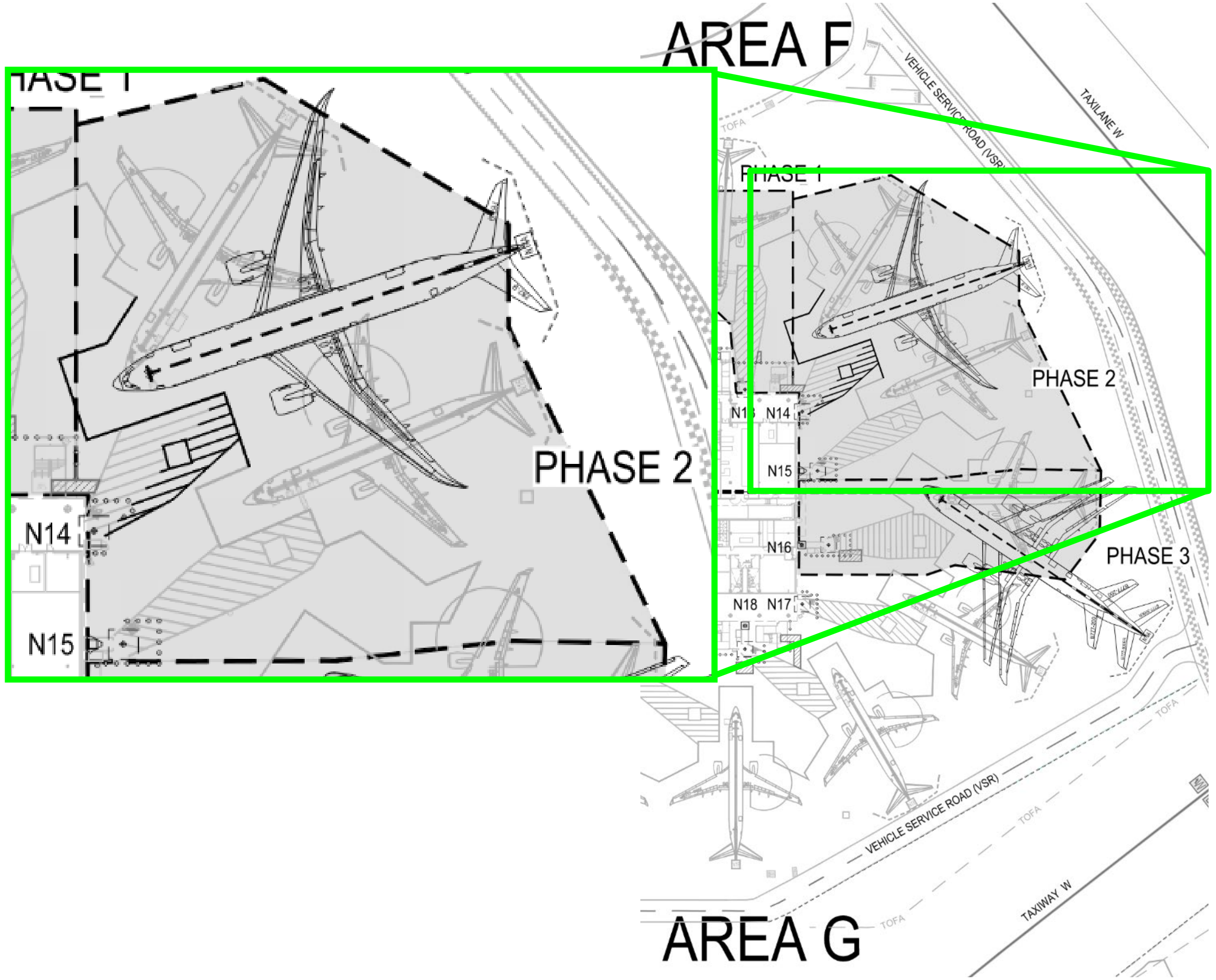
Project Scope

- Phase 1
  - Pavement reconstruction and markings (between Gate N13 and N14).
  - High mast lighting for WB operations (Gate N14).
  - SafeDock unit for WB operations (Gate N14).



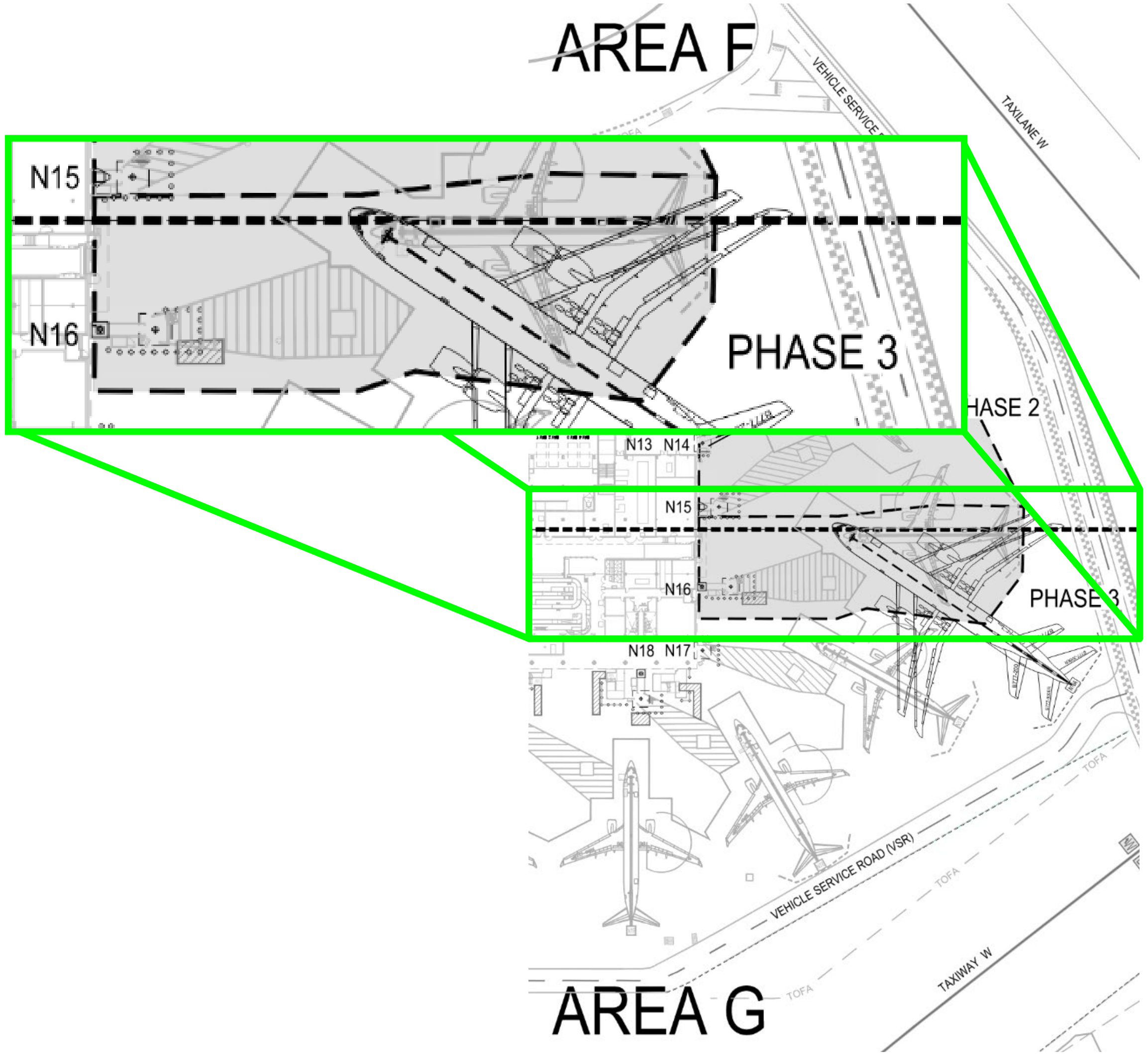
Project Scope

- Phase 2 – Gates N14 and N15
  - Apron pavement reconstruction and markings.
  - SafeDock unit for WB operations (Gate N14).
  - Pre-conditioned air unit for WB operations (Gate N14).
  - 400 Hz power for WB operations (Gate N14).
  - Fuel hydrant pits and infrastructure for WB operations (Gate N14).



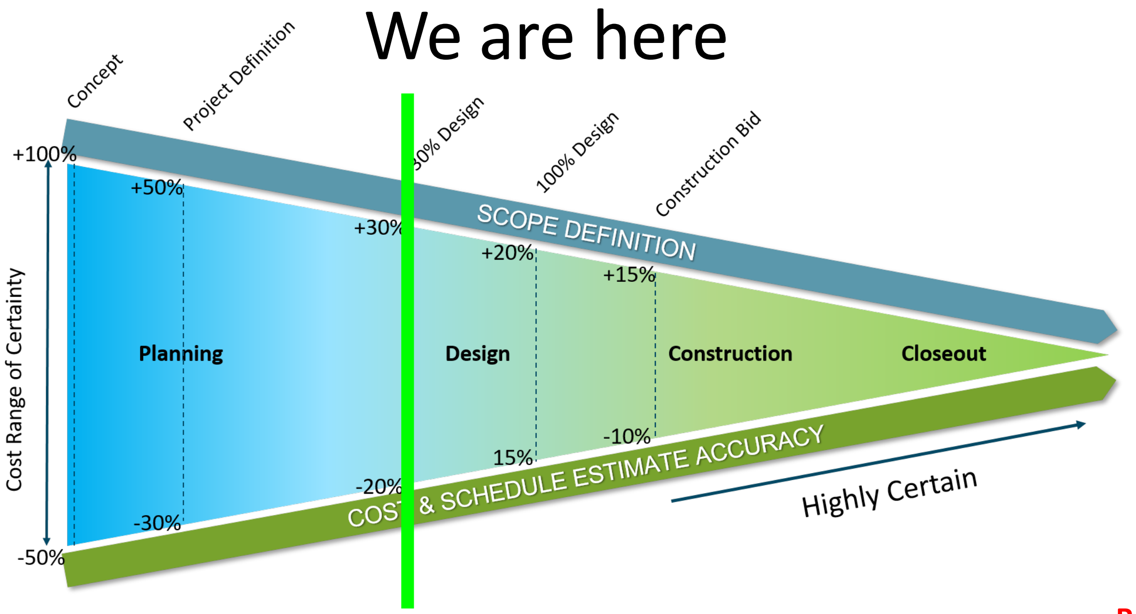
Project Scope

- Phase 3 – Gate N16
  - – Apron pavement reconstruction and markings.
  - – High mast lighting for WB operations (Gate N16).
  - – Fuel hydrant pit and infrastructure for WB operations.



Project Cost and Schedule

Cost Breakdown	This Request	Total Project
Design	$1,375,000	$1,670,000
Construction	$2,500,000	$7,710,500
Total	$3,875,000	$9,380,500



Schedule

Final Design Start:	Q3 2023
Construction Start:	Q3 2024
Project in Use:	Q4 2024

Return to Agenda

Port of Seattle

COMMISSION
AGENDA MEMORANDUM | **Item No.** 8e

ACTION ITEM | **Date of Meeting** August 8, 2023

DATE: July 28, 2023

TO: Stephen P. Metruck, Executive Director

FROM: Marie Ellingson, Sr. Manager, Cruise Operations and Business Development
Tim Leonard, Capital Project Manager, Waterfront Project Management

SUBJECT: **Terminal 91 Cruise Passenger Secondary Gangways Procurement (C800129)**

Amount of this request: $8,700,000
Total estimated project cost: $9,000,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to execute a contract for two new cruise passenger secondary gangways for the Smith Cove Cruise Terminal at Pier 91. This authorization is for $8,700,000 of a total estimated project cost of $9,000,000. (CIP# C800129).

A secondary gangways Request for Proposal (RFP) is planned to be advertised subsequently to the requested Commission authorization. Staff will return to Commission for additional budget authorization, prior to execution of a purchase contract, if the RFP responses result in a total project cost that is higher than currently estimated.

EXECUTIVE SUMMARY

Safe, reliable, and well operating passenger gangways are critical to cruise operations. Secondary passenger gangways serve to better accommodate the large capacity ships of today and act as an operations backup for the primary gangway. The existing east and west cruise ship berths at Pier 91 each contain a primary passenger gangway, but only the east berth has a secondary passenger gangway. This existing secondary gangway is at the end of its service life; is limited in operational capacity as well as mobility; and requires constant maintenance attention. The proposed Terminal 91 Cruise Passenger Secondary Gangways procurement project will enable the Port to replace the existing secondary passenger gangway on the east berth and add a second gangway on the west to achieve passenger embarking and disembarking capacity, an additional layer of flexibility for shore power connections, and better operational mobility.

JUSTIFICATION

New cruise ships, and their respective passenger capacities, are continually increasing in size within the cruise industry. The ability to safely, and efficiently, embark and disembark cruise passengers between the Smith Cove Cruise Terminal building and the passenger loading door(s), on the various sized cruise vessels that berth at Pier 91, is essential to successful cruise operations. Ideally, each cruise ship berth should have a secondary gangway, as well as a primary gangway - not only to accommodate passenger capacities of larger vessels – but also to serve as a fully capable (ADA compliant) passenger gangway in the event the berth's aging primary gangway is not in service.

Only one secondary passenger gangway is currently in operation at the Smith Cove Cruise Terminal, and it is only in use at the east berth. An additional secondary gangway is needed at the west berth. The existing (east berth) secondary gangway, which was assembled from sections of older gangways, has reached the end of its service life and has become a maintenance concern. Additionally, it has a limited operational range for connecting to cruise vessels, lacks mobility, limited passenger capacity, and unlike the two primary gangways at Pier 91, it is not ADA compliant. The proposed two new secondary gangways will alleviate these concerns. Additionally, the improved mobility and vessel connection range provided by the new secondary gangways will enable them to operate more efficiently with the proposed mobile shore power equipment for Pier 91 and better accommodate the expanding range of cruise ship passenger door locations. Having both a primary and secondary passenger gangway available at each berth will enable the Smith Cove Cruise Terminal to maintain a high level of cruise passenger satisfaction which is critical to the cruise lines as well as the Port.

This project supports the following Century Agenda and Maritime Division strategic goals:
Century Agenda:

1. Responsibly Invest in the Economic Growth of the Region and All Its Communities
2. Be the Greenest and Most Energy Efficient Port in North America
3. Be a Highly Effective Public Agency

Maritime Division:

1. Asset Management
2. Sustainability

Sustainability

The vertical operational range performance specifications, currently being developed by the project team for the RFP, have taken tidal elevation increases, projected to occur during the potential service life (25-years) of the new gangways, into consideration. Equipment sustainability factors to be addressed in the gangway selection criteria are planned to include, but not be limited to, energy efficiency, material types, and maintenance requirements.

Diversity in Contracting

The Port's Diversity in Contracting Department was coordinated with regarding the technical expertise consultant contract, previously executed as part of this project, and no women and minority owned business enterprise (WMBE) goal was established due to the specific cruise industry related expertise required. The project team is continuing to work with Port Diversity staff to determine a WMBE goal for potential vendors, as applicable, to be reflected in the gangways RFP to be advertised.

DETAILS

Scope of Work

The proposed cruise passenger secondary gangways procurement is planned to result in a contract being awarded to, and executed with, a selected vendor for the manufacturing, transport, delivery, and assembly of two (2) new gangways at Pier 91. Port staff, as well as a technical expertise consultant, are currently determining the gangway operational requirements and preparing the necessary RFP documents. This work is also being performed in consultation with Cruise Terminals of America and SSA Marine as they are responsible for performing cruise operations at Smith Cove Cruise Terminal.

Key Procurement Effort Tasks:

1. Analysis of Pier 91 gangways operational requirements (in process).
2. Determination of new gangways equipment requirements (in process).
3. Preparation of RFP documents to be advertised (in process).
4. Review of RFP responses and selection of vendor.
5. Negotiation of gangways vendor contract.
6. Review of gangways shop drawings.
7. Monitoring of gangways manufacturing and transport
8. On-site gangways delivery and installation coordination.
9. Gangways commissioning and operation/maintenance coordination.
10. Project closeout

Schedule

Due to the critical need for new secondary gangways at Smith Cove Cruise Terminal, the project is endeavoring to procure and install them at Pier 91 as soon as possible. The milestone goals below reflect an aggressive schedule, but the post-2023 milestones shown are contingent upon variables not under the complete control of the Port and are therefore subject to change.

Milestone Goals

Commission project authorization	Q3 2023
Request for Proposal advertisement	Q3 2023
Gangways vendor contract execution	Q1 2024
Gangways manufacturing start	Q1 2024

Gangways in-use date (as soon as possible)	Q1 2025

Cost Breakdown	This Request	Total Project
Project management, procurement, and technical consultant services	$200,000	$500,000
Gangways manufacturing, transport and installation	$8,500,0000	$8,500,0000
Total	$8,700,0000	$9,000,0000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Do nothing – continue to utilize and maintain the existing single Pier 91 secondary passenger gangway (currently operating at the east berth only).

Pros:

(1) Retains Port capital for other priority projects and financial initiatives.
(2) Avoids potential temporary impacts to existing cruise and commercial shipping business operations.

Cons:

(1) Ongoing lack of secondary gangway at west Pier 91 cruise vessel berth.
(2) Ongoing limited operational capacity and remaining service life risk of existing secondary gangway at east Pier 91 cruise vessel berth.
(3) Ongoing increased operational costs to maintain and repair existing secondary passenger gangway.
(4) Missed opportunity to implement long term goals and objectives for more efficient Cruise operations and meeting increasing cruise vessel passenger needs.
(5) Potential lost revenue from increased flexibility to allow more ships to call to Port.

This is not the recommended alternative.

Alternative 2 – Defer procurement of the secondary gangways to a later date.

Pros:

(1) Retains Port capital for other priority projects and financial initiatives in short-term.
(2) Delays potential temporary impacts to existing cruise and commercial shipping business operations.

Cons:

(1) Ongoing lack of secondary gangway at west Pier 91 cruise vessel berth.
(2) Ongoing limited operational capacity and remaining service life risk of existing secondary gangway at east Pier 91 cruise vessel berth.
(3) Ongoing increased operational costs to maintain and repair existing secondary passenger gangway.
(4) Missed immediate opportunity to implement long term goals and objectives for more efficient Cruise operations and meeting increasing cruise vessel passenger needs.

(5) Potential lost revenue from increased flexibility to allow more ships to call to Port.

This is not the recommended alternative.

Alternative 3 – Procure two (2) new cruise passenger secondary gangways.

Pros:

(1) Alleviates lack of secondary gangway at west Pier 91 cruise vessel berth.
(2) Alleviates limited operational capacity and service life risk of existing secondary gangway at east Pier 91 cruise vessel berth.
(3) Reduced secondary gangway maintenance and repair costs.
(4) Contributes to implementation of long-term goals and strategic objectives for Cruise operations and meeting increasing cruise vessel passenger needs.
(5) Increased revenue from additional flexibility to allow more ships to call to Port.

Cons:

(1) Requires immediate Port investment of funds.
(2) Creates potential temporary impacts to existing cruise and commercial shipping business operations.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

Cost Estimate/Authorization Summary	Capital	Expense	Total
COST ESTIMATE			
Current project estimate	$9,000,000	$0	$9,000,000
AUTHORIZATION			
Previous authorizations (initial budget per POS Cruise Director approval)	$300,000	$0	$300,000
Current request for authorization	$8,700,000	$0	$8,700,000
Total authorizations, including this request	$9,000,000	$0	$9,000,000
Remaining amount to be authorized	$0	$0	$0

Annual Budget Status and Source of Funds

This project is included in the 2023 Capital Plan under C800129 T91 New Cruise Gangways. The total estimated project cost is $8,800,000.

This project will be funded by the General Fund.

Financial Analysis and Summary

Project cost for analysis	$9,000,000
Business Unit (BU)	Cruise Operations

Effect on business performance (NOI after depreciation)	•No incremental operating revenue or cost-savings is directly associated with this project. •Increased operations and maintenance expenses not anticipated. • Project mitigates risks to existing revenue and provides opportunities for potential revenue growth. • NOI after depreciation will be reduced $450K annually.
IRR/NPV (if relevant)	N/A

ATTACHMENTS TO THIS REQUEST

(1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

None

Item No: 8e_Supp
Meeting Date: August 8, 2023

Terminal 91 Cruise Passenger Secondary Gangways

Project Authorization

Marie Ellingson, Manager, Cruise Operations and Business Development
Tim Leonard, Capital Project Manager, Waterfront Project Management

CIP # C800129
WP # U00655

Port of Seattle

Project Authorization Request

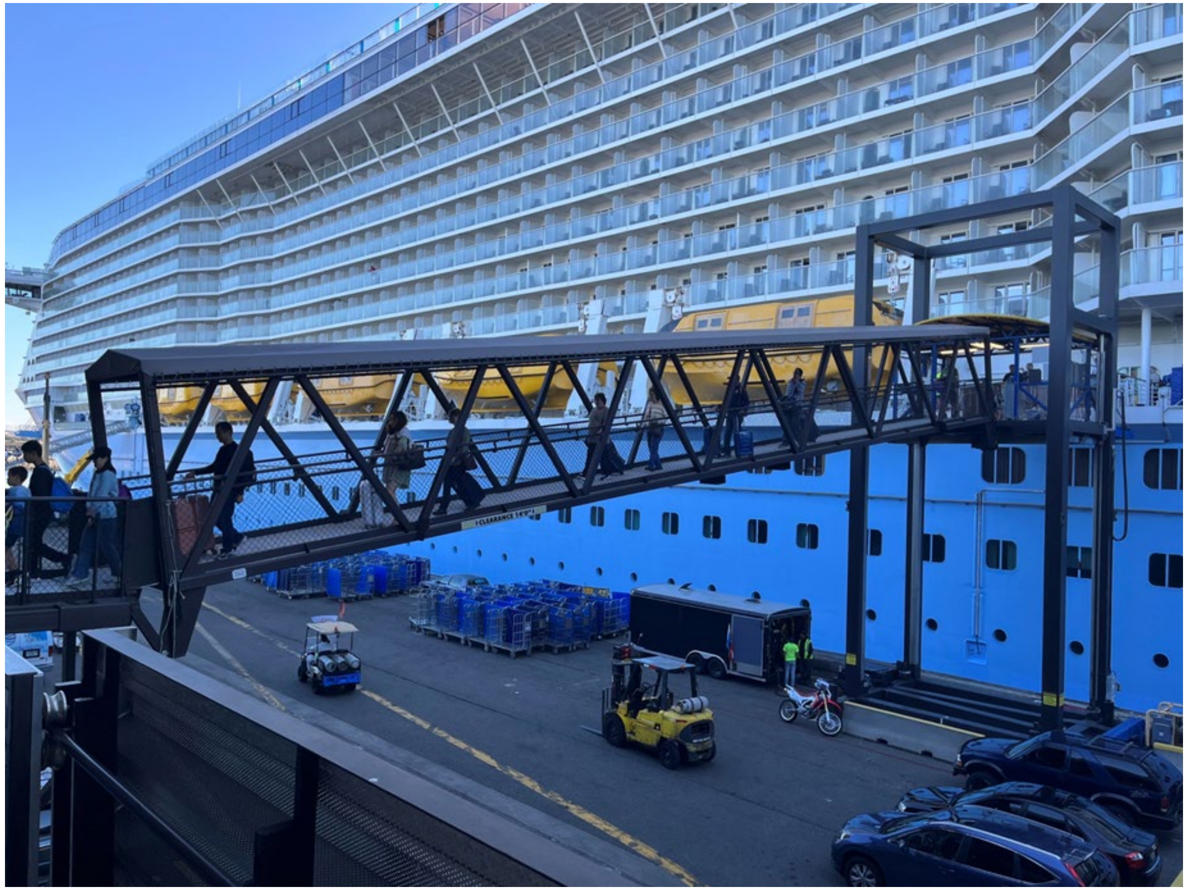
Request Commission authorization for the Executive Director to procure two new cruise passenger secondary gangways for the Smith Cove Cruise Terminal at Pier 91. This authorization is for $8,700,000 of a total estimated project cost of $9,000,000.

(CIP# C800129).

Project Background

- East and West T91 berths each have a primary passenger gangway, but ONLY East berth currently has a secondary gangway
- Existing secondary gangway is at end of service life and has limited operational range (non-ADA compliant) and capacity
- Cruise vessel sizes and passenger operational requirements are increasing

Project Objectives



Existing passenger secondary gangway at Pier 91 East cruise berth

- Maximize secondary passenger gangways' operational capacity, range, and mobility at both T91 berths
- Increase cruise passenger loading safety and efficiency
- Provide fully capable backup gangway for both Pier 91 primary gangways
- Improve cruise passenger vessel embarkment and disembarkment experience

Project Scope

Replace existing aged **single** secondary gangway with **two** new secondary gangways at Pier 91

- Analyze and determine gangways operational requirements
- Prepare and advertise a gangways Request for Proposal
- Select vendor to manufacture, deliver, and assemble new secondary gangways at Pier 91
- Oversee vendor work and commission installed gangways

Procurement Risks

Risk	Probability	Impact	Mitigation
Required gangways manufacturing time: ongoing global supply chain instability and limited availability of some materials/components may add significant time to manufacturing schedule.			Expedite RFP and gangways vendor contract execution to degree possible. Limit equipment features and extras to degree possible to minimize manufacturing requirements.
Gangways cost: Ongoing global economic instability and cost inflation may result in estimated cost escalation.			Expedite RFP and gangways vendor contract execution to degree possible to limit cost escalation due to inflation. Limit equipment features and extras to degree possible to minimize costs.
Gangways transport time: Limited number of qualified, and US located, gangways manufacturers may require long distance global transport for delivery to Terminal 91			Maximize potential number of vendors by limiting specialized gangways requirements where possible and proactively advertising Request for Proposal opportunity.

High	
Medium	
Low	

Project Schedule

Key Milestone Goals:

Commission project authorization	Q3 2023
Request for Proposal advertisement	Q3 2023
Gangways vendor contract execution	Q1 2024
Gangways manufacturing start	Q1 2024
Gangways in-use date (as soon as possible)	Q1 2025

Cost Estimate/Authorization Summary

	Capital	Expense	Total
COST ESTIMATE			
Current project estimate	$9,000,000	$0	**$9,000,000**
AUTHORIZATION			
Previous authorizations (initial budget per POS Cruise approval)	$300,000	$0	**$300,000**
Current request for authorization	$8,700,000	$0	**$8,700,000**
Total authorizations, including this request	$9,000,000	$0	**$9,000,000**
Remaining amount to be authorized	$0	$0	**$0**

Return to Agenda

COMMISSION
AGENDA MEMORANDUM
BRIEFING ITEM

Item No.	10b
Date of Meeting	August 8, 2023

DATE: July 21, 2023

TO: Stephen P. Metruck, Executive Director

FROM: Eric Schinfeld, Senior Manager of Federal and International Government Relations

SUBJECT: Commercial Aviation Coordinating Commission Briefing

EXECUTIVE SUMMARY

The Commercial Aviation Coordinating Commission was created by the State Legislature in 2019, and tasked with recommending a single preferred location for a new commercial service airport by June 15, 2023. In addition, the CACC aimed to recommend additional ways to accommodate capacity needs at existing aviation facilities. The Washington State Department of Transportation's Aviation Division provided staff support for coordinating and administering the Commission, as well as technical assistance as requested by commission members. The Port of Seattle served on the CACC in a technical advisory committee.

In 2023, the State Legislature voted to shift from the CACC to a new Commercial Aviation Work Group (CAWG). However, Governor Inslee vetoed the portions of the legislation that immediately repealed the CACC and its mandate. Therefore, the CACC proceed with delivering its final report to the State Legislature on June 15, 2023. The presentation at the August 8 Port of Seattle Commission meeting will summarize the history, process, findings, and next steps from the CACC's final report.

BACKGROUND

The CACC began in October 2019 with three specific deadlines:

1. Phase 1: Provide an initial list of six possible locations to the Legislature by January 1, 2021
2. Phase 2: Provide a list of the top two locations (options) by October 15, 2022
3. Phase 3: Provide a single preferred location recommendation by June 15, 2023

The Commission was comprised of 15 voting members and 12 non-voting members; the Port of Seattle was represented in the second category. The overall mission of the CACC was to provide recommendations to the Legislature to solve the forecast shortage of capacity for commercial air passenger service, air cargo, and general aviation.

The Legislature mandated that a recommendation on a new commercial aviation facility could not be in King County, and could not include siting a facility on, or in the vicinity of, a military installation that would be incompatible with the installation's ability to carry out its mission requirements (such as Joint Base Lewis McChord).

The CACC built on past efforts to address this challenge, including the 1992 "Flight Plan" study – a joint effort between Puget Sound Regional Council and the Port of Seattle – that resulted in recommendations to build a third runway at SEA, initiate commercial service at Paine Field and construct a new airport in south Puget Sound. In addition, the Puget Sound Regional Council completed its Regional Aviation Baseline Study, which forecasted a 27 million passenger enplanement gap if no new commercial aviation capacity was developed in the region.

Based on significant public resistance to siting of a new airport in any of the identified locations, the State Legislature passed a bill during the 2023 Legislative Session to sunset the work on the CACC and shift to an ongoing Commercial Aviation Work Group. The CAWG does not have a specific deadline for recommendations.

ATTACHMENTS TO THIS REQUEST

(1) Commercial Aviation Coordinating Commission Final Report to Legislative Transportation Committees
(2) Presentation slides

Commercial Aviation Coordinating Commission Report to Legislative Transportation Committees

2023 Final Recommendation

Prepared June 15, 2023

Introduction

Per SSB 5370 (2019), as revised by SSB 5165 (2021), the following survey information below is provided as the final report to the Legislature from the Commercial Aviation Coordinating Commission (CACC). At the onset, it is important to note that as a result of legislative action in 2022, the timeline for the Commission's work was extended to June 15, 2023.

Executive summary

The Commercial Aviation Coordinating Commission's final hybrid in-person and online meeting June 9, 2023, focused on how to ensure that the work of the CACC provides a solid foundation and baseline of information to be used by the follow-on work group established by ESHB 1791.

The CACC voted to use their last survey as the final report to the Legislature.

This report has the survey results and comments for the work group in ESHB 1791 to use as a guide as they continue the work CACC started.

Survey Overview

Note: *The data and commentary in the survey below is subjective and to be used as a guide for the upcoming work group in ESHB 1791.*

The 16-question survey was completed by 16 Commissioners: 10 voting members and 6 non-voting members.

The majority did not prefer a "No Action" alternative as the CACC's response to the Legislature and believe the future of commercial aviation capacity needs (passenger and cargo) can only be met with a greenfield site that has yet to be identified. The majority also believe Paine Field will continue to add commercial capacity regardless of the CACC's recommendations and the inability to make any recommendations located in King County or near a military installation has been a hindrance to the CACC process.

The CACC recognized Yakima Air Terminal-McAllister Field as the only existing airport interested in becoming the solution, however the majority do not believe that should be the location for the new primary commercial aviation facility.

The CACC was evenly divided in whether it is possible to have a new primary commercial aviation facility complete and functional by 2040 – most believe it will only be possible beyond 2050.

Survey data and responses:

The order of importance, once a commercial aviation facility site is selected:

1. Identification of airport sponsor.
2. Commitments of funding to build the facility.
3. Airport Master Plan creation.
4. Commitment of funding to build the supporting infrastructure (roads, rail, utilities, stormwater, wastewater, etc.) to the facility.
5. Industry commitments to operate from the new site.
6. Environmental approvals (NEPA, SEPA).

Additional items include:

- Sustainability / Emerging technologies.
- Airspace.
- Legislature should create the airport sponsor.
- Adhere to the FAA Part 139 process to create a commercial airport.
- Lack of support from the business community is notable.
- Simultaneous construction of airport and infrastructure.

In regard to ESHB 1791, some comments included:

- More study required.
- The new law will supersede the process of the CACC; our work to date and opinions should be "packaged" and transferred. We are not in a position to make a recommendation with the substantial community opposition at the three finalist sites.

- The legislature has all but ensured the sunset of the CACC without consideration of its work.

The Legislature charged the CACC with providing a list of recommendations on the future facilities needs to meet anticipated commercial aviation, general aviation, and air cargo demands. CACC member recommendations include:

- Sustainable aviation support.
- UAS support.
- Passenger vehicle charging stations.
- Training site for enhancing workforce development.
- Connectivity to the Link/train infrastructure for passengers.
- Highway connectivity for delivery of goods and services.
- The use of JBLM land must be part of the long-term commercial aviation capacity solution.
- Ensure that all HST/PPT revenues derived from aviation fuel sales are directed to the state aeronautics account (rather than the general fund), as required for FAA compliance; this is the single most important recommendation for general aviation.
- Develop and implement mandatory statewide compatible land use requirements around airports. As essential public facilities, airports cannot be subject to the whims of local land use decisions. This is the second most important recommendation for general aviation.
- Plan, prepare, and equip all airports with the necessary infrastructure for emerging aviation technologies and sustainable fuels.
- While utilizing and expanding existing commercial service facilities will not fully solve the capacity issue, this should be an interim measure taken while a new commercial airport is cited and developed.
- Let the new regional airport authority figure this out in cooperation with other agencies operating airports in the region as well as MPOs.
- Outreach program to be developed based on the site selection process.
- Inclusion of other types of aviation including E-VTOL/uncrewed passenger and/or cargo.
- Necessary infrastructure to get people and cargo to the site: road/passenger rail/etc.
- Sustainability focus - SAF, electric, hydrogen, hybrid.
- Must front-end the possibility of high-speed rail or similar to reach more distant locations.
- The legislature has all but ensured the sunset of the CACC without consideration of its work; time to move on with the same consideration of the decision.
- Put more options on the table to adequately assess other greenfield sites; keep eastern Washington locations as an option.
- Must front-end the willingness for community agreements regarding noise, etc., and the extensive economic benefits possible for a community, to adequately promote to communities a rational balance between a new airport and the negative impacts.
- The necessity for an alternative to SEATAC.
- The site must be in western WA.
- Federal compliance (or ability to address/achieve it).
- Accessibility.
- Capacity (terminal and air side operations).

- Detail the needs as specified in the PSRC's most recent report on commercial aviation.
- Provide data on local airport capacity and response to potential expansion as developed by CACC staff.
- Share the consultants research on potential greenfield sites.

The final comments in recommendations include:

- Move JBLM to eastern Washington, in the vicinity of Moses Lake (a C-17 training facility) and Yakima (Army training facilities). Then repurpose JBLM into a new commercial aviation facility.
- The City of Yakima is willing to host the "preferred commercial aviation facility." Given the difficulty of moving 55,000 passengers per day to/from Yakima, consider a different alternative. Make Yakima Air Terminal/McAllister Field a joint military-commercial facility and relocate JBLM aviation assets there.
- Continue to grow Paine Field's commercial capacity.
- A recommendation should be made to the legislature to study the feasibility of a joint military/civilian facility.
- The Legislature must act to create a new regional airport authority and empower it to complete the site selection process, acquire land for the new airport, mitigate impacts and impose zoning and other land use restrictions.
- I understand your desire to receive input from CACC members, however, I am hesitant to provide policy input via a questionnaire rather than in a publicly noticed meeting where topics are fully discussed. I bypassed a couple of questions for this reason.
- Any limitations made on a study (location proximate to an AFB, location prohibitions, etc.) potentially hinder a decision-making process. All potential options (and solutions) should be considered.
- Recommendations for a singular site (greenfield or otherwise) limits the ability to identify a full range of solutions that will likely be needed to meet future demand.
- With enough funding and support, expansion of an existing site may be able to meet a 2040 timeframe. However, completion by 2040 seems unlikely for a greenfield site.
- Regarding Question #6: My answer is no because, as I recall, early analysis and decision by the CACC narrowed the range of considerations to sites west of the Cascades. If eastern region options are to be considered, then a review of all viable options should be further vetted.
- Public engagement and consensus building among local government agencies is critical to the advancement of any potential expansion efforts. Watching that unfold as part of this work reminded me of the importance of a thoughtful and transparent decision-making process (and Warren was incredibly adept in his communication on behalf of the CACC). I would strongly encourage public engagement (as well as industry engagement) in future efforts.
- Number of questions above I could not answer; Nos. 5 and 6. Both require an "other" choice with explanation. I do not believe we have been provided adequate analysis as between the three finalist sites for a final decision - particularly on issues of community public health and environmental impacts. Yakima may be a great idea; we've done no analysis so both a yes and no choice are speculative.

- I think a minority report may be justified and useful, depending upon what the majority has voted. Can't define it in the abstract. I do note that as a citizen representative, with no staff or budget support, it is unclear how to proceed with drafting a useful minority report.
- Could not answer Question #2 because I think it will take a combination of new and greenfield.
- Could not answer Question #6 because it will require studying, which CACC has not conducted.
- In Question #11, (perhaps) a "no action" response is the only way to get Yakima studied.
- I am a voting member, but I do not feel confident I have enough knowledge of the legislative process to prepare a minority report.
- It is unfortunate CACC was prevented from even considering a joint use airport with Lewis McChord Air Force Base. There are examples in other parts of the United States were this model works. Would have the least environmental impact in my view.
- I think we should turn over all the work and research done by and for the CACC to the new legislatively created work group and wish them luck.
- Thank you to all the CACC members for your time and effort over the years.

Conclusion

The CACC wishes the new work group luck in their journey to solve the future of commercial aviation passenger and cargo capacity needs.

Documents and information of the CACC's work can be found at https://wsdot.wa.gov/travel/aviation/commercial-aviation-coordinating-commission.

APPENDIX A
CACC Members and Positions

Voting

Arif Ghouse: Representative of commercial service airports and ports – County with a population of two million or more.

Stroud Kunkle: Representative of commercial service airports and ports –Port in eastern WA with a runway of at least 13,500' in length.

Larry Krauter: Representative of commercial service airports and ports – Commercial service airport in eastern WA located in a county with a population of 400,000 or more.

Jim Kuntz: Representative of commercial service airports and ports – Association of ports.

Shane Jones: Representative from the airline industry and private sector.

Lorin Carr: Representative from the airline industry and private sector.

Andrea Goodpasture: Representative from the airline industry and private sector.

Mark Englizian: Citizen representative from eastern Washington.

Steve Edmiston: Citizen representative from western Washington.

Wendy Janway: Representative from the freight forwarding industry.

Joshua Marcy: Representative from a community organization which understands the impacts of a large commercial aviation facility on a community.

Bryce Yadon: Representative from a statewide environmental organization.

Robin Toth: Representative from the Department of Commerce.

Eric Johnson: Representative from the Division of Aeronautics (Aviation), Dept. of Transp.

Non-Voting

Warren Hendrickson: Representative from the WA state Aviation Alliance (WSAA).

Robert Rodriguez: Representative from the Department of Defense.

Senator Curtis King: Senate member from the two largest caucuses in the Senate, appointed by the President of the Senate.

Senator Karen Keiser: Senate member from the two largest caucuses in the Senate, appointed by the President of the Senate.

Representative Tom Dent: House of Representatives member from the two largest caucuses, appointed by the Speaker of the House.

Representative Tina Orwall: House of Representatives member from the two largest caucuses, appointed by the Speaker of the House.

Lois Bollenback: Representative from an eastern WA metropolitan planning organization.

Jason Thibedeau: Representative from a western WA metropolitan planning organization.

Tony Bean: Representative from an eastern WA regional airport.

Rudy Rudolph: Representative from a western WA regional airport.

Kerri Woehler: WSDOT Multi-Modal Planning.

Item No. 10b supp
Meeting Date: August 8, 2023

COMMERCIAL AVIATION COORDINATING COMMISSION (CACC) FINAL UPDATE

Port of Seattle Commission
August 8, 2023

Warren Hendrickson
CACC Chair

CACC Update

Background

CACC's Charge

- Identify a single preferred location for a new commercial aviation facility by June 15, 2023

Membership/Administrative Support

- 15 voting members; 12 non-voting members
- WSDOT Aviation tasked with administrative support role

Substitute Senate Bill 5370 (2019); Substitute Senate Bill 5165 (2021)

CACC Update

Process

Goal, Timeline, and Funding

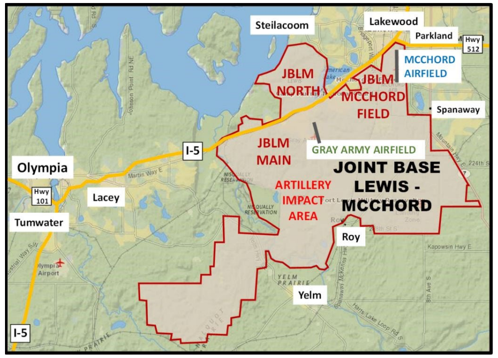
- Provide recommendations to the Legislature to solve the forecast shortage of capacity for commercial air passenger service, air cargo, and general aviation
- Three phased deadlines: January 2022, October 2022, June 2023
- Funding made available to the CACC was limited to public outreach/administrative purposes; no specific funding for research and analysis

CACC Update

Process

CACC Restrictions

- Recommendations on commercial aviation facility needs must exclude those located in a county with a population of two million or more
- Options for a new primary commercial aviation facility may not include siting a facility on or in the vicinity of a military installation that would be incompatible with the installation's ability to carry out its mission requirements



CACC Update

Process

CACC Restrictions

- Recommendations on commercial aviation facility needs must exclude those located in a county with a population of two million or more
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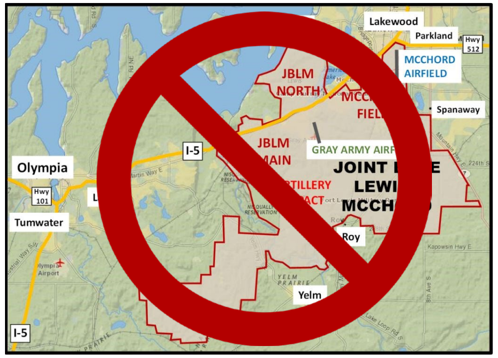


CACC Update

The History & The Challenge

- 1992 'Flight Plan' study – A joint effort between Puget Sound Regional Council and Port of Seattle
  - Recommendations:
    - Build a 3rd runway at SeaTac Airport
    - Initiate commercial service at Paine Field
    - Construct a new airport in south Puget Sound

- Puget Sound Regional Council Regional Aviation Baseline Study
  - Completed in 2021
  - Forecasted
    - 27 million passenger enplanement gap
    - ~ 800,000 metric ton air cargo gap
    - $31 Billion annual economic impact and 209,000 jobs if demand is met

Combined Sea-Tac and Paine Field Commercial Capacity/Demand

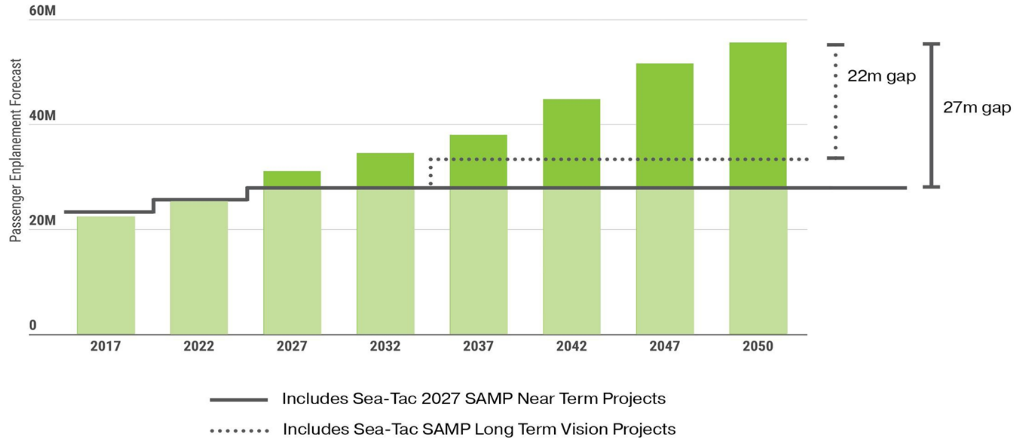
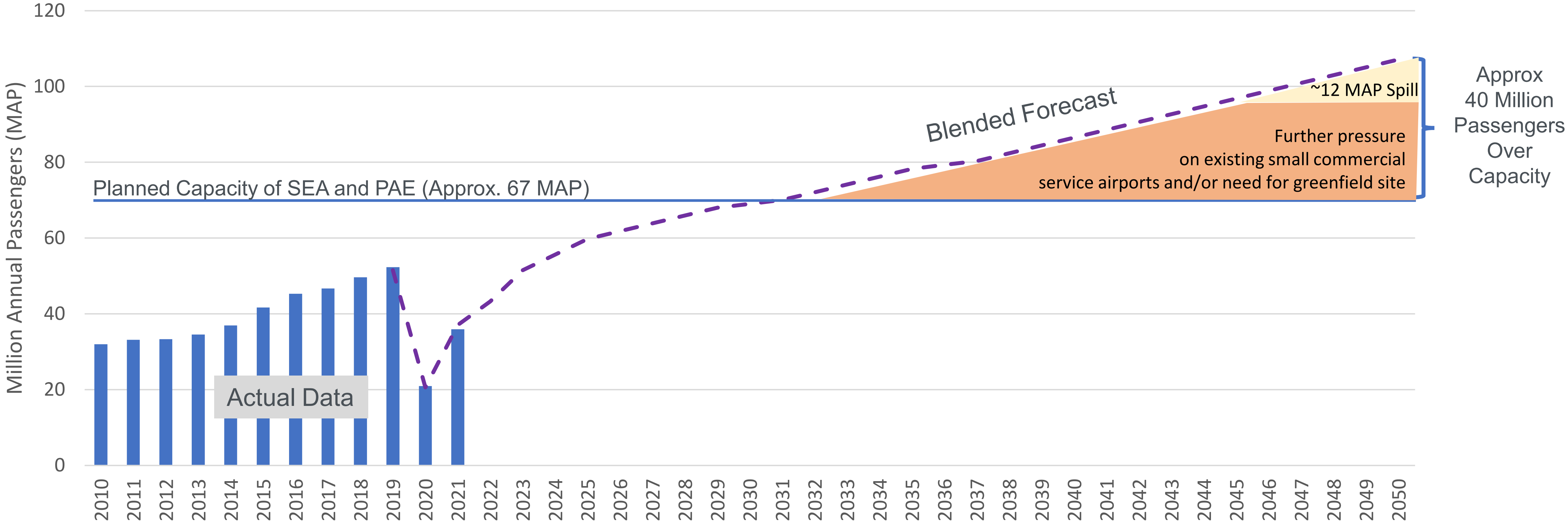


Table 6-2. Projected Demand Accommodating Scenarios

SCENARIOS FOR YEAR 2050 PASSENGER ENPLANEMENT DEMAND (55M)	2050 PASSENGER DEMAND/ CAPACITY MET	RESULTING ANNUAL PASSENGER ENPLANEMENT GAP	ESTIMATED ANNUAL ADDED ECONOMIC ACTIVITY	ESTIMATED ADDED JOBS TO THE REGION
Scenario 1: Baseline, Meet 50% to 60% of 2050 Demand	28,000,000 to 33,000,000	27,000,000 to 22,000,000	~$4 billion to $9 billion	~27,000 to 61,000
Scenario 2: Meet 80% of 2050 Demand	44,000,000	11,000,000	~$20 billion	~135,000
Scenario 3: Accommodate 100% of 2050 Demand	55,000,000	0	$31 billion	209,000

CACC Update

What Are We Solving For Today?



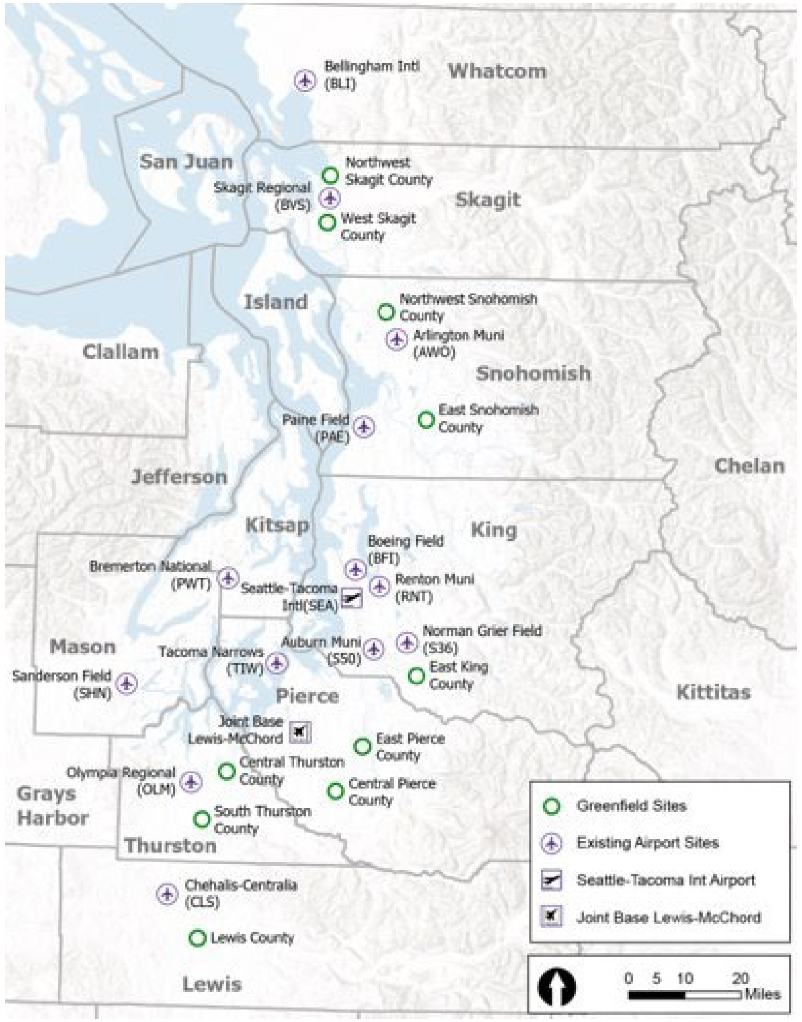
Phase 1 Conclusions

- Can the required capacity be met by existing airports? No
- Only a new airport on a “Greenfield Site” will successfully provide the needed capacity
- CACC was not funded for such technical analysis
- Advent of the Aviation System Plan
  - Separate but parallel effort
  - In-depth technical analysis of statewide aviation system

CACC Update

Greenfield Sites

- Skagit County Northwest
- Skagit County Southwest
- Snohomish County Northwest
- Snohomish County Southeast
- King County Southeast **
- Pierce County East
- Pierce County Central
- Thurston County Central
- Thurston County South
- Lewis County

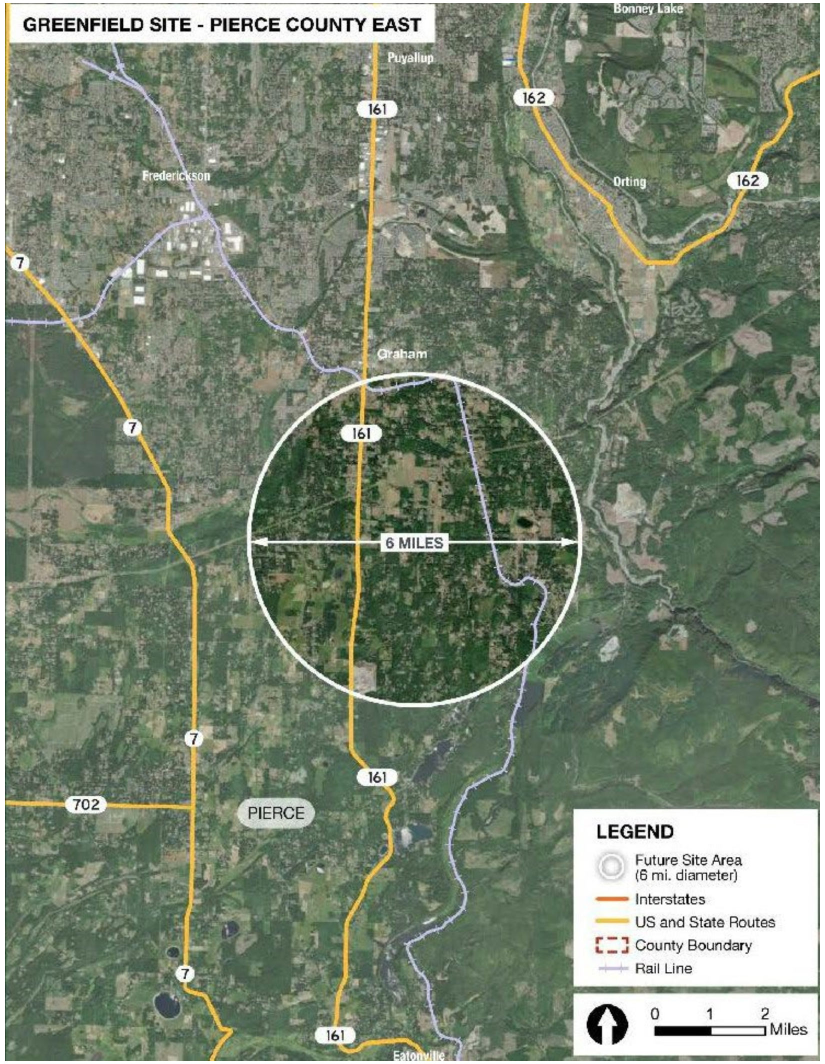


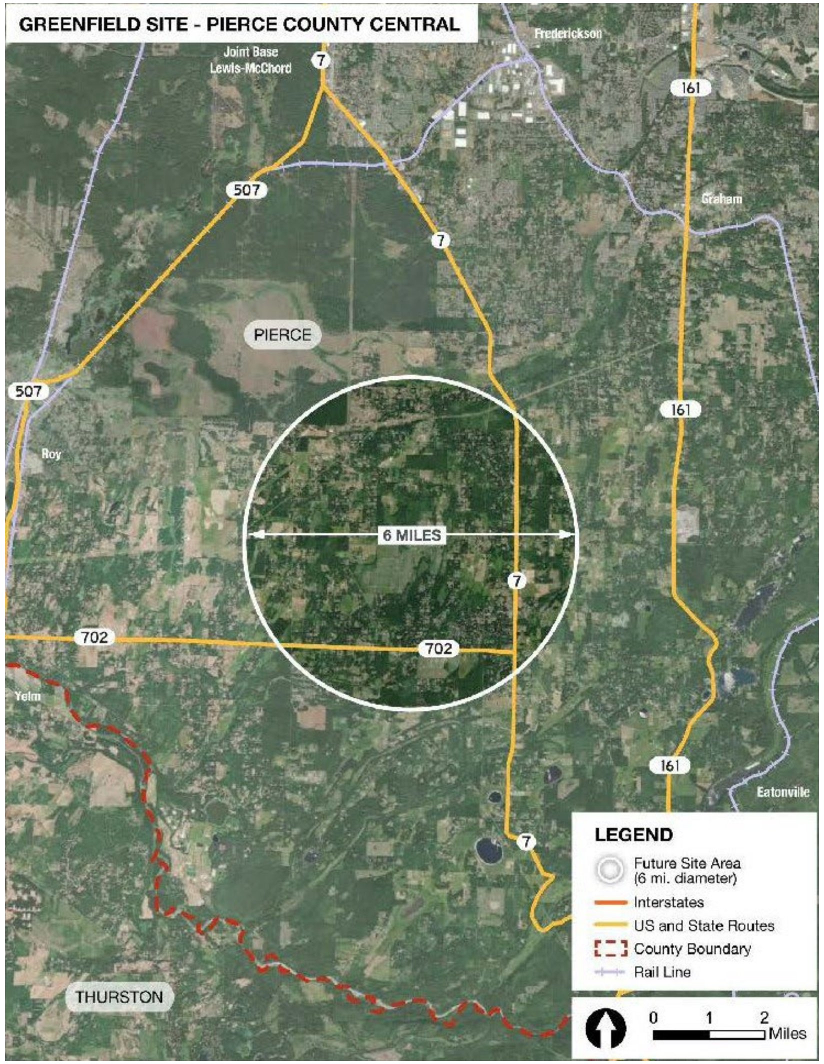
CACC Update

Narrowing the Options

Criterion Category	Essential Factor	Greenfield Sites									
		Skagit County Northwest	Skagit County Southwest	Snohomish County Northwest	Snohomish County Southeast	King County Southeast	Pierce County East	Pierce County Central	Thurston County Central	Thurston County South	Lewis County
	Terrain Impact										
	Property Acquisition										
	Environmental Justice										
	Wetland Impact										
	Floodplain Impact										
	Incompatible Land Use										
	Population Served										
	Unaccommodated Passenger Demand	4.4 MAP	6.4 MAP	19.9 MAP	20.3 MAP	22.2 MAP	20.8 MAP	19 MAP	7.9 MAP	4.6 MAP	1.2 MAP

CACC Update


GREENFIELD SITE - PIERCE COUNTY EAST
Bonney Lake
Puyallup
Frederickson
Orting
Graham
6 MILES
PIERCE
Eatonville
161
162
7
702
LEGEND
Future Site Area (6 mi. diameter)
Interstates
US and State Routes
County Boundary
Rail Line
0 1 2 Miles

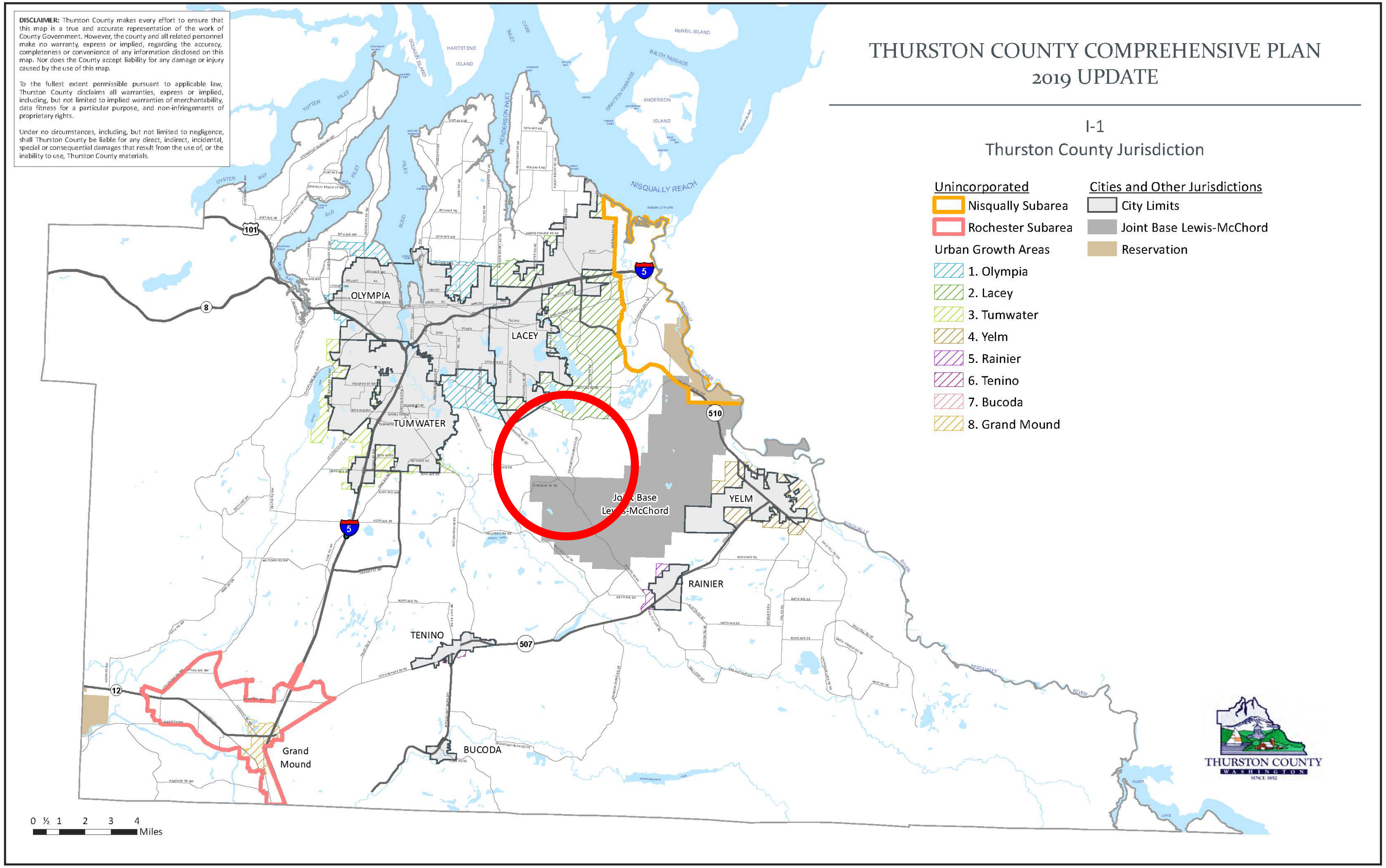

GREENFIELD SITE - PIERCE COUNTY CENTRAL
Joint Base Lewis-McChord
Frederickson
Graham
PIERCE
Roy
Yelm
6 MILES
THURSTON
Eatonville
7
161
507
702
LEGEND
Future Site Area (6 mi. diameter)
Interstates
US and State Routes
County Boundary
Rail Line
0 1 2 Miles

CACC Update

GREENFIELD SITE - THURSTON COUNTY CENTRAL
PIERCE
THURSTON
Olympia
Lacey
Tumwater
East Olympia
Olympia Regional Airport
DuPont
Yelm
Rainier
Tenino
6 MILES
5
510
99
121
507
LEGEND
Future Site Area (6 mi. diameter)
Interstates
US and State Routes
County Boundary
Rail Line
0 1 2 Miles

GREENFIELD SITE - THURSTON COUNTY SOUTH
THURSTON
LEWIS
Olympia
Lacey
Tumwater
Olympia Regional Airport
Tenino
Rochester
Centralia
5
99
121
12
507
LEGEND
Future Site Area (6 mi. diameter)
Interstates
US and State Routes
County Boundary
Rail Line
0 1 2

CACC Update



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Date: 09/25/2019 by EP

CACC Update

Phase 2 Recommendation

- Add capacity to Paine Field according to its Airport Master Plan
- Continue to develop a greenfield site option with a 3,100-acre, two-runway configuration in Pierce County Central, Pierce County East, or Thurston County Central

CACC Update

Interface with Local Governments/Public Feedback

- Not a single local government entity (city, county, or port) – nor sovereign tribal nations – in Pierce and Thurston County supports a new greenfield site airport
- Universally widespread public opposition
- Transportation/infrastructure limitations
- Environmental concerns

CACC Update

Interface with Local Governments/Public Feedback (cont'd)

- City of Yakima has formally requested that the CACC choose Yakima Air Terminal/McAllister Field as the single preferred location
- Three consistent responses from the public:
  - Build to meet capacity in an environmentally sustainable way
  - Expand existing airports
  - Maximize travel by rail
- The public outreach challenge

CACC Update

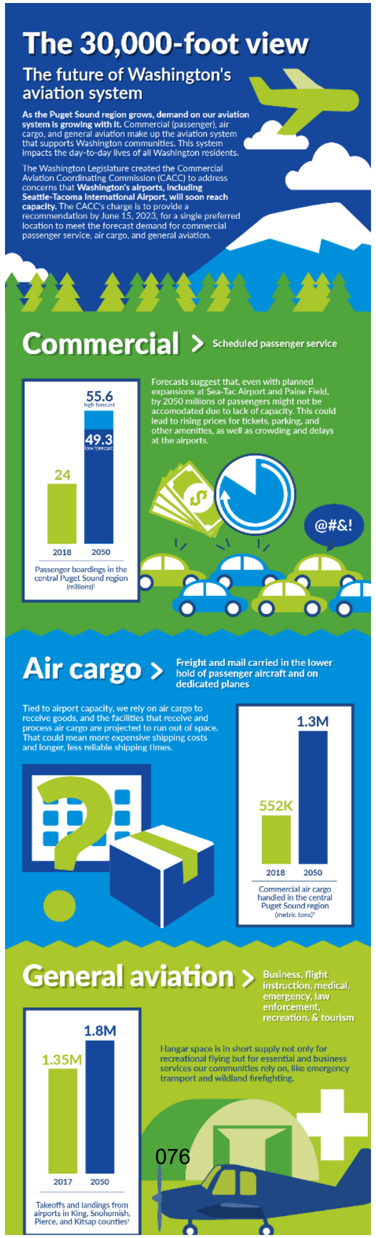
No Action Alternative

- "No action" does not mean "no implications"
- Potential implications of taking no action can include, in general:
  - Economic impacts: congestion raises prices/reduces economic impact
  - Implementation of slot control / demand management techniques
  - Increase in ticket prices / fares become less competitive
  - Overall airfield restrictions / increased delays
  - Decreased passenger level of service (LOS) / less seats available
  - Increased pressure on existing small commercial service airports

CACC Update

Public Engagement Metrics

- Introductory 1 statistically-representative, random-sample survey mailed to 33,000 households
- 3 online open houses with approximately 50,900 users
- 64,537 multiple-choice question answers received and 14,414 open-ended comments received through online open houses
- 2 series of virtual public meetings with 393 attendees
- 5 virtual drop-in sessions with 419 attendees



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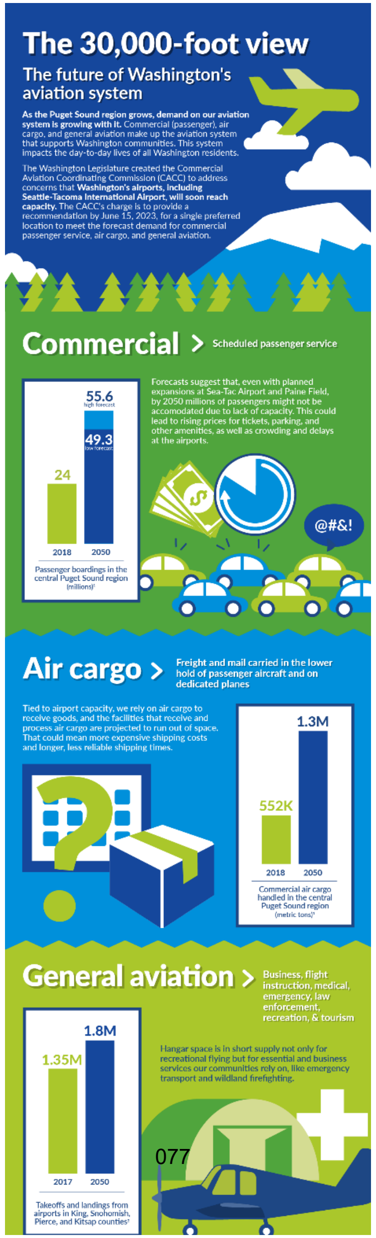
Public Engagement Metrics (cont'd)

- 25 listserv messages to 920 subscribers
- 3 infographics
- Dozens of briefings for community groups, media interviews, local governments and elected officials
- 4 meetings of a community-based organization working group
- Over 2,500 emails to the CACC inbox



CACC Update

Recap of ESHB 1791

April 20: Bill Passed, Signed, and Delivered to Governor
May 15: Gubernatorial Action

- Purposes of Bill:
  - Create a new Commercial Aviation Work Group (CAWG)
  - Establish new tasking and membership
  - Transfer remaining CACC funding to CAWG
  - Repeal the statutes creating the CACC, effectively abolishing this Commission
  - Place the bill into immediate effect

CACC Update

Recap of ESHB 1791 (cont'd)

- Governor Inslee's Actions:
  - Signed ESHB 1791 into law, became effective July 23
  - Vetoed sections 3, 5, 7, and 8 of the bill
- Vetoed sections that did not become law include:
  - Section 3: CAWG task list
  - Section 5: Funding transfer
  - Section 7: Repeal of the statutes that created the CACC
  - Section 8: Placed the CAWG into immediate effect

Commission Member Survey

Commission Member Survey

Question 2

- Do you believe that future commercial aviation capacity needs (passenger and cargo) can be met with existing airports or that a greenfield site is required?
  - Use of existing airports will be sufficient 1
  - Only a greenfield site can provide the needed capacity 13

Commission Member Survey

Question 4

- Shall the single preferred location for a new commercial aviation facility be Paine Field or a greenfield site?
  - Paine Field 3
  - Greenfield Site 13

Commission Member Survey

Question 5

- Which greenfield site do you prefer?
  - Pierce County East 0
  - Pierce County Central 1
  - Thurston County Central 0
  - A yet-to-be-identified greenfield site 13

Commission Member Survey

Question 6

- Should Yakima Air Terminal-McAllister Field be selected as the single preferred location for a new primary commercial aviation facility?
  - Yes 3
  - No 11

Commission Member Survey

Question 7

- Do you believe it is possible to have a new primary commercial aviation facility complete and functional by 2040?
  - Yes 8
  - No 8

Commission Member Survey

Question 9

- The following items are ranked in their order of importance, once a commercial aviation facility site is selected:
  - Identification of airport sponsor
  - Commitments of funding to build the facility
  - Airport Master Plan creation
  - Commitment of funding to build the supporting infrastructure (roads, rail, utilities, stormwater, wastewater, etc.) to the facility
  - Industry commitments to operate from the new site
  - Environmental approvals (NEPA, SEPA)

Commission Member Survey

Question 11

- Would you prefer a "No Action" alternative be the CACC's response to the state legislature?
  - Yes 5
  - No 11

Commission Member Survey

Question 14

- Has the inability to make any recommendations located in King County been a hindrance to the CACC process?
  - Yes 9
  - No 7

Commission Member Survey

Question 15

- Has the inability to make any recommendations on or near a military installation been a hindrance to the CACC process?
  - Yes 10
  - No 6

Commission Discussion

Final Recommendations

Commission Discussion

Considerations

- Public Feedback
- Lack of Local Government Support (City/County/Port)
- Lack of Indian Sovereign Nation Support
- Legislative Intent Behind HB 1791
- Governor’s Veto Comments
- CACC Member Survey Responses
- Statutory Responsibility

Commission Discussion

Three Recommendations Required

- Single Preferred Commercial Aviation Facility
  - Voting Members Only
  - Nine Votes Minimum Required
- Additional Recommendations for General Aviation, Commercial Passenger Service, and Commercial Air Cargo
- Recommendations for the Single Preferred Commercial Aviation Facility to be Operational by 2040

Final Outcome

CACC Update

Next Steps for the CACC /CAWG

- Final CACC report completed and submitted to the state legislature July 17, 2023
- CACC legally sunsetted on June 30, 2023
- CAWG legally established July 23, 2023
- Recruitment of CAWG members, tasking, meeting schedule TBD
- CACC Chair has offered to assist CAWG with the transition

CACC Update

Next Steps For All of Us

Next Steps For All of Us

- Do we agree there is a problem?

Next Steps For All of Us

- Do we agree there is a problem?
- Do we agree it is worth solving?

Next Steps For All of Us

- Do we agree there is a problem?
- Do we agree it is worth solving?
- If so, how do we solve it?

Next Steps For All of Us

- Do we agree there is a problem?
- Do we agree it is worth solving?
- If so, how do we solve it?
- If not, are we willing to accept the consequences of No Action?

Questions???

https://wsdot.wa.gov/travel/aviation/commercial-aviation-coordinating-commission

E-Mail: CACC@wsdot.wa.gov

Warren Hendrickson/CACC Chair
warrenh@portolympia.com
(360) 528-8050

Port of Seattle

COMMISSION
AGENDA MEMORANDUM | **Item No.** 10c
ACTION ITEM | **Date of Meeting** August 8, 2023

DATE: July 6, 2023

TO: Stephen P. Metruck, Executive Director

FROM: Linda Springmann, Director Cruise & Maritime Marketing
Kelly Purnell, Capital Project Manager, Waterfront Project Management

SUBJECT: **Terminal 91 Cruise Shore Power Mobile Cable Positioning Devices Procurement (C801293)**

Amount of this request:	$2,500,000
Total estimated project cost:	$2,750,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to enter a contract for the procurement of a proprietary shore power system consisting of two (2) mobile cable positioning devices for Pier 91. This authorization is for $2,500,000 of a total estimated project cost of $2,750,000. (CIP# C801293).

EXECUTIVE SUMMARY

The provision of shore power for cruise ships is the port's greatest opportunity to reduce greenhouse gas (GHG) emissions and improve local air quality. To capitalize on the opportunity, the Port is committed to collaborating with cruise lines to increase the number of annual shore power-equipped homeport calls to 100 percent with a 100 percent connection rate by 2030. Reaching these goals will require innovation and enhanced technology. Currently, the Port's Smith Cove Cruise Terminal at Pier 91 provides shore power at its two cruise berths. However, the ability to connect to shore power is constrained due to the fixed-location technology.

The Terminal 91 Shore Power Extension project will add flexibility to the existing shore power connection points on the east and west berths and will increase the connection rate of shore power capable cruise ships by modifying the technology used today. Given the unique needs of each cruise vessel, leveraging the CPD innovation will enable more vessels to plug in. This approach ensures the highest optimization of the Port's assets and lifespan.

The first phase of the project requires the purchase of two (2) mobile cable positioning devices (CPD) and minimal modification to the current shore power system. This approach uses the existing cabling and switch gear from the fixed jib crane and plugs them into the new CPD. The current jib cranes have minimal reach because of their fixed location and can only accommodate cruise ships with certain shore power plug configurations. Replacing the jib cranes on the east and west berths of Pier 91 with mobile CPDs will allow a higher opportunity for cruise ships to use shore power while at berth and will also result in operational flexibility in how ships use the berths.

A competition waiver has been executed to purchase the CPDs from Watts Marine, a local company leading in shore power technology around the globe. Watts Marine currently operates the shore power system and jib cranes at Pier 91 and will perform much of the work to transition to the mobile CPDs.

A second phase of the shore power extension project will be completed later to extend a new shore power cable and plug-in to the north end of the west berth. Planning for that phase of the project is anticipated to start in Q4 2023.

JUSTIFICATION

This project supports the following Century Agenda and Maritime Division strategic goals:

Century Agenda:

1. Responsibly Invest in the Economic Growth of the Region and All Its Communities
2. Be the Greenest and Most Energy Efficient Port in North America
3. Be a Highly Effective Public Agency

Maritime Division:

1. Asset Management
2. Sustainability

In addition, the project specifically addresses several near-term Ocean-Going Vessel (OGV) strategic actions of the Port of Seattle's Maritime Climate and Air Action Plan (MCAAP, 2021) contributing to the overall 2030 goal of reducing annual emissions by approximately 13,000 Metric Tonnes CO_2 and 8 Metric Tonnes diesel particulate matter (DPM) by maximizing the potential for shore power connections:

- By 2025: Require shore power use by shore power-equipped homeport cruise ships at Terminal 91 for all shore power equipped ships.
- By 2030: Collaborate with cruise lines to increase the number of annual shore power equipped calls at the Port with a goal to reach 100 percent shore power-equipped homeport calls and a 100 percent connection rate by 2030.

This investment also contributes to the Port's long-term commitment to reduce greenhouse gas emissions as follows:

- 50 percent reduction by 2030
- Net zero or better by 2040 for port-controlled or indirect emissions
- Carbon neutral or better by 2050 for port-influences emissions

Furthermore, the Port's continued investment in shore power connectivity underscores the organization's commitment to near-port communities and the priority to decrease the impact of operations on adjacent neighborhoods. A transition to the mobile CDPs will have an immediate benefit to the Magnolia, Interbay and Queen Anne neighbors by increasing the potential for more ships to use shore power while at the facility.

In 2022, 69 of 83 equipped homeport calls connected to shore-power, an 83% rate, avoiding 2,000 tonnes greenhouse gas emissions. However, if all shore power-equipped homeport calls at Pier 91 plugged in, 5,300 tonnes greenhouse gas emissions would be avoided (estimated based on 2023 season).

To meet the goal of 100 percent of shore-power capable vessels connecting to shore power, cruise facilities need to accommodate a wide-range of vessel types and connection configurations to minimize the times ships cannot plug in, including for weather and safety issues, technical equipment challenges either on board or at the berth and alignment issues. For example, in 2023 two shore-power equipped ships at Pier 91 had alignment issues that required moving gangways weekly to establish a shore power connection. Combined, these cruise ships account for 39 calls or 20% of total calls at Pier 91 and have a GHG reduction potential of 1,000 tonnes GHG.

By replacing two (2) fixed jib cranes with mobile CPDs, this project enhances the flexibility of cruise operations by providing more berthing options that allow cruise ships of various types, sizes, and plug-in configurations to connect to shore-power, further eliminating fossil fuel dependency while at the Port. Increasing operational flexibility of the shore power at Pier 91 moves the Port closer to achieving its sustainability goals.

Diversity in Contracting

WMBE goals have not been established for purchasing of the mobile CPDs. A competition waiver has been executed to procure the proprietary mobile CPDs from Watts Marine.

DETAILS

The procurement of two (2) mobile CPDs will include a complete package contracted to Watts Marine for the devices and associated modifications to the existing system.

Scope of Work

A competition waiver has been executed to procure a proprietary shore power system from Watts Marine. The contract will consist of a complete package for the following work:

1. Design and engineering of the equipment
2. Delivery of two (2) Mobile Cable Positioning Devices including any customization of power cables, plugs, and minor site modifications.

3. Certification of the provided equipment.
4. Spare parts.
5. Installation, commissioning, and testing of the equipment, including the service manuals and warranties.

Schedule

Activity	
Commission authorization for procurement of two (2) proprietary CPDs, installation, and commissioning services from Watts Marine	2023 Quarter 3
Procurement of Mobile CPDs	2023 Quarter 3
Delivery and installation of Mobile CPDs	2024 Quarter 2
In-use date	2024 Quarter 2

Cost Breakdown	This Request	Total Project
Mobile CPDs Procurement Package (including design and engineering, delivery, installation, and commissioning), modifications to plug/power cables.	$2,500,000	$2,500,000
Soft costs	$0	$250,000
Total	$2,500,000	$2,750,000

<u>ALTERNATIVES AND IMPLICATIONS CONSIDERED</u>

Alternative 1 – Do nothing – maintain the current shore power set up with the fixed jib cranes on the east and west berths.

<u>Cost Implications:</u>

<u>Pros:</u>

(1) Retains Port capital for other priority projects and financial initiatives.
(2) Avoids temporary construction impacts to existing cruise operations and commercial shipping business operations.

<u>Cons:</u>

(1) Lost opportunity to allow a greater range of vessels to plug-in to shore power.
(2) Missed opportunity to implement long term goals and strategic objectives for Cruise operations to become sustainable and to increase business opportunities.
(3) Continues to contribute to greenhouse gas emissions.
(4) Potential lost revenue from increased flexibility to allow more ships to call to port and plug-in.

This is not the recommended alternative.

Alternative 2 – Defer procurement of the mobile CPDs to a later date as part of the overall T91 Shore Power Extension project to include shore power cable and plug-in on the north end of the west berth of Pier 91.

Cost Implications: At 6% escalation per year, procuring the CPDs later could cost between $100,000 to $250,000 assuming a 2-year delay.

Pros:

(1) Retains Port capital for other priority projects and financial initiatives.
(2) Avoids a second season of temporary construction impacts to existing cruise operations and commercial shipping business operations.
(3) Realizes efficiencies in consolidating construction into a single project, rather than phasing over two or three years.

Cons:

(1) Missed opportunity to implement long term goals and strategic objectives for Cruise operations to become sustainable and to increase business opportunities.
(2) Continues to contribute to greenhouse gas emissions.
(3) Potential lost revenue from increased flexibility to allow more ships to call to port and plug-in earlier.
(4) Adds complication to an easily phased project.

This is not the recommended alternative.

Alternative 3 – Procure two (2) mobile CPDs as the first phase of the Termina 91 Shore Power Extension project.

Cost Implications: No additional escalation will be applied to the overall cost. Savings of potentially $250,000, more if the project is deferred longer than two years.

Pros:

(1) Contributes to implementation of long-term goals and strategic objectives for Cruise operations to become sustainable and to increase business opportunities.
(2) Reduces cruise contributions to greenhouse gas emissions.
(3) Increased revenue from additional flexibility to allow more ships to call to port and plug-in.
(4) Minimizes potential future supply chain issues should another globally impactful event occurs (Covid, war, inflation).

Cons:

(1) Requires large Port investment of funds.
(2) Creates temporary construction impacts to existing commercial shipping and tenant business operations.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

Cost Estimate/Authorization Summary

Cost Estimate/Authorization Summary	Capital	Expense	Total
COST ESTIMATE			
Original estimate	$2,750,000	$0	$2,750,000
AUTHORIZATION			
Previous authorizations	$250,000	0	$250,000
Current request for authorization	2,500,000	0	2,500,000
Total authorizations, including this request	$2,750,000	0	$2,750,000
Remaining amount to be authorized	$0	$0	$0

Annual Budget Status and Source of Funds

This project was included in the 2023 Capital Plan C801293 T91 Cruise Shore Power Extension with a total project cost of $4,000,000.

This project will be funded by the Tax Levy.

Financial Analysis and Summary

Project cost for analysis	$2,750,000
Business Unit (BU)	Cruise Operations
Effect on business performance (NOI after depreciation)	•No incremental operating revenue or cost-savings is directly associated with this project. • On-going maintenance expenses, if any, are not yet known. • Annual depreciation is expected to increase by approximately $55,000.
IRR/NPV (if relevant)	N/A
CPE Impact	N/A

ADDITIONAL BACKGROUND

N/A

ATTACHMENTS TO THIS REQUEST

(1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

None

Item No: 10c supp
Meeting date: August 8, 2023

Terminal 91 Shore Power Extension:

Authorization to Procure

Mobile Cable Positioning Devices

Linda Springmann, Director Cruise & Maritime Marketing
Kelly Purnell, Capital Project Manager, Waterfront Project Management

CIP # C801293
WP # N10318

Port of Seattle®

Overview

- Action Requested
- Project Objectives
- Sustainability Goals
- Project Scope
- Schedule
- Project Estimate

Action Requested

Request Commission authorization for the Executive Director to:

1. Proceed with entering into a contract for the procurement of a proprietary shore power system consisting of two (2) mobile cable positioning devices for Terminal 91, Pier 91.

Project Estimated Cost: $2,750,000

Procurement Authorization Request: $2,500,000

Project Objectives

- Increase the potential number of ship connections by leveraging newer innovations that allow variable berthing needs.

- Ensuring the highest opportunity to reach shore power without moving gangways provides the best optimization of our assets and their lifespan.

- Accelerate emissions reductions by eliminating barriers.

T91 Cruise Sustainability

- In 2022:

  - Of shore power-equipped, homeport calls, 69 of 83 equipped calls connected (83%).

  - Shore power connections in 2022 avoided 2,000 tonnes greenhouse gas emissions.

Century Agenda Goals

This project supports the following Port goals and action plans:

Century Agenda:

- Responsibly Invest in the Economic Growth of the Region and All Its Communities

- Be the Greenest and Most Energy Efficient Port in North America

- Be a Highly Effective Public Agency

Project Scope

- Procure two (2) mobile cable positioning devices (CPD)
- Replace current connection point/ jib cranes with CPDs on east and west side of Pier 91

Existing jib crane, west berth Pier 91

Project Scope

- Competition waiver contract with Watts Marine
- Procurement package includes:
  - Design and engineering
  - Delivery, installation, and commissioning of Mobile CPDs

Mobile Cable Positioning Device (CPD)

Preliminary Schedule

Commission authorization for Mobile CPDs procurement	**2023 Quarter 3**
Procurement of Mobile CPDs	2023 Quarter 3
Delivery and installation of Mobile CPDs	2024 Quarter 2
In-use date	2024 Quarter 2

Project Estimate

Cost Estimate/Authorization Summary	Capital	Expense	Total
COST ESTIMATE			
Current estimate	$2,750,000	0	**$2,750,000**
AUTHORIZATION			
Previous authorizations	$250,000	0	**$250,000**
Current request for authorization	**$2,500,000**	0	**$2,500,000**
Total authorizations, including this request	$2,750,000	0	**$2,750,000**
Remaining amount to be authorized	$0	$0	**$0**

Questions?

Return to Agenda

Port of Seattle

COMMISSION
AGENDA MEMORANDUM | **Item No.** 10d
ACTION ITEM | **Date of Meeting** August 8, 2023

DATE: July 18, 2023

TO: Stephen P. Metruck, Executive Director

FROM: Kenneth R. Lyles, Director, Maritime Operations and Security
Kelli Goodwin, Senior Manager, Maritime Operations
Mark Longridge, Capital Project Manager, Seaport Project Management

SUBJECT: Terminal 91 Berths 6 & 8 Redevelopment and Additional Stormwater Treatment Construction Funding (CIP#s C102475, C801350)

Amount of this request:	$71,825,000
Total estimated project cost:	$76,000,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to 1) advertise, award, and execute a major works construction contract to complete the redevelopment of the Terminal 91 Berths 6 & 8, to utilize a Project Labor Agreement, and 2) enter into agreements in support of completion of this work, including tribal agreements. Total request for this action will be $71,825,000 for a project total authorization of $76,000,000.

EXECUTIVE SUMMARY

This project will redevelop the condemned vessel berths and adjoining apron areas of Berths 6 & 8 along the northeast side of Pier 90 at Terminal 91 to help ensure the long-term viability of the Port of Seattle (Port) as the home to the North Pacific fishing fleet.

Planned redevelopment includes demolition of approximately 62,250 square feet of condemned existing timber apron and 830 linear feet of seawall (northerly portion of Berth 6 and entire Berth 8), removal and relocation of existing gangway, floats and boathouse, removal/replacement of existing small office structures, and reconstruction of a concrete apron structure at 600 pounds per square foot along the current alignment. The project includes the removal of over 2,000 failing creosote piles, installation of approximately 320 concrete and steel piles, with an overall decrease in overwater coverage. The project work also includes stormwater improvements, upgraded shore power connections, renewable energy through new solar panel arrays, and a direct connection for vessel sanitary sewer.

JUSTIFICATION

The redevelopment of Berths 6 & 8 supports the following Maritime Division goals toward achieving Century Agenda objectives:

1. Continue to grow the economic value of the fishing and maritime cluster including the number of local jobs and regional business revenue.
2. Prioritize uses that support the commercial fishing industry, with a focus on anchoring the North Pacific fishing fleet in Seattle.
3. Supports the Port's strategy to "be the greenest and most energy-efficient port in North America" by installing solar array infrastructure, stormwater treatment infrastructure, direct connection for vessel sanitary sewer, and replacing existing creosote piling with cement and recycled steel materials.
4. Supports anticipated growth in cruise ship operations.

DETAILS

Berths 6 & 8 are the last remaining original timber pier berths at Terminal 91 and are at the end of their service life. Approximately 30% of the apron is condemned, and the remaining sections are posted with severe load limits. Originally built in the 1910s, this section of Pier 90 was most recently rehabilitated in 1985, and little has been done to the structure since then. Redevelopment of Berths 6 & 8 is critical to ensuring the long-term viability of the port as the home to the North Pacific fishing fleet.

The fleet has been modernizing and will continue to do so. New builds are larger than the vessels they are replacing. This means vessels that may have previously been able to moor at Fishermen's Terminal are now too long or draw too much water to remain and are looking to moor at Terminal 91. Fishing companies are also growing. As an example, both the Ocean Peace and O'Hara companies have each added additional vessels to their fleets in the past five years.

Critical to the fleet's success while in port is access to laydown areas, heavy lift capability pier side, and ample apron space to perform offloads, backloads, and repair work. This project will replace approximately 62,250 square feet of condemned existing timber pier structure and 830 linear feet of seawall, providing pier apron capable of supporting the fleet's activities and needs.

Demand for moorage at Terminal 91 continues to grow. Several times during the shoulder seasons the space at Terminal 91 proves inadequate to accommodate the needs of the North Pacific fleet. Cruise activity at Terminal 91 is growing in both number and size of vessels, further increasing the demand on Terminal 91 berth space. This project responds to that demand and will alleviate some of the shoulder season pressure by providing space for three 250-foot-plus catcher processors.

As noted in the 2017 Fishing Vessel Moorage Analysis for the Port by S2 Strategy, "fishing and seafood processing sector of the maritime industry, as a whole has by far the largest revenue impact to the state of any maritime sector. And is at least equal in job production to the other sectors...." Recommendations included providing an additional three to four 200-400-foot berths by 2020 and to plan for berths to accommodate another ten to twelve boats of 175-400-feet over the next decade. Restoring existing load limited and partially condemned moorage facilities to their full capacity is the first step to meeting these future capacity needs.

Scope of Work

This project provides material waterside and landside improvements, including the following:

- Dock demolition and replacement, relocation of boat house and removal of existing small boat floats. Demolition of the existing pier deck and structure, including removal or cutoff of approximately 2,200 creosote piles. Removal and regrading of the existing under pier slope and replacement of the upland sheet pile wall.

- Placement of approximately 240 prestressed concrete structural piles and approximately 80 steel fender and guide piles, placement of 4 feet of riprap rock and habitat fish mix, placement of the new concrete precast deck panels, bullrail, utilities, bollards, upgraded shore power connection points and appurtenances.

- Removal of the existing buildings A-310 building (currently leased by American Seafoods), A-300, A-400, A-301, A-500, A-501 (occupied by Port Operations and police), removal of existing pavement and installation of deep soil mixing soil amendments, stormwater treatment system, and surface regrading.

- Installation of two new modular buildings for tenant and Port use, paving and striping, installation of electric vehicle charging infrastructure, and installation of modernized electrical substation to service the buildings and vessels at the pier.

Berth dredging is not expected to be required to accommodate the current vessel demand; however, future dredging could be achieved if necessary or desired under a separate project, covered by C800431 -- Dredge P90 East.

Diversity in Contracting

The project team has coordinated with the Diversity in Contracting Department to determine appropriate Women and Minority Business Enterprise aspirational goals for this project and identified a 5% contracting goal for the major works contract advertisement.

Sustainability/Community Outreach

This project will replace the existing creosote timber pier with a more environmentally responsible concrete apron. It is expected that all the existing creosote timber piles will be removed from the water column, resulting in a significant reduction in the number of piles overall. The plans also include a vessel sanitary sewer connection point to eliminate the use of on-dock collection tanks and resulting truck transport of waste with its associated fuel use and greenhouse gas emissions.

The design collects and treats all stormwater collected on the new construction areas using a cartridge filter vault, plus includes additional stormwater treatment elements to treat another approximately 100,000 square feet of additional pier area outside the project limits. This additional scope will be funded by the Marine Stormwater Utility as a separate work project included in this authorization. Completing this work concurrently provides efficiency in both design and construction and allows us to treat twice the impervious surface area before discharging to the Sound.

The new office structures are planned to be modular construction to reduce site construction time and construction waste, with energy efficient heating, ventilation, and air conditioning (HVAC) systems. Solar photovoltaic panels will be installed on the larger of the two buildings and sized to produce sufficient power for all that building's energy use. Both buildings will include EV charging parking, which is being coordinated with the Port's fleet management, and covered bike racks to encourage alternate commuting methods.

Port staff have been working with terminal users throughout the design to mitigate operational impacts and have kept the Neighbors Advisory Committee (NAC) informed about the project and potential neighborhood impacts. Outreach included regular updates at the NAC monthly meetings which includes community leaders from Magnolia and Queen Anne. During construction, staff will implement a communication plan to provide specific details to Queen Anne and Magnolia neighbors, adjacent businesses and T91 tenants with a focus on noise from the pile driving work.

Schedule

All in-water work associated with the work must be completed within the fish window from August 1 to January 15 of each construction season, with pile driving for steel pile from September 1 to January 15, a two-month reduction from previous typical fish window permit work. This presents another constraint to the project that will need to be closely monitored and will likely require more than one full fish window construction period to complete the work. Both federal and local permits are in process and expected to be issued in Q3 of 2023, but if delayed this may affect the advertising and construction schedule.

The construction scope includes several long lead items, including precast concrete elements and electrical equipment. As such, while contract execution is expected in 2023, the main site construction activity is expected to begin just before the start of in water activity in mid-2024. Minor project elements and some demolition may be accomplished before this if possible.

Activity

Commission design authorization	2020 Q1
Design start	2020 Q3
Commission construction authorization	2023 Q3
Construction start	2024 Q2
In-use date	2025 Q4

This request reflects the Engineer's most recent estimate of construction cost, escalated to the construction period, including potential project risks. The project team performed a full risk analysis of the project at both 30% and 90% design milestones to evaluate potential cost and schedule risks and quantify them using a Monte Carlo probabilistic analysis. The project total in this memo represents the 50th percentile estimate from the latest risk analysis update.

Cost Breakdown	This Request	Total Project
Design	$0	$4,175,000
Construction	$71,825,000	$71,825,000
Total	$71,825,000	$76,000,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Maintain the status quo. Continue to enable limited operations of the berths for workboat moorage and keep the load restrictions and condemnation of dock sections in place.

Cost Implications: This alternative carries significant uncertainty and risk and accordingly much variability in cost potential. Maintenance costs for the berth are not currently high but would expand greatly if a deck failure occurred, for example.

Pros:

(1) Lower initial capital cost.

Cons:

(1) Significant risk to the structure if kept in use. Deterioration will continue.
(2) Current berth space demand from the Pacific fishing fleet not met.
(3) Revenue for these berths would remain minimal.

This is not the recommended alternative.

Alternative 2 – Replace the deteriorated timber apron with a concrete apron structure.

Cost Implications: Total project cost $76 million

Pros:

(1) Brings the berth back to full operation, replacing the deteriorated facility.
(2) Provides much needed berth and staging space for the North Pacific fishing fleet.
(3) Replacement of existing creosote pilings and apron, with far fewer concrete elements. Significant environmental benefits.

Cons:

(1) Higher initial capital cost.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

The current total project estimate has significantly increased from initial planning level estimates due to required additional scope, including upland soil improvements to meet current seismic code and resultant building replacements, increased permitting mitigation costs, and historically high construction escalation over the last several years. Cost increases have been further aggravated due to the pandemic and resultant manufacturing and supply chain issues, especially for long lead items such as electrical equipment.

The current estimate includes significant allowances for continued market volatility, escalation and construction contingency, but will be completed on a competitive low bid basis.

Cost Estimate/Authorization Summary	Berth Redevelopment (U00554)	Additional Stormwater Treatment (U00704)	Expense	Total
COST ESTIMATE				
Original estimate	$40,000,000	$0	$0	$40,000,000
Previous changes – net	$0	$100,000	$0	100,000
Current change	$35,600,000	$300,000	$0	$35,900,000
Revised estimate	$75,600,000	$400,000	$0	$76,000,000
AUTHORIZATION				
Previous authorizations	$4,075,000	$100,000	$0	$4,175,000
Current request for authorization	$71,525,000	$300,000	$0	$71,825,000
Total authorizations, including this request	$75,600,000	$400,000	$0	$76,000,000
Remaining amount to be authorized	$0	$0	$0	$0

Annual Budget Status and Source of Funds

This project is part of the 2023 Capital Plan under C102475 Terminal 91 Berth 6 & 8 Redevelopment with a total project cost of $70,126,000 and it is included in the draft 2024 Capital Plan with an updated total project cost of $76,000,000.

The redevelopment of the berths is being funded by the Tax Levy. Additional stormwater treatment work is being funded by the Stormwater Utility.

Financial Analysis and Summary

Project cost for analysis	$76,000,000
Business Unit (BU)	Elliott Bay Fishing and Commercial Operations
Effect on business performance (NOI after depreciation)	The redeveloped berths are expected to increase annual moorage revenue by approximately $900,000 in the first full year of operation. Annual depreciation expense is estimated to increase by approximately $2.5 million based on an expected useful life of 30 years.
IRR/NPV (if relevant)	NPV: ($50+ million)

ATTACHMENTS TO THIS REQUEST

(1) Sustainable Design Strategy (Dec 27, 2023)
(2) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

January 7, 2020 – The Commission authorized design and permitting funding of $4,000,000.

Port of Seattle

Sustainable Design Strategy
Terminal 91 Berths 6-8 Redevelopment Project

Date December 27, 2022

Contents

Project Background

The T91 berths 6-8 project is a Tier 2 project under SEF Policy Directive 3768, adopted by the Port of Seattle Commission in January 2020.

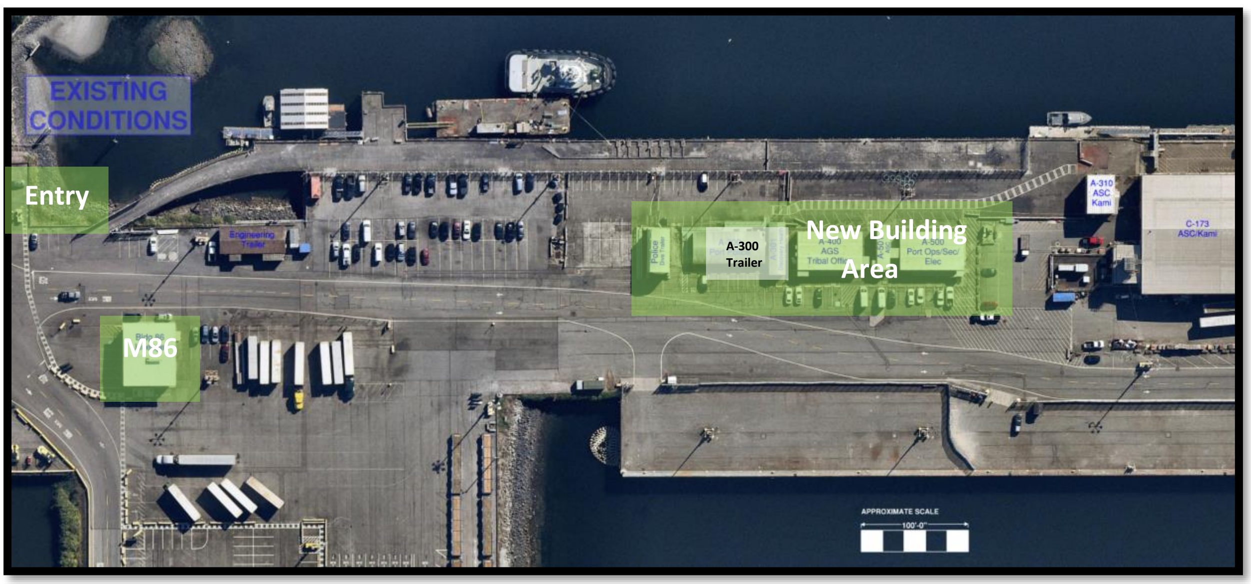


Figure 1: Terminal 91 Berths 6-8 Building Area, M86, and Entry Gate shown in green

The T91 berths 6-8 redevelopment project consists of the following scope items:

1. Demolition of approximately 62,000 square feet of condemned existing timber apron and 830 linear feet of seawall.
2. Removal and relocation of existing gangway, floats, boathouses, and a small office structure.
3. Removal and relocation of existing tenant and Port building office space near the new timber apron.

The seawall and apron components of the project (items 1 and 2, above) were brought to the SEAC committee in November 2021 (Attachment 1), and the office building element (item 3, above) was brought to SEAC via a memo on August 16, 2022 (Attachment 2), since it was a later phase of work. **The Sustainable Design Strategy outcomes outlined here include the entire redevelopment project.**

Executive Summary

The Port of Seattle focused on five analyses to understand how the T91 berths 6-8 redevelopment project impacts greenhouse gas emissions, meets energy needs through conservation or renewables, preserves maritime industrial space, resiliency, operational efficiency, and tree canopy coverage. The five analyses and resulting recommendations are summarized here and expanded in detail in subsequent sections of this memo:

1. **Pier Replacement Alternatives.** Staff recommend a precast concrete deck with asphalt overlay and concrete piles. The deck and piles have a long design life and are durable. This includes stormwater collection and treatment to improve water quality. Concrete piles enable a reduction of roughly 2,200 piles and removal of all creosote timber piles.
2. **Building Options Analysis**. Staff recommend building new net-zero modular structures with solar panels, electric vehicle (EV) charging, and covered bike racks.
3. **Heating and Cooling Analysis.** The new modular structures will meet Seattle Energy Code, and the staff recommend installation of high efficiency HVAC equipment, windows, and insulation.
4. **Sewage Disposal Analysis.** Staff recommend piloting a direct discharge sewer connection to berths 6-8, to reduce tenant-driven transportation emissions associated with sewage waste removal by truck.
5. **Tree Canopy Analysis.** Staff do not recommend pursuing on-terminal trees at this time based on property use, cost and benefit that is difficult to quantify.

A detailed description of the SEF and sustainability analyses leading to these recommendations is provided below.

Sustainable Evaluation Framework

The Sustainable Evaluation Framework (Policy Directive 3768) was adopted by the Port of Seattle Commission in January 2020 with the intent of improving transparency around the Port's decision-making process for how sustainability and equity are integrated into capital projects and key operational decisions. The objective is to keep the Port on track to meet our Century Agenda goals and ensure we are prioritizing our triple bottom line of people, the planet, and economic prosperity.

Sustainability Analyses

Port of Seattle staff focused on five analyses to understand how the T91 berths 6-8 redevelopment project impacts greenhouse gas emissions, meets energy needs through conservation or renewables, preserves maritime industrial space, resiliency, operational efficiency, and tree canopy coverage. Each of the five analyses and resulting recommendations are described below (pier replacement alternatives, building options, heating and cooling alternatives, sewage disposal options, and tree canopy).

Each alternative (shown in the left-most column of each analysis table) was weighed against various environmental and operational considerations (shown in the top row). Color coding indicates how each alternative relatively and qualitatively aligns with each goal, with green representing "good", yellow "moderate", and red "poor".

Pier Replacement Alternatives

Deck

A concrete deck is recommended for its sustainability, having a long service life and relatively inert material properties once cured. Concrete pier decks are common and durable for the type of operations at the facility and what is currently in use for all other pier areas on the property. The solid concrete deck will also allow for collection and containment of stormwater runoff that could then be routed upland for treatment prior to discharge. To further improve the sustainability of the project, the solid concrete deck can be precast concrete deck panels to minimize overwater concrete work and construction time. Low embodied carbon concrete may be an option for the pier deck depending on availability, schedule, and cost.

Option	Water Quality Impacts	Materials	Cost	Design Life
Recommend Alt 1: Precast Concrete Deck with Asphalt Overlay	• No uncured concrete exposure	• Long design life • Able to resurface		50 years
Alt 2: Cast in Place Concrete Deck with Asphalt Overlay	• Increased chance of spill or contamination	• Long design life • Able to resurface • Increased waste during construction		50 years
Alt 3: Cast in Place Concrete Deck with Exposed Concrete	• Increased chance of spill or contamination			50 years

Piles

Concrete piling offers the highest combination of strength, durability and longevity for the load bearing sections of this application. Other pile materials used for both fender and guide piles will likely be steel, which would also include different steel treatments.

Option	Water Quality Impacts	Materials	Cost	Design Life
Recommend Alt 1: Concrete Pile	• Embodied Carbon • Better sound attenuation	• Long design life • Very durable		50+ years
Alt 2: Steel Pile	• High underwater noise when impacted	• Low design life		25 years
Alt 3: Galvanized Zinc Pile	• Release of zinc • High underwater noise when impacted	• Long design life • Limited maintenance		45 years
Alt 4: Epoxy-Coated Steel Pile	• Could release zinc • High underwater noise when impacted	• Long design life • High maintenance needs		40 years
Alt 5: Galvanized and Epoxy-Coated Steel Pile	• Increases submerged land impact • Could release zinc • High underwater noise when impacted	• Long design life • High maintenance needs • Difficult maintenance		60 years
Alt 6: Galvanized and HDPE Sleeved Steel Pile	• Increases submerged land impact • Could release zinc • High underwater noise when impacted	• Long design life • Sleeve maintenance		55 years

Overall Design Measures

The current project design results in a net reduction in overwater coverage of approx. 5,500 sf, the removal of 2,300 creosote timber piling, and the replacement of only 382 pilings (net piling reduction of close to 2,000). It also will include stormwater collection and treatment to improve water quality.

Building Options

Staff assessed four alternatives to accommodate the office function requirements at T91 berths 6-8.

The recommended building option, which entails construction of new modular buildings that are not LEED certified, but constructed to standards above baseline since they include solar panels, insulation, and EV charging. The solar panels will enable the modular buildings to be net-zero buildings, with the additional possibility to supply EV charging with solar power as well. This alternative also includes provision for covered bicycle racks for building occupant use and to incentivize active mobility at the site. While this option is $600,000 more than the lowest cost alternative (Alternative 1), the environmental benefits of a net-zero building and the preservation of existing maritime industrial space align best with all Port goals.

Option	Up Front Costs (Millions)	M86 Lost Tenant Revenue (Millions over 24 years)	Reduce Embodied Carbon	Meet Increased energy needs through conservation or renewables	Port Access and Wayfinding	Preserve Existing Marine Industrial Space (M86)
Alt 1: Repurpose M86 and reuse A-300 trailer with solar and EV charging	1.7	2.5				
Alt 2: Construct new modular buildings (8,500 SF)	4.4					
Recommended Alt 3: Construct new modular buildings with solar and EV charging	4.8					
Alt 4: Construct new LEED modular buildings with solar and EV charging	5.3					

Heating and Cooling Alternatives

Port of Seattle engineers assessed three alternatives to heat and cool new modular buildings at T91 berths 6-8. Since in-house Port engineering developed this analysis, cost differences are purely relative.

The selected alternative includes investing in a higher-efficiency variable refrigerant flow (VRF) HVAC system. Up-front costs are comparable to Alternative 2, but these systems are less common on modular buildings and may carry higher manufacturing risk but are becoming more common throughout buildings in Seattle. This system meets the Port's energy efficiency goals and is the recommended alternative.

Option	Up-Front Cost	Manufacturer Risk	Energy Efficient
Alt 1: Variable Air Volume HVAC with code-compliant windows/ insulation			
Alt 2: Variable Air Volume HVAC with improved windows and insulation			
Recommended Alt 3: Variable Refrigerant Flow (VRF) with good windows and insulation			

Berth 6 and 8 Sewage Disposal Options (non-building)

The Port of Seattle assessed two alternatives to manage fishing fleet sewage at T91 berths 6-8. Typical sewage disposal for the fishing fleet at T91 entails pumping sewage from the vessel into a large above-ground tank stored on site. Periodically, vacuum trucks come to pump out those tanks and transport the sewage off site for disposal. Tenants each pay roughly $70,000 per year for this service, separate from their rent. The Port has heard tenant feedback that those trucks are cumbersome to coordinate and expensive. Vacuum trucks typically get only 1.2 miles per gallon fuel efficiency using diesel vehicles.

Port staff recommend Alternative 1, which involves installing a direct-discharge sewer line to serve berths 6 and 8, thereby eliminating the need for 32 vacuum truck trips per year.

The Port can recover installation and maintenance costs of the sewer line by increasing tenant rents while simultaneously reducing overall annual tenant costs by eliminating sewage handling expenses, achieving a financial win-win.

Additionally, by reducing vacuum truck trips, the Port can reduce tenant-driven transportation emissions at T91 by 6.6 tons per year, or almost 200 tons over the life of the sewer line, equivalent to nearly 20,000 gallons of diesel fuel. A direct sewer line improves resiliency by providing alternative ways to manage sewage at the site, and reduces issues if there are road closures, strikes, or a natural disaster that disrupts the ability to get trucks on site readily. The sewer line also improves efficient operations at the terminal by reducing the number of trucks moving around on site and reduces the risk associated with a sewage spill.

Option	Total Cost (30 Years, millions)	Carbon Reduced (tCO2e)	Resiliency	Operational Efficiencies	Carbon Reduced (tCO_2e/yr)	$/$tCO_2e$
Recommend Alt 1: Install direct sewer line	1.1	198			6.6	($7,000)
Alt 2: Business-As-Usual septage	2.2	0			0	$0

Tree Canopy

The Port of Seattle assessed the opportunity to increase the tree canopy at Terminal weighed against various environmental and operational considerations.

The Port does not recommend planting trees at T91 berths 6-8. The soil behind the bulkhead is likely laden with debris and unsuitable for plants, necessitating installation of tree boxes (Figure 2). The up-front cost of $50,000 and ongoing maintenance costs of $15,000 per year (assuming 5 days of maintenance per year) were determined to be excessive given the inability to quantify benefits from the small canopy increase.

Option	Total Cost (20 Years, millions)	Reduced Heat-Island Effect	Improved aesthetics
Recommend Alt 1: No trees	0		
Alt 2: Six trees behind bulkhead	0.35		

Table 4: T91 Berths 6-8 Tree Canopy Alternatives Matrix

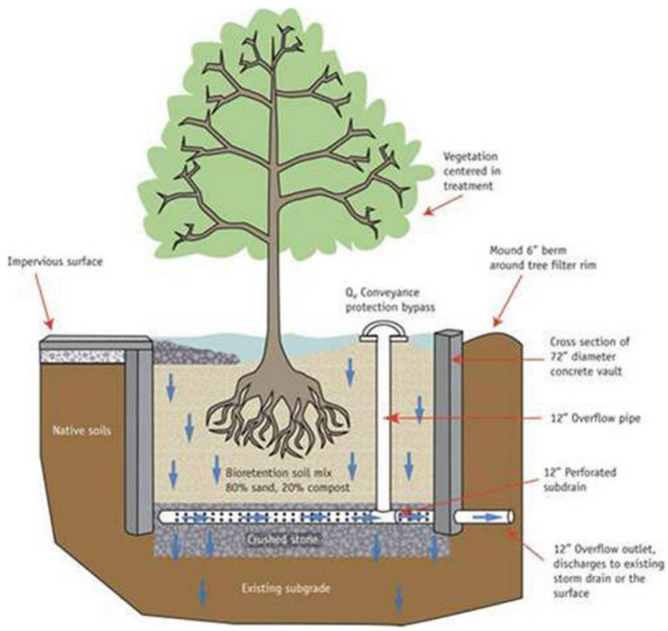


Figure 2: Typical Tree Box Diagram[1]

Figure 3: Example rendering of trees at T91

[1] Rector, P, Obropta, C., Brown, J. Green Infrastructure Practices: Tree Boxes. Rutgers Cooperative Extension Fact Sheet FS1209. August 2013. Available at: https://njaes.rutgers.edu/fs1209/

Closing

The Port of Seattle focused on five analyses to understand how the T91 berths 6-8 building project impacts greenhouse gas emissions, meeting energy needs through conservation or renewables, preserving maritime industrial space, resiliency, operational efficiency, and tree canopy coverage. The five analyses and resulting recommendations are as follows:

1. **Pier Replacement Alternatives.** Staff recommend a precast concrete deck with asphalt overlay and concrete piles. The deck and piles have a long design life and are durable. This includes stormwater collection and treatment to improve water quality. Concrete piles enable a reduction of roughly 2,200 piles and removal of all creosote timber piles.
2. **Building Options Analysis**. The Port recommends building new net-zero modular structures with solar panels, electric vehicle (EV) charging, and covered bike racks.
3. **Heating and Cooling Analysis.** The new modular structures will meet Seattle Energy Code, and the Port will install high efficiency HVAC equipment, windows, and insulation.
4. **Sewage Disposal Analysis.** The Port is piloting a direct discharge sewer connection to berths 6-8, reducing tenant-driven transportation emissions.
5. **Tree Canopy Analysis.** The Port is not pursuing on-terminal trees for this project.

Attachments

- Attachment 1- Terminal 91 Berths 6-8 Apron SEAC Presentation_20201118
- Attachment 2- Terminal 91 Berths 6-8 SDS Presentation_20220816

Attachment 1

SUSTAINABLE EVALUATION FRAMEWORK: TERMINAL 91 BERTHS 6 AND 8 REDEVELOPMENT

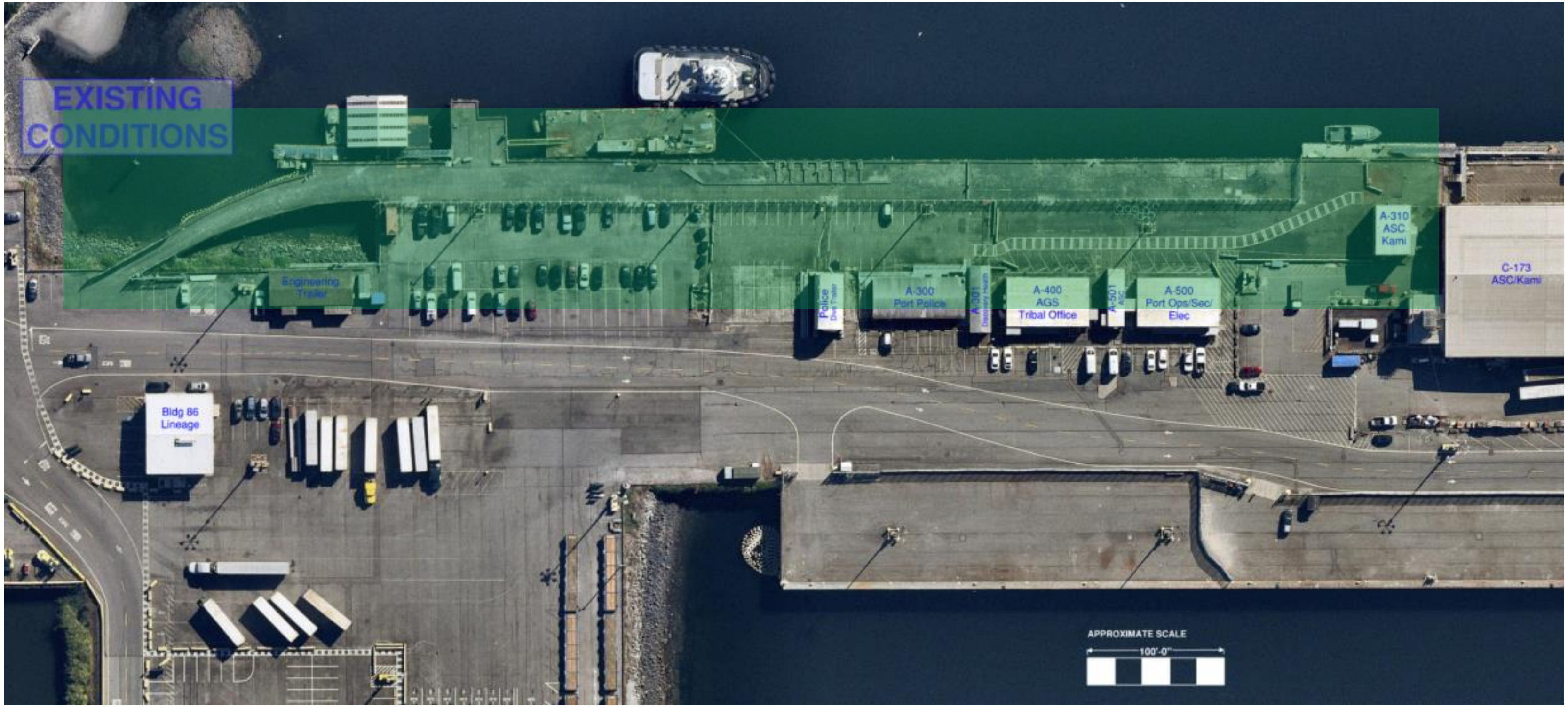
Laura Wolfe
November 18, 2021

Port of Seattle®

Sustainable Evaluation Framework Policy Directive (Resolution #3768)

- **Project Definition**
- **Project Timeline**
- **Sustainable Design Approach (SDA)**
  - *in early planning stage*
- **Sustainable Design Strategy (SDS)**
  - *in design stage*
- **Next Steps**

Project Definition



Project Timeline

• January 2020	Design Authorization
• October 2020	SPARC Team Meeting
• May 2021	30% Design – Wharf
• July 2021	SPARC Team Meeting
• November 2021	SEAC Committee
• December 2021	30% Design – Buildings
• January 2022	SEAC Committee
• Early 2023	Construction authorization

Sustainable Design Approach (SDA)

- Berth efficiency and access
- Alleviate space pressure
- Accommodate tribal uses
- Adaptability
- Balance economic goals with environmental impact
- Engage near-port communities

- Integrated Team Meetings
- Established design goals and targets

Sustainable Design Strategy (SDS)

- **Reduce GHG Emissions**
  - Alternate/reuse of materials
  - Reduce energy consumption

- **Protect Health and the Environment**
  - Decrease inwater/overwater footprint
  - Water quality
  - Light, glare, and noise
  - Consolidate developed areas

- **SDS Builds on SDA**
- **Alternatives analysis**
- **Present to SEAC Committee at 30%**
- **Incorporate feedback from SEAC Committee into SDS**

Sustainable Design Strategy (SDS)

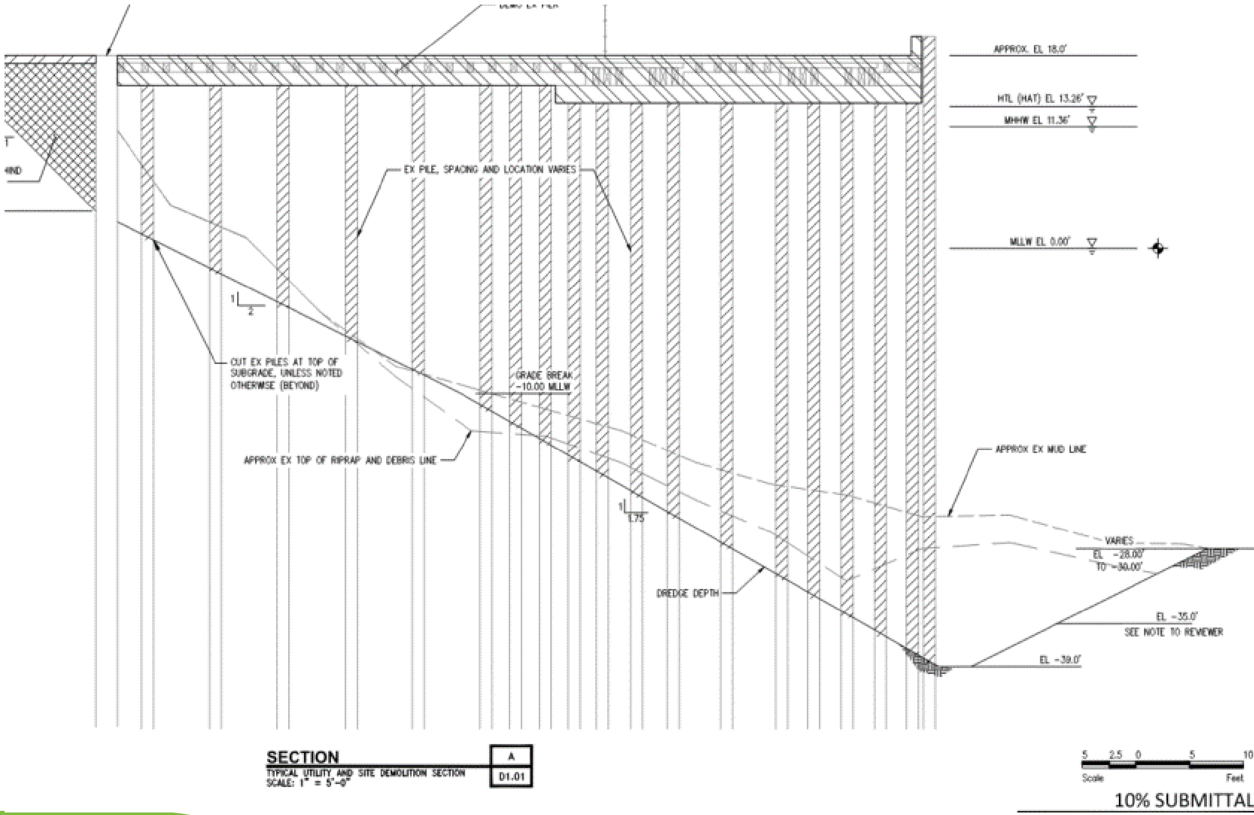
- **Increase Resilience**
  - Accommodate future uses
  - Design to be adaptable

- **Local Economic Development, Equity, Partnerships**
  - Provide service for fishing fleet
  - Consideration of tribal uses
  - Regional materials, local/WMBE businesses
  - Engage near-Port communities
  - Work with existing tenants

- **SDS Builds on SDA**
- **Alternatives analysis**
- **Present to SEAC Committee at 30%**
- **Incorporate feedback from SEAC Committee into SDS**

Apron Reconstruction

- **Focus:**
  - Remove creosote
  - Decrease coverage
  - Pier materials
  - Protect water quality



Pier Materials

- **Pre-cast Concrete Deck or Cast-in-place Deck**

Pier Materials

Design Component	Alternative	Water Quality Impacts	Materials	Financial Sustainability	
				Cost	Design Life
Deck	**Precast Concrete Deck with asphalt overlay**	**No uncured concrete exposure**	**Less waste Able to resurface**	**$**	**50 years**
	Cast in place Concrete Deck with asphalt overlay	Spill potential	Increased waste Able to resurface	$$	50 years
	Cast in place Concrete deck with exposed concrete final surface	Spill potential	Increased waste Not able to resurface	$$$	50 years

Pier Materials

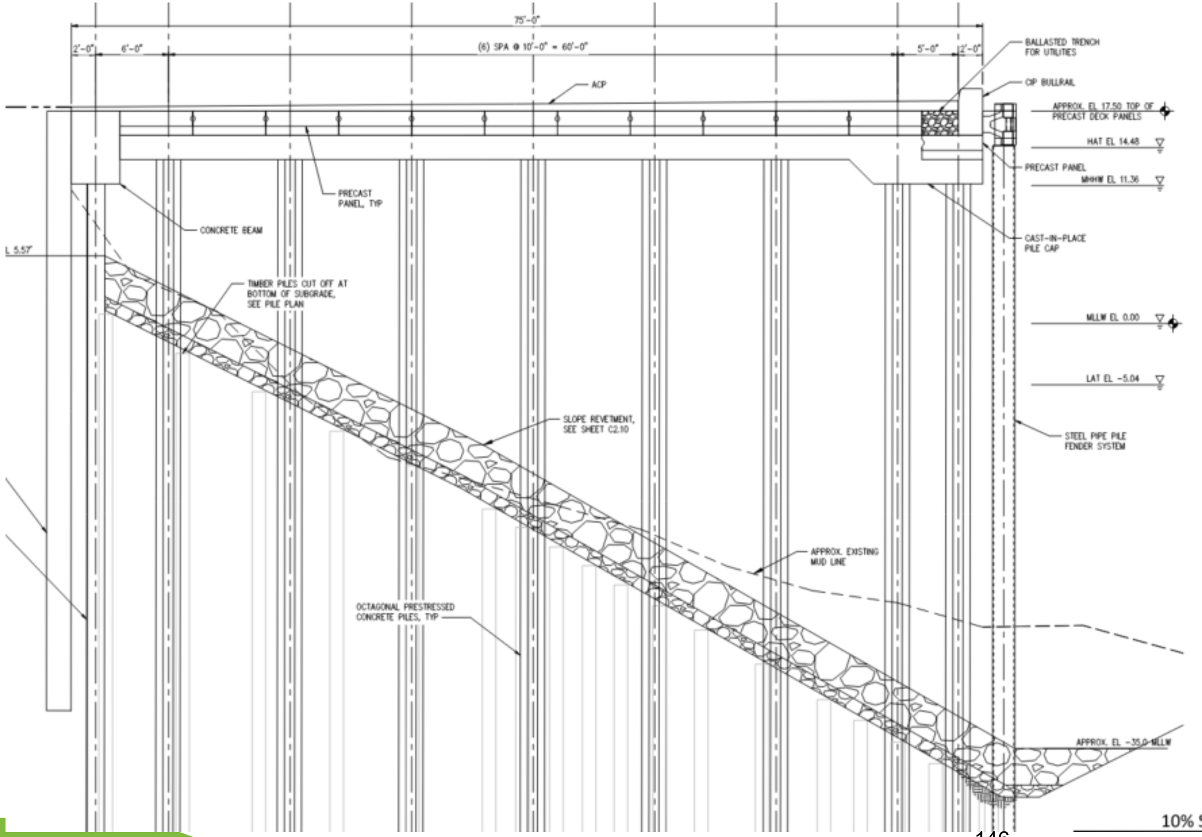
- Concrete Piles or Steel Piles

Pier Materials

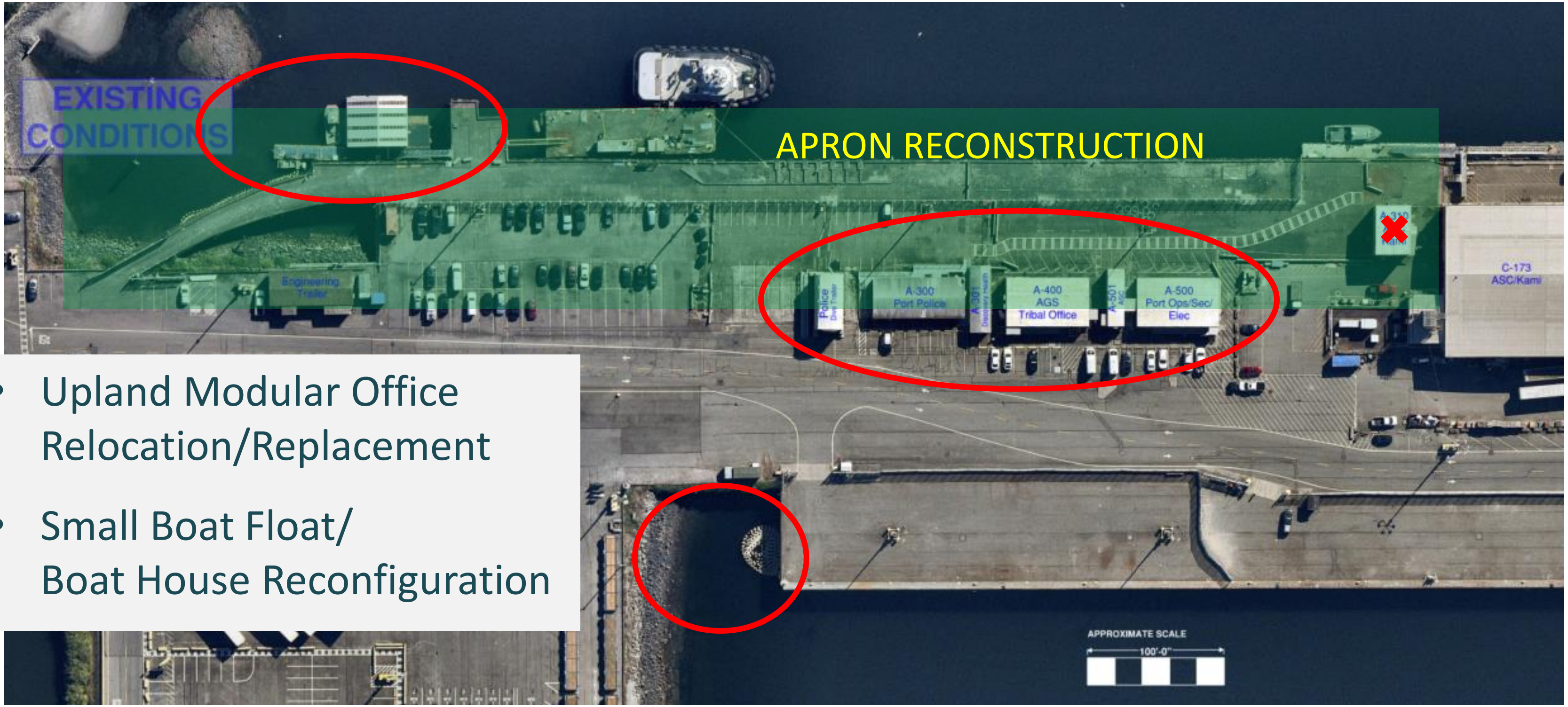
Design Component	Alternative	Water Quality Impacts	Materials	Financial Sustainability	
				Cost	Design Life
Piles	Concrete Pile	Embodied carbon Less underwater noise impact	Longer design life Very durable	$	50+ years
	Steel Pile	More underwater noise impact	Short life wastes material	$$	25 years
	Galvanized Steel Pile	Release of zinc More underwater noise impact	Longer design life	$$	45 years
	Epoxy-coated Steel Pile	More underwater noise impact	Longer design life Coating maintenance	$$	40 years
	Galvanized and Epoxy-coated Steel Pile	Could release zinc More underwater noise impact	Longer design life Coating maintenance	$$$	60 years
	Galvanized and HDPE Sleeved Steel Pile	Increases submerged land impact Could release zinc More underwater noise impact	Longer design life Sleeve maintenance	$$$	55 years

Apron Reconstruction

- Creosote timber apron removal (2300+ piles)
- Concrete Pile supported replacement (~382 piles)
- Remove 5,500sf of overwater coverage
- Collect and treat stormwater



Uplands Redevelopment



- Upland Modular Office Relocation/Replacement
- Small Boat Float/ Boat House Reconfiguration

Uplands Redevelopment Goals

- Adapt to tenant needs
- Improve Access and Operational Efficiency
- Reduce Energy Consumption
- Reuse and Salvage
- Limit Construction Disturbance

Next Steps

- **Further design and finalize SDS for all elements**
- **Sustainable design elements incorporated into:**
  - *Construction Documents & Contract Specifications*
  - *Sustainability Compliance Manual, Operations Manual*
- **Maintain adherence to Final SDS**
- **Significant deviations need to be brought to SEAC Committee and Director of Engineering, Environment, & Sustainability**
- **Lessons learned and process adaptation**

- **Execution**
- **Adherence**
- **Deviations need to be documented and vetted**

QUESTIONS?

Pier Materials

- **Infeasible Replacement Alternatives**
  - Grating is not recommended as a feature due to heavy equipment use on pier, although may be possible in support float areas
  - Composite piling not feasible structurally due to proposed loads and substrate conditions
  - Reinhall piling not feasible due to substrate conditions
  - Treated timber pile is not recommended due to environmental concerns
  - Uncoated steel deck is not feasible due to corrosion, aesthetics, and safety concerns

Pier Materials

- **Pre-cast Concrete Deck over Cast-in-place**
  - No uncured concrete exposed to site
  - Less construction disturbance
  - Better quality control
  - Less expensive than cast in place

- **Concrete Piles over Steel Piles**
  - Better sound attenuation than impacted steel piles
  - Equal if not longer design life than treated steel (50+ years)
  - $1 to $2M less than steel
  - Very durable, low maintenance

Pier Materials

Design Component	Alternative	Water Quality Impacts	Materials	Financial Sustainability	
				Cost	Design Life
Deck	**Precast Concrete Deck with asphalt overlay**	**Consideration of embodied carbon, no uncured concrete exposure**	**Longer design life, possible to resurface as needed**	**$**	**50 years**
	Cast in place Concrete Deck with asphalt overlay	Consideration of embodied carbon, lower quality control, likely thicker sections and increased chance of spill or contamination	Longer design life, possible to resurface, but increased waste from forming during construction	$$	50 years
	Cast in place Concrete deck with exposed concrete final surface	Consideration of embodied carbon, lower quality control, likely thicker sections and increased chance of spill or contamination	Longer design life, but less possibility to resurface. Significantly more complex to pour and grade during construction leading to significant waste	$$$	50 years

Pier Materials

Design Component	Alternative	Water Quality Impacts	Materials	Financial Sustainability	
				Cost	Design Life
Piles	Concrete Pile	Consideration of embodied carbon, better sound attenuation than impacted steel piles	Longer design life, very durable	$	50+ years
	½” Wall Steel Pile	None identified	Needs to be replaced quicker, wasting more material	$$	25 years
	½” Wall Steel Pile: Galvanized	Release of zinc into the environment	Longer design life	$$	45 years
	½” Wall Steel Pile: Epoxy-coated	None identified	Longer design life, coating maintenance due to abrasion	$$	40 years
	½” Wall Steel Pile: Galvanized and Epoxy-coated	Can release zinc into environment if coating is abraded	Longer design life, coating maintenance due to abrasion	$$$	60 years
	½” Wall Steel Pile: Galvanized and HDPE sleeve	Increases submerged land impact, can release zinc into environment if sleeve fails	Longer design life, sleeve maintenance	$$$	55 years

Attachment 2

SUSTAINABLE EVALUATION FRAMEWORK: TERMINAL 91 BERTHS 6 AND 8

Jessica Brown
August 16, 2022

Port of Seattle®

Timeline

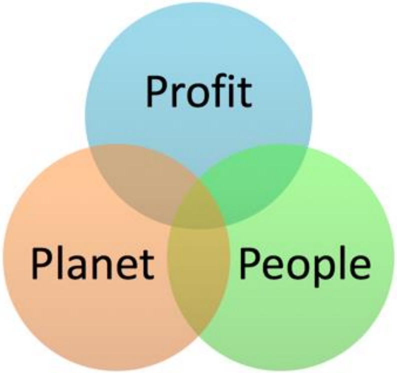
- Director’s Sync: 8/8/22
- SEAC Documentation: 8/16/22
- Project Status: 90% Building Design

Agenda

- Sustainable Evaluation Framework
- Project Scope
- Sustainability/Equity Alternatives Summary
- Recommendations/Outcomes
- Director Feedback

Sustainable Evaluation Framework Policy Directive

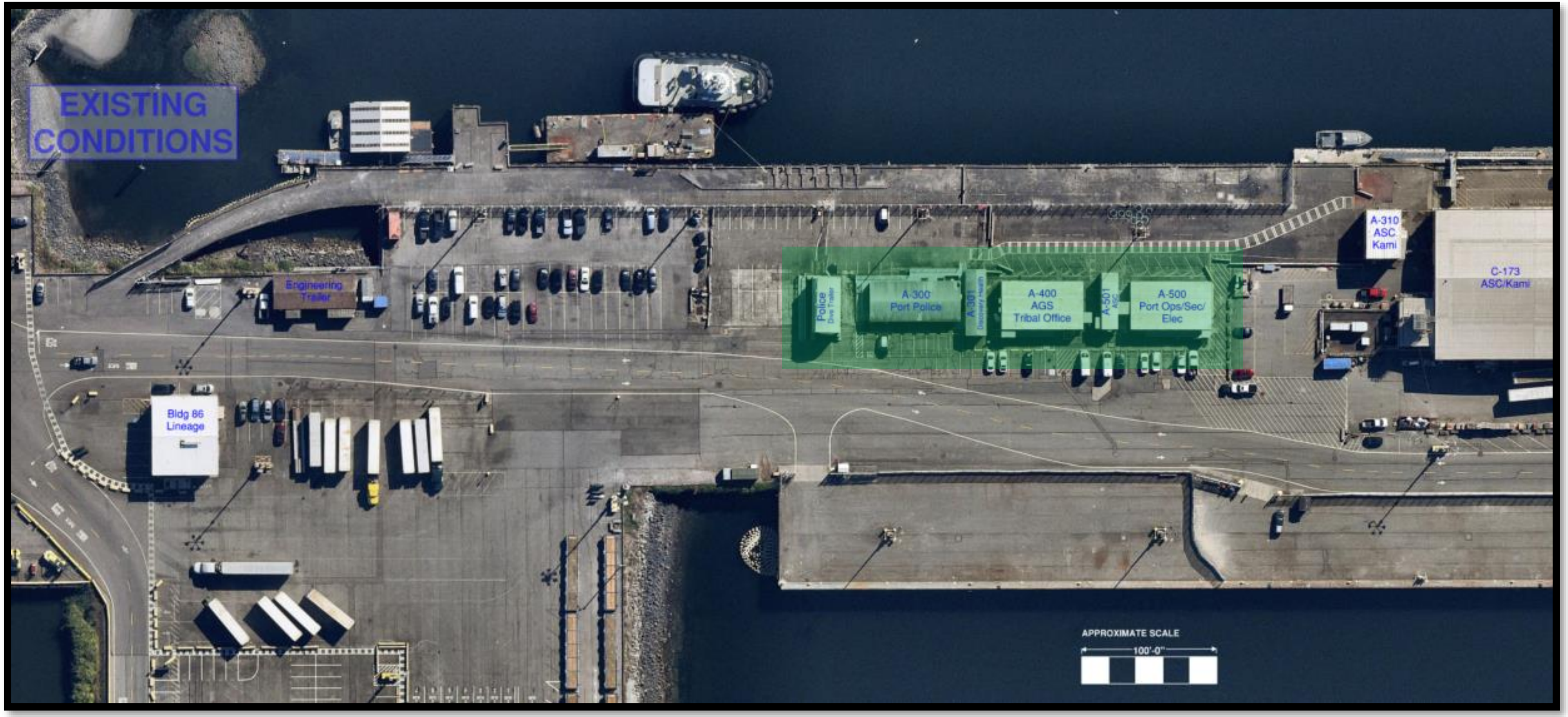
- Commission Resolution 3768
- Increase **transparent analysis** of sustainability and equity opportunities
- Align capital projects and operational decisions with **Century Agenda goals**



T91 Berths 6-8 Stakeholders

- **Sponsor** - Kelli Goodwin, Lily Ninburg
- **WPM** - Mark Longridge
- **Design Team** - KPFF
- **E&S** - Jessica Brown, Laura Wolfe
- **Engineering** - Nathan Greene
- **Maintenance** - DJ Lewis, Scott Veysey

Project Definition



Recommendations

- **Building Options**
  - **Do** build new net-zero structure <u>with</u> solar and EV charging
  - **Do** install covered bike racks
  - **Do not** pursue LEED certification at any level
  - **Do not** repurpose Building M86
- **Heating and Cooling Alternatives**
  - **Do** meet Seattle Energy code
  - **Do** install energy efficient HVAC
  - **Do** install energy efficient windows and insulation
- **Direct Sewer Line**
  - **Do** Install direct sewer line to berths 6-8
- **Tree Canopy**
  - **Do not** increase tree canopy

Building Options

Option	Up Front Costs (Millions)	M86 Tenant Revenue	Reduce Embodied Carbon	Meet Increased energy needs through conservation or renewables	Port Access and Wayfinding	Preserve Existing Marine Industrial Space (M86)
Alt 1: Repurpose M86 and reuse A-300 trailer with solar and EV charging	1.2	(1.6)				
Alt 2: Construct new modular buildings (8,500 SF)	4.4					
Recommended Alt 3: Construct new modular buildings with solar and EV charging	4.8					
Alt 4: Construct new LEED modular buildings with solar and EV charging	5.3					

HVAC Alternatives Summary

Option	Up-Front Cost	Manufacturer Risk	Energy Efficient
Alt 1: Variable Air Volume HVAC with code-compliant windows/ insulation			
Alt 2: Variable Air Volume HVAC with improved windows and insulation			
Recommended Alt 3: Variable Refrigerant Flow (VRF) with good windows and insulation			

Direct Sewer Line to Berths 6-8

Option	Total Cost (30 Years, millions)	Carbon Reduced (tCO2e)	Resiliency	Operational Efficiencies	Carbon Reduced (tCO_2e/yr)	\$/tCO_2e
Recommend Alt 1: Install direct sewer line	1.1	198			6.6	(\$7,000)
Alt 2: Business-As-Usual septage	2.2	0			0	\$0

Increased Tree Canopy

Option	Total Cost (20 Years, millions)	Reduced Heat-Island Effect	Improved aesthetics
Recommend Alt 1: No trees	0		
Alt 2: Six trees behind bulkhead	0.35		

Recommendations

- **Building Options**
  - **Do** build new net-zero structure <u>with</u> solar and EV charging
  - **Do** install covered bike racks
  - **Do not** pursue LEED certification at any level
  - **Do not** repurpose Building M86
- **Heating and Cooling Alternatives**
  - **Do** meet Seattle Energy code
  - **Do** install energy efficient HVAC
  - **Do** install energy efficient windows and insulation
- **Direct Sewer Line**
  - **Do** Install direct sewer line
- **Tree Canopy**
  - **Do not** increase tree canopy

QUESTIONS?

Item No.: 10d_supp
Meeting Date: August 8, 2023

Terminal 91 Berth 6 & 8 Redevelopment

Kelli Goodwin – Senior Manager, Maritime Operations
Mark Longridge – Capital Project Manager

Port of Seattle®

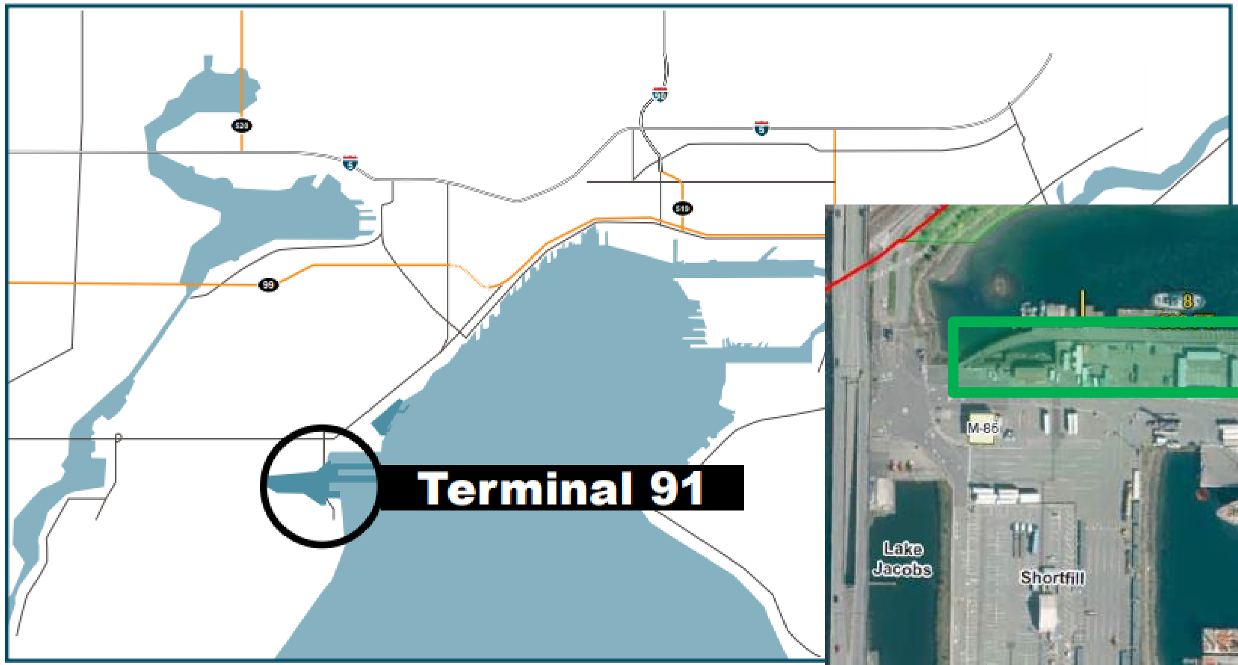
Action Requested

Request Commission authorization for the Executive Director to:

1) Advertise, award, and execute a major works construction contract to complete the redevelopment of the Terminal 91 Berths 6 & 8, to utilize a Project Labor Agreement
2) Enter into agreements in support of completion of this work, including tribal agreements.

Total request for this action will be $71,825,000 for a project total authorization of $76,000,000.

Project Location

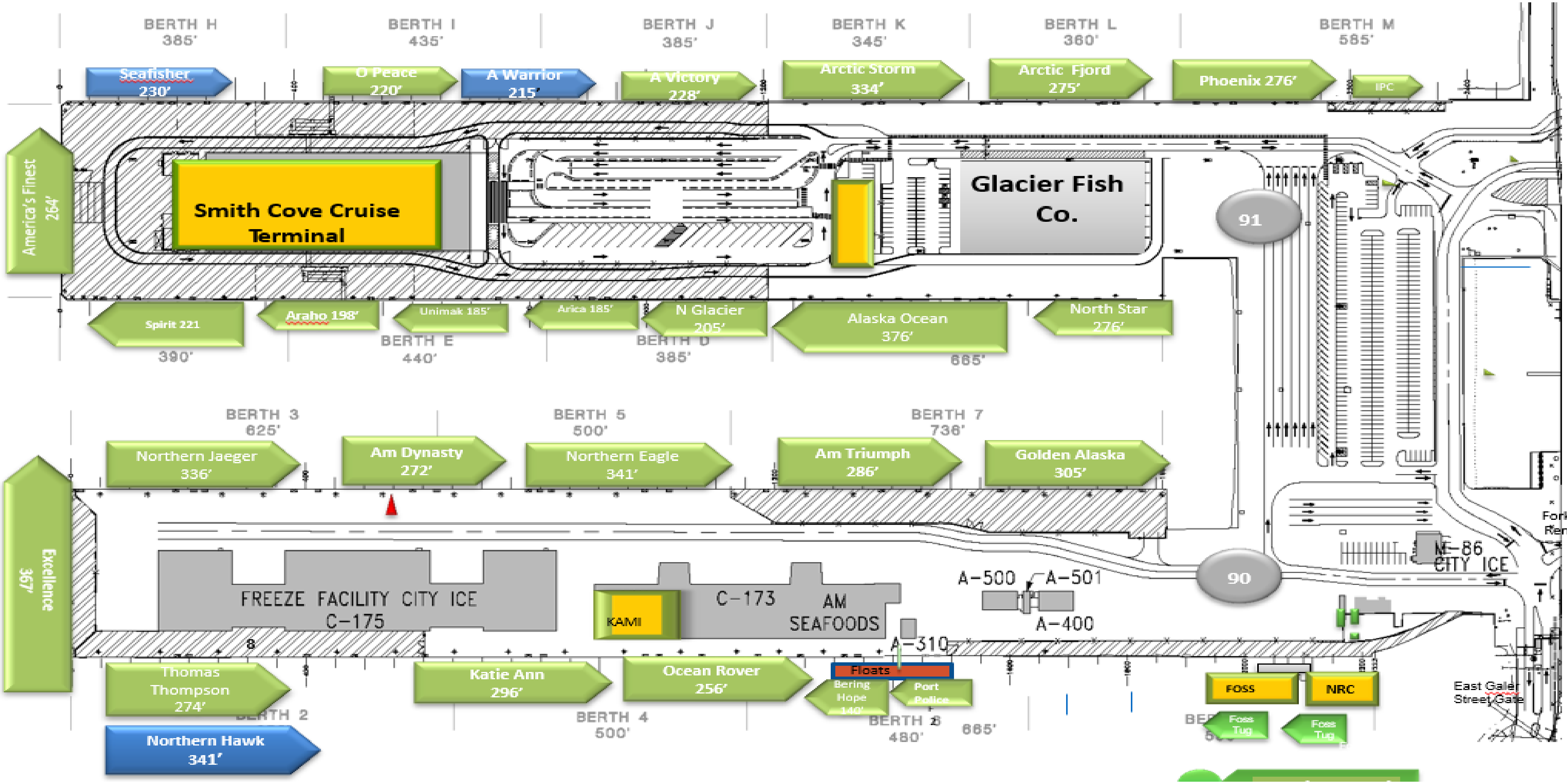


Project Location

Demand for Berths Increasing

Berthing Plan
Sunday January 8, 2023

Port of Seattle



Vessel Size Increasing

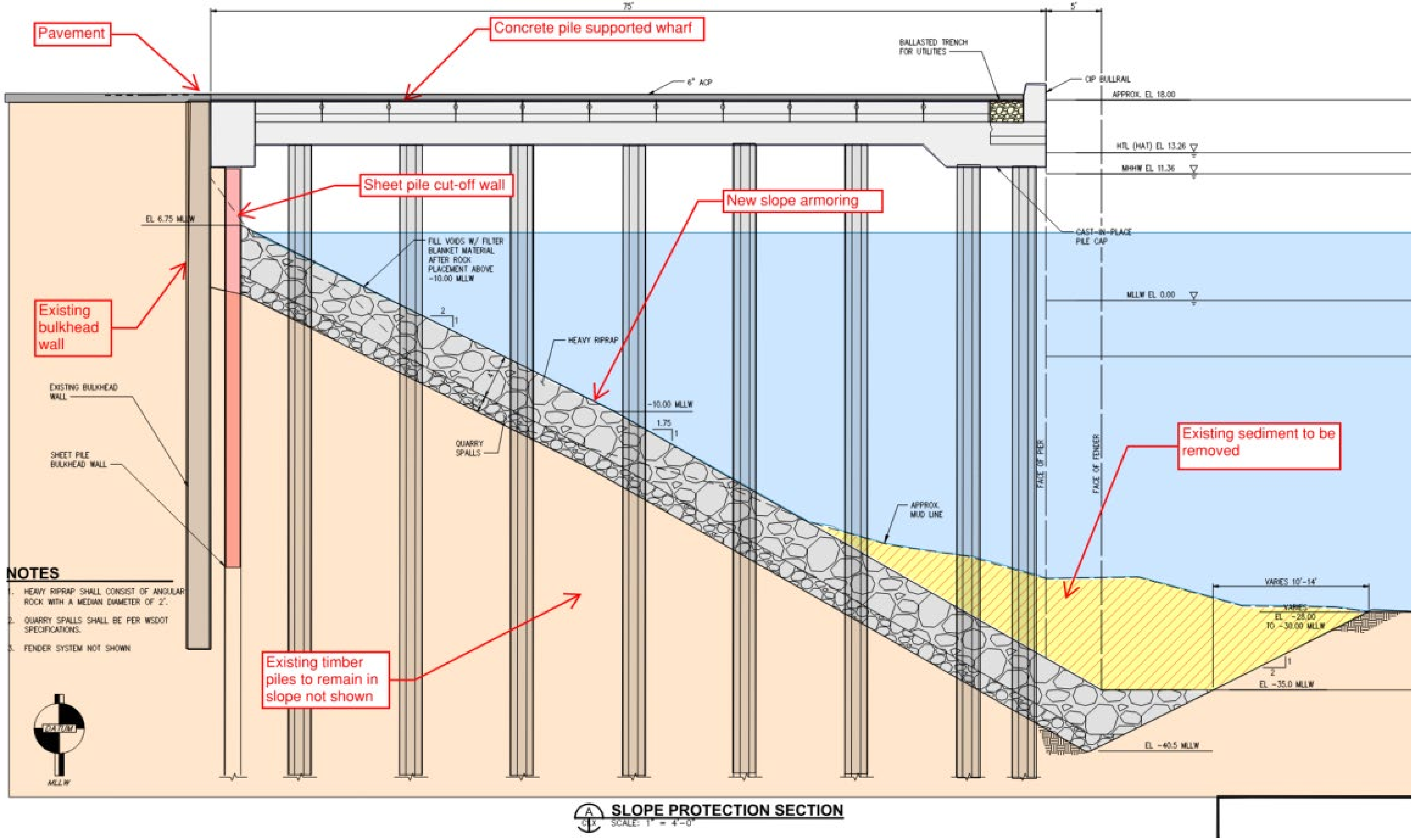
Current Condition

- 70% of pier load restricted
- 30% of pier condemned (no vehicle traffic)

Current Condition

- Creosote Timber Construction
- Significant underdock and fender deterioration

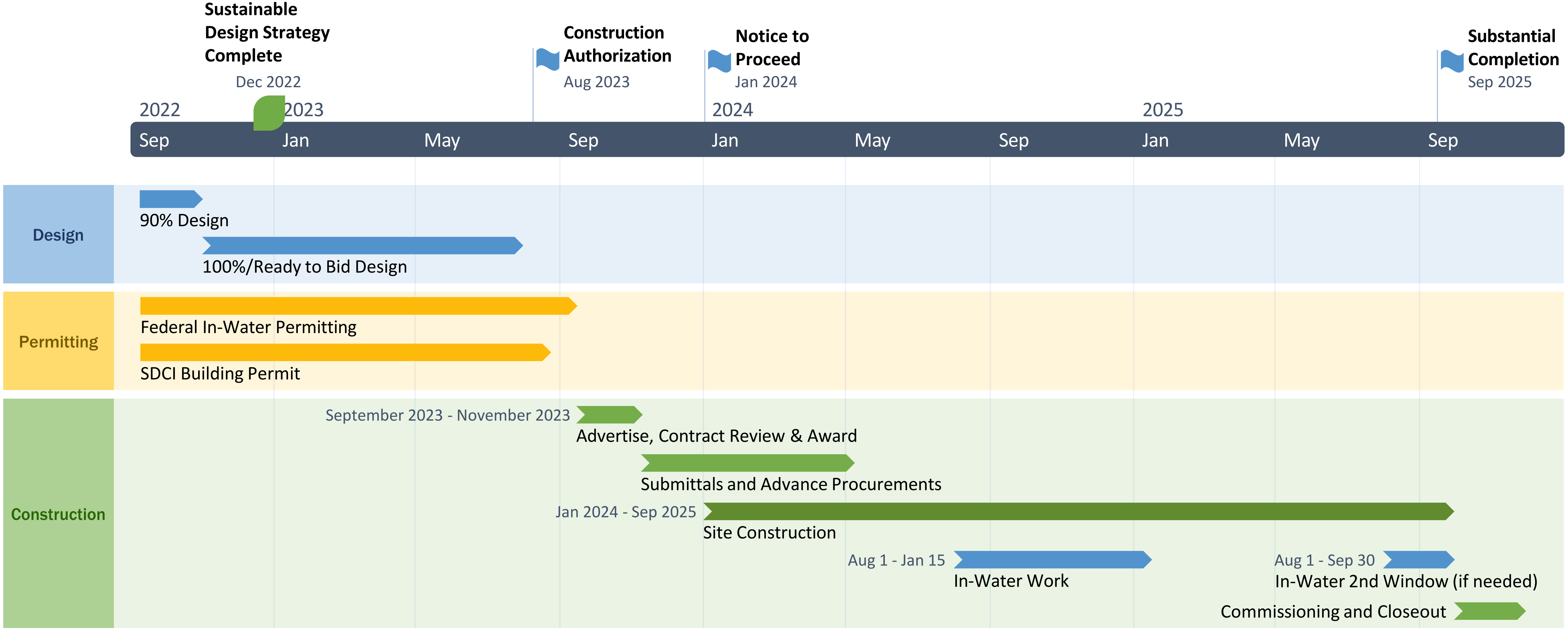
Proposed Pier Replacement



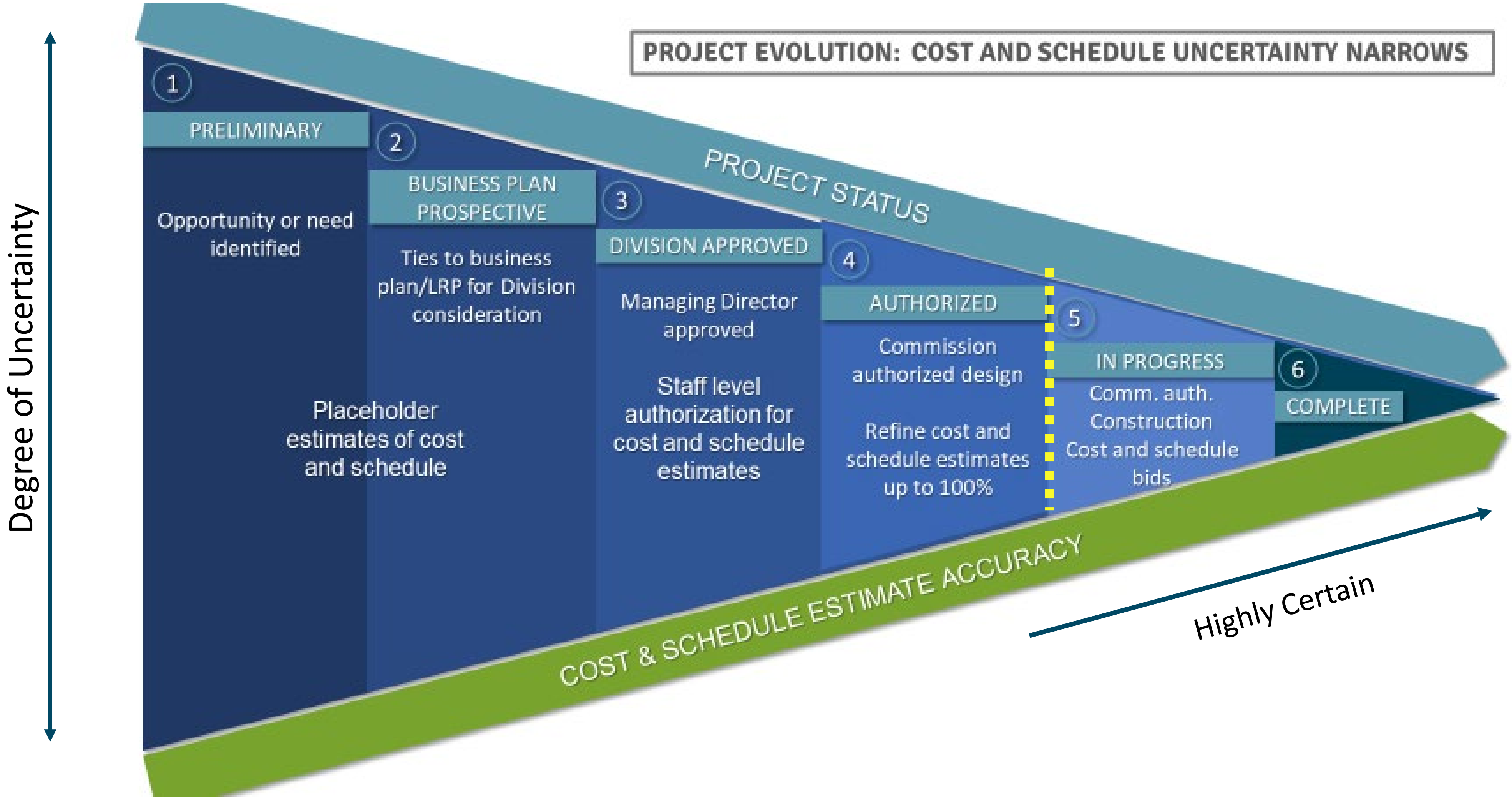
Upland Development & Sustainability

- Replacing/consolidating existing 6 buildings into 2 for tenants and Port with energy efficient HVAC
  - Larger of these building will include solar 40kV PV array sized to cover all electrical needs
- Innovative vessel sanitary sewer pump out to reduce truck traffic
- Sustainable transportation elements include covered bike facilities and additional EV charging stations
- Additional 100K sf of stormwater treatment area
- Project will remove over 2,200 creosote piles and over 10K sf of over water coverage

T91 Berth 6&8 - Schedule



Capital Improvement Plan Status & Certainty



Remaining Project Risks

RISK	DESCRIPTION	PROBABILITY	IMPACT	MITIGATION
Permit Timing	Federal In-Water Permit under review, approvals pending.	High	High	Continued coordination with agencies and tribal partners to agree on review and mitigation terms. Consider Advertise before permit if approval is imminent.
Unforeseen Hazardous materials in building/Site	Industrial site carries risk of contaminated soils and regulated building materials	Low	Low	Regulated material surveys performed on all buildings, soil pre-characterization completed.
Delayed Material Availability	Long lead items may impact installation schedule, especially precast and electrical materials	Low	Med	Bid work as soon as possible to allow for lead time, prioritize submittals for long lead items.
Extended displacement of staff and tenants	Replacement of the buildings required temporary facilities for Port staff and tenants. Schedule delays may increase this.	Med	Med	Build clear milestones into contract documents to minimize staff and tenant displacement
Bids Significantly Over Estimate	Continued volatility and escalation in construction markets, specialized work	Low	High	Carry additional contingency as informed by risk analysis, escalate estimates to mid point of construction.

Authorization Request/Next Steps

Total amount of this request: $71,825,000

Total project budget: $76,000,000

Next Steps:

- 100% design complete, final ready to bid set in development.
- Finalize agency and tribal federal in-water permit review and approval
- Advertise and award major works contract

Questions?

Return to Agenda

COMMISSION
AGENDA MEMORANDUM

ACTION ITEM

Item No. 10e

Date of Meeting August 8, 2023

DATE: June 1, 2023

TO: Stephen P. Metruck, Executive Director

FROM: Mike Tasker, Director, Aviation Maintenance
Jinah Kim, Senior Manager, Aviation Maintenance

SUBJECT: Airport Custodial Services – Zone 1 through 4, Waste Removal Services for Airport Dining and Retail tenants and Commission Initiative Implementation

Amount of this request:	$ 54,300,000.
Total estimated service cost:	$ 149,300,000.

ACTION REQUESTED

Request Commission authorization for the Executive Director to increase the contract value for the existing service contracts for Custodial Services at Seattle-Tacoma International Airport by $54,300,000 for a new total cumulative value of $149,300,000. This commission authorization will also allow the Executive Director to recompete and execute up to two (2) five-year custodial service contracts and add waste removal services for the Airport Dining and Retail (ADR) tenants (through a separate competitive process and separate contract) and add the Commission Public Health and Safety initiative at Seattle-Tacoma International Airport.

EXECUTIVE SUMMARY

In March 2020, the Commission authorized $95,000,000 for Custodial Services at Seattle-Tacoma International Airport's Zones 1-4 through 2026. However, the initial authorization for Custodial Zone 1 -4 was requested before the procurements were completed and the contract pricing from 2020 through 2022 came back significantly higher than the Port expected.

The requested contract value increase of $54,300,000 would support the following essential service contracts.

1. Increase authorization to address additional contract costs through 2026.

2. Request authorization to advertise, award, and execute up to two custodial service contracts in Q3 2023 competitively. The proposed pricing is expected to be higher due to inflation and an 8.66% increase in minimum wage in 2023.

3. Implement Commission Initiative to provide complimentary hygiene products at the airport to enhance Public Health and Safety and Customer Experience.

4. Contract for waste removal services from the ADR tenants to the ramp areas. This will reduce the level of security risks due to the increased number of airport badge issued on the ramp level, also mitigate waste contaminations, and FOD collections, and increase environmental stewardship, efficiency, and customer experience. This request is only for the contracting authority as these costs will be funded by the tenant reimbursement.

Custodial services for Zone 5-International Arrival Facility (IAF) were procured separately from other four zones under a separate Commission Contracting Authority approval; therefore, the requested amount does not include the cost for Zone 5, IAF.

JUSTIFICATION

Approval of this request will allow the Port to procure market value custodial contracts through competitive processes and amend existing contracts for cost increases associated with labor increase, additional products, and other supplemental supplies to support the hygiene service provided to the public. New procurement of service contracts will align the contracting authority with actual costs experienced, will aid the airport in meeting the custodial standards under increasing passenger volume, support the Port's customer experience goals and support economic growth and the women- and minority- business enterprise (WMBE) aspirational goals.

Approval of this request will allow the Port to procure market value waste removal service for ADR tenants in accordance with the Washington State's prevailing wage structure, which will create more jobs, aid the Airport in meeting customer service standards under increasing passenger volume, improve services in accordance with a Continuous Process Improvement (CPI), and provide more opportunities for the women- and minority- business enterprise (WMBE).

Diversity in Contracting

Aviation Maintenance staff is working with the Diversity in Contracting Department regarding setting the women- and minority- business enterprise (WMBE) aspirational goals for contracted work. A 20% WMBE goal has been set by the Diversity in Contracting Department for custodial service contracts, based on that determination we anticipate achieving a similar aspirational goal in the new procurement of the zone RFP and waste removal service RFP.

DETAILS

The facility needs to be clean and well maintained to meet the Port's customer experience expectations in support of the Port's Century Agenda goal to advance as a leading tourism and business gateway of choice on the West Coast.

Starting in January 2018, the Airport transitioned to the performance-based zone model of four contracts covering the then identified four zones at the Airport. The original procurement provided for the four contracts to have a two-year initial contract duration with the opportunity to renew any of the contracts for up to an additional three years in one-year increments. This initial procurement resulted in three prime contractors being awarded the four zone contracts.

In 2020 we received commission authorization for $95M prior to the award of the contracts for services through 2026. After awarding the contracts it was determined that we would need approximately $135M to get through 2026.

Line Item	Zone 1	Zone 2	Zone 3	Zone 4	Total
Base 2-Year Contract Value	12,239,931.93	19,535,942.98	11,792,357.51	6,876,335.00	**50,444,567.42**
Option Year 1	6,659,888.51	10,114,060.08	6,400,131.19	3,611,092.00	26,785,171.78
Option Year 2	7,056,604.74	10,379,250.98	6,769,594.29	3,719,425.00	
Option Year 3	7,472,990.88	10,843,535.18	7,156,256.63	3,831,007.00	
Total all 3 Option Yrs.	**21,189,484.13**	**31,336,846.24**	**20,325,982.11**	**11,161,524.00**	84,013,836.48
Total Contract Value	**33,429,416.06**	**50,872,789.22**	**32,118,339.62**	**18,037,859.00**	**134,458,403.90**
Original Authorization					95,000,000.00

After the four-zone procurement, a fifth zone has been developed to incorporate the facilities generated by the building of the International Arrivals Facility (IAF). Zone 5 service contract was procured and executed in 2021, and the service eventually started in early 2022 when the facility was open. The staff will have an opportunity to procure the Zone 5 service contract with Central Procurement Office (CPO) in 2026.

Since the award in 2020, inflation has increased the cost of custodial services in zones one through four to approximately $149M.

If this authorization request is approved, up to two zone custodial services Request for Proposal (RFP) will be advertised in Q3 2023, awarded, and executed in Q4 2023 for the services to start on 01/01/2024 through a competitive procurement process.

Port staff anticipate incorporating Labor Harmony language into the RFPs for each of these zones and ADR supporting waste removal services. Aviation Maintenance staff has been coordinating with Labor Relations staff and Legal staff on the specific language as each RFP is developed for the custodial services contracts and will coordinate the same effort for ADR waste service contract.

The cost increase to provide public health hygiene products at the airport facilities is estimated at $60,000.00 per year and $300,000.00 for the next 5 years.

Scope of Work

*A*dvertise, award, and execute five-year custodial service contracts in Q3 2023 for the following essential services at Seattle-Tacoma International Airport to enhance customer experience:

(1) Perform competitive RFP process for Custodial services in up to 2 zones covering 1.2 million Square Feet of the Airport for the services begin on January 1st, 2024.
(2) Add Public Health and Safety Commission initiative service, Complimentary Hygiene Products to All.
(3) Establish details to perform competitive RFP process for Waste removal services for Airport Dining and Retail (ADR) tenants; Port teams will work through details with ADR tenants to determine the contract start date.

Schedule

The following schedule represents the key areas and dates for each of the existing zone contracts:

(1) Zone 1's (consisting of Concourses A, B and the South Satellite) custodial two-year contract will expire on December 31, 2023. 3 additional one-year renewal options are available if deemed appropriate to execute. However, the future of the contractor's successful performance is not guaranteed at this time, and the Port may or may not exercise its option to extend another year in 2024. If Airport staff chose not to exercise the option, staff will work with the Central Procurement Office (CPO) to make a request for proposals in 2023. The new 2-base year contract with three 1-year option years will start on January 1, 2024, and end December 31, 2028.
(2) Zone 3's (consisting of Ticketing, Baggage Claim, Curbside, Light Rail Walkway, Ground Transportation customer facing stops, Garage elevators and escalators and Cruise Lot & Lobby), custodial contract terminated February 2023 due to performance issues, and a new contract was executed with another contractor in March 2023 within the Port rights and Central Procurement Office process. However, the short-term contract will end in December 2023, and the staff will work with the Central Procurement Office (CPO) to make a request for proposals in 2023. The new 2-base year contract with three 1-year option years will start on January 1, 2024, and end December 31, 2028.

The table below shows contract start and end year for each zone, however Zone 5, International Arrival Facility (IAF), is not included in the exiting contract authority.

Contract Timeline		Jul - Dec 21	2022	2023	2024	2025	Jan- Jun 26	Jul - Dec 26	2027	2028
Zone 1			Z1	Z1						
Zone 2		Z2					Z2			
Zone 3			Z3	Z3						
New Z3					NEW 5-year contract					
Zone 4				Z4					Z4	
Zone 5			Z5					Z5		

Commission Contracting authorization	2023 Quarter 3
Custodial Svc RFP start	2023 Quarter 3
Service start	2024 Quarter 1
In-use date for Custodial Svc contracts	January 1, 2024
In-use date for ADR waste svc.	TBD

Cost Breakdown This Request

Custodial Z1-4 New RFP Contract price	$54,000,000.
Additional Service Scope – Public Health & Safety	$300,000.
ADR Tenant Waste removal Svc	$0.
Total	$54,300,000.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Advertise, award and execute a new Zone 3 Custodial Service contract only and receive funding for other exiting custodial contracts.

Cost Implications: $47,000,000.

Pros:

(1) This alternative is the lowest cost option to manage custodial contracts.

(2) This alternative allows for the Port to explore and pay a fair market price determined through a competitive process.

Cons:

(1) This alternative could potentially allow underperforming contractors to continue at the airport for another year or more.

(2) This alternative would not satisfy the Port goals or initiatives.

(3) This alternative would eliminate a motivational lever available to the Airport staff to drive performance in a positive direction in terms of service quality.

(4) These alternative delays the next round of competition for at least one and potentially more zones. It would put the Port in risk of paying the contractor above market price due to the lack of competition.

(5) This alternative would not support ADR waste removal service.

This is not the recommended alternative.

Alternative 2 – Advertise, award and execute up to two (2) new 5-year contracts by 2023, receive new funding to fulfil other zone contracts until 2026 and add ADR waste removal service and Commission Public health and safety initiative.

Cost Implications: $54,300,000.00

Pros:

(1) This alternative allows for the Port to explore and pay a fair market price determined through a competitive process.
(2) This alternative provides opportunities to revise the current contract terms with enforcement and incentives to hold the contractor more accountable to meet the Airport standards.
(3) Staggering the RFPs for the new contracts would provide different contract periods, load leveling the workload for Airport and Contractor staff. Four smaller scale transitions over multiple years can be more manageably accomplished. Transitioning all four zones at one time has a high risk of service quality degradation.
(4) This alternative will allow the Port to procure a new contract and amend the existing contracts to capture the cost of providing hygiene products to the traveling public at the airport.
(5) Add a new ADR waste mgmt. contract to enhance customer experience.

Cons:

(1) The alternative brings the complexities of multiple transitions and Contracting Authority requests.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

Cost Estimate/Authorization Summary	Capital	Expense	Total
COST ESTIMATE			
Original estimate		$95,000,000.	$95,000,000.
2020-2023 increase	$0.	$54,300,000.	$54,300,000.
Revised estimate	$0.	$149,300,000.	$149,300,000.
AUTHORIZATION			
Previous authorizations	$0.	$95,000,000.	$95,000,000.
Current request for authorization	$0.	$54,300,000.	$54,300,000.
Total authorizations, including this request	$0.	$149,300,000.	$149,300,000.
Remaining amount to be authorized	$0.	$0.	$0.

Annual Budget Status and Source of Funds

Custodial service costs are included in Aviation Maintenance's annual operating budget. The funding source will be the Airport Development Fund.

Future Revenues and Expenses (Total cost of ownership)

N/A.

ADDITIONAL BACKGROUND

(1) Airport Custodial Services ppt.

ATTACHMENTS TO THIS REQUEST

(1) Graphic of the SEA Zones 1 through 5
(2) Presentation

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

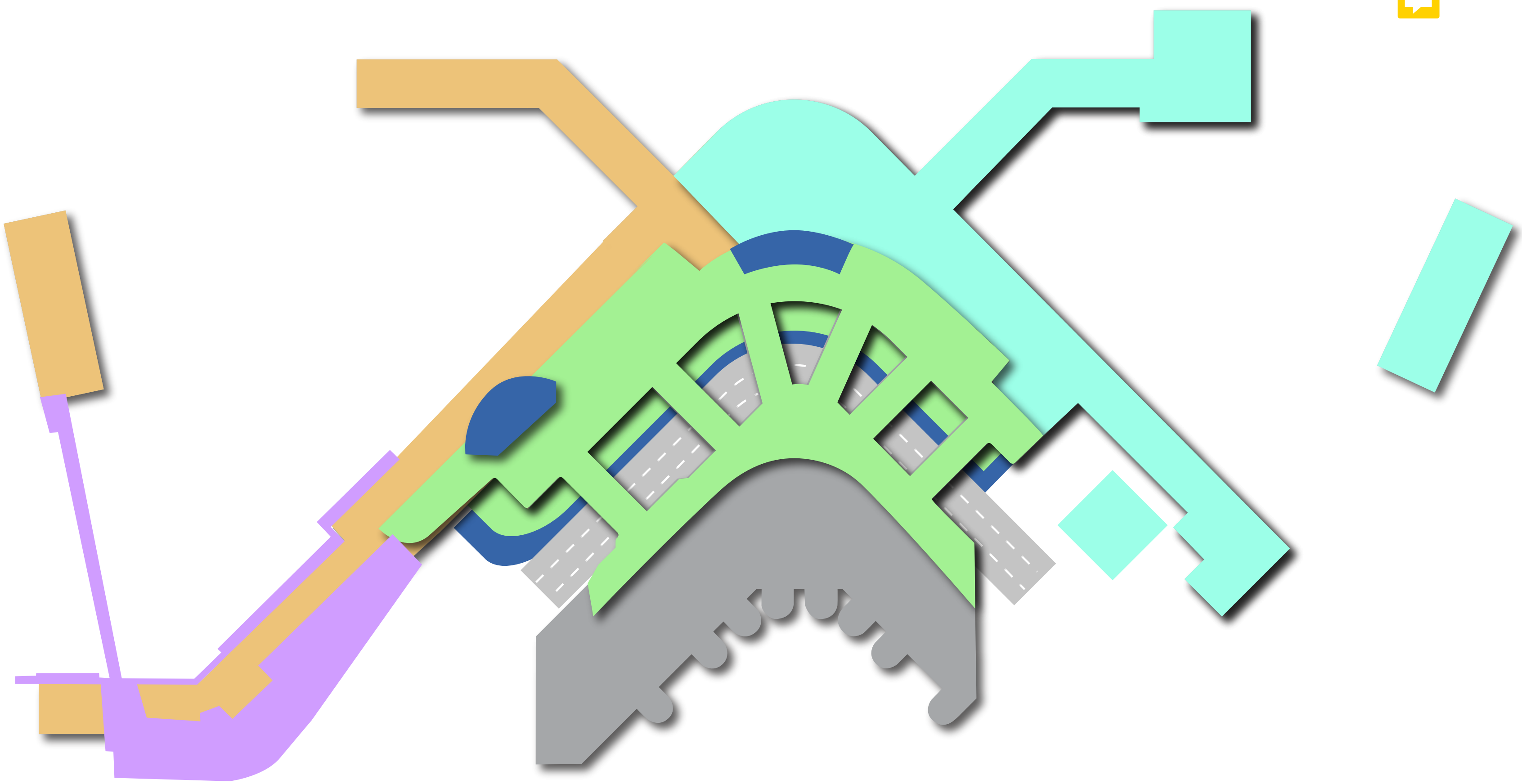
March 24, 2020 – The Commission authorized the Executive Director to execute up to 4 contracts for Zone 1-4 for Seattle-Tacoma International Airport.

June 25, 2019 – The Commission authorized the Executive Director to execute a contract for janitorial services for Zone 5, consisting of the IAF new construction facilities for Seattle-Tacoma International Airport.

September 27, 2016 – The Commission authorized the Chief Executive Officer to execute up to four contracts for janitorial services for Seattle-Tacoma International Airport.

August 23, 2016 – The Commission was briefed "Contract for Janitorial Services at Sea-Tac Airport."

Item No. 10e_attach
Meeting Date: August 8, 2023



Zone 1: Concourse A, Concourse B, and South Satellite

Zone 2: Concourse C, Concourse D, North Satellite, and Central Terminal

Zone 3: AOB Mezzanine, Ticketing, Baggage Claim, Cruise Lobby, Curbside, Garage Elevators, Elevator Lobbies, Escalators and and 3rd Floor Garage Restrooms, North GT Cruise Lot

Zone 4: Baggage Handling, Compactor Sites, Airport Office Bldg., Main Terminal Police and Security, MT Penthouse, Outlying Buildings

Zone 5: Elevated Passenger Walkway and IAF

Airport Custodial Services

Zone 1 through 4,

Waste Removal Services for Airport Dining and Retail tenants,

and Commission Initiative Implementation

Action Requested

- Request Commission authorization for the Executive Director to increase the contract value for the existing service contracts for Custodial Services at Seattle-Tacoma International Airport by $54,300,000 for a new total cumulative value of $149,300,000.
- This commission authorization will also allow the Executive Director to recompete and execute up to two (2) five-year custodial service contracts and a separate competitive waste removal service contract for the Airport Dining and Retail (ADR) tenants and add the Commission Public Health and Safety initiative at Seattle-Tacoma International Airport.

Request 1 - Increase Authorization for Additional Funding

- Request to increase the contract value for the existing service contracts to carry through 2026

Service Contract Pricing Table from 2021

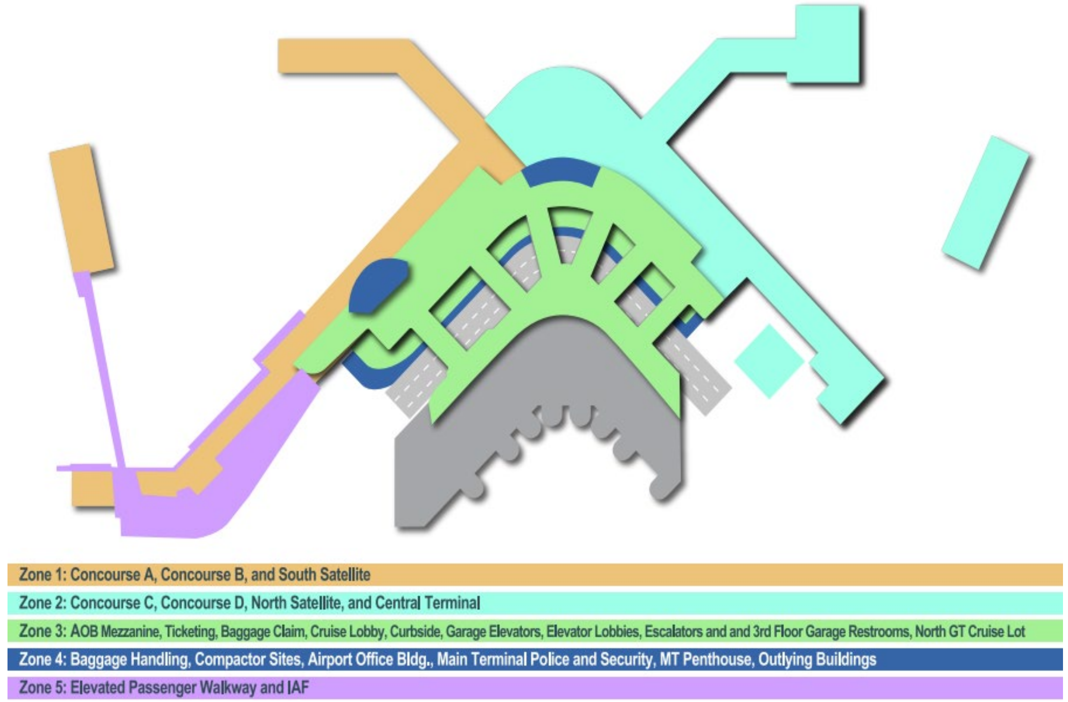
Line Item	Zone 1	Zone 2	Zone 3	Zone 4	**Total**
Base 2-Year Contract Value	12,239,931.93	19,535,942.98	11,792,357.51	6,876,335.00	**50,444,567.42**
Option Year 1	6,659,888.51	10,114,060.08	6,400,131.19	3,611,092.00	26,785,171.78
Option Year 2	7,056,604.74	10,379,250.98	6,769,594.29	3,719,425.00	
Option Year 3	7,472,990.88	10,843,535.18	7,156,256.63	3,831,007.00	
Total all 3 Option Yrs.	**21,189,484.13**	**31,336,846.24**	**20,325,982.11**	**11,161,524.00**	84,013,836.48
Total Contract Value	**33,429,416.06**	**50,872,789.22**	**32,118,339.62**	**18,037,859.00**	**134,458,403.90**
Original Authorization					95,000,000.00

Request 1 - Increase Authorization for Additional Funding

Custodial Service Improvement Background History

- To enhance Customer Experience and Quality of Service
- To boost competition among contractors
- Labor Harmony and increased W-MBE participations
- Created Jobs and increased Living Wages
- From 165 Contracted FTE in 2017 to 320 Contracted FTE in 2023
- Skytrax Cleanest Airport North America 2022

Custodial Zone Map



Request 2 - Recompete up to two custodial service contracts

- Request for Commission Approval for recompeting up to 2 zone contracts.
- Contract Duration and Schedule

Contract Timeline		Jul - Dec 21	2022	2023	2024	2025	Jan- Jun 26	Jul - Dec 26	2027	2028
Zone 1			Z1	Z1						
Zone 2		Z2					Z2			
Zone 3			Z3	Z3						
New Z3					NEW 5-year contract					
Zone 4				Z4					Z4	
Zone 5			Z5					Z5		

- 2 Year-Base Contracts with Three (3) One (1) Year Optional – Total up to 5 Years
- Performance based Contracts
- Zone 3 Temp Contract ends Dec. 2023

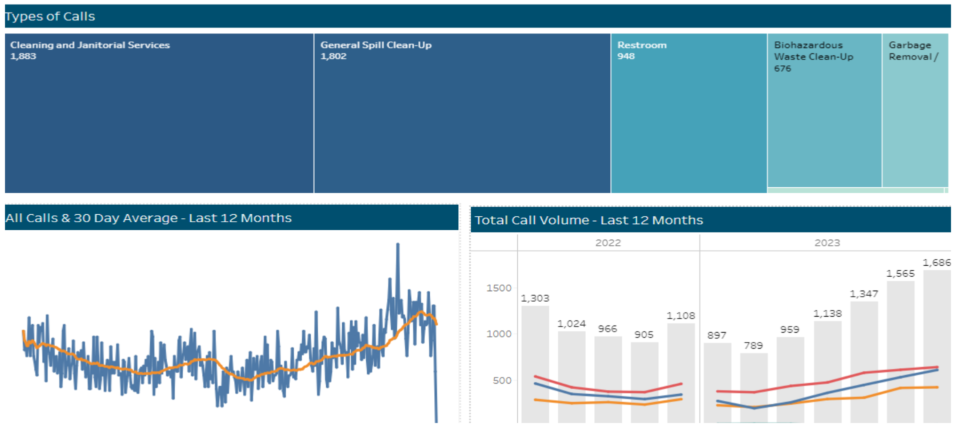
Request 2 - Recompete up to two custodial service contracts

How Quality Assurance (QA) metrics work

- Emergent call via Maximo
  - Measure response time and completion
  - Escalation notifications
  - Optiqo and Elerts (SeeSay) calls captured into Maximo Data
- Veoci audits by AV-OPS Airport Duty Managers and AV-Maintenance Facility Service Contract Mgmt. QA Specialists
  - 24hr. resolution escalation notifications
- Incentivized Contracts if Quarterly Veoci scores >80%

❖ Maximo Compliance:

- Call Volume, Call Compliance by %, Types of Call, Call Peak Hours, Detail with Work Order Status, and Performance Comparison by Zone

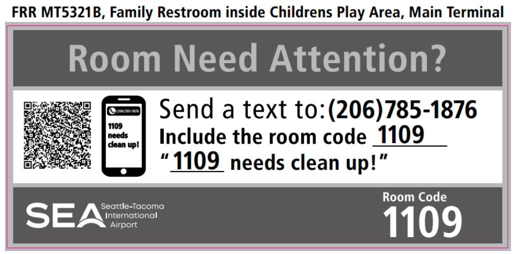


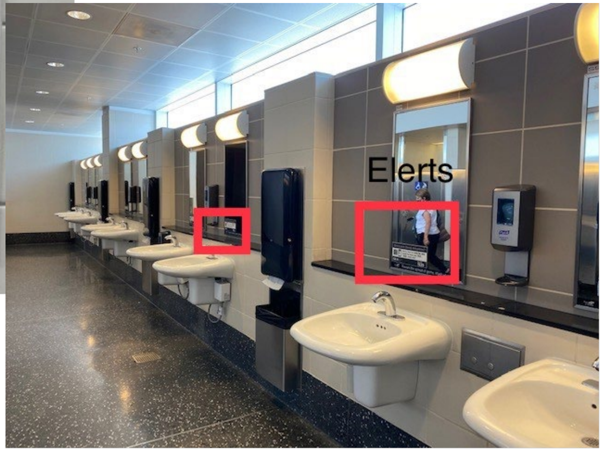
❖ Veoci Audits:

- Average Scores per Area, Highest and Lowest Scoring Gate Hold Room and RR per Concourse

Request 2 - Recompete up to two custodial service contracts

- Optiqo at each RR entrance
  - Time Stamp-last cleaned
  - QR code for alerts and feedback
- Elerts (SeeSay)
  - Text-A-Tip/QR code on each RR mirror
- Airport Service Quality (ASQ) Scores conducted by Airports Council International (ACI)
  - Quarterly survey
- Skytrax
  - Best Airport N. America 2022 & 2023
  - Cleanest N. America Airport 2022 & 2nd 2023





Request 3 – Funding for Commission Public Health and Safety Initiative

- Request to fund hygiene products for the public at the airport 2024
- Timeline of Implementation
  - Port public facing 2024
  - Port locations 3Q-4Q 2023

Request 4 – Contracting Authority ADR Waste Removal Svc.

- Need for waste removal service contract from ADR tenants to the ramp waste collection sites.
  - To reduce level of security risks due to increased number of airport badge issued on the ramp level.
  - To mitigate waste contaminations, and FOD collections.
  - To increase environmental stewardship, efficiency, and customer experience.
- Request for the contracting authority only as the costs will be funded by the tenant reimbursement.

Q & A

Thank You!

Return to Agenda

Port of Seattle

COMMISSION
AGENDA MEMORANDUM

ACTION ITEM

	Item No.	10f
	Date of Meeting	August 8, 2023

DATE: August 8, 2023

TO: Stephen P. Metruck, Executive Director

FROM: Dave McFadden, Managing Director, Economic Development
Kyra Lise, Director of Real Estate Development
Kelly Purnell, Project Manager, Waterfront Project Management

SUBJECT: Fishermen's Terminal Redevelopment Program - Maritime Innovation Center (CIP #C801084) and Site Improvements (CIP #C801211)

Amount of this request:	$ 27,415,000
Total estimated project cost:	$ 32,600,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to advertise, award, and execute a major works construction contract utilizing a Project Labor Agreement to enable construction of a package of improvements to the Fishermen's Terminal including 1) the renovation of the Ship Supply Building into the Maritime Innovation Center and 2) a set of public space improvements to Fishermen's Terminal which include landscape enhancements, wayfinding signage and interpretative signage. Both projects include art projects supported by the Port's 1% for Art program. Request for the Maritime Innovation Center is $25,750,415. Request for the Site Improvements is $1,665,000. Requested funds include funds allocated for the art project components of both projects representing $320,500. Total request for this action will be $27,415,000 for a project total authorization of $32,600,000.

EXECUTIVE SUMMARY

Staff is requesting authorization to renovate and transform the historic Seattle Ship Supply Building into a cutting-edge, Living Building Challenge (LBC) certified Maritime Innovation Center (MInC). The building will serve as a beacon for innovation within the maritime industry. It will bring in partners, students and innovators from academia, business, government agencies and the community together to collaborate around maritime problems and opportunities. The MInC will ultimately help support maritime industry vitality and sustainability. (It is intended that Maritime Blue will be the tenant/operator of the MInC under a lease agreement with the Port that is not part of this authorization. The Port's Asset Management team is currently negotiating with Maritime Blue the terms of that lease.)

The second project is a set of public space site improvements including new wayfinding and monument signage; interpretative signage with newly developed content intended to inform the public about the history, cultural relevance, and heritage of Fishermen's Terminal; and new landscape and public space hardscape improvements intended to enhance the visitor experience at FT. Each of the two projects include a 1% for Art investment yielding at least three new art works commissioned by the Port for the facility.

JUSTIFICATION

In 2015, the Port of Seattle Commission directed staff to develop a long-term strategic plan for Fishermen's Terminal (FT). The Port subsequently worked with VIA architecture to develop this plan, which utilized extensive engagement with internal and external stakeholders at FT. The FT strategic plan, produced in 2016, provided a context for determining a series of planned investments in the property to meet the key strategic objective outlined in the plan: to "leverage the maritime and fishing activities and industries, in alignment with Century Agenda goals, *to prepare the uplands portion of Fishermen's Terminal for growth."*

Broadly stated, this package of projects and capital investments makes good on strategic objectives outlined in the FT Strategic Plan and primes Fishermen's Terminal for future growth with success measured against the following strategic outcomes:

- Continue to grow the economic value of the fishing and maritime cluster including the number of local jobs and business revenue.
- Improve overall financial returns to allow us to fulfill the Port's commitment to the industry and taxpayers.
- Prioritize uses that support the commercial fishing industry, with a focus on anchoring the North Pacific Fishing fleet.
- Prioritize development that maximizes utilization of facility assets.
- Recognize and enhance Fishermen's Terminal as a living community landmark.

Maritime Innovation Center (MInC)

As part of efforts to redevelop Fishermen's Terminal, staff has worked over the past six years with the maritime community to develop a Maritime Innovation Center that will:

- Be a focal point for maritime innovation.
- Support investment in ***Blue Economy*** start-ups and new technologies.
- Offer an incubator and accelerator environment.
- Drive equitable economic development.
- Support workforce development and maritime career exploration.

The Center can help the region's maritime industry adopt advanced technologies and stimulate innovative entrepreneurship. Staff has visited maritime innovation centers like the Ocean House in Iceland or Alta Sea at the Port of Los Angeles and seen how these facilities are helping sustain important fishing and maritime industries. Developing the Port of Seattle MInC can foster similar impacts. This is a significant opportunity for the region and Washington State:

- The MInC can support maritime industry competitiveness and position it for new opportunities. The global "Ocean Economy" is growing. It is valued on a conservative basis by the Organization for Economic Cooperation and Development (OECD) at $1.5 trillion (2010) and growing to $3.0 trillion by 2030.
- The Center can tap into our region's world class entrepreneurial ecosystem and channel its energy and technologies to benefit the maritime industry.
- Public and private partners are interested in the MInC as focal point to help advance: 1) electrification; 2) ship and vessel design innovation; 3) marine renewables; and 4) seafood product development.

The MInC also builds upon a successful partnership we have forged with Maritime Blue (MB). The Port and MB have built a successful maritime accelerator program and are now instituting a new incubator program at Fishermen's Terminal. The Port also has a significant partnership with MB to advance maritime career exploration and development. These key initiatives will continue to unfold over the next few years, and they can further scale when MB expands operations into the MInC.

Developing the MInC aligns with and advances the Port's Century Agenda. Developing a Living Building Challenge (LBC) certified facility demonstrates the Port's commitment to be *the greenest and most energy-efficient port in North America*. The MInC will also host work and collaborations focused on green energy development and sustainability.

The MInC also demonstrates the Port's commitment to *responsibly invest in the economic growth of the region and all its communities*. The facility will promote industrial land use and investment. It will also support career connected learning, workforce development and women- and minority-owned business development.

Signage/Landscaping Improvements

The second project is a set of public space improvements in and around the vicinity of the Maritime Innovation Center which include wayfinding and site signage, interpretative signage and landscaping which connects to our goal to *become a model for equity, diversity, and inclusion*. This package of improvements enhances the public experience at Fishermen's Terminal that was a priority of the FT Strategic Plan. Our design works to balance our objectives of inviting the public to explore FT and understand the value of the working waterfront by clearly separating the public from the operational needs of the Terminal.

Our new interpretative signage content was developed by public historian Sharon Boswell to work with Native consultant Headwater People and representatives from the Port of Seattle's Office of Equity, Diversity, and Inclusion (OEDI). These representatives engaged stakeholders from various institutions across Seattle whose role is aligned with developing public histories (National Nordic Museum, MOHI, Burke Museum) as well as representatives from the local fisher community to develop the story of FT featuring a wider array of voices, communities, and key issues that have influenced the history of FT. The new historic content updates and contextualizes the facility's historic role in the region through the eyes and stories of the individuals and communities of FT. Overall, the interpretative signage program is designed to do the following:

- Improve public literacy about the maritime and fishing industries
- Integrate Native history and context to the story of FT
- Explore the communities who have contributed to the history of FT
- Better understand the ecological and industrial context of FT
- Provide clear and safe pedestrian navigation of the public on the working waterfront
- Increase exposure to the public of retail and dining establishments

Project Labor Agreement:
There is a project labor agreement (PLA) for the MInC project. The PLA for this project requires an apprenticeship of 15% of total labor hours. Of that, 21% will be People of Color, and 12% will be women. Additionally, this PLA has a priority hire requirement of 20%.

Diversity in Contracting

The project has met the 20% of design contracts requirement, and the Project Labor Agreement (PLA) for this project exceeds the LBC requirement for workforce development. In addition to meeting the LBC imperative, the Port Diversity in Contracting Department has established a 12% WMBE goal for the MInC and Public Site Improvements project.

Sustainability at the MInC

The Living Building Challenge is comprised of seven performance areas, or "Petals": Materials, Site, Water, Energy, Health, Equity, and Beauty. The LBC now has ten Core Imperatives that address the fundamental tenets of each Petal; all the Core Imperatives are required for Petal Certification. Inclusion is a new imperative addressing diversity in hiring and access to training compliance. This establishes the requirement to include diverse stakeholders from vulnerable or disadvantaged populations in the design, construction, operations and maintenance phases at the following levels:

- 20% of design contract and/or construction contracts, and 10% of maintenance contracts must be with JUST organizations that meet required levels for Diversity category, or are registered Minority, Women, or Disadvantaged Business Enterprises (MWDBE) organizations, or international equivalent.

- Workforce development/training/community benefits agreements, registered apprentice programs, and similar programs are employed for 10% of the General Contractor's project contracts and/or maintenance contracts.

This imperative may be also satisfied through a donation to appropriate groups that meet the intent.

Meeting this imperative supports the Port of Seattle's aspirational goal to triple the number of WMBE firms that contract with the Port and increase the percentage of dollars spent on WMBE contracts to 15 percent within 5 years of program implementation of the Diversity in Contracting Program.

DETAILS

Scope of Work

Built around 1918, the Seattle Ship Supply Building (Maritime Innovation Center) is one of the oldest structures on the Fishermen's Terminal site. The original building's heavy timber structure is a classical basilica form with a central two-story nave and gable roof, flanked by two side shed structures. At over 45 feet at the top of the gable, Seattle Ship Supply is the tallest existing building on the Fishermen's Terminal site and is prominently visible from the Ballard Bridge. The existing building suffers from years of ad hoc modifications and needs substantial improvements to meet current building codes.

The Port recognizes the potential to honor the history of Fishermen's Terminal by restoring and enhancing the original structure and providing spaces that support the next generation inventions that drive the competitiveness of Washington State's Blue Economy. The building once renovated will provide approximately 15,700 SF of light industrial spaces, meeting rooms, and classrooms that will bring together leaders from education, industry, and government to address both challenges and opportunities within the maritime cluster.

The following scopes of work will be completed:

Maritime Innovation Center (MInC):

The MInC will be an incubator space that supports and drives innovation in the maritime sector at Fishermen's Terminal in Seattle through collaborative research and enterprise development support services, operated by Maritime Blue, a non-profit partner of the Port. Once constructed the MInC will provide light industrial spaces, office, meeting rooms, research and development, as well as classrooms and collaboration space that will bring together leaders within the maritime cluster. The alteration of the historic structure will transform the building in many ways with an all-new exterior envelope, seismic upgrades, building systems, and leading-edge sustainability features in line with the Port of Seattle's goal to be the greenest, most energy efficient Port in North America.

The following work will be completed:

- Hazardous materials abatement for lead paint, asbestos, and silica that is so prolific in early twentieth century construction will be completed by Port Construction Services in advance of the general contractor breaking ground.
- Demolition and renovation of the "core and shell" of the building, meaning all existing siding, roofing, utilities, and internal infrastructure will be removed, while preserving the bulk of the original timber framing.

- The building will be jacked and cribbed and temporarily relocated to the adjacent south parking lot to install a new driven-pile deep foundation with grade beams and pile caps.
- Renovated and new core and shell including preserving the rare and valuable original old-growth timber framing, reinforced with modern steel framing.
- Salvage of existing old-growth timber flooring and some of the existing beams that will not be used for the framing, will be restored and used for flooring, benches, and other building aesthetic components.

Sustainability Details

With the goal of being "the greenest and most energy-efficient port in North America" the Port of Seattle has set ambitious but achievable targets in energy efficiency, stormwater management and emissions reduction. To meet these goals while setting a new standard of environmentally sustainable development for ports around the world, Fishermen's Terminal is pursuing the world's most rigorous green building certification – The Living Building Challenge.

A holistic and performance-based rating system, the LBC requires projects create regenerative buildings that address site, water, energy, materials and even equity related challenges. Certification is only awarded once a building has proven its net positive energy and water performance after a year's worth of building operations.

Below are just some of sustainable features of The Fishermen's Terminal project.

To achieve net positive energy and reduce emissions:

- On-site photovoltaic energy production.
- No combustion, all-electric building operation to support greenhouse gas reduction (ground source heat pump).
- Battery backup system to add resiliency for facility operations.
- Electric vehicle charging stations, bike parking and shower facilities.

To demonstrate the commitment to restoring water quality and improving aquatic life on industrial property:

- On-site stormwater treatment and detention
- Rainwater catchment for irrigation, toilet flushing and potable water use
- On-site grey water and black water treatment

To improve the health and wellbeing of our community:

- Daylighting and natural ventilation to reduce energy demand and provide a healthier interior environment.
- No "red list" materials will be used – significant reduction in chemicals of concern.
- Biophilic design that incorporates strategies to enhance the human/nature connection and reinforces the connection to place.
- Community education and outreach

- Urban agriculture

To reduce emissions and build toward the circular economy:

- Reclaimed and FSC-certified wood regional materials.
- Landfill waste diversion
- Equitable and diverse workforce

Public Site Improvements:

The Vision for Fishermen's Terminal included in the FT Strategic Plan is to create a community landmark that supports the maritime industry by welcoming the general public to the industrial working waterfront. The general public site improvements planned are aimed at supporting such vision by improving safety for both visitors and industry while creating engaging and educational storytelling and wayfinding signage for the general public that describes the legacy of FT and the importance of the maritime industry in the region.

The FT Site Improvements include:

- Providing clarity for vehicular, bike and pedestrian routes and access with improved wayfinding signage and branding
- Electrical lighting upgrades
- Low maintenance landscaping
- Interpretive signage
- Provisions for parking and loading to accommodate future needs
- These site improvements will link the remodeled MInC to the central commercial core of Fishermen's Terminal primarily comprised of the Fishermen's Center Building (C-15 Building), and the parking areas in between them.

1% for Art

Two contracts have been executed to commission original works of Art for the MInC.

- Ty Juvinel – A local Coast Salish carver, Cultural preservationist, and artist. Ty has submitted a proposal for a 12-foot laser cut aluminum sculpture depicting Coast Salish traditional purse seining.
- Shogo Ota – A Seattle based graphic designer and artist specializing in murals, event posters and custom illustrations. Shogo has submitted a proposal for a large-scale mural depicting salmon migration that will be located on the west side of Net Shed 3, immediately adjacent to the MInC.

An RFQ for the Public Site Improvements Art has been developed. This will be an artist invitational, and the finalist will be selected by a diverse panel of Port staff and Seattle art community members.

Tenancy

The MInC is proposed to be tenanted by the Maritime Blue Accelerator project and other relatively small anchor tenants associated with Maritime Blues program not yet identified. The master tenant shall run the MInC as a business incubator, complete with services and support for an ongoing set of cohorts of maritime focused enterprises. Subtenants may also be allowed under the master tenant contract. Selection of the master tenant will be timed in coordination with the construction timetable for the MInC such that occupancy can begin with the issuance of an Occupancy Permit by the City of Seattle.

Risk Management

Fishermen's Terminal, like much of Port-owned waterfront properties, was built on poor quality fill soils. The soil conditions at the location of the Seattle Ship Supply building will require a new, deep driven-pile foundation. Additionally, current land use code prohibits building "new" buildings within the shoreline. The project is within the shoreline. The building cannot be completely disassembled to install the new foundation and then reassembled as to do so runs the risk of being considered "new" build per code. Therefore, it is likely that the building will need to be jacked and cribbed, and temporarily relocated in its entirety into the adjacent south parking lot, a significant risk which must be carefully approached to ensure success.

These conditions, along with the inherent complexity of renovating a 100+ year-old timber frame building, and incorporating all the diverse FT stakeholder inputs, carries more risk than a typical new construction building project. To address the various risks associated with this project, a robust risk analysis model was developed by a project controls and risk management consultant to identify, quantify, and plan for risk management and mitigation before, during and after construction. Risk analysis workshops were held to engage all the project subject matter experts to review the potential risk probabilities for a suite of identified issues; the first workshop was held during design, and the second workshop focused on construction. The results of the risk model inform the team on how the realization of these risks, and potential opportunities, could affect the project from a cost and schedule perspective.

The results of the first risk assessment at 60% design led the project team to conduct the following additional site validation studies.

- Geotechnical environmental site analysis
- Soil conductivity testing for ground source heat pump wells
- Foundation alternatives study
- Constructability study (construction means and methods)

The second risk assessment at 100% design has informed the project team largely on the construction risks.

In addition to the risk workshops, two contractor information sessions, including one-on-one sessions with prospective general contractors, were held in Q1 2022 and Q2 2023 to solicit feedback on the project documents and expected construction approach options. The comments that were received reinforced known risks, and identified additional risks that were then added to the risk model.

Overall, the 60% risk assessment identified sixty (60) risks. Eleven (11) more were added during the 100% risk assessment; however, due to the Port team's due diligence to mitigate many of the risks between 60% and 100% design, twenty-two (22) risks were either closed, absorbed into the estimate, or sufficiently managed during the 100% risk assessment, bringing the active risks to forty-nine (49).

The top ten (10) remaining risks are listed below in order of probability and impact. Many of these risks have now been further addressed through additional mitigation measures to either accept the risk or incorporate them into the overall project estimate. Some of the most critical mitigation measures are described below.

1. General Contactor's Living Building Challenge experience
2. Safety and Security – theft and break-ins
3. Living Building Challenge requirements for materials
4. Permit timing
5. Jacking and cribbing the building
6. Photovoltaic system adequacy
7. Tie-in to existing equipment/systems
8. Unforeseen hazardous materials in building
9. Lift station controls mod schedule conflict
10. Bids significantly over estimate

While switching to an alternate project delivery (General Contractor/Contract Management or GC/CM) was considered when the project reached 60%, the impact to the schedule was deemed too great and the project continued with a Design-Bid-Build delivery. However, significant risks remain due to the complexity of the project, including poor soils, need to temporarily relocate the building, and general unknown site conditions despite the many studies that have been conducted. The selected delivery method did not allow for a contractor to be involved in details of the development of the project construction means and methods and site validation efforts, creating gaps in information that would otherwise assuage a contractor's risk tolerance. To mitigate these risks, the project team has determined that 10% of additional major construction contingency funds should be carried above and beyond the typical 15%.

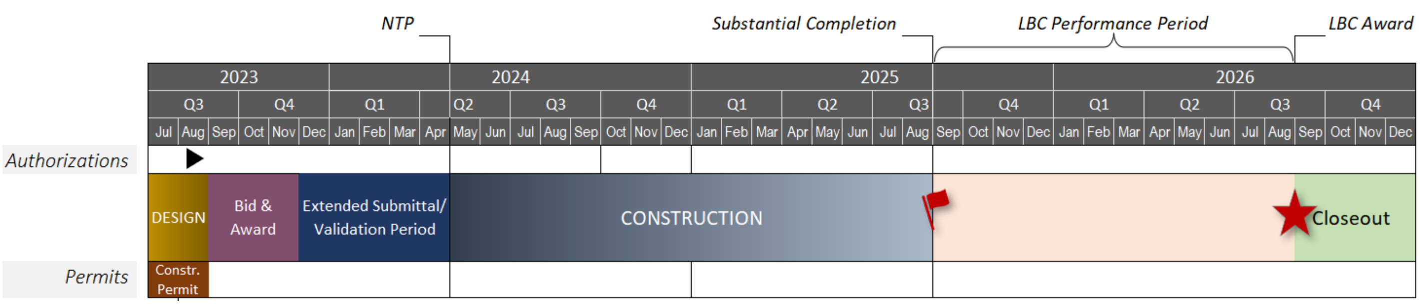
In addition, allowances (funding for specific scopes of work identified in the bid form at a pre-determined dollar value) will be set up so that the prospective bidders know there is money available to verify known-unknown risks. These allowances are meant to minimize bid inflation because of unknown site issues. These funds may or may not be fully utilized pending what is found during the construction process. Unused funds will revert to the Port.

Lastly, enhanced construction site security was identified as need to mitigate a significant, and highly probable risk of theft and break-ins. The Port has an on-call security guard contract that will be utilized to provide a dedicated security guard on-site during all non-construction hours. The cost for this has been absorbed into the construction estimate.

In addition to the risk mitigation measures described above, the Port has completed the following scopes of work since last coming before the Commission in 2022 for the MInC:

- Completed a structural redesign necessary to correct a design error found during the first cycle of construction permit review.
- Completed 100% design and completed an updated project cost estimate based on the 100% building designs and preferred sustainability options.
- Completed a draft content framework for the interpretive signage program with collaboration from a full panel of internal and external stakeholder reviewers.
- Completed the conceptual design for two commissioned art installations funded by 1% for Art.
- Completed second risk assessment workshop at 100% design that built upon the 60% design risk assessment workshop completed in 2021.

Schedule



Activity:

Commission initial design authorization	2016 Q4
Design start	2017 Q1
Commission additional design funding authorizations	2019 Q1, 2019 Q2, 2021 Q2, 2022 Q4
Commission authorization for conditional construction for execution of $4.87M Dept. or Commerce grant	2020 Q4
Commission construction authorization	2023 Q3
Construction start	2024 Q2

In-use date	2025 Q4

Cost Breakdown	This Request	Total Project
Design (including 1% for Art)		
MInC	$0	$3,650,000
Public Site Improvements	$0	$1,535,000
Construction (including 1% for Art)		
MInC*	$25,750,000	$25,750,000
Public Site Improvements	$1,665,000	$1,665,000
Total	$27,415,0000	$ 32,600,0000

*does not account for additional $5M Dept. of Commerce state grant #19-92201-007

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Do nothing: pass on Authorization for Construction

Cost Implications:
Loss of $5,000,000 Washington State Department of Commerce grant funding towards completion of Maritime Innovation Center project. Loss of $5,000,000 sunk costs from design and permitting.

Pros:
(1) Retains Port capital for other priority projects and financial initiatives.
(2) Avoids temporary construction impacts to existing fishing and upland tenant business operations.

Cons:
(1) Missed opportunity to implement FT Long-Term Strategic Plan objectives of supporting fishing and maritime clusters as the sector begins to recover from the recession caused by the COVID-19 pandemic.
(2) Loss of $5 million grant funds from Washington State Department of Commerce towards the construction of the MInC.
(3) Risk of not being able to extend the Master Use Permit for another year, resulting in significant delays and rework to re-permit the project.
(4) Missed opportunity for partnering with Washington Maritime Blue in creating FT based hub for regional innovation initiative and achieve Port objectives of advancing maritime industry through innovation and modernization.
(5) Missed opportunity to enhance public awareness and enjoyment of Fishermen's Terminal.

This is NOT the recommended alternative.

Alternative 2 – Postpone authorization for construction to a later date.

Pros:
(1) Retains Port capital for other priority projects and financial initiatives.

(2) Enables factoring of more exact economic condition information into project approval decision.
(3) Delays temporary construction impacts to existing fishing and upland tenant business operations.

Cons:
(1) Risk of not being able to extend the Master Use Permit for another year, resulting in significant delays and rework to re-permit the project.
(2) Likely higher cost of completing construction bid documents due to delay.
(3) Potential missed opportunity to capitalize on market and implement FT Long-Term Strategic Plan objectives of supporting fishing and maritime clusters as the sector begins to recover from the recession caused by the COVID-19 pandemic.
(4) Likely loss of $5 million grant funds from Washington State Department of Commerce towards the construction of the MInC.
(5) Likely loss of Shoreline Substantial Development permit due to expiration and inability to extend per Washington Administrative Code requirements.
(6) Potential missed opportunity for partnering with Washington Maritime Blue in creating FT based hub for regional innovation initiative and achieve Port objectives of advancing maritime industry through innovation and modernization.
(7) Potential missed opportunity to capitalize on market and to enhance public awareness and enjoyment of Fishermen's Terminal.

This is not the recommended alternative.

Alternative 3 – Approve construction funding to complete proposed MInC and Public Site Improvements

Pros:
(1) Implementation of FT Long-Term Strategic Plan objectives of supporting fishing and maritime clusters as well as improving long-term financial viability of FT.
(2) Creation of FT based hub, in financial partnership with the State of Washington, for regional innovation initiative and achieve Port objectives of advancing maritime industry through innovation and modernization.
(3) Addition of major maritime business tenant(s) and needed light industrial space within the Ballard Interbay area.
(4) Redevelopment of existing vacant and dilapidated facility areas and make an architectural statement at site entrance.
(5) Enhancement of public awareness and enjoyment of Fishermen's Terminal.
(6) Support the creation of many new jobs in the maritime/manufacturing sector.

Cons:
(1) Requires major Port investment of funds.
(2) Creates temporary construction impacts to existing fishing and tenant business operations.

FINANCIAL IMPLICATIONS

Cost Estimate/Authorization Summary	Capital	Expense	Total
COST ESTIMATE			
Previous Estimate (including 1% for Art)			
MInC Building	$26,400,000	$0	$26,400,000
Site Improvements	$3,20,000	$0	$3,203,000
Current Change (including 1% for Art)			
MInC Building	$3,000,000	$0	$3,000,000
Site Improvements	($3,000)	$0	($3,000)
Revised estimate (including 1% for Art)			
MInC Building	$29,400,000	$0	$29,400,000
Site Improvements	$3,200,000	$0	$3,200,000
AUTHORIZATION			
Previous authorizations			
MInC Building	$3,650,000	$0	$3,650,000
Site Improvements	$1,535,505	$0	$1,535,505
Current request for authorization (including 1% for Art)			
MInC Building	$25,750,000	$0	$25,750,000
Site Improvements	$1,665,000	$0	$1,665,000
Total authorizations, including this request	$29,400,000	$0	$29,400,000
MInC Building	$3,200,000	$0	$3,200,000
Site Improvements			
Remaining amount to be authorized			
MInC Building	$0	$0	$0
Site Improvements	$0	$0	$0

Annual Budget Status and Source of Funds

The MInC project was included in the 2023 Plan of Finance under C801084 FT Maritime Innovation Center with a total estimated project cost of $25,060,000. The Public Site Improvements project was included in the 2023 Plan of Finance under C801211 FT Site Improvements with a total estimated project cost of $3,487,000. Both projects have been included with updated cost estimates in the draft 2024 Capital Plan currently in development.

Both projects will be funded by the Tax Levy. The MInC has received a $5 million contribution towards construction from the State of Washington's Department of Commerce.

Financial Analysis and Summary

Project cost for analysis	$27,600,000 (excludes $5 million state contribution)
Business Unit (BU)	Maritime Portfolio Management
Effect on business performance (NOI after depreciation)	Upon full occupancy, the innovation center is expected to generate incremental revenue of approximately $550K per year. A more accurate income forecast will be available upon execution of future lease/operating agreement(s). Together, both projects will increase annual depreciation by approximately $650K.
IRR/NPV (if relevant)	NPV (approx.): ($15,000,000) IRR: N/A
CPE Impact	N/A

ADDITIONAL BACKGROUND

The Living Building Challenge:

The MInC and Public Site Improvements project will achieve what only a handful of projects have done to date through adoption of the Living Building Challenge. The LBC consists of seven performance categories, or "Petals": Place, Water, Energy, Health + Happiness, Materials, Equity and Beauty. Each of these petals requires an intensive and intentional design, skilled construction, and a 12-month maintenance and data collection period to prove that all the innovative sustainable systems are working properly and achieving maximum efficiency to obtain final LBC certification. LBC excludes all "Red List" chemicals in the materials used, requires salvage of wood materials, enhances the health of the community through equity, education, aesthetics, clean air and water, and access to public amenities.

For a complete description of the Living Building Challenge and its imperatives, please see Attachment 2.

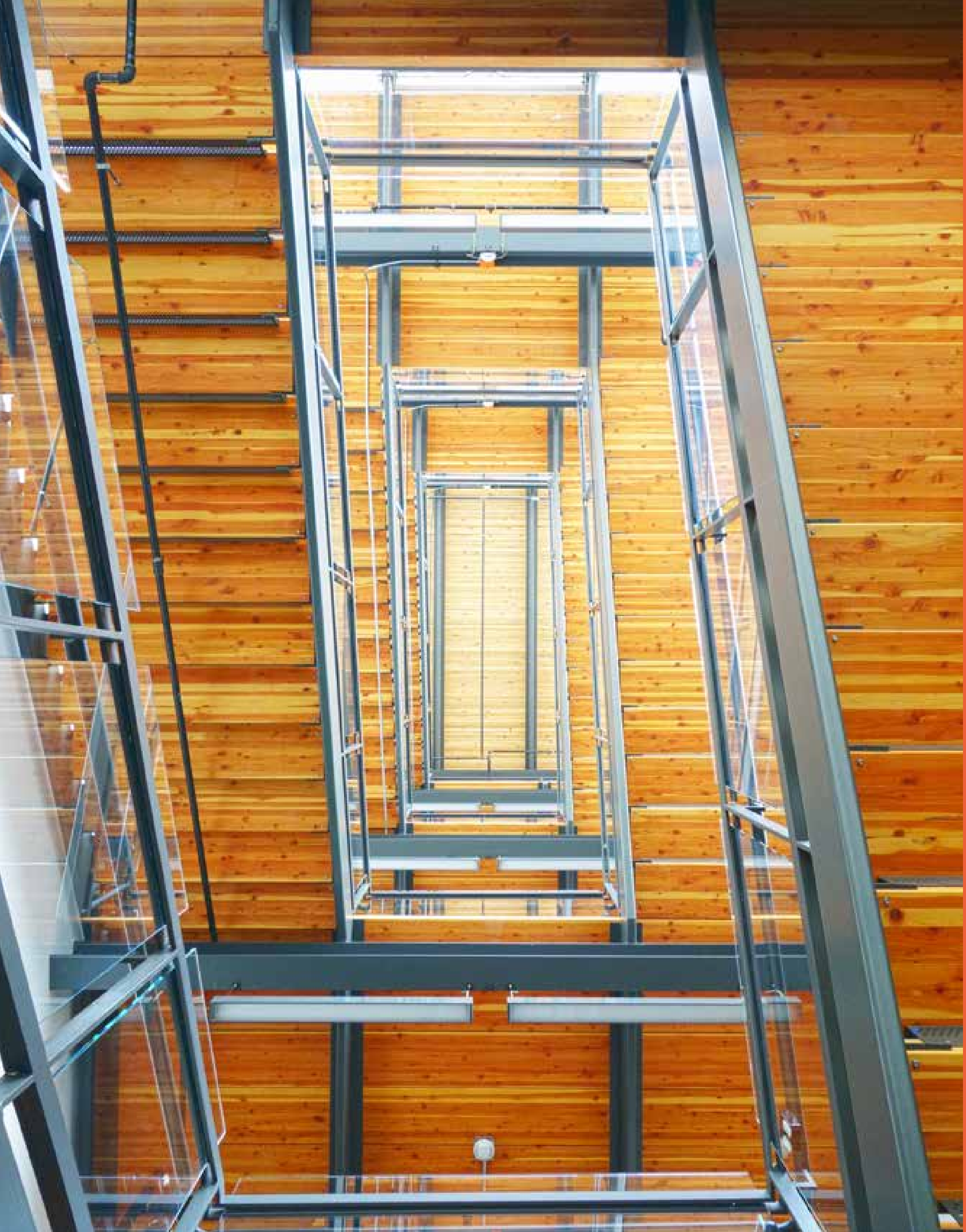
ATTACHMENTS TO THIS REQUEST

(1) Living Building Challenge 4.0
(2) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- November 11, 2022 – Commission authorized an additional $500,000 in design funding for the proposed Fishermen's Terminal Maritime Innovation Center (C801084, U00414) to complete design and permitting due to a design error that required correction.
- March 08, 2022 –Commission authorization for the Executive Director to invest at least $5,718,840 into the Maritime Innovation Center (MInC) to provide required matching funds for a United States Economic Development Administration grant in the amount of $5,000,000.

- May 11, 2021 – Commission authorized an additional $1,000,000 in design funding for the proposed Fishermen's Terminal Maritime Innovation Center (C801084, U00414) to complete design and permitting; and (2) to execute an amendment to the existing service agreement with Miller Hull Partnership, LLP for Fishermen's Terminal Phased Design Services in the amount of $2,500,000; for a new Not-To-Exceed (NTE) value of $6,000,000.
- March 23, 2021 – Commission authorized Design and Permitting completion of the FT Site Improvements (U00320) Under the New CIP C801211, utilizing $1,525,505 in formerly authorized funding for the Gateway Building.
- December 8, 2020 – Commission authorized Construction of the MInC as the condition for executing the Interagency Agreement with Washington State Department of Commerce to allow the acceptance of a $5M grant towards its construction.
- May 14, 2019 – Commission authorized $1,850,000 design funding and an amendment to the Fishermen's Terminal Phased Design Services contract, with Miller Hull Partnership LLP, for $1,000,000 for final planning, design, and permitting for the Maritime Innovation Center.
- January 22, 2019 – The Commission authorized an additional $1,800,000 in design funding for FT Gateway Building improvements, and the execution of an amendment to the existing Architectural/Engineering Services contract for FT Redevelopment for $1,000,000 to complete the final planning, design and permitting of the Gateway Building and FT Site Improvements.
- January 8, 2019 – Commission received a briefing regarding Maritime Blue Plan and the Maritime Innovation Center.
- September 26, 2017 – The Commission authorized $1,325,000 construction funding for the demolition of the existing bank building and Net Sheds 7 and 8. This work has not yet been advertised for bids, per direction by the Commission, pending finalization of a Gateway Building tenant lease agreement.
- December 13, 2016 –Commission authorized an initial $3,000,000 for the Fishermen's Terminal Redevelopment program planning and design; the total preliminarily estimated design cost was $7,000,000.
- May 17, 2016 - Commission received a briefing on the planning strategies comprising the Fishermen's Terminal Long-Term Strategic Plan.
- October 27, 2015 - Commission received a briefing about the progress of the stakeholder outreach program for the Fishermen's Terminal Long-Term Strategic Plan.
- August 11, 2015 - Commission received a briefing on the proposed scope and goals in advance of the launch of the planning process.



Item No: 10f_Attach

Date of Meeting: August 8, 2023

LIVING BUILDING CHALLENGE℠ 4.0

A Visionary Path to a Regenerative Future

INTERNATIONAL
LIVING FUTURE
INSTITUTE℠

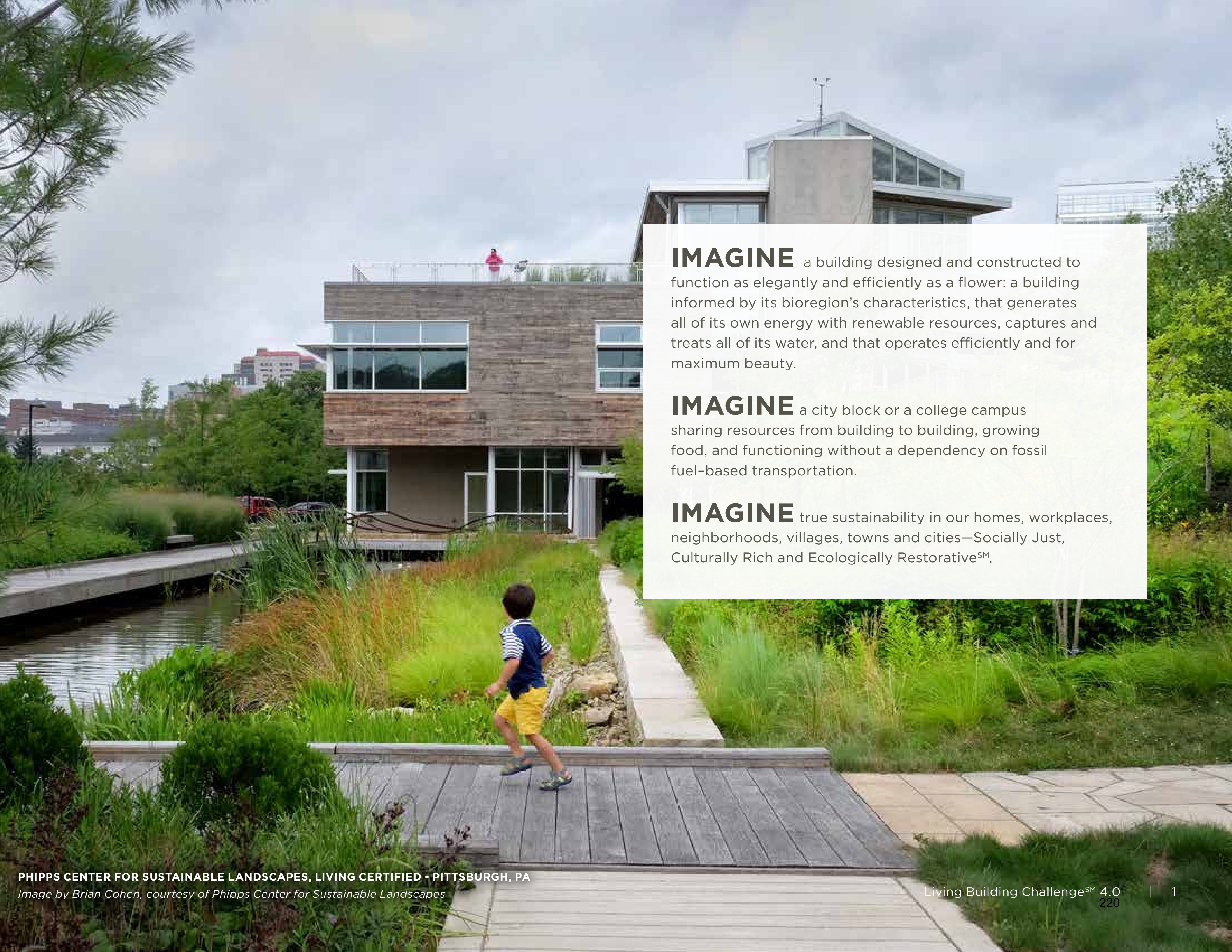
LIVING BUILDING CHALLENGE℠ 4.0

A Visionary Path to a Regenerative Future

NOTIFICATION

For information, address:

The International Living Future Institute
1501 East Madison Street, Suite 150
Seattle, WA 98122



IMAGINE a building designed and constructed to function as elegantly and efficiently as a flower: a building informed by its bioregion's characteristics, that generates all of its own energy with renewable resources, captures and treats all of its water, and that operates efficiently and for maximum beauty.

IMAGINE a city block or a college campus sharing resources from building to building, growing food, and functioning without a dependency on fossil fuel–based transportation.

IMAGINE true sustainability in our homes, workplaces, neighborhoods, villages, towns and cities—Socially Just, Culturally Rich and Ecologically Restorative℠.

PHIPPS CENTER FOR SUSTAINABLE LANDSCAPES, LIVING CERTIFIED - PITTSBURGH, PA
Image by Brian Cohen, courtesy of Phipps Center for Sustainable Landscapes

IT'S TIME TO CREATE A LIVING FUTURE AND A WORLD OF LIVING BUILDINGS

TABLE OF CONTENTS

BALLARD EMERALD STAR ZERO ENERGY HOME, ZERO ENERGY CERTIFIED - SEATTLE, WA
Image courtesy of Ballard Emerald Star Zero Energy Home

EXECUTIVE SUMMARY: CREATING A REGENERATIVE WORLD TOGETHER

OUR GOAL IS SIMPLE. IN THE WORDS OF BUCKMINSTER FULLER— TO MAKE THE WORLD WORK FOR 100% OF HUMANITY IN THE SHORTEST POSSIBLE TIME THROUGH SPONTANEOUS COOPERATION WITHOUT ECOLOGICAL OFFENSE OR THE DISADVANTAGE OF ANYONE.[1]

The Living Building Challenge℠ is an attempt to dramatically raise the bar from a paradigm of doing less harm to one in which we view our role as a steward and co-creator of a true Living Future. The Challenge defines the most advanced measure of sustainability in the built environment today and acts to rapidly diminish the gap between current limits and the end-game positive solutions we seek.

The Challenge aims to transform how we think about every single act of design and construction as an opportunity to positively impact the greater community of life and the cultural fabric of our human communities. The program has always been a bit of a Trojan horse—a philosophical worldview cloaked within the frame of a certification program. The Challenge is successful because it satisfies our left-brain craving for order and thresholds, and our right-brain intuition that the focus needs to be on our relationship with and understanding of the whole of life.

1 The Living Building Challenge was the 2012 winner of the Buckminster Fuller Prize, the world's top award for socially responsible design.

As such the program is a philosophy first, an advocacy tool second, and a certification program third. Within the larger Living Future Challenge framework that covers the creation of all human artifacts and edifices, the Living Building Challenge focuses on humanity's most abundant creations—its buildings. It is in essence a unified tool for transformative thought, allowing us to envision a future that is Socially Just, Culturally Rich and Ecologically Restorative.

Regardless of the size or location of the project, the Living Building Challenge provides a framework for design, construction and the symbiotic relationship between people, our community, and nature. The Living Building Challenge calls for action to restore the relationship between people and nature in an increasingly urbanized world as we become more and more disconnected from the world with which we evolved. It is a challenge to immerse ourselves in such a pursuit—and many refer to the ability to do so as a paradigm shift.

Projects that achieve Living Building® certification can claim to be the greenest anywhere, and will serve as role models in their communities for redefining the future of the built environment. Whether the project is restorative, regenerative, or operates with a net zero impact, it has a home in the construct of the Living Building Challenge.

continued >>

Although it is ambitious to achieve all of the requirements of the Living Building Challenge, the performance-based approach creates a simplicity and ease of use: There are twenty simple and profound Imperatives that must be met for any type of project, at any scale, in any location around the world.

This Standard is decidedly not a checklist of best practices—the Imperatives of the Living Building Challenge are performance-based and position the ideal outcome as an indicator of success.

The specific methodology used to meet the expectations of the Living Building Challenge is not up to our Institute—but rather to the genius of the design teams, owners, and occupants themselves, who are expected to make informed and vested decisions appropriate to the project, place, and bioregion.

The Living Building Challenge is a holistic standard, pulling together the most progressive thinking from the worlds of architecture, engineering, planning, interiors, landscape design, and policy. It challenges us to ask these questions:

What if every single act of design and construction made the world a better place? if every intervention resulted in greater biodiversity and social equity; additional outlets for beauty and personal expression; a deeper understanding of climate, culture, and place; a realignment of our food and transportation systems; increased soil health; and a more profound sense of what it means to be a citizen of a planet where resources and opportunities are provided fairly and equitably?

A tall order to be sure.

The scale of change we seek is immense. But without recording these utmost visions and clarity of purpose, we as a society will never experience the type of future that is possible and necessary for our long-term survival. It is our belief that only a dozen years remain to completely reshape humanity's relationship with nature and to realign our ecological footprint to be within the planet's carrying capacity.

Incremental change has not been an option in the past decade, and in the coming one it must become an approach of the past.

Over the last thirty years, green building has grown to become the most important and progressive trend in the building industry. There have been huge steps forward in the design, construction and operation of buildings, and yet when compared with the rate of change that is required to avoid the worst effects of climate change and other global environmental challenges, our progress has been minute and barely recordable. That is why, with the launch of the Living Building Challenge 4.0 we are also releasing the Core Green Building Certification, defining the ten essential requirements that define a baseline for green building. It is time to build a bridge between the highest levels of main stream green building certification programs and the Living Building Challenge and to propel the industry toward more Living Buildings.

The Living Building Challenge is an ever-evolving program shaped by the incredible experiences of our project teams as they continually break new ground. Over time, feedback from a diverse array of stakeholders actively using the challenge helps us understand how to refine and improve the program to have the greatest impacts.

Institute staff are also monitoring changes in the field and the market, and making adjustments to the program as needed to reflect current realities and opportunities. We also strive to keep raising the bar as we learn together, moving our projects closer still to the goal of a regenerative living future.

- The internal logic of the Living Building Challenge is based on pragmatic, tested experience with what has already been built in the marketplace. Each new Living Building adds further weight to the evidence that a world of Living Buildings is possible now.
- Because this Standard is continuously informed by the work that project teams are doing on the ground, Petal Handbooks clarify and consolidate the rules at a set point in time to provide a unified reference for project teams. The Dialogue (see page 70) provides an online platform for project teams to request further clarifications and new exceptions and search for articles by topic. A glossary of critical program definitions is provided on page 78.
- The Living Building Challenge does not dwell on basic best-practice issues, so it can instead focus on critical high-level goals. It is assumed that to achieve this aspirational standard, typical best practices are already being met and championed by the team's expert consultants. The implementation of this Standard requires leading-edge technical knowledge, an integrated design approach, and design and construction teams well versed in advanced practices related to green building.
- Regional solutions are manifested in all Living Building Challenge projects due to a number of variables, including climate factors, building characteristics and community context. For example, becoming water-independent in the desert demands the evolution of a project's design to emulate a cactus instead of a tree. The built environment will be richer, and the stress on our resources will lessen as more and more projects have this focus on an appropriate response to place.

ITERATIVE PROCESS

LIVING BUILDING CHALLENGE 4.0 FOCUSES ON THE RELATIONSHIP BETWEEN IMPACT AND EFFORT

This revised version of the Living Building Challenge has been developed based on two goals: to simplify the program so the level of effort of teams is better aligned with their impacts, at both project and market scales; and to fill the gap between the highest levels of mainstream green building certifications, and the entry point to the Living Building Challenge. The resulting Standard is streamlined, eliminating time consuming requirements that were not directly influencing projects or markets. LBC 4.0 also raises the bar by requiring that teams address basic issues in all Petals, even if the project is primarily focused on a more limited scope of priorities. In addition, a number of new performance-based compliance paths have been added to increase flexibility for teams. These changes promise to relieve some of the frustrations of the previous versions, while maintaining the high standards and inspirational vision that the ILFI community expects from the Living Building Challenge.

A FEW KEY CHANGES INCLUDE THE FOLLOWING:
The Living Building Challenge now has ten Core Imperatives that address the fundamental tenets of each Petal. All the Core Imperatives are required for Petal Certification, and together they constitute the requirements of the new Core Green Building Certification. Notable updates in LBC 4.0 by Imperative include:

I-01 ECOLOGY OF PLACE includes a performance-based approach to the project location and local ecology and community.

I-02 URBAN AGRICULTURE introduces a secondary path to improve the accessibility to fresh food in conjunction with on-site food production. Required percentages of site area have been simplified and are now based on Transect rather than Floor Area Ratio (FAR). Food storage requirements are modified.

THE WATER PETAL has been divided into two Imperatives, Core and Living, and requires comparison to a baseline.

THE ENERGY PETAL has been separated into Core and Living Imperatives that incorporate an EUI minimum and embodied carbon.

I-09 HEALTHY INTERIOR ENVIRONMENT is now a Core Imperative that outlines baseline requirements to achieve good indoor air quality.

I-10 HEALTHY INTERIOR PERFORMANCE includes some of the previous requirements of LBC 3.1 Civilized Environment and Healthy Interior Environment plus some expanded options for fresh air and controls.

I-11 ACCESS TO NATURE is a new Imperative based on one of the previous requirements of the LBC 3.1 Biophilic Environment Imperative.

I-12 RESPONSIBLE MATERIALS is a new Core Imperative setting a materials baseline for all projects.

I-13 RED LIST has an updated list based on classes of chemicals, as a means to clarify the process for updating the Red List Chemical Abstract Services Registry Number list and avoid regrettable substitutions. The threshold for compliance has been set at 90%.

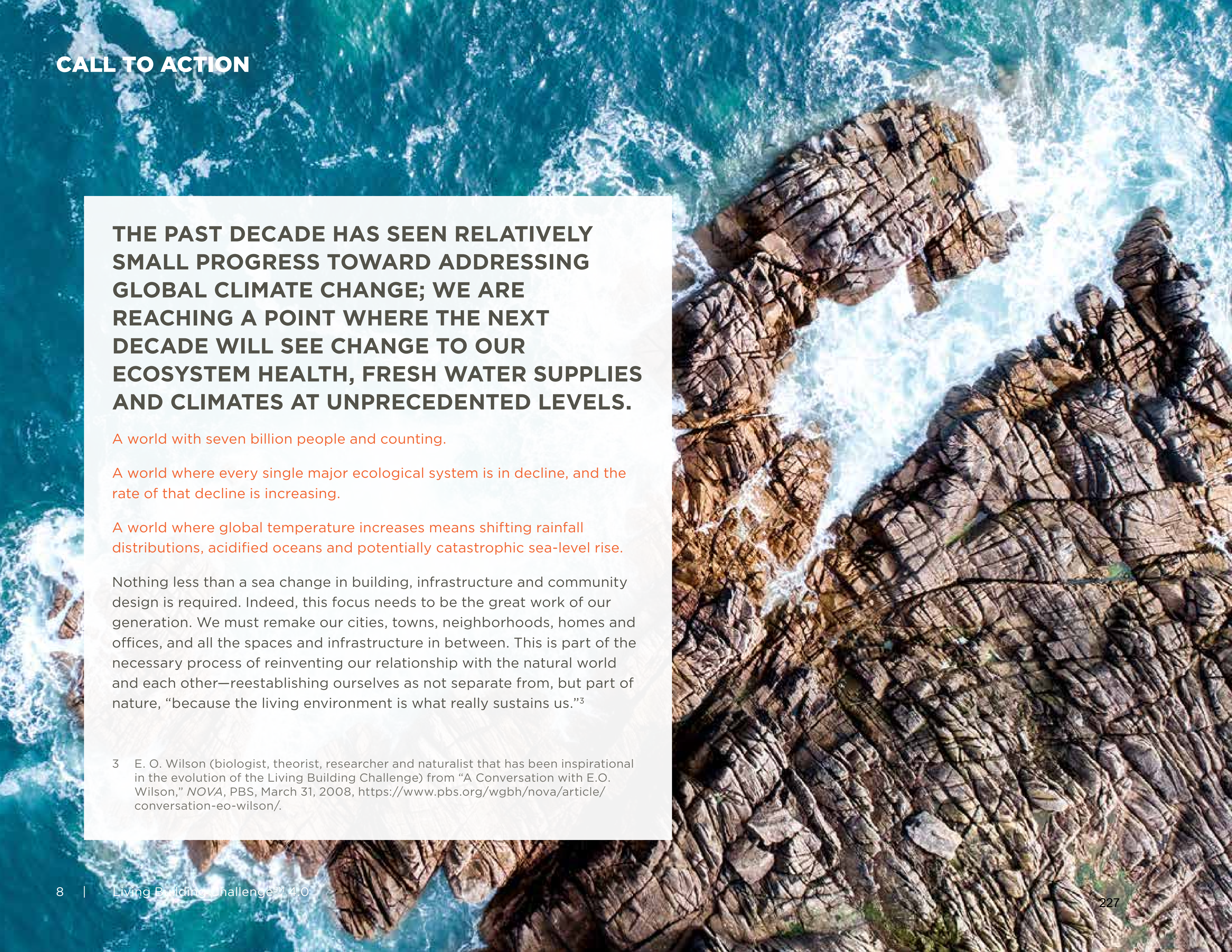
I-14 RESPONSIBLE SOURCING has an FSC project certification pathway and the calculation to determine the number of required Declare labels has been changed.

I-18 INCLUSION is a new Imperative addressing diversity in hiring and access to training. The Just label requirement has been changed and incorporated in this Imperative.

I-19 BIOPHILIC DESIGN includes most of the requirements of the LBC 3.1 Biophilic Environment Imperative integrated with the requirements from the LBC 3.1 Beauty + Spirit Imperative.

I-20 EDUCATION + INSPIRATION now requires one Living Future Accredited (LFA) professional on each project team.[2]

2 https://living-future.org/education-lfa-2/



THE PAST DECADE HAS SEEN RELATIVELY SMALL PROGRESS TOWARD ADDRESSING GLOBAL CLIMATE CHANGE; WE ARE REACHING A POINT WHERE THE NEXT DECADE WILL SEE CHANGE TO OUR ECOSYSTEM HEALTH, FRESH WATER SUPPLIES AND CLIMATES AT UNPRECEDENTED LEVELS.

A world with seven billion people and counting.

A world where every single major ecological system is in decline, and the rate of that decline is increasing.

A world where global temperature increases means shifting rainfall distributions, acidified oceans and potentially catastrophic sea-level rise.

Nothing less than a sea change in building, infrastructure and community design is required. Indeed, this focus needs to be the great work of our generation. We must remake our cities, towns, neighborhoods, homes and offices, and all the spaces and infrastructure in between. This is part of the necessary process of reinventing our relationship with the natural world and each other—reestablishing ourselves as not separate from, but part of nature, “because the living environment is what really sustains us.”[3]

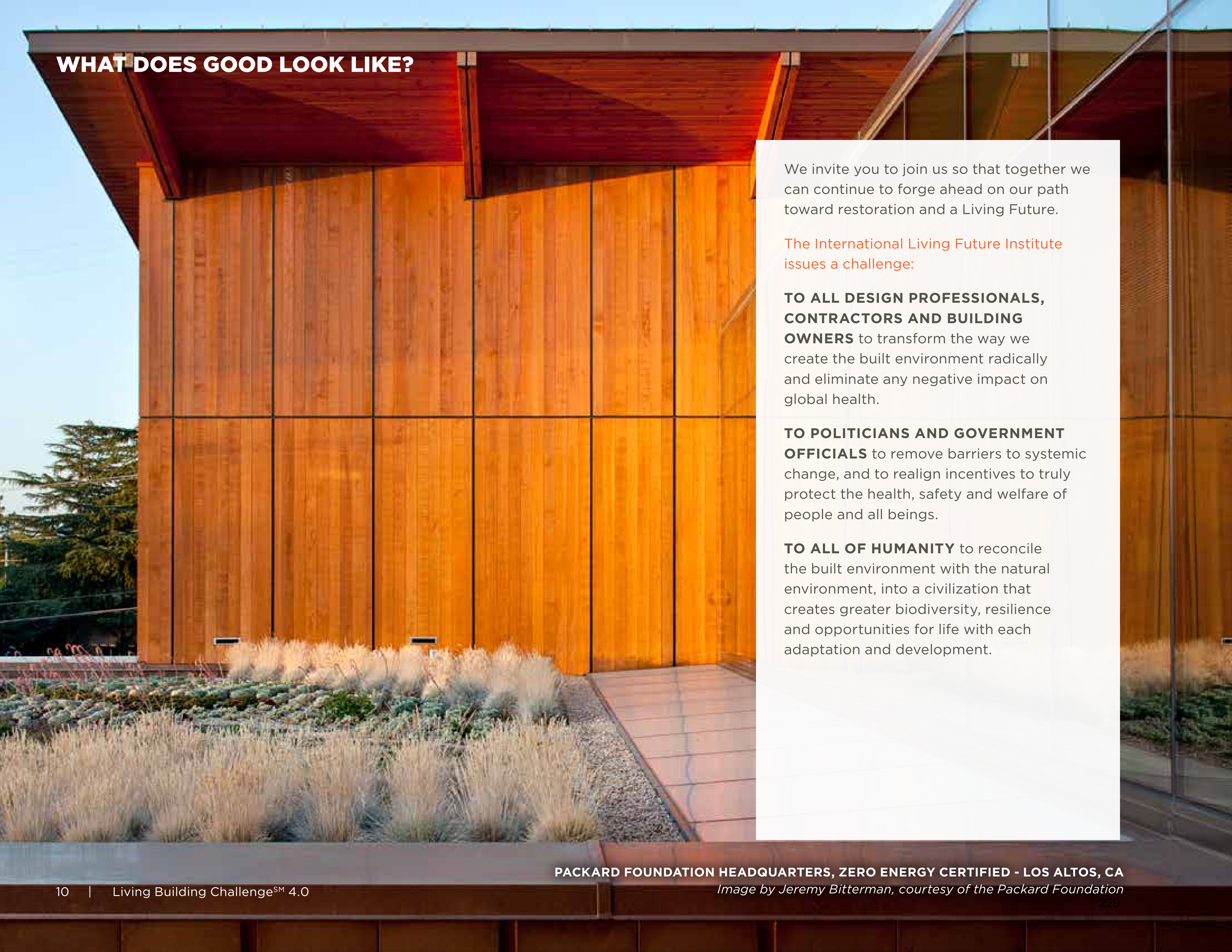
3 E. O. Wilson (biologist, theorist, researcher and naturalist that has been inspirational in the evolution of the Living Building Challenge) from “A Conversation with E.O. Wilson,” *NOVA*, PBS, March 31, 2008, https://www.pbs.org/wgbh/nova/article/conversation-eo-wilson/.

Since it was launched in 2006, the Living Building Challenge has inspired and motivated rapid and significant change: projects have sprouted up all over North America and beyond—currently, there are efforts underway in a dozen countries with several million square feet of Living Building Challenge projects in progress—each as a beacon in the dark showing what is possible; the regulatory environment has embraced a series of reforms; and most importantly, a new sense of possibility has permeated design communities as a result of the first 100+ certified projects.

Now that the Challenge has shown it is possible to achieve, the LBC 4.0 takes the lessons learned from the first 100+ certified projects and the first 500 registered projects and creates a scalable, simple and elegant certification program that can adequately address the radical change the built environment must make in the next decade.

THIS STANDARD IS AN ACT OF OPTIMISM AND BELIEF THAT WITH THE RIGHT TOOLS IN THE HANDS OF PASSIONATE, LITERATE, AND SENSITIVE INDIVIDUALS, A REVOLUTIONARY TRANSFORMATION IS POSSIBLE. IT IS A PROGRAM THAT ASKS US TO THINK HOLISTICALLY AND TO ENGAGE BOTH OUR RIGHT AND LEFT BRAINS, HEAD AND HEART.

WHAT DOES GOOD LOOK LIKE?



We invite you to join us so that together we can continue to forge ahead on our path toward restoration and a Living Future.

The International Living Future Institute issues a challenge:

TO ALL DESIGN PROFESSIONALS, CONTRACTORS AND BUILDING OWNERS to transform the way we create the built environment radically and eliminate any negative impact on global health.

TO POLITICIANS AND GOVERNMENT OFFICIALS to remove barriers to systemic change, and to realign incentives to truly protect the health, safety and welfare of people and all beings.

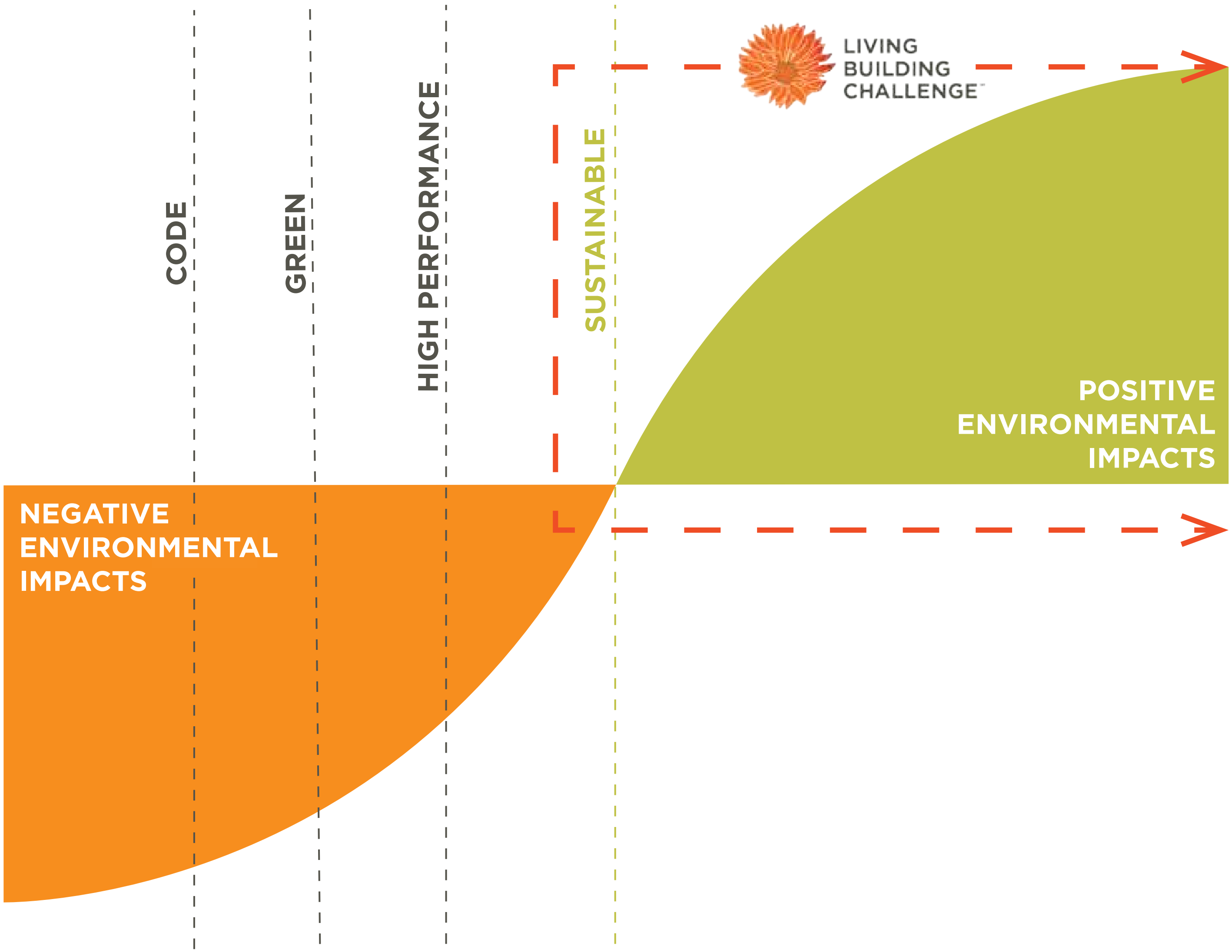
TO ALL OF HUMANITY to reconcile the built environment with the natural environment, into a civilization that creates greater biodiversity, resilience and opportunities for life with each adaptation and development.

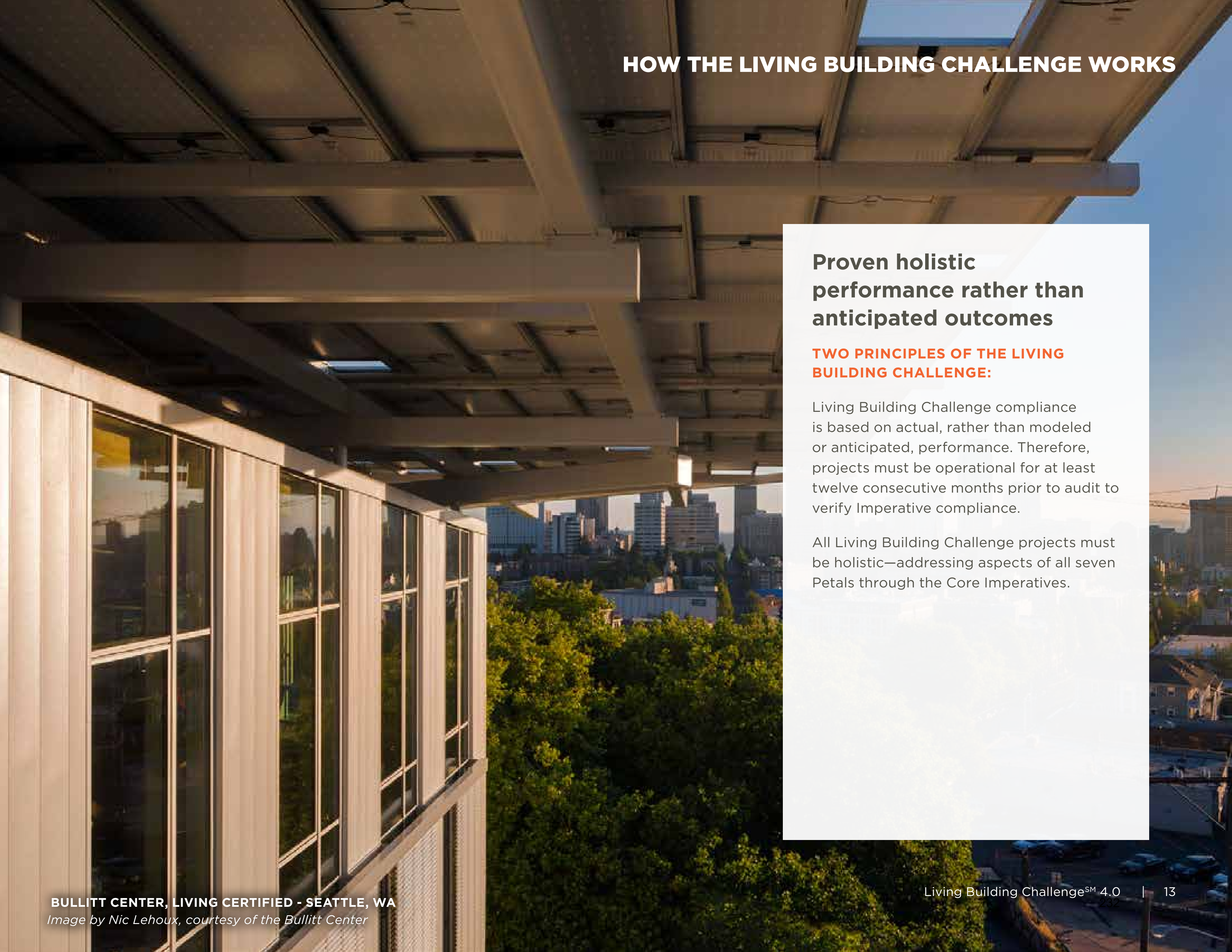
PACKARD FOUNDATION HEADQUARTERS, ZERO ENERGY CERTIFIED - LOS ALTOS, CA
Image by Jeremy Bitterman, courtesy of the Packard Foundation

INSTEAD OF A WORLD THAT IS MERELY A LESS BAD VERSION OF THE ONE WE CURRENTLY HAVE—WE ASK A SIMPLE AND PROFOUND QUESTION—WHAT DOES GOOD LOOK LIKE?

SETTING THE IDEAL AS THE INDICATOR OF SUCCESS

THE LIVING BUILDING CHALLENGE IS A PHILOSOPHY, CERTIFICATION, AND ADVOCACY TOOL FOR PROJECTS TO MOVE BEYOND MERELY BEING LESS BAD AND TO BECOME TRULY REGENERATIVE.





Proven holistic performance rather than anticipated outcomes

TWO PRINCIPLES OF THE LIVING BUILDING CHALLENGE:

Living Building Challenge compliance is based on actual, rather than modeled or anticipated, performance. Therefore, projects must be operational for at least twelve consecutive months prior to audit to verify Imperative compliance.

All Living Building Challenge projects must be holistic—addressing aspects of all seven Petals through the Core Imperatives.

BULLITT CENTER, LIVING CERTIFIED - SEATTLE, WA
Image by Nic Lehoux, courtesy of the Bullitt Center

STRUCTURE + APPLICABILITY

The Living Building Challenge consists of seven performance categories, or “Petals”: Place, Water, Energy, Health + Happiness, Materials, Equity and Beauty.

Each Petal is subdivided into Imperatives, for a total of twenty Imperatives in the Challenge. The Imperatives can be applied to almost every conceivable building project, of any scale and any location—be it a new building or an existing structure.

Many of the Imperatives have temporary exceptions to acknowledge current market limitations. These are listed in the Petal Handbooks, which should be consulted for the most up-to-date rulings. Temporary exceptions will be modified or removed as the market changes. With this Standard, the Institute requires advocacy for essential improvements to the building industry.

R.W. KERN CENTER, LIVING CERTIFIED - AMHERST, MA
IMAGE BY ROBERT BENSON, COURTESY OF THE R.W. KERN CENTER

The Living Building Challenge is versatile and can apply to **any building project**. These include but are not limited to:

Living Building Challenge projects come in all shapes and sizes and consist of both new construction and renovation projects—including historic preservation. If you can imagine it, then it can likely be a Living Building given the right application of strategies, technologies, and imagination. Requirements can vary based on project context and conditions, but the intent of the Imperatives remains the same, regardless of project type.

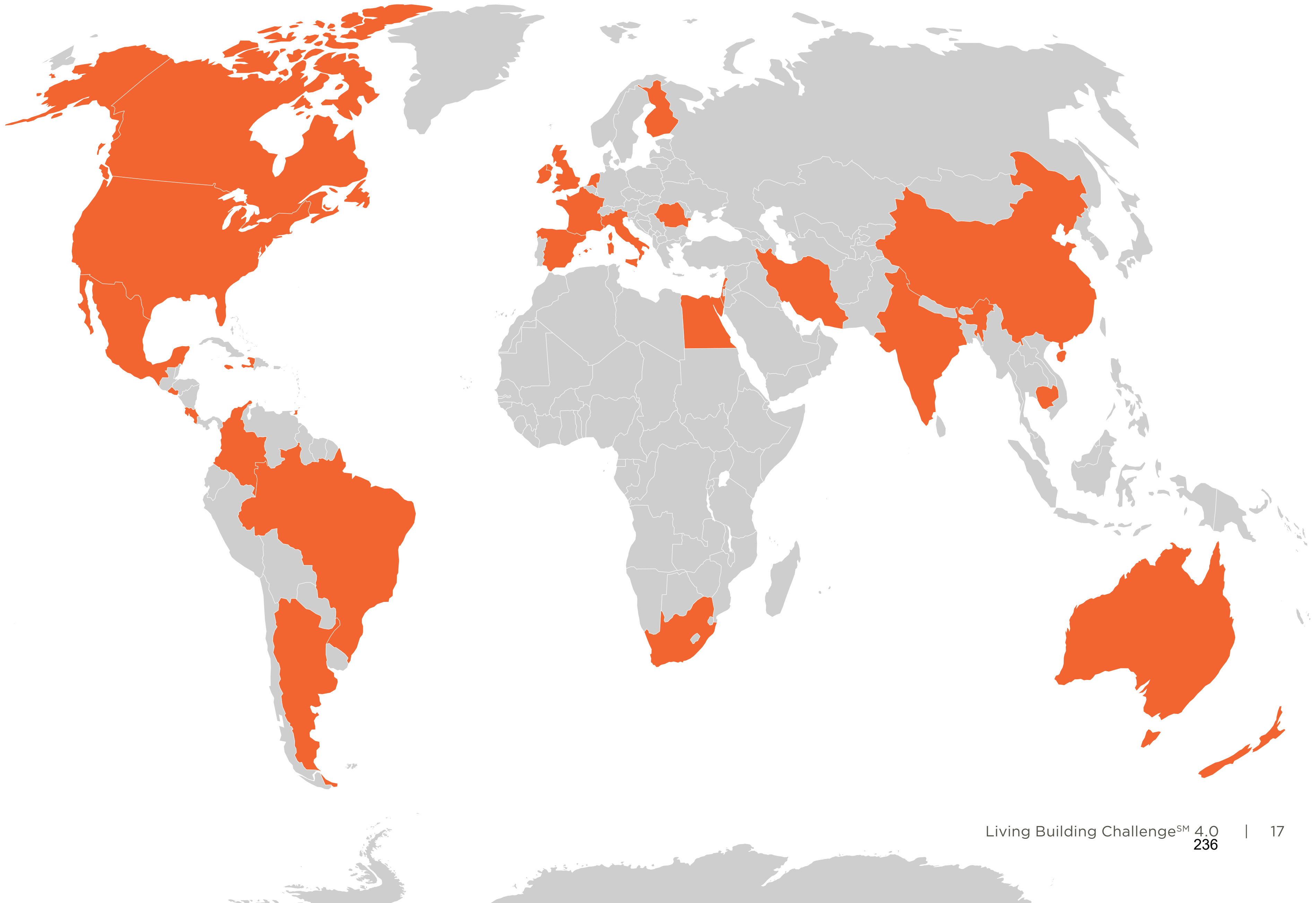
HAWAI'I PREP ACADEMY ENERGY LAB, LIVING CERTIFIED - KAMUELA, HI
IMAGE BY MATTHEW MILLMAN PHOTOGRAPHY, COURTESY OF FLANSBURGH ARCHITECTS

DESERT RAIN, LIVING CERTIFIED - BEND, OR
IMAGE BY CHANDLER PHOTOGRAPHY, COURTESY OF DESERT RAIN

LIVING BUILDINGS IN EVERY CLIMATE ZONE AND COUNTRY

Currently there are projects pursuing certification in nearly every building type.

LIVING BUILDING CHALLENGE PROJECTS CAN BE BUILT IN ANY CLIMATE ZONE ANYWHERE IN THE WORLD—AS EVIDENCED BY THE UNIQUE ARRAY OF PROJECTS CURRENTLY UNDERWAY IN MANY COUNTRIES AROUND THE GLOBE.



CURRENT AS OF APRIL 2019: 563 REGISTERED PROJECTS IN 29 COUNTRIES.

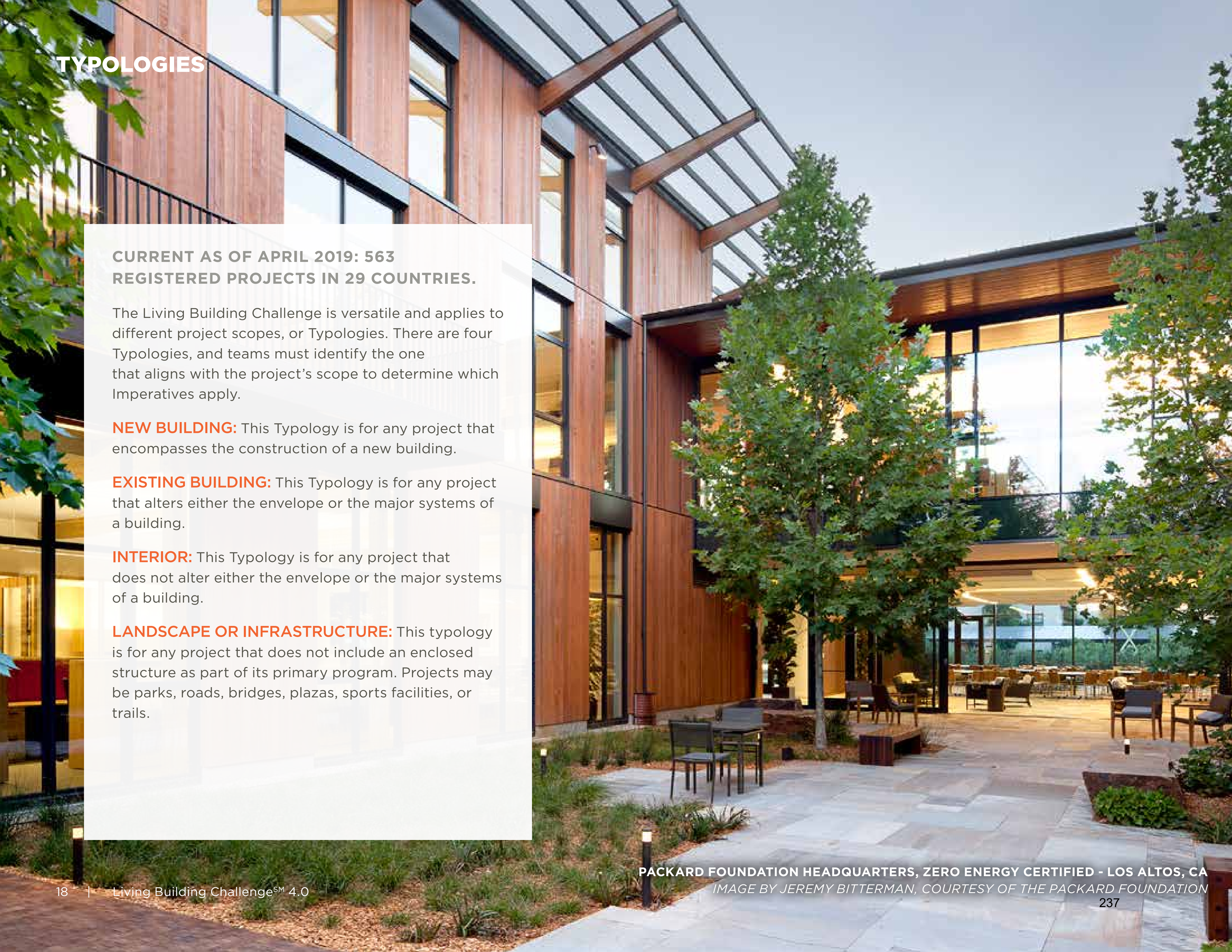
The Living Building Challenge is versatile and applies to different project scopes, or Typologies. There are four Typologies, and teams must identify the one that aligns with the project's scope to determine which Imperatives apply.

NEW BUILDING: This Typology is for any project that encompasses the construction of a new building.

EXISTING BUILDING: This Typology is for any project that alters either the envelope or the major systems of a building.

INTERIOR: This Typology is for any project that does not alter either the envelope or the major systems of a building.

LANDSCAPE OR INFRASTRUCTURE: This typology is for any project that does not include an enclosed structure as part of its primary program. Projects may be parks, roads, bridges, plazas, sports facilities, or trails.



PACKARD FOUNDATION HEADQUARTERS, ZERO ENERGY CERTIFIED - LOS ALTOS, CA
IMAGE BY JEREMY BITTERMAN, COURTESY OF THE PACKARD FOUNDATION

The Living Building Challenge is composed of 20 Imperatives grouped into seven petals. Some Imperatives are not required for all Typologies.

PETAL		IMPERATIVE	TYPOLOGY: New Building	TYPOLOGY: Existing Building	TYPOLOGY: Interior	TYPOLOGY: Landscape + Infrastructure
PLACE	Core Imperative	1 Ecology of Place	Imperative required for typology	Requirement dependent on scope	Not required for typology	Imperative required for typology
	Scale jumping allowed	2 Urban Agriculture	Imperative required for typology	Imperative required for typology	Not required for typology	Not required for typology
		3 Habitat Exchange	Imperative required for typology	Imperative required for typology	Imperative required for typology	Imperative required for typology
	Core Imperative; Scale jumping allowed	4 Human Scaled Living	Imperative required for typology	Requirement dependent on scope	Requirement dependent on scope	Not required for typology
WATER	Core Imperative; Scale jumping allowed; Handprinting Imperative	5 Responsible Water Use	Imperative required for typology	Imperative required for typology	Imperative required for typology	Imperative required for typology
	Scale jumping allowed; Handprinting Imperative	6 Net Positive Water	Imperative required for typology	Imperative required for typology	Not required for typology	Imperative required for typology
ENERGY	Core Imperative; Scale jumping allowed	7 Energy + Carbon Reduction	Imperative required for typology	Imperative required for typology	Imperative required for typology	Imperative required for typology
	Scale jumping allowed	8 Net Positive Energy	Imperative required for typology	Imperative required for typology	Imperative required for typology	Imperative required for typology
HEALTH + HAPPINESS	Core Imperative	9 Healthy Interior Environment	Imperative required for typology	Imperative required for typology	Imperative required for typology	Not required for typology
		10 Healthy Interior Performance	Imperative required for typology	Imperative required for typology	Imperative required for typology	Not required for typology
		11 Access to Nature	Imperative required for typology	Imperative required for typology	Imperative required for typology	Not required for typology
MATERIALS	Core Imperative	12 Responsible Materials	Imperative required for typology	Imperative required for typology	Imperative required for typology	Imperative required for typology
		13 Red List	Imperative required for typology	Imperative required for typology	Imperative required for typology	Imperative required for typology
		14 Responsible Sourcing	Imperative required for typology	Imperative required for typology	Imperative required for typology	Imperative required for typology
		15 Living Economy Sourcing	Imperative required for typology	Imperative required for typology	Imperative required for typology	Imperative required for typology
		16 Net Positive Waste	Imperative required for typology	Imperative required for typology	Imperative required for typology	Imperative required for typology
EQUITY	Core Imperative	17 Universal Access	Imperative required for typology	Requirement dependent on scope	Requirement dependent on scope	Requirement dependent on scope
	Core Imperative	18 Inclusion	Imperative required for typology	Imperative required for typology	Imperative required for typology	Imperative required for typology
BEAUTY	Core Imperative	19 Beauty + Biophilia	Imperative required for typology	Imperative required for typology	Imperative required for typology	Imperative required for typology
	Core Imperative	20 Education + Inspiration	Imperative required for typology	Imperative required for typology	Imperative required for typology	Imperative required for typology

- CORE IMPERATIVE
- SCALE JUMPING ALLOWED
- HANDPRINTING IMPERATIVE
- IMPERATIVE REQUIRED FOR TYPOLOGY
- REQUIREMENT DEPENDENT ON SCOPE
- NOT REQUIRED FOR TYPOLOGY

TRANSECTS

Because the Challenge is performance-based, the guiding principles and performance metrics apply regardless of where in the world the project is located—what changes is the specific mix of strategies and technologies—leaving it up to the genius of the design team to choose the most appropriate design response.

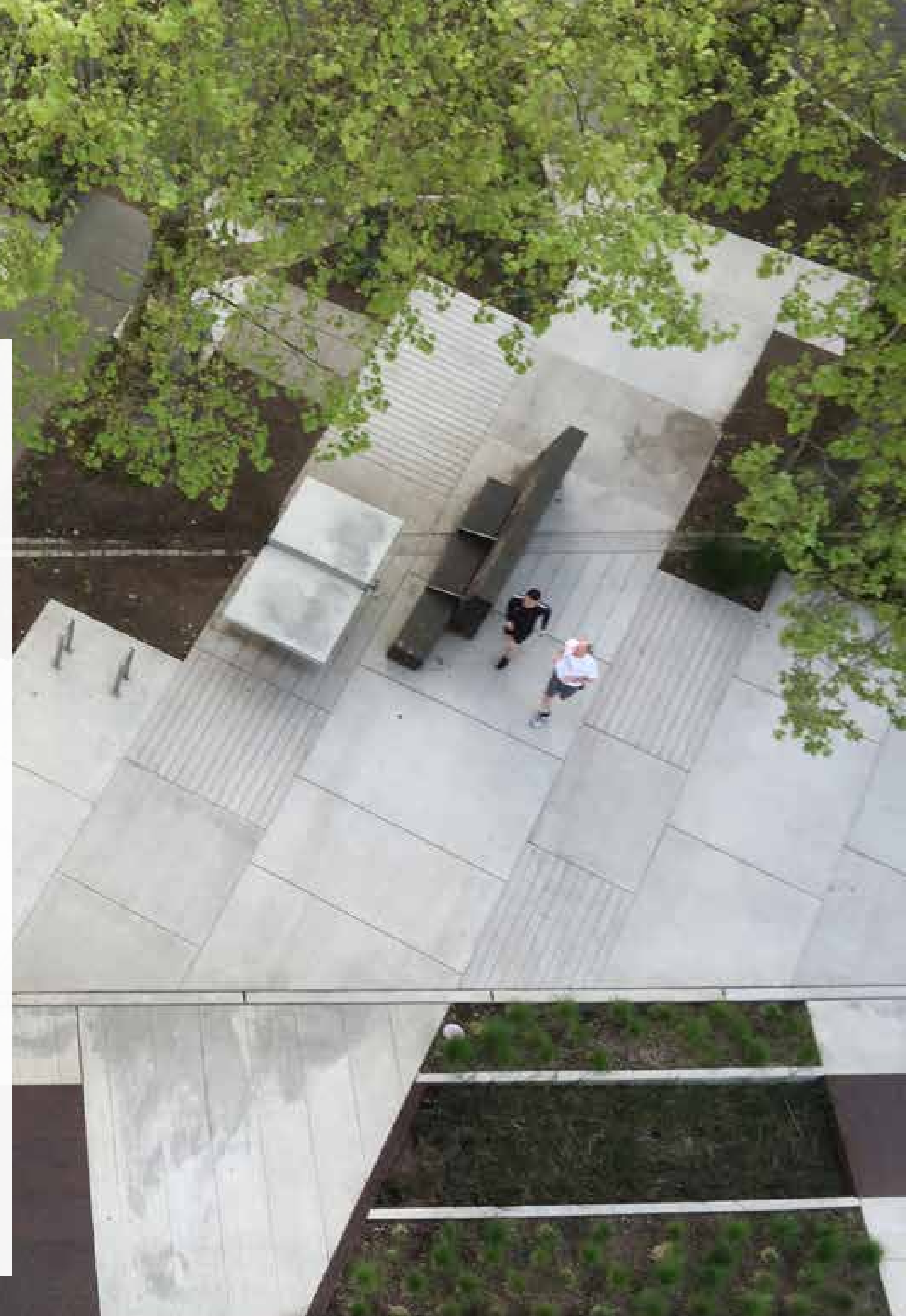
To encourage appropriate development in specific settings, the Standard draws on the work of Duany Plater-Zyberk & Company, who created the New Urbanism Transect model for rural to urban categorization.[4] The Transect is a powerful basis for planning and demonstrates that different types of standards befit different development realities.

The Living Transect, which is applied to all projects, is used to modify the requirements for and apply exceptions to a number of Imperatives in the Living Building Challenge. Living Transects are an adaptation of the original Transect concept; the primary modification has been a reclassification of Transect zones T3 and T4 to emphasize appropriate mixed-use densification rather than sprawl.[5]

The Challenge encourages the transition of suburban zones to grow into either new urban areas with greater density; or to create balanced, mixed-use villages that can support full lives with minimal car trips; or to be restructured as new rural zones for food production, habitat, and ecosystem services.

continued >>

4 www.transect.org
5 These are general descriptions. Refer to the v4.0 Place Petal Handbook for more information.



MCGILVRA PLACE PARK, LIVING CERTIFIED - SEATTLE, WA
IMAGE COURTESY OF BERGER PARTNERSHIP

Photo: joyfull / Shutterstock.com

Photo: Andrew F. Kazmierski / Shutterstock.com

L1. NATURAL HABITAT PRESERVE:

This Transect is comprised of land that is set aside as a nature preserve or is defined as wildlands or sensitive ecological habitat. It may not be developed except in limited circumstances related to the preservation or interpretation of the landscape, as outlined in the Place Petal Handbook.

L2. RURAL ZONE:

This Transect is comprised primarily of land that is used for agriculture and food production-based development, as well as the outlying areas of small towns and villages.

L3. VILLAGE OR CAMPUS ZONE:

This Transect is comprised of relatively low-density mixed-use development found in rural villages and towns, and low-density neighborhoods outside of small cities, and may also include college or university campuses.

L4. GENERAL URBAN ZONE:

This Transect is comprised of light- to medium-density mixed-use development found in larger villages, small towns, or at the edge of larger cities.

L5. URBAN CENTER ZONE:

This Transect is comprised of a medium- to high-density mixed-use development found in small to mid-sized cities or in the first “ring” of a larger city.

L6. URBAN CORE ZONE:

This Transect is comprised of high-to very high-density mixed use development found in large cities and metropolises.

SCALE JUMPING

THE LIVING BUILDING CHALLENGE SPURS PROJECTS TO HAVE THEIR OWN UTILITY, GENERATE THEIR OWN ENERGY, CAPTURE THEIR OWN WATER, AND PROCESS THEIR OWN WASTE. YET, THE IDEAL SCALE FOR SOLUTIONS IS NOT ALWAYS WITHIN A PROJECT'S PROPERTY BOUNDARY.

Depending on the technology, the optimal scale can vary when considering environmental impact, first cost and operating costs. To address these realities, the Living Building Challenge has a Scale Jumping overlay to allow multiple buildings or projects to operate in a cooperative state—sharing green infrastructure as appropriate and allowing for environmental and social benefits to be achieved as elegantly and efficiently as possible. Refer to the summary table on page 19 to view all Imperatives that may employ the Scale Jumping overlay.[6]

Please note that some projects may scale from the Living Building Challenge program to the Living Community Challenge℠ program, Standards that are designed to work together.

Imperatives where scale jumping are allowed are marked with this icon.

6 Refer to the v4.0 Petal Handbooks for more information on Scale Jumping by Imperative.

Registration is the first step toward Living Building Challenge certification and is accessible through ILFI membership. Registered projects can benefit from many Institute resources, such as the opportunity to submit program clarification and exception requests through the Dialogue. To register a project, teams will need to provide basic information about the project, owner, and team, most of which can be updated later as the project evolves.

Once projects have completed construction and a 12-month performance period, they can certify under one of the many certification paths.

ZERO CARBON CERTIFICATION

Carbon neutral with top tier efficiency.

- 100% building energy load offset with on- or off-site renewables
- For existing buildings, combustion allowed
- Embodied carbon reduction and offset

ZERO ENERGY CERTIFICATION

World class efficiency and characteristics, reinforcing a fossil fuel free future.

- 100% building energy load offset with on-site renewables, driving efficiency
- Pathway for premium off-site renewables for certain project types

CORE GREEN BUILDING CERTIFICATION

Responding to climate change with holistic high performance.

Required Imperatives:

C1	01	Ecology of Place
C2	04	Human Scaled Living
C3	05	Responsible Water Use
C4	07	Energy + Carbon Reduction
C5	09	Healthy Interior Environment
C6	12	Responsible Materials
C7	17	Universal Access
C8	18	Inclusion
C9	19	Beauty + Biophilia
C10	20	Education + Inspiration

LIVING BUILDING CHALLENGE PETAL CERTIFICATION

One pillar of deep regenerative design built on a holistic high-performance foundation.

All Core Imperatives are required, plus the remaining Imperatives to complete either the Water, or Energy or Materials Petal.

ALL CORE IMPERATIVES

Water

06	Net Positive Water

Energy

08	Net Positive Energy

Materials

13	Red List
14	Responsible Sourcing
15	Living Economy Sourcing
16	Net Positive Waste

LIVING BUILDING CHALLENGE LIVING CERTIFICATION

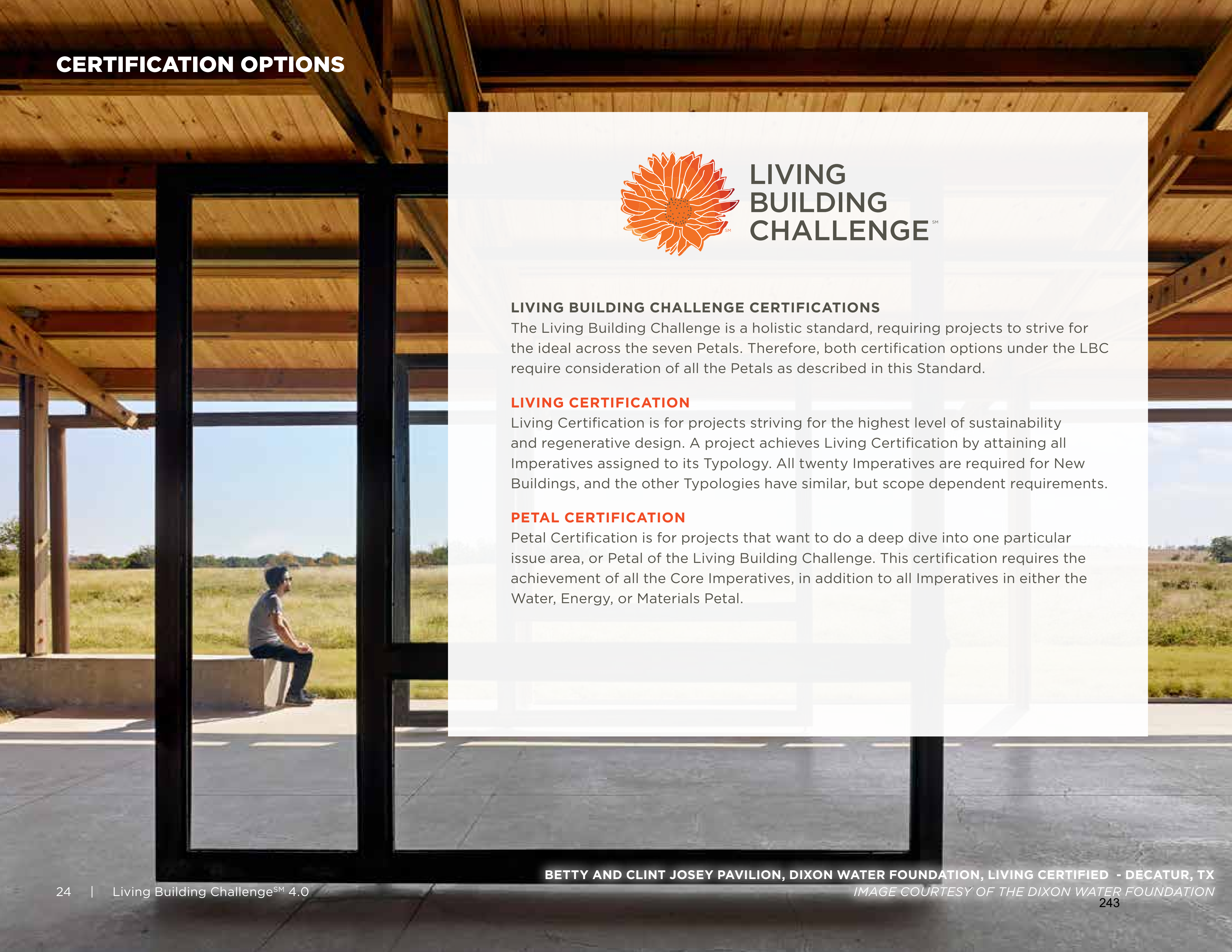
Summit of holistic aspiration and attainment; fully restorative.

All Imperatives must be achieved to certify:

01	Ecology of Place
02	Urban Agriculture
03	Habitat Exchange
04	Human Scaled Living
05	Responsible Water Use
06	Net Positive Water
07	Energy + Carbon Reduction
08	Net Positive Energy
09	Healthy Interior Environment
10	Healthy Interior Performance
11	Access to Nature
12	Responsible Materials
13	Red List
14	Responsible Sourcing
15	Living Economy Sourcing
16	Net Positive Waste
17	Universal Access
18	Inclusion
19	Beauty + Biophilia
20	Education + Inspiration

BULLITT CENTER, LIVING CERTIFIED - SEATTLE, WA
IMAGE BY NIC LEHOUX, COURTESY OF BULLITT FOUNDATION

CERTIFICATION OPTIONS



LIVING BUILDING CHALLENGE CERTIFICATIONS

The Living Building Challenge is a holistic standard, requiring projects to strive for the ideal across the seven Petals. Therefore, both certification options under the LBC require consideration of all the Petals as described in this Standard.

LIVING CERTIFICATION

Living Certification is for projects striving for the highest level of sustainability and regenerative design. A project achieves Living Certification by attaining all Imperatives assigned to its Typology. All twenty Imperatives are required for New Buildings, and the other Typologies have similar, but scope dependent requirements.

PETAL CERTIFICATION

Petal Certification is for projects that want to do a deep dive into one particular issue area, or Petal of the Living Building Challenge. This certification requires the achievement of all the Core Imperatives, in addition to all Imperatives in either the Water, Energy, or Materials Petal.

BETTY AND CLINT JOSEY PAVILION, DIXON WATER FOUNDATION, LIVING CERTIFIED - DECATUR, TX

IMAGE COURTESY OF THE DIXON WATER FOUNDATION

OTHER INTERNATIONAL LIVING FUTURE INSTITUTE CERTIFICATIONS

CORE GREEN BUILDING CERTIFICATION

Core Green Building Certification (Core Certification) is for projects seeking a high aspiration certification that is verified, holistic and readily achievable. Projects must meet the requirements of the ten Core Imperatives – up to two Core Imperatives per Petal – and verify performance for water and energy through a twelve month performance period. All Imperatives required for this certification are described in this Standard, and are consolidated into the Core Green Building Certification Standard.

ZERO ENERGY CERTIFICATION

Zero Energy (ZE) Certification is for projects focused on achieving net zero energy through the on-site production of renewable energy. The marketplace has characterized net zero energy in many different ways, but ILFI has a simple definition:

One hundred percent of the building's energy needs on a net annual basis must be supplied by on-site renewable energy, with no combustion.

ZERO CARBON CERTIFICATION

Zero Carbon (ZC) Certification is for projects focused on impacting climate change through energy and materials. This certification requires that one hundred percent of the operational energy use associated with the project be offset by new on- or off-site renewable energy. It also requires a targeted energy efficiency level and a reduction in the embodied carbon of the project's primary materials.[7] In addition, one hundred percent of the carbon emissions impacts associated with the construction and materials of the project must be disclosed and offset.

For additional information about membership, registration and certification, including links, see pages 74 + 75.

7 See glossary and v4.0 Materials Petal Handbook for more information.

TE KURA WHARE, LIVING CERTIFIED - TŪHOE, TĀNEATUA, NZ
IMAGE COURTESY OF TE KURA WHARE PROJECT TEAM

IT'S TIME TO CREATE A LIVING FUTURE

UNIVERCITY CHILDCARE CENTRE, LIVING CERTIFIED - BURNABY, B.C., CANADA
IMAGE BY MARTIN TESSLER, COURTESY OF UNIVERCITY

PLACE

Restoring a Healthy Relationship Between Nature, Place and Community

- **I-01 ECOLOGY OF PLACE**
- **I-02 URBAN AGRICULTURE**
- **I-03 HABITAT EXCHANGE**
- **I-04 HUMAN-SCALED LIVING**

SCALE JUMPING PERMITTED FOR
I-02 URBAN AGRICULTURE
I-04 HUMAN-SCALED LIVING

PETAL INTENT

The intent of the Place Petal is to realign how people understand and relate to the natural environment that sustains us. The built environment must reconnect with the ecology of place and the unique characteristics found in every community so that story can be honored, protected and enhanced. The Place Petal clearly articulates where it is acceptable for people to build, how to protect and restore a place once it has been developed, and how to encourage the creation of communities that are once again based on the pedestrian rather than the automobile. In turn, these communities need to be supported by a web of local and regional agriculture that encourages the consumption of local, fresh and seasonal food.

The continued spread of sprawl development and the vastly increasing number of global megalopolises threaten the few wild places that remain. The decentralized nature of our communities impedes our capacity to feed ourselves in a sustainable way and also increases transportation impacts and pollution. The overly dense urban centers in turn crowd out healthy natural systems, isolating culture from a sense of place. As prime land for construction diminishes, more development tends to occur in sensitive areas that are easily harmed or destroyed. Invasive species threaten ecosystems, which are already weakened by the constant pressure of existing human developments. The impact of single-occupancy fossil fuel vehicles on global climate change is devastating. Fortunately, alternatives are plentiful from public transit and car sharing to electric vehicles and bicycles.

IDEAL CONDITIONS + CURRENT LIMITATIONS

The Living Building Challenge envisions a world full of compact, connected communities with healthy rather than inhumane levels of density—inherently conserving the natural resources that support human health and the farmlands that feed us, while also inviting natural systems back into the daily fabric of our lives. As previously disturbed areas are restored, the trend is reversed, and nature's functions are invited back into a healthy interface with people.

Human behavior and attitudes are the most significant barriers to transforming our surroundings. As the global population reaches unprecedented levels, the pressures to develop previously undeveloped land are even stronger than before and the solutions to develop in a restorative and healthy fashion even more imperative.

PLACE

CORE **IMPERATIVE**

01

ECOLOGY OF PLACE

The intent of this Imperative is to protect wild and ecologically significant places and encourage ecological regeneration and enhanced function of the communities and places where projects are built.

All projects must avoid building on pristine greenfield, wilderness, prime farmland or in a floodplain unless they meet an exception.[8] Projects must preserve thriving vibrant ecological environments and habitats.

All project teams must document site and community conditions prior to the start of work, including but not limited to identification of the project's "reference habitat(s)".

All projects must demonstrate that they contribute positively to the ecology of their place and restore or enhance the ecological performance of the site towards a healthy ecological baseline. On-site landscape must be designed to mature and evolve, and emulate the functionality of the reference habitat, as appropriate to the project's Transect.[9]

All project teams must assess cultural and social equity factors and needs in the community and consider those identified needs to inform design and process decisions.

No petrochemical fertilizers or pesticides can be used for the operation and maintenance of the on-site landscape, including urban agriculture.

8 Refer to the v4.0 Place Petal Handbook for exceptions to the limits on project locations.
9 Refer to the v4.0 Place Petal Handbook for more information regarding the emulation of the reference habitat, including specific aspects to consider.

PLACE

IMPERATIVE

02

URBAN AGRICULTURE

SCALE JUMPING PERMITTED

The intent of this Imperative is to integrate opportunities for connecting the community to locally grown fresh food.

All projects must dedicate a portion of their total project area to growing food, or they must dedicate a smaller portion of their total project area to growing food and must also directly provide weekly community access to healthy local food that address a community need, through farmers markets, CSA programs or other local food producers.[10]

LIVING TRANSECT	Percent of total project area for Agriculture	
	PATHWAY 1 Agriculture only	**PATHWAY 2** Agriculture + food access
1	5%	2% + weekly access
2	20%	10% + weekly access
3	15%	7% + weekly access
4	10%	5% + weekly access
5	5%	2% + weekly access
6	2%	0% + weekly access

Scale jumping can be used as the means to expand the availability of healthy, local food (through agriculture or other means) to a specific population or the community in general via an off-site location such as a food bank, school, or other community resource.

Resilience Strategy
All projects (except residential projects) must provide access to food for 75% of FTE occupants for a minimum of three days during an emergency.

Residential projects must demonstrate the capacity to store at least a two-week supply of food.

10 Refer to the v4.0 Place Petal Handbook for clarifications of the types of agriculture that are acceptable as well as some ideas for healthy food access compliance.

PLACE

IMPERATIVE 03

HABITAT EXCHANGE

The intent of this Imperative is to protect land for other species as more and more land is taken for human use.

All projects must set aside land equal to the project area (or 0.4 hectares/1 acre, whichever is greater)[11] away from the project site, in perpetuity, through an approved Land Trust organization or the Institute's Living Future Habitat Exchange Program.[12]

11 Refer to the v4.0 Place Petal Handbook for clarifications, exceptions and other information. ILFI now operates the Living Future Habitat Exchange Program in cooperation with conservation organizations.

12 www.living-future.org/exchange.

TE KURA WHARE, LIVING CERTIFIED - TŪHOE, TĀNEATUA, NZ
IMAGE COURTESY OF TE KURA WHARE PROJECT TEAM

PLACE

CORE IMPERATIVE

04

HUMAN-SCALED LIVING

SCALE JUMPING PERMITTED

The intent of this Imperative is to contribute toward the creation of walkable, pedestrian-oriented communities that reduce the use of fossil fuel vehicles.

All projects must maintain or increase the density of the site and support a human-powered lifestyle.

All projects (except single family residential) must also:

- Be built to a human scale that is appropriate for the neighborhood.
- Provide places for occupants to gather and connect with the community.
- Provide sufficient secure, weather-protected storage for human-powered vehicles and facilities, such as showers and lockers, to encourage biking.[13]
- Provide at least two electric vehicle charging stations or one per thirty spaces, whichever is greater.
- Minimize impervious surface parking to no more than 20% (Transects 1-3), 15% (Transect 4), 5% for (Transect 5) and 0% (Transect 6) of the Project Area and ensures that any surface parking area larger that 20m x 30m is separated with planted areas.[14]

13 Projects must demonstrate how they have addressed on-site bike storage opportunities in order to meet the intent of this Imperative.
14 For maximum parking guidelines refer to the 4.0 Place Petal Handbook

continued >>

PLACE

CORE **IMPERATIVE**

04

HUMAN-SCALED LIVING

SCALE JUMPING PERMITTED

- Either reduce single-occupancy vehicle (SOV) trips and trips by fossil fuel-based vehicles by 30% over an established baseline relevant to the projects region and occupancy type, or
- Implement at least four of the following best practices:
  - Consideration and enhancement of pedestrian routes, including weather protection on street frontages.
  - Advocacy in the community to facilitate the uptake of human-powered and public transportation.
  - A transit subsidy for all occupants of the building (if owner occupied) or a requirement for tenant employers to provide such a subsidy.
  - Carpool coordination assistance.
  - Access either to subsidized car sharing and/or to hybrid or EV fleet vehicles.
  - Regular survey of occupants to determine current fossil fuel-based SOV trips.

Single-family homes (all Transects) must assess how occupants can reduce their transportation impact through car sharing, use of public transportation, alternative fuel vehicles, or bicycles and implement at least two identified strategies.

WATER

Creating Developments that Operate within the Water Balance of a Given Place and Climate

I-05 RESPONSIBLE WATER USE

I-06 NET POSITIVE WATER

SCALE JUMPING PERMITTED FOR
I-05 RESPONSIBLE WATER USE
I-06 NET POSITIVE WATER

PETAL INTENT

The intent of the Water Petal is to realign how people value water; to address the energy and chemicals involved in transporting, purifying and pumping water; and to redefine "wastewater" as a precious nutrient and resource.

The scarcity of water is a serious issue, as many countries around the world face severe shortages and compromised water quality due to global climate change. Even regions that have avoided the majority of these problems to date due to a historical presence of abundant fresh water are at risk: the impacts of climate change, highly unsustainable water use patterns, and the continued drawdown of major aquifers suggest significant problems ahead. Closed loop systems based on the resources available, with localized treatment, can help mitigate these issues and create a more resilient water future.

IDEAL CONDITIONS + CURRENT LIMITATIONS

The Living Building Challenge envisions a future whereby all developments are configured based on the carrying capacity of the site: harvesting sufficient water to meet the needs of a given population while respecting the natural hydrology of the land, the water needs of the ecosystem the site inhabits, and the ecosystem of the community. Indeed, water can be used and purified and then used again—and the cycle repeats.

Currently, such practices are often illegal due to health, land use, and building code regulations (or because of the undemocratic ownership of water rights) that arose precisely because people were not properly safeguarding the quality of their water. Therefore, reaching the ideal for water use means challenging outdated attitudes and technology with decentralized site- or district-level solutions that are appropriately scaled, elegant, and efficient.

WATER

CORE **IMPERATIVE**

05

RESPONSIBLE WATER USE

SCALE JUMPING PERMITTED

The intent of this Imperative is to encourage projects to treat water like a precious resource, minimizing waste and the use of potable water, while avoiding downstream impacts and pollution.

All projects must not use potable water for irrigation, and use less water for the project's other needs than a baseline regional building of the same type at the following rates:[15]

- New Building: 50%
- Existing Building: 30%

Affordable housing projects can use water handprinting combined with project efficiency to meet water savings goals.[16]

All projects must treat all stormwater on site, through natural or mechanical means and without chemicals, and manage all stormwater based on both pre-development hydrology and current ecological conditions, as determined by a qualified professional.

All projects on a Combined Sewer Overflow (CSO) system, or in a floodplain (based on an exception) must incorporate stormwater detention and avoid sheet flow off the site.

15 Refer to the 4.0 Water Petal Handbook for clarifications and exceptions, including an exception based on jurisdictional refusal of the designed systems. That exception does not apply to irrigation systems.

16 There are two ways to create a Handprint: (1) Preventing or avoiding Footprints that would otherwise have occurred, which includes reducing the magnitude of Footprints that occur, relative to what their magnitude would otherwise have been; and (2) Creating positive benefits which would not otherwise have occurred, without impacting the Footprint. All change occurs relative to some baseline, often referenced as "business as usual," or BAU.

WATER

IMPERATIVE 06

NET POSITIVE WATER

SCALE JUMPING PERMITTED

The intent of this Imperative is for project water use and release to work in harmony with the natural water flows of the site and its surroundings.

All projects must supply one hundred percent of the project's water needs through captured precipitation or other natural closed-loop water systems, and/or through recycling used project water, and all water must be purified as needed without the use of chemicals.[17] No potable water may be used for non-potable uses.

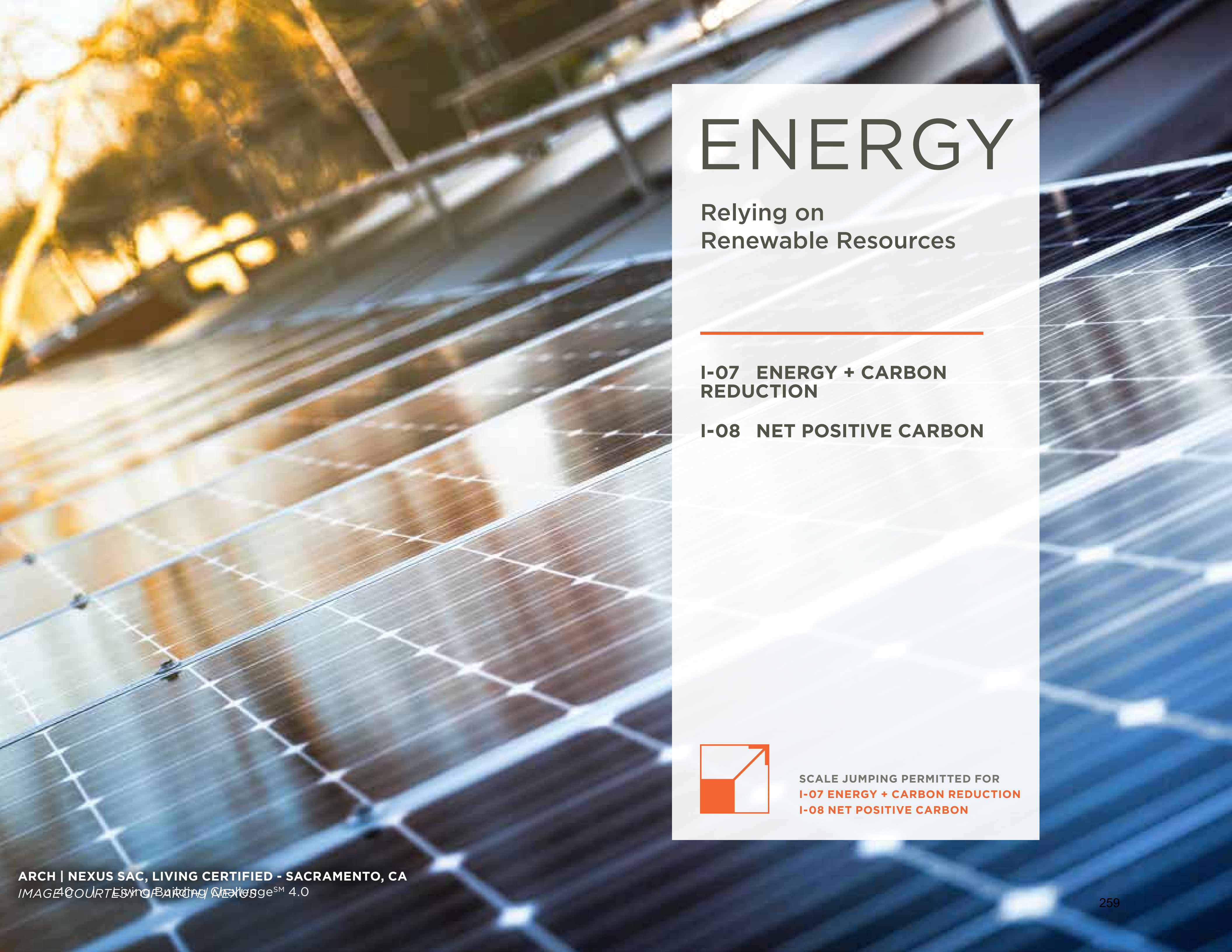
All projects must address all grey and black water through on-site treatment and management through reuse, a closed loop system, or infiltration.[18] Projects that are not able to treat and manage on-site may use handprinting within their watershed and community.

Scale jumping strategies are allowed with some limitations. For example, connecting to a community or municipal facility is allowed only if the facility treats waste to tertiary levels, reuses or infiltrates all water in balance with the water shed, and has a biologically based treatment process with no chemicals. For all scale jumping, pump energy must be accounted for through renewable energy sources.

All projects must incorporate a resilience strategy to provide drinking water for up to a week for all regular building occupants through water storage on-site.

17 Refer to the v4.0 Water Petal Handbook for clarifications and exceptions, such as exceptions based on local health regulations.
18 Refer to the Water Petal Handbook for clarifications and exceptions, such exceptions based on local health regulations.

FRICK ENVIRONMENTAL CENTER, LIVING CERTIFIED - PITTSBURGH, PA
IMAGE BY JEREMY MARSHALL, COURTESY OF FRICK ENVIRONMENTAL CENTER



ENERGY

Relying on Renewable Resources

I-07 ENERGY + CARBON REDUCTION

I-08 NET POSITIVE CARBON

SCALE JUMPING PERMITTED FOR
I-07 ENERGY + CARBON REDUCTION
I-08 NET POSITIVE CARBON

ARCH | NEXUS SAC, LIVING CERTIFIED - SACRAMENTO, CA
IMAGE COURTESY OF ARCH | NEXUS

PETAL INTENT

The intent of the Energy Petal is to create new sources of renewable energy that allow projects to operate year-round in a resilient, carbon pollution-free manner. In addition, the Energy Petal prioritizes energy efficiency as a means to reduce wasteful spending, of energy, resources, and capital.

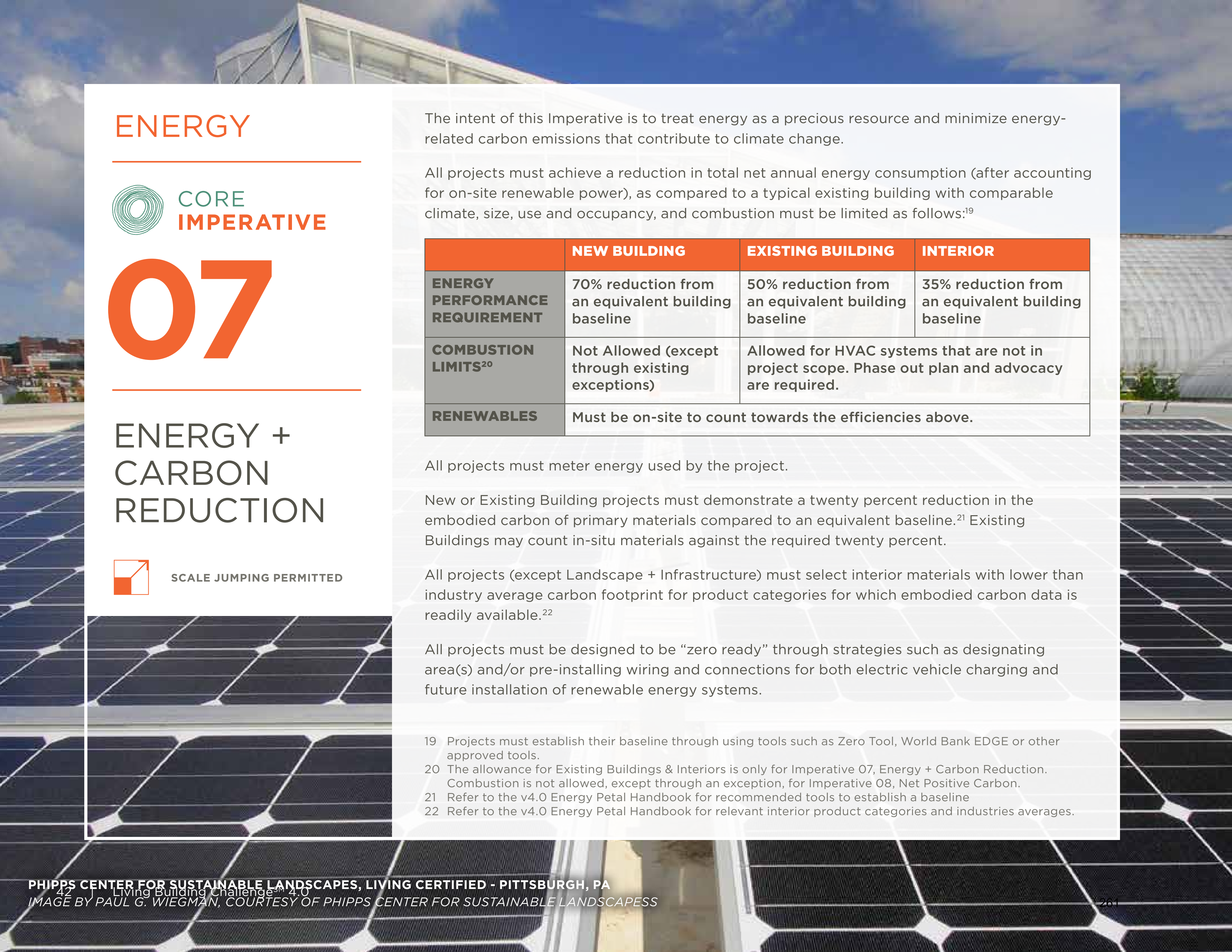
Today, buildings consume more energy than any other final use. Most of the energy generated for these buildings is from ecologically destructive and often politically destabilizing sources that include coal, gas, oil, and nuclear power. Large-scale hydro, while inherently cleaner in generation, comes at the expense of widespread disruption to ecosystems. Combustion of wood pellets and other biomass can release particulates and carbon dioxide (CO2) into the atmosphere that can affect public health or strain land reserved for food production while robbing the soil of much-needed nutrient recycling. The combined negative impacts of this energy infrastructure are becoming increasingly evident, as ever-increasing carbon emissions from energy use are resulting in changes to the climate that threaten the safety and prosperity of communities worldwide.

The Energy Petal attempts to establish a new paradigm for humans' relationship with energy, in which the places we live, work and play become catalysts for a healthy and resilient future.

IDEAL CONDITIONS + CURRENT LIMITATIONS

The Living Building Challenge envisions safe, resilient and decentralized energy infrastructure, one powered entirely by renewables. The energy grid will supply power equitably to incredibly efficient buildings that do not contribute to the negative externalities associated with combustion or fission.

Although considerable progress has been made to advance the cost-effectiveness and performance of renewable energy technologies, many projects still perpetuate fossil fuel energy infrastructure due to cost or regulatory barriers. In order to truly realize the social, ecological and economic benefits of clean energy, there must be even more urgency placed on move away from combustion-based energy sources. Storage of energy in the form of batteries or advanced materials will also enable teams to more effectively utilize the energy harvested on site and support the phasing out of short-term combustion needs on the utility grid.



ENERGY

CORE
IMPERATIVE

07

ENERGY + CARBON REDUCTION

SCALE JUMPING PERMITTED

The intent of this Imperative is to treat energy as a precious resource and minimize energy-related carbon emissions that contribute to climate change.

All projects must achieve a reduction in total net annual energy consumption (after accounting for on-site renewable power), as compared to a typical existing building with comparable climate, size, use and occupancy, and combustion must be limited as follows:[19]

	NEW BUILDING	EXISTING BUILDING	INTERIOR
ENERGY PERFORMANCE REQUIREMENT	70% reduction from an equivalent building baseline	50% reduction from an equivalent building baseline	35% reduction from an equivalent building baseline
COMBUSTION LIMITS[20]	Not Allowed (except through existing exceptions)	Allowed for HVAC systems that are not in project scope. Phase out plan and advocacy are required.	
RENEWABLES	Must be on-site to count towards the efficiencies above.		

All projects must meter energy used by the project.

New or Existing Building projects must demonstrate a twenty percent reduction in the embodied carbon of primary materials compared to an equivalent baseline.[21] Existing Buildings may count in-situ materials against the required twenty percent.

All projects (except Landscape + Infrastructure) must select interior materials with lower than industry average carbon footprint for product categories for which embodied carbon data is readily available.[22]

All projects must be designed to be "zero ready" through strategies such as designating area(s) and/or pre-installing wiring and connections for both electric vehicle charging and future installation of renewable energy systems.

19 Projects must establish their baseline through using tools such as Zero Tool, World Bank EDGE or other approved tools.
20 The allowance for Existing Buildings & Interiors is only for Imperative 07, Energy + Carbon Reduction. Combustion is not allowed, except through an exception, for Imperative 08, Net Positive Carbon.
21 Refer to the v4.0 Energy Petal Handbook for recommended tools to establish a baseline
22 Refer to the v4.0 Energy Petal Handbook for relevant interior product categories and industries averages.

PHIPPS CENTER FOR SUSTAINABLE LANDSCAPES, LIVING CERTIFIED - PITTSBURGH, PA
IMAGE BY PAUL G. WIEGMAN, COURTESY OF PHIPPS CENTER FOR SUSTAINABLE LANDSCAPESS

ENERGY

IMPERATIVE

08

NET POSITIVE CARBON

SCALE JUMPING PERMITTED

The intent of this Imperative is to foster the development and use of carbon-free renewable energy resources while avoiding the negative impacts of fossil fuel use, primarily the emissions that contribute to global climate change.

All projects must supply one hundred and five percent of their project's energy needs through on-site renewable energy on a net annual basis, without the use of combustion.[23]

All projects (except single-family residential) must sub-meter major energy end uses.

All single-family residential projects must develop a method to understand and trouble-shoot energy use.

All projects must account for the total embodied carbon emissions (tCO2e) from its construction (including the energy consumed during construction) through the utilization of carbon-sequestering materials and/or through a one-time carbon offset purchase through an ILFI-approved carbon offset provider.[24]

All projects must develop and incorporate a resilience strategy to allow the building to be habitable for one week, or otherwise participate in support for the local community in a disaster, through the use of batteries, storage etc.

23 Refer to the v4.0 Energy Petal Handbook for a list of renewable energy systems, clarifications, and exceptions, including sub-metering requirements. Energy consumed during construction must be accounted for with either a carbon offset or renewable energy on site.

24 Refer to the v4.0 Energy Petal Handbook for approved carbon offset programs, clarifications, and exceptions.

HEALTH + HAPPINESS

Fostering Environments that Optimize Physical and Psychological Health and Well Being

PETAL INTENT

The intent of the Health + Happiness Petal is to create healthy spaces that allow all species to thrive by connecting people to nature and ensuring that our indoor spaces have healthy air and natural daylight.

Many developments provide substandard conditions for health, with over fifty percent of global office workers having no access to daylight. Research studies show that a connection to nature has a direct effect on people's productivity, their creativity and their ability to counter stress. Ensuring healthy environments does not rely just on the moment that the building is open, it requires continuous monitoring and diligence to ensure that alterations to systems over time do not diminish people's health.

IDEAL CONDITIONS + CURRENT LIMITATIONS

The Living Building Challenge envisions a nourishing, highly productive and healthy built environment where everyone has fresh air, daylight, views outside and can be connected to the weather, the seasons and the time of day. However, even the best available solutions require acceptance and engagement by the occupants and the project owner. For buildings to be healthy over time takes a commitment from the project occupants and owners.

OMEGA CENTER FOR SUSTAINABLE LIVING, CERTIFIED LIVING - RHINEBECK, NY
IMAGE BY FARSID ASSASSI, COURTESY OF BNIM ARCHITECTS

HEALTH + HAPPINESS

CORE **IMPERATIVE**

09

HEALTHY INTERIOR ENVIRONMENT

The intent of this Imperative is to promote good indoor air quality and a healthy interior environment for project occupants.

All projects must:

- Comply with the current version of ASHRAE 62, or international equivalent.
- Prohibit smoking within any buildings or enclosed spaces, and within 25’ of any building opening, including air supply vents.
- Develop a Healthy Indoor Environment Plan specific to the project’s building type and location. The plan must address cleaning protocols, the prevention of particulates and toxins through an entry approach and implementation of at least one strategy to improve air quality.
- Provide views outside and daylight for 75% of occupants.
- Provide direct exhaust for kitchens, bathrooms, and janitorial areas.

HEALTH + HAPPINESS

IMPERATIVE

10

HEALTHY INTERIOR PERFORMANCE

The intent of this Imperative is to demonstrate ongoing high-quality indoor air and a healthy indoor environment.

To promote good indoor air quality performance, all projects must:

- Provide the results from an Indoor Air Quality test one to six months after occupancy, or provide readings from an ILFI-approved continuously monitored indoor air quality system.[25]
- Comply with the CDPH Standard Method v1.1-2010 (or international equivalent) for 90% of interior building products that have the potential to emit volatile organic compounds (VOCs).
- Implement a cleaning protocol that uses cleaning products that comply with the EPA Safer Choice label (or international equivalent, such as Globally Harmonized System [GHS]).[26]

All projects must provide 95% of occupants access to views and daylight and opportunities for the remaining five percent of occupants to move to compliant spaces for a portion of their day.[27]

In addition, all projects must provide at least two of the following:

- Sufficient operable windows to provide natural ventilation for at least six months of the year.
- Ability for the occupants to influence their local airflow and temperature through direct input or controls.
- Flexible options for working and learning such as sit/stand options and/or varied sensory experiences for living, working or learning.

Residential projects must provide operable windows for 100% of the project occupants.

25 Testing protocols must be consistent with the United States Environmental Protection Agency Compendium of Methods for the Determination, or international equivalent. Continuous monitoring must address specific pollutants and verification standards. Refer to the v4.0 Health + Happiness Petal Handbook for the exceptions and clarifications.
26 www.epa.gov/dfe; https://www.osha.gov/dsg/hazcom/global.html
27 Refer to the v4.0 Health + Happiness Petal Handbook for daylight compliance options.

WEST BERKELEY PUBLIC LIBRARY, ZERO ENERGY CERTIFIED - BERKELEY, CA
IMAGE BY DAVID WAKELY, COURTESY OF WEST BERKELEY PUBLIC LIBRARY

HEALTH + HAPPINESS

IMPERATIVE

11

ACCESS TO NATURE

The intent of this Imperative is to provide opportunities for project occupants to directly connect to nature, and to assess the success of the Health + Happiness Imperatives.

All projects must connect people and nature through the provision of sufficient and frequent human-nature interactions in both the interior and the exterior of the project to connect the majority of occupants with nature directly.

All projects must request that occupants complete a post-occupancy evaluation that addresses the health benefits of the project including the benefits of daylight, fresh air and access to nature at least once within six to twelve months of occupancy.

CHESAPEAKE BAY BROCK ENVIRONMENTAL CENTER, LIVING CERTIFIED - VIRGINIA BEACH, VA
IMAGE BY DAVE CHANCE, COURTESY OF BROCK ENVIRONMENTAL CENTER

MATERIALS

Building with Products that are Safe for All Species Through Time

ETSY HEADQUARTERS, PETAL CERTIFIED - BROOKLYN, NY
IMAGE BY EMILY ANDREWS, COURTESY OF ETSY

PETAL INTENT

The intent of the Materials Petal is to help create a materials economy that is non-toxic, ecologically restorative, and transparent. Throughout their life cycle, building materials are responsible for many adverse environmental issues, including personal illness, habitat and species loss, pollution, and resource depletion. The Imperatives in this section aim to remove the worst known offending materials and practices and to drive business toward a truly responsible materials economy. When impacts can be reduced but not eliminated, there is an obligation not only to offset the damaging consequences associated with the construction process, but also to strive for corrections in the industry itself. Over the past decade, the Red List has transformed the building industry from one where ingredients were held in secret to one where transparency is becoming the new normal.

IDEAL CONDITIONS + CURRENT LIMITATIONS

The Living Building Challenge envisions a future where all materials in the built environment are regenerative and have no negative impact on human and ecosystem health. The precautionary principle guides all materials decisions when impacts are unclear.

There are significant limitations to achieving the ideal for the materials realm. Product specification and purchase has far-reaching impacts, and although consumers are starting to weigh these in parallel with other more conventional attributes such as aesthetics, function and cost, the biggest shortcoming is due to the market itself. Transparency is vital; as a global community, the only way we can transform into a truly sustainable society is through open communication and honest information sharing.

Declare®, the Institute's ingredients label for building products, is a publicly accessible label and online database and is embedded within the Materials Petal. Not only does Declare provide a clear solution to both transparency and documentation for projects, and a means to verify when exceptions are no longer needed, it also provides a forum for sharing the information compiled by a project team as part of their documentation requirements for certification.

declareproducts.com

TE KURA WHARE, LIVING CERTIFIED - TŪHOE, TĀNEATUA, NZ
IMAGE COURTESY OF TE KURA WHARE PROJECT TEAM

MATERIALS

CORE **IMPERATIVE**

12

RESPONSIBLE MATERIALS

The intent of this Imperative is to set a baseline for transparency, sustainable extraction, support of local industry and waste diversion for all projects.

All projects must positively impact the building products market by meeting the following materials selection criteria:

- The project must contain one Declare label product per 200 sq m of gross building area, or project area, whichever is smaller, up to twenty distinct products from five manufacturers. All other product manufacturers not currently in Declare must, at a minimum, receive a letter requesting they disclose their ingredients and identify any Red List content.[28]
- All projects (except residential) must incorporate one product certified under the Living Product Challenge.[29]
- 50% of wood products must be FSC, salvaged, or harvested on site either for the purpose of clearing the area for construction or to restore or maintain the continued ecological function of the site. The remainder must be from low risk sources.[30]
- 20% or more of the materials construction budget must come from within 500 kilometers of construction site.[31]
- The project must divert 80% of the construction waste material from the landfill and provide dedicated infrastructure for the collection of recyclables and compostable food scraps during occupancy.

When a project is targeting all Materials Imperatives, it is not necessary to document this Imperative, since all requirements are superseded by Imperatives 13-16.

28 www.living-future.org/declare/
29 www.living-future.org/lpc/
30 The Nature, Economy and People Connected tool or equivalent must be used to assess risk: https://www.nepcon.org/sourcinghub/timber
31 "Materials construction budget" is defined as all material costs and excludes labor, soft costs, and land. Declare products and salvaged materials may be counted at twice their value. Certain natural building materials may include labor cost in their calculation. Refer to the v4.0 Materials Petal Handbook for more information.

OWENS CORNING® ECOTOUCH® PINK® FIBERGLAS™ BATT INSULATION
IMPERATIVE CERTIFIED (LIVING PRODUCT CHALLENGE)
IMAGE COURTESY OF OWENS CORNING

MATERIALS

IMPERATIVE 13

RED LIST

The intent of this Imperative is to foster a transparent materials economy free of toxins and harmful chemicals.

All projects must avoid the following Red List chemical classes in 90% of the project's new materials by cost.[32] "In situ" materials do not need to be removed or vetted for Red List chemical classes.[33]

- Antimicrobials (marketed with a health claim)
- Alkylphenols and related compounds
- Asbestos compounds
- Bisphenol A (BPA) and structural analogues
- California-banned solvents
- Chlorinated Polymers, including:
  - Chlorinated poly-ethylene (CPE)
  - Chloroinated poly-vinyl chloride (CPVC)
  - Chloroprene (neo-prene monomer)
  - Chlorosulfonated poly-ethylene (CSPE)
  - Polyvinylidene chlo-ride (PVDC)
- Polyvinyl chloride (PVC)
- Chlorobenzenes
- Chlorofluorocarbons (CFC) and hydrochloro-fluorocarbons (HCFC)
- Formaldehyde (added)
- Monomeric, polymeric and organo-phosphate halogenated flame retardants (HFRs)
- Organotin Compounds
- Perfluorinated compounds (PFCs)
- Phthalates (orthophthalates)
- Polychlorinated biphenyls (PCBs)
- Polycyclic aromatic hydrocarbons (PAHs)
- Short-chain and medium-chain chlorinated paraffins
- Toxic heavy metals
  - Arsenic
  - Cadmium
  - Chromium
  - Lead (added)
  - Mercury
- Volatile organic compounds (VOC) (wet-applied products)*
- Wood Treatments containing creosote or pentachlorophenol

*VOCs are limited, not banned. Refer to the v4.0 Materials Petal Handbook for specific reference standard + thresholds.

32 Refer to the v4.0 Materials Petal Handbook for complete and up-to-date listings of the numerous Red List exceptions. For purposes of the Living Building Challenge, "Materials" includes systems furniture and excludes FF&E.

33 A list of CAS registry numbers that correspond with each Red List item is available and should be projects based on their date of registration. Materials deemed hazardous by a remediation professional must be addressed appropriately.

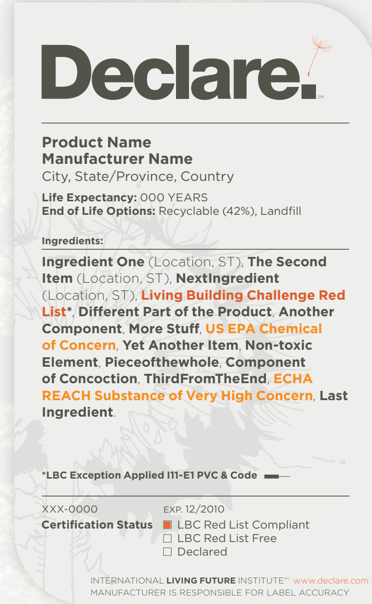
THE LICHEN COLLECTION BY MOHAWK
PETAL CERTIFIED (LIVING PRODUCT CHALLENGE)
IMAGE COURTESY OF MOHAWK

MATERIALS

IMPERATIVE 14

RESPONSIBLE SOURCING

The intent of this Imperative is to support sustainable extraction of materials and transparent labeling of products.



All projects must advocate for:

- The creation and adoption of third-party certified standards for sustainable resource extraction and fair labor practices for extraction of rock, metal, minerals, and timber.
- Certification under the Natural Stone Council (NSC) 373 Standard by quarries and/or manufacturers of all dimension stone products used within the project.[34]

All projects must either source 80% or more of all wood, by cost or volume, as Forest Stewardship Council (FSC) certified,[35] or as salvaged, or from the intentional harvest of on-site timber for the purpose of clearing the area for construction or restoring/maintaining the continued ecological function of the on-site bionetwork, and the remaining 20% of wood must be from low-risk sources.[36] Alternatively, the project may achieve FSC Project Certification.[37]

All projects must contain two Declare labeled products per 200 sq m of gross building area, or project area, whichever is smaller, up to forty products, and advocate to all manufacturers that are not in Declare that they register their products in the Declare database.[38]

All projects (except residential) must incorporate one product certified under the Living Product Challenge per 1,000 sq. m of gross building area or project area, whichever is smaller, up to three products.[39] Residential projects must incorporate one product certified under the Living Product Challenge.

34 http://naturalstonecouncil.org/education-training/nsc-initiatives/dimensional-stone-standard/.
35 Refer to the v4.0 Materials Petal Handbook for a full list of exceptions, such as an exception for wood in existing buildings undergoing renovation.
36 The Nature, Economy and People Connected tool or equivalent must be used to assess risk: https://www.nepcon.org/sourcinghub/timber
37 See FSC websites by location: e.g., https://us.fsc.org/en-us/market/green-building/fsc-project-certification; https://www.fsc-uk.org/en-uk/business-area/fsc-certificate-types/project-certification
38 www.living-future.org/declare/
39 www.living-future.org/lpc

MATERIALS

IMPERATIVE 15

LIVING ECONOMY SOURCING

The intent of this Imperative is to foster local communities and businesses, while minimizing transportation impacts.

The project must incorporate place-based solutions and contribute to the expansion of a regional economy rooted in sustainable practices, products, and services.

Manufacturer location for materials must adhere to the following restrictions:

- 20% or more of the materials construction budget must come from within 500 kilometers of construction site.[40]
- 30% of the total materials construction budget must come from within 1000 kilometers of the construction site or closer.
- An additional 25% of the materials construction budget must come from within 5000 kilometers of the construction site.
- The remaining 25% of materials may be sourced from any location.

40 “Materials construction budget” is defined as all material costs excluding labor, soft costs, and land. Declare products and salvaged materials may be counted at twice their value. Certain natural building materials may include labor cost in their calculation. Refer to the v4.0 Materials Petal Handbook for more information.

BETTY AND CLINT JOSEY PAVILION, DIXON WATER FOUNDATION, LIVING CERTIFIED - DECATUR, TX
IMAGE COURTESY OF THE DIXON WATER FOUNDATION

MATERIALS

IMPERATIVE

16

NET POSITIVE WASTE

The intent of this Imperative is to integrate waste reduction into all phases of projects and to encourage imaginative reuse of salvaged “waste” materials.

All projects must strive to reduce or eliminate the production of waste during design, construction, operation, and end of life in order to conserve natural resources and to find ways to integrate waste back into either an industrial loop or a natural nutrient loop.[41]

All projects must feature at least one salvaged material per 500 square meters of gross building area or be an adaptive reuse of an existing structure.

All projects must create a Materials Conservation Management Plan that explains how the project optimizes materials in each of the following phases:

- Design Phase, including the consideration of deconstruction and appropriate durability in product specifications.
- Construction Phase, including product optimization and collection of waste materials for reuse or recycling.
- Operation Phase, including a collection plan for extra consumables and durables.
- End of Life Phase, including a plan for adaptable reuse and deconstruction.

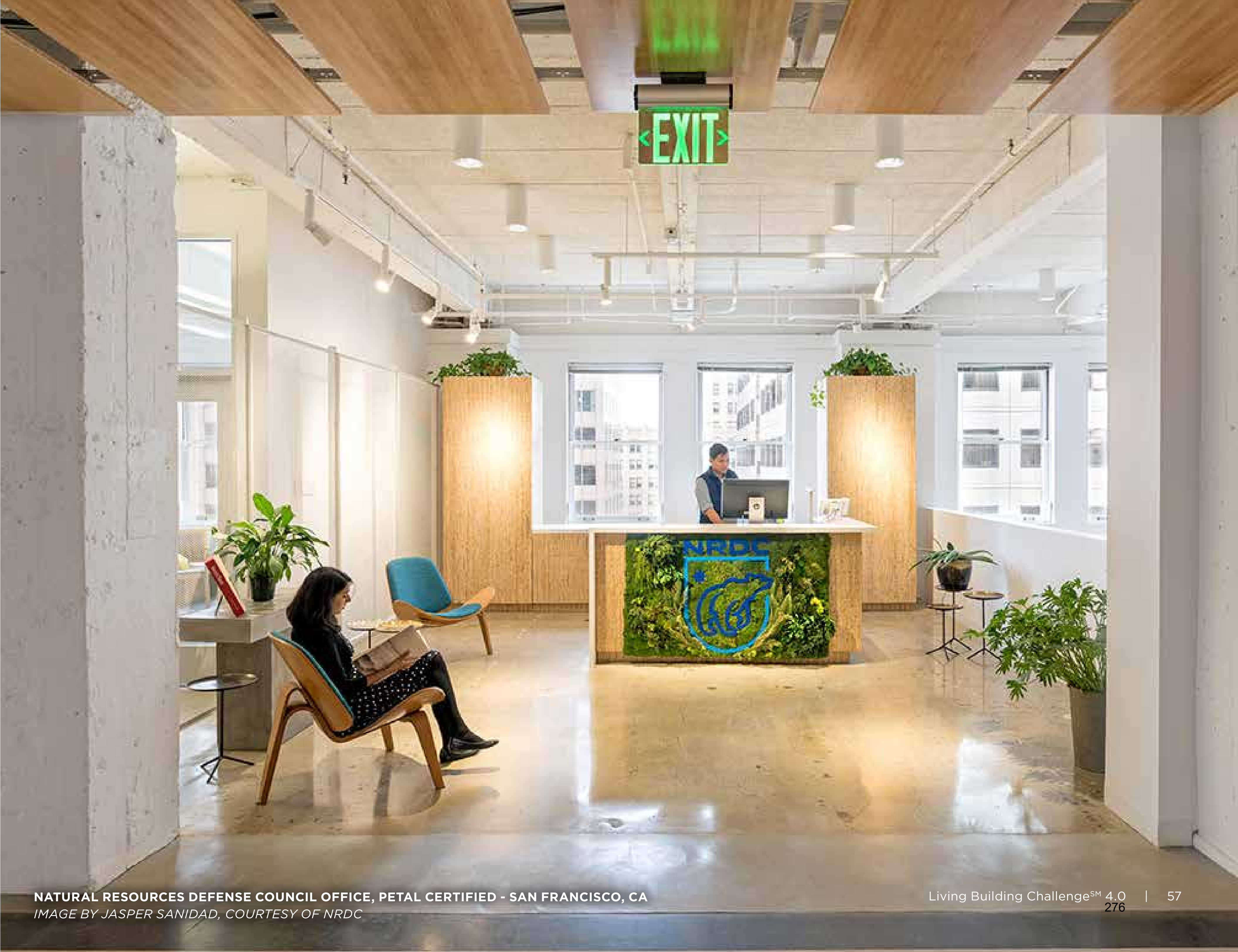
All projects must divert waste material from the landfill to the following levels (by weight or volume) during construction:

MATERIAL	MINIMUM DIVERSION RATE
Metal	**99%**
Paper and cardboard	**99%**
Soil and biomass	**100%**
Rigid foam, carpet, and insulation	**95%**
All others – combined weighted average[42]	**90%**
Demolition Waste	**80%**

All project types must provide dedicated infrastructure for the collection of recyclables and compostable food scraps.

Projects located on sites with existing infrastructure must complete a pre-building audit that inventories available materials and assemblies for reuse or donation.

41 Refer to the v4.0 Materials Petal Handbook for calculation details, clarifications, and exceptions.
42 Hazardous materials in demolition waste, such as lead-based paint, asbestos, and polychlorinated biphenyls (PCBs), are exempt from percentage calculations.



NATURAL RESOURCES DEFENSE COUNCIL OFFICE, PETAL CERTIFIED - SAN FRANCISCO, CA
IMAGE BY JASPER SANIDAD, COURTESY OF NRDC

EQUITY

Supporting a Just, Equitable World

I-17 UNIVERSAL ACCESS

I-18 INCLUSION

PETAL INTENT

The intent of the Equity Petal is to elevate equity as a project goal, and to transform developments to foster a just and inclusive community that enables all people to participate, prosper, and reach their full potential. It is grounded in the belief that a society that embraces and engages all sectors of humanity and allows the dignity of equal access and fair treatment is a civilization in the best position to make decisions that protect and restore the natural environment that sustains all of us.

Disturbing trends toward privatizing infrastructure, externalizing negative social and environmental impacts, and limiting access to nature, which combined with growing income equality exacerbate polarized attitudes of “us” vs. “them”, and limit full participation in community life for all. Only by realizing that we are indeed all in this together can the greatest environmental and social problems be addressed.

Living Buildings are meant to be accessible and welcoming to all people, helping us recognize and celebrate cultural richness, while ensuring equitable access to fresh air, sunlight, and clean water and soil.. The process of designing, building and operating Living Buildings should also have a positive impact in creating jobs and opportunities for inclusion of people who have been disadvantaged, excluded, or discriminated against.

Just℠, the Institute’s social justice transparency platform for organizations, is a publicly accessible label and online database, and is a core component of the Equity Petal. Just is a powerful tool to help project teams assess their own organizational equity, and to identify and support other organizations that share the values of a socially just and culturally rich living future.

living-future.org/just

IDEAL CONDITIONS + CURRENT LIMITATIONS

The Living Building Challenge envisions a built environment that is welcoming and accessible, and that enables all people to participate, prosper, and reach their full potential. It is a built environment created by equitable organizations, who lead inclusive design and construction processes.

Current limitations to reaching this ideal stem from ingrained cultural and social attitudes about the rights associated with private ownership and from structural and institutionalized racism and sexism, and widespread discrimination. A clear and concerted effort to address social equity issues is generally absent in most organizations, design objectives, and outcomes, and project stakeholders are usually limited by our ingrained assumptions and attitudes about ownership and rights, further excluding stakeholders in the community who will also be impacted by and could benefit from the project.

continued >>

ETSY HEADQUARTERS, PETAL CERTIFIED - BROOKLYN, NY
IMAGE BY EMILY ANDREWS, COURTESY OF ETSY

EQUITY

CORE **IMPERATIVE**

17

UNIVERSAL ACCESS

The intent of this Imperative is to allow equitable access to, and protections from any negative impacts resulting from the development of, Living Building projects.

All projects must make all primary transportation, roads and non-building infrastructure that are considered externally focused (e.g. plazas, seating or park space) equally accessible to all members of the public regardless of background, age and socioeconomic class—including the homeless—with reasonable steps taken to ensure that all people can benefit from the project's creation.[43]

Projects in Transects L3-L6 (except single-family residences) must provide for and enhance the public realm through design measures and features that are accessible to all members of society, such as street furniture, public art, gardens, and benches.

All projects must safeguard access for those with physical disabilities through designs meeting either the Principles of Universal design (United States Access Board), the Americans with Disabilities Act (ADA), and the Architectural Barriers Act (ABA) Accessibility Guidelines, or international equivalent.[44]

No project may block access to, nor diminish the quality of, fresh air, sunlight, and natural waterways for any member of society or adjacent developments. Projects must also appropriately address any noise audible to the public.

- Fresh Air: Projects must protect adjacent property from any noxious emissions that would compromise its ability to use natural ventilation. All operational emissions must be free of Red List items, persistent bioaccumulative toxicants, and known or suspect carcinogenic, mutagenic and reprotoxic chemicals.

43 Refer to the v4.0 Equity Petal Handbook for exceptions and clarifications regarding access.
44 Refer to the v4.0 Equity Petal Handbook for exceptions, such as those for private residences and historic structures. ADA and ABA Accessibility Guidelines are available online: www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-aba-standards/aba-standards

continued >>

EQUITY

CORE **IMPERATIVE**

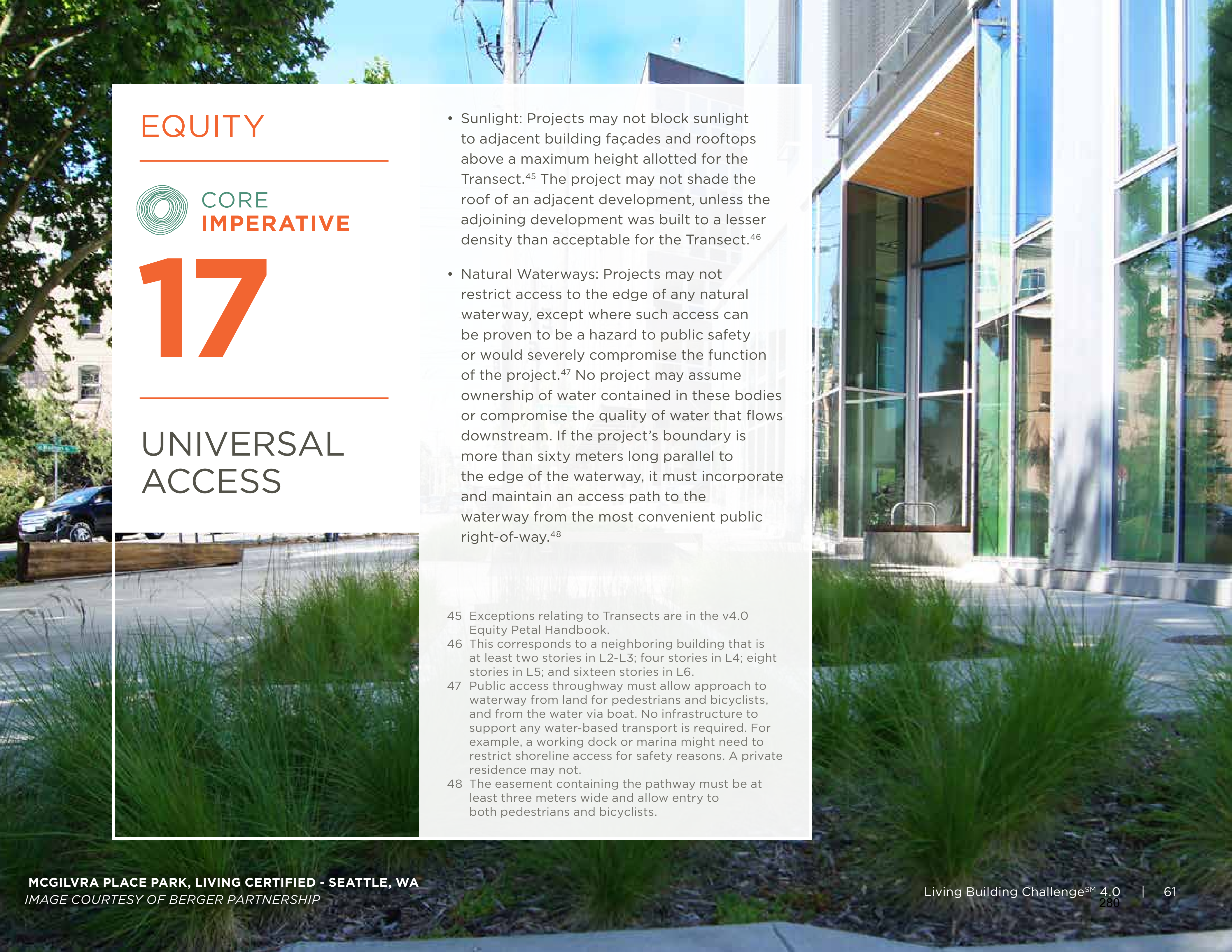
17

UNIVERSAL ACCESS

- Sunlight: Projects may not block sunlight to adjacent building façades and rooftops above a maximum height allotted for the Transect.[45] The project may not shade the roof of an adjacent development, unless the adjoining development was built to a lesser density than acceptable for the Transect.[46]

- Natural Waterways: Projects may not restrict access to the edge of any natural waterway, except where such access can be proven to be a hazard to public safety or would severely compromise the function of the project.[47] No project may assume ownership of water contained in these bodies or compromise the quality of water that flows downstream. If the project's boundary is more than sixty meters long parallel to the edge of the waterway, it must incorporate and maintain an access path to the waterway from the most convenient public right-of-way.[48]

45 Exceptions relating to Transects are in the v4.0 Equity Petal Handbook.
46 This corresponds to a neighboring building that is at least two stories in L2-L3; four stories in L4; eight stories in L5; and sixteen stories in L6.
47 Public access throughway must allow approach to waterway from land for pedestrians and bicyclists, and from the water via boat. No infrastructure to support any water-based transport is required. For example, a working dock or marina might need to restrict shoreline access for safety reasons. A private residence may not.
48 The easement containing the pathway must be at least three meters wide and allow entry to both pedestrians and bicyclists.



MCGILVRA PLACE PARK, LIVING CERTIFIED - SEATTLE, WA
IMAGE COURTESY OF BERGER PARTNERSHIP

EQUITY

CORE IMPERATIVE

18

INCLUSION

The intent of this Imperative is to help create stable, safe, and high-paying job opportunities for people in the local community, and support local diverse businesses through hiring, purchasing, and workforce development practices.

All projects must have a Just label for at least two project team organizations that have an integral role in decisions during both design and construction phases, and an additional five organizations involved in the project must complete a self-assessment.[49]

In addition, all projects must either:

include diverse stakeholders from vulnerable or disadvantaged populations in the design, construction and operations and maintenance phases at the following levels:

- 20% of design contract and/or construction contracts, and 10% of maintenance contracts must be with JUST organizations that meet required levels for Diversity category, or are registered Minority, Woman, or Disadvantaged Business Enterprises (MWDBE) organizations, or international equivalent.[50]
- Workforce development/training/community benefits agreements, registered apprentice programs, and similar programs are employed for 10% of the General Contractor's project contracts, and/or project maintenance contracts.

or,

donate 0.1% of total project cost to a regional, community-based nonprofit organization focused on equity and inclusion.

49 https://living-future.org/just; Just labeled "project team organizations" that are contracted to the owner can also count towards the 20% requirement below.
50 Required levels for either the Gender or Ethnic Diversity Indicators: One in Just 1.0, two in Just 2.0.

CAPITAL STUDIOS, AFFORDABLE HOUSING PILOT PROJECT - AUSTIN, TX
IMAGE BY PAUL BARDAGJY, COURTESY OF CAPITAL STUDIOS

BEAUTY

Celebrating Design that Uplifts the Human Spirit

I-19 BEAUTY + BIOPHILIA

I-20 EDUCATION + INSPIRATION

PHIPPS CENTER FOR SUSTAINABLE LANDSCAPES, LIVING CERTIFIED - PITTSBURGH, PA
Image by Brian Cohen, courtesy of Phipps Center for Sustainable Landscapes

PETAL INTENT

The intent of the Beauty Petal is to recognize the need for beauty and the connection to nature as a precursor to caring enough to preserve, conserve, and serve the greater good. As a society, we are often surrounded by ugly and inhumane physical environments. The key to creating beautiful buildings is to embrace a biophilic design process that emphasizes that people and nature are connected and the connection to place, climate, culture and community are crucial to creating a beautiful building.

IDEAL CONDITIONS + CURRENT LIMITATIONS

The Living Building Challenge envisions designs that elevate our spirits, connect us to nature and all other living systems and inspire us to be better than we currently are. Mandating beauty is, by definition, an impossible task, which is why we require biophilic design as the process to arrive at a beautiful building. In this Petal, the Imperatives are based on the theory that connecting to nature, place, community and climate will create good design, and that the communication of that design process will allow Biophilic and Living Buildings to be replicated. We do not begin to assume that we can judge beauty and project our own aesthetic values on others. But we do want to understand people's objectives and know that an effort was made to enrich people's lives with each square meter of construction, on each project. This intentionality of good design and graceful execution must carry forth into a program for educating the public about the environmental qualities of each Living Building Challenge project.

There are no current limitations to this Petal other than embracing our connection to nature and what we as a society choose to value.

ETSY HEADQUARTERS, PETAL CERTIFIED - BROOKLYN, NY
IMAGE BY EMILY ANDREWS, COURTESY OF ETSY

BEAUTY

CORE **IMPERATIVE**

19

BEAUTY + BIOPHILIA

The intent of this Imperative is to connect teams and occupants with the benefits of biophilia and incorporate meaningful biophilic design elements into the project.

Projects must be designed to include elements that nurture the innate human/nature connection. Each project team must engage in a minimum of one all-day exploration of the biophilic design potential for the project. The exploration must result in a biophilic framework and plan for the project that outlines strategy and implementation ideas for the following:[51]

- How the project will be transformed by deliberately incorporating nature through Environmental Features, Light and Space, and Natural Shapes and Forms.
- How the project will be transformed by deliberately incorporating nature's patterns through Natural Patterns and Processes and Evolved Human-Nature Relationships.
- How the project will be uniquely connected to the place, climate, and culture through Place-Based Relationships. The project must meaningfully integrate public art and contain design features intended solely for human delight and the celebration of culture, spirit, and place appropriate to the project's function.

The framework should include a record of the exploration day and goals for the project, as well as historical, cultural, ecological, and climatic studies that thoroughly examine the site and context for the project. The plan must contain methods for tracking biophilia at each design phase to ensure sufficient implementation of the framework.

51 Each of the biophilic design elements is outlined on table 1-1, p. 15 of *Biophilic Design: The Theory, Science, and Practice of Bringing Buildings to Life* by Stephen R. Kellert, Judith H. Heerwagen, and Martin L. Mador.

HAWAI'I PREP ACADEMY ENERGY LAB, LIVING CERTIFIED - KAMUELA, HI
IMAGE BY MATTHEW MILLMAN PHOTOGRAPHY, COURTESY OF FLANSBURGH ARCHITECTS

BEAUTY

CORE **IMPERATIVE**

20

EDUCATION + INSPIRATION

The intent of this Imperative is to provide educational materials about the operation and performance of the project to the occupants and the public in order to share successful solutions and catalyze broader change.

All projects must provide:

- A Living Building Challenge Case Study.
- An annual open day for the public.[52]
- A copy of the Operations and Maintenance Manual.[53]

All projects (except single-family residential) must:

- Provide a simple brochure describing the design and environmental features of the project.
- Install interpretive signage that teaches visitors and occupants about the project.
- Develop and share an educational website about the project.
- Include one Living Future Accredited Professional on the project team.

52 See v4.0 Beauty Petal Handbook for how this requirement applies to residential projects
53 See v4.0 Beauty Petal Handbook for how this requirement applies to residential projects

BULLITT CENTER, LIVING CERTIFIED - SEATTLE, WA
Image by Nic Lehoux, courtesy of the Bullitt Center

ETSY HEADQUARTERS, PETAL CERTIFIED - BROOKLYN, NY
IMAGE BY EMILY ANDREWS, COURTESY OF ETSY

RESOURCES

VANDUSEN BOTANICAL GARDEN VISITOR CENTRE, PETAL CERTIFIED - VANCOUVER, B.C., CANADA
COURTESY OF VANDUSEN

ADDITIONAL RESOURCES FOR DEEPER ENGAGEMENT

THE LIVING BUILDING CHALLENGE WEBSITE

An online resource for project teams and others, the Living Building Challenge section of Living-future.org provides the Living Building Challenge Standard document and the resources that support the certification process—including fee schedules for certification, detailed case studies of certified projects, and education resources. Additional project team resources are available to registered project teams. living-future.org/lbc

PETAL HANDBOOKS

The Petal Handbooks are a critical resource for project teams pursuing the Living Building Challenge. They contain the clarifications, exceptions, and definitions needed to fully understand Imperative requirements and compliance options. Because the Living Building Challenge program is continuously informed by the work that project teams are doing on the ground, the handbooks have been developed to clarify and consolidate the rules at a set point in time to provide a unified reference for project teams. They are periodically updated to include all current Dialogue posts. While the Petal Handbooks are an excellent reference tool, they should be used in conjunction with the Dialogue to ensure that the most up-to-date rulings are understood.

MEMBERSHIP

To begin the registration process, the project team leaders contact are is required to have a Premium Membership with the Institute. Once registered and logged in, members are directed to a landing page with links that provide access to the project registration form and allow them to update their account details. Digital versions of the Petal Handbooks are available for purchase to all International Living Future Institute members. A current fee schedule is published on the Institute's website. living-future.org/membership

THE DIALOGUE

The Dialogue is an online platform for the transparent exchange of ideas between project teams and the Institute—it is the official venue to request feedback on proposed strategies for meeting the requirements of the Living Building Challenge. The Dialogue allows for current unknowns to be discovered and shared in real time as teams proceed with their projects and research. It provides teams with the flexibility to get information most relevant to their work, such as in-depth commentaries, compliance paths, clarifications, and temporary exceptions.

Organized by the twenty Imperatives and filterable based on specific content, the activity in the Dialogue not only serves as a platform for distributing strategies for success, it also yields modifications to future releases of the Standard itself. In this way, the Dialogue captures the ongoing evolution of the Living Building Challenge and gives credit to the hundreds, if not thousands, of individuals who contribute to the process. Only project team members can post questions to the Dialogue, but responses are available to all ILFI members as searchable articles.

TRIM TAB

Trim Tab is the Institute's quarterly digital magazine and blog. Trim Tab features provocative articles, interviews, and news about people and designs transforming the built environment. Each digital issue is distributed via ILFI's full list of newsletter subscribers and archived on the Trim Tab site, which is free to all readers. Jumpstart your learning at living-future.org/trimtab.

RESEARCH

Despite the rigor of the Living Building Challenge, project teams are proving that the strict requirements of the program are very solvable. However, both perceived and real limitations to success still exist that are technical, regulatory, behavioral, or financial—or a combination of these influencing factors. In collaboration with partners in the design and construction field, local and state governments, and other forward-thinking nonprofits, the Institute is spearheading efforts to carry out cutting-edge research and create practical tools. The latest published reports are posted on the Institute's website: living-future.org/research.

R.W. KERN CENTER, LIVING CERTIFIED - AMHERST, MA
IMAGE BY ROBERT BENSON, COURTESY OF THE R.W. KERN CENTER

APPROACH

The International Living Future Institute's (ILFI's) Living Building Challenge (LBC) technical assistance is focused on building capacity within project teams to create buildings that are socially just, culturally rich, and ecologically restorative. ILFI staff work with project teams at critical points in the design and development timeline to ensure those teams have the information they need to meet LBC requirements on their current project, and going forward. ILFI staff are not a substitute for any consultant or design team member. We support the project team through inspiration, education, and the review of key project documents and procedures specific to LBC. Technical assistance is customized to help each project team capitalize upon their project's opportunities, identify and clear their project's specific hurdles, take advantage of the lessons learned from hundreds of other projects, and set the project on the road to successful certification under the Living Building Challenge.

STANDARD SERVICES

The following services have been found to efficiently and effectively provide benefit to project teams – inspiring, educating and guiding team members to help them develop processes and make decisions that move them towards successful LBC certification. Please see our website for further information about each service: living-future.org/lbc/resources/#technical-assistance

- Feasibility study
- Charrette facilitation
- In-house workshops
- Biophilic design exploration.
- Design phase review
- Materials consulting
- On-going consulting

CUSTOMIZED SERVICES

Every project is unique. Customized consulting is available to help owners and teams navigate specific areas of interest or need. Some examples have included goal setting, RFP assistance, research on operations strategies, solar analysis, ideas for fundraising and funding, education program development, and application of LBC strategies across portfolios or campuses.

Please contact ILFI at LBC.consulting@living-future.org to discuss needs and request a proposal.

The Institute is dedicated to transforming theory and practice in all

ARCH | NEXUS SAC, LIVING CERTIFIED - SACRAMENTO, CA
IMAGE COURTESY OF ARCH | NEXUS

sectors of the building industry, and offers several ways to broaden one's knowledge of deep-green building principles and practices, including the following:

IN-PERSON + ONLINE WORKSHOPS, LIVING FUTURE ACCREDITATION (LFA)

The Institute offers in-person and online workshops taught by expert faculty about the Living Building Challenge, other Living Future Challenges and ILFI transparency labels, and related topics. Workshops are continually developed throughout the year and are announced on the website and in our newsletters. On-demand courses (and pre-recorded webinars) are always available on our website.

To encourage the pursuit of this education, the Institute also offers Living Future Accreditation—the LFA is designed to acknowledge the most advanced and progressive-thinking professionals who are working toward a living future. Learn more on our website.

The Institute welcomes suggestions for future workshops and other educational content. Contact Institute staff to discuss options for hosting a workshop locally by emailing education@living-future.org.

LIVING FUTURE UNCONFERENCE

The Institute's four-day Living Future unConference is the flagship annual event for leading minds in the green building movement seeking solutions to the most daunting global issues of our time. Out-of-the-ordinary learning and networking formats deliver innovative design strategies, in-depth case studies, cutting-edge technical information, and much-needed inspiration to achieve progress toward a truly living future. Conference sessions encourage a hopeful approach to the planet's economic, ecological, and social challenges, and offer solutions for sites, infrastructure, buildings, neighborhoods and products.

The Living Future unConference offers project teams the opportunity to interact with other teams with similar project types, climates, or regulatory challenges to help model and scale LBC. Each Living Future hosts a project team summit and several face-to-face gatherings as well as ample networking opportunities.

THE AMBASSADOR NETWORK is a global initiative to encourage the rapid and widespread adoption of restorative principles guided by the Living Building Challenge and the Living Community Challenge. Living Community Ambassadors will soon be added to the Network. Professionals from all walks of life are encouraged to sign up for the Ambassador Network and help us spread the word about a Living Future. The power of the network allows best practices and ideas to be shared globally, harnessing the best of social media and communication tools for rapid interchange. The Network has been designed to support the continued flow of ideas and solutions among participants and the Institute. It presents numerous options for engagement, and the Institute has created a wealth of related training materials and resources. More information about the Ambassador Network and the online applications are available on the Institute's website: living-future.org/ambassador.

AMBASSADOR PRESENTERS: Professionals who wish to shift the focus of green building conversations are trained through the Ambassador Network to deliver one-hour, informal introductory presentations to peers, local organizations, institutions, companies, and community groups. The presentations are delivered by volunteers, with the purpose of raising awareness around the Living Building Challenge. Presentations around the Living Community Challenge will be added soon. Ambassador Presenters help build local capacity for the formation of Living Building Challenge Collaboratives, forums for sustained discussions on restorative principles.

LIVING BUILDING CHALLENGE COLLABORATIVES: In communities all over the world, the principles of the Living Building Challenge are being shared and disseminated by our growing network of Collaboratives. These community-based groups meet in person regularly to share knowledge and create the local conditions that support development of Living Buildings and Communities. Collaboratives are overseen by at least two trained Collaborative Facilitators, who are responsible for cultivating a welcoming environment for grassroots involvement and outreach. Each Living Building Challenge Collaborative has an active social media presence via Facebook and various other outlets. Visit living-future.org/ambassador to locate a Collaborative in your area, or contact us to learn how to start a new Collaborative in your city.

CONNECT + REGISTER

Continued advancement of the Living Building Challenge and Living Community Challenge will require many minds and great ideas. The Institute has established a presence on an array of online communication forums that make it possible to aggregate impressions, suggestions and insights—please reach out to us today to get involved and contribute to a Living Future!

f /livingbuildingchallenge and /livingfutureinstitute

@livingbuilding and @Living_Future

REGISTER A PROJECT

To register a project, a project team member must have a Premium Membership with the Institute. Visit the membership page on our website to become a member, or contact membership@living-future.org to renew your membership.[54] Premium Membership grants access to a variety of benefits and allows you to register for any of our programs.

Once the team has a Premium Membership, registration links can be found on the member dashboard. After providing some basic information about your project and paying the registration fee, team members can be added and have immediate access to view and begin uploading the documentation required for certification. Most of the information provided at the time of registration can be updated, if necessary, by logging in to your project dashboard.

54 https://living-future.org/membership-purchase

SUBMIT FOR CERTIFICATION

When a project team has submitted all documentation required for certification in the project Portal, they are eligible for certification. After the team notifies the Institute that the project is ready by writing to lbc.certification@living-future.org, the team is invoiced for the certification fee. When the certification fee has been paid, the auditor will be given access to begin reviewing documentation.

For more step by step information on the certification process, refer to this article on the ILFI help desk.

Performance Period: All projects require twelve months of occupancy data before they can submit for certification.

LBC Ready Recognition: LBC Ready Recognition is available for projects that wish to have a preliminary ruling that confirms initial efforts and the intent to certify. The LBC Ready audit may take place any time after construction is complete.

An LBC Ready ruling does not constitute certification of the project, but does indicate that the project is on track and the ruling on each Imperative is likely to be carried forward to the certification audit. Although an LBC Ready ruling is based on design predictions for water and energy, certification will still be based on performance, and a site visit by the LBC auditor is required. If teams complete work on the project between the LBC Ready audit and the certification audit that involves the use of new materials or makes other changes relevant to targeted Imperatives, additional documentation, such as a revised materials tracking sheet, must be submitted for review during the certification audit.

Ongoing monitoring of energy and water data, and ILFI access to that data is required for the LBC Ready audit, continuing until the certification audit, to ensure the project is on track. In addition, the time a project can remain LBC Ready without submitting for certification is limited.

For most projects, the same auditor will perform both LBC Ready and certification audits, although this cannot be guaranteed. Only the certification audit will result in a Living Building Challenge Certification.

The following table identifies Imperatives that are eligible for LBC Ready Audit and those that require additional documentation after the twelve-month performance period. Bold Imperatives are Core Imperatives, required for every project under Core, Petal and Living Certifications.

IMPERATIVE	LBC READY AUDIT	CERTIFICATION AUDIT
01: Ecology of Place	**X**	**X**
02: Urban Agriculture	X	X
03: Habitat Exchange*	X	
04: Human-Scaled Living	**X**	
05: Responsible Water Use	**X**	**X**
06: Net Positive Water	X	X
07: Energy + Carbon Reduction	**X**	**X**
08: Net Positive Energy*	X	X
09: Healthy Interior Environment	**X**	
10: Healthy Interior Performance	X	X
11: Access to Nature	X	
12: Responsible Materials	**X**	
13: Red List	X	
14: Responsible Sourcing	X	
15: Living Economy Sourcing	X	
16: Net Positive Waste	X	X
17: Universal Access	**X**	
18: Inclusion*	**X**	**X**
19: Biophilic Design: Beauty + Spirit	**X**	
20: Inspiration + Education[55]	**X**	**X**

Questions? Contact the Institute at lbc.certification@living-future.org.
* Offset payments to third parties can be delayed until the Certification Audit, but in that case, the project will not be listed as officially LBC Ready on the ILFI website.

55 The Case Study needs to be completed for all Imperatives targeted in the current audit. The remaining requirements are typically reviewed in the final audit.

AMERICAN SAMOA EPA OFFICE, ZERO ENERGY CERTIFIED - UTULEI AMERICAN SAMOA
IMAGE COURTESY OF THE AS-EPA

A BRIEF HISTORY OF THE LIVING BUILDING CHALLENGE

The idea for Living Building Challenge emerged in the mid-1990s, during an effort to produce the most advanced sustainable design project in the world: the EpiCenter in Bozeman, Montana. This project was led by Bob Berkebile and Kath Williams and was funded by the National Institute of Standards and Technology. Working with Berkebile at BNIM, Jason F. McLennan guided the research and technology solutions for the EpiCenter—in the process, he also began to conceptualize the requirements for what is now known as a Living Building. Following the EpiCenter, Berkebile and McLennan continued to develop the idea and published several related articles.[56]

In 2000, BNIM was hired by the David and Lucile Packard Foundation to examine the economic and environmental implications of a Living Building alongside the various levels of LEED® certification.[57] The findings were presented in a document called the Packard Matrix, which demonstrated that a Living Building was the smartest long-term choice economically, although it carried a hefty first-cost premium. (In 2009, the Institute's Living Building Financial Study proved that first-cost premiums have diminished, and certain building types make immediate financial sense.) More recently, real cost data from completed projects has rounded out the picture, proving that the economic argument for Living Buildings is quite compelling and first-cost premiums are modest and diminishing.

In 2005, McLennan began to turn the theoretical idea into a codified standard. He gifted the Living Building Challenge version 1.0 to the Cascadia Green Building Council in August 2006, and three months later the Challenge was formally launched to the public. In 2007, McLennan hired Eden Brukman to direct the ongoing development and international deployment of the Living Building Challenge.

56 Refer to the In The News section of the Institute website to download early publications.
57 www.bnim.com/work/david-and-lucile-packard-foundation-sustainability-report-and-matrix

Together, they authored Living Building Challenge 2.0, evolving the requirements of the program and demonstrating how to apply the Imperatives to various scales of development and settings.

In response to an increase in global attention and interest, Cascadia founded the International Living Building Institute in 2009 as an umbrella organization for the Living Building Challenge and its auxiliary programs. The Institute certified the first projects in 2010, which changed the green building movement on a fundamental level. Groups around the world reached out to learn more about the Living Building Challenge and to forge formal ties with the Institute, underscoring that people from all parts of the world are looking for hopeful, practical responses to environmental, social, and economic difficulties.

At the beginning of 2011, the Institute was renamed the International Living Future Institute, with a mission to lead the transformation to a world that is socially just, culturally rich and ecologically restorative. In 2012, Amanda Sturgeon, now the Institute CEO, took over as director of the Challenge and has led the process to strengthen tools and ease implementation for projects with great success.

Then ILFI moved into a building pursuing Living Certification—the Bullitt Center in Seattle, Washington—in 2013.

In 2014 the Living Building Challenge 3.0 was released a collaborative effort led by Jason McLennan and Amanda Sturgeon together with input gathered from Living Building Challenge projects and internal program staff and subject matter experts. Many aspects, such as Biophilic Design and Equity, were strengthened and some of the newer program resources such as Declare and Just were incorporated.

continued >>

BULLITT CENTER, LIVING CERTIFIED - SEATTLE, WA
Image by Nic Lehoux, courtesy of the Bullitt Center

As of 2019, 105 projects have been certified and well over 500 have registered, representing over a dozen building types in nearly every climate zone on the planet. The Challenge has begun to move from proving that Living Buildings are possible to scaling the program to new levels, and to new types and sizes of projects.

Amanda Sturgeon has led, with consultation from Jason McLennan and the staff, a new evolution of the Living Building Challenge. The Living Building Challenge 4.0 is yet another step in the evolution of the Challenge and recognizes the urgent need to scale, providing a Core Green Building Certification that can bridge the gap between mainstream green building certification programs and the aspirations of the Living Building Challenge, and removing many of the barriers that have been highlighted by our project teams to make achieving Living Certification more possible than ever.

As an iterative program, no change is possible to the Living Building Challenge without the feedback from our project teams, who are our “committees” on the ground, and from our third party auditors, who see firsthand where the opportunities and barriers lie. For them, and for the ground breaking work they have put in to put the Challenge into Action, we are grateful.

GLOSSARY

Adaptive reuse
The process of reusing a structure or building for a purpose other than the original purpose for which it was built or designed.

Blackwater
Discharged water containing solid and liquid human wastes from toilets and urinals.

Business as usual (BAU)
Business as usual is the baseline reference point for handprinting. In simplest terms, BAU refers to a repeat of last year. More formally, it refers to: responding to this year's external forces with last year's approach. For companies that sell goods or services, BAU is: responding to this year's demand, with last year's products and processes.
For projects, BAU is addressing current demands based on typical fixtures, materials or processes.

Chemical Abstracts Service (CAS) number
A unique numerical identifier for nearly every known chemical, compound, or organic substance.

Closed-loop water systems
Systems in which all water used on a project is captured, treated, used/reused, and/or released within the boundaries of the project area.

Combustion
Any burning or combustion of fossil fuels or wood products.

Consumables
Non-durable goods that are likely to be used up or depleted quickly. Examples include office supplies, packaging and containers, paper and paper products, batteries, and cleaning products.

Deconstruction
The systematic removal of materials from a building or project for the purposes of salvage, reuse, and/or recycling.

Diverted waste
All items removed from the project that are then recycled, reused, salvaged, composted, or otherwise diverted from landfills or incineration.

Durables
Goods that have utility over time rather than being depleted quickly through use. Examples include appliances, electronic equipment, mobile phones, and furniture.

Energy needs
All electricity, heating, and cooling requirements of either grid-tied or off-the-grid systems, excluding back-up generators.

Floor Area Ratio (FAR)
FAR = Gross Building Area / Total Project Area.

Forest Stewardship Council (FSC)
An independent, non-profit, membership-led organization that protects forests for future generations and sets standards under which forests and companies are certified. Membership consists of three equally weighted chambers—environmental, economic, and social—to ensure the balance and the highest level of integrity.

Furniture, Fixtures and Equipment (FF&E)
Furniture, fixtures, or other equipment that has no permanent connection to the structure of a building or utilities and is not part of the systems furniture.

Greenfield
Land that was not previously developed or polluted.

Greywater
Water discharged from sinks, showers, laundry, drinking fountains, etc., but not including water discharged from toilets and urinals.

continued >>

Halogenated flame retardants (HFRs)
HFRs include PBDE, TBBPA, HBCD, Deca-BDE, TCPP, TCEP, Dechlorane Plus and other retardants with bromine or chlorine.

Handprints
Handprints are positive impacts, or beneficial changes, on footprint-related impact categories, measured in footprint-related units (e.g., kg CO2-equivalent, for carbon handprints). An actor can get credit for a handprint if the actor is a cause of the change, and if the handprint is voluntarily caused by the actor. Changes which are required (e.g. by law) do not count as handprints; they are considered “business-as-usual” (BAU). The actor does not need to be the only cause of the change. Credit for the handprint is shared equally and fully among all parties who jointly cause the change.

Hazardous Material
Materials that have been deemed dangerous or carcinogenic for humans or the environment and require specific measures for disposal, such as asbestos, lead paint, zor materials producing ionizing radiation.

Land trust
A nonprofit organization that, as all or part of its mission, actively works to conserve land by undertaking or assisting in land or conservation easement acquisition, or by its stewardship of such land or easements.

Manufacturer location
The final point of fabrication or manufacture of an assembly or building material.

Materials Construction Budget
All the material costs delivered to the site, excluding labor, soft costs, and land.

On-site landscape
The planted area not used to comply with the requirements of Imperative 02: Urban Agriculture. The strategies implemented for each Imperative are not required to be mutually exclusive or physically separated.

Potable water
Water that is fit for human consumption.

Primary Materials
Materials that make up the majority of the structural components, foundation and envelope of projects; often predominantly concrete, steel and/or wood.

Prime farmland
Land that has been used for agricultural production at some time during the four years prior to the relevant Important Farmland Map date, or in the five years prior to the project, and where the soil meets the physical and chemical criteria for Prime Farmland or Farmland of Statewide Importance as determined by the USDA Natural Resources Conservation Service (NRCS).

Pristine greenfield
Land that has not been impacted by humans and maintains thriving viable habitat. Land that has not been developed, but has been altered and degraded through ranching, mono-culture agriculture, crowding, pollution or other means is not considered pristine greenfield for the purposes of I-01 Ecology of Place.

Project Area
The entire scope of the project and all areas disturbed by the project work including areas of construction, staging and conveyance, which is typically, but not necessarily, all land within the property line. Project Area must be consistent across all Imperatives.

Project water discharge
All water leaving the building including stormwater, greywater, and blackwater.

continued >>

Renewable energy
Energy generated through passive solar, photovoltaics, solar thermal, wind turbines, water-powered microturbines, direct geothermal or fuel cells powered by hydrogen generated from renewably powered electrolysis. Nuclear energy is not an acceptable option.

Salvaged materials
Used building materials that can be repurposed wholly in their current form or with slight refurbishment or alterations.

Sensitive ecological habitat
Habitat that is threatened, endangered, or particularly vulnerable to changes in the local ecology. Examples include, but are not limited to, wetlands, dunes, old growth forests, and native prairies.

Stormwater
Precipitation that falls on the ground surfaces of a property.

Systems furniture
A modular furniture system that might include work surfaces, cabinetry, file systems, flexible partitions, and desk chairs used to create or furnish a series of offices workspaces. .

Wetland
Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

R.W. KERN CENTER, LIVING CERTIFIED - AMHERST, MA
IMAGE BY ROBERT BENSON, COURTESY OF THE R.W. KERN CENTER

LIVING BUILDING CHALLENGE℠

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SEATTLE, WA 98122

tel: 206.223.2028

livingbuildingchallenge.org

Cover image: The Bullitt Center, Seattle, WA - Image by Krista Elvey

Item No: 10f Supp
Meeting date: August 08, 2023

Fishermen's Terminal Redevelopment
Request for Construction Authorization

Port of Seattle®

Action Requested

Authorization for the Executive Director to advertise, award, and execute a major works construction contract utilizing a Project Labor Agreement to enable construction of a package of improvements for to the Fishermen's Terminal including for an amount of $27,415,000 for a total project cost of $32,600,000 for:

1) the renovation of the Ship Supply Building into the Maritime Innovation Center (MInC)

2) a set of public space improvements to Fishermen's Terminal which include landscape enhancements, wayfinding signage and interpretative signage.

Maritime Innovation Center

Maritime Innovation Center Drives Port Vision

- Supports maritime industry competitiveness and sustainability
- Drives innovation, addresses maritime industry challenges and develops new generation of businesses that can support maritime and fishing industries
- Demonstrates Port commitment to sustainability and equity
- Demonstrates Port commitment to industrial lands
- Supports modernization and renovation of Fishermen's Terminal (implements goals of 2016 FT Strategic Plan)

Innovation Center Strategic Objectives

- ☑ Be a focal point for maritime innovation
- ☑ Support investment in ***Blue Economy*** start-ups and new technologies
- ☑ Offer incubator and accelerator environment
- ☑ Drive equitable economic development
- ☑ Support workforce development and maritime career exploration

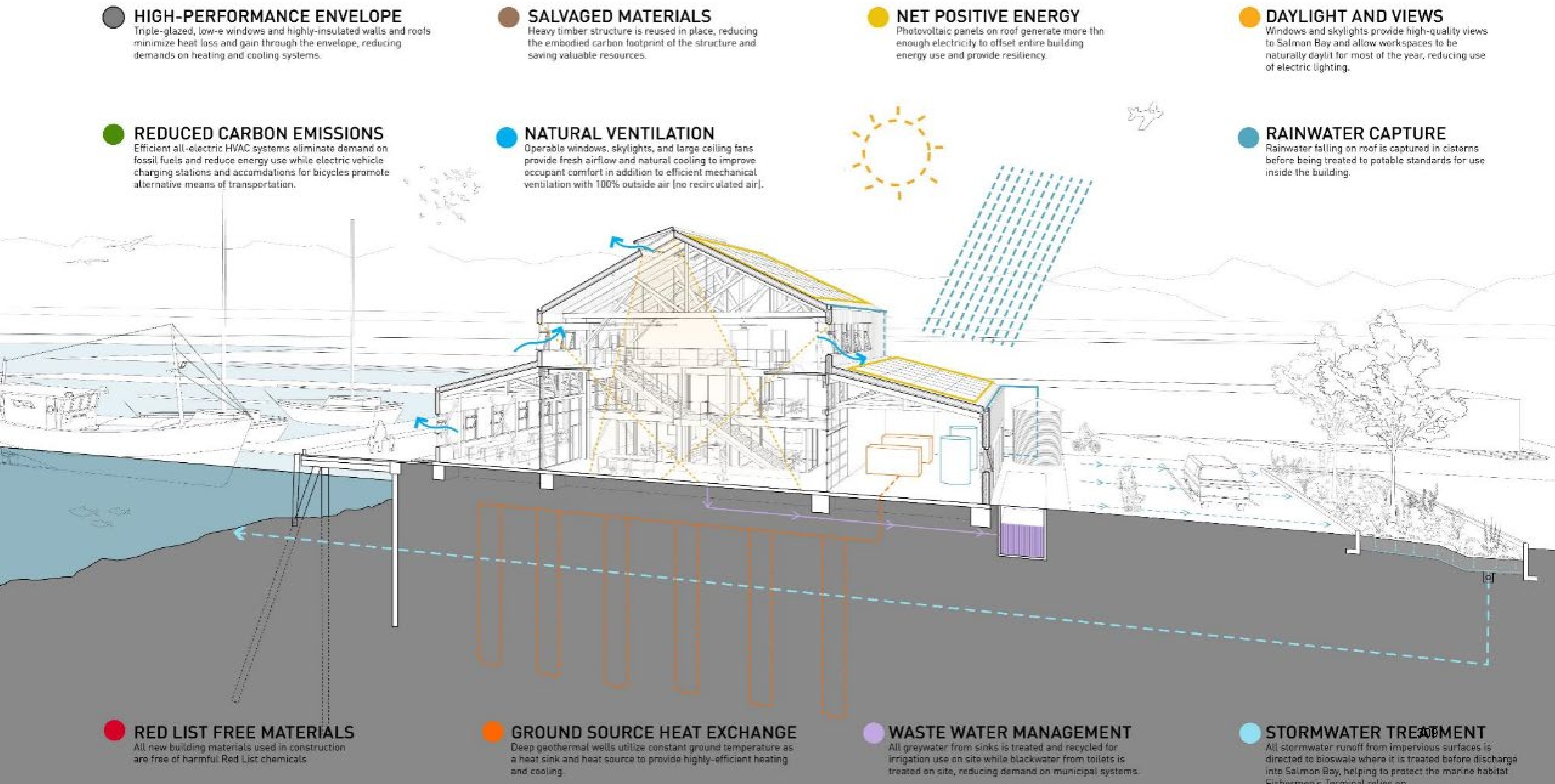
Design Elements

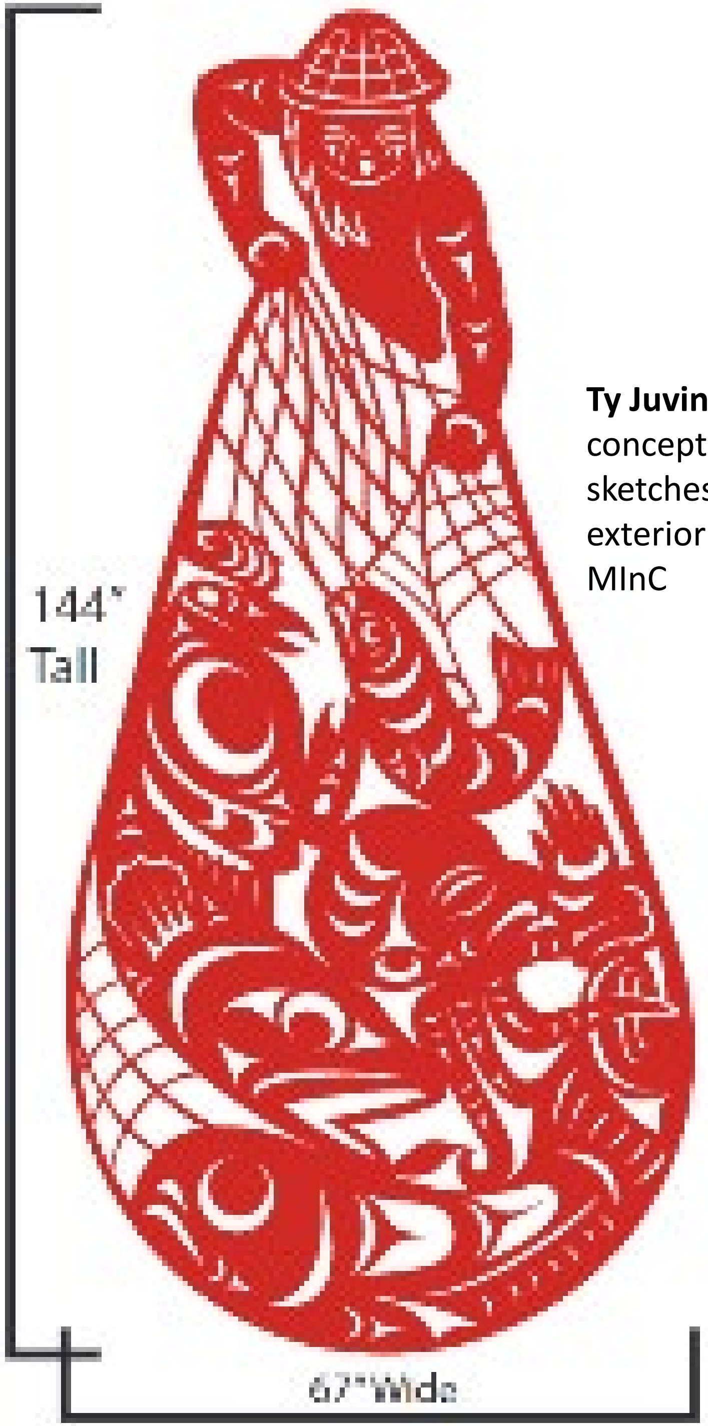
- Will use the existing building footprint from 1918
- Building will be completely renovated utilizing existing beams and replacing building skin with clad materials
- All-new exterior envelope including new glass exterior windows and doors to enhance transparency and fresh air and light
- Seismic upgrades including new steel supports along wood beams
- New building systems
- Living Building Challenge

Proposed Building Improvements

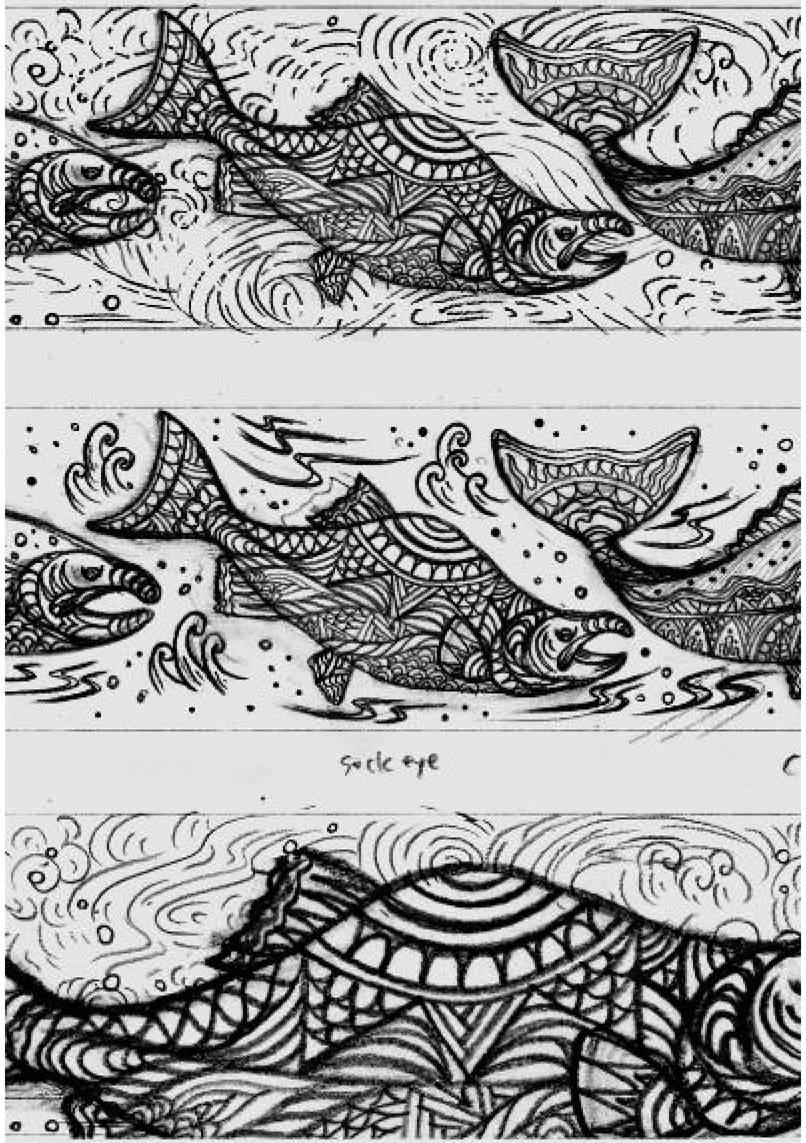
- Abatement of regulated materials in existing structure
- Partial existing building demolition (timber structural framework to be preserved)
- Enhancement of structural piles and framework
- Rehab Ship Supply building core and shell
- Utility services removal and replacement
- New building perimeter and parking lot paving

Living Building Challenge Sustainability Commitment





Ty Juvinel – conceptual sketches for exterior panel @ MInC



Shogo Ota – conceptual sketches for exterior mural of net shed 3

Maritime Innovation Center

1% for Art

Public Space Improvements

As a primary goal of the Fishermen's Terminal Strategic Plan there are clear benefits for improving the public experience at FT including:

- **Stewardship** by future generations
- **Educating the public** about the role of fisheries in Puget Sound
- **Increased revenues for** existing and future public facing **businesses**
- **Improving partnerships** between the Port of Seattle and interested organizations
- **Increased literacy** for the contributions of the maritime industry.

Fishermen's Terminal Site Improvements

LANDSCAPE

- Landscape Planting
- Parking Striping
- Crosswalk Improvements
- Site Furniture

SIGNAGE

- Interpretative Signage
- Wayfinding Signage
- New Monument Sign

ELECTRICAL

- Site Lighting

A Living Landmark: Updating Interpretive Signage

- Working with Consulting Public Historian Sharon Boswell-SRI ethnohistorian with specialization in Native histories in the Puget Sound
- Collecting more diverse stories and histories
- Integrating the Native experience, Immigration
- Improving accessibility for disabled visitors (ADA)
- Reducing visual clutter, creating a unified design approach
- Integrates narrative, artifacts, original documents

Enhancing public exposure to the Terminal must be carefully balanced” with safely operating the seaport

Example: FISHING WAY OF LIFE -

Property of Museum of History & Industry, Seattle

Property of Museum of History & Industry, Seattle

1. Human Faces of the Terminal:
   Past and Present Fishers, Boat
   Owners/Builders,
   Business Owners, Maritime Innovators;
   Tourists
   a. Native heritage
   b. Ethnic Heritage
   b. Women in fishing
   c. Fishing families
   d. Industry supporters
2. Fish and Marine Mammals
   a. Types of fish
   b. Evolution of past to current catch
   c. Other types of marine wildlife and Impacts
3. Where are We Fishing and Why?

Fishermen's Terminal Redevelopment

Project Cost Summary MInC (updated 100% Design Estimate plus risk mitigation)

Description	Estimated Costs
Engineer's Estimate of Direct Constr. Costs	$15.8 M
Construction Risk Mitigation Costs	$4.9 M
Soft Costs	$6.4 M
Taxes	$2.1 M
Art Program	$270 K
TOTAL ESTIMATED PROJECT COSTS	**$29.4 M**

The project is included in the Port of Seattle's approved 2022-2026 CIP with a total project cost of $19,869,000.

Extraordinary Risk Mitigation Cost Summary

Description	Estimated Costs
Contingencies, enhanced	$ 4.1M
Advanced abatement of regulated materials	$0.15M
Site Verification Allowances	$ 0.4M
Construction site security	$0.25M
TOTAL RISK MITIGATION COSTS	**$ 4.9M**

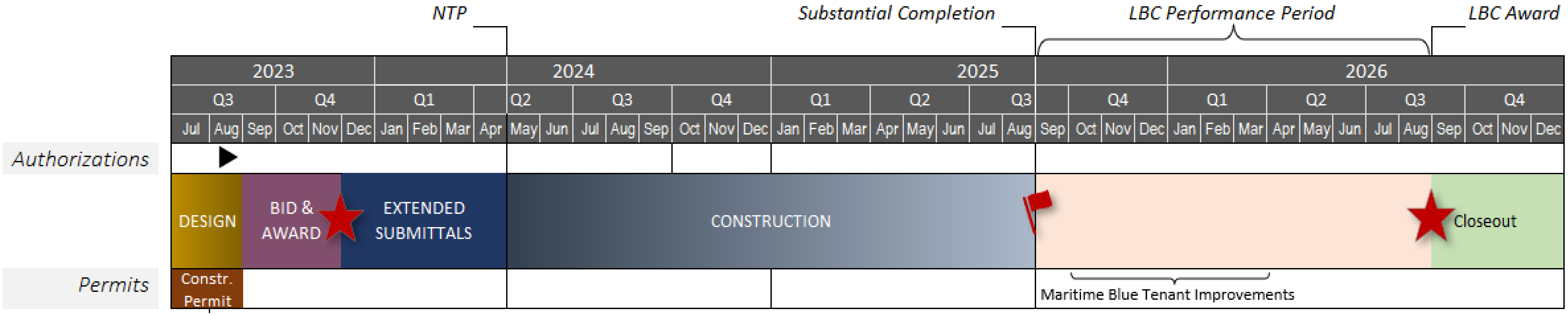
Fishermen’s Terminal Redevelopment

Project Cost Summary Public Site Improvements
(updated 100% Design Estimate plus risk mitigation)

Description	Estimated Costs
Engineer’s Estimate of Direct Constr. Costs	$1.2 M
Construction Risk Mitigation Costs	$180 K
Soft Costs	$1.6 M
Taxes	$140 K
Art Program	$50 K
TOTAL ESTIMATED PROJECT COSTS	**$3.2 M**

The project is included in the Port of Seattle’s approved 2022-2026 CIP with a total project cost of $19,869,000.

Fishermen's Terminal Development Schedule



Questions

Fishermen's Terminal Strategic Plan (2016)

- **Continue to grow the economic value of the fishing and maritime cluster** including the number of local jobs and business revenue
- **Improve overall financial returns** to allow us to fulfill the Port's commitment to the industry and taxpayers
- **Prioritize uses that support the commercial fishing industry**, with a focus on anchoring the North Pacific Fishing fleet
- **Prioritize development** that maximizes utilization of facility assets
- **Recognize and enhance Fishermen's Terminal as a living community landmark**

Top 10 Project Risks

RISKS	DESCRIPTION	PROBABILITY	IMPACT	MITIGATION
GC's LBC experience	Significant additional effort/costs associated with compliance of LBC	Med	High	LBC design expert supporting contractor, build strong relationship with GC early
Safety and Security	FT is open to public. Theft and break-ins at construction site likely	High	Med	Port provided dedicated security guard for all non-construction hours
LBC requirements for materials	Material vetting for LBC compliance is requires high level of monitoring	Med	High	LBC focused specifications. LBC design expert supporting contractor, added funds
Permit timing	Construction permit timing for bid and constraint of expiration for Master Use Permit	Med	High	Limited NTP for minor construction for MUP, plan additional permit review cycles
Jacking and cribbing the building	Existing MInC building fails during jacking	Med	High	Enhanced submittals, advanced constructability analysis
Photovoltaic system adequacy	LBC requires net positive energy. Tenant operations will affect this. May need more PVs	Med	High	Add panels, add batteries, increase capacity
Tie-in to existing equipment/systems	Infrastructure tie-ins to existing systems that are not functional or need replacement	Med	Med	Perform survey of systems. Require contractor to verify as-builts
Unforeseen hazardous materials in building	Abatement of regulated materials may be more than anticipated	Med	Med	Advanced abatement by PCS, Spec for unplanned hazardous materials discovery
Lift station controls mod schedule conflict	Sewer lift station controls on building but must operate during construction. Mods needed.	Med	Med	Coordinate with Marine Maintenance to relocate controls in advance
Bids significantly over estimate	Low bid project delivery, many known-unknown risks that may inflate bids	Low	High	Carry additional contingency, provide allowances to manage bid inflation

Return to Agenda

COMMISSION
AGENDA MEMORANDUM | **Item No.** 11a

BRIEFING ITEM | **Date of Meeting** August 8, 2023

DATE: July 21, 2023

TO: Stephen P. Metruck, Executive Director

FROM: Dan Thomas, Chief Financial Officer
Michael Tong, Director, Corporate Budget

SUBJECT: Q2 2023 Financial Performance Briefing

EXECUTIVE SUMMARY

The purpose of this presentation is to provide a status report of the Q2 2023 financial performance results.

BACKGROUND

The Port's overall operating revenues for Q2 2023 were $462.0 million, which is $8.3 million above budget and $99.7 million higher than the same period last year. Excluding Aeronautical revenues, which are based on cost recovery and revenue sharing formulas, other Airport Non-Aero revenues were $145.4 million, $7.8 million over budget mainly due to higher revenues from Public Parking ($4.4M), Rental Cars ($2.1M), Airport Commercial Properties ($1.6M), and Clubs & Lounges ($1.0M); partially offset by lower revenues from ADR & Terminal Leased Space ($1.9M).

Non-Airport revenues were $4.9M over budget mainly due to higher NWSA Distributable Revenue ($4.7M) and Cruise ($2.3M); partially offset by lower revenues from Conference & Event Center ($2.1M) and Grain ($1.3M).

Total operating expenses for the first half of 2023 were $264.7 million, which is $15.7 million below budget and $43.4 million higher than 2022. The favorable budget variance was largely due to delay in Outside Services spending, Travel & Other Employee Expenses, and Third Party Management Operating Expense.

Net operating income before depreciation was $197.3 million, which is $23.9 million above budget and $55.8 million higher than the same period last year.

The presentation outline is as follows:

1. Portwide Operating Results
2. Aviation Division Operating Results

3. Maritime Division Operating Results
4. Economic Development Division Operating Results
5. Central Services Operating Results

ATTACHMENTS TO THIS BRIEFING

(1) Q2 2023 Financial and Performance Report
(2) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

None

Item No. 11a attach

Date of Meeting: August 8, 2023

PORT OF SEATTLE

Q2 2023 FINANCIAL PERFORMANCE REPORT

AS OF JUNE 30, 2023

TABLE OF CONTENTS

I. PORTWIDE FINANCIAL & PERFORMANCE REPORT 06/30/23

I. PORTWIDE

EXECUTIVE SUMMARY

Airport passenger volume continues to rebound and is expected to be 8.8% higher than 2022 and 3.4% lower than pre-pandemic volumes in 2019. Non-Aeronautical revenues are anticipated to exceed the budget due to higher revenues in most lines of business. The remaining federal relief funds of $13.8M, which includes $1.9M for Airport Dining and Retail (ADR) tenants, will be applied in 2023.

The 2023 cruise season is under way with a projected total of 287 cruise sailings and 1.4 million revenue passengers. Each homeported vessel brings in over $4 million to the local economy each time it provisions at the dock. The Port will provide shore power connections to vessels allowing them to turn off diesel engines while at the dock, which reduces air pollution and greenhouse gas emissions. The Port joined other organizations in creating the world's first cruise-focused Green Corridor to explore decarbonization strategies last year.

Fishing, Commercial and Recreational Marinas, Cruise, and Maritime Portfolio Management are expected to exceed revenue targets while grain volume is projected to be down 35% due to lower demand from China. Conference center volume is estimated to be down by 13% due to events and conference cancellations earlier this year.

Overall, operating revenues were 8.3M or 1.8% above budget while expenses were $15.7M or 5.6% lower than budget in the second quarter of 2023. For the full year, we are projecting operating revenues to be $18.3M to exceed budget mainly due to higher-than-expected Airport Non-Aero Revenues. Operating expenses are expected to be $5.0M lower than budget due to vacant positions, lower Utilities and Third-Party Management Expenses.

PORTWIDE FINANCIAL SUMMARY

	2021 YTD	2022 YTD	2023 YTD	2023 YTD	Actual vs. Budget Variance		Change from 2022 Incr (Decr)	
$ in 000's	Actual	Actual	Actual	Budget	$	%	$	%
Aeronautical Revenues	143,188	181,846	240,218	244,692	(4,474)	-1.8%	58,372	32.1%
Airport Non-Aero Revenues	73,219	114,802	145,446	137,662	7,785	5.7%	30,644	26.7%
Non-Airport Revenues	49,475	65,638	76,356	71,411	4,945	6.9%	10,718	16.3%
Total Operating Revenues	**265,883**	**362,286**	**462,020**	**453,765**	**8,255**	**1.8%**	**99,734**	**27.5%**
Total Operating Expenses	195,776	220,822	264,713	280,383	15,670	5.6%	43,890	19.9%
NOI before Depreciation	**70,107**	**141,464**	**197,307**	**173,382**	**23,925**	**13.8%**	**55,844**	**39.5%**
Depreciation	91,246	104,114	123,656	98,780	(24,876)	-25.2%	19,542	18.8%
NOI after Depreciation	**(21,139)**	**37,350**	**73,651**	**74,603**	**(951)**	**-1.3%**	**36,302**	**97.2%**

2023 YTD Actuals vs. 2023 YTD Budget:

- Airport Non-Aero Revenues were up $7.8M compared to budget mainly due to higher Public Parking, Airport Commercial Properties, and Rental Car revenue; partially offset by lower revenue from Airport Dining and Retail & Terminal Lease Space revenue.
- Non-Airport Revenues were $4.9M above budget mainly due to higher Cruise and NWSA Distributable revenue; partially offset by lower Grain and Conference & Event Centers.
- Total Operating Expenses are $15.7M lower than budget due to delays in hiring and implementing projects/initiatives.

2023 YTD Actuals vs. 2022 YTD Actuals:

- Total Operating Revenues were up $99.7M due higher passenger volumes compared to 2022; higher revenues in non-aeronautical lines of businesses (Public Parking, ADR & Terminal Leased Space, Rental Cars, Ground Transportation, Clubs & Lounges, and Airport Commercial Properties), Cruise, and NWSA Distributable Revenue.
- Total Operating Expenses was $43.9 M higher compared to 2022 due to higher Payroll, Outside Services, Equipment, Supplies & Stock, and Third-Party Management Expense.

NON-AIRPORT FINANCIAL SUMMARY

	2021 YTD	2022 YTD	2023 YTD	2023 YTD	Actual vs. Budget Variance		Change from 2022 Incr (Decr)	
$ in 000's	Actual	Actual	Actual	Budget	$	%	$	%
NWSA Distributable Revenue	22,166	24,527	28,949	25,153	3,796	15.1%	4,422	18.0%
Maritime Revenues	19,507	31,788	35,856	34,040	1,816	5.3%	4,068	12.8%
EDD Revenues	4,089	6,680	8,361	10,123	(1,761)	-17.4%	1,681	25.2%
SWU & Other	3,713	2,643	3,189	2,095	1,094	52.2%	546	20.7%
Total Operating Revenues	**49,475**	**65,638**	**76,356**	**71,411**	**4,945**	**6.9%**	**10,718**	**16.3%**
Total Operating Expenses	35,658	43,508	49,171	54,420	5,249	9.6%	5,662	13.0%
NOI before Depreciation	**13,817**	**22,129**	**27,185**	**16,991**	**10,194**	**60.0%**	**5,056**	**22.8%**
Depreciation	18,949	18,918	19,138	18,141	(997)	-5.5%	220	1.2%
NOI after Depreciation	**(5,132)**	**3,211**	**8,047**	**(1,150)**	**9,198**	**-799.7%**	**4,836**	**150.6%**

2023 YTD Actuals vs. 2023 YTD Budget

- Non-Airport Operating Revenues were up $4.9M compared to budget mainly due to higher NWSA Distributable revenue and Cruise; partially offset by lower Grain and Conference & Event Centers.
- Non-Airport Operating Expenses were $5.2M lower than budget because of delays in hiring, project spending delays, and timing of tenant improvements and maintenance.

2023 YTD Actuals vs. 2022 YTD Actuals

- Non-Airport Operating Revenues were $10.7M higher compared to 2022 because of higher revenues from NWSA Distributable Revenue, Cruise, Conference and Event Centers, Recreational Boating, Fishing and Operations, Central Harbor Management, and unbudgeted police forfeitures; partially offset by lower Grain, and Maritime Portfolio Management revenues.
- Non-Airport Operating Expenses were $5.7M higher than 2022 due to higher Payroll and Outside Services; partially offset by lower Property Rentals and Utilities.

I. PORTWIDE FINANCIAL & PERFORMANCE REPORT 06/30/23

MAJOR OPERATING REVENUES SUMMARY

$ in 000's	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 Incr (Decr) $	Change from 2022 Incr (Decr) %
Aeronautical Revenues	143,188	181,846	240,218	244,692	(4,474)	-1.8%	58,372	32.1%
Public Parking	25,537	41,842	52,391	48,001	4,390	9.1%	10,549	25.2%
Rental Cars - Operations	11,497	16,803	18,021	16,626	1,395	8.4%	1,218	7.2%
Rental Cars - Operating CFC	-	-	5,495	4,819	676	14.0%	5,495	0.0%
ADR & Terminal Leased Space	17,764	26,131	31,985	33,930	(1,946)	-5.7%	5,854	22.4%
Ground Transportation	4,208	9,226	11,750	11,420	330	2.9%	2,524	27.4%
Employee Parking	4,457	5,062	5,460	5,234	226	4.3%	398	7.9%
Airport Commercial Properties	5,541	7,520	9,618	8,014	1,604	20.0%	2,098	27.9%
Airport Utilities	3,010	3,845	4,194	4,271	(77)	-1.8%	348	9.1%
Clubs and Lounges	709	3,048	5,436	4,396	1,040	23.7%	2,388	78.3%
Cruise	61	11,258	15,437	13,100	2,337	17.8%	4,179	37.1%
Recreational Boating	6,330	6,914	7,751	7,776	(24)	-0.3%	837	12.1%
Fishing & Operations	4,768	4,967	5,481	4,927	554	11.2%	514	10.3%
Grain	3,433	3,405	1,964	3,231	(1,268)	-39.2%	(1,441)	-42.3%
Maritime Portfolio Management	4,914	5,237	5,205	4,994	210	4.2%	(33)	-0.6%
Central Harbor Management	3,654	4,131	4,960	4,672	288	6.2%	829	20.1%
Conference & Event Centers	420	2,538	3,377	5,439	(2,061)	-37.9%	839	33.1%
NWSA Distributable Revenue	22,166	24,527	28,949	25,153	3,796	15.1%	4,422	18.0%
Other	4,225	3,986	4,329	3,069	1,260	41.1%	343	8.6%
Total Operating Revenues (w/o Aero)	**122,695**	**180,440**	**221,802**	**209,073**	**12,729**	**6.1%**	**41,362**	**22.9%**
TOTAL	**265,883**	**362,286**	**462,020**	**453,765**	**8,255**	**1.8%**	**99,734**	**27.5%**

MAJOR OPERATING EXPENSES SUMMARY

$ in 000's	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 Incr (Decr) $	Change from 2022 Incr (Decr) %
Salaries & Benefits	71,476	76,063	90,131	89,742	(389)	-0.4%	14,068	18.5%
Wages & Benefits	64,484	67,884	79,333	77,916	(1,417)	-1.8%	11,449	16.9%
Payroll to Capital Projects	14,733	12,936	15,420	21,826	6,405	29.3%	2,484	19.2%
Outside Services	40,724	48,370	57,354	77,604	20,250	26.1%	8,984	18.6%
Utilities	12,860	16,626	15,541	15,779	238	1.5%	(1,085)	-6.5%
Equipment Expense	2,960	4,532	5,683	5,432	(251)	-4.6%	1,151	25.4%
Supplies & Stock	4,030	4,227	5,617	4,613	(1,004)	-21.8%	1,390	32.9%
Travel & Other Employee Expenses	864	1,675	2,208	4,329	2,122	49.0%	533	31.8%
Third Party Mgmt Op Exp	2,010	3,498	5,485	6,669	1,183	17.7%	1,987	56.8%
B&O Taxes	1,682	2,246	2,895	3,207	312	9.7%	649	28.9%
Other Expenses	6,392	7,578	14,991	12,362	(2,629)	-21.3%	7,412	97.8%
Charges to Capital Projects/Overhead Alloc	(26,440)	(24,814)	(29,947)	(39,096)	(9,150)	23.4%	(5,133)	20.7%
TOTAL	**195,776**	**220,822**	**264,713**	**280,383**	**15,670**	**5.6%**	**43,890**	**19.9%**

I. PORTWIDE FINANCIAL & PERFORMANCE REPORT 06/30/23

PORTWIDE FINANCIAL YEAR-END FORECAST SUMMARY

$ in 000's	2021 Actual	2022 Actual	2023 Forecast	2023 Budget	Fcst vs. Budget Variance $	Fcst vs. Budget Variance %	Change from 2022 Incr (Decr) $	Change from 2022 Incr (Decr) %
Aeronautical Revenues	317,513	402,540	501,441	504,948	(3,507)	-0.7%	98,901	24.6%
Airport Non-Aero Revenues	183,819	256,613	317,218	296,102	21,116	7.1%	60,605	23.6%
Non-Airport Revenues	120,689	150,977	153,278	152,634	644	0.4%	2,301	1.5%
Total Operating Revenues	**622,020**	**810,130**	**971,937**	**953,684**	**18,253**	**1.9%**	**161,807**	**20.0%**
Total Operating Expenses	364,656	475,739	568,461	573,431	4,970	0.9%	92,721	19.5%
NOI before Depreciation	**257,364**	**334,390**	**403,476**	**380,253**	**23,224**	**6.1%**	**69,086**	**20.7%**
Depreciation	190,683	232,236	207,951	207,951	-	0.0%	(24,285)	-10.5%
NOI after Depreciation	**66,681**	**102,155**	**195,526**	**172,302**	**23,224**	**13.5%**	**93,371**	**91.4%**

Year-End Forecast

- Total Operating Revenues are expected to be $18.3M higher than budget and $161.8M higher than 2022; the $13.8M federal relief grants help offset the $11.8M Aeronautical revenues and provide $1.9M for Airport Dining and Retail (ADR) tenants in 2023.
- Total Operating Expenses are expected to be $5.0M favorable to budget and $92.7M higher than 2022. It would have only been $77.1M higher than 2022 after adjusting for $15.6M state pension credit in 2022.
- NOI before depreciation forecast to be $23.2M favorable to budget and $69.1M higher than 2022.

KEY PERFORMANCE METRICS

	2022 YTD Actual	2023 YTD Actual	2022 Actual	2023 Forecast	2023 Budget	Fav (UnFav) Fcst vs. Budget Variance Chg.	Fav (UnFav) Fcst vs. Budget Variance %	Incr (Decr) Change from 2022 Chg.	Incr (Decr) Change from 2022 %
Total Passengers (in 000's)	20,889	23,740	45,964	50,063	48,887	1,176	2.4%	4,099	8.9%
Landed Weight (lbs. in millions)	13,617	15,103	29,079	31,603	30,226	1,377	4.6%	2,524	8.7%
Passenger CPE (in $)	N/A	N/A	16.09	18.66	19.29	0.63	3.2%	2.57	16.0%
Grain Volume (metric tons in 000's)	2,659	1,362	4,391	3,253	4,338	(1,085)	-25.0%	(1,137)	-25.9%
Cruise Passenger (in 000's)	451	653	1,309	1,548	1,430	118	8.2%	238	18.2%
Shilshole Bay Marina Occupancy	97.2%	97.8%	97.6%	97.5%	97.5%	0.0%	0.0%	-0.1%	-0.1%

I. PORTWIDE FINANCIAL & PERFORMANCE REPORT 06/30/23

KEY BUSINESS EVENTS

The Port of Seattle signed a Memorandum of Agreement (MOA) with the Muckleshoot Indian Tribal Government. This MOA will allow for greater collaboration on mutually agreed interests in major transportation, infrastructure, economic development, and conservation projects. Areas already identified of greatest interest for the shared focus include Elliott Bay, the Duwamish Estuary, Lake Washington Ship Canal, Salmon Bay, Puget Sound, and the broader Salish Sea. Both entities will develop a work plan that identifies projects and initiatives intended to make progress towards sustainable co-existence on the land and waters of the region.

The Port launched the fourth cycle of the South King County Community Impact Fund (SKCCIF) Economic Recovery Program. Community-led groups and nonprofits can apply for up to $100,000 for a single year or $250,000 in multiyear funding. The SKCCIF was established in 2019 to increase opportunities in historically underserved, ethnically and culturally diverse communities and more than 60 projects have received SKCCIF funding since 2019. Majority of the projects funded were geared towards providing job application assistance in underserved and non-English speaking communities as well as improving public spaces and increasing environmental awareness. In addition, the Port held the 3rd Annual Pathways to Opportunities – An Environment and Jobs Symposium. Participants heard from local and regional leaders in the environmental and workforce space, and learned about funding sources, including the Port of Seattle's South King County Community Impact Fund. Similarly, the Port joined other Seattle-based maritime organizations in a "Maritime Works" campaign to increase awareness to local opportunities for young adults looking for a high-wage career based in Puget Sound.

The Port Commission authorized a new Language Access Policy that sets into motion an assessment of current practices (including a review of publicly facing documents, resources, signage, websites, social media sites, and forms); the development of a guidance manual for divisions to create language access plans; and a proposal for budgeting resources necessary to implement this policy. This policy aims to identify and systemically eliminate disparities as well as ensure that all audiences have access to critical Port information, despite language or accessibility barriers.

Additionally, the Port commission adopted the Equity Policy Directive which will serve as a guide in the integration of equity, diversity, and inclusion into the Port's policies, practices, and programs for years to come. This directive represents more than a year of work among the Commission Office, Office of Equity Diversity and Inclusion, Human Resources, External Relations, Legal, the Port's Executive Leadership Team, external and community-based partners, and input from many Port employees. The Port will report continuous process improvement opportunities annually regarding contracting with community-based organizations, informed by at least one listening session with these community-based organizations.

The Port, in partnership with Schmidt Ocean Institute (SOI), hosted an event to announce the discovery of three new hydrothermal vents from SOI's inaugural expedition and to celebrate SOI's Artist-at-Sea program. The deep-sea inspired art was displayed at the Port from October 2022 until April 2023. Both the event and art program highlight the importance of increasing awareness of deep-sea diversity for the planet.

The Port celebrated the newly signed legislation to create policy and per-gallon price incentives for the production and use of Sustainable Aviation Fuel (SAF) in Washington. The Port advocated for the new law as part of its multi-year push to accelerate the deployment of locally produced SAF at Seattle-Tacoma International Airport. The per gallon incentive can be claimed as a tax credit by fuel producers or consumers like airlines. The bill also requires Washington State University and University of Washington to calculate the emission benefits near Seattle-Tacoma International Airport (SEA) from the increased use of SAF.

SEA welcomed the latest new international service on Tahiti Nui from Seattle to France. This service is offered year-round, twice weekly. Air Tahiti Nui, in partnership with Alaska Airlines, is the first and only carrier offering nonstop flights connecting the South Pacific, Pacific Northwest, and now Paris. The codeshare partnership between Air Tahiti Nui and Alaska Airlines allows passengers to travel via SEA to and from almost 100 cities in North America. Likewise, SEA welcomed Alaska Airlines' new international service to Nassau, Bahamas (NAS). Seasonal service will begin on December 15 and operate through April 10.

I. PORTWIDE FINANCIAL & PERFORMANCE REPORT 06/30/23

CAPITAL SPENDING SUMMARY

$ in 000's	2023 YTD Actual	2023 Forecast	2023 Budget	2023 Plan of Finance	Budget Variance $	%
Aviation	184,564	458,345	485,572	663,877	27,227	5.6%
Maritime	4,421	27,967	32,313	40,805	4,346	13.4%
Economic Development	2,574	7,670	8,086	6,737	416	5.1%
Central Services & Other (note 1)	2,959	12,270	15,371	14,424	3,101	20.2%
TOTAL	**194,518**	**506,252**	**541,342**	**725,843**	**35,090**	**6.5%**

Note:
(1) "Other" includes 100% Port legacy projects in the North Harbor and Storm Water Utility Small Capital projects.

Total capital spending is forecast to be $506.3M for 2023, 93.5% of the budget due to delay in projects: MT Low Voltage Sys Upgrade, Checked Bag Recap/Optimization, Surface Area Management System, C Concourse Expansion, SEA Gateway, and Engineering Fleet Replacement.

PORTWIDE INVESTMENT PORTFOLIO

During the second quarter of 2023, the investment portfolio earned 3.11% versus the benchmark's (the Bank of America Merrill Lynch 1-3 Year US Treasury & Agency Index) of 4.98%. Over the last twelve months, the portfolio and the benchmark have earned 2.64% and 4.49%, respectively. Since the Port became its own Treasurer in 2002, the life-to-date earnings of the Port's portfolio and the benchmark are 2.33% and 1.83%, respectively.

II. AVIATION DIVISION

FINANCIAL SUMMARY

Financial Summary ($ in 000's)	2021 Actual	2022 Actual	2023 Forecast	2023 Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Incr/(Decr) Change from 2022 $	Incr/(Decr) Change from 2022 %
Operating Revenue								
Aeronautical Revenues	317,513	402,540	501,441	504,948	(3,507)	-0.7%	98,901	24.6%
Non-Aeronautical Revenues	183,819	256,613	317,218	296,102	21,116	7.1%	60,605	23.6%
Total Operating Revenues	**501,332**	**659,153**	**818,659**	**801,051**	**17,609**	**2.2%**	**159,506**	**24.2%**
Total Operating Expenses	**341,679**	**394,990**	**458,703**	**460,535**	**1,832**	**0.4%**	**63,714**	**16.1%**
Net Operating Income	**159,652**	**264,163**	**359,956**	**340,515**	**19,441**	**5.7%**	**95,793**	**36.3%**
CPE	15.93	16.09	18.66	19.29	0.63	3.2%	2.57	16.0%
Non-Aero NOI ($ in 000s)	135,483	72,611	174,118	150,386	(23,732)	-15.8%	101,507	139.8%
Enplaned passengers (in 000s)	18,073	22,966	25,031	24,444	(588)	-2.4%	2,065	9.0%
Capital Expenditures (in 000s)	**389,051**	**311,631**	**458,345**	**485,572**	**27,226**	**5.6%**	**146,714**	**47.1%**

2023 Forecast vs. 2023 Budget

- Net Operating Income (NOI) for 2023 which includes Federal Relief grants is forecasted to be ($19.4M or 5.7%) favorable to the budget, driven primarily by:
  - Non-Aeronautical revenue is (21.1M or 7.1%) favorable primarily due to Landside revenue continues to recover strongly, especially in Parking, Rental Car, and GT due to high demand from returning passengers. Concessions still required Federal Relief of $1.9M.
  - Total Operating Expenses are projected to underspend by ($1.8M or 0.4%).

2023 Forecasts vs. 2022 Actuals

- Net Operating Income for 2023 is projected to be ($95.8M or 36.3%) higher than prior year primarily driven by:
  - Higher Operating Revenue ($160M or 24.2%) compared to prior year is due to passenger levels improving with a forecast of being down only 3.4% compared to 2019.
  - Higher forecasted Operating Expenses ($63.7M or 16.1%) compared to prior year is primarily driven by higher Payroll, Outside Services, and Charges from Other Divisions compared to 2022. 2022 was the second year of recovery, but spending was still lower than normal due to directives to spend less due to the business environment related to the pandemic.

II. AVIATION DIVISION FINANCIAL & PERFORMANCE REPORT 06/30/23

A. BUSINESS EVENTS

- Expected passenger levels is projected to be 3.4% lower than 2019.
- Federal relief continues to improve bottom line, and helps customers:
  - $11.8 million for ARPA
  - $1.9 million for tenant concessions relief (CRRSAA)

B. KEY PERFORMANCE METRICS

	YTD 2021	YTD 2022	YTD 2023	% YTD Change from 2022
Total Passengers (000's)				
Domestic	13,770	19,075	21,046	10.3%
International	528	1,814	2,694	48.5%
Total	14,298	20,889	23,740	13.6%
Operations	171,873	190,202	162,365	-14.6%
Landed Weight (In Millions of lbs.)				
Cargo	1,409	1,357	1,319	-2.8%
All other	10,584	12,260	13,784	12.4%
Total	11,993	13,617	15,103	10.9%
Cargo - Metric Tons				
Domestic freight	174,449	165,169	147,095	-10.9%
International & Mail freight	60,738	61,487	52,588	-14.5%
Total	235,187	226,656	199,683	-11.9%

*Mail weight for 2021 forward is incorporated in freight

II. AVIATION DIVISION FINANCIAL & PERFORMANCE REPORT 06/30/23

Key Performance Measures

	2021 Actual	2022 Actual	2023 Forecast	2023 Approved Budget	Actual vs. Budget Variance $	%	Incr/(Decr) Change from 2022 $	%
Key Performance Metrics								
Cost per Enplanement (CPE)	15.93	16.09	18.66	19.29	0.63	3.2%	2.57	16.0%
Non-Aeronautical NOI (in 000's)[1]	93,175	30,256	174,118	150,386	23,732	15.8%	143,862	475.5%
Other Performance Metrics								
O&M Cost per Enplanement	16.28	3.86	18.33	18.84	0.52	2.7%	14.47	375.0%
Non-Aero Revenue per Enplanement	10.17	2.36	12.67	12.11	0.56	4.6%	10.31	436.6%
Debt per Enplanement (in $)	198	-	151	154	4	2.3%	151	0.0%
Debt Service Coverage	1.69	2.64	2.03	1.87	0.16	8.5%	(0.61)	-23.1%
Days cash on hand (10 months = 304 days)	423	0	467	457	11	2.3%	467	0.0%
Aeronautical Revenue Sharing ($ in 000's)	-	-	-	-	-	0.0%	-	0.0%
Activity (in 000's)								
Enplanements	18,073	22,966	25,031	24,444	588	2.4%	2,065	9.0%
Total Passengers	36,154	45,964	50,063	48,887	1,176	2.4%	4,099	8.9%

Key Performance Metrics

2023 Forecast vs. 2023 Budget

- Cost per Enplanement (CPE):
  - CPE is forecasted to be ($.63 or 3.2%) within alignment to budget.
  - Non-Aero NOI is ($23.7M or 15.8%) favorable due to Landside revenues continuing to recover strongly, especially in Parking, Rental Car, and GT due to high demand from returning passengers.

2023 Forecast vs. 2022 Actuals

- CPE is $2.57 higher compared to prior year due to Increases due to higher divisional allocations, changes in ERL & Capital to Expense adjustments, IAF Smarte Carte, IAF CBP Expenses, and rebalancing of VIP Hospitality focus areas.
- Non-Aero NOI is $143.9M higher than prior year due to projection of improved revenues compared to prior year across the Non-Aeronautical businesses.

C. OPERATING RESULTS

Division Summary – YTD Actuals

Total Airport Expense Summary ($ in 000's)	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Incr/(Decr) Change from 2022 $	Incr/(Decr) Change from 2022 %
Operating Expenses								
Payroll	76,202	79,627	92,502	92,928	426	0.5%	12,876	16.2%
Outside Services	26,770	32,518	38,888	52,850	13,962	26.4%	6,370	19.6%
Utilities	9,750	12,207	11,437	11,488	51	0.4%	(770)	-6.3%
Other Expenses	(461)	5,128	7,102	2,939	(4,163)	-141.6%	1,974	38.5%
Total Airport Direct Charges	**112,261**	**129,480**	**149,929**	**160,205**	**10,277**	**6.4%**	**20,449**	**15.8%**
Environmental Remediation Liability	801	(2,312)	6,377	2,680	(3,697)	-138.0%	8,689	-375.8%
Capital to Expense	288	26	359	-	(359)		333	1286.2%
Total Exceptions	**1,090**	**(2,286)**	**6,737**	**2,680**	**(4,057)**	**-151.4%**	**9,023**	**-394.7%**
Total Airport Expenses	**113,351**	**127,193**	**156,665**	**162,885**	**6,220**	**3.8%**	**29,472**	**23.2%**
Corporate	34,011	36,831	42,814	45,023	2,209	4.9%	5,982	16.2%
Police	11,336	11,677	14,123	15,591	1,469	9.4%	2,446	20.9%
Maritime/Economic Development/Other	1,420	1,613	1,940	2,463	523	21.2%	328	20.3%
Total Charges from Other Divisions	**46,767**	**50,121**	**58,877**	**63,077**	**4,201**	**6.7%**	**8,756**	**17.5%**
Total Operating Expenses	**160,118**	**177,314**	**215,542**	**225,963**	**10,421**	**4.6%**	**38,228**	**21.6%**

Expenses – 2023 YTD Actuals vs. 2023 YTD Budget

- Operating Expenses were ($10.4M or 4.6%) underspent to Budget driven primarily by the underspend in Charges from other Divisions of $4.2M, and in Outside Services of $14M across multiple business areas. The bulk of the under-run is in the Aviation Project Management Group with delays in the Airline Realignment work and savings from Custodial Contracts related to vendors not earning incentive pay, and under-runs in Facilities and Infrastructure due to timing of when service directives are executed.

II. AVIATION DIVISION FINANCIAL & PERFORMANCE REPORT 06/30/23

Division Summary – YE Forecast

Total Airport Expense Summary ($ in 000's)	2021 Actual	2022 Actual	2023 Forecast	2023 Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Incr/(Decr) Change from 2022 $	Incr/(Decr) Change from 2022 %
Operating Expenses								
Payroll	157,207	168,389	184,224	189,477	5,253	2.8%	15,835	9.4%
Outside Services	62,382	75,700	107,667	109,249	1,582	1.4%	31,966	42.2%
Utilities	20,175	22,880	21,344	22,321	977	4.4%	(1,536)	-6.7%
Other Expenses	1,519	15,141	7,734	4,296	(3,438)	-80.0%	(7,407)	-48.9%
Total Airport Direct Charges	**241,284**	**282,110**	**320,968**	**325,342**	**4,374**	**1.3%**	**38,858**	**13.8%**
Environmental Remediation Liability	1,583	(1,274)	11,027	7,120	(3,907)	-54.9%	12,302	-965.2%
Capital to Expense	1,254	2,356	400	-	(400)		(1,956)	-83.0%
Total Exceptions	**2,837**	**1,081**	**11,427**	**7,120**	**(4,307)**	**-60.5%**	**10,346**	**956.8%**
Total Airport Expenses	**244,121**	**283,191**	**332,396**	**332,462**	**66**	**0.0%**	**49,204**	**17.4%**
Corporate	71,550	80,452	91,521	92,679	1,157	1.2%	11,070	13.8%
Police	23,473	27,660	29,647	30,264	617	2.0%	1,987	7.2%
Maritime/Economic Development/Other	2,536	3,687	5,139	5,131	(8)	-0.2%	1,453	39.4%
Total Charges from Other Divisions	**97,558**	**111,799**	**126,308**	**128,074**	**1,766**	**1.4%**	**14,509**	**13.0%**
Total Operating Expenses	**294,217**	**382,704**	**458,703**	**460,535**	**1,832**	**0.4%**	**76,000**	**19.9%**

Operating Expenses – 2023 YE Forecast compared to 2023 YE Budget

- Total Operating Expenses is forecasted to underspend by $1.8M driven by under-runs in Payroll due to vacancies and $1.8M Charges from Other Divisions, offset by projected over-runs in Outside Services due to mid-year requests approved with largest impact due to Baggage Handling Equipment software and other mid-year requests.

II. AVIATION DIVISION FINANCIAL & PERFORMANCE REPORT 06/30/23

Aeronautical Business Unit Summary – YTD Actuals

Aeronautical NOI ($ in 000's)	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	%	Incr/(Decr) Change from 2022 $	%
Rate Base Revenues								
Airfield Movement Area	37,192	47,737	66,779	67,008	(230)	-0.3%	19,042	39.9%
Airfield Apron Area	10,932	8,290	14,321	14,671	(350)	-2.4%	6,030	72.7%
Terminal Rents	83,321	105,972	133,174	132,787	387	0.3%	27,202	25.7%
Federal Inspection Services (FIS)	3,560	11,527	17,345	21,801	(4,457)	-20.4%	5,817	50.5%
Total Rate Base Revenues	**135,005**	**173,527**	**231,618**	**236,268**	**(4,650)**	**-2.0%**	**58,091**	**33.5%**
Airfield Commercial Area	8,177	8,320	8,600	8,425	176	2.1%	281	3.4%
Subtotal before Revenue Sharing	**143,182**	**181,846**	**240,218**	**244,692**	**(4,474)**	**-1.8%**	**58,372**	**32.1%**
Revenue Sharing	-	-	-	-	-		-	
Total Aeronautical Revenues	**143,182**	**181,846**	**240,218**	**244,692**	**(4,474)**	**-1.8%**	**58,372**	**32.1%**
Total Aeronautical Expenses	**111,036**	**120,393**	**151,356**	**157,242**	**5,886**	**3.7%**	**30,963**	**25.7%**
Aeronautical NOI	**32,146**	**61,453**	**88,862**	**87,451**	**1,411**	**1.6%**	**27,409**	**44.6%**

Aeronautical – 2023 YTD Actuals vs. 2023 YTD Budget

- Net Operating Income was ($1.4M or 1.6%) favorable to budget driven by lower operating expenses in Outside Services and Charges from Other Divisions.

Aeronautical – 2023 YTD Actuals vs. 2022 YTD Actuals

- Net Operating Income was ($27.4M or 44.6%) higher than 2022 Q2 because aeronautical revenues in 2022 were based on increased passenger activity compared to the same last year when it was only the second year of recovery where activity levels were still relatively lower.

Aeronautical Business Unit Summary - YE Forecast

Aeronautical NOI ($ in 000's)	2021 Actual	2022 Actual	2023 Forecast	2023 Budget	Actual vs. Budget Variance $	%	Incr/(Decr) Change from 2022 $	%
Rate Base Revenues								
Airfield Movement Area	88,061	118,240	145,819	141,938	3,881	2.7%	27,579	23.3%
Airfield Apron Area	22,016	17,211	27,195	29,330	(2,135)	-7.3%	9,983	58.0%
Terminal Rents	205,283	220,399	269,231	270,513	(1,282)	-0.5%	48,832	22.2%
Federal Inspection Services (FIS)	10,978	29,347	41,982	46,317	(4,334)	-9.4%	12,635	43.1%
Total Rate Base Revenues	**326,339**	**385,197**	**484,227**	**488,098**	**(3,871)**	**-0.8%**	**99,030**	**25.7%**
Airfield Commercial Area	16,702	17,343	17,214	16,850	364	2.2%	(129)	-0.7%
Subtotal before Revenue Sharing	**343,041**	**402,541**	**501,441**	**504,948**	**(3,507)**	**-0.7%**	**98,901**	**24.6%**
Revenue Sharing	-	-	-	-	-		-	
Total Aeronautical Revenues	**343,041**	**402,541**	**501,441**	**504,948**	**(3,507)**	**-0.7%**	**98,901**	**24.6%**
Total Aeronautical Expenses	**203,573**	**261,574**	**322,207**	**320,649**	**(1,558)**	**-0.5%**	**60,633**	**23.2%**
Aeronautical NOI	**139,468**	**140,967**	**179,234**	**184,300**	**(5,065)**	**-2.7%**	**38,268**	**27.1%**
Debt Service	(62,607)	(80,554)	(147,510)	(152,649)	5,139	-3.4%	(66,956)	83.1%
Net Cash Flow	**76,860**	**60,413**	**31,724**	**31,650**	**74**	**0.2%**	**(28,689)**	**-47.5%**

Airline Rate Base Cost Drivers

$ in 000's	2023 Budget	2023 Forecast	Impact on Aero Revenues Budget vs Budget $	%
O&M [1]	310,618	313,932	3,314	1.1%
Federal Relief Grants O&M	-	-	-	0.0%
Net O&M	310,618	313,932	3,314	1.1%
Debt Service Before Offsets	234,463	227,395	(7,068)	-3.0%
Debt Service PFC Offset	(89,720)	(88,557)	1,162	-1.3%
Federal Relief Grants Debt Service	-	(1,673)	(1,673)	0.0%
Net Debt Service	144,743	137,165	(7,578)	-5.2%
Amortization	35,561	35,289	(272)	-0.8%
Space Vacancy	(2,066)	(1,400)	666	-32.2%
TSA Operating Grant and Other	(758)	(758)	-	0.0%
Rate Base Revenues	**488,098**	**484,227**	**(3,871)**	**-1%**
Commercial area	16,850	17,214	364	2%
Total Aero Revenues	**504,948**	**501,441**	**(3,507)**	**-1%**

(1) O&M, Debt Service Gross, and Amortization do not include commercial area costs or the international incentive expenses

2023 Forecast to 2023 Budget

- O&M – $3.3M higher due primarily to increase in Aero allocated O&M. Increases primarily in Gates, Mvmt Area and Terminal, partially offset by savings in FIS. Increases due to higher divisional allocations, changes in ERL & Capital to Expense adjustments, IAF Smarte Carte, IAF CBP Expenses, and rebalancing of VIP Hospitality focus areas.

Non-Aero Business Unit Summary – YTD Actuals

Non-Aeronautical NOI ($ in 000's)	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Revised Budget	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Incr/(Decr) Change from 2022 $	Incr/(Decr) Change from 2022 %
Non-Aeronautical Revenues									
Public Parking	25,537	41,842	52,391	48,001	48,001	4,390	9.1%	10,549	25.2%
Rental Cars	11,497	16,803	23,516	21,445	21,445	2,070	9.7%	6,712	39.9%
Ground Transportation	4,208	9,226	11,750	11,420	11,420	330	2.9%	2,524	27.4%
Airport Dining & Retail	14,871	22,835	27,200	29,432	29,432	(2,232)	-7.6%	4,365	19.1%
Other	17,106	24,096	30,589	27,363	27,363	3,226	11.8%	6,493	26.9%
Total Non-Aeronautical Revenues	**73,219**	**114,802**	**145,446**	**137,662**	**137,662**	**7,785**	**5.7%**	**30,644**	**26.7%**
Total Non-Aeronautical Expenses	**30,353**	**56,921**	**64,186**	**68,721**	**68,721**	**4,535**	**6.6%**	**7,265**	**12.8%**
Non-Aeronautical NOI	**42,867**	**57,881**	**81,260**	**68,941**	**68,941**	**12,320**	**17.9%**	**23,379**	**40.4%**

Non-Aeronautical – 2023 YTD Actuals vs. 2023 YTD Budget

- Net Operating Income is ($12.3M or 17.9%) favorable to budget driven by:
    - Parking revenue YTD reflects strong performance due to higher tariff rates than prior year. Most recent Parking rate increase was implemented in April 2022.
    - Rental Car strong revenue performance reflects higher rental rates due to continued shortage in rental vehicle availability.

Non-Aeronautical – 2023 YTD Actuals vs. 2022 YTD Actuals

- Net Operating Income was ($23.4M or 40.4%) higher than 2022 driven by:
    - Increasing passenger levels and activity when compared to Q2 2022 when it was still early in the second year of recovery from the pandemic.

Non-Aero Business Unit Summary - YE Forecast

Non-Aeronautical NOI ($ in 000's)	2021 Actual	2022 Actual	2023 Forecast	2023 Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Incr/(Decr) Change from 2022 $	Incr/(Decr) Change from 2022 %
Non-Aeronautical Revenues								
Public Parking	64,104	88,899	108,539	96,768	11,771	12.2%	19,640	22.1%
Rental Cars	34,740	56,473	59,918	53,830	6,088	11.3%	3,445	6.1%
Ground Transportation	11,947	20,804	25,074	24,324	750	3.1%	4,270	20.5%
Airport Dining & Retail	35,565	36,581	61,383	64,270	(2,887)	-4.5%	24,802	67.8%
Other	37,463	53,856	62,304	56,910	5,393	9.5%	8,448	15.7%
Total Non-Aeronautical Revenues	**183,819**	**256,613**	**317,218**	**296,102**	**21,116**	**7.1%**	**60,605**	**23.6%**
Total Non-Aeronautical Expenses	**90,644**	**121,130**	**136,496**	**139,887**	**3,390**	**2.4%**	**15,367**	**12.7%**
Non-Aeronautical NOI[1]	**93,175**	**135,483**	**180,721**	**156,216**	**24,506**	**15.7%**	**45,239**	**33.4%**
Less: CFC Surplus	(6,834)	-	(6,603)	(5,829)	(774)	13.3%	(6,603)	
Adjusted Non-Aeronautical NOI	**86,341**	**135,483**	**174,118**	**150,386**	**23,732**	**15.8%**	**38,635**	**28.5%**
Debt Service	(33,065)	(27,096)	(33,562)	(34,094)	532	-1.6%	(6,466)	23.9%
Net Cash Flow	**53,276**	**108,387**	**140,556**	**116,293**	**24,264**	**20.9%**	**32,169**	**29.7%**

(1) Includes Federal Relief for Concessions

Non-Aeronautical – 2023 Forecast vs. 2022 Budget

- Non-Aeronautical net operating income (before reduction of CFC Surplus) is forecasted to be ($24.5M or 15.7%) favorable primarily in the Landside business areas, particularly in Parking with strong performance due to higher tariff rates than prior year. Rental Car strong revenue performance reflects higher rental rates due to continued shortage in rental vehicle availability.

Non-Aeronautical – 2023 Forecast vs. 2022 Actuals

- Non-Aeronautical net operating income (before reduction of CFC Surplus) is forecasted to be ($45.2M or 33.4%) higher compared to prior year due to passenger levels improving with a forecast of being only down 3.4% compared to 2019.

D. CAPITAL RESULTS

Capital Variance

$ in 000's	2023 YTD Actual	2023 Year-End Forecast	2023 Budget	2023 POF	Bud vs. Fcst $	Bud vs. Fcst %
MT Low Voltage Sys Upgrade (1)	5,050	17,050	24,000	24,425	6,950	29.0%
Checked Bag Recap/Optimization (2)	46,428	98,033	102,855	131,600	4,822	4.7%
Surface Area Management System (3)	442	1,052	5,565	6,890	4,513	81.1%
C Concourse Expansion (4)	17,097	45,413	49,625	31,996	4,211	8.5%
Telecommunication Meet Me Room (5)	965	3,030	6,902	7,045	3,872	56.1%
AF Utility Improvements (6)	320	727	4,209	7,131	3,481	82.7%
Art Pool (7)	308	1,808	5,250	5,250	3,442	65.6%
Checkpoint 1 Relocation (8)	401	2,794	5,744	11,479	2,950	51.4%
International Arrivals Fac-IAF (9)	1,781	7,756	10,700	18,781	2,944	27.5%
NEPL Improvements (10)	1,290	2,527	4,930	5,300	2,403	48.7%
Cargo Buildings Improvements (11)	83	300	2,124	2,292	1,824	85.9%
All Other	110,399	322,053	341,528	532,447	19,475	5.7%
Subtotal	184,564	502,543	563,432	784,636	60,888	10.8%
CIP Cashflow Mgmt Reserve	-	(44,198)	(77,860)	(120,759)	(33,662)	43.2%
Total Spending	**184,564**	**458,345**	**485,572**	**663,877**	**27,226**	**5.6%**

1. Equipment Purchase Delays; New cashflow forecast provided by Contractor.
2. SSAT work has been delayed. Designer is behind in billing.
3. Schedule delays due to complexities of Airfield/JOC/DBB and SAAB Contractor work.
4. Cash flow has been updated to reflect GCCM design and construction phasing sequencing.
5. MMR Bldg Mob delayed due to Conc A project in the space. Equip Lead time delivery/invoice timing. Design review comments delayed permitting 2 months. Fiber design on track but behind on invoices.
6. Cascade Rd Ductbank project delayed due to Contractors work re-sequencing.
7. Delays in contract executions with artists.
8. Scope decrease. Schedule delays for NTP, therefore further delaying 2023 costs to 2024.
9. Design delays.
10. Phase 2 estimate is under budget. And Phase 3 is behind schedule pending EV discussions.
11. Pre-Construction submittals delay, Permit delay, and Contract negotiations extension.

III. MARITIME DIVISION

FINANCIAL SUMMARY (Excludes Pension Adjustments)

$ in 000's	2021 Actual	2022 Actual	2023 Forecast	2023 Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 $	Change from 2022 %
Total Revenues	**48,738**	**71,365**	**77,962**	**76,262**	**1,700**	**2%**	**6,598**	**9%**
Total Operating Expenses	**47,784**	**59,556**	**64,921**	**66,068**	**1,147**	**2%**	**5,365**	**9%**
Net Operating Income	**954**	**11,808**	**13,041**	**10,194**	**2,847**	**-28%**	**1,233**	**-10%**
NOI Including Pension Adj	***7,616***	***14,375***	***13,041***	***10,194***	***2,847***	***-28%***	***(1,333)***	***-9%***
Capital Expenditures	**18,923**	**21,949**	**27,967**	**32,313**	**4,346**	**13%**	**6,018**	**27%**

2023 Forecast vs. 2023 Budget

- Operating Revenues are forecasted $1.7M higher than budget:
  - Grain $2.0M lower from reduction in volumes. Cruise $3M and Marinas $.6M higher from increased occupancy.
- Operating Expenses forecasted $1.1M lower than budget from payroll savings and some project deferrals.
- Net Operating Income Planned $2.8M favorable to budget.
- Capital Spending forecasted at 87% of $32.3M budget.

2023 Forecast vs. 2022 Actuals

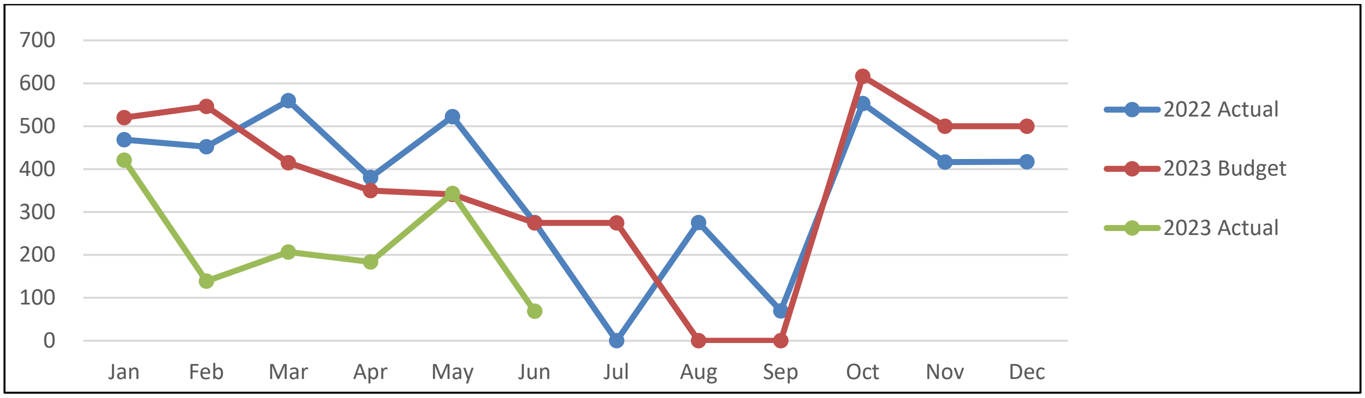
- Operating Revenues expected $6.6M higher than 2022 with higher Cruise occupancy & rates offset by lower grain volumes.
- Operating Expenses forecasted $5.4M higher than 2022 actual driven primarily by increased represented and non-represented wage rates.
- Net Operating Income forecasted $1.2M higher than 2022 actual.

Net Operating Income before Depreciation by Business

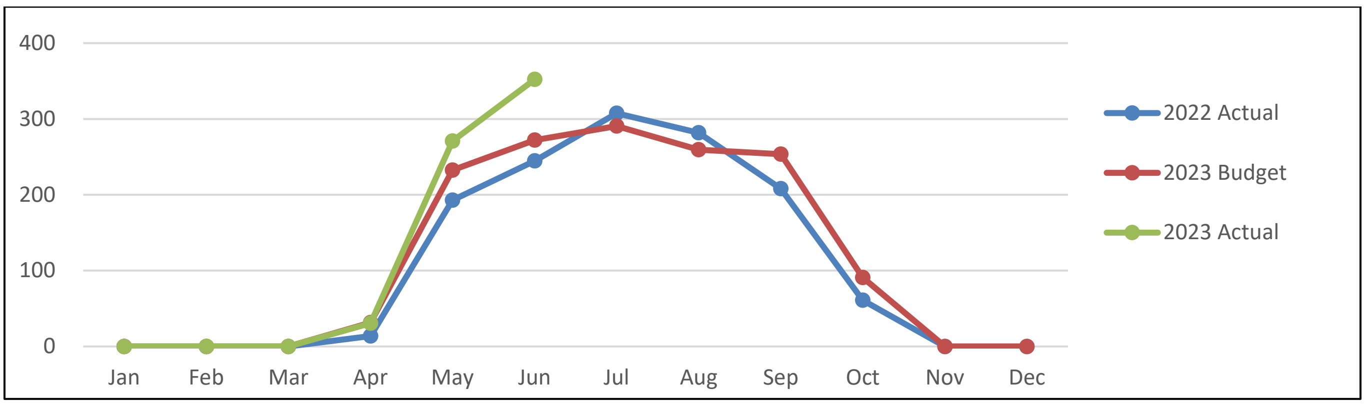
$ in 000's	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 $	Change from 2022 %
Ship Canal Fishing & Operations	(1,405)	(1,422)	(2,202)	780	35%	(18)	-1%
Elliott Bay Fishing & Commercial Operations	(673)	(676)	(1,397)	722	52%	(3)	NA
Recreational Boating	166	259	181	78	43%	94	57%
Cruise	5,312	8,349	5,215	3,135	-60%	3,037	-57%
Grain	2,731	868	2,288	(1,420)	-62%	(1,863)	-68%
Maritime Portfolio	(2,193)	(1,683)	(2,750)	1,066	39%	510	23%
All Other	(200)	(550)	73	(624)	849%	(350)	175%
Total Maritime	**3,738**	**5,145**	**1,408**	**3,736**	**-265%**	**1,407**	**-38%**

A. KEY PERFORMANCE METRICS

Grain Volume – Metric Tons in 000's



Cruise Passengers in 000's



B. OPERATING RESULTS

$ in 000's	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 $	Change from 2022 %
Ship Canal Fishing & Operations	2,134	2,328	2,651	2,313	338	15%	323	14%
Elliott Bay Fishing & Commercial Operation	2,635	2,638	2,829	2,614	216	8%	191	7%
Recreational Boating	6,330	6,914	7,751	7,776	(24)	0%	837	12%
Cruise	61	11,258	15,437	13,100	2,337	18%	4,179	37%
Grain	3,433	3,405	1,964	3,231	(1,268)	-39%	(1,441)	-42%
Maritime Portfolio Management	4,914	5,237	5,205	4,994	210	4%	(33)	-1%
Other	1	7	18	12	6	NA	11	161%
Total Revenue	**19,507**	**31,788**	**35,856**	**34,040**	**1,816**	**5%**	**4,068**	**13%**
Expenses								
Maritime (Excl. Maint)	7,031	9,021	8,399	8,958	559	6%	(622)	-7%
Economic Development	2,135	2,864	2,718	3,253	535	16%	(145)	-5%
Total Direct	**9,166**	**11,884**	**11,117**	**12,211**	**1,093**	**9%**	**(767)**	**-6%**
Maintenance Expenses	5,093	6,387	7,148	7,032	(116)	-2%	761	12%
Envir Services & Planning	785	755	1,480	1,629	149	9%	725	96%
Seaport Finance & Cost Recovery	513	473	622	663	41	6%	148	31%
Seaport Project Management	193	445	849	1,241	393	32%	403	91%
Total Support Services	**6,584**	**8,060**	**10,098**	**10,565**	**467**	**4%**	**2,038**	**25%**
IT	1,335	1,526	1,794	1,832	38	2%	268	18%
Police Expenses	1,477	1,577	2,244	2,480	236	10%	667	42%
External Relations	571	743	824	1,029	205	20%	81	11%
Other Central Services	3,277	4,080	4,473	4,311	(162)	-4%	392	10%
Aviation Division / Other	170	179	162	205	43	21%	(17)	-10%
Total Central Services / Other	**6,830**	**8,105**	**9,496**	**9,856**	**360**	**4%**	**1,391**	**17%**
Total Expense	**22,581**	**28,050**	**30,711**	**32,632**	**1,921**	**6%**	**2,662**	**9%**
NOI Before Depreciation	**(3,074)**	**3,738**	**5,145**	**1,408**	**3,736**	**265%**	**1,407**	**38%**
Depreciation	8,881	8,952	9,100	8,418	(681)	-8%	148	2%
NOI After Depreciation	**(11,955)**	**(5,214)**	**(3,955)**	**(7,010)**	**3,055**	**44%**	**1,259**	**24%**

2023 YTD Actuals vs. 2023 YTD Budget

- Operating Revenues were $1,816K higher than budget driven by:
  - Ship Canal favorable $338K from higher occupancy related to the cancellation of Alaskan Crab Season.
  - Elliott Bay Fishing higher by $216K due to favorable moorage.
  - Recreational Boating $24K unfavorable.
  - Cruise $2,337K higher from increased occupancy.
  - Grain $1,268K unfavorable from lower volumes flowing to China.
  - Maritime Portfolio Management $210K higher from new tenants at the Maritime Industrial Center.
- Operating Expenses were $1,921K lower than budget:
  - Direct Expenses were $1,093K lower than budget
    - Elliot Bay Fishing and Commercial $170K lower from utility accrual.
    - Cruise $362K under from timing of outside services & equipment.
    - Maritime Security is $237K lower than budget from staff shortages at T91.
    - Maritime Marketing $207K below budget due to timing of spend.
    - Maritime Portfolio Management $545K below budget due to timing of tenant improvements.
    - Division Administration is under by budget by $257K from open FTEs and timing of travel.
    - Divisional contingency open headcount vacancy factor created a $649K unfavorable variance.
    - All other Direct Expenses net to $36K over budget.
  - Total Support Services were $467K favorable to budget due to significant open FTEs in both Maintenance and Environmental along with saving from project deferrals.
  - Total Central Services / Other were $360K favorable to budget.
- Net Operating Income was $3.7M favorable to budget.

III. MARITIME DIVISION FINANCIAL & PERFORMANCE REPORT 06/30/23

2023 YTD Actuals vs. 2022YTD Actuals

- Operating Revenues were $6.4M higher than 2022 due large increase in Cruise occupancy and increased rates at marinas, offset by to lower Grain volumes & a change in Cruise P66 lease from expense to contra revenue.
- Operating Expenses were $2,7M higher than 2022 actual driven primarily by payroll increases and offset by $1.2M capital to expense in 2022 for Gateway Building in Fishermen's Terminal.
- Net Operating Income was $1.4M higher than 2022 actual.

$ in 000's	2021 Actual	2022 Actual	2023 Forecast	2023 Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 $	Change from 2022 %
Ship Canal Fishing & Operations	4,240	4,592	4,855	4,555	330	7%	263	6%
Elliott Bay Fishing & Commercial Operation	5,618	5,975	5,453	5,253	220	4%	(521)	-9%
Recreational Boating	12,851	13,978	15,591	15,591	0	0%	1,613	12%
Cruise	9,517	30,469	37,832	34,832	3,000	9%	7,364	24%
Grain	6,112	5,792	3,814	5,814	(2,000)	-34%	(1,978)	-34%
Maritime Portfolio Management	10,392	10,550	10,392	10,192	200	2%	(158)	-1%
Other	7	10	24	24	0	NA	14	152%
Pension Revenue Adjustment	*(408)*	*170*	*0*	*0*	*0*	*NA*	*(170)*	*NA*
Total Revenue	**48,331**	**71,534**	**77,962**	**76,262**	**1,700**	**2%**	**6,428**	**9%**
Expenses								
Maritime (Excl. Maint)	13,951	17,706	18,051	18,251	200	1%	345	2%
Economic Development	4,559	5,710	6,066	6,366	300	5%	356	6%
Total Direct	**18,510**	**23,416**	**24,117**	**24,617**	**500**	**2%**	**701**	**3%**
Maintenance Expenses	11,326	13,213	14,040	14,040	0	0%	827	6%
Envir Services & Planning	2,018	3,120	3,841	3,841	0	0%	721	23%
Seaport Finance & Cost Recovery	1,163	1,087	1,359	1,359	0	0%	272	25%
Seaport Project Management	342	1,007	2,279	2,479	200	8%	1,272	126%
Total Support Services	**14,849**	**18,426**	**21,519**	**21,719**	**200**	**1%**	**3,092**	**17%**
IT	2,695	3,223	3,714	3,725	11	0%	491	15%
Police Expenses	3,064	3,662	4,683	4,781	98	2%	1,022	28%
External Relations	1,222	1,552	1,690	2,045	355	17%	138	9%
Other Central Services	7,109	8,908	8,886	8,869	(17)	0%	(23)	0%
Aviation Division / Other	336	368	312	312	0	0%	(56)	-15%
Total Central Services / Other	**14,426**	**17,714**	**19,286**	**19,733**	**447**	**2%**	**1,572**	**9%**
Total Expense before Pension Adjustment	**47,784**	**59,556**	**64,921**	**66,068**	**1,147**	**2%**	**5,365**	**9%**
Pension Expense Adjustment	*(7,070)*	*(2,396)*	*0*	*0*	*0*	*NA*	*2,396*	*100%*
Total Expense	**40,714**	**57,160**	**64,921**	**66,068**	**1,147**	**2%**	**7,761**	**14%**
NOI excluding Pension Adjustments	*954*	*11,808*	*13,041*	*10,194*	*2,847*	*28%*	*1,233*	*10%*
NOI Before Depreciation	**7,616**	**14,375**	**13,041**	**10,194**	**2,847**	**28%**	**(1,333)**	**9%**
Depreciation	17,718	17,980	17,456	17,456	0	0%	(525)	-3%
NOI After Depreciation	**(10,101)**	**(3,606)**	**(4,414)**	**(7,261)**	**2,847**	**39%**	**(809)**	**-22%**

2023 Forecast vs. 2023 Budget

- Operating Revenues are forecasted $1.7M higher than budget:
  - Cruise $3.0M lower from higher occupancy than planned.
  - Grain $2.0M lower based on a 35% reduction in volumes.
  - Fishing, Commercial, and Boating Marinas are $220K higher from added moorage at T91 and from closure of Alaskan Crabbing season at Fishermen's Terminal.
- Operating Expenses forecasted $1.1M favorable to budget from payroll savings and some project deferrals.
- Net Operating Income Planned $2.8M favorable to budget.

2023 Forecast vs. 2022 Actuals (Excludes Pension Adjustment)

- Operating Revenues expected $6.4M higher than 2022 with higher Cruise occupancy & rates offset by lower grain volumes.
- Operating Expenses forecasted $7.8M higher than 2022 actual driven primarily by increased represented and non-represented wage rates.
- Net Operating Income forecasted $1.2M higher than 2022 actual.

C. CAPITAL RESULTS

$ in 000's	2023 YTD Actual	2023 Year-End Forecast	2023 Budget	2023 POF	Budget vs Forecast $	Budget vs Forecast %
P66 Shore Power	790	8,620	8,817	15,390	197	2%
P66 Fender Overhaul	65	3,048	3,227	3,939	179	6%
MD Reserve	0	2,000	2,000	2,000	0	0%
Maritime Video Camera Pro	109	1,809	1,800	1,800	(9)	-1%
T117 Restoration	295	2,498	1,263	30	(1,235)	-98%
T91 Berth 6 & 8 Redev	512	883	1,193	734	310	26%
FT Maritime Innovation Center	225	1,241	1,103	3,297	(138)	-13%
Cruise Upgrades COVID19	0	0	1,000	0	1,000	100%
MD Fleet	940	5,113	6,555	4,790	1,442	22%
MD Small Projects	468	1,561	3,368	1,443	1,807	54%
All Other Project	1,017	6,304	8,983	20,668	2,679	30%
Subtotal	4,421	33,077	39,309	54,091	6,232	16%
CIP Cashflow Mgmt Reserve	0	(5,110)	(6,996)	(13,286)	(1,886)	27.0%
Total Maritime	**4,421**	**27,967**	**32,313**	**40,805**	**4,346**	**13.4%**

Note: POF (Plan of Finance) is the total estimated during the budget process.

Comments on Key Projects with Significant Variances

- **T117–** Funds previously encumbered under consulting contracts added back to forecast.
- **Cruise COVID Upgrades** - Placeholder to mitigate COVID upgrade requirements no longer needed.
- **T91 Berth 6/8 & All Other Projects** - Additional time needed for federal permitting (2 months). LED Upgrade small cap projects moved to Large CIP.

IV. ECONOMIC DEVELOPMENT DIVISION

FINANCIAL SUMMARY

$ in 000's	2021 Actual	2022 Actual	2023 Forecast	2023 Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 $	Change from 2022 %
Total Revenues	**9,294**	**17,734**	**20,901**	**22,201**	**(1,300)**	**-6%**	**3,167**	**18%**
Total Operating Expenses	**20,560**	**24,200**	**28,418**	**30,149**	**1,731**	**6%**	**4,218**	**17%**
Net Operating Income	**(11,266)**	**(6,466)**	**(7,517)**	**(7,948)**	**431**	**5%**	**(1,051)**	**16%**
NOI Including Pension Adj	***(8,870)***	***(5,771)***	***(7,517)***	***(7,948)***	***431***	***5%***	***(1,746)***	***30%***
Capital Expenditures	**9,314**	**4,311**	**7,670**	**8,086**	**416**	**5%**	**3,359**	**78%**

2023 Forecast vs. 2023 Budget

- Operating Revenues forecasted to $1.3M unfavorable to budget due to lower volumes at the Conference & Event Center.
- Operating Expenses $1.7M below budget due to variable cost impact of lower Conference Center volumes, delayed hiring, and timing of tourism & grant spending.
- Net Operating Income forecasted at $.4M above budget.
- Capital Spending forecasted at 95% of $8.1M budget.

2023 Forecast vs. 2022 Actuals

- Operating Revenues forecasted $3.2M higher than 2022 with increases in Conference & Event Center along with increased concession revenue at the Bell Street garage.
- Operating Expenses $4.2M higher than 2022 due to payroll increases and Conference & Event Center volumes and change in the EDD Grants from 1yr to 2yr cycle.
- Net Operating Income forecasted $1.1M lower than 2022 actual.

Net Operating Income before Depreciation by Business

$ in 000's	2021 YTD Actual	2022 YTD Actual	2022 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 $	Change from 2022 %
Portfolio Management	(1,875)	(412)	(1,428)	1,016	71%	1,463	78%
Conference & Event Centers	(1,195)	(1,895)	(1,235)	(661)	-54%	(701)	-59%
Tourism	(312)	(534)	(801)	268	33%	(222)	-71%
EDD Grants	1	(143)	(350)	207	59%	(144)	-12456%
Env Grants/Remed Liab/ERC	(812)	(46)	61	(107)	-176%	766	94%
Total Econ Dev	**(4,192)**	**(3,031)**	**(3,753)**	**723**	**19%**	**1,162**	**28%**

A. OPERATING RESULTS

$ in 000's	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 $	Change from 2022 %
Revenue	3,669	4,142	4,984	4,684	300	6%	842	20%
Conf & Event Centers	420	2,538	3,377	5,439	(2,061)	-38%	839	33%
Total Revenue	**4,089**	**6,680**	**8,361**	**10,123**	**(1,761)**	**-17%**	**1,681**	**25%**
Expenses								
Portfolio Management	1,643	1,898	1,534	1,807	273	15%	(364)	-19%
Conf & Event Centers	1,271	2,333	3,509	4,936	1,427	29%	1,176	50%
P69 Facilities Expenses	90	98	103	116	13	11%	5	6%
RE Dev & Planning	94	132	145	139	(7)	-5%	14	11%
EconDev Expenses Other	298	492	503	310	(192)	-62%	11	2%
Maintenance Expenses	1,792	1,718	1,577	1,648	71	4%	(141)	-8%
Maritime Expenses (Excl Maint)	490	535	661	883	221	25%	126	24%
Total EDD & Maritime Expenses	**5,678**	**7,205**	**8,032**	**9,839**	**1,807**	**18%**	**828**	**11%**
Diversity in Contracting	48	57	83	145	61	42%	26	47%
Tourism	380	1,099	524	923	400	43%	(576)	-52%
EDD Grants	87	(1)	143	300	157	52%	144	-12456%
Total EDD Initiatives	**515**	**1,155**	**750**	**1,368**	**618**	**45%**	**(405)**	**-35%**
Environmental & Sustainability	13	10	21	30	9	31%	11	111%
Police Expenses	99	103	121	134	13	10%	18	17%
Other Central Services	2,093	2,319	2,402	2,435	34	1%	82	4%
Aviation Division	95	80	66	70	4	6%	(14)	-18%
Total Central Services & Aviatio	**2,300**	**2,513**	**2,609**	**2,669**	**59**	**2%**	**97**	**4%**
Envir Remed Liability	0	0	0	0	0	NA	0	NA
Total Expense	**8,493**	**10,872**	**11,392**	**13,876**	**2,484**	**18%**	**520**	**5%**
NOI Before Depreciation	**(4,403)**	**(4,192)**	**(3,031)**	**(3,753)**	**723**	**19%**	**1,162**	28%
Depreciation	1,919	1,906	2,064	1,914	(150)	-8%	157	8%
NOI After Depreciation	**(6,322)**	**(6,099)**	**(5,094)**	**(5,667)**	**573**	**10%**	**1,004**	**16%**

2023 YTD Actuals vs. 2023 YTD Budget

- Operating Revenue were $1.8M unfavorable to budget due primarily to unexpected cancellations at the Conference and Event Center, partially offset by favorable concession revenue at Bell Street Garage.
- Operating Expenses were $1,307K favorable to budget:
  - Portfolio Management $273K lower from bad debt recovery.
  - Conference and Event Center $1,427K lower from lower activity.
  - Maintenance $71K lower due to open positions.
  - Maritime $221K lower from project deferrals.
  - EDD Initiatives $618K below budget due to timing of Tourism and EDD Grant spending along with $150K budgeted in EDD Grants but booked in Economic Dev. Other
  - All other expenses net to $23K under budget.
- Net Operating Income was $723K favorable to budget.

2023 YTD Actuals vs. 2022 YTD Actuals

- Operating Revenues were $1,681K higher than 2022 actual from increased conferences, parking revenues, and leases.
- Operating Expenses were $520K higher than 2022 actual:
  - Portfolio management lower $364K from bad debt booked in 2022 and recovered in 2023.
  - Conference and Event Centers $1,176K higher than 2022 due to variable costs associated with higher Conference and Event Center volumes.
  - Tourism $576K lower than 2022 due to prior year payment for Washington Tourism Alliance program.
  - All other Expenses net to $284K higher than 2022.

- Net Operating Income was $751K higher than 2022 actual.

$ in 000's	2021 Actual	2022 Actual	2023 Forecast	2023 Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 $	Change from 2022 %
Revenue	7,384	8,886	10,022	9,722	300	3%	1,137	13%
Conf & Event Centers	1,910	8,848	10,879	12,479	(1,600)	-13%	2,030	23%
Total Revenue	**9,294**	**17,734**	**20,901**	**22,201**	**(1,300)**	**-6%**	**3,167**	**18%**
Expenses								
Portfolio Management	3,737	3,653	3,680	3,905	225	6%	27	1%
Conf & Event Centers	3,124	6,563	9,537	10,769	1,232	11%	2,975	45%
P69 Facilities Expenses	268	230	221	221	0	0%	(10)	-4%
RE Dev & Planning	231	299	294	294	0	0%	(5)	-2%
EconDev Expenses Other	736	1,058	900	900	0	0%	(158)	-15%
Maintenance Expenses	3,769	3,836	3,253	3,303	50	2%	(583)	-15%
Maritime Expenses (Excl Maint)	862	1,263	1,736	1,811	75	4%	472	37%
Total EDD & Maritime Expenses	**12,727**	**16,902**	**19,621**	**21,203**	**1,582**	**7%**	**2,719**	**16%**
Diversity in Contracting	253	186	250	250	0	0%	64	34%
Tourism	1,877	1,737	1,830	1,830	0	0%	93	5%
EDD Grants	889	105	1,450	1,450	0	0%	1,345	1287%
Total EDD Initiatives	**3,019**	**2,028**	**3,530**	**3,530**	**0**	**0%**	**1,502**	**74%**
Environmental & Sustainability	24	35	67	83	16	19%	32	92%
Police Expenses	205	240	250	258	8	3%	10	4%
Other Central Services	4,408	4,848	4,813	4,938	125	3%	(36)	-1%
Aviation Division	177	147	138	138	0	0%	(9)	-6%
Total Central Services & Aviation	**4,814**	**5,270**	**5,268**	**5,417**	**149**	**3%**	**(2)**	**0%**
				0				
Total Expense before Pension Adjustmen	**20,560**	**24,200**	**28,418**	**30,149**	**1,731**	**6%**	**4,218**	**17%**
Pension Expense Adjustment	(2,396)	(695)	0	0	0	NA	695	100%
Total Expense	**18,164**	**23,505**	**28,418**	**30,149**	**1,731**	**6%**	**4,913**	**21%**
NOI Before Depreciation	**(8,870)**	**(5,771)**	**(7,517)**	**(7,948)**	**431**	**5%**	**(1,746)**	-30%
Depreciation	3,841	3,954	3,741	3,741	0	0%	(213)	-5%
NOI After Depreciation	**(12,711)**	**(9,725)**	**(11,258)**	**(11,689)**	**431**	**4%**	**(1,533)**	**-16%**

2023 Forecast vs. 2023 Budget

- Operating Revenues forecasted to $1.3M unfavorable to budget due to lower volumes at the Conference & Event Center offset by improving performance at Bell St. Garage.
- Operating Expenses $1.7M favorable to budget due to variable cost impact of lower Conference Center volumes ($1.2M), delayed hiring, and timing of tenant improvements.
- Net Operating Income forecasted at $.4M above budget.

2023 Forecast vs. 2022 Actuals (Excludes Pension Adjustments)

- Operating Revenues forecasted $3.2M higher than 2022 with increases in Conference & Event Center along with increased concession revenue at the Bell Street garage.
- Operating Expenses $4.2M higher than 2022 due to payroll increases, Conference & Event Center volumes and change in the EDD Grants from 1yr to 2yr cycle.
- Net Operating Income forecasted $1.1M lower than 2022 actual excluding pension adjustments.

B. CAPITAL RESULTS

$ in 000's	2023 YTD Actual	2023 YE Forecast	2023 Budget	2023 POF	Budget vs Forecast $	Budget vs Forecast %
T91 Uplands Dev Phase I	573	2,190	2,204	1,682	14	1%
WTCW Roof Replacement	1,002	2,032	1,841	1,003	(191)	-10%
P69 Underdock Utility Rpl	555	1,065	999	547	(66)	-7%
CW Bridge Elev Modernizat	224	479	480	7	1	0%
P66 Roof Upgrades	66	286	341	556	55	16%
P66 BHICC Interior Modern	0	0	276	0	276	100%
P69 3rd Floor Terrace Rep	0	25	262	262	237	90%
P69 and P66 Public Video	3	103	250	250	147	59%
Tenant Improvements - Capi	0	202	202	300	0	0%
T91 Ped Path and Bike Bri	9	144	150	300	6	4%
All Other Projects	142	2,792	3,274	3,780	482	15%
Subtotal	2,574	9,318	10,279	8,687	961	9%
CIP Cashflow Mgmt Reserve	0	(1,648)	(2,193)	(1,950)	(545)	25%
Total Economic Development	**2,574**	**7,670**	**8,086**	**6,737**	**416**	**5%**

Note: POF (Plan of Finance) is the total estimated during the budget process.

Comments on Key Projects

- **P66 BHICC -** $276k for pending claim resolution no longer needed.
- **P69 3rd Floor Terrace & Public Video –** Delay due to resource constraints.
- **Other Projects -** Number of small projects related to LED upgrades removed moved to Large Cap CIP.

V. CENTRAL SERVICES DIVISION

FINANCIAL SUMMARY

$ in 000's	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 Incr (Decr) $	Change from 2022 Incr (Decr) %
Total Operating Revenues	**1,982**	**271**	**290**	**46**	**243**	**526.4%**	**19**	**7.1%**
Core Central Support Services	39,964	44,434	51,528	53,234	1,705	3.2%	7,094	16.0%
Police	13,769	14,211	17,323	18,916	1,593	8.4%	3,112	21.9%
Engineering/PCS	4,575	4,418	6,383	7,993	1,609	20.1%	1,965	44.5%
Total Operating Expenses	**58,309**	**63,064**	**75,235**	**80,142**	**4,907**	**6.1%**	**12,171**	**19.3%**

2023 YTD Actuals vs. 2023 YTD Budget

- Operating Revenues favorable by $243K due primarily to Police forfeiture.
- Operating Expenses $4.9M favorable to budget mainly due to staffing vacancies, and project spending delays.

2023 YTD Actuals vs. 2022 YTD Actuals

- Operating Revenues $19K above 2022 mainly due to higher Police forfeiture seizures and recycling revenues in 2023.
- Operating Expenses $12.2M higher than 2022 mainly due to higher Payroll and Outside Services; offset by lower General Expenses and higher charges to Capital Projects.

A. BUSINESS EVENTS

- Reached an agreement with the Police represented group on the Body Worn Camera (BWC) Policy. This accomplishment will now allow for the implementation of the BWC program with the goal of implementation department wide by 3rd quarter 2023.
- Hosted Green Corridor update webinar.
- Secured final passage of 2:1 Match Bill in State Legislature.
- Secured final passage of SAF Incentivization Bill in State Legislature.
- Hosted celebration officially opening Central Terminal at SEA.
- Convened ceremonial signing ceremony of the Port’s MOA with the Muckleshoot Indian Tribe and inaugural government to government meeting.
- Hosted annual Duwamish Alive! community habitat restoration work party.
- Commissioner Cho and Executive Director Metruck presented the Maritime Industry Breakfast with Mayor Harrell.
- Hosted a multi-cultural Working Waterfront boat tour for 250 community members with Commissioner Mohamed and partners PCAT, DRCC, EPA, and Community Health Advocates.
- Partnered with NWSA on a Bike Truck Safety Fair promoting freight mobility and safe corridors/practices for pedestrians and bicycles.
- Hosted the annual SKCCIF Environment and Jobs Symposium with 150 attendees.
- Hosted 100 students for the annual Raisbeck Aviation High School Environmental Challenge with site tours, presentations and business proposal competitions.
- Hosted the South King County Symposium with 150 attendees in partnership with Community Engagement.
- Completed the Equitable Spending and Accountability Project (ESAP) framework for the equity spending pilot program.
- Received a clean independent Certified Public Accountant (CPA) audit opinion on the Port’s 2022 financial statements.
- Received the GFOA Distinguished Budget Presentation Award for the 2023 Budget Document.

B. KEY PERFORMANCE METRICS

Century Agenda Strategic Objectives	YTD 2021	YTD 2022	YTD 2023
Responsibly Invest in the Economic Growth of the Region and all its Communities			
A. Job seekers placed in jobs at SEA Airport through the Employment Center	417	660	1,118
B. Number of SEA Airport tenants supported in finding employees	0	82	95
C. Employment Center training completions	0	270	554
D. K-12 Career Connected Learning: WFD engagement with teachers/faculty	450	0	13
E. Community members entering employment in construction, maritime and environmental sustainability	9	37	26
F. Number of Job Openings created	124	187	199
G. Job applications received	5,825	7,662	6,477
H. Number of job interviews conducted	640	1,314	968
I. Number of new employees hired	140	276	284
J. Number of interns	109	48	100
K. Number of Veteran Fellows	2	1	0
L. Number of employees participating in Tuition Reimbursement	36	36	25
Become a Model for Equity, Diversity and Inclusion			
A. Employee participation in OEDI programming (Caucuses, Book Clubs, Town Halls, etc.)	548	850	878
Be a Highly Effective Public Agency			
A. Central Services costs as a % of Total Operating Expenses	29.1%	28.0%	27.7%
B. Investment portfolio earnings versus the benchmark (the Bank of America Merrill Lynch 1-3 Year US Treasury & Agency Index)	1.23%/ 0.25%	1.17%/ 2.95%	3.11%/ 4.98%
C. Comply with Public Disclosure Act and respond in a timely manner	305	418	671
D. Percent of annual audit work plan completed each year	100%	100%	100%
E. Employee Development Class Attendees/Structured Learning	1637	1097	1490
F. Total Recordable Incident Rate (previous Occupational Injury Rate)	5.84	3.32	5.72
G. Lost Work Day Rate (previously Days Away Severity Rate)	57.47	18.41	73.69
H. Customer Survey for Police Service Excellent or Above Average	100%	90%	TBD

C. OPERATING RESULTS

Financial Summary (Year-End Forecast)

$ in 000's	2021 Actual	2022 Actual	2023 Forecast	2023 Budget	Fcst vs. Budget Variance $	Fcst vs. Budget Variance %	Change from 2022 Incr (Decr) $	Change from 2022 Incr (Decr) %
Total Revenues	**(233)**	**2,538**	**399**	**155**	**244**	**157.7%**	**(2,139)**	**-84.3%**
Executive	2,051	2,029	3,494	3,678	185	5.0%	1,465	72.2%
Commission	1,773	2,206	2,717	2,905	188	6.5%	511	23.2%
Legal	7,054	8,213	6,563	5,079	(1,484)	-29.2%	(1,650)	-20.1%
External Relations	6,827	8,651	10,664	12,333	1,669	13.5%	2,013	23.3%
Equity Diversity and Inclusion	4,937	4,283	6,121	6,953	832	12.0%	1,838	42.9%
Human Resources	8,675	11,087	14,307	16,049	1,743	10.9%	3,220	29.0%
Labor Relations	1,110	1,085	1,452	1,600	147	9.2%	368	33.9%
Internal Audit	1,296	2,406	2,259	2,047	(211)	-10.3%	(147)	-6.1%
Accounting & Financial Reporting Services	6,967	7,914	10,000	10,344	344	3.3%	2,086	26.4%
Information & Communication Technology	19,944	25,693	30,629	30,419	(210)	-0.7%	4,937	19.2%
Information Security	1,328	1,571	2,513	2,794	282	10.1%	941	59.9%
Finance & Budget	1,801	2,279	2,872	2,765	(106)	-3.8%	593	26.0%
Business Intelligence	904	1,395	1,914	2,072	158	7.6%	519	37.2%
Risk Services	4,047	5,078	5,965	5,749	(216)	-3.7%	887	17.5%
Office of Strategic Initiatives	713	893	1,423	1,471	48	3.2%	530	59.4%
Central Procurement Office	3,633	5,816	7,899	8,021	121	1.5%	2,083	35.8%
Contingency	(123)	(268)	(3,314)	(6,579)	(3,264)	49.6%	(3,046)	1136.6%
Core Central Support Services	**72,936**	**90,330**	**107,476**	**107,702**	**225**	**0.2%**	**17,146**	**19.0%**
Police	17,194	35,064	35,929	36,673	744	2.0%	865	2.5%
Total Before Cap Dev & Environment	**90,130**	**125,395**	**143,405**	**144,375**	**970**	**0.7%**	**18,011**	**14.4%**
Capital Development								
Engineering	1,626	5,053	8,832	9,497	666	7.0%	3,779	74.8%
Port Construction Services	3,321	3,651	5,982	6,980	998	14.3%	2,330	63.8%
Sub-Total	4,948	8,704	14,814	16,478	1,664	10.1%	6,110	70.2%
Environment & Sustainability								
Environment & Sustainability	676	763	1,708	2,050	342	16.7%	946	124.0%
Sub-Total	676	763	1,708	2,050	342	16.7%	946	124.0%
Capital to Expense	-	56	-	-	-	0.0%	(56)	-100.0%
Total Expenses	**95,753**	**134,917**	**159,928**	**162,903**	**2,974**	**1.8%**	**25,011**	**18.5%**

V. CENTRAL SERVICES DIVISION FINANCIAL & PERFORMANCE REPORT 06/30/23

2023 Forecast vs. 2023 Budget

Operating Expenses for 2023 are forecasted to be $3.0M below Budget due primarily to:

- **Executive –** favorable variance of $185K primarily due to lower Payroll of $316K; offset by higher Promotional Expenses of ($134K).
- **Commission** – favorable variance of $183K primarily due to lower Payroll.
- **Legal** – unfavorable variance of ($1.5M) due to higher Outside Services ($1M), Payroll ($321K), and less charges to Capital Projects ($150K).
- **External Relations** – favorable variance of $1.7M primarily due to lower Outside Services of $1.2M, Payroll $200K, Travel $91K, General Expenses $79K, Equipment $35K, and Promotional Expenses $68K.
- **Equity, Diversity, and Inclusion** – favorable variance of $832K primarily due to lower Outside Services of $605K, Payroll of $221K, and General Expenses of $26K; partially offset by higher Promotional Expenses of ($31K).
- **Human Resources** – favorable variance of 1.7M primarily due to lower Payroll of $1.4M, Outside Services $196K, General Expenses $87K, and Travel $37K.
- **Labor Relations** – favorable variance of $147K primarily due to lower Payroll.
- **Internal Audit** – unfavorable variance of ($211K) primarily due to higher General Expenses of ($238K) and lower charges to Capital Projects ($31K); partially offset by lower Payroll of $57K.
- **Accounting and Financial Reporting Services** – favorable variance of $344K primarily due to lower Payroll of $308K and Travel $64K; partially offset by higher Outside Services ($29K).
- **Information & Communication Technology** – unfavorable ($210K) due to lower charges to Capital Projects ($752K); offset by lower Payroll $508K and Travel $86K.
- **Information Security** – favorable variance of $282K primarily due to lower Payroll of $83K, Outside Services of $168K, and Travel of $26K.
- **Corporate Finance & Budget** – unfavorable variance of ($106K) primarily due to higher Payroll of ($88K) and Travel ($26K).
- **Business Intelligence** – favorable variance of $158K primarily due to lower Payroll $62K, Outside Services of $80K, and Travel $15K.
- **Risk Services** – unfavorable variance of ($216K) due to higher Insurance Expense ($255K); partially offset by lower Outside Services of $34K and Travel $7K.
- **Office of Strategic Initiative –** favorable variance of $48K primarily due to lower Payroll of $36K and Outside Services $38K; partially offset by higher Travel ($23K).
- **Central Procurement Office** – favorable variance of $121K primarily due to lower Payroll of $52K, Supplies $41K, Travel $46K, and General Expenses $38K; partially offset by higher Equipment Expense ($66K).
- **Police** – favorable variance of $744K primarily due to lower Payroll of $1.2M, Travel $186K, and Worker's Comp $148K; partially offset by higher Outside Services ($569K), Equipment ($70K) and General Expenses ($140K).
- **Engineering** – favorable variance of $666K primarily due to lower Payroll of $1.7M, Property Rentals $660K, Travel $84K, and Equipment Expense $36K; partially offset by higher General Expenses ($638K), Outside Services ($66K), and Lower charges to Capital Projects of ($1.1M).
- **PCS** – favorable variance of $998K primarily due to lower Payroll of $1.2M, Outside Services of $105K, and Equipment Expense $118K; partially offset by lower charges to Capital Projects ($310K) and Supplies ($187K).
- **Environment & Sustainability Admin** – favorable variance of $342K primarily due to lower Outside Services $319K and Payroll $40K; partially offset by higher General Expenses ($6K), and Travel ($12K).
- **Contingency** – unfavorable variance of ($3.3M) due to Vacancy Factor actuals in departments.

2023 Forecast vs. 2022 Actuals

- Operating Expenses for 2023 are forecasted to be $18.2M higher than 2022, after adjusting for $6.7M state pension credit in 2022 actuals, mainly due to:
    - **Core Central Support Services** – $11.7M higher than 2022 primarily due to: higher payroll for current employees and new positions as well as full year salaries for mid-year 2022 positions; contractual increases; addition of new initiatives to support growing needs of the organization.
    - **Police** – $2.4M above 2022 due to: increase in salary and benefits for represented groups based on new contracts, new positions, vacant positions in 2022, and addition of new initiatives to enhance the safety and security of the public.
    - **Capital Development** – $4.1M higher than 2022 primarily due to higher payroll and addition of new positions as well as contractual increases to support the capital program.

D. CAPITAL RESULTS

$ in 000's	2023 YTD Actual	2023 Year-End Forecast	2023 Budget	2023 POF	Budget Variance $	Budget Variance %
Engineering Fleet Replacement	52	1,662	3,065	1,600	1,403	45.8%
Corporate Fleet Replacement	136	1,769	1,836	1,274	67	3.6%
Infrastructure - Small Cap	204	1,500	1,865	1,500	365	19.6%
Services Tech - Small Cap	621	1,864	1,500	1,500	(364)	-24.3%
Enterprise Network Refresh	17	1,472	1,603	2,000	131	8.2%
Office Wi-Fi Refresh	204	964	964	1,077	0	0.0%
Phone System Upgrade	467	862	862	120	0	0.0%
Radio Microwave Redund. Loop	6	526	760	1,000	234	30.8%
Storage Area Network Refresh	480	751	750	750	(1)	-0.1%
Other (note 1)	604	4,045	5,573	6,738	1,528	27.4%
Subtotal	2,791	15,415	18,778	17,559	3,363	17.9%
CIP Cashflow Adjustment	-	(4,400)	(5,600)	(5,600)	(1,200)	21.4%
TOTAL	**2,791**	**11,015**	**13,178**	**11,959**	**2,163**	**16.4%**

Note:
(1) "Other" includes remaining ICT projects and small capital projects/acquisitions.

Q2 2023 Financial Performance Report

Item No. 11a_supp

Date of Meeting: August 8, 2023

Port of Seattle®

Key Highlights

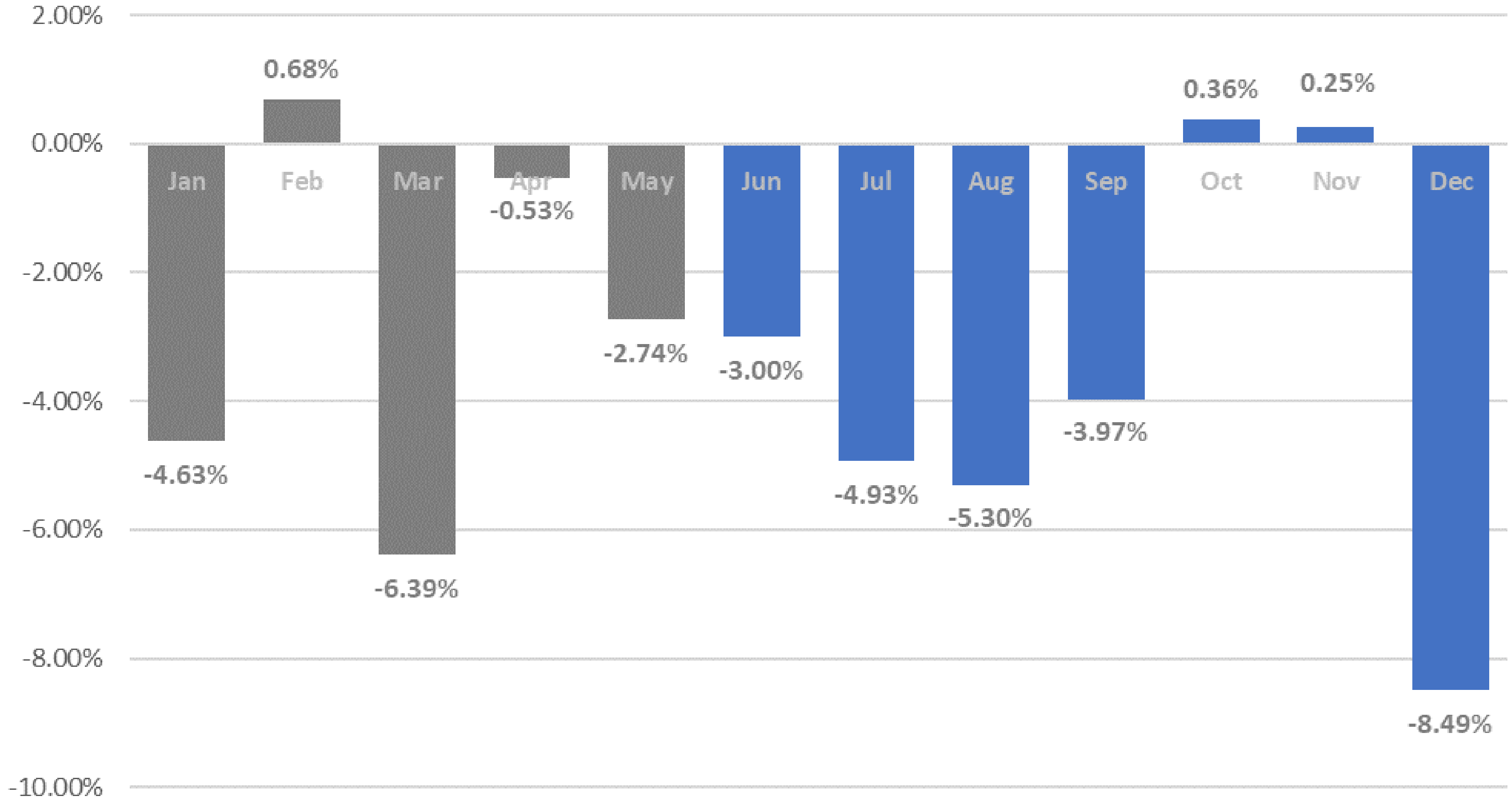
- Strong financial performance results in the first half of the year
- SEA passenger growth is rebounding; forecast is 3.4% lower than 2019 and 8.8% higher than 2022
- 2023 Cruise season is underway with projected 287 cruise sailings and over 1.4 million revenue passengers
- Total operating expenses were $15.7M under the budget in Q2, and project to be $5.0M under the budget on a full-year basis
- Total capital spending forecast to be $506.3M, 93.5% of the budget, for the year

Aviation Division

2023 Q2 Financial Performance Report

Passenger Growth Rebounding

by Month for 2023 vs 2019



Passengers (millions)	
2019 Actual	51.8
2020 Actual	20.0
2021 Actual	36.2
2022 Actual	46.0
2023 Budget	48.9
2023 Forecast	50.0

3.4% ↓

compared to 2019

8.8% ↑

compared to 2022

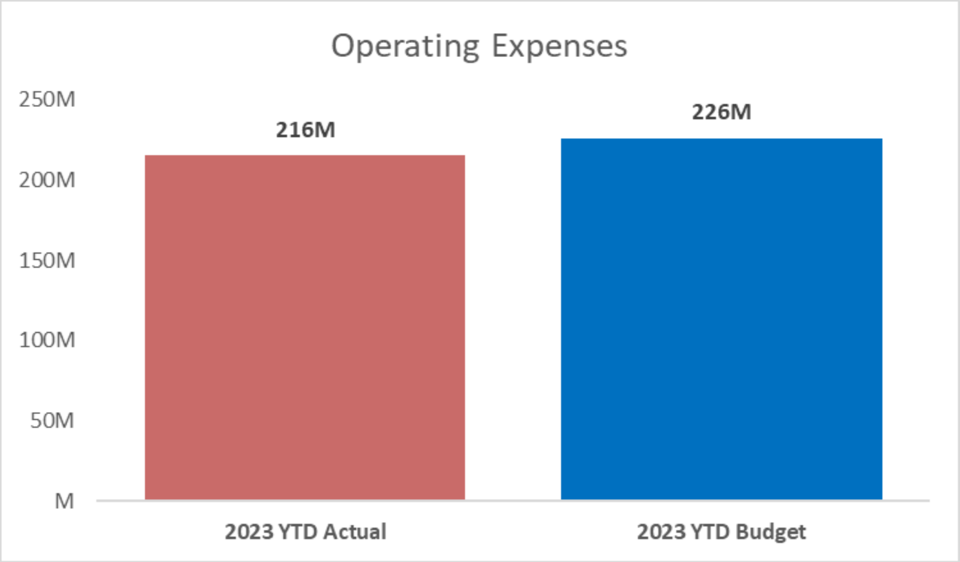
Financial Summary

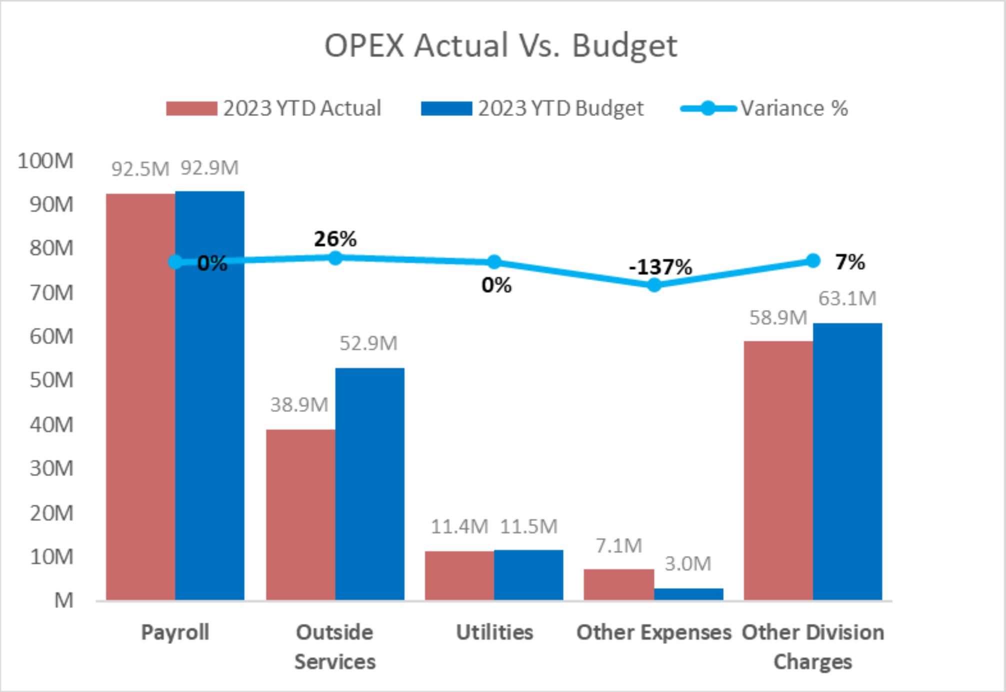
Figures in $000s	Forecast YE 2023	Budget YE 2023	Variance
Revenues			
Aeronautical	501,441	504,948	(3,507)
Non-Aeronautical	317,218	296,102	21,116
Total Revenues	**818,659**	**801,051**	**17,609**
Total O&M Expenses	**458,703**	**460,535**	**1,832**
Federal Relief	11,900	10,000	1,900
Concessions Relief	1,918	250	1,668
NOI (after Federal Relief Grants)	**373,774**	**350,765**	**23,009**
Key Measures			
Non-Aero NOI (in $000s)	180,721	156,216	24,506
CPE ($)	18.66	19.29	0.63
Debt Service Coverage	2.04	1.87	0.17
Other Information			
ADF Balance (in $000s)	587,002	576,000	11,002
Capital Spending (in $000s)	458,345	485,572	27,226

Business/Financial Highlights

- Passenger forecast reduction: Now 3.4% lower than 2019
- Non-aero revenues recovering, forecast to exceed budget

Operating Expenses Summary (YTD)

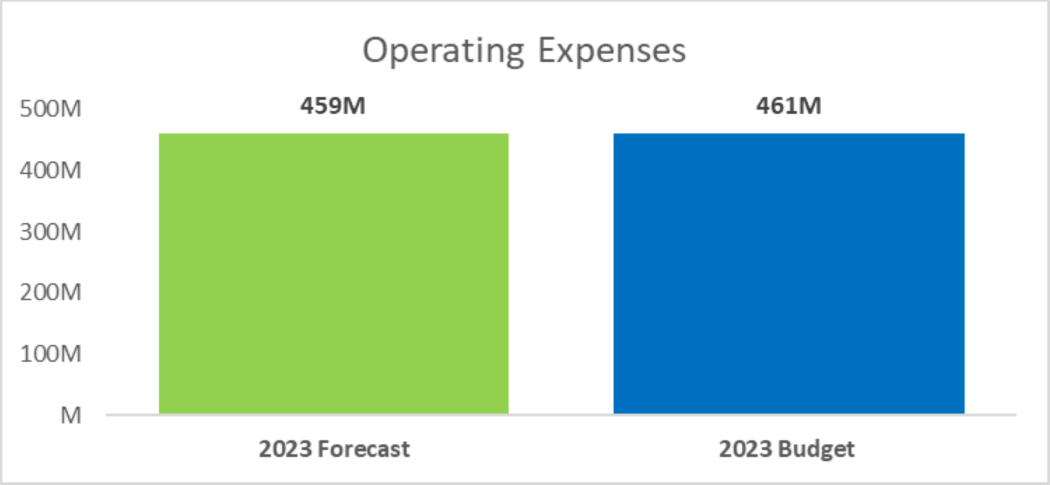


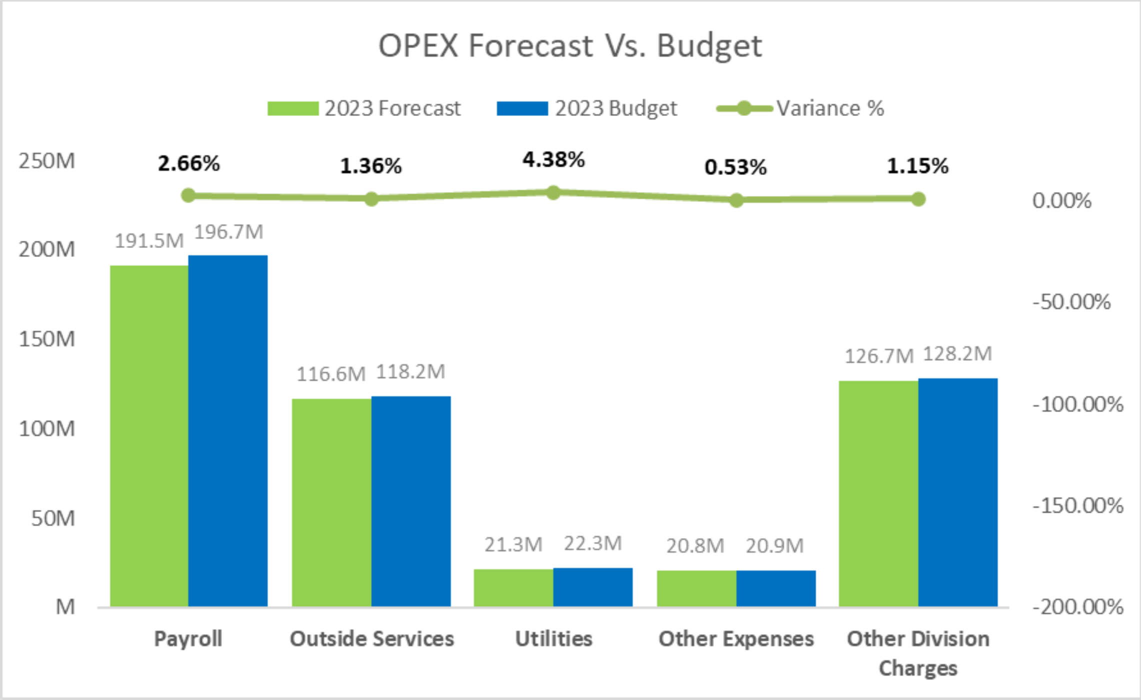


$10.4M or 4.6% Under budget

- **Underspend** primarily in Outside Services of **$14M** due to delays in PMG, and savings from custodial contracts related to vendors not earning incentive pay.

Operating Expenses Summary (Full Year Forecast)





$1.8M or 0.4% under budget

Major Drivers:

- Full Year Forecast is currently anticipated to be closely aligned to Budget at the net rollup.
- Forecasted underspend is approx. $1.8M primarily due to under-runs in Payroll due to vacancies and $1.7M Charges from Other Divisions, offset by increases in other expenses due to less charges to capital and increases to Environmental Remediation Liability (ERL).

Aeronautical Revenue

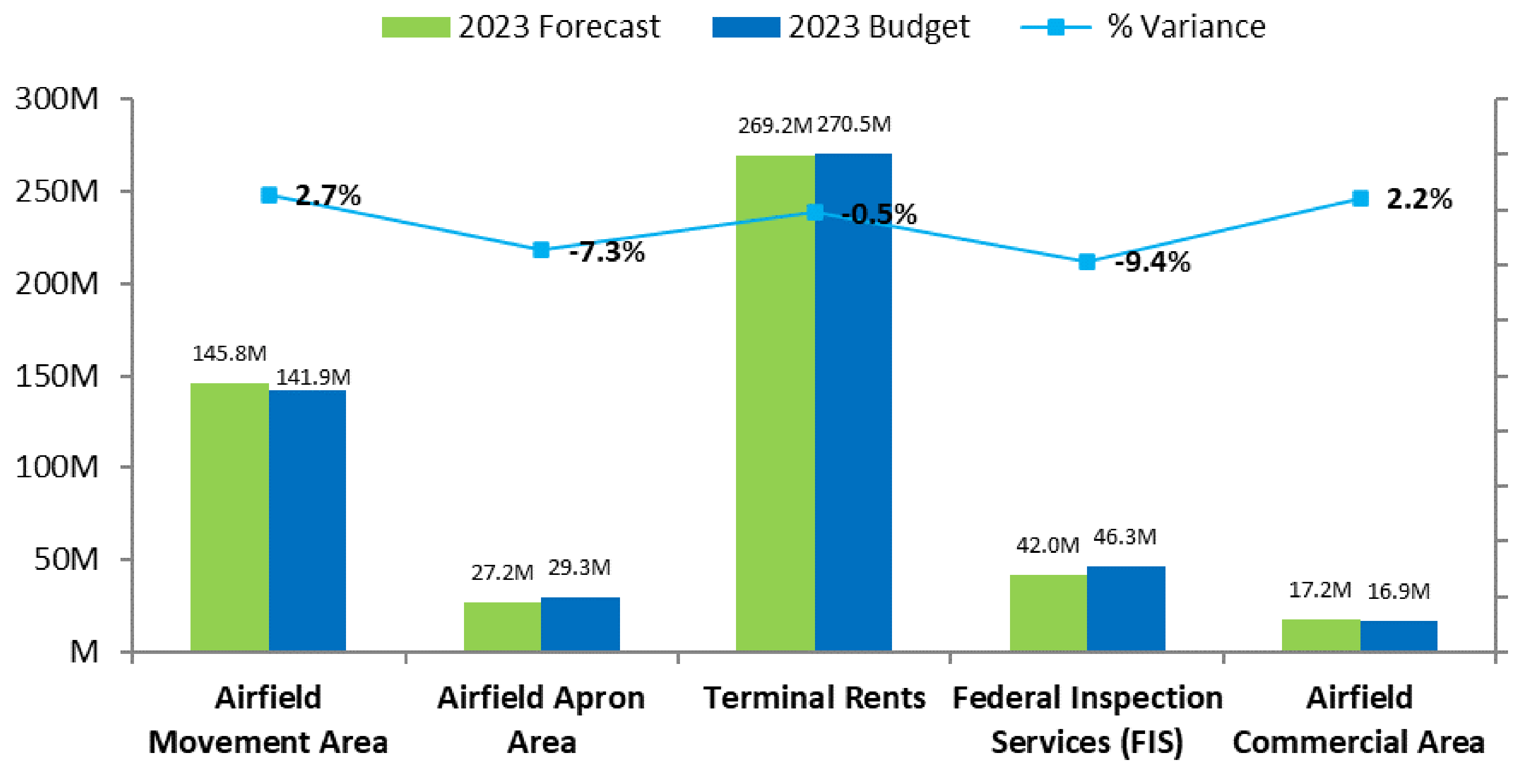
Forecast

$501M

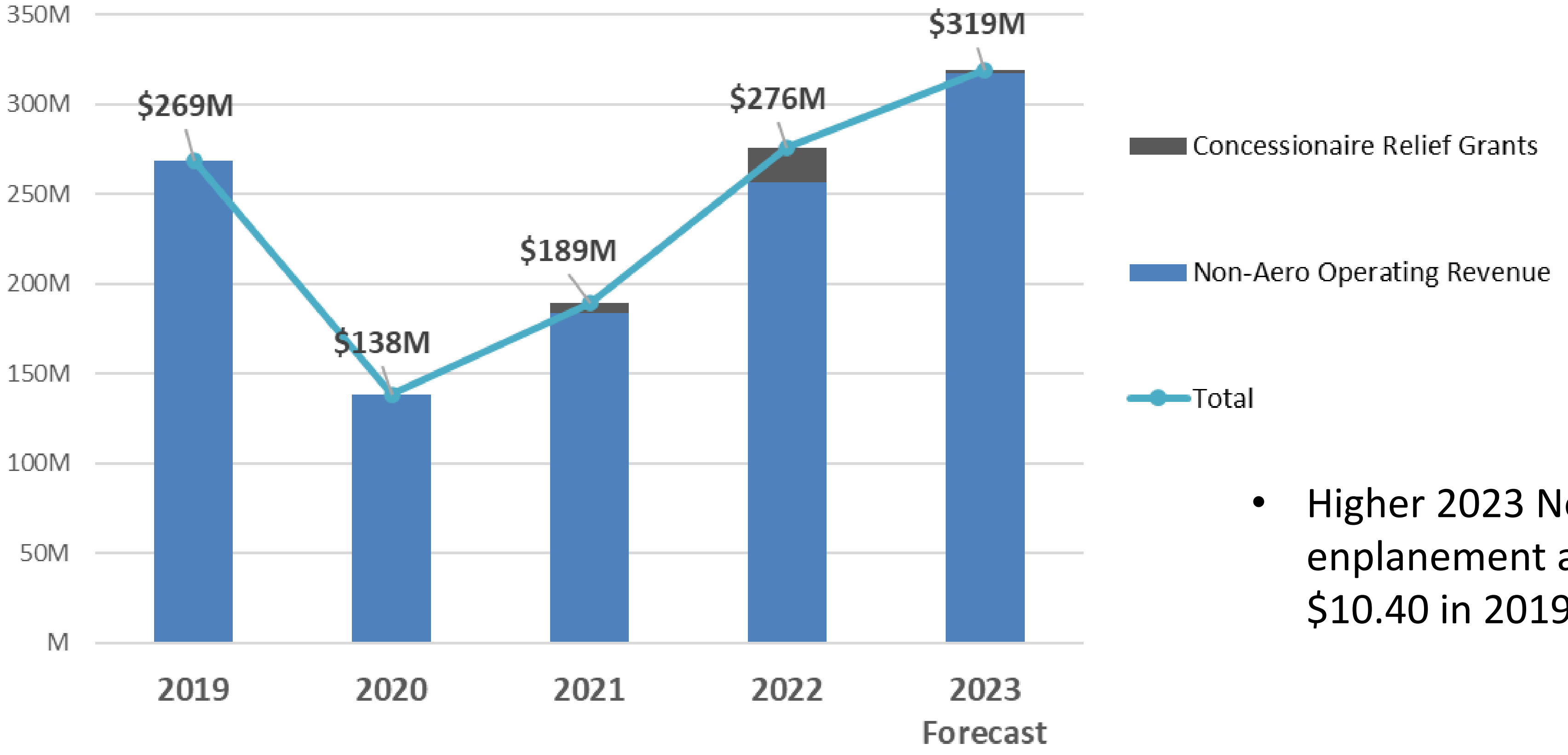
0.7%

Budget

$505M



Non-Aero Revenue YoY with Concessions Grant Impact



- Higher 2023 Non-aero revenue per enplanement at $12.68 compared to $10.40 in 2019.

Note: Remaining ARPA $1.9M federal Concessionaire Relief grant funds expected to be applied to ADR tenants in 2023.

Non-Aeronautical Revenues

Reflects Real Business Performance BEFORE reduction by Concessionaire Relief grant rent credits

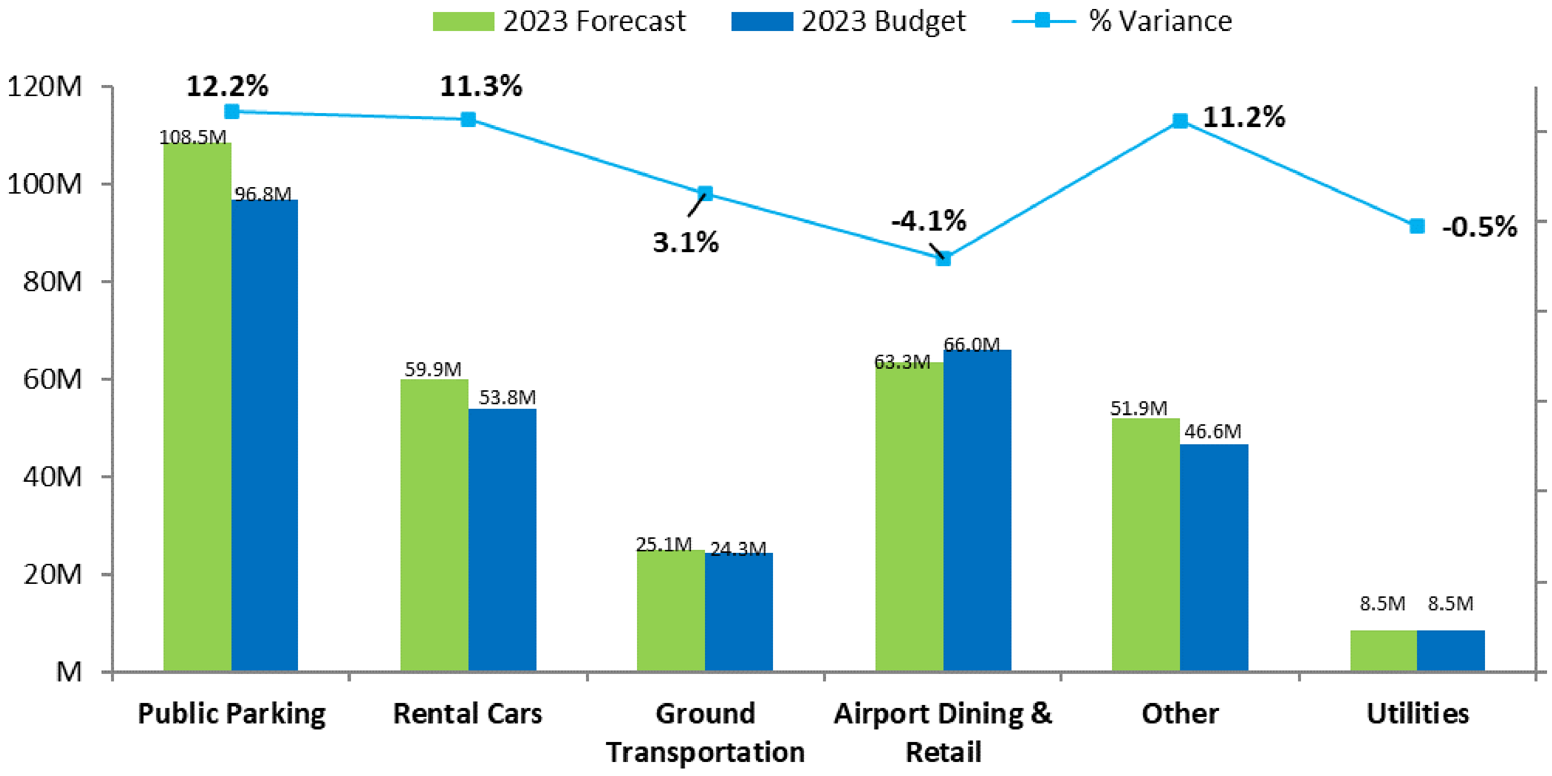
Forecast

$319.1M

7.1%

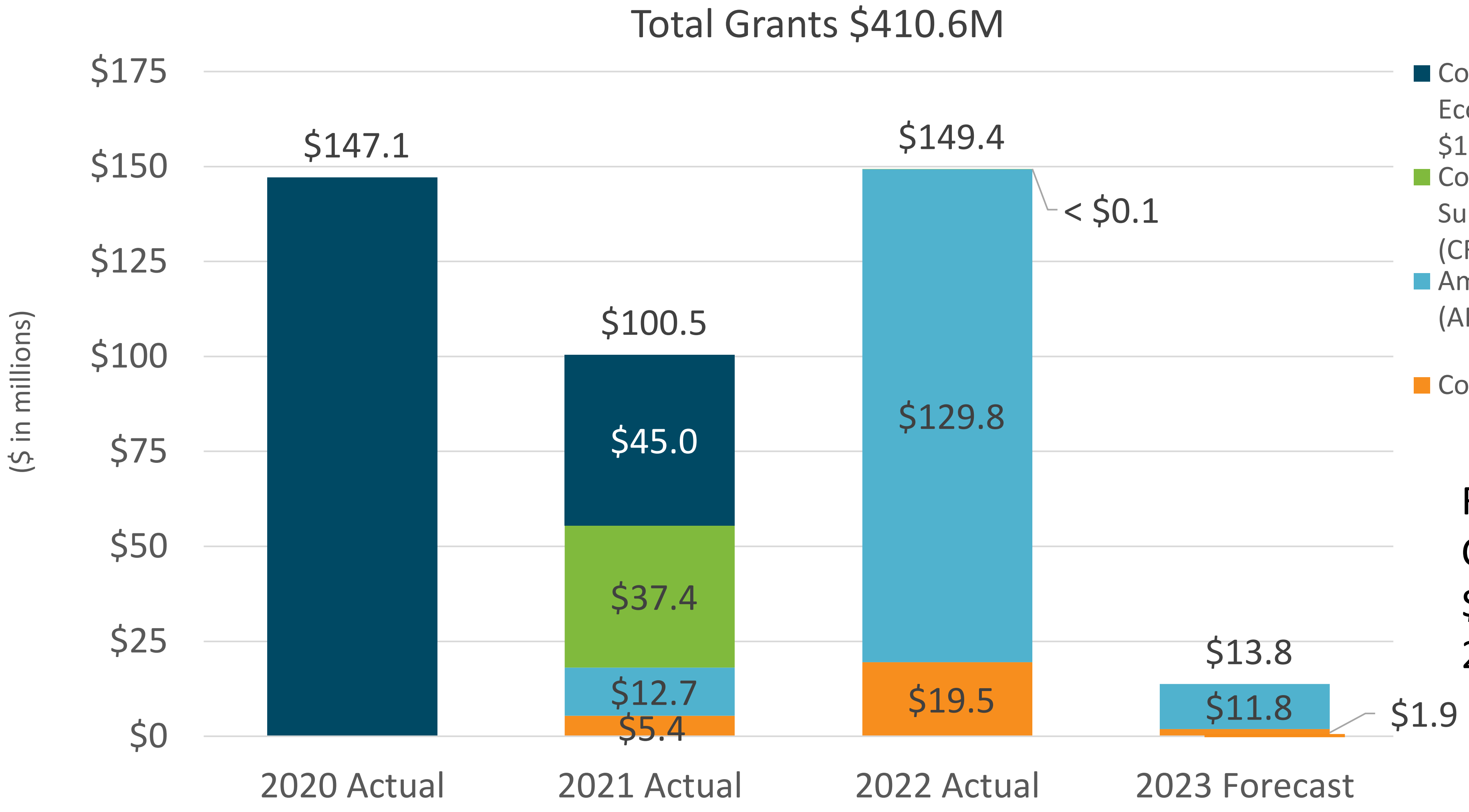
Budget

$296.4M



Final $1.9M in Concessionaire Relief grant rent credits (ARPA grant) will be applied to qualified ADR tenants in 2023.

Federal Relief Grant Summary



Remaining Federal Covid grants of $13.8M to utilize in 2023.

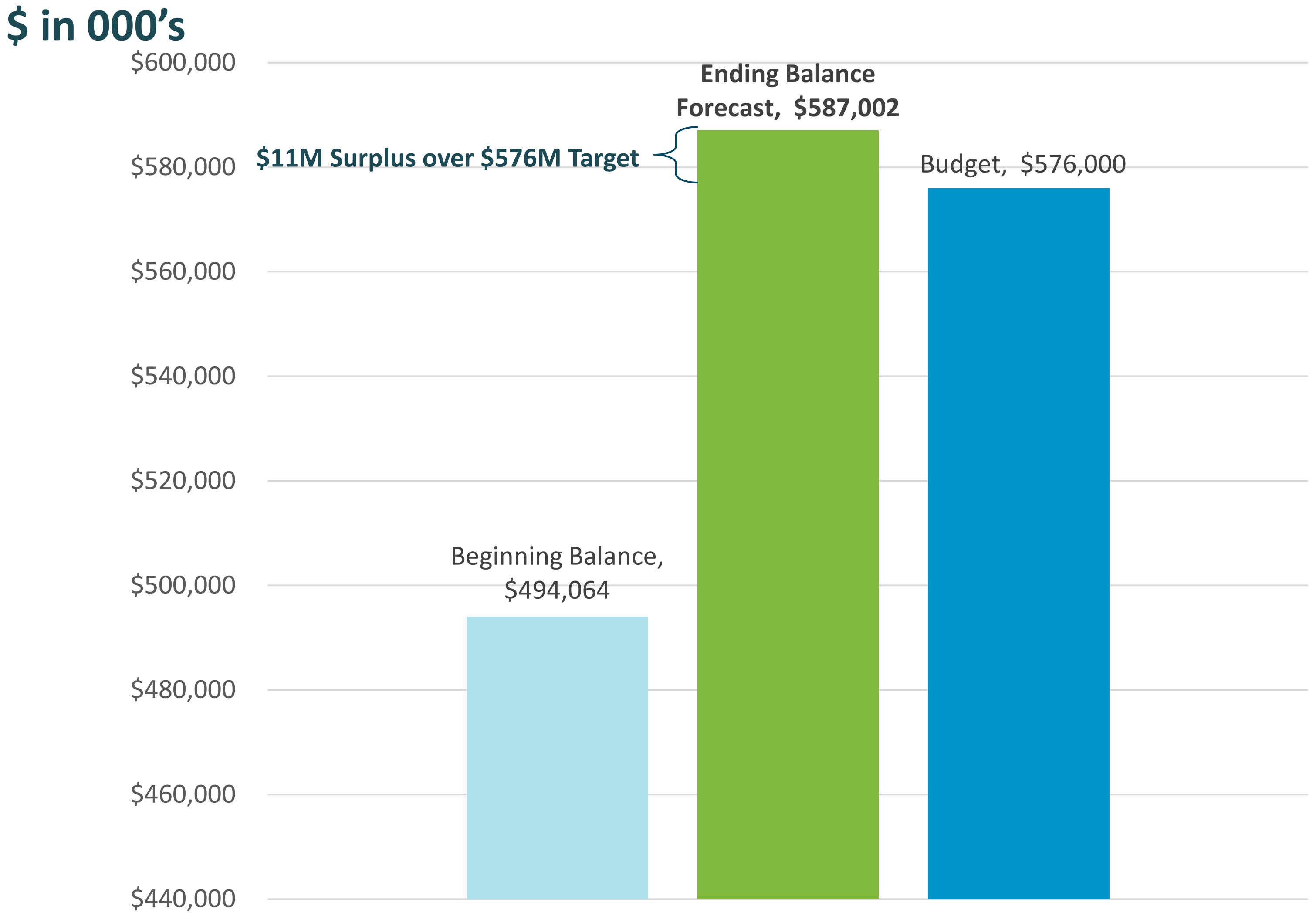
Debt Service Ratio is projected to be better than budget

in $000's	2022 Actual	2023 Forecast	2023 Budget	Variance
Revenues				
Aero	402,540	501,441	504,949	(3,508)
Non-aero	256,613	317,218	295,852	21,366
Total Revenues	**659,153**	**818,659**	**801,051**	**17,608**
O&M	**(382,704)**	**(458,703)**	**(460,535)**	**1,832**
Net Operating Income	**276,449**	**359,956**	**340,516**	**19,440**
Federal Relief Grants Non-op	24,477	-	-	-
Concession Rent Relief Grants	21,419	1,918	250	1,668
CFC Excess	(4,338)	(6,603)	(4,427)	(2,176)
Other net non-operating	5,034	13,878	13,635	243
Available for debt service	**323,040**	**369,149**	**349,974**	**19,176**
Debt Service				
Gross debt service (net of cap i)	316,133	312,176	316,397	(4,221)
CFC offset	(18,696)	(24,645)	(24,658)	13
PFC offset	(69,681)	(94,481)	(95,000)	519
Federal Relief Grants DS offset	(105,371)	(11,978)	(9,997)	(1,981)
Net Debt Service	**122,385**	**181,072**	**186,743**	**(5,670)**
Debt Service Coverage	2.64	2.04	1.87	0.17

Note: DS Coverage is airport only debt service coverage, calculated in accordance with airline agreement.

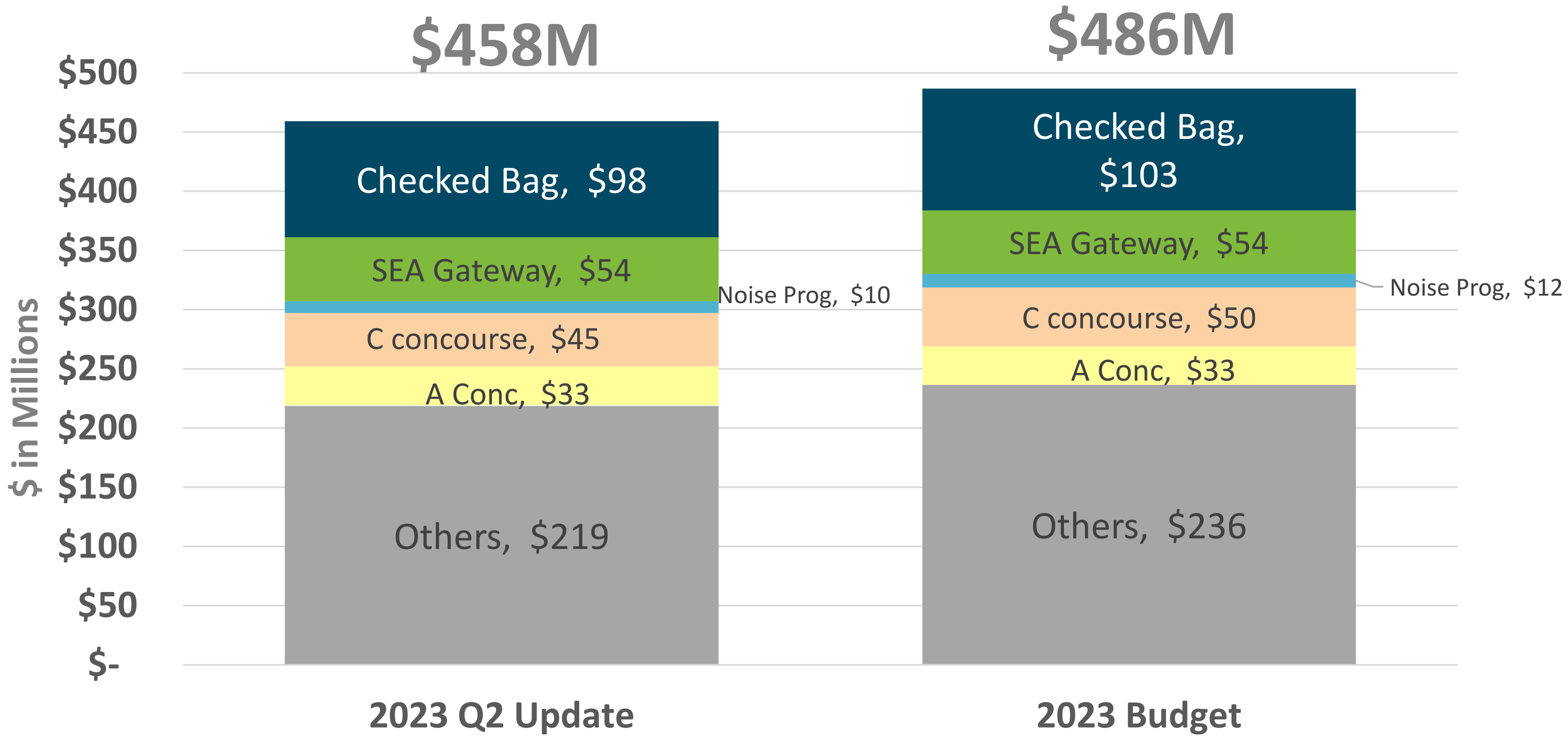
- **Non-aero revenues** are projected to be around **$21M higher** than budget (public parking by $12M; rental car by $6M; flight kitchen & space rentals by $3M, and clubs/lounge by $2M)
- **Aero revenues** 2023 forecast are **$3.5M lower** than budget as lower debt service charges are not included in rate base due to delay in assets completion.
- **Total O&M** is around **$1.8M favorable** to budget

Airport Development Fund Balance



- **Ending balance of <u>$587M</u> exceeding target of $576M (15 months of O&M in 2023) by $11M**
- **ADF funded capital projects Forecast is $50M**

2023 Capital Spending forecast: 94% of Budget



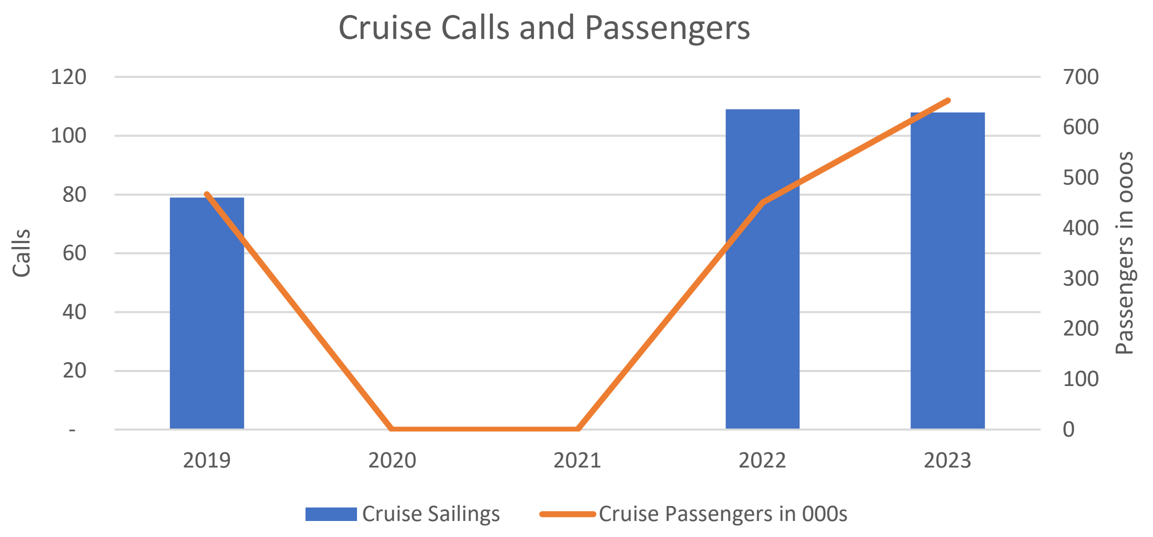
- Most mega projects are projected to have spendings close to the budget
- Design/schedule and billing delays in baggage project result in lower cashflows
- Schedule delays caused variance in other projects

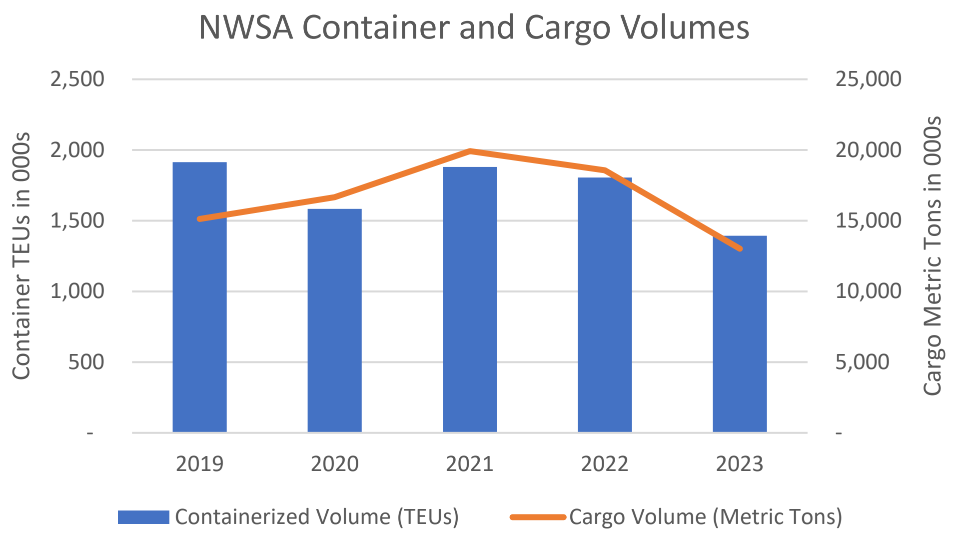
Seaport

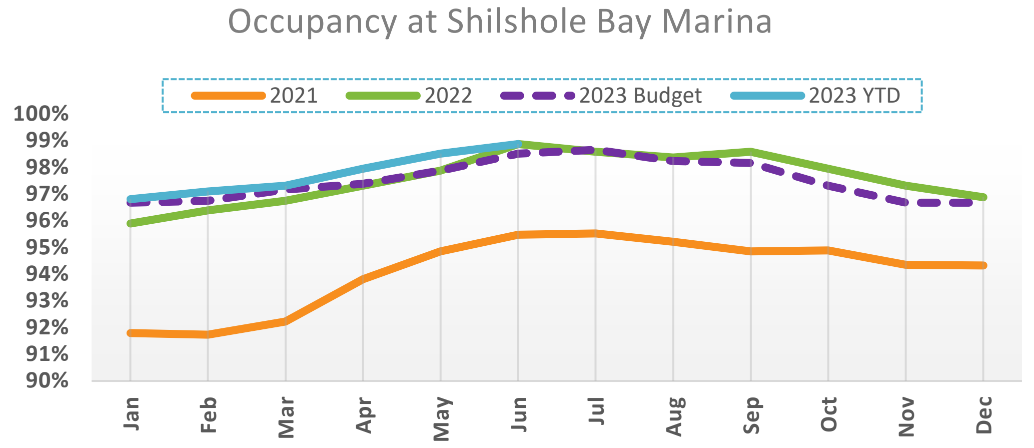
2023 Q2 Financial Performance Report

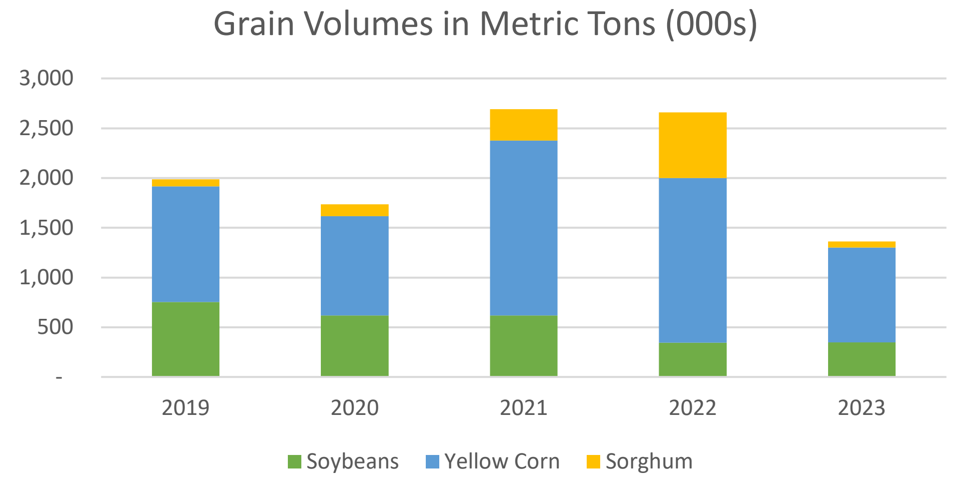
Seaport Key Metrics

Through Q2









Cruise better than expected. Cargo facing challenges.

Seaport Performance Summary

$ in 000's	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 $	Change from 2022 %	2023 Forecast	2023 Budget	Fcst vs. Budget Variance $	Fcst vs. Budget Variance %
Revenues											
Maritime	31,788	35,856	34,040	1,816	5%	4,068	13%	77,962	76,262	1,700	2%
Economic Development Division	6,680	8,361	10,123	(1,761)	-17%	1,681	25%	20,901	22,201	(1,300)	-6%
Joint Venture	24,358	29,205	24,505	4,700	19%	4,847	20%	49,010	49,010	0	0%
Total Revenue	**62,826**	**73,422**	**68,668**	**4,754**	**7%**	**10,597**	**17%**	**147,873**	**147,473**	**400**	**0%**
Expenses											
Maritime	28,050	30,711	32,632	1,921	6%	2,662	9%	64,921	66,068	1,147	2%
Economic Development Division	10,872	11,392	13,876	2,484	18%	520	5%	28,418	30,149	1,731	6%
Joint Venture	818	1,371	942	(429)	-46%	553	68%	2,500	2,148	(352)	-16%
Total Expense	**39,740**	**43,474**	**47,450**	**3,976**	**8%**	**3,734**	**9%**	**95,839**	**98,365**	**2,526**	**3%**
NOI Before Stormwater Utility	**23,086**	**29,948**	**21,218**	**8,730**	**41%**	**6,862**	**30%**	**52,034**	**49,108**	**2,926**	**6%**
Stormwater Utility NOI	**817**	**664**	**398**	**266**	**67%**	**(153)**	**-19%**	**1,624**	**1,624**	**0**	**0%**
Total Non-Aviation Business NOI	**23,902**	**30,612**	**21,616**	**8,996**	**42%**	**6,709**	**28%**	**53,658**	**50,732**	**2,926**	**6%**

Year-to-Date

- Better than expected waterside occupancy Fishing and Commercial vessels.
- High cruise volumes driving parking revenue.
- NWSA – Lower Revenues, Lower Expenses.

Forecast

- Grain Volumes off 35%.
- Cruise up 24%.
- Lower expenses from open positions.
- Stormwater utility at budget

Favorable financial results YTD, outlook neutral.

Maritime Division

2023 Q2 Financial Performance Report

Port of Seattle®

Maritime Division

Financial Summary

Figure in $000s	Forecast	Budget	Variance
Revenues			
Fishing, Commercial, & Recreational			
Marinas	25,900	25,400	500
Cruise	37,832	34,832	3,000
Maritime Portfolio Mgmt.	10,392	10,192	200
Grain / Other	3,838	5,838	(2,000)
Total	77,962	76,262	1,700
O&M Expense			
Direct	24,117	24,617	500
Support Services	21,519	21,719	200
Central Services and Other	19,286	19,733	447
Total	64,921	66,068	1,147
Net Operating Income	13,041	10,194	2,847
Capital Spending	27,967	32,313	4,346

Business Highlights

- Cruise Occupancy YTD over 100% vs 85% budgeted.
- Grain Volumes down 49% Y/Y in first 6 months and forecasted down 35% from full year 2022.
- T91 Berth 6 & 8 Redevelopment completed 100% design.
- Duwamish River People's Park - 3 Fish & Invertebrate sampling events. Over 2,100 chum counted on April 21st.
- Completed stormwater system and pipe repairs at Shilshole Bay Marina (supports transferring pipes to City).

Maritime Q2 2023 Financials

Net Operating Income is $3.7M favorable to budget and $1.4M better than 2022

- Revenue is $1.8M better than budget and $4.1M above 2022 driven by increased cruise occupancy & impacts of canceling the Alaska Crab season, partially offset by reduced grain volumes.

- Expenses $1.9M or 6% favorable to budget driven by payroll savings, tenant improvements timing, and consulting costs. Expenses up $2.7M Y/Y primarily due to Payroll.

- Capital spending was $4.4M and forecasted at $28M or 87% of $32.3M budget.

	2021 YTD	2022 YTD	2023 YTD	2023 YTD	Actual vs. Budget Variance		Change from 2022	
$ in 000's	Actual	Actual	Actual	Budget	$	%	$	%
Total Revenues	19,507	31,788	35,856	34,040	1,816	5%	4,068	13%
Total Operating Expense	22,581	28,050	30,711	32,632	1,921	6%	2,662	9%
Net Operating Income	(3,074)	3,738	5,145	1,408	3,736	-265%	1,407	-38%
Depreciation	*8,881*	*8,952*	*9,100*	*8,418*	*(681)*	*-8%*	*148*	*2%*
Net Income	(11,955)	(5,214)	(3,955)	(7,010)	3,055	44%	1,259	24%

Stormwater Utility Tracking to Budget

$ in 000's	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 $	Change from 2022 %
Revenue								
NWSA	859	389	539	523	17	3%	150	39%
Tenants Revenue	1,506	2,174	2,115	2,157	(42)	-2%	(58)	-3%
Port Non-tenants Revenue	727	845	862	862	0	0%	17	2%
Total Revenues	**3,093**	**3,407**	**3,516**	**3,541**	**(25)**	**-1%**	**109**	**3%**
Expenses								
SWU	348	683	626	865	239	28%	(57)	-8%
Maintenance Expenses	1,299	1,378	1,283	1,734	451	26%	(96)	-7%
Central Waterfront PM	3	19	10	10	0	1%	(9)	-47%
Environmental & Sustainability	26	10	15	23	8	33%	5	54%
Environmental Finance	9	6	6	17	11	66%	(1)	-13%
Other Central Services	376	495	913	494	(418)	-85%	418	85%
Total Expenses	**2,061**	**2,591**	**2,852**	**3,143**	**291**	**9%**	**261**	**10%**
NOI Before Depreciation	**1,032**	**816**	**664**	**398**	**266**	**67%**	**(152)**	**-19%**
Depreciation	636	640	624	584	(41)	-7%	(16)	-2%
NOI After Depreciation	**396**	**176**	**39**	**(186)**	**225**	**-121%**	**(137)**	**-78%**

- Expenses are under due to timing of outside services spend.

Northwest Seaport Alliance Summary

NWSA Operating Income	Year-to-Date			Fav (UnFav)		Incr (Decr)	
Before GASB 87 Adjustment	2022	2023		Budget Variance		Change from 2022	
$ in 000's	Actual	Actual	Budget	$	%	$	%
Operating Revenue	101,123	113,633	117,397	(3,764)	-3%	12,510	12%
Operating Expense	43,164	49,327	56,583	7,256	13%	6,163	14%
Operating Income*	**57,959**	**64,306**	**60,814**	**3,492**	**6%**	**6,347**	**11%**
Depreciation	10,413	10,482	10,705	223	2%	69	1%
Net Operating Income	**47,546**	**53,824**	**50,109**	**3,715**	**7%**	**6,278**	**13%**
Cargo TEUs	1,806,732	1,394,347				(412,385)	-22.8%
Cargo Volume (Metric Tons)	18,558,442	13,022,238				(5,536,204)	-29.8%
***Excludes Depreciation**							

Revenue

- $3.8M below budget from the impacts of 23% reduction in TEUs.
- $12.5M higher than 2022 driven crane minimum revenue at Husky terminal, Coast Guard lease on 46, lease escalations, and higher Auto volumes.

Operating Expense

- $7.3M below budget from lower Maintenance and volume driven expenses.
- $6.2M higher than 2022 from increased payroll cost.

Volume reductions driving financial performance.

Joint Venture Q2 2023 Financials

$ in 000's	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Fav (UnFav) Actual vs. Budget Variance $	%	Incr (Decr) Change from 2022 $	%
Revenue							
NWSA Distributable Revenue	24,527	28,949	25,153	3,796	15%	4,422	18%
Contra Joint Venture Revenue	(995)	(933)	(1,015)	82	-8%	63	-6%
Subtotal Distributable Revenue frm NWSA	23,532	28,016	24,138	3,879	16%	4,485	19%
Other Service Revenue Tenant Reimbursements	381	522	285	238	83%	141	37%
Port Revenue from NWSA Facilities	445	666	83	584	N/A	221	50%
Total Revenues	**24,358**	**29,205**	**24,505**	**4,700**	**19%**	**4,847**	**20%**
Expenses							
Maintenance Expenses	277	375	314	(61)	-19%	98	35%
JV Direct	179	472	53	(419)	-795%	293	164%
Security	91	103	98	(6)	-6%	13	
Environmental & Sustainability	85	257	281	24	9%	172	202%
Seaport Finance & Cost Recovery	74	158	135	(23)	-17%	84	112%
Seaport Project Management	17	35	37	2	5%	18	102%
Central Services / Other	94	37	93	56	60%	(57)	-61%
Total Expenses	**818**	**1,437**	**1,011**	**(426)**	**-42%**	**620**	**76%**
NOI Before Depreciation	23,540	27,767	23,493	4,274	18%	4,227	18%
Legacy Depreciation for NWSA Facilities	7,399	7,348	7,225	(123)	-2%	(51)	-1%
NOI After Depreciation	**16,141**	**20,419**	**16,268**	**4,151**	**26%**	**4,278**	**27%**

Home Port Activities

Revenues:

- NWSA Distributable Revenue higher than budget due project spending timing less than budget.
- Port Revenue from NWSA Facilities higher from unbudgeted Pacific Crane Maintenance lease at T46.

Expenses

- $426K unbudgeted T5 environmental reserve adjustment expense
- Tenant maintenance work at T18, P16/17, T30, and T115.

Economic Development Division

2023 Q2 Financial Performance Report

Economic Development Division

Financial Summary

Figure in $000s	**Forecast**	**Budget**	**Variance**
Revenues	20,901	22,201	(1,300)
O&M Expense			
EDD & Maritime	16,368	17,900	1,532
Maintenance	3,253	3,303	50
Diversity in Contracting	250	250	0
Tourism	1,830	1,830	0
EDD Grants	1,450	1,450	0
Central Services and Other	5,268	5,417	149
Total	28,418	30,149	1,731
NOI	(7,517)	(7,948)	431
Capital Spending	7,670	8,086	416

Business Highlights

- Parking returning to pre-pandemic levels.
- Maintained 90% occupancy.
- Conference Center volumes returning after Q1 cancellations.
- P66 Central Waterfront Elevators Project reached substantial completion.
- FT Maritime Innovation Center Project completed 100% design.
- T91 Uplands Development completed 30% design.

Economic Development Financial Highlights

Net Operating Income $723K favorable to budget and $1.2M higher than 2022

- Revenue unfavorable to budget by $1.8M and $1.7M higher than 2022. Higher than anticipated conference cancellations partially offset by uptick in demand at the Bell Street Garage.
- Expenses favorable to budget by $2.5M driven by less conferences than budgeted and timing of spend. Expenses are up by $520K Y/Y due to increased Conference & Event Center volumes offset by Tourism expenses and timing of tenant improvements & broker fees.
- Capital spending was $2.6M and forecasted at $7.7M or 95% of $8.1M budget.

	2021 YTD	2022 YTD	2023 YTD	2023 YTD	Actual vs. Budget Variance		Change from 2022	
$ in 000's	Actual	Actual	Actual	Budget	$	%	$	%
Total Revenues	**4,089**	**6,680**	**8,361**	**10,123**	**(1,761)**	**-17%**	**1,681**	**25%**
Total Operating Expense	**8,493**	**10,872**	**11,392**	**13,876**	**2,484**	**18%**	**520**	**5%**
Net Operating Income	**(4,403)**	**(4,192)**	**(3,031)**	**(3,753)**	**723**	**19%**	**1,162**	**28%**
Depreciation	***1,919***	***1,906***	***2,064***	***1,914***	***(150)***	***-8%***	***157***	***8%***
Net Income	**(6,322)**	**(6,099)**	**(5,094)**	**(5,667)**	**573**	**10%**	**1,004**	**16%**

Central Services

2023 Q2 Financial Performance Report

Port of Seattle

Central Services

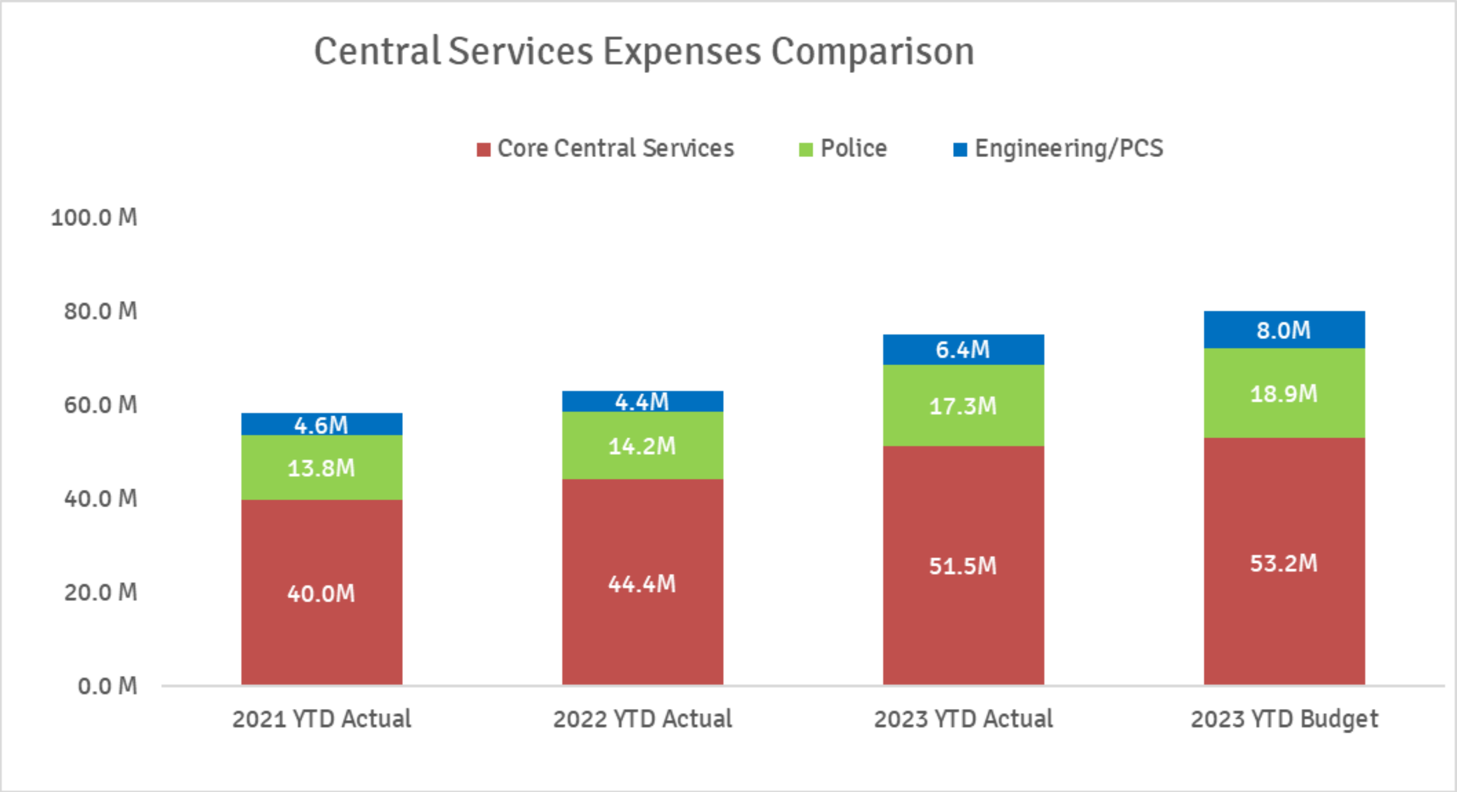
Financial Summary

Figures in $000s	Forecast	Budget	Variance
Revenues	**399**	**155**	**244**
Core Central Support Serv	109,186	109,752	566
Police	35,929	36,673	744
Engineering/PCS	14,814	16,478	1,664
O&M Expenses	**159,928**	**162,903**	**2,974**
Capital Spending	**11,015**	**13,178**	**2,163**

Business Highlights

- Hosted a multi-cultural **Working Waterfront boat tour** for 250 community members
- Hosted the annual **SKCCIF Environment and Jobs Symposium** with 150 attendees
- Partnered with NWSA on a **Bike Truck Safety Fair** promoting freight mobility
- Secured final passage of **2:1 Match Bill** in State Legislature
- Secured final passage of **SAF Incentivization Bill** in State Legislature
- Completed the Equitable Spending and Accountability Project **(ESAP)** framework

Central Services YTD Financial Highlights



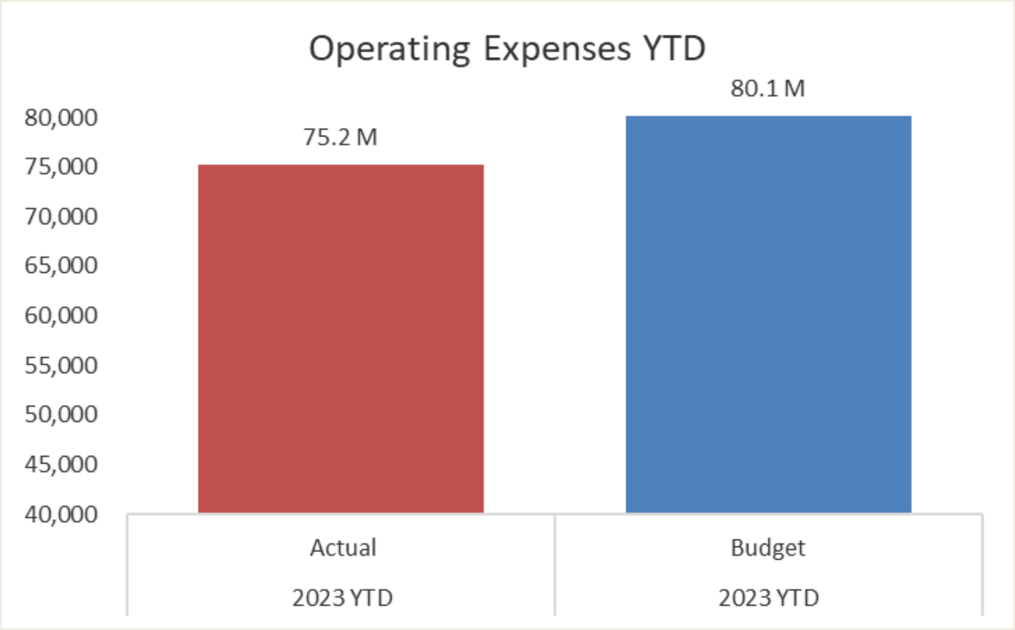
2023 YTD Total Operating Expenses are **$4.9M below** budget due to:

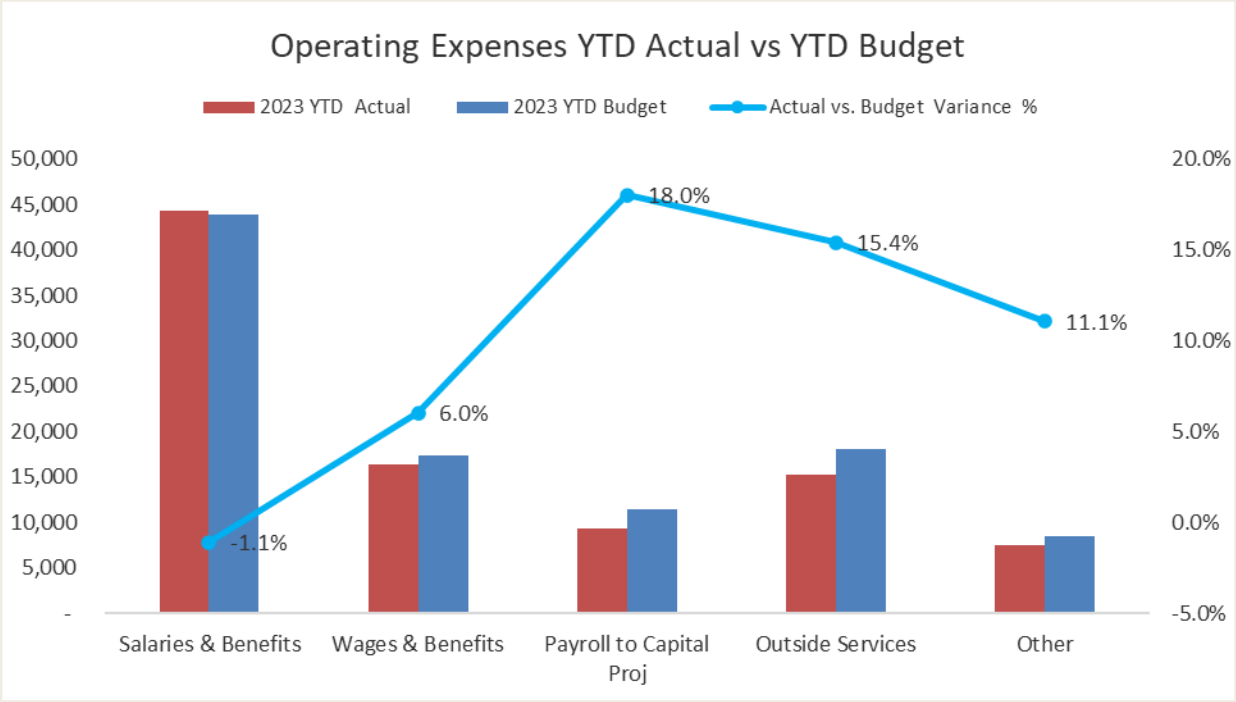
- Lower Payroll and Outside Services, partially offset by lower Charges to Capital Projects

2023 YTD Total Operating Expenses are **$12.2M higher** compared to 2022 due to:

- Higher Payroll and Outside Services in 2023, partially offset by lower General Expense and higher Charges to Capital Projects

Operating Expenses Summary





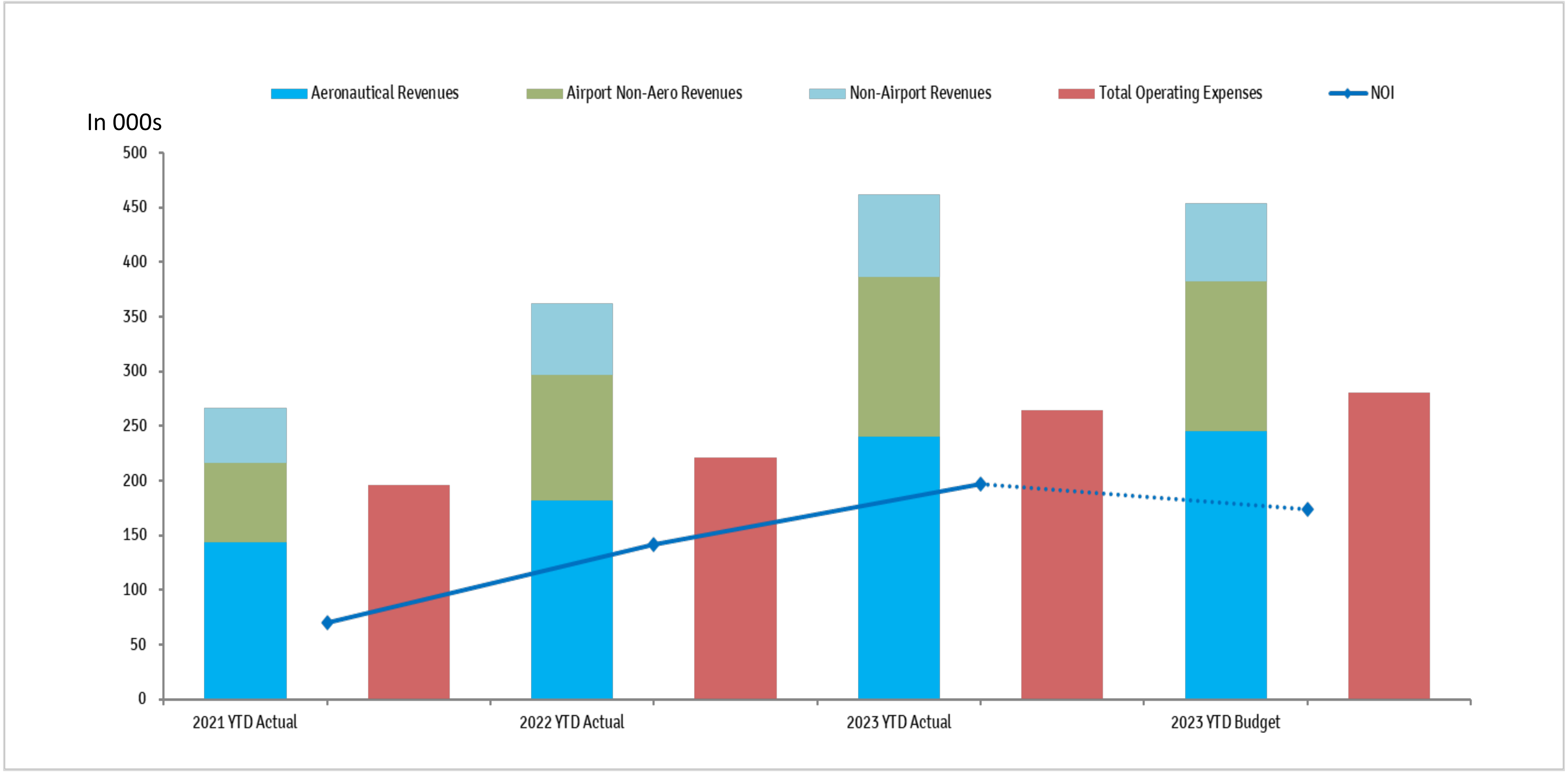
$4.9M or 6.1% favorable

- Payroll **$2.6M** lower due to vacancies
- Outside Services **$2.8M** underspent
- Favorable variance partially offset by **$1.4M** less Charges to Capital Projects

Port Wide

2023 Q2 Financial Performance Report

Port Wide Financial Summary



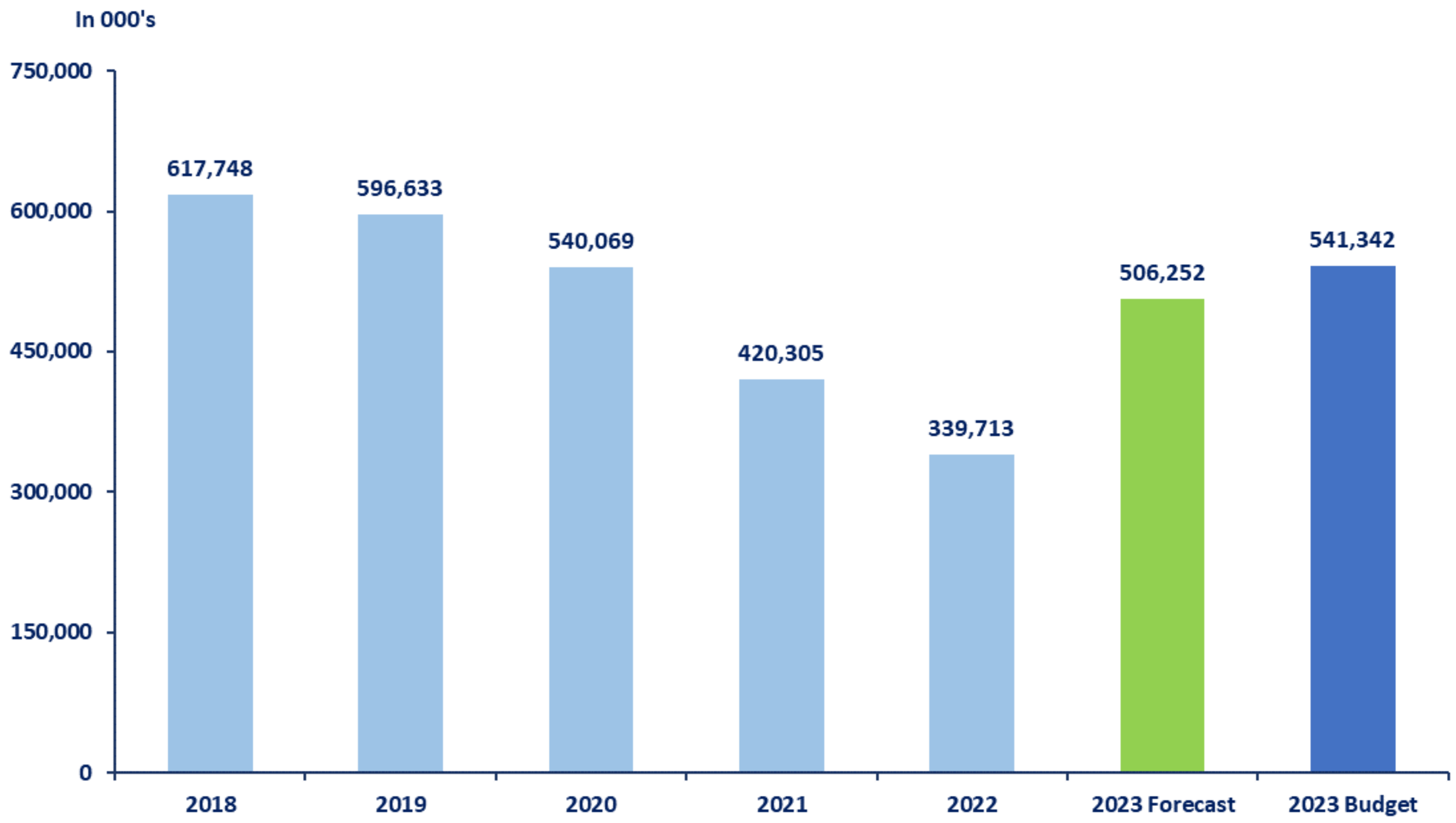
- Total Operating Revenues: $8.3M above budget mainly due to higher Non-Aeronautical Revenues.
- Total Operating Expenses: $15.7M below budget
- NOI before Depreciation: $24.0M above budget

Port Wide Financial Summary (YE Forecast)

$ in 000's	2021 Actual	2022 Actual	2023 Forecast	2023 Budget	Fcst vs. Budget Variance $	Fcst vs. Budget Variance %	Change from 2022 Incr (Decr) $	Change from 2022 Incr (Decr) %
Aeronautical Revenues	317,513	402,540	501,441	504,948	(3,507)	-0.7%	98,901	24.6%
Airport Non-Aero Revenues	183,819	256,613	317,218	296,102	21,116	7.1%	60,605	23.6%
Non-Airport Revenues	120,689	150,977	153,278	152,634	644	0.4%	2,301	1.5%
Total Operating Revenues	**622,020**	**810,130**	**971,937**	**953,684**	**18,253**	**1.9%**	**161,807**	**20.0%**
Total Operating Expenses	364,656	475,739	568,461	573,431	4,970	0.9%	92,721	19.5%
NOI before Depreciation	**257,364**	**334,390**	**403,476**	**380,253**	**23,224**	**6.1%**	**69,086**	**20.7%**
Depreciation	190,683	232,236	207,951	207,951	-	0.0%	(24,285)	-10.5%
NOI after Depreciation	**66,681**	**102,155**	**195,526**	**172,302**	**23,224**	**13.5%**	**93,371**	**91.4%**

- Total Operating Revenues are expected to be $18.3M above budget due to Airport Non-Aero Revenues higher that expected, partially offset by lower $3.5M Aeronautical Revenues and $2.0M lower Grain
- Total Operating expenses are expected to be $5.0M below budget mainly due to vacant positions, lower Utilities and Third-Party Management Expenses
- Net Operating Income before Depreciation is forecasted to be $23.2M above budget

Port Wide Capital Spending



- Q2 YTD total capital spending was $194.5M
- For the full year, total capital spending is expected to be $506.3M, 93.5% of the budget

Aviation Division Appendix

2023 Q2 Financial Performance Report

Port of Seattle®

Airport Activity

	YTD 2021	YTD 2022	YTD 2023
Total Passengers (000's)			
Domestic	13,770	19,075	21,046
International	528	1,814	2,694
Total	14,298	20,889	23,740
Operations	171,873	190,202	162,365
Landed Weight (In Millions of lbs.)			
Cargo	1,409	1,357	1,319
All other	10,584	12,260	13,784
Total	11,993	13,617	15,103
Cargo - Metric Tons			
Domestic freight	174,449	165,169	147,095
International & Mail freight	60,738	61,487	52,588
Total	235,187	226,656	199,683

2023 YTD Passenger volume:

- YTD through June passenger volume is 14% higher than YTD in 2022.
- Total passenger recovery is building, but volumes are expected to be 3.4% lower for full year 2023 than pre-pandemic volumes in 2019.

Month summary (Jun 2023 vs. Jun 2022)

Airline	Code	Current pax	Market share	Previous pax	Pax % diff
Alaska Airlines (rollup)	AS	2,503,944	51.5%	2,217,213	12.9%
Delta Air Lines (rollup)	DL	1,199,336	24.7%	1,022,567	17.3%
United Airlines (rollup)	UA	245,879	5.1%	214,086	14.9%
Southwest Airlines (r..	WN	219,106	4.5%	240,221	-8.8%

Aviation Financial Summary

Financial Summary ($ in 000's)	2021 Actual	2022 Actual	2023 Forecast	2023 Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Incr/(Decr) Change from 2022 $	Incr/(Decr) Change from 2022 %
Operating Revenue								
Aeronautical Revenues	317,513	402,540	501,441	504,948	(3,507)	-0.7%	98,901	24.6%
Non-Aeronautical Revenues	183,819	256,613	317,218	296,102	21,116	7.1%	60,605	23.6%
Total Operating Revenues	**501,332**	**659,153**	**818,659**	**801,051**	**17,609**	**2.2%**	**159,506**	**24.2%**
Total Operating Expenses	**341,679**	**394,990**	**458,703**	**460,535**	**1,832**	**0.4%**	**63,714**	**16.1%**
Net Operating Income	**159,652**	**264,163**	**359,956**	**340,515**	**19,441**	**5.7%**	**95,793**	**36.3%**
CPE	15.93	16.09	18.66	19.29	0.63	3.2%	2.57	16.0%
Non-Aero NOI ($ in 000s)	135,483	79,214	180,721	156,216	(24,506)	-15.7%	101,507	128.1%
Enplaned passengers (in 000s)	18,073	22,966	25,031	24,444	(588)	-2.4%	2,065	9.0%
Capital Expenditures (in 000s)	**389,051**	**311,631**	**458,345**	**485,572**	**27,226**	**5.6%**	**146,714**	**47.1%**

Key Performance Measures

	2021 Actual	2022 Actual	2023 Forecast	2023 Approved Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Incr/(Decr) Change from 2022 $	Incr/(Decr) Change from 2022 %
Key Performance Metrics								
Cost per Enplanement (CPE)	15.93	16.09	18.66	19.29	0.63	3.2%	2.57	16.0%
Non-Aeronautical NOI (in 000's)[1]	93,175	30,256	174,118	150,386	23,732	15.8%	143,862	475.5%
Other Performance Metrics								
O&M Cost per Enplanement	16.28	3.86	18.33	18.84	0.52	2.7%	14.47	375.0%
Non-Aero Revenue per Enplanement	10.17	2.36	12.67	12.11	0.56	4.6%	10.31	436.6%
Debt per Enplanement (in $)	198	-	151	154	4	2.3%	151	0.0%
Debt Service Coverage	1.69	2.64	2.04	1.87	0.17	9.0%	(0.60)	-22.7%
Days cash on hand (10 months = 304 days)	423	0	467	457	11	2.3%	467	0.0%
Aeronautical Revenue Sharing ($ in 000's)	-	-	-	-	-	0.0%	-	0.0%
Activity (in 000's)								
Enplanements	18,073	22,966	25,031	24,444	588	2.4%	2,065	9.0%
Total Passengers	36,154	45,964	50,063	48,887	1,176	2.4%	4,099	8.9%

Aviation Expense YTD Summary

Total Airport Expense Summary ($ in 000's)	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Incr/(Decr) Change from 2022 $	Incr/(Decr) Change from 2022 %
Operating Expenses								
Payroll	76,202	79,627	92,502	92,928	426	0.5%	12,876	16.2%
Outside Services	26,770	32,518	38,888	52,850	13,962	26.4%	6,370	19.6%
Utilities	9,750	12,207	11,437	11,488	51	0.4%	(770)	-6.3%
Other Expenses	(461)	5,128	7,102	2,939	(4,163)	-141.6%	1,974	38.5%
Total Airport Direct Charges	**112,261**	**129,480**	**149,929**	**160,205**	**10,277**	**6.4%**	**20,449**	**15.8%**
Environmental Remediation Liability	801	(2,312)	6,377	2,680	(3,697)	-138.0%	8,689	-375.8%
Capital to Expense	288	26	359	-	(359)		333	1286.2%
Total Exceptions	**1,090**	**(2,286)**	**6,737**	**2,680**	**(4,057)**	**-151.4%**	**9,023**	**-394.7%**
Total Airport Expenses	**113,351**	**127,193**	**156,665**	**162,885**	**6,220**	**3.8%**	**29,472**	**23.2%**
Corporate	34,011	36,831	42,814	45,023	2,209	4.9%	5,982	16.2%
Police	11,336	11,677	14,123	15,591	1,469	9.4%	2,446	20.9%
Maritime/Economic Development/Other	1,420	1,613	1,940	2,463	523	21.2%	328	20.3%
Total Charges from Other Divisions	**46,767**	**50,121**	**58,877**	**63,077**	**4,201**	**6.7%**	**8,756**	**17.5%**
Total Operating Expenses	**160,118**	**177,314**	**215,542**	**225,963**	**10,421**	**4.6%**	**38,228**	**21.6%**

Aviation Expense YE Summary

Total Airport Expense Summary ($ in 000's)	2021 Actual	2022 Actual	2023 Forecast	2023 Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Incr/(Decr) Change from 2022 $	Incr/(Decr) Change from 2022 %
Operating Expenses								
Payroll	157,207	168,389	184,224	189,477	5,253	2.8%	15,835	9.4%
Outside Services	62,382	75,700	107,667	109,249	1,582	1.4%	31,966	42.2%
Utilities	20,175	22,880	21,344	22,321	977	4.4%	(1,536)	-6.7%
Other Expenses	1,519	15,141	7,734	4,296	(3,438)	-80.0%	(7,407)	-48.9%
Total Airport Direct Charges	**241,284**	**282,110**	**320,968**	**325,342**	**4,374**	**1.3%**	**38,858**	**13.8%**
Environmental Remediation Liability	1,583	(1,274)	11,027	7,120	(3,907)	-54.9%	12,302	-965.2%
Capital to Expense	1,254	2,356	400	-	(400)		(1,956)	-83.0%
Total Exceptions	**2,837**	**1,081**	**11,427**	**7,120**	**(4,307)**	**-60.5%**	**10,346**	**956.8%**
Total Airport Expenses	**244,121**	**283,191**	**332,396**	**332,462**	**66**	**0.0%**	**49,204**	**17.4%**
Corporate	71,550	80,452	91,521	92,679	1,157	1.2%	11,070	13.8%
Police	23,473	27,660	29,647	30,264	617	2.0%	1,987	7.2%
Maritime/Economic Development/Other	2,536	3,687	5,139	5,131	(8)	-0.2%	1,453	39.4%
Total Charges from Other Divisions	**97,558**	**111,799**	**126,308**	**128,074**	**1,766**	**1.4%**	**14,509**	**13.0%**
Total Operating Expenses	**294,217**	**382,704**	**458,703**	**460,535**	**1,832**	**0.4%**	**76,000**	**19.9%**

Aeronautical Business YTD

Aeronautical NOI ($ in 000's)	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Incr/(Decr) Change from 2022 $	Incr/(Decr) Change from 2022 %
Rate Base Revenues								
Airfield Movement Area	37,192	47,737	66,779	67,008	(230)	-0.3%	19,042	39.9%
Airfield Apron Area	10,932	8,290	14,321	14,671	(350)	-2.4%	6,030	72.7%
Terminal Rents	83,321	105,972	133,174	132,787	387	0.3%	27,202	25.7%
Federal Inspection Services (FIS)	3,560	11,527	17,345	21,801	(4,457)	-20.4%	5,817	50.5%
Total Rate Base Revenues	**135,005**	**173,527**	**231,618**	**236,268**	**(4,650)**	**-2.0%**	**58,091**	**33.5%**
Airfield Commercial Area	8,177	8,320	8,600	8,425	176	2.1%	281	3.4%
Subtotal before Revenue Sharing	**143,182**	**181,846**	**240,218**	**244,692**	**(4,474)**	**-1.8%**	**58,372**	**32.1%**
Revenue Sharing	-	-	-	-	-		-	
Total Aeronautical Revenues	**143,182**	**181,846**	**240,218**	**244,692**	**(4,474)**	**-1.8%**	**58,372**	**32.1%**
Total Aeronautical Expenses	**111,036**	**120,393**	**151,356**	**157,242**	**5,886**	**3.7%**	**30,963**	**25.7%**
Aeronautical NOI	**32,146**	**61,453**	**88,862**	**87,451**	**1,411**	**1.6%**	**27,409**	**44.6%**

Aeronautical Business YE

Aeronautical NOI ($ in 000's)	2021 Actual	2022 Actual	2023 Forecast	2023 Budget	Actual vs. Budget Variance $	%	Incr/(Decr) Change from 2022 $	%
Rate Base Revenues								
Airfield Movement Area	88,061	118,240	144,568	141,938	2,630	1.9%	26,329	22.3%
Airfield Apron Area	22,016	17,211	27,204	29,330	(2,126)	-7.3%	9,992	58.1%
Terminal Rents	205,283	220,399	268,712	270,513	(1,801)	-0.7%	48,313	21.9%
Federal Inspection Services (FIS)	10,978	29,347	41,833	46,317	(4,483)	-9.7%	12,486	42.5%
Total Rate Base Revenues	**326,339**	**385,197**	**482,318**	**488,098**	**(5,780)**	**-1.2%**	**97,120**	**25.2%**
Airfield Commercial Area	16,702	17,343	17,214	16,850	364	2.2%	(129)	-0.7%
Subtotal before Revenue Sharing	**343,041**	**402,541**	**499,532**	**504,948**	**(5,416)**	**-1.1%**	**96,991**	**24.1%**
Revenue Sharing	-	-	-	-	-		-	
Total Aeronautical Revenues	**343,041**	**402,541**	**499,532**	**504,948**	**(5,416)**	**-1.1%**	**96,991**	**24.1%**
Total Aeronautical Expenses	**203,573**	**261,574**	**322,287**	**320,649**	**(1,638)**	**-0.5%**	**60,713**	**23.2%**
Aeronautical NOI	**139,468**	**140,967**	**177,245**	**184,300**	**(7,054)**	**-3.8%**	**36,279**	**25.7%**
Debt Service	(62,607)	(80,554)	(147,510)	(152,649)	5,139	-3.4%	(66,956)	83.1%
Net Cash Flow	**76,860**	**60,413**	**29,735**	**31,650**	**(1,915)**	**-6.1%**	**(30,677)**	**-50.8%**

Aero Cost Drivers

$ in 000's	2023 Budget	2023 Forecast	Impact on Aero Revenues Budget vs Budget $	%
O&M [(1)]	310,618	313,932	3,314	1.1%
Federal Relief Grants O&M	-	-	-	0.0%
Net O&M	310,618	313,932	3,314	1.1%
Debt Service Before Offsets	234,463	227,395	(7,068)	-3.0%
Debt Service PFC Offset	(89,720)	(88,557)	1,162	-1.3%
Federal Relief Grants Debt Service	-	(1,673)	(1,673)	0.0%
Net Debt Service	144,743	137,165	(7,578)	-5.2%
Amortization	35,561	35,289	(272)	-0.8%
Space Vacancy	(2,066)	(1,400)	666	-32.2%
TSA Operating Grant and Other	(758)	(758)	-	0.0%
Rate Base Revenues	**488,098**	**484,227**	**(3,871)**	**-1%**
Commercial area	16,850	17,214	364	2%
Total Aero Revenues	**504,948**	**501,441**	**(3,507)**	**-1%**

2023 Forecast to 2023 Budget

O&M – $3.3M higher increase in Aero allocated O&M (overall O&M decrease). Increases primarily in Gates, Mvmt Area and Terminal, partially offset by savings in FIS.

Increases due to higher divisional allocations, changes in ERL & Capital to Expense adjustments, IAF Smarte Carte, IAF CBP Expenses, and rebalancing of VIP Hospitality focus areas.

Federal Relief Grants Aero Portion:

- $11.9M remaining for 2023 and will evaluate on the use plan

Aero rate base revenues based on cost recovery formulas

Non-Aeronautical Business YTD

(Operating Revenue below has been REDUCED by Federal Concessionaire Relief grants)

Non-Aeronautical NOI ($ in 000's)	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Incr/(Decr) Change from 2022 $	Incr/(Decr) Change from 2022 %
Non-Aeronautical Revenues								
Public Parking	25,537	41,842	52,391	48,001	4,390	9.1%	10,549	25.2%
Rental Cars	11,497	16,803	23,516	21,445	2,070	9.7%	6,712	39.9%
Ground Transportation	4,208	9,226	11,750	11,420	330	2.9%	2,524	27.4%
Airport Dining & Retail	14,871	22,835	27,200	29,432	(2,232)	-7.6%	4,365	19.1%
Other	17,106	24,096	30,589	27,363	3,226	11.8%	6,493	26.9%
Total Non-Aeronautical Revenues	**73,219**	**114,802**	**145,446**	**137,662**	**7,785**	**5.7%**	**30,644**	**26.7%**
Total Non-Aeronautical Expenses	**30,353**	**56,921**	**64,186**	**68,721**	**4,535**	**6.6%**	**7,265**	**12.8%**
Non-Aeronautical NOI	**42,867**	**57,881**	**81,260**	**68,941**	**12,320**	**17.9%**	**23,379**	**40.4%**

Non-Aeronautical Business YE

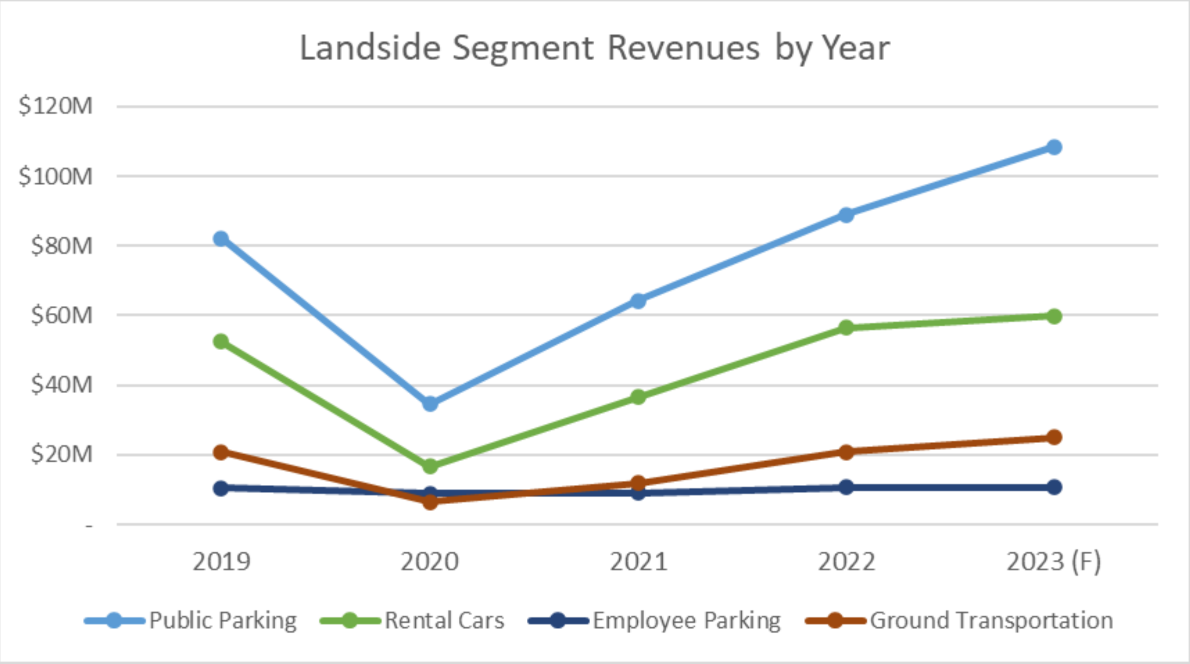
(Actual Business Recovery shown prior to revenue reductions for grant rent credits)

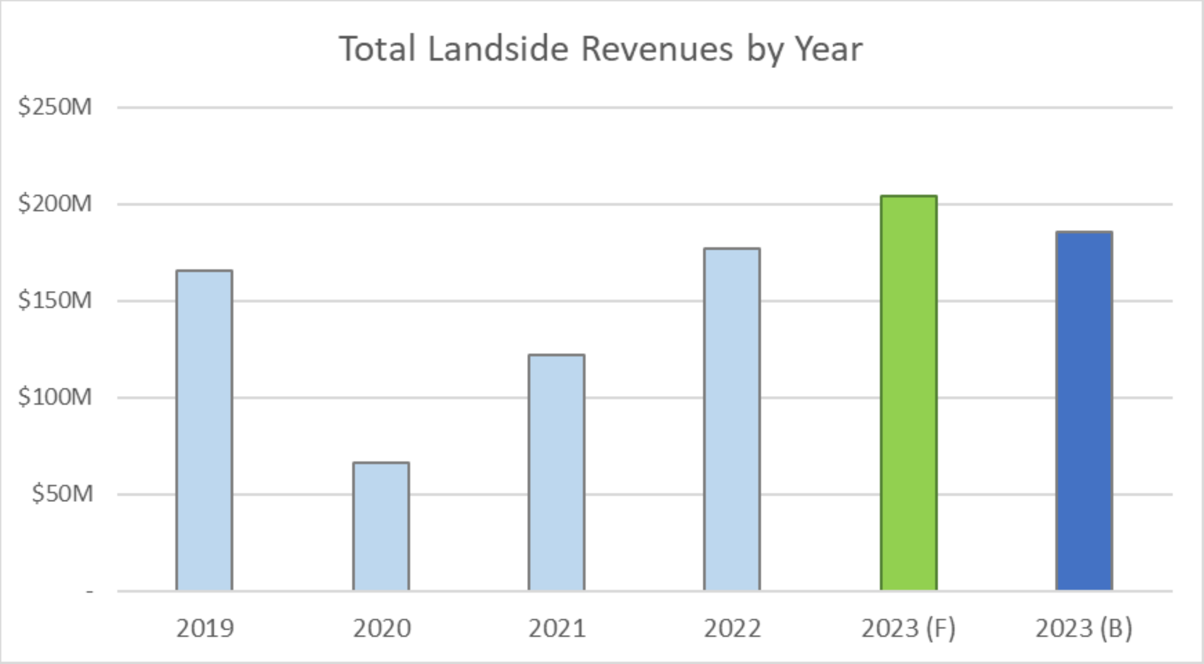
Non-Aeronautical Revenue Recovery Trend by Year ($ in 000's)	2019 Actual	2020 Actual	2021 Actual	2022 Actual	2023 Forecast	2023 Budget	Incr/(Decr) 2023 FCST v. 2023 Budget $	%	Incr/(Decr) 2023 FCST v. 2022 Actual $	%
Non-Aeronautical Revenues										
Public Parking	82,125	34,502	64,289	88,899	108,539	96,768	11,771	12.2%	19,640	22.1%
Rental Cars	52,567	37,306	36,612	56,473	59,918	53,830	6,088	11.3%	3,445	6.1%
Ground Transportation	20,765	6,557	11,947	20,804	25,074	24,324	750	3.1%	4,270	20.5%
Airport Dining & Retail	61,615	25,418	38,693	55,719	63,302	64,520	(1,218)	-1.9%	7,583	13.6%
Commercial Properties	15,773	10,766	12,520	16,747	20,039	16,959	3,080	18.2%	3,292	19.7%
Non-Airline Terminal Leased Space	6,398	5,816	6,159	6,954	9,532	9,090	442	4.9%	2,578	37.1%
Clubs and Lounges	10,274	2,043	3,478	8,688	11,303	9,859	1,444	14.7%	2,615	30.1%
Utilities	7,431	5,672	6,350	7,943	8,498	8,541	(43)	-0.5%	555	7.0%
Other Non-Aero Revenue	12,091	10,281	9,072	13,932	12,932	12,461	471	3.8%	(1,000)	-7.2%
Total Non-Aeronautical Revenues BEFORE grants	**269,037**	**138,362**	**189,120**	**276,159**	**319,136**	**296,352**	**22,784**	**7.7%**	**42,978**	**15.6%**
less Concession Relief grants	**-**	**-**	**(5,301)**	**(19,546)**	**(1,918)**	**(250)**	**(1,668)**	**667.3%**	**17,628**	**-90.2%**
Non-Aeronautical Operating Revenue	**269,037**	**138,362**	**183,819**	**256,613**	**317,218**	**296,102**	**21,116**	**7.1%**	**60,605**	**23.6%**
Total Enplanements	***25,874***	***10,037***	***18,073***	***22,966***	***25,020***	***24,444***	***576***	***2.4%***	***2,054***	***8.9%***
International Enplanements	*2,858*	*664*	*821*	*2,185*	*2,752*	*2,698*	*54*	*2.0%*	*567*	*25.9%*
O&D Enplanements	*18,163*	*6,614*	*12,073*	*15,617*	*17,364*	*16,934*	*430*	*2.5%*	*1,747*	*11.2%*

Final $1.9M in Concessionaire Relief grant rent credits (ARPA grant) will be applied to qualified ADR tenants in 2023.

Non-Aero Detail: Landside Revenue Trends

Each individual Landside revenue segment surpassed 2019 levels in 2022, and each segment is forecasted to continue growing through 2023

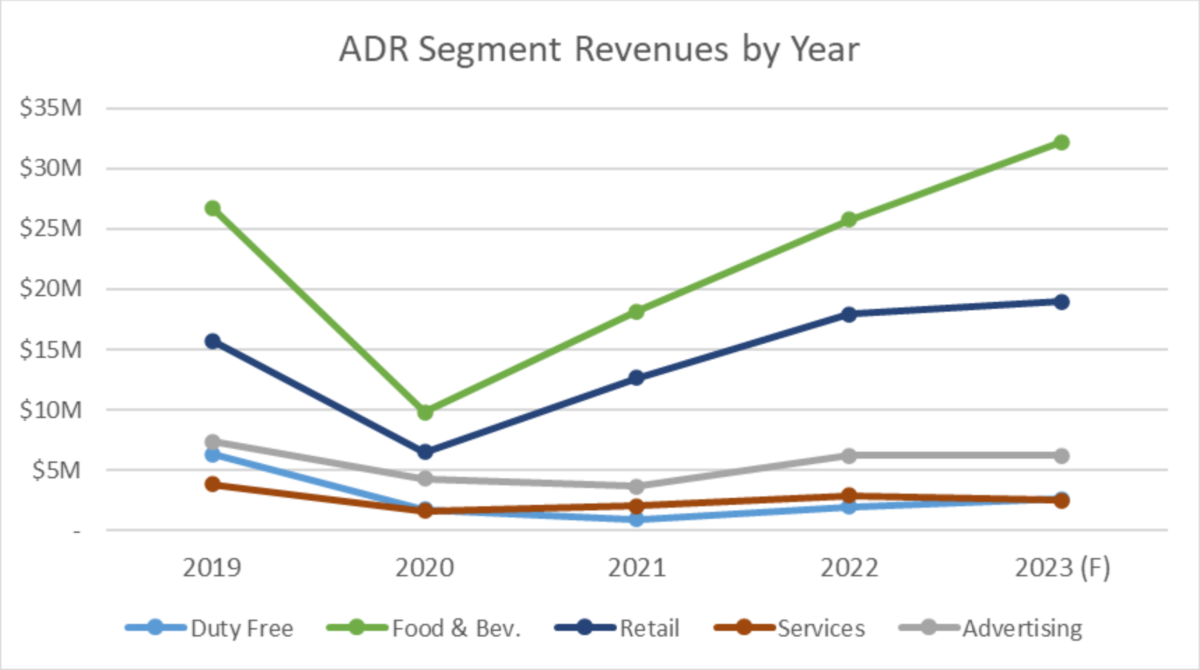


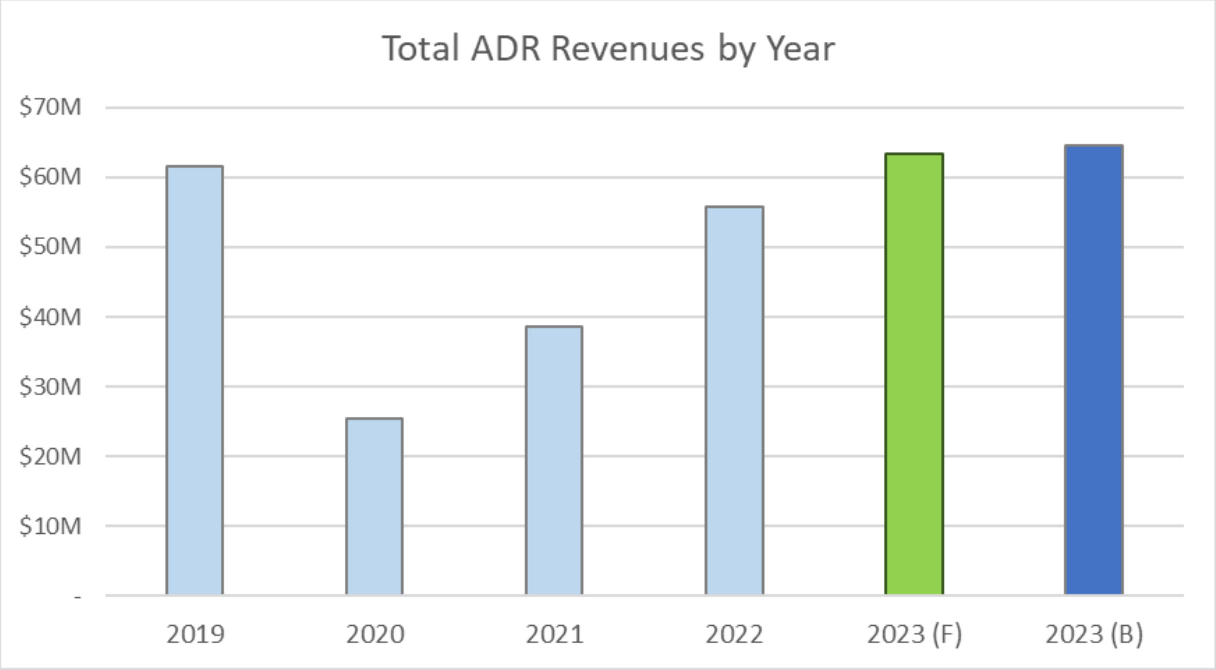


Non-Aero Detail: ADR Revenue Trends

Combined Airport Dining & Retail revenues are forecasted to surpassed 2019 levels in 2023, though with uneven recovery patterns throughout the COVID-19 pandemic

Full recoveries from Food & Beverage and Retail lines of business offset slower recoveries in Duty Free, Services, and Advertising

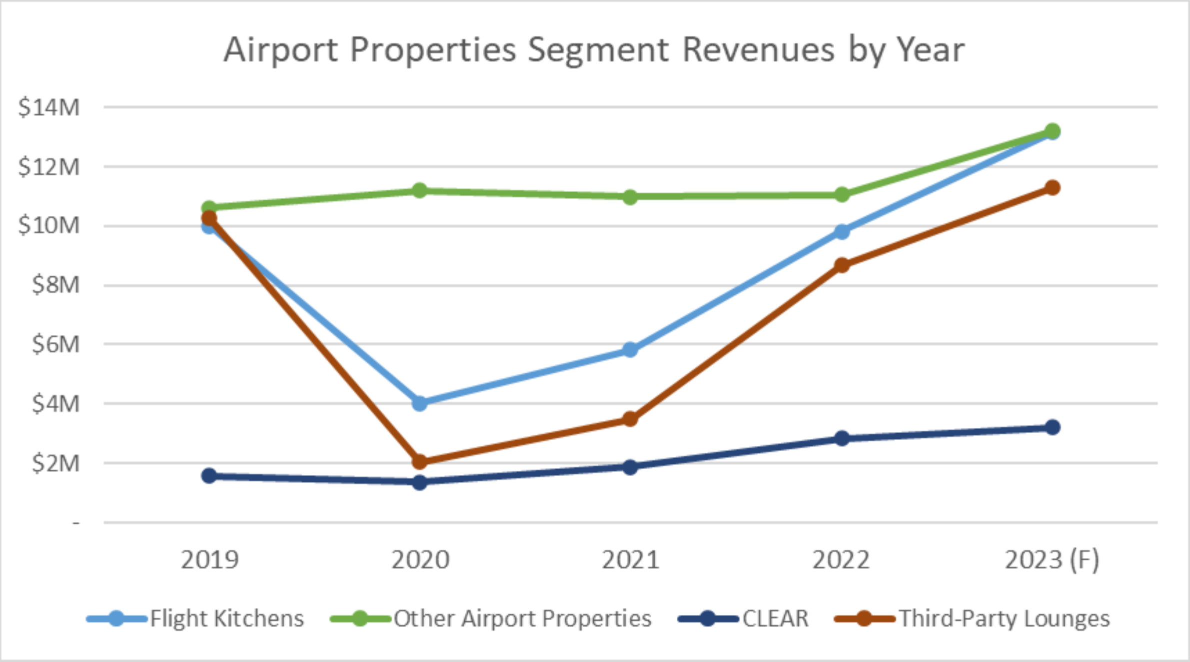


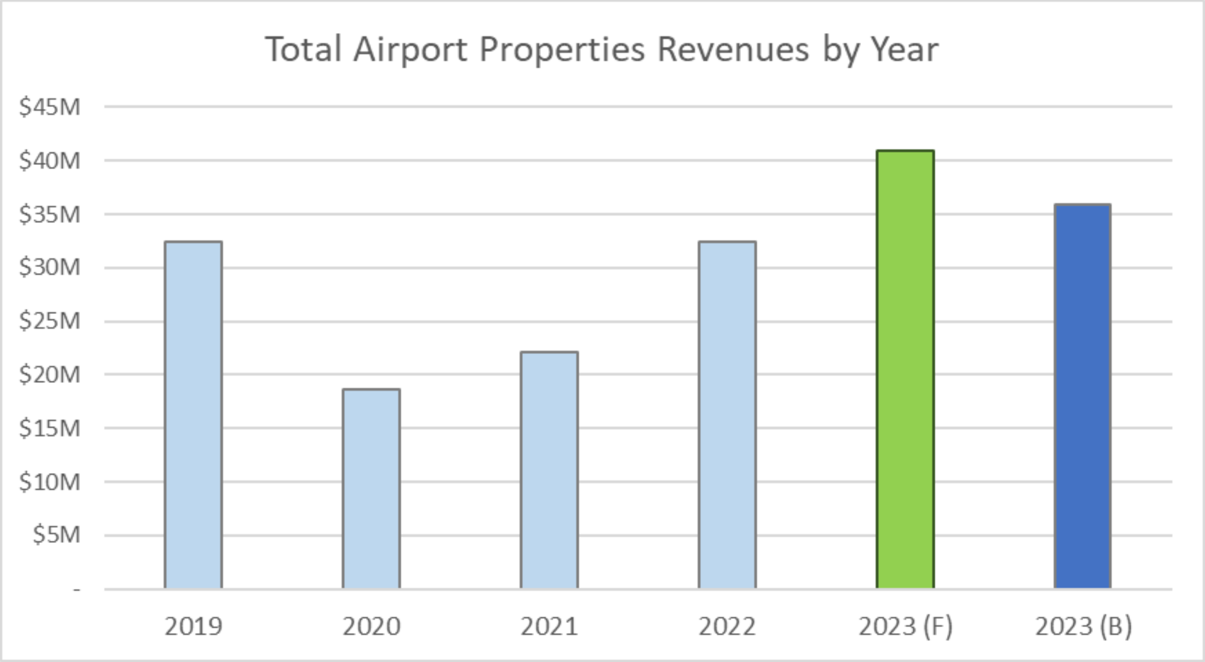


Non-Aero Detail: AVBP Revenue Trends

Combined Airport Business & Properties revenues are forecasted to surpass 2019 levels in 2023, though with uneven recovery patterns throughout the COVID-19 pandemic

Revenues from CLEAR concessions and other airport leases remained stable throughout COVID-19, while revenues from Flight Kitchens and Third-Party Managed Lounges (Concourse A & SSAT) were more impacted and had a longer recovery arc





2023 Capital Expenditures

$ in 000's	2023 YTD Actual	2023 Year-End Forecast	2023 Budget	2023 POF	Bud vs. Fcst $	Bud vs. Fcst %
MT Low Voltage Sys Upgrade (1)	5,050	17,050	24,000	24,425	6,950	29.0%
Checked Bag Recap/Optimization (2)	46,428	98,033	102,855	131,600	4,822	4.7%
Surface Area Management System (3)	442	1,052	5,565	6,890	4,513	81.1%
C Concourse Expansion (4)	17,097	45,413	49,625	31,996	4,211	8.5%
Telecommunication Meet Me Room (5)	965	3,030	6,902	7,045	3,872	56.1%
AF Utility Improvements (6)	320	727	4,209	7,131	3,481	82.7%
Art Pool (7)	308	1,808	5,250	5,250	3,442	65.6%
Checkpoint 1 Relocation (8)	401	2,794	5,744	11,479	2,950	51.4%
International Arrivals Fac-IAF (9)	1,781	7,756	10,700	18,781	2,944	27.5%
NEPL Improvements (10)	1,290	2,527	4,930	5,300	2,403	48.7%
Cargo Buildings Improvements (11)	83	300	2,124	2,292	1,824	85.9%
All Other	110,399	322,053	341,528	532,447	19,475	5.7%
Subtotal	184,564	502,543	563,432	784,636	60,888	10.8%
CIP Cashflow Mgmt Reserve	-	(44,198)	(77,860)	(120,759)	(33,662)	43.2%
Total Spending	**184,564**	**458,345**	**485,572**	**663,877**	**27,226**	**5.6%**

(1) Equipment Purchase Delays; New cashflow forecast provided by Contractor

(2) SSAT work has been delayed. Designer is behind in billing

(3) Schedule delays due to complexities of Airfield/JOC/DBB and SAAB Contractor work.

(4) Cash flow has been updated to reflect GCCM design and construction phasing sequencing

(5) MMR Bldg Mob delayed due to Conc A proj in the space. Equip Lead time delivery/invoice timing. Design review comments delayed permitting 2 months. Fiber dsgn on track but behind on invoices.

(6) Cascade Rd Ductbank project delayed due to Contractors work re-sequencing

(7) Delays in contract executions with artists

(8) Scope decrease. Schedule delays for NTP, therefore further delaying 2023 costs to 2024.

(9) Design delays.

(10) Phase 2 estimate is under budget. And Phase 3 is behind schedule pending EV discussions.

(11) Pre Construction submittals delay, Permit delay, and Contract negotiations extension.

Maritime Division Appendix

2023 Q2 Financial Performance Report

Maritime 2023 Q2 Financial Summary

$ in 000's	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 $	Change from 2022 %
Ship Canal Fishing & Operations	2,134	2,328	2,651	2,313	338	15%	323	14%
Elliott Bay Fishing & Commercial Operation	2,635	2,638	2,829	2,614	216	8%	191	7%
Recreational Boating	6,330	6,914	7,751	7,776	(24)	0%	837	12%
Cruise	61	11,258	15,437	13,100	2,337	18%	4,179	37%
Grain	3,433	3,405	1,964	3,231	(1,268)	-39%	(1,441)	-42%
Maritime Portfolio Management	4,914	5,237	5,205	4,994	210	4%	(33)	-1%
Other	1	7	18	12	6	NA	11	161%
Total Revenue	**19,507**	**31,788**	**35,856**	**34,040**	**1,816**	**5%**	**4,068**	**13%**
Expenses								
Maritime (Excl. Maint)	7,031	9,021	8,399	8,958	559	6%	(622)	-7%
Economic Development	2,135	2,864	2,718	3,253	535	16%	(145)	-5%
Total Direct	**9,166**	**11,884**	**11,117**	**12,211**	**1,093**	**9%**	**(767)**	**-6%**
Maintenance Expenses	5,093	6,387	7,148	7,032	(116)	-2%	761	12%
Envir Services & Planning	785	755	1,480	1,629	149	9%	725	96%
Seaport Finance & Cost Recovery	513	473	622	663	41	6%	148	31%
Seaport Project Management	193	445	849	1,241	393	32%	403	91%
Total Support Services	**6,584**	**8,060**	**10,098**	**10,565**	**467**	**4%**	**2,038**	**25%**
IT	1,335	1,526	1,794	1,832	38	2%	268	18%
Police Expenses	1,477	1,577	2,244	2,480	236	10%	667	42%
External Relations	571	743	824	1,029	205	20%	81	11%
Other Central Services	3,277	4,080	4,473	4,311	(162)	-4%	392	10%
Aviation Division / Other	170	179	162	205	43	21%	(17)	-10%
Total Central Services / Other	**6,830**	**8,105**	**9,496**	**9,856**	**360**	**4%**	**1,391**	**17%**
Total Expense	**22,581**	**28,050**	**30,711**	**32,632**	**1,921**	**6%**	**2,662**	**9%**
NOI Before Depreciation	**(3,074)**	**3,738**	**5,145**	**1,408**	**3,736**	**265%**	**1,407**	**38%**
Depreciation	8,881	8,952	9,100	8,418	(681)	-8%	148	2%
NOI After Depreciation	**(11,955)**	**(5,214)**	**(3,955)**	**(7,010)**	**3,055**	**44%**	**1,259**	**24%**

Variance from Budget

- Revenue $1.8M favorable:
  - Ship Canal – Impacts from cancellation of Alaskan Crab Season.
  - Elliott Bay Fishing & Commercial – higher volumes.
  - Cruise – Higher Occupancy.
  - Grain – Lower Volumes.
- Operating Exp. $1.9M favorable:
  - Direct $1.1M favorable – Payroll savings and tenant improvements.
  - Support Services $467K favorable – Open FTEs, timing of outside services.
  - Central Services $360K favorable – Open FTEs.

Maritime 2023 Financial Forecast

$ in 000's	2021 Actual	2022 Actual	2023 Forecast	2023 Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 $	Change from 2022 %
Ship Canal Fishing & Operations	4,240	4,592	4,855	4,555	330	7%	263	6%
Elliott Bay Fishing & Commercial Operation	5,618	5,975	5,453	5,253	220	4%	(521)	-9%
Recreational Boating	12,851	13,978	15,591	15,591	0	0%	1,613	12%
Cruise	9,517	30,469	37,832	34,832	3,000	9%	7,364	24%
Grain	6,112	5,792	3,814	5,814	(2,000)	-34%	(1,978)	-34%
Maritime Portfolio Management	10,392	10,550	10,392	10,192	200	2%	(158)	-1%
Other	7	10	24	24	0	NA	14	152%
Pension Revenue Adjustment	*(408)*	*170*	*0*	*0*	*0*	*NA*	*(170)*	*NA*
Total Revenue	**48,331**	**71,534**	**77,962**	**76,262**	**1,700**	**2%**	**6,428**	**9%**
Expenses								
Maritime (Excl. Maint)	13,951	17,706	18,051	18,251	200	1%	345	2%
Economic Development	4,559	5,710	6,066	6,366	300	5%	356	6%
Total Direct	**18,510**	**23,416**	**24,117**	**24,617**	**500**	**2%**	**701**	**3%**
Maintenance Expenses	11,326	13,213	14,040	14,040	0	0%	827	6%
Envir Services & Planning	2,018	3,120	3,841	3,841	0	0%	721	23%
Seaport Finance & Cost Recovery	1,163	1,087	1,359	1,359	0	0%	272	25%
Seaport Project Management	342	1,007	2,279	2,479	200	8%	1,272	126%
Total Support Services	**14,849**	**18,426**	**21,519**	**21,719**	**200**	**1%**	**3,092**	**17%**
IT	2,695	3,223	3,714	3,725	11	0%	491	15%
Police Expenses	3,064	3,662	4,683	4,781	98	2%	1,022	28%
External Relations	1,222	1,552	1,690	2,045	355	17%	138	9%
Other Central Services	7,109	8,908	8,886	8,869	(17)	0%	(23)	0%
Aviation Division / Other	336	368	312	312	0	0%	(56)	-15%
Total Central Services / Other	**14,426**	**17,714**	**19,286**	**19,733**	**447**	**2%**	**1,572**	**9%**
Total Expense before Pension Adjustment	**47,784**	**59,556**	**64,921**	**66,068**	**1,147**	**2%**	**5,365**	**9%**
Pension Expense Adjustment	*(7,070)*	*(2,396)*	*0*	*0*	*0*	*NA*	*2,396*	*100%*
Total Expense	**40,714**	**57,160**	**64,921**	**66,068**	**1,147**	**2%**	**7,761**	**14%**
NOI excluding Pension Adjustments	*954*	*11,808*	*13,041*	*10,194*	*2,847*	*28%*	*1,233*	*10%*
NOI Before Depreciation	**7,616**	**14,375**	**13,041**	**10,194**	**2,847**	**28%**	**(1,333)**	**9%**
Depreciation	17,718	17,980	17,456	17,456	0	0%	(525)	-3%
NOI After Depreciation	**(10,101)**	**(3,606)**	**(4,414)**	**(7,261)**	**2,847**	**39%**	**(809)**	**-22%**

Variance from Budget

- **Revenue $1.7M unfavorable:**
  - Ship Canal Fishing / Elliott Bay Fishing & Commercial favorable H1.
  - Cruise Trending over 100% occupancy.
  - Grain – Anticipated 35% reduction in volumes due to lower near-term demand from China.
- **Operating Expense $1.1M favorable:**
  - Direct – YTD spend on Tenant Improvements. Open FTEs.
  - Support Services & Central Services – Delays in filling Open FTEs.

Cruise 2023 Financials

$ in 000s	2022	2023	2023	Bud Var	
Revenue by Facility:	Actual	Actual	Budget	$	%
P66 Cruise	2,673	3,856	3,235	621	19%
P66 Vessel Ops	111	16	58	(41)	-71%
T91 Cruise	8,307	11,372	9,643	1,729	18%
Utilities	167	193	164	29	17%
Total Revenue	**11,258**	**15,437**	**13,100**	**2,337**	**18%**
Dept Expenses:					
Staff	294	414	431	18	4%
Outside Services	(270)	90	351	261	74%
General Expenses	1,221	1,084	1,143	60	5%
Equipment & Supplies	31	126	103	(24)	-23%
Utilities	116	216	265	48	18%
Support Services:					
Maintenance	1,111	1,614	1,500	(114)	-8%
Project Management	77	180	178	(2)	-1%
Environmental & Planning	196	242	375	132	35%
Economic Development	211	269	194	(75)	-38%
Police/Security	545	693	934	242	26%
Other/Central Services	1,886	2,159	2,412	252	10%
Total Expense	**5,418**	**7,088**	**7,886**	**798**	**10%**
NOI Before Depreciation	**5,840**	**8,349**	**5,215**	**3,135**	**60%**
Depreciation	2,992	3,018	2,867	151	5%
NOI After Depreciation	**2,848**	**5,331**	**2,348**	**2,983**	**127%**

Variance from Budget

Revenues

- Q2 YTD revenue $2.3M favorable due to higher occupancies than budgeted (85% budgeted vs >100% actual average).

Expenses

- $798K less than budget
- Timing of Port Valet charges
- Less than budget:
  - Police - $242K
  - Env - $132K
  - Support & Central Services - $252K

Variance from 2022

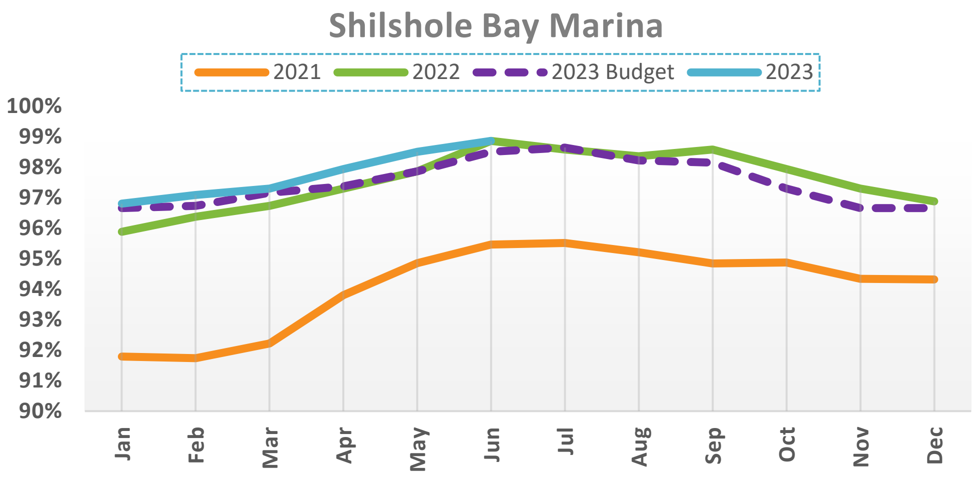
Revenues

- Higher revenue in 2023 due to higher occupancies

Expenses

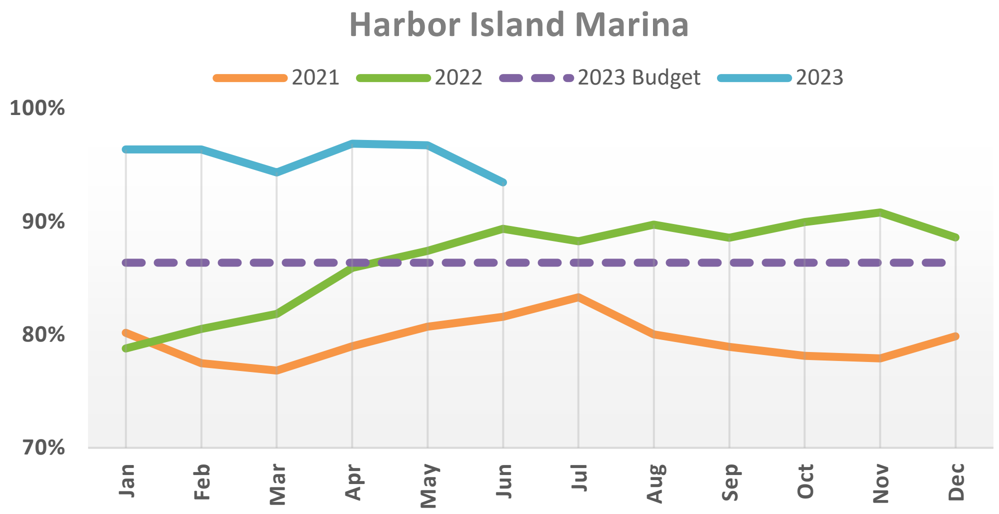
- $432K increase in 2023
- Increased staffing levels + salary increases in 2023

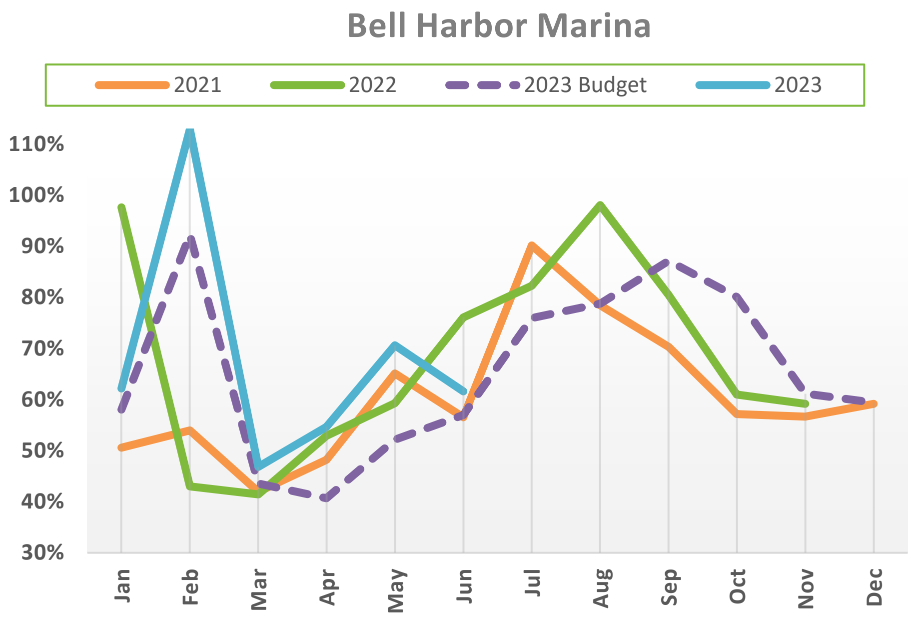
Recreational Boating Occupancy



Occupancy

- SBM, HIM and BHM occupancies are 0.37%, 9.32% and 11.33% favorable to the budget, respectively.
- SBM, HIM and BHM occupancies are 0.58%, 11.72% and 12.3% increase from 2022, respectively.





Recreational Boating

YTD Actual vs. Budget					
$ in 000's	2022	2023	2023	Bud Var	
	Actual	Actual	Budget	$	%
Revenue by Facility:					
Shilshole Bay Marina	6,193	6,923	6,976	(53)	-1%
Harbor Island Marina	240	284	260	25	10%
Bell Harbor Marina	187	220	224	(4)	-2%
Utility Sales Revenue	294	325	316	9	3%
Total Revenue	**6,914**	**7,751**	**7,776**	**(24)**	**0%**
Dept Expenses:					
Staff	1,093	1,266	1,310	44	3%
Outside Services	38	21	18	(3)	-17%
General Expenses	56	75	63	(12)	-19%
Equipment & Supplies	25	39	85	46	54%
Utilities	676	737	671	(67)	-10%
Support Services:					
Maintenance	1,903	1,633	1,701	67	4%
Project Management	133	116	111	(5)	-4%
Environmental & Planning	118	243	241	(2)	-1%
Economic Development	141	119	142	23	16%
Police/Security	536	613	783	169	22%
Other/Central Services	2,031	1,903	2,472	(29)	-10%
Total Expense	**6,748**	**6,764**	**7,595**	**830**	**11%**
NOI Before Depreciation	166	987	181	806	-445%
Depreciation	1,646	1,598	1,523	(76)	-5%
NOI After Depreciation	**(1,481)**	**(611)**	**(1,342)**	**730**	**54%**

Occupancy

- SBM, HIM and BHM occupancies are 0.37%, 9.32% and 11.33% favorable to the budget, respectively.
- SBM, HIM and BHM occupancies are 0.58%, 11.72% and 12.3% increase from 2022, respectively.

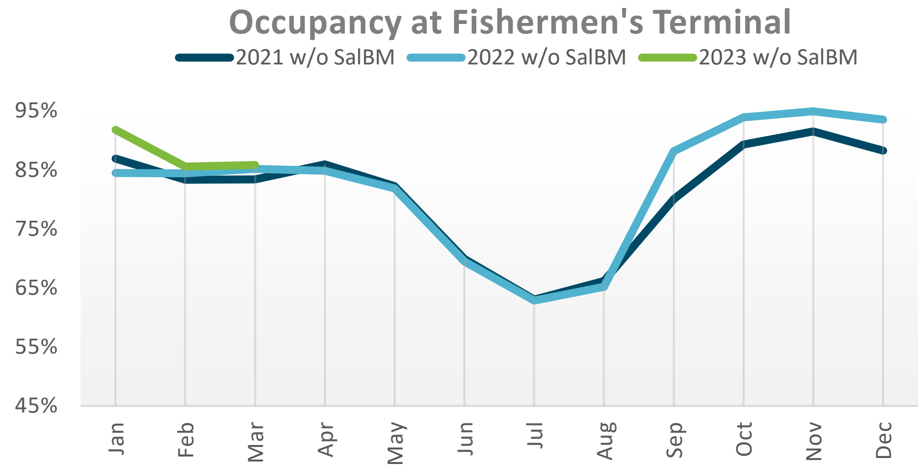
Variance from Budget

- Total Revenue of ($24K) below budget due to the slowing fill-out of empty spaces at SBM.
- $44K under-budget in Employee Related expenses primarily due to and $29K favorable in travel expenses and $15K favorable in Salaries & Benefits related;

Variance from 2022

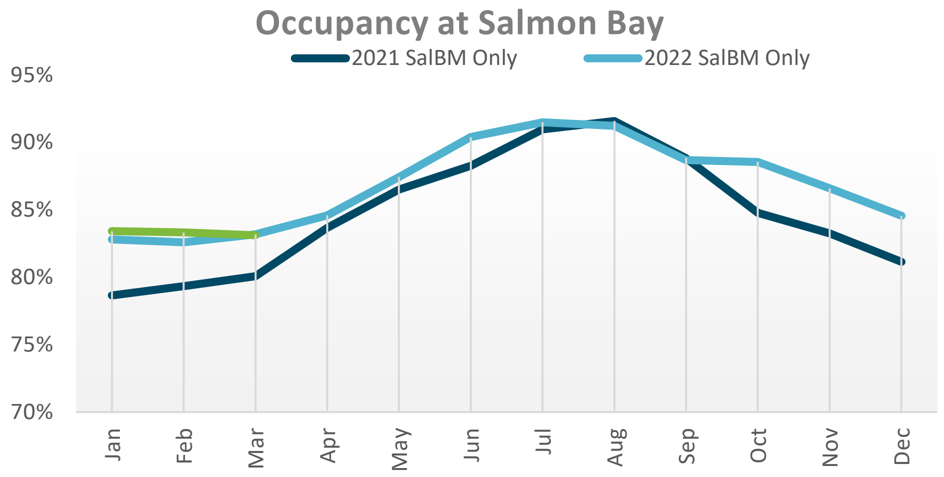
- Revenue $837K higher related to a 10% rate increase in 2023 and increasing occupancy rate at SBM, HIM, and BHM;
- $173K increase in staff costs primarily due to vacant positions in Q1 2022; marketing expense increase partially was due to $35K payments for 2023 Seattle Boat Show Sponsorship.

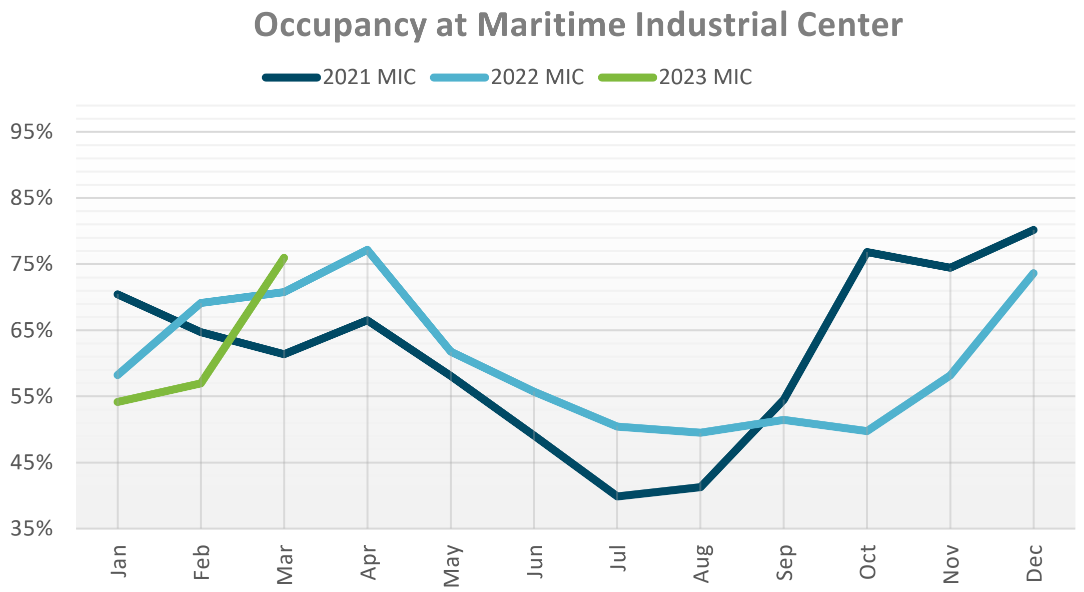
Ship Canal Fishing & Commercial Occupancy



Occupancy

- Overall monthly occupancy rate increased about 2.1% from 2022
  - ✓ MIC down -3.7%,
  - ✓ FT Fishing up 4.7%
  - ✓ SaBM up 0.43%
  - ✓ FT RecBoating down -1.6%





Ship Canal Fishing & Operations

YTD Actual vs. Budget					
$ in 000's	2022 Actual	2023 Actual	2023 Budget	Bud Var $	Bud Var %
Revenue by Facility:					
FT Commercial	1,263	1,561	1,265	296	23%
FT RecBoating	370	371	353	18	5%
Salmon Bay Marina	467	514	511	2	0%
Maritime Industrial Center	110	96	91	5	5%
Utility Sales Revenue	118	109	92	17	19%
Total Revenue	**2,328**	**2,651**	**2,313**	**338**	**15%**
Dept Expenses:					
Staff	539	598	715	118	16%
Outside Services	6	9	10	1	9%
General Expenses	93	102	15	(87)	-581%
Equipment & Supplies	50	14	49	36	72%
Utilities	476	550	504	(46)	-9%
Support Services:					
Maintenance	1,143	907	1,175	268	23%
Project Management	81	252	355	102	29%
Environmental & Planning	96	114	162	47	29%
Economic Development	27	27	41	14	34%
Police/Security	226	264	336	72	21%
Other/Central Services	997	122	134	(29)	-10%
Total Expense	**3,733**	**3,711**	**4,515**	**804**	**18%**
NOI Before Depreciation	(1,405)	(1,059)	(2,202)	1,143	52%
Depreciation	1,182	1,169	1,132	(37)	-3%
NOI After Depreciation	**(2,587)**	**(2,228)**	**(3,334)**	**1,106**	**33%**

Occupancy

- Overall monthly occupancy rate increased about 1.1% from 2022
  - ✓ FT Fishing up 3.6%
  - ✓ SalBM down - 0.1%
  - ✓ FT RecBoating down - 2.2%
  - ✓ MIC up 1.2%

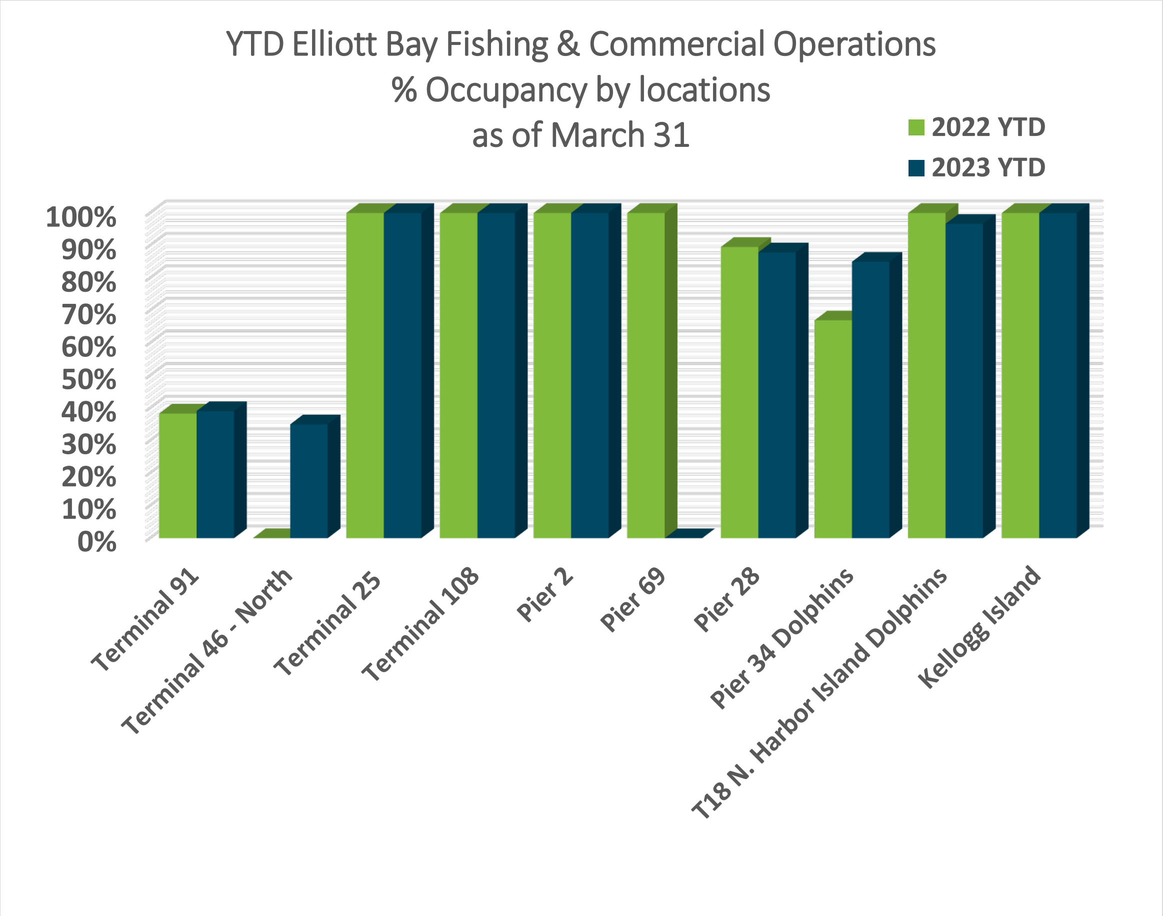
Variance from Budget

- $90K or 5% favorable in moorage associated with canceling of Alaska crab season as population faces unprecedented decline, and the east side of Dock 3 got permission to use starting mid-Feb; locker rental also contributed $25K favorably; Derelict Vessels program reimbursement $184K
- $118K favorable to the budgeted in staff-related expenses primarily due to 1 vacant position at Salmon Bay;

Variance from 2022

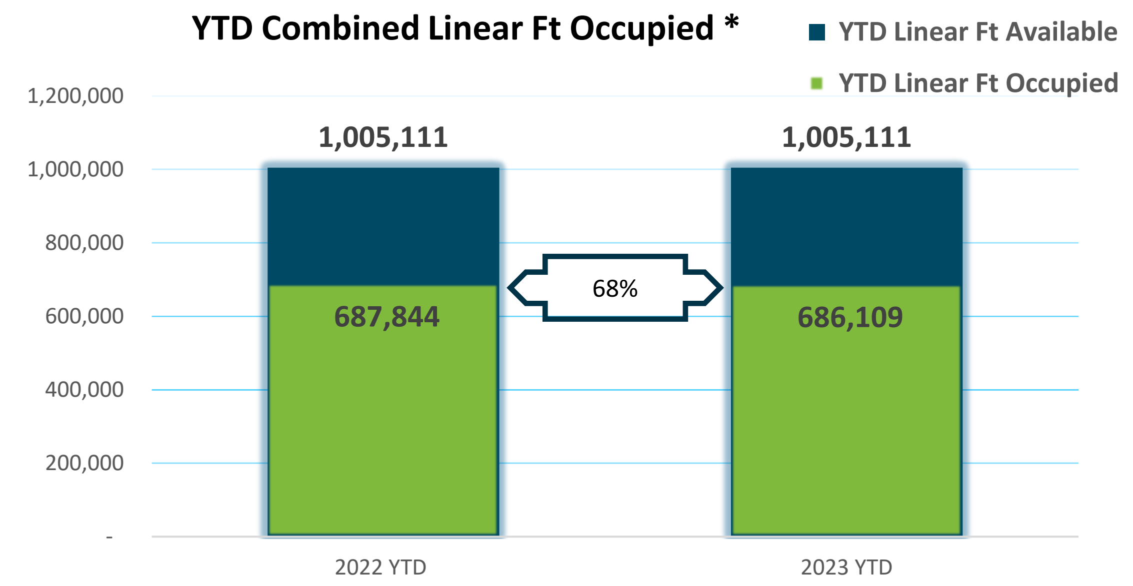
- 5% rate increase at FT & MIC and 10% at FT RecBoating and SaBM, and higher occupancy in 2023, contributed to the revenue increase. Canceling of Alaska crab season and the east side of Dock 3 also contributed to the moorage, locker, and utilities revenue increase
- Direct Operating Expenses increased primarily due to increased utility, Bad Debt, and staff-related expenses. The increasing results were partially offset by a decrease in legal expenses related to injury claim lawsuits in 2022 at FT

Elliott Bay Fishing & Commercial Occupancy



Occupancy

- Elliott Bay Occupancy 68%, flat from 2022
  - % Occupied includes an allowance for lines and vessel spacing that varies by facility
  - P69: One time customer, Beyel Brothers, departure delayed by USCG
  - P28: New customer, Global Diving & Salvage
  - Spot moorage/dockage under TT5: T108, P28, P34, T18 N



* Combined Occupaid numbers are weighted average

Elliott Bay Fishing & Commercial

YTD Actual vs. Budget

$ in 000's	2022 Actual	2023 Actual	2023 Budget	Bud Var $	Bud Var %
Revenue by Facility:					
T-91 Fishing Related	1,219	1,330	1,313	16	1%
T-91 Vessel Operations	230	323	284	38	13%
Kellogg Island – Moorage	199	214	209	5	2%
Terminal 25 Docks	220	199	199	0	0%
Terminal 18 North - Dolphins	156	130	112	17	15%
Pier 34 Dolphins	114	124	114	11	9%
Other (P2, P28, P69, T46,T108)	196	209	122	87	71%
Utility Sales Revenue	304	300	259	42	16%
Total Revenue	**2,638**	**2,829**	**2,614**	**216**	**8%**
Dept Expenses:					
Staff	329	370	377	6	2%
Outside Services	5	11	9	(1)	-15%
General Expenses	135	89	51	(39)	-76%
Equipment & Supplies	4	5	13	8	65%
Utilities	843	627	823	196	24%
Support Services:					
Maintenance	620	643	746	103	14%
Project Management	40	53	132	79	60%
Environmental & Planning	59	123	142	19	14%
Economic Development	50	50	59	10	16%
Police/Security	298	331	434	103	24%
Other/Central Services	929	884	1,226	342	-10%
Total Expense	**3,311**	**3,184**	**4,011**	**827**	**21%**
NOI Before Depreciation	(673)	(355)	(1,397)	1,043	75%
Depreciation	1,733	1,667	1,616	(51)	-3%
NOI After Depreciation	**(2,406)**	**(2,022)**	**(3,013)**	**991**	**33%**

Occupancy

- Elliott Bay Occupancy 71%, - 3% down from 2022

Variance from Budget

- Revenue $216M over budget related to higher in open storage/yard usage (TT5) and vessels staying longer for repairs/projects;
- Expense $827K below budgeted YTD contributed by $527K lower allocation, utilities $196K under-budget primarily due to timing, as well as $103K under-budget in Maintenance

Variance from 2022

- $191K or 7% higher in revenue primarily related to the commercial vessels rate increased by 7% from 2022, as well as increased in yard usage due to more activities, like roe auction
- ($127K) decrease in 2023 contributed by a ($216K) decrease in Utilities due to timing. The decrease was partially offset by $64K increase in Environmental & Planning related to Derelict Vessels project and traffic study, and $14K increase in Maintenance

Maritime Portfolio Management 2023 Financials

$ in 000's	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Fav (UnFav) Actual vs. Budget Variance $	%	Incr (Decr) Change from 2022 $	%
Maritime Portfolio Management							
Marina Office & Retail	1,699	1,782	1,581	201	13%	83	5%
Maritime Industrial	2,235	2,157	2,017	140	7%	(78)	-3%
Utilities	1,303	1,265	1,396	(131)	-9%	(37)	-3%
Total Revenue	**5,237**	**5,205**	**4,994**	**210**	**4%**	**(33)**	**-1%**
PM Direct	3,168	1,755	2,291	536	23%	(1,413)	-45%
EDD PM Direct	151	203	240	38	16%	52	34%
EDD Other	267	209	211	2	1%	(58)	-22%
MD Direct	276	221	283	62	22%	(55)	-20%
Total Direct	**3,862**	**2,388**	**3,025**	**638**	**21%**	**(1,475)**	**-38%**
Maintenance Expenses	1,484	1,769	1,814	44	2%	285	19%
Enviromental & Sustainability	111	243	254	11	4%	131	118%
Seaport Finance & Cost Recovery	112	151	155	3	2%	39	35%
Seaport Project Management	97	165	360	195	54%	68	70%
Total Support Services	**1,804**	**2,328**	**2,582**	**254**	**10%**	**524**	**29%**
Total Central Services/Other	**1,764**	**2,172**	**2,137**	**(36)**	**-2%**	**408**	**23%**
Total Expense	**7,430**	**6,888**	**7,744**	**856**	**11%**	**(542)**	**-7%**
NOI Before Depreciation	**(2,193)**	**(1,683)**	**(2,750)**	**1,066**	**39%**	**510**	**23%**
Depreciation	1,240	1,264	1,145	(119)	-10%	24	2%
NOI After Depreciation	**(3,433)**	**(2,947)**	**(3,894)**	**947**	**24%**	**486**	**14%**

Variance from Budget
- Revenue $210K favorable; Space Rental at MIC, T91, and T106 partially offset by Utilities.
- Expenses $856K lower than budget due to favorable Outside Services $382K (Tenant Improvement and Broker Fees), Project Management $195K, and Utilities $163K.

Variance from 2022
- Revenue down ($33K); Utilities and Space Rental from T91 mainly Lineage and FT mainly FVO.
- Expense down $542K from prior year due to May 2022 $1.2M capital to expense for Fishermen's Terminal Gateway Building.

- Includes uplands of Shilshole Bay Marina, Terminal 91 (Industrial), Fishermen's Terminal, Maritime Industrial Center, Salmon Bay Marina, T-115, T-108, and T-106.

Business Highlights

Maritime Environment & Sustainability

- Reviewed EPA Proposed Plan for East Waterway Cleanup - coordinated review with City and County. Supported EPA at public meetings related to the draft Plan.
- Duwamish River People's Park - 3 Fish & Invertebrate sampling events. Over 2,100 chum counted on 4.21!
- Terminal 5 Berth Modernization coordination with agencies RE: contractor over-dredge event & associated permit modifications.
- Green Corridor First Movers group development - work on potential grant funding, communications plan, global engagement, and Landscape Assessment. First Movers agreed to proceed with the Maersk McKinney Moller Center to lead first phase of feasibility work!
- 2024 capital Budget development – MES staff completed environmental, permitting, & sustainability review of all 2024 CIP proposals. 102 forms reviewed.
- Port and Muckleshoot MOA signing ceremony and first govt to govt meeting

Business Highlights

Maritime Stormwater Utility

•Hired new Environmental Management Specialist, to focus on CIP review, construction oversight & training.

•Presented on the Utility’s green and innovative stormwater systems at the regional Municipal Stormwater Conference in Wenatchee, WA

•Completed stormwater system and pipe repairs at Shilshole Bay Marina (supports transferring pipes to City)

•Completed business planning and budget work for 2024

Maritime Environment & Sustainability Q2

$ in 000's	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Fav (UnFav) Actual vs. Budget Variance $	%	Incr (Decr) Change from 2022 $	%
Salaries & Benefits	1,014	1,212	1,760	1,712	(49)	-3%	548	45%
Wages & Benefits	5	2	4	5	2	30%	2	78%
Payroll to Cap/Govt/Envrs Proj	457	395	383	458	74	16%	(11)	-3%
Equipment Expense	0	15	22	32	10	32%	7	48%
Supplies & Stock	2	2	4	2	(2)	-105%	2	93%
Outside Services	242	127	428	747	319	43%	301	237%
Travel & Other Employee Exps	17	39	42	68	26	38%	3	9%
Telecommunications	7	7	8	9	2	19%	1	7%
General Expenses	3	9	22	10	(12)	-114%	12	129%
Promotional Expenses	2	6	0	5	5	100%	(6)	-100%
Property Rentals	11	0	0	0	-	NA	-	NA
Utilities	0	1	2	0	(2)	NA	2	252%
Worker's Compensation Exper	2	2	3	2	(1)	-56%	1	67%
Overhead Allocations	120	-13	-1	0	1	NA	12	-94%
Total	**1,880**	**1,804**	**2,676**	**3,050**	**374**	**12%**	**873**	**48%**
Charges to Cap/Govt/Envrs Pro	-748	-622	-654	-802	(148)	18%	(33)	5%
Divisional Allocation	0	0	0	0	(0)	539%	0	-188%
Total	**1,131**	**1,182**	**2,022**	**2,248**	**226**	**10%**	**840**	**71%**

Major Variances:

- **Outside Services:** Favorable due to timing
- **Salaries:** Unfavorable due to less staff charges to Cap/ERL

Lower Staff costs to Capital and ERL than planned and delays in payments of invoices for Outside Services

Maritime Cost Recovery through Q2

Maritime Environmental Cost Recovery (Cash received - $ in 000s)						
Grants						
Site	**2022 Accrued**	**Q1**	**Q2**	**Q3**	**Q4**	**Total**
LD	-	(226)	(178)	-	-	(404)
EWW	-	(1,230)	(877)	-	-	(2,107)
T115N	-	(2)	(12)	-	-	(14)
T115 Plant 1		(57)	(83)			(140)
T91	-	(718)	(753)	-	-	(1,471)
Subtotal	**-**	**(2,233)**	**(1,903)**	**-**	**-**	**(4,136)**
Insurance						
T91		-	(354)	-	-	(354)
Settlement - Waste Management		(200)	-	-	-	(200)
Settlement - Exxon		(1,150)	-	-	-	(1,150)
Settlement - Crosby		(21)	(21)	-	-	(42)
Settlement -GAIC		-	-	-	-	-
Subtotal	**-**	**(1,371)**	**(375)**	**-**	**-**	**(1,746)**
MOAs						
LD		(1,190)	(0)	-	-	(1,190)
T117 Sediments		-	(22)	-	-	(22)
EWW		(7)	(7)	-	-	(15)
T108	-	(185)	(0)	-	-	(185)
T115 Plant 1	-	(0)	-	-	-	(0)
Subtotal	**-**	**(1,383)**	**(29)**	**-**	**-**	**(1,412)**
Total	**-**	**(4,987)**	**(2,307)**	**-**	**-**	**(7,294)**

- $1.04M of the grant money received in 2023 is under the year-end accrual account due to the new accounting process changed. $3.08M is under the grant money received account for 2023.
- The settlement money received from Waste Management, Exxon and Crosby will need to be reimbursed to Great American Insurance Co. next year, per the T91 Settlement Agreement.

Grant Summary 2023 Q2 YTD (PWFD)

$000s		2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Fav (UnFav) Actual vs. Budget Variance $	%	Incr (Decr) Change from 2022 $	%
DOE MTCA Grants									
		$ 1.32	$ -	$ -	$ 246.25				
100917	Lower Duwamish Superfund	$ -	$ 10.24	$ 173.33	$ -	$ 173.33	NA	$ 163.09	1593%
104137	NonERL 100917 LDW	$ -	$ 8.71	$ 4.78	$ -	$ 4.78	NA	$ (3.93)	-45%
104124	T115N DOE AO	$ 2.82	$ 2.86	$ 9.59	$ -	$ 9.59	NA	$ 6.73	236%
105460	T115 (Boeing Plant 1) DOE- AO	$ -	$ 17.25	$ 39.42	$ -	$ 39.42	NA	$ 22.17	129%
105511	NonERL- T115N ERL Projects	$ -	$ -	$ 0.31	$ -	$ 0.31	NA	$ 0.31	NA
105313	T91 RCRA Sediments RIFS	$ -	$ -	$ 753.49	$ -	$ 753.49	NA	$ 753.49	NA
105706	NonERL Related to T115S ERL	$ -	$ -	$ 0.59	$ -	$ 0.59	NA	$ 0.59	NA
D4831	HI EWW Superfund	$ -	$ -	$ 2,106.13	$ -	$ 2,106.13	NA	$ 2,106.13	NA
104136	NonERL D4831 EWW	$ -	$ -	$ 0.37	$ -	$ 0.37	NA	$ 0.37	NA
Total DOE MTCA Grants		**$ 4.14**	**$ 39.06**	**$ 3,088.02**	**$ 246.25**	**$ 3,088.02**	**12.5402**	**$ 3,048.95**	**7805%**

Approx $1 mil of the money received in first quarter is not showing up here due to new process changes by Capital Services.

NWSA is reported separately for T18 and T5

Marine Maintenance Overhead

Overhead Expense	2022 Actual	2023 YTD Actual	2023 YTD Budget	Bud Var $	Bud Var %	22 vs. 23 $	
Wages & Benefits	2,919	3,530	3,683	153	4%	(611)	-17%
Salaries & Benefits	1,685	2,077	2,028	(49)	-2%	(392)	-19%
Equipment Expense	297	482	456	(26)	-5%	(185)	-38%
Payroll to Cap/Govt/Envrs Proj	297	328	426	98	30%	(31)	-9%
Worker's Comp	252	306	148	(158)	-52%		
Supplies & Stock	122	184	121	(63)	-34%	(62)	-34%
Travel & Other Employee Exp	42	117	169	52	44%	(75)	-64%
Outside Services	55	115	326	211	183%	(60)	-52%
Utilities	83	108	71	(37)	-34%	(25)	-23%
General Expenses	49	57	48	(9)	-16%		
Telecommunications	37	36	48	12	33%	1	3%
Charges to Cap/Govt/Envrs Proj	(297)	(328)	(426)	(98)	30%	31	-9%
Total MM Overhead	**5,541**	**7,012**	**7,098**	**86**	**1%**	**(1,471)**	**-21%**

- Payroll
  W&B ~ Under budget due to 9 unfilled Represented and 1 Non-represented positions. S&B ~ Increase in reported hours for Training and Facility and Parks Maintenance support. Decrease in reported Payroll/Charges to Capital projects (98K).
- Equipment Expense
  Auto roughly 60% increase in Fuel reported costs (108K), Equip Maint (72K) due to Auto/Truck collision repairs and Tools, Other Rolling and Stock shop Unbudgeted Ladder replacement project.
- Worker's Comp
  Several active claims
- Supplies & Stock
  Increase in Safety Supplies Shop Stock PPE's, (31K) and Uniforms & Protective Equipment (24K). Materials for HVAC & Controls, (9K).
- Travel & Other Employee Exp
  Underspent in Registration Fees/Tuition 41K and Employee Food & Beverage, 9K.
- Outside Services
  Budget requested for Parks Assessment, 50K underway. Fleet Benchmarking study, 80K. Minimal spending on Facilities Elevator maintenance, 34K and Expense Project 830 Portwide Fire Life Safety Assessment, 12K in Q2.
- Utilities
  Increase due to Environmental Initiative of buying renewable natural gas. This expense is expected to double in unbudgeted costs creating a permanent variance.

Waterfront PM

Waterfront Project Management					
$ in 000s	2022 YTD	2023 YTD	2023 YTD	Bud Var F/(U)	
Expenses	Actual	Actual	Budget	$	%
Payroll	1,868	2,581	3,293	712	22%
Outside Services	31	304	797	493	62%
Travel & Other Employee Exp	10	14	63	49	78%
Charges to Capital	(909)	(1,148)	(2,376)	(1,228)	52%
Other / OH Allocations	(135)	(15)	(15)	1	-5%
Total Expenses	**866**	**1,736**	**1,763**	**27**	**2%**

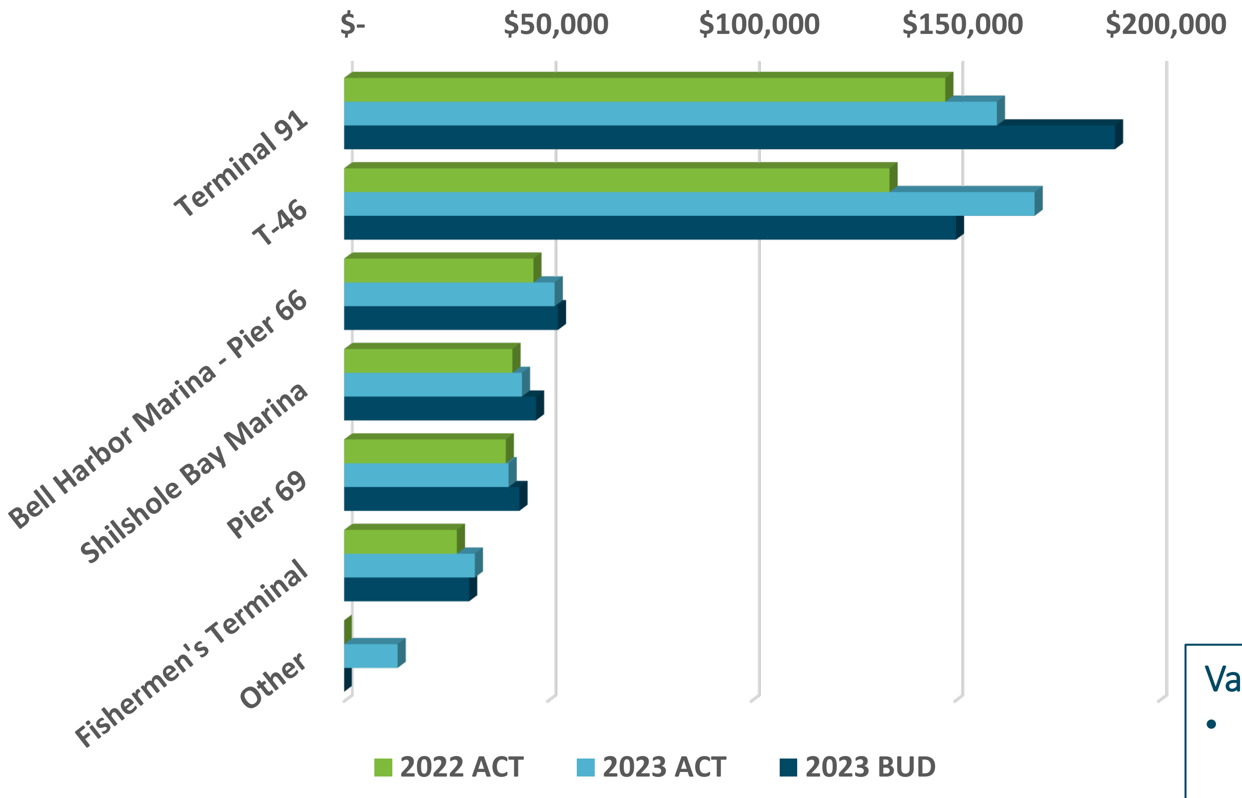
Major Variances:

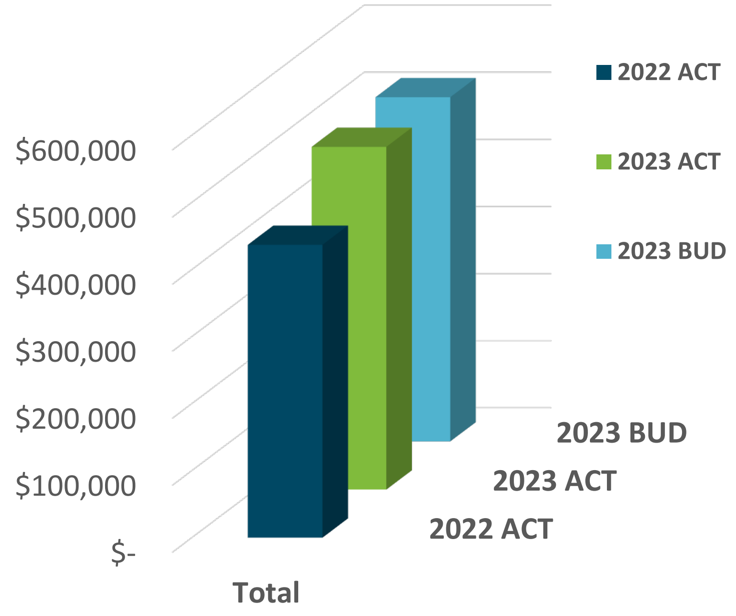
- The high variance in payroll is due to vacant positions; there are 7 vacancies (unfilled positions) remaining.
- Charges to Capital projects have been less than estimated due to the learning curve on new hires and more admin support (time charged to subclass 6260 is higher).
- Outside Services – contracts for maintenance will continue to be utilized and paid for thru the year.
- Other/OH Allocations – An increase to the OH %age will be submitted to Accounting.

Key Project Milestones:

- P66 ShorePower received final Commission construction authorization.
- T91 Berth 6 & 8 Redevelopment completed 100% design.
- Notice to Proceed to begin construction issued on T5 South Marine Building.
- P17 Bulkhead Emergency Repairs reached substantial complete.
- T18, T30, and T46 Maintenance Dredging received Managing Member design authorization.
- T91 Uplands Development completed 30% design.
- P66 Central Waterfront Elevators Project reached substantial completion.
- FT Maritime Innovation Center Project completed 100% design.

Maritime Security





Variance from Budget

- 2023 actual is in line with the budget, T91 $29K favorable due to staff shortage at American Guard Services, offset by unfavorable results from T46 ($20K), T-102, and HIM due to request from business related to increasing in break-ins/thefts

Variance from 2022

- $74K increase primarily related to increasing in break-ins/thefts at T46, T-102, and HIM

Maritime Capital 2023

$ in 000's	2023 YTD Actual	2023 Year-End Forecast	2023 Budget	2023 POF	Budget vs Forecast $	Budget vs Forecast %
P66 Shore Power	790	8,620	8,817	15,390	197	2%
P66 Fender Overhaul	65	3,048	3,227	3,939	179	6%
MD Reserve	0	2,000	2,000	2,000	0	0%
Maritime Video Camera Pro	109	1,809	1,800	1,800	(9)	-1%
T117 Restoration	295	2,498	1,263	30	(1,235)	-98%
T91 Berth 6 & 8 Redev	512	883	1,193	734	310	26%
FT Maritime Innovation Center	225	1,241	1,103	3,297	(138)	-13%
Cruise Upgrades COVID19	0	0	1,000	0	1,000	100%
MD Fleet	940	5,113	6,555	4,790	1,442	22%
MD Small Projects	468	1,561	3,368	1,443	1,807	54%
All Other Project	1,017	6,304	8,983	20,668	2,679	30%
Subtotal	4,421	33,077	39,309	54,091	6,232	16%
CIP Cashflow Mgmt Reserve	0	(5,110)	(6,996)	(13,286)	(1,886)	27.0%
Total Maritime	**4,421**	**27,967**	**32,313**	**40,805**	**4,346**	**13.4%**

Projects with Significant Variances

T117– Funds previously encumbered under consulting contracts added back to forecast.

Cruise COVID Upgrades - Placeholder to mitigate COVID upgrade requirements no longer needed.

T91 Berth 6/8 & All Other Projects - Additional time needed for federal permitting (2 months). LED Upgrade small cap projects moved to Large CIP.

Economic Development Division Appendix

2023 Q2 Financial Performance Report

Port of Seattle

EDD YTD 2023 Financials

$ in 000's	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 $	Change from 2022 %
Revenue	3,669	4,142	4,984	4,684	300	6%	842	20%
Conf & Event Centers	420	2,538	3,377	5,439	(2,061)	-38%	839	33%
Total Revenue	**4,089**	**6,680**	**8,361**	**10,123**	**(1,761)**	**-17%**	**1,681**	**25%**
Expenses								
Portfolio Management	1,643	1,898	1,534	1,807	273	15%	(364)	-19%
Conf & Event Centers	1,271	2,333	3,509	4,936	1,427	29%	1,176	50%
P69 Facilities Expenses	90	98	103	116	13	11%	5	6%
RE Dev & Planning	94	132	145	139	(7)	-5%	14	11%
EconDev Expenses Other	298	492	503	310	(192)	-62%	11	2%
Maintenance Expenses	1,792	1,718	1,577	1,648	71	4%	(141)	-8%
Maritime Expenses (Excl Maint)	490	535	661	883	221	25%	126	24%
Total EDD & Maritime Expenses	**5,678**	**7,205**	**8,032**	**9,839**	**1,807**	**18%**	**828**	**11%**
Diversity in Contracting	48	57	83	145	61	42%	26	47%
Tourism	380	1,099	524	923	400	43%	(576)	-52%
EDD Grants	87	(1)	143	300	157	52%	144	-12456%
Total EDD Initiatives	**515**	**1,155**	**750**	**1,368**	**618**	**45%**	**(405)**	**-35%**
Environmental & Sustainability	13	10	21	30	9	31%	11	111%
Police Expenses	99	103	121	134	13	10%	18	17%
Other Central Services	2,093	2,319	2,402	2,435	34	1%	82	4%
Aviation Division	95	80	66	70	4	6%	(14)	-18%
Total Central Services & Aviatio	**2,300**	**2,513**	**2,609**	**2,669**	**59**	**2%**	**97**	**4%**
Envir Remed Liability	0	0	0	0	0	NA	0	NA
Total Expense	**8,493**	**10,872**	**11,392**	**13,876**	**2,484**	**18%**	**520**	**5%**
NOI Before Depreciation	**(4,403)**	**(4,192)**	**(3,031)**	**(3,753)**	723	19%	1,162	28%
Depreciation	1,919	1,906	2,064	1,914	(150)	-8%	157	8%
NOI After Depreciation	**(6,322)**	**(6,099)**	**(5,094)**	**(5,667)**	**573**	**10%**	**1,004**	**16%**

Variance from Budget

Revenue $1.8M unfavorable to budget

- Conferences and Events activity less than budgeted

Expenses $2.5M favorable to budget

- Timing of tenant improvements
  - Small Works Construction services - $245K favorable
- Conference and Event center volumes driving reduced variable expenses.
  - 3rd Party Mangement - $1.26M favorable
    - WTC - $93K less
    - Bell Harbor - $1.1M less
- Outside Services $918K favorable to budget
  - $255K less in tourism personal services

EDD 2023 Forecast

$ in 000's	2021 Actual	2022 Actual	2023 Forecast	2023 Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 $	Change from 2022 %
Revenue	7,384	8,886	10,022	9,722	300	3%	1,137	13%
Conf & Event Centers	1,910	8,848	10,879	12,479	(1,600)	-13%	2,030	23%
Total Revenue	**9,294**	**17,734**	**20,901**	**22,201**	**(1,300)**	**-6%**	**3,167**	**18%**
Expenses								
Portfolio Management	3,737	3,653	3,680	3,905	225	6%	27	1%
Conf & Event Centers	3,124	6,563	9,537	10,769	1,232	11%	2,975	45%
P69 Facilities Expenses	268	230	221	221	0	0%	(10)	-4%
RE Dev & Planning	231	299	294	294	0	0%	(5)	-2%
EconDev Expenses Other	736	1,058	900	900	0	0%	(158)	-15%
Maintenance Expenses	3,769	3,836	3,253	3,303	50	2%	(583)	-15%
Maritime Expenses (Excl Maint)	862	1,263	1,736	1,811	75	4%	472	37%
Total EDD & Maritime Expenses	**12,727**	**16,902**	**19,621**	**21,203**	**1,582**	**7%**	**2,719**	**16%**
Diversity in Contracting	253	186	250	250	0	0%	64	34%
Tourism	1,877	1,737	1,830	1,830	0	0%	93	5%
EDD Grants	889	105	1,450	1,450	0	0%	1,345	1287%
Total EDD Initiatives	**3,019**	**2,028**	**3,530**	**3,530**	**0**	**0%**	**1,502**	**74%**
Environmental & Sustainability	24	35	67	83	16	19%	32	92%
Police Expenses	205	240	250	258	8	3%	10	4%
Other Central Services	4,408	4,848	4,813	4,938	125	3%	(36)	-1%
Aviation Division	177	147	138	138	0	0%	(9)	-6%
Total Central Services & Aviation	**4,814**	**5,270**	**5,268**	**5,417**	**149**	**3%**	**(2)**	**0%**
				0				
Total Expense before Pension Adjustmen	**20,560**	**24,200**	**28,418**	**30,149**	**1,731**	**6%**	**4,218**	**17%**
Pension Expense Adjustment	(2,396)	(695)	0	0	0	NA	695	100%
Total Expense	**18,164**	**23,505**	**28,418**	**30,149**	**1,731**	**6%**	**4,913**	**21%**
NOI Before Depreciation	**(8,870)**	**(5,771)**	**(7,517)**	**(7,948)**	**431**	**5%**	**(1,746)**	-30%
Depreciation	3,841	3,954	3,741	3,741	0	0%	(213)	-5%
NOI After Depreciation	**(12,711)**	**(9,725)**	**(11,258)**	**(11,689)**	**431**	**4%**	**(1,533)**	**-16%**

Variance from Budget

- Revenue forecasted $1.3M below budget.
  - Predicting a 12% reduction in conference volumes based on feedback from CHI.
- Expenses forecasted $1.7M favorable to budget.
  - Lower TI and Broker fees.
  - Conference and Event center volumes driving reduced variable expenses.
  - Lower Maintenance and Central Services based on open positions.

Portfolio Management 2023 Financials

$ in 000s	2022 YTD	2023 YTD	2023 YTD	Bud Var	
Revenue by Facility:	Actual	Actual	Budget	$	%
Conference Centers	2,136	2,766	4,801	(2,035)	-42%
WTC - Seattle	422	673	664	10	1%
WTC West - Building	1,831	1,918	1,828	90	5%
P66 Retail	115	148	136	12	9%
Bell Street Garage	595	843	943	(100)	-11%
T102 Uplands	856	945	826	119	14%
T91 Uplands	612	692	659	33	5%
Other (P2, P69, T34, Tsubota, T5SE)	345	460	482	(21)	-4%
Utilities	381	599	441	158	36%
Total Revenue	**6,679**	**8,353**	**10,121**	**(1,768)**	**-17%**
Dept Expenses:					
Staff	470	577	735	158	22%
Outside Services	238	77	266	189	71%
General Expenses	2,951	3,810	5,156	1,345	26%
Equipment & Supplies	24	37	166	130	78%
Utilities	832	871	794	(77)	-10%
Support Services:					
Maintenance	1,704	1,568	1,641	73	4%
Project Management	81	148	310	163	52%
Environmental & Planning	73	83	94	11	12%
Maritime	2,239	2,228	2,523	295	12%
Police/Security	253	292	319	27	9%
Other/Central Services	884	969	779	(191)	-24%
Total Expense	**9,749**	**10,660**	**12,784**	**2,124**	**17%**
NOI Before Depreciation	**(3,070)**	**(2,307)**	**(2,663)**	**356**	**-13%**
Depreciation	1,901	2,058	1,910	148	8%
NOI After Depreciation	**(4,971)**	**(4,365)**	**(4,573)**	**208**	**-5%**

Variance from Budget

- Revenue unfavorable to budget due to slower than anticipated recovery in Conference & Events Centers.
- Bell St Parking Garage revenue $100K unfavorable to budget
- Expenses lower than budget due to lower Conference & Events Centers volumes.

Variance from 2022

- Uptick in business activity at Conference & Events Centers and return for Bell Street Parking Garage.
- Expenses up from higher Conference & Events Centers volumes.

- Includes non-alliance & upland real-estate at Tsubota, T-91 (General), T-86, P-69, Bell Street Garage, Smith Cove Conference Center, Bell Harbor International Conference Center, World Trade Center, Foreign Trade Zone, Pier 2, T-34, and T-102.

EDD Capital 2023

$ in 000's	2023 YTD Actual	2023 YE Forecast	2023 Budget	2023 POF	Budget vs Forecast $	%
T91 Uplands Dev Phase I	573	2,190	2,204	1,682	14	1%
WTCW Roof Replacement	1,002	2,032	1,841	1,003	(191)	-10%
P69 Underdock Utility Rpl	555	1,065	999	547	(66)	-7%
CW Bridge Elev Modernizat	224	479	480	7	1	0%
P66 Roof Upgrades	66	286	341	556	55	16%
P66 BHICC Interior Modern	0	0	276	0	276	100%
P69 3rd Floor Terrace Rep	0	25	262	262	237	90%
P69 and P66 Public Video	3	103	250	250	147	59%
Tenant Improvements - Capi	0	202	202	300	0	0%
T91 Ped Path and Bike Bri	9	144	150	300	6	4%
All Other Projects	142	2,792	3,274	3,780	482	15%
Subtotal	2,574	9,318	10,279	8,687	961	9%
CIP Cashflow Mgmt Reserve	0	(1,648)	(2,193)	(1,950)	(545)	25%
Total Economic Development	**2,574**	**7,670**	**8,086**	**6,737**	**416**	**5%**

P66 BHICC - $276k for pending claim resolution no longer needed.

P69 3rd Floor Terrace & Public Video – Delay due to resource constraints.

Other Projects - Number of small projects related to LED upgrades removed moved to Large Cap CIP.

Central Services Appendix

2023 Q2 Financial Performance Report

Central Services Business Events

- Hosted Green Corridor update webinar.
- Convened ceremonial signing ceremony of the Port's MOA with the Muckleshoot Indian Tribe and inaugural government to government meeting.
- Hosted annual Duwamish Alive! community habitat restoration work party.
- Hosted a multi-cultural Working Waterfront boat tour for 250 community members with Commissioner Mohamed and partners PCAT, DRCC, EPA, and Community Health Advocates.
- Partnered with NWSA on a Bike Truck Safety Fair promoting freight mobility and safe corridors/practices for pedestrians and bicycles.
- Hosted the annual SKCCIF Environment and Jobs Symposium with 150 attendees.
- Hosted 100 students for the annual Raisbeck Aviation High School Environmental Challenge with site tours, presentations and business proposal competitions.
- Hosted the South King County Symposium with 150 attendees in partnership with Community Engagement.
- The Port reached an agreement with the Police represented group on the Body Worn Camera (BWC) Policy.
- The Port received a clean independent Certified Public Accountant (CPA) audit opinion on the Port's 2022 financial statements.
- Received the GFOA Distinguished Budget Presentation Award for the 2023 Budget Document.

Central Services YTD Financial Highlights

$ in 000's	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 Incr (Decr) $	Change from 2022 Incr (Decr) %
Total Operating Revenues	**1,982**	**271**	**290**	**46**	**243**	**526.4%**	**19**	**7.1%**
Core Central Support Services	39,964	44,434	51,528	53,234	1,705	3.2%	7,094	16.0%
Police	13,769	14,211	17,323	18,916	1,593	8.4%	3,112	21.9%
Engineering/PCS	4,575	4,418	6,383	7,993	1,609	20.1%	1,965	44.5%
Total Operating Expenses	**58,309**	**63,064**	**75,235**	**80,142**	**4,907**	**6.1%**	**12,171**	**19.3%**

2023 YTD Total Operating Expenses are $4.9M under the budget due to:

- Delay in contract spending and delays in hiring vacant positions and lower charges to Capital Projects

2023 YTD Total Operating expenses are $12.2M higher compared to 2022 due to:

- Higher Payroll in 2023 due to new positions hired in 2022
- Higher Outside Services costs YTD due to project delays in 2022
- Higher Insurance and other General Expenses in 2022

Central Services YTD Expense by Category

$ in 000's	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 Incr (Decr) $	Change from 2022 Incr (Decr) %
Salaries & Benefits	35,205	37,854	44,334	43,849	(485)	-1.1%	6,480	17.1%
Wages & Benefits	13,695	13,103	16,345	17,394	1,049	6.0%	3,242	24.7%
Payroll to Capital Projects	8,222	7,857	9,367	11,426	2,059	18.0%	1,510	19.2%
Equipment Expense	571	1,155	1,146	1,508	362	24.0%	(9)	-0.8%
Supplies & Stock	229	312	518	512	(7)	-1.3%	207	66.4%
Outside Services	11,601	11,708	15,232	18,008	2,776	15.4%	3,524	30.1%
Travel & Other Employee Expenses	417	726	999	1,837	838	45.6%	273	37.6%
Insurance Expense	1,507	1,950	2,163	2,240	77	3.4%	213	10.9%
Litigated Injuries & Damages	-	808	206	-	(206)	0.0%	(602)	-74.5%
Other Expenses	1,050	1,523	2,439	2,306	(132)	-5.7%	916	60.2%
Charges to Capital Projects/Overhead Alloc	(14,188)	(13,930)	(17,514)	(18,937)	(1,423)	7.5%	(3,584)	25.7%
TOTAL	**58,309**	**63,064**	**75,235**	**80,142**	**4,907**	**6.1%**	**12,171**	**19.3%**

- Payroll savings due to staff vacancies
- Outside Services below budget due to spending delays
- Travel & Other Employee Expenses under budget due to delayed spending at the beginning of the year
- Charges to Capital below budget due to delay of some capital projects

Central Service Financial Summary (YE Forecast)

$ in 000's	2021 YTD Actual	2022 YTD Actual	2023 YTD Forecast	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 Incr (Decr) $	Change from 2022 Incr (Decr) %
Total Operating Revenues	**(233)**	**2,538**	**399**	**155**	**244**	**157.7%**	**(2,139)**	**-84.3%**
Core Central Support Services	73,612	91,149	109,186	109,752	566	0.5%	18,037	19.8%
Police	17,194	35,064	35,929	36,673	744	2.0%	865	2.5%
Engineering/PCS	4,948	8,704	14,814	16,478	1,664	10.1%	6,110	70.2%
Total Operating Expenses	**95,753**	**134,917**	**159,928**	**162,903**	**2,974**	**1.8%**	**25,011**	**18.5%**

Central Services Capital Spending

$ in 000's	2023 YTD Actual	2023 Year-End Forecast	2023 Budget	Budget Variance $	Budget Variance %
Engineering Fleet Replacement	52	1,662	3,065	1,403	45.8%
Corporate Fleet Replacement	136	2,689	1,836	(853)	-46.5%
Infrastructure - Small Cap	204	1,500	1,865	365	19.6%
Services Tech - Small Cap	621	1,864	1,500	(364)	-24.3%
Enterprise Network Refresh	17	1,472	1,603	131	8.2%
Office Wi-Fi Refresh	204	964	964	0	0.0%
Phone System Upgrade	467	862	862	0	0.0%
Radio Microwave Redund. Loop	6	526	760	234	30.8%
Storage Area Network Refresh	480	751	750	(1)	-0.1%
Other (note 1)	604	4,045	5,573	1,528	27.4%
Subtotal	2,791	16,335	18,778	2,443	13.0%
CIP Cashflow Adjustment	-	(4,800)	(5,600)	(800)	14.3%
TOTAL	**2,791**	**11,535**	**13,178**	**1,643**	**12.5%**

Note:

(1) "Other" includes remaining ICT projects and small capital projects/acquisitions.

Portwide Appendix

2023 Q2 Financial Performance Report

Port of Seattle

Port Wide Financial Summary

$ in 000's	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 Incr (Decr) $	Change from 2022 Incr (Decr) %
Aeronautical Revenues	143,188	181,846	240,218	244,692	(4,474)	-1.8%	58,372	32.1%
Airport Non-Aero Revenues	73,219	114,802	145,446	137,662	7,785	5.7%	30,644	26.7%
Non-Airport Revenues	49,475	65,638	76,356	71,411	4,945	6.9%	10,718	16.3%
Total Operating Revenues	**265,883**	**362,286**	**462,020**	**453,765**	**8,255**	**1.8%**	**99,734**	**27.5%**
Total Operating Expenses	195,776	220,822	264,713	280,383	15,670	5.6%	43,890	19.9%
NOI before Depreciation	**70,107**	**141,464**	**197,307**	**173,382**	**23,925**	**13.8%**	**55,844**	**39.5%**
Depreciation	91,246	104,114	123,656	98,780	(24,876)	-25.2%	19,542	18.8%
NOI after Depreciation	**(21,139)**	**37,350**	**73,651**	**74,603**	**(951)**	**-1.3%**	**36,302**	**97.2%**

- Total Operating Revenues: $8.3M higher than budgeted
- Total Operating Expenses: $15.7M below budget mainly due to delay in Outside Services spending, vacant positions, and Travel & Other Employee Expenses.
- NOI before Depreciation: $24.0M above budget

Non-Airport YTD Financial Summary

$ in 000's	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 Incr (Decr) $	Change from 2022 Incr (Decr) %
NWSA Distributable Revenue	22,166	24,527	28,949	25,153	3,796	15.1%	4,422	18.0%
Maritime Revenues	19,507	31,788	35,856	34,040	1,816	5.3%	4,068	12.8%
EDD Revenues	4,089	6,680	8,361	10,123	(1,761)	-17.4%	1,681	25.2%
SWU & Other	3,713	2,643	3,189	2,095	1,094	52.2%	546	20.7%
Total Operating Revenues	**49,475**	**65,638**	**76,356**	**71,411**	**4,945**	**6.9%**	**10,718**	**16.3%**
Total Operating Expenses	35,658	43,508	49,171	54,420	5,249	9.6%	5,662	13.0%
NOI before Depreciation	**13,817**	**22,129**	**27,185**	**16,991**	**10,194**	**60.0%**	**5,056**	**22.8%**
Depreciation	18,949	18,918	19,138	18,141	(997)	-5.5%	220	1.2%
NOI after Depreciation	**(5,132)**	**3,211**	**8,047**	**(1,150)**	**9,198**	**-799.7%**	**4,836**	**150.6%**

- Non-Airport Operating Revenue is $4.9M above budget due to higher revenues from NWSA Distributable Revenues, Cruise, Fishing & Operations, and unbudgeted Police Revenues; offset by lower revenues from Grain and Conference & Event Center
- Expenses are $5.2M lower than budget due delays in hiring, implementing program initiatives, and travel; offset by higher Supplies Expense, higher Equipment Expense, and lower charges to Capital Projects.

Port Wide YTD Operating Revenues Summary

$ in 000's	2021 YTD Actual	2022 YTD Actual	2023 YTD Actual	2023 YTD Budget	Actual vs. Budget Variance $	Actual vs. Budget Variance %	Change from 2022 Incr (Decr) $	Change from 2022 Incr (Decr) %
Aeronautical Revenues	143,188	181,846	240,218	244,692	(4,474)	-1.8%	58,372	32.1%
Public Parking	25,537	41,842	52,391	48,001	4,390	9.1%	10,549	25.2%
Rental Cars - Operations	11,497	16,803	18,021	16,626	1,395	8.4%	1,218	7.2%
Rental Cars - Operating CFC	-	-	5,495	4,819	676	14.0%	5,495	0.0%
ADR & Terminal Leased Space	17,764	26,131	31,985	33,930	(1,946)	-5.7%	5,854	22.4%
Ground Transportation	4,208	9,226	11,750	11,420	330	2.9%	2,524	27.4%
Employee Parking	4,457	5,062	5,460	5,234	226	4.3%	398	7.9%
Airport Commercial Properties	5,541	7,520	9,618	8,014	1,604	20.0%	2,098	27.9%
Airport Utilities	3,010	3,845	4,194	4,271	(77)	-1.8%	348	9.1%
Clubs and Lounges	709	3,048	5,436	4,396	1,040	23.7%	2,388	78.3%
Cruise	61	11,258	15,437	13,100	2,337	17.8%	4,179	37.1%
Recreational Boating	6,330	6,914	7,751	7,776	(24)	-0.3%	837	12.1%
Fishing & Operations	4,768	4,967	5,481	4,927	554	11.2%	514	10.3%
Grain	3,433	3,405	1,964	3,231	(1,268)	-39.2%	(1,441)	-42.3%
Maritime Portfolio Management	4,914	5,237	5,205	4,994	210	4.2%	(33)	-0.6%
Central Harbor Management	3,654	4,131	4,960	4,672	288	6.2%	829	20.1%
Conference & Event Centers	420	2,538	3,377	5,439	(2,061)	-37.9%	839	33.1%
NWSA Distributable Revenue	22,166	24,527	28,949	25,153	3,796	15.1%	4,422	18.0%
Other	4,225	3,986	4,329	3,069	1,260	41.1%	343	8.6%
Total Operating Revenues (w/o Aero)	**122,695**	**180,440**	**221,802**	**209,073**	**12,729**	**6.1%**	**41,362**	**22.9%**
TOTAL	**265,883**	**362,286**	**462,020**	**453,765**	**8,255**	**1.8%**	**99,734**	**27.5%**

Port Wide YTD Operating Expense Summary

	2021 YTD	2022 YTD	2023 YTD	2023 YTD	Actual vs. Budget Variance		Change from 2022 Incr (Decr)	
$ in 000's	Actual	Actual	Actual	Budget	$	%	$	%
Salaries & Benefits	71,476	76,063	90,131	89,742	(389)	-0.4%	14,068	18.5%
Wages & Benefits	64,484	67,884	79,333	77,916	(1,417)	-1.8%	11,449	16.9%
Payroll to Capital Projects	14,733	12,936	15,420	21,826	6,405	29.3%	2,484	19.2%
Outside Services	40,724	48,370	57,354	77,604	20,250	26.1%	8,984	18.6%
Utilities	12,860	16,626	15,541	15,779	238	1.5%	(1,085)	-6.5%
Equipment Expense	2,960	4,532	5,683	5,432	(251)	-4.6%	1,151	25.4%
Supplies & Stock	4,030	4,227	5,617	4,613	(1,004)	-21.8%	1,390	32.9%
Travel & Other Employee Expenses	864	1,675	2,208	4,329	2,122	49.0%	533	31.8%
Third Party Mgmt Op Exp	2,010	3,498	5,485	6,669	1,183	17.7%	1,987	56.8%
B&O Taxes	1,682	2,246	2,895	3,207	312	9.7%	649	28.9%
Other Expenses	6,392	7,578	14,991	12,362	(2,629)	-21.3%	7,412	97.8%
Charges to Capital Projects/Overhead Alloc	(26,440)	(24,814)	(29,947)	(39,096)	(9,150)	23.4%	(5,133)	20.7%
TOTAL	**195,776**	**220,822**	**264,713**	**280,383**	**15,670**	**5.6%**	**43,890**	**19.9%**

- Payroll expenses were $4.6M below budget primarily due to vacant positions
- Outside Services were $20.2M under budget due to project delays
- Travel & Other Employee Expenses were $2.1M lower than budget due to delays in training and travel
- Charges to Capital Projects were lower by ($9.2M) due to delays in Capital Projects

Port Wide Capital Spending Summary

$ in 000's	2023 YTD Actual	2023 Forecast	2023 Budget	Budget Variance $	Budget Variance %
Aviation	184,564	458,345	485,572	27,227	5.6%
Maritime	4,421	27,967	32,313	4,346	13.4%
Economic Development	2,574	7,670	8,086	416	5.1%
Central Services & Other (note 1)	2,959	12,270	15,371	3,101	20.2%
TOTAL	**194,518**	**506,252**	**541,342**	**35,090**	**6.5%**

<u>Note:</u>
(1) "Other" includes 100% Port legacy projects in the North Harbor and Storm Water Utility Small Capital projects

Return to Agenda