

Earth Day Celebration at Mt Tabor (as guests of Sunrise PDX) with L-R: Dalena Bradley, Susan Bladholm (Founder), Prathyosha Chaya, Cindy Tam, and Naureen Khan.

Bouncing Forward with Optimism

More good news! Happy spring everyone! Thank you for your continued support and willingness to write letters of support, to attend meetings and conferences on our behalf and for providing virtual and written testimony. Your work has fueled our effort to date and we estimate that our community has provided more than \$6M in pro bono value to the passenger ferry initiative.

We are on a path to bring a transformative new mode of transit to the Portland metropolitan region while helping to reduce carbon pollution, creating good-paying jobs, and building a new and better Portland.

Our work is building momentum and our ferry consultant, John Sainsbury, and I have been working on outlining the needs for a Pilot Project Proof of Concept: Where will it be? What vessel(s) will we use? How much will it cost? When will it run? We'll be announcing the Pilot Project in early June; look for an invitation to join us for an announcement. We will detail the cost, funding plan, route and plan to operate a two-year pilot project, beginning in Summer 2022. Yes, you read that right—beginning in a year!

Sincerely,

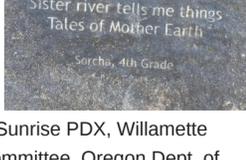
Susan Bladholm



Your FFF board and their committee roles. Top L-R: Susan Bladholm, Founder/President; Nina Byrd, Finance/Strategy; consultant John Sainsbury, Maritime Consulting Partners; Charlene Zidell, Strategy; Sue Van Brocklin, Marketing Communications; James Paulson, Chair of Board and Community Outreach Chair; Scott South, Finance; Dan Bower, Finance; Allison Tivnon, Secretary and Marketing Communications.

Here are some of the highlights from our 2021 Quarter 1:

- Federal dollars are being made available for bold, one-time, visionary initiatives as part of the American Rescue Plan Act. We are working with Michelle Giguere, Summit Strategies, on how to tap into the funds allocated to help reduce greenhouse gas emissions, improve resilience, foster equity, and build our region's economy.
- We updated our marketing materials and freshened our website. [Take a look!](#)
- We did a lot of outreach to include meetings with Oregon and SW Washington Congressional delegation staff, Prosper Portland, ticketing software contacts, City Hall Commissioners and Portland Parks and PBOT, PCC Workforce Training, Vancouver Mobility Committee, Neighbors for Clean Air, OMSI, Metro leadership, Sunrise PDX, Willamette Cover, Clackamas County Pedestrian and Bike Committee, Oregon Dept. of State Lands, Oregon Marine Board, Milwaukie Mayor Gamba, Clackamas County Commissioner Savas, Portland Spirit and Multnomah County staff.
- We engaged in fundraising and were not awarded the Portland Clean Energy Fund Grant, but we remain in contention for an ODOT STIF grant for \$500,000 to go towards the Pilot Project.
- We applied for three foundation grants.
- We talked with a lot of curious and engaged residents who want to find a role at FFF for volunteering.
- We learned about lease agreements and the regulatory environment from Oregon Department of State Lands, DEQ and the Army Corps of Engineers. We will have a Kaizen session with 10 state and federal agencies in mid-June to discuss the needs and requirements from the key jurisdictions.
- We continued to build the framework of our Community Benefit Plan, with the help of Sunrise PDX.
- We started looking at workforce training opportunities with PCC and members of Oregon's Congressional delegation.
- We worked on the pro forma for the Pilot Project, so we have clarity around our capital infrastructure costs (for the federal funding requests) and operational costs (for the local funding through foundations, corporate sponsorships, state/regional/local private sources).
- We attended the virtual Passenger Vessel Association Conference and heard many stories about the significant impact of COVID on operators across the country. We learned about many communities that are focused on a zero-emission goal and the strides that ferry operators have made with renewable energy, building in hydrogen fuel cell technology. A quick summary about the future of ferries—they will be:
 - Sustainably made
 - Hybrid/battery
 - Agile
 - Situationally aware
 - Autonomous
 - Connected



Bounce forward—more resilient and strategic for a smarter recovery.

Contributed by Linda Baker

"Transportation planning is managed separately from energy, health and telecommunications when the reality is these systems themselves are almost always 'systems of systems.'"

The first step in building resilient infrastructure involves breaking down organizational silos that can stymie new solutions to 21st-century environmental and economic challenges. That was one of the key takeaways from a fascinating talk delivered in February by the founding director of the [Global Resilience Institute at Northeastern University](#).

"The underpinning of the resilience imperative arises from the reality that we are hyperconnected," said Dr. Stephen Flynn, who delivered his speech as part of the U.S. Department of Transportation's ["Straight from the Source" thought leadership speaker program](#).

A confluence of trends — globalization, internet technologies and climate change — has created a web of interdependent systems such that "if you have a disruption with one, it tends to cascade and impact the others," he explained.

Bridging the divide

But even as hyperconnectivity has come to define the way we live today, people and institutions charged with managing public services and resources often remain isolated and disconnected from one another.

Transportation, for one, is managed separately from energy, health and telecommunications when the reality is these systems themselves are almost always "systems of systems," Flynn noted. Getting in front of those interdependencies is the resilience challenge of our times.

The talk raises interesting questions about how to assess the cost-benefits of a novel infrastructure project like Frog Ferry. While stakeholders rightfully scrutinize impacts to river ecosystems, a holistic approach balances these concerns with broader community goals such as reducing fossil fuel activity tied to climate change.

Drilling down further, a resilience analysis might show how putting a footing in a given riverbank — applying best practices to mitigate impacts to fisheries — would take hundreds of thousands of cars off the road, dramatically reducing greenhouse gas emissions.

'Bouncing forward'

Flynn likened our neglect of infrastructure to "inheriting our grandparents' mansion," an invaluable asset we have failed utterly to maintain. While there is broad consensus around the need to invest in infrastructure, those investments must reflect best practices for sustainability and resilience.

Resilience is often framed as risk management, but the reality is not so much about bouncing back from disaster but "bouncing forward," Flynn added. "You want to recover, but in a way that you are in a stronger and better place."

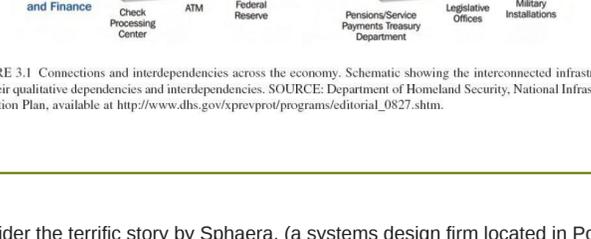


FIGURE 3.1 Connections and interdependencies across the economy. Schematic showing the interconnectedness of infrastructure and their qualitative dependencies and interdependencies. SOURCE: Department of Homeland Security, National Infrastructure Protection Plan, available at http://www.dhs.gov/xpreprpt/programs/editorial_0827.shtm.

Consider the terrific story by Sphaera, (a systems design firm located in Portland, San Francisco, Amsterdam and Geneva) about building global, democratic and distributed infrastructure for mobilizing innovations, people and community.

How a transformative approach to collaboration and finance supports citizens, governments, corporations, and civil society to share the burdens and the benefits of solving wicked problems.

[From Billions to Trillions - describing a framework to solve the SDGs](#)



L-R: SOLVE Clean Up at Cathedral Park as a pre-Earth Day tribute to remove tons of concrete off the beaches. With Willie Levenson, Human Access Project and Michael Pouncil, Willamette Harbor Citizens Advisory Council. SOLVE downtown Portland clean up with Susan Bladholm, Founder, and Travel Oregon VP, Teresa O'Neill.

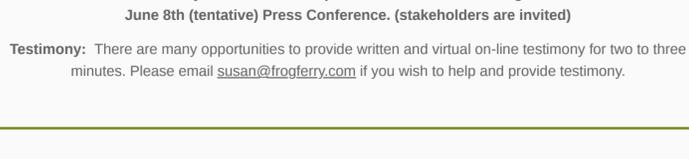


2021 Cost Overview

Phase I (2017-2020) comprised of research (four reports and studies), outreach, and fundraising in order to conduct and deliver the **Operational Feasibility Study and Financial Plan**. Studies show a ferry operation is feasible and affordable.

- Phase II (2021-2024)** focuses on conducting a Pilot Project as a proof of concept:
- One 70-passenger vessel that runs on a diesel engine (R99 is 80% cleaner than traditional diesel). Our plan is to run a full-electrified fleet, which will take a few years to implement.
 - 24-Month Operation: Summer 2022 - Summer 2024
 - Cathedral Park to RiverPlace
 - Total Cost for Two-Years - \$9.7M: Planning, Mobilization, and Operations
 - Total Funding Needed - \$8.5M: We will have ticket revenue and sponsorship income
 - The City of Portland's Dept of Transportation has agreed to sponsor our FTA Passenger Ferry Grant application, which will be due in Summer 2021 for \$3.3M.
 - Avg Passenger Ticket Price (One-Way) - \$3; Honored Passenger Ticket Price - \$2

- Phase III (2024-ONWARD)** plans to stand up a public ferry service, with one or two additional vessels per year and two additional stops (potentially Vancouver, OMSI, and Lake Oswego) in 2024. Vessels and stops will be added based on demand. The infrastructure cost and the annual operating subsidy cost for a seven electrified vessel annual operation moving 800,000 passengers (based on 50% load factor):
- Capital Costs - \$40M: Planning, engineering, vessel and equipment acquisition, and regulatory requirements for five stops and seven boats.
 - Operating Costs - \$6.8M: Labor, fuel, insurance, maintenance, administration, marketing, communications and training
 - Ticket Revenue - \$3.0M
 - On-Board Sales Revenue - \$1.3M
 - Annual Subsidy - \$2.5M: Ticket revenue covers 45% of costs and revenue from other onboard sales attributes another 19%
 - Avg Passenger Ticket Price (One-Way) - \$5; Honored Passenger Ticket Price - \$3



Upcoming Events:

- May 10: Marketing Communication Committee
- May 25: Customer Experience Committee Meeting
- June 8th (tentative) Press Conference. (stakeholders are invited)

Testimony: There are many opportunities to provide written and virtual on-line testimony for two to three minutes. Please email susan@frogferry.com if you wish to help and provide testimony.