Vessel with Voltage

Updating a Transit District Fleet with Hybrid Technology

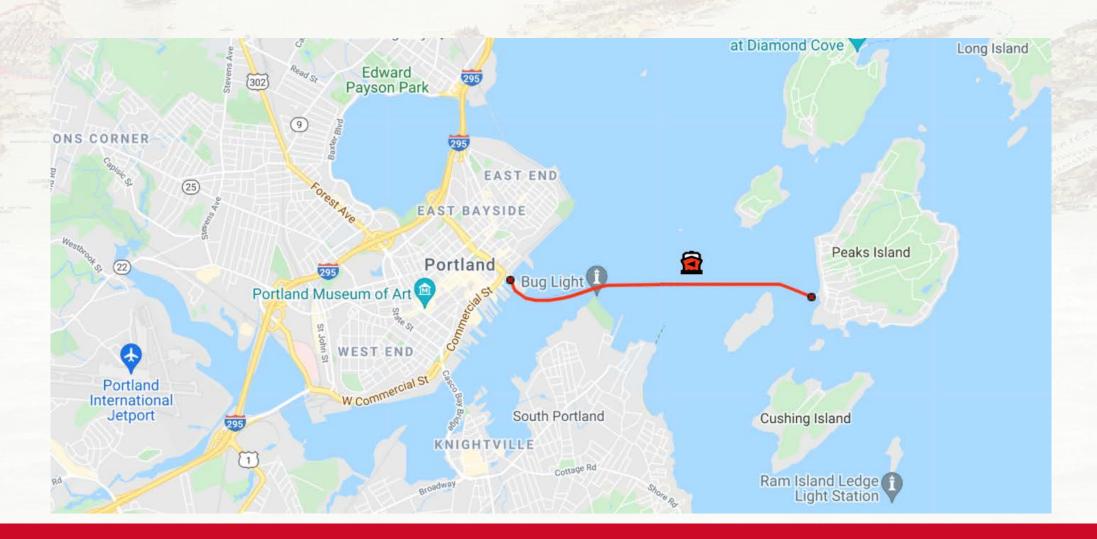
Hank Berg
General Manager
Casco Bay Island Transit District

Casco Bay Lines
Portland, Maine

April 22, 2022

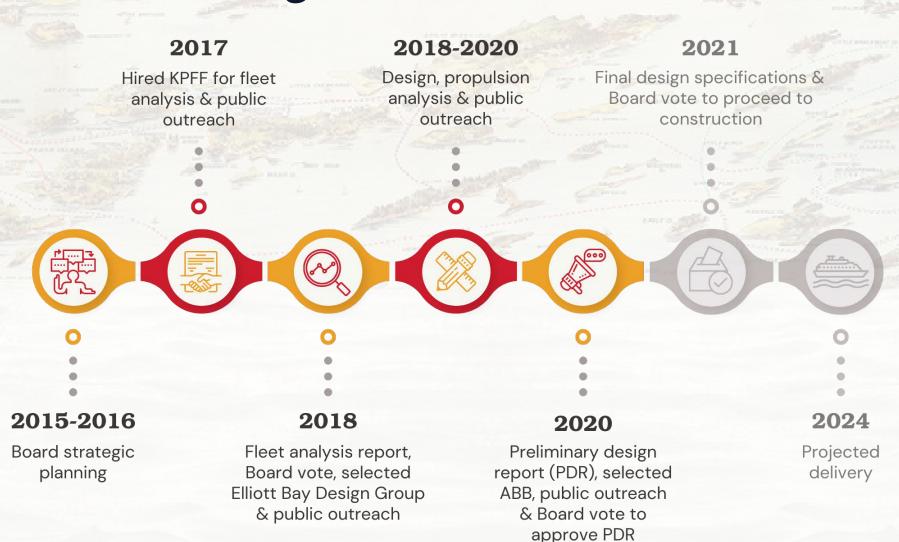


CBITD Peaks Island Service

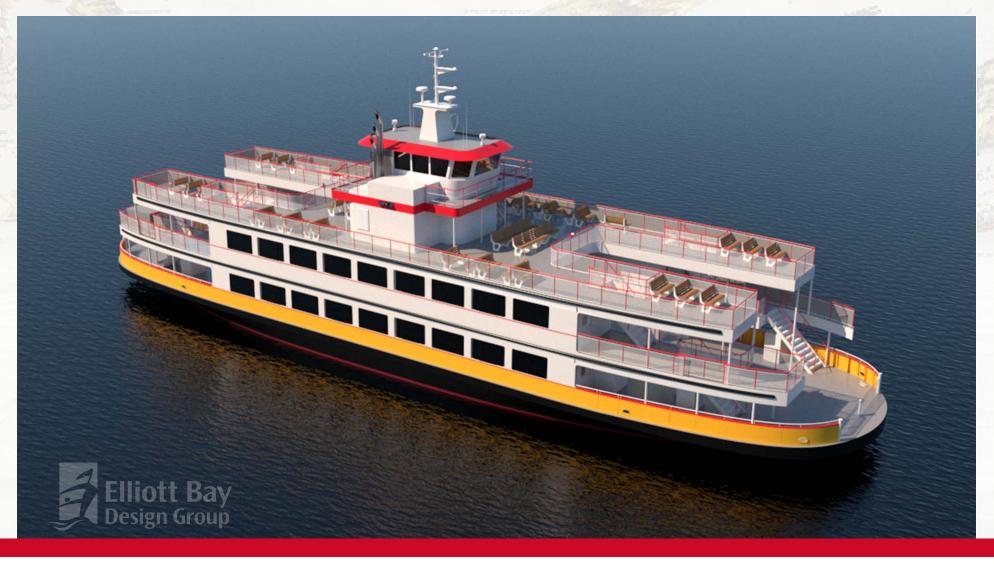




Project Timeline



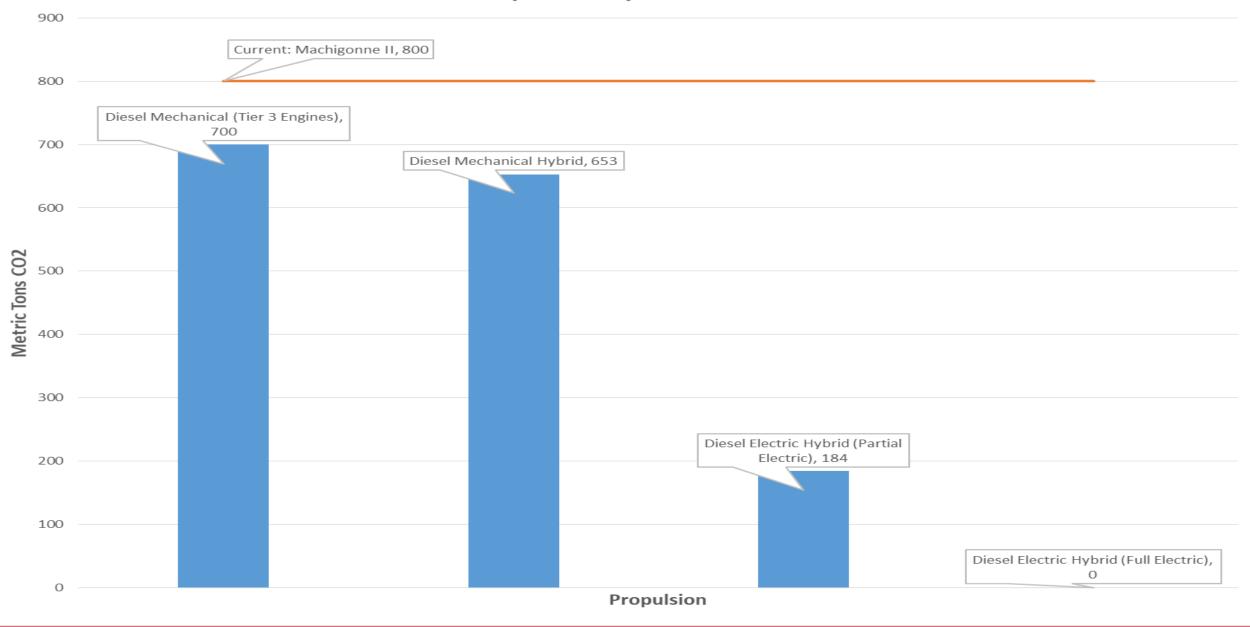
New Vessel Side A



New Vessel Side B



Propulsion System Annual Emissions



Shoreside Charging

- Goal: 10 year battery life
- 220 kWh is used each round trip
- Charging occurs only at Portland
- Challenges:
 - 10 minute charging window
 - Automated process with 30 sec set up
 - Getting power to site:
 Charger requires I.3MW
 - Peak demand rate issue



New Vessel Funding

- FTA urban discretionary
- FTA urban formula
- MaineDOT
- VW Settlement (via MaineDOT)
- MARAD
- City of Portland
- CBITD

Looking Ahead

2017
Hired KPFF for fleet analysis & public outreach

2018-2020

Design, propulsion analysis & public outreach

2021

Final design specifications & Board vote to proceed to construction















2015-2016

Board strategic planning

2018

Fleet analysis report, Board vote, selected Elliott Bay Design Group & public outreach 2020

Preliminary design report (PDR), selected ABB, public outreach & Board vote to approve PDR 2024

Projected delivery

Thank You!

t: (207) 774-7872

e: hankb@cascobaylines.com

