WETA
WATER EMERGENCY
TRANSPORTATION AUTHORITY

Presentations for May 4, 2023 Board of Directors Meeting

WETA
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TRANSPORTATION AUTHORITY

Item 8: FY 2024-28 Fare Program

FY2024-FY28 Fare Program

Water Emergency Transportation Authority

Board of Directors Meeting

May 4, 2023

Fare Policy and FY2024-28 Fare Program Recap

- Fare Policy Update
  - ➢Captures core principles of Pandemic Recovery Program
  - ➢Directs current and future fare decisions

- FY2024-28 Fare Program
  - ➢Offset rising costs
  - ➢Special Events Fare Adjustment to fully recover operating costs
  - ➢Fare predictability for riders

Fare Policy Goals in Attachment 8A

Public Outreach

- Board Authorized Release for Public Input – March 2, 2023
- Public Comment Period started on March 3, 2023
  - ➢Signage on WETA Vessels, Bay Alerts
  - ➢Multiple languages
  - ➢Dedicated Webpage
  - ➢Virtual Events
  - ➢Media, Social Media Campaign
  - ➢Community Outreach
- Public Comment Takeaways
  - ➢Comments via email, social media (43)
  - ➢Fare change: Support – 31; Neutral – 3; Oppose - 9

Proposed Revision

Adult ~~Clipper~~ Fare

Service	Current Fare	FY2024	FY 2025	FY 2026	FY 2027	FY 2028
Alameda Seaplane, Harbor Bay, Oakland & Alameda, and Richmond	$4.50	$4.60	$4.70	$4.90	$5.00	$5.20
South San Francisco	$6.75	$7.00	$7.20	$7.40	$7.60	$7.90
Vallejo	$9.00	$9.30	$9.60	$9.90	$10.20	$10.50

Summary of Fare Structure:

- ~~25 percent surcharge fee for~~ Paper Ticket fares same as Clipper and Mobile Fares
- 50 percent discount on Youth, Senior, and Disabled fares for Clipper and Paper Ticket fares
- 67 percent discount on School Groups by reservation only

Fare Structure For All Routes in Attachment 8B

Paper Ticket Surcharge Fees

- Goals
  - Encourage riders to purchase electronic tickets
  - Expedites Boarding Process and Improves Customer Experience
  - Similar Practice Among Other Regional Transit Operators (GGBHD, Caltrain)
- Survey Data Findings
  - 98% of WETA riders have access to smart phones
  - Paper Tickets - 7% of total purchased tickets; of which 20% Low-Income riders
- Proposed Revision – Paper Ticket Fares same as Clipper and Mobile Fares

Proposed Special Event Fares

Adult Fare

Service	Current Fare	FY2024	FY 2025	FY 2026	FY 2027	FY 2028
Oakland & Alameda	$9.60	$10.50	$10.75	$11.25	$11.50	$11.75
Vallejo	$15.90	$18.25	$18.75	$19.25	$20.00	$20.50

Summary of Fare Structure:

- Tickets available through Anchor System only
- 25 percent discount for Senior, Youth, and Disabled fares

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Item 11: WETA Zero Emissions Plan

Zero Emission Plan

WETA Board of Directors

May 4, 2023

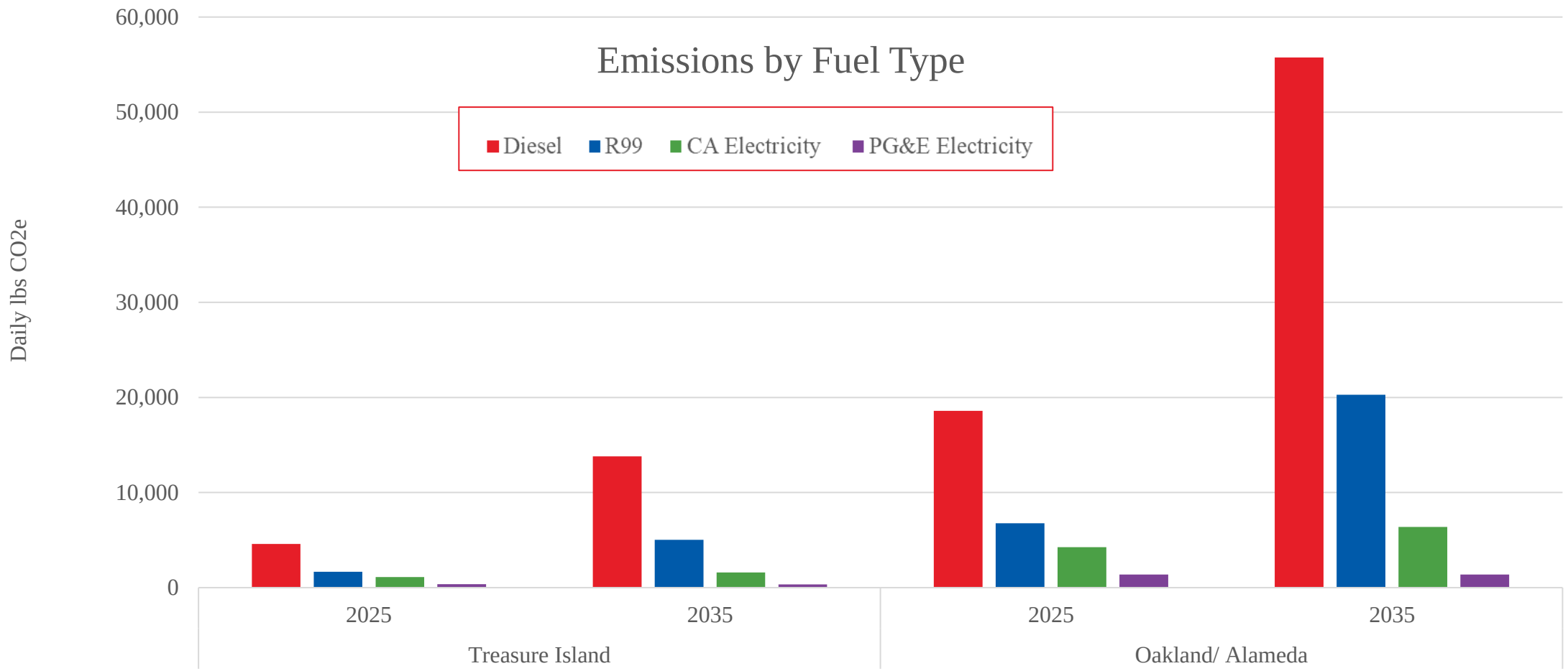
CEC Blueprint Objectives

Develop a plan to transition ferry operations on San Francisco Bay to zero-emission vessels

- How much power do we need?
- Where will it come from?
- When do we need it?
- How much will it cost?
- How do we pay for it?

Emphasis on the use of electric propulsion systems and resolving the technical and regulatory barriers for the shore side infrastructure

Alignment with Climate Goals



Services provided by WETA emit significantly fewer GHGs when operating as electric vessels vs. diesel vessels. Shown below are representative short- and medium-length routes

Stakeholders Engaged

CARB

State of California Energy Commission

United States Coast Guard 1790

San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

Alameda Municipal Power

PG&E

San Francisco County Transportation Authority

Port of San Francisco

Seal of the City of Alameda Incorporated 1854

City of Berkeley

City of South San Francisco California

Richmond California

LENNAR

Chevron

beacn

Consultant Team

ARUP

aurora marine design

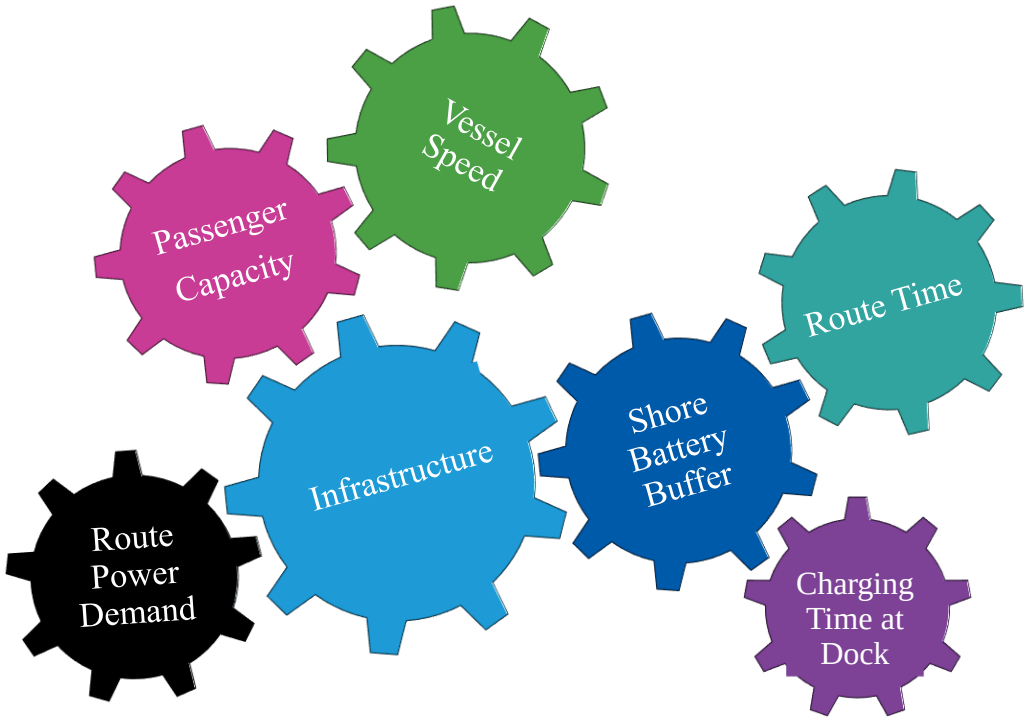
Elliott Bay Design Group

Liftech Consultants Inc.

Workflow

Stage 1
Baselining

Collect and process data on operations, vessels and terminals to define their constraints and opportunities



Stage 2
Optioneering

Develop solutions and assess their attributes and drawbacks to select optimal direction

Stage 3
Strategy

Lay out an actionable path to progress to procurement, design and delivery of electrified ferry service

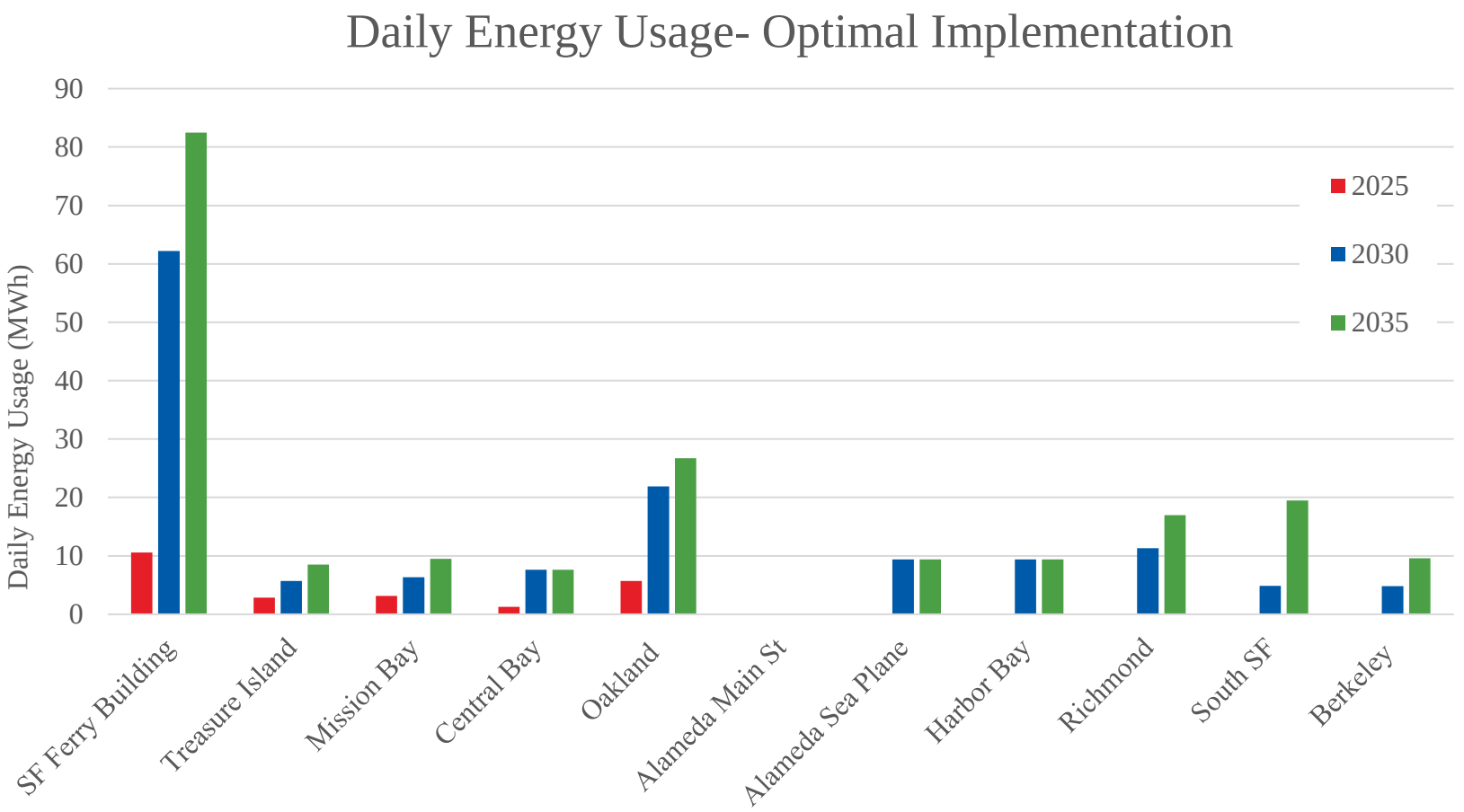
Energy Demand

Optimal Timeline Used as Basis for Analysis

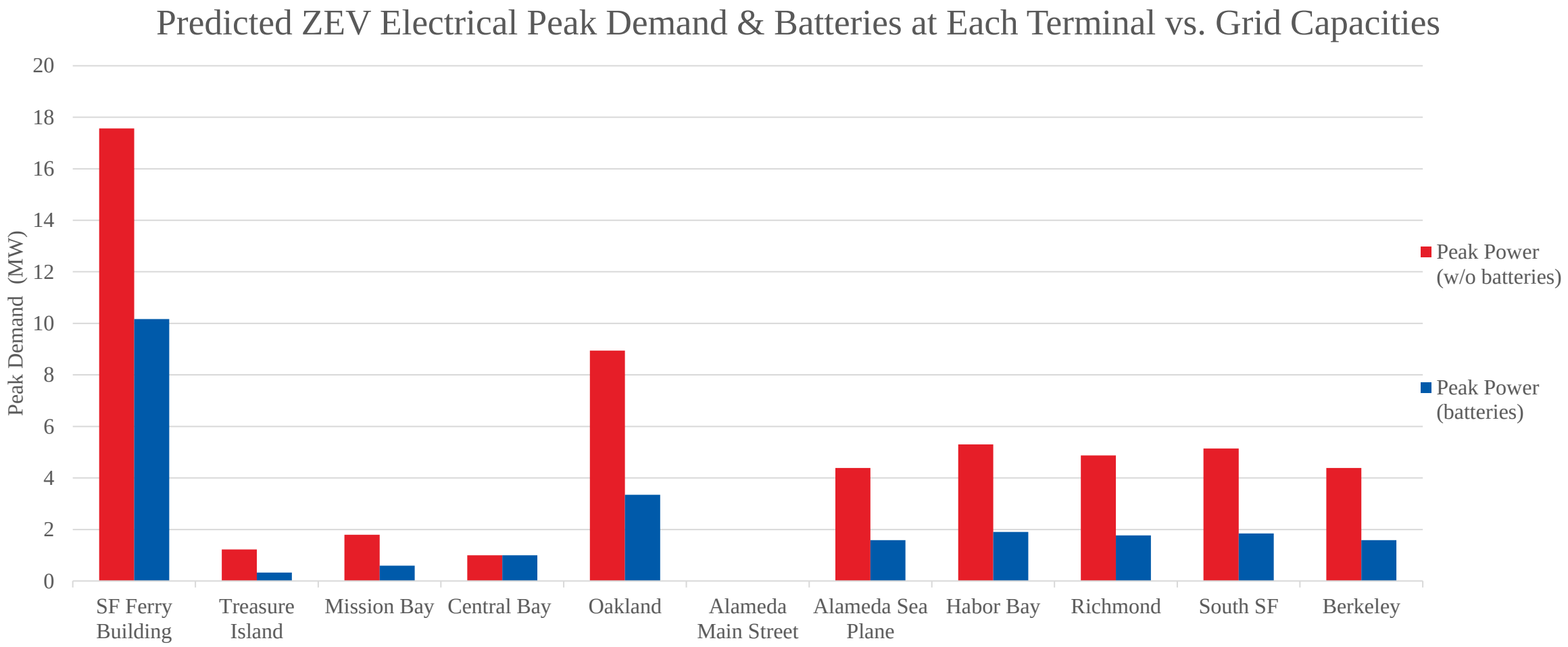
SF General Hospital **374 MWh/day**

SF Central Library **22 MWh/day**

Typical House **0.03 MWh/day**

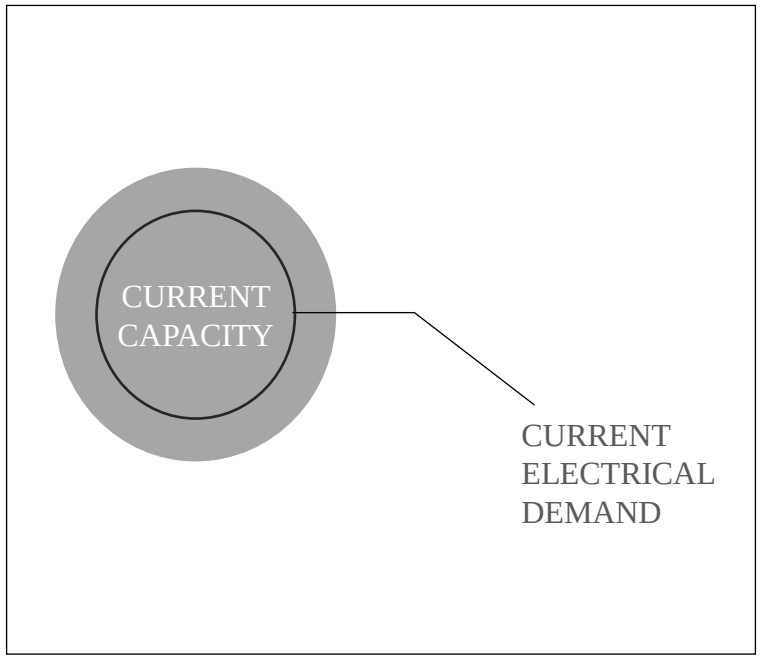


Terminal Demand & Capacities



Meeting Increased Demand

CURRENT CONDITION



Existing grid capacity meets current electrical demand.

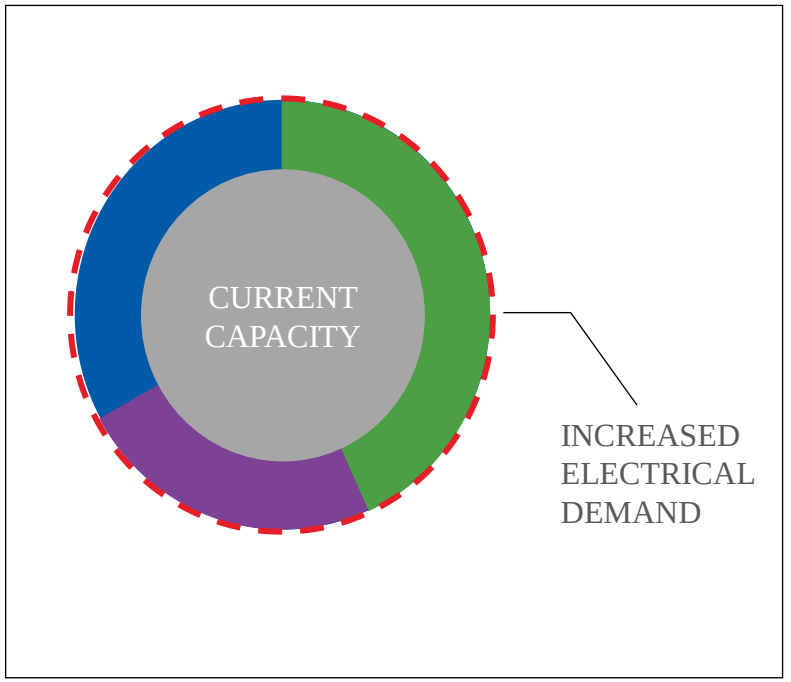
VESSEL ELECTRIFICATION

GRID UPGRADES

BATTERY STORAGE

LOAD MANAGEMENT

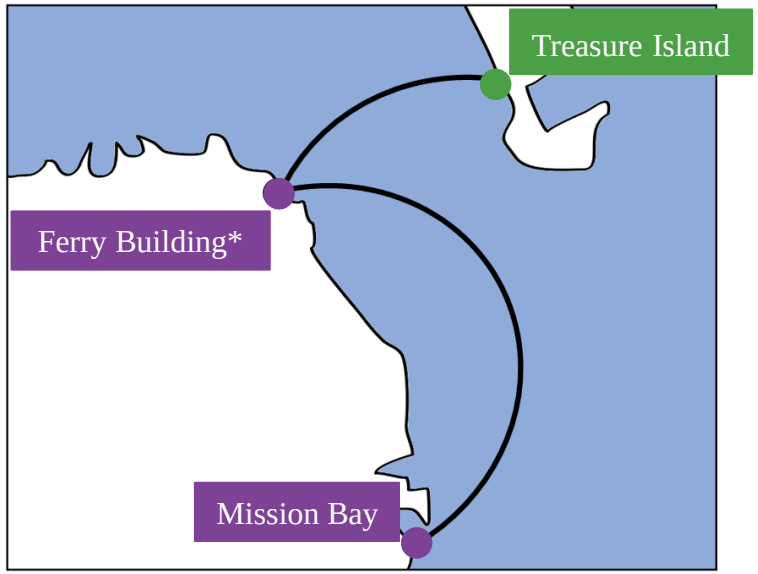
ELECTRIFIED CONDITION



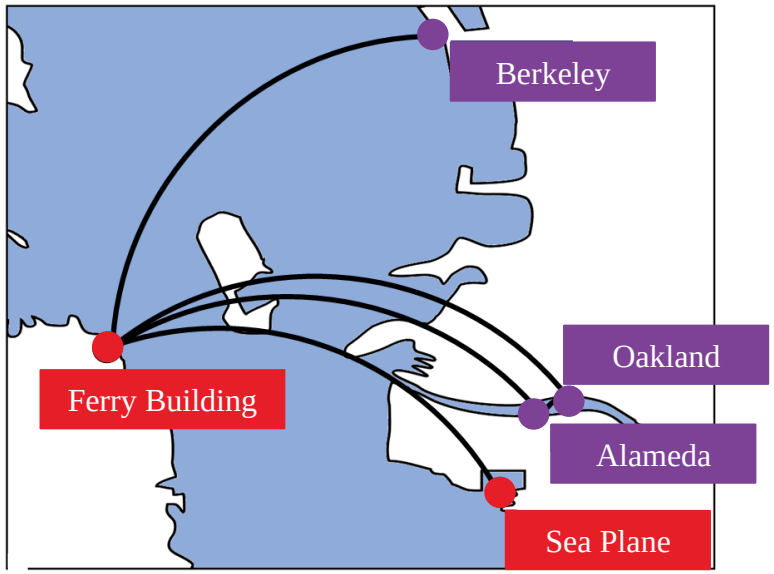
Existing grid capacity does not meet increased electrical demand in most terminal locations.

Shoreside Infrastructure Feasibility

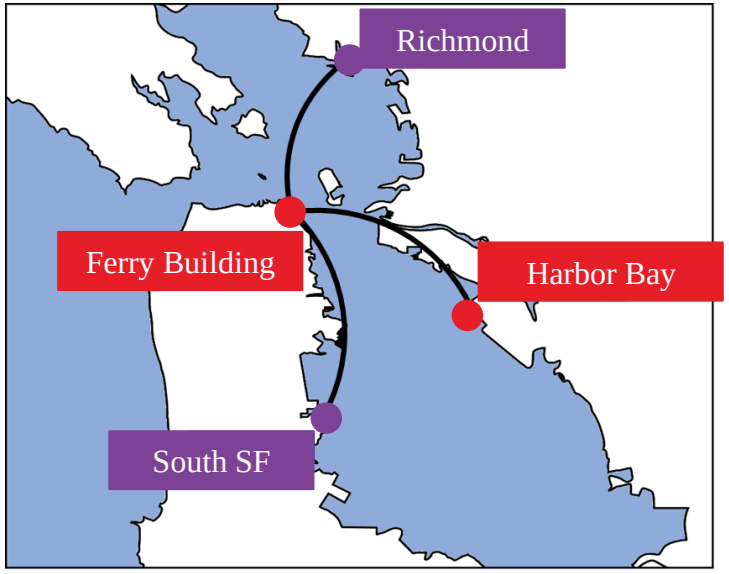
Phase 1 – Inner Central Bay



Phase 2 – Central Bay



Phase 3 – Long Run Central Bay



Planned Grid Upgrades	Planned or existing grid capacity that is sufficient for electric ferries
Requires Upgrades	Local feeders found to have sufficient grid capacity on PG&E ICA mapping tool
Requires Significant Upgrades	New feeders or substation upgrade required with major cost and timeline implications

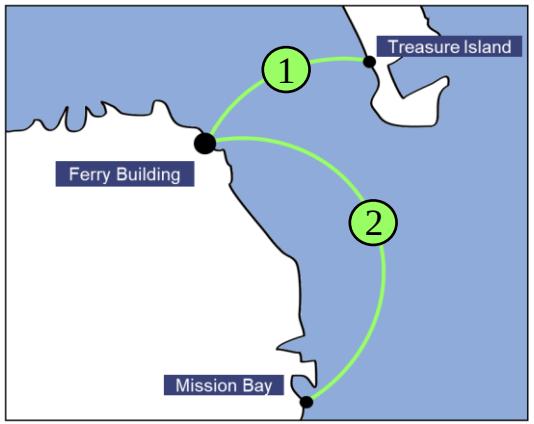
**Ferry building – minimal upgrades suffice in this first phase while only the highlighted routes are electrified*

Terminal Implementation

Terminals	Utility Provider	Completion Year	Anticipated Stakeholders	Terminal Electrical Grid Infrastructure Costs	
				(Low End Cost in Million $)	(High End Cost in Million $)
Downtown SF Terminal	SFPUC/PG&E	2027	Port of SF	$ 2.70	$ 5.00
Mission Bay	SFPUC/PG&E	2028	Port of SF	$ 2.80	$ 2.80
Treasure Island	SFPUC/PG&E	2025	TIMMA/TIDG, SFCTA	$ 1.80	$ 3.00
Main St. Alameda	AMP	2027	City of Alameda	$ 2.60	$ 3.80
Alameda Seaplane	AMP	2027	City of Alameda	$ 2.80	$ 4.30
Central Bay Maintenance Facility	AMP	2027	City of Alameda	$ 6.40	$ 9.50
Oakland	PG&E	2028	Port of Oakland	$ 2.50	$ 4.40
Berkeley	PG&E	2028	City of Berkeley	$ 2.50	$ 4.40

Vessel Feasibility

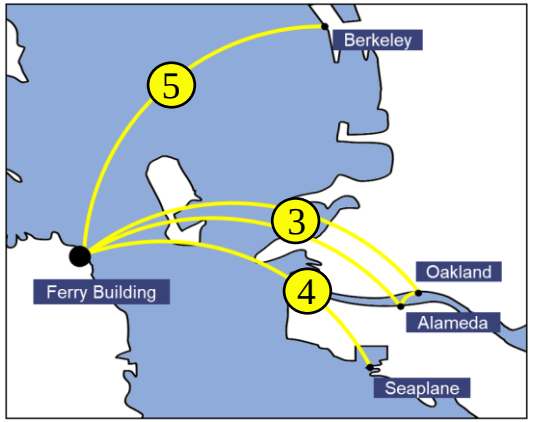
Phase 1 – Inner Central Bay



1 Treasure Island

2 Mission Bay

Phase 2 – Central Bay

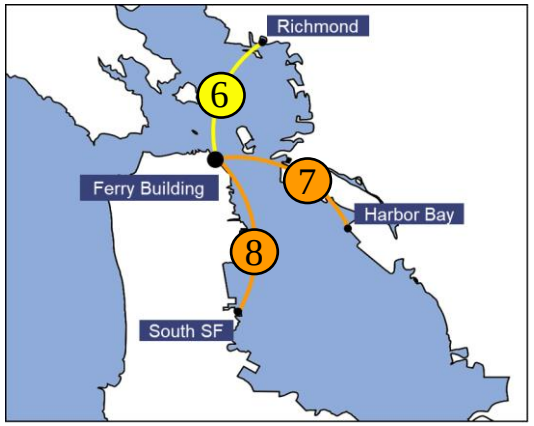


3 Oakland/Alameda

4 Seaplane

5 Berkeley

Phase 3 – Long Run Central Bay

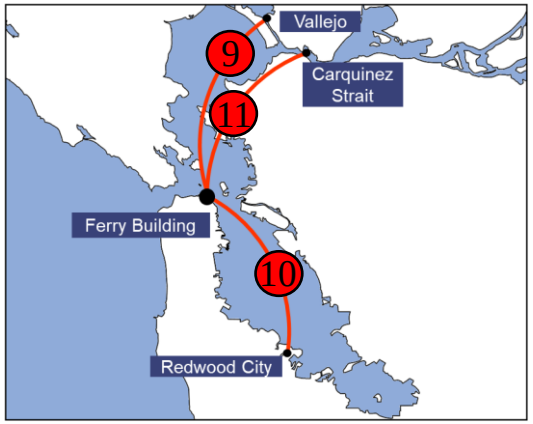


6 Richmond

7 Harbor Bay

8 South SF

Phase 4 – Long Runs



9 Vallejo

10 Redwood City

11 Carquinez

Feasible with Current Vessel Technology

Feasible with Current Vessel Technology - Operational Changes Required

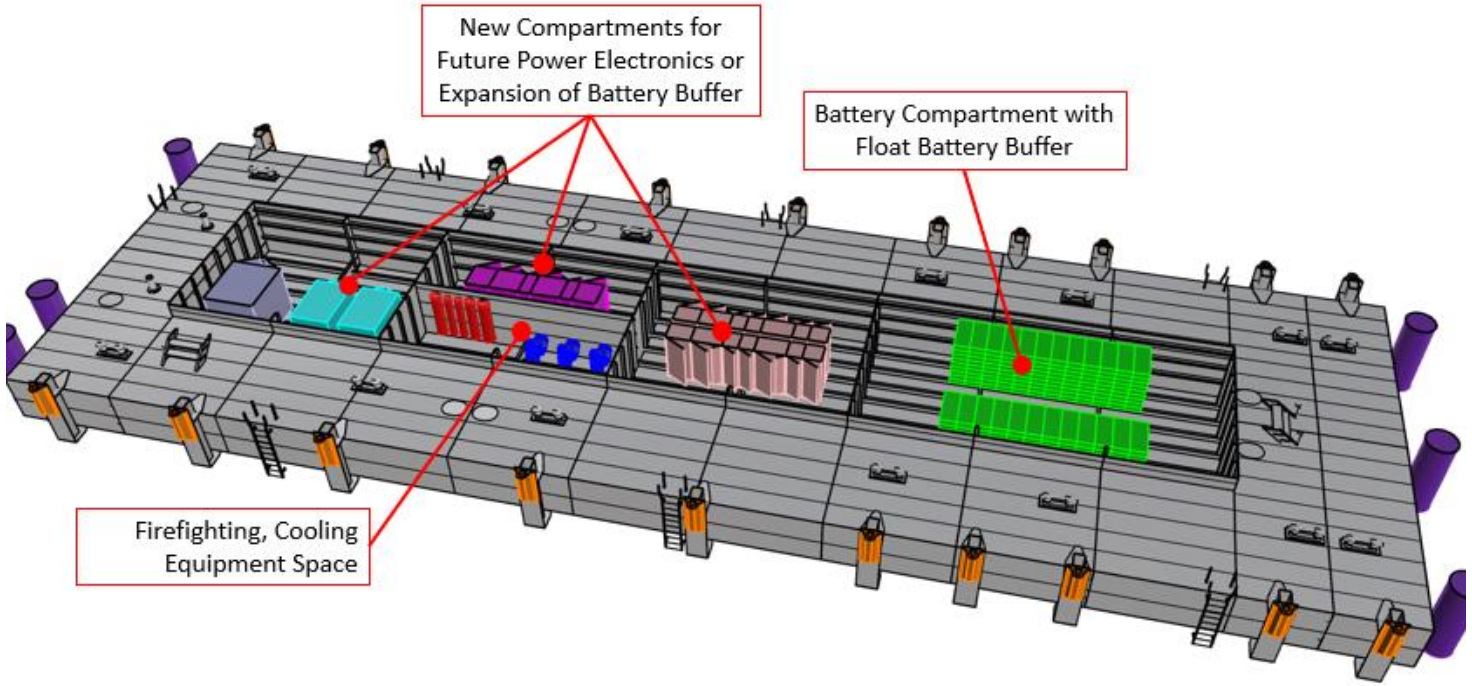
Feasible with Current Vessel Technology - Significant Operational Changes Required

Not Currently Feasible – TBD Future Technology Required

Terminal Energy Storage

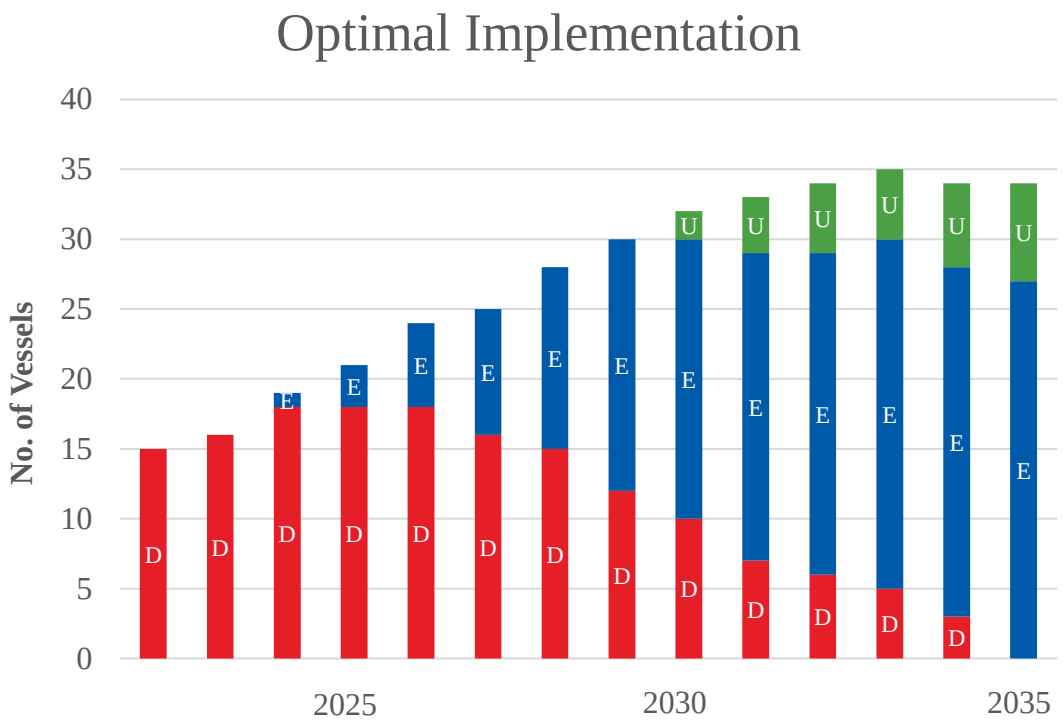
San Francisco Ferry Building

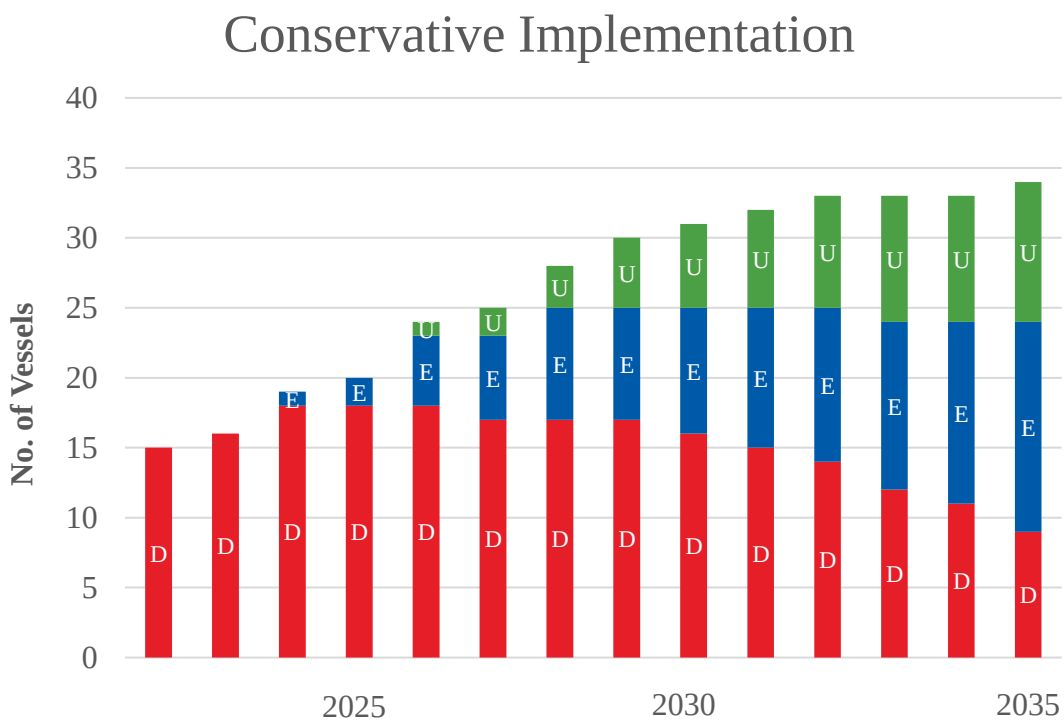
A float battery charging system can be successfully deployed at the S.F. terminal, saving the local utility grid an additional ~4MW of peak electrical demand.



Fleet Electrification Schedule

Optimal Timeline Used as Basis for Analysis





Diesel Vessel

Battery Electric Vessel

TBD (Future Technology, Alternative Fuel, Hydrogen)

Vessel Implementation

Vessel	Primary Service	Completion Year	Estimated Cost	Funding Source
	(Route)	(Year)	(Million $)	(Name)
300E #1	Seaplane	2026	$19	FTA Replacement Funds: Intintolli
300E #2	Seaplane	2027	$19	FTA Replacement Funds: Mare Island
149E #5	Berkeley	2027	$8	TBD
Hydrus Repower	Oakland/Alameda	2027	$9	TBD
149E #4	Berkeley	2028	$8	TBD
Cetus Repower	Oakland/Alameda	2028	$9	TBD
Argo Repower	Oakland/Alameda	2029	$9	TBD
Carina Repower	Seaplane	2030	$9	TBD
149E #1	Treasure Island / Mission Bay	2025	$8	FTA
149E #2	Treasure Island / Mission Bay	2025	$8	TIRCP
149E #3	Treasure Island / Mission Bay	2025	$8	TIRCP

Opportunity for Operating Cost Savings

Terminal electricity consumption was converted to equivalent diesel fuel use in the table below.

Terminal	Consumption	Diesel Fuel Use Abated	Equivalent Cost of Fuel: Worst Case Electricity Tariffs	Equivalent Cost of Fuel: 30% Demand Charge Reduction with BESS
	(GWh/yr)	*(Thousands of Gallons)*	*($/gal Equivalent)*	*($/gal Equivalent)*
S.F. Downtown	27.6	1840	5.54	4.29
Treasure Island	3.1	210	4.25	3.43
Oakland	8.7	580	7.76	6.26
Alameda Seaplane	7.1	470	3.42	2.99

Implementation

- Grants secured: $94.1 million
- Positive outlook for future grants
- Alignment with WETA Business Plan, RM3 Five-Year Plan
- On-Going Work Program
  - Downtown San Francisco Terminal Electrification
  - Alameda Facilities Local Grid Extensions
  - Vessel Construction
  - Passenger Float Battery and Charging System Design

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Item 12: Proposed FY24 Budget

WATER EMERGENCY TRANSPORTATION AUTHORITY

San Francisco Bay Ferry

FISCAL YEAR 2023/24 BUDGET PRESENTATION

Board of Directors Meeting
May 4, 2023

BUDGET ACTIONS

- May meeting
  - Presentation and Review of Draft

- June meeting: Approval of Fiscal Year 2023/24 Budget
  - Includes required resolutions
  - Authorizations for funding agencies

OVERVIEW

Expense Authorization: $143.4 million

FY 2023/24 Proposed Budget (in millions)		
Operating Budget Expenditures	$	68.4
Ferry Service (Ongoing)		*61.7*
Demonstration Services		*2.7*
Planning and Administration		*3.9*
Capital Projects		75.0
Total Budget Expense	$	143.4

OVERVIEW

Funding : $143.4 million

FY 2023/24 Revenues (in millions)		
Bridge Tolls	$	45.7
Federal Funds		53.5
State Funds		22.5
Local Funds		6.2
Passenger Fares		12.8
Other Funds		2.7
Total Budget Revenue	$	143.4

OVERVIEW

- Last year of COVID Federal Support for Operations
- New Operating and Capital Sources: RM3 and STA
- New Demonstration programs: Hydrogen Vessel and Oakland Estuary
- New Staff: To support RM3 capital program, customer-focused improvements, and service expansion

OVERVIEW

Ongoing Challenges in FY 2023/24:

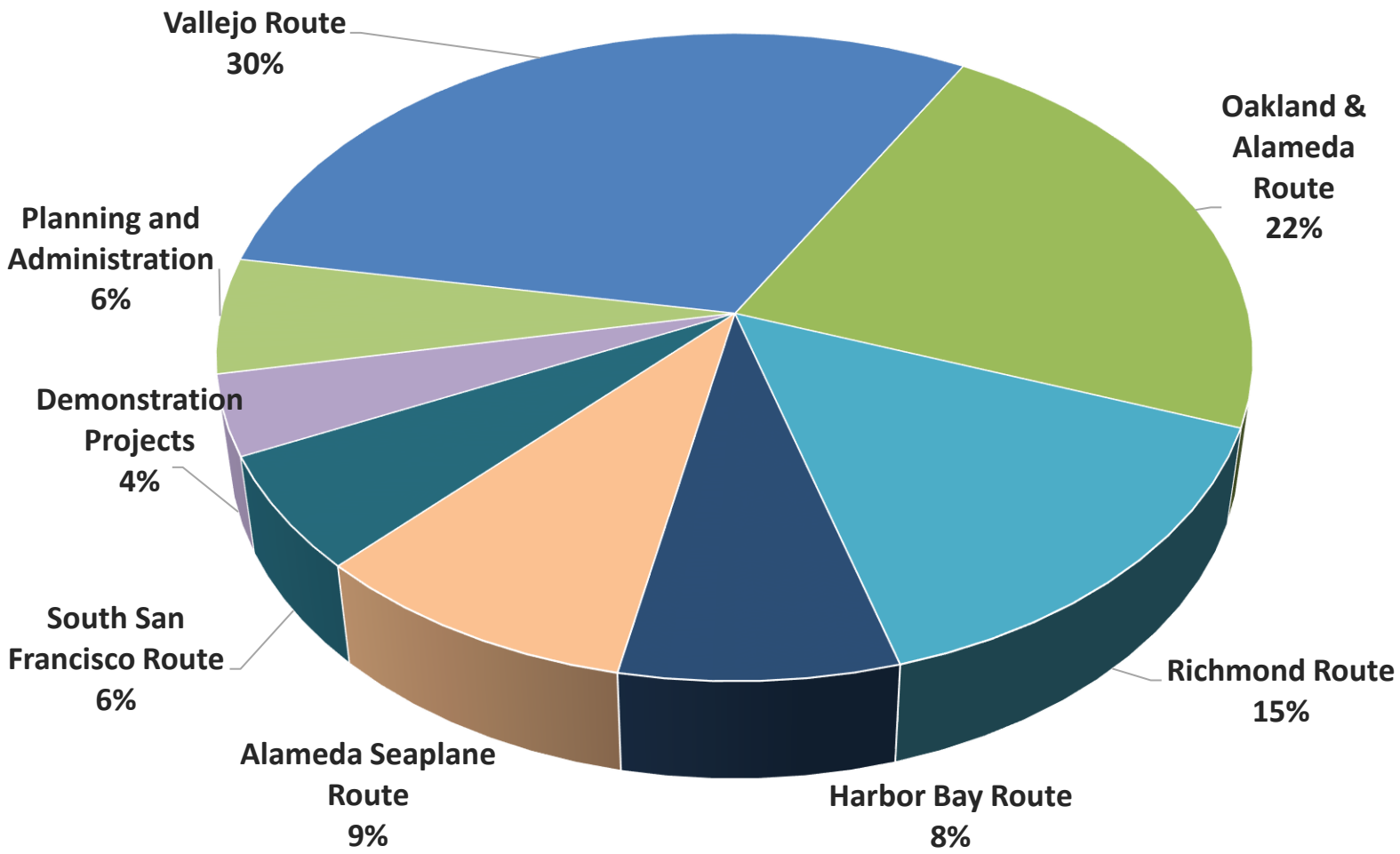
- Significant industry-wide increases in costs since the pandemic just for current services– since 2019 WETA fuel costs nearly double, labor costs up 38%
- Changes in commute patterns plus lowered fares = significant lowered revenue – since 2019 43% reduction in fare revenue

RM3 provides support for now

OPERATIONS BUDGET

$68 Million Proposed

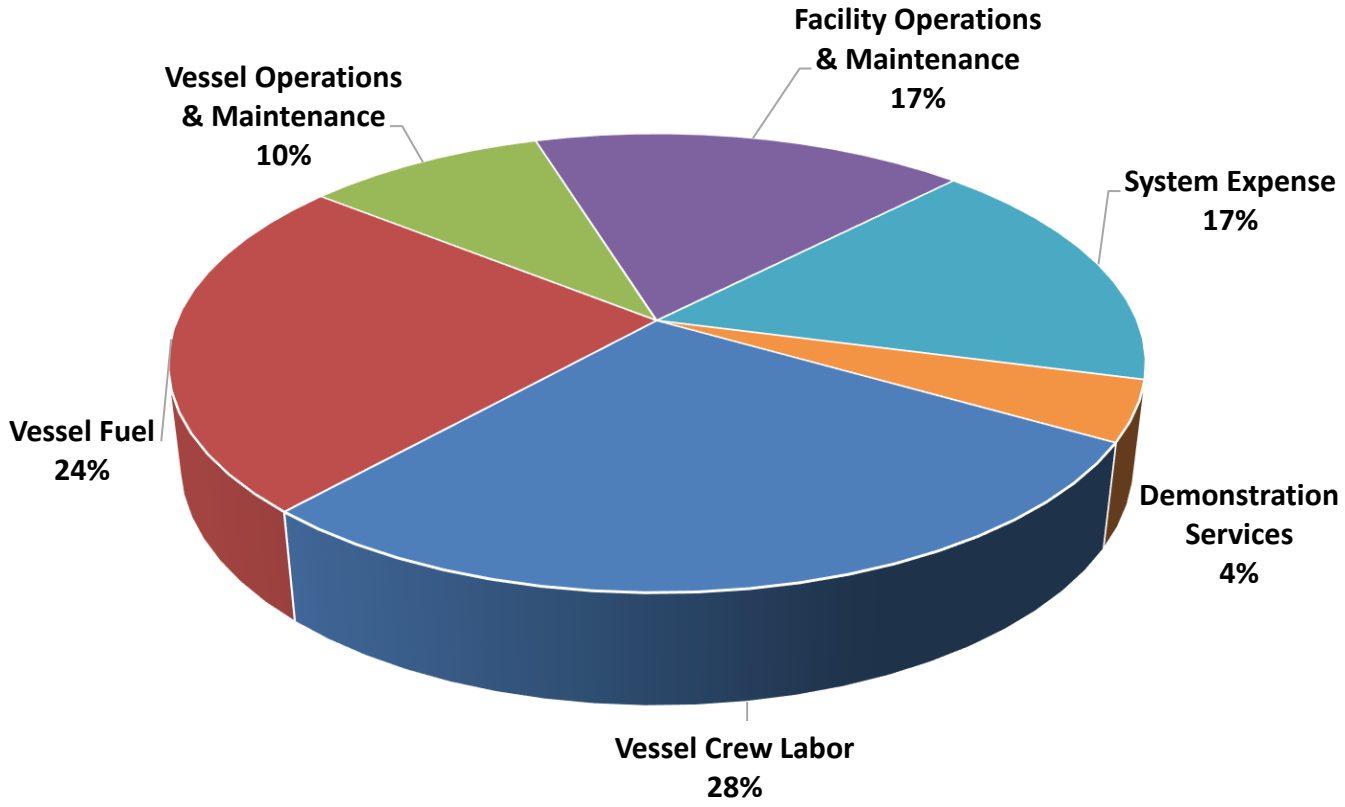
- $64.5 million Ferry Service
- $3.9 million Planning & Administration
- 90% for ongoing service routes



OPERATIONS BUDGET: FERRY SERVICES

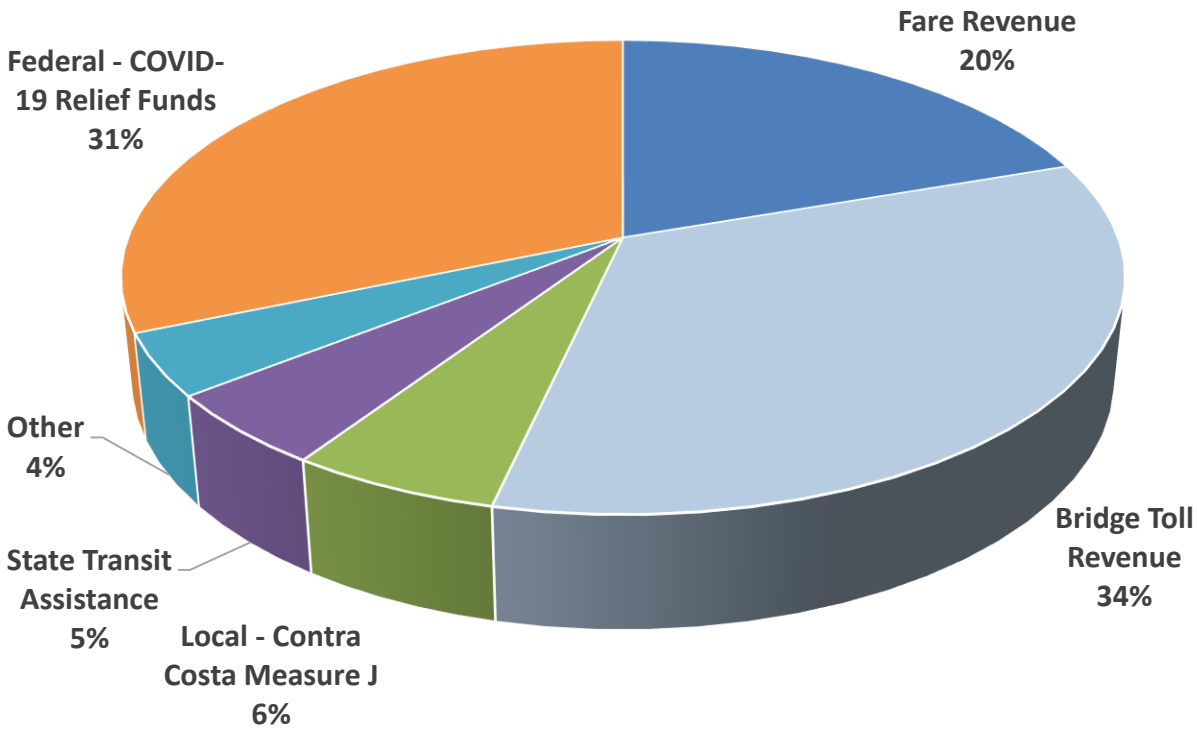
Proposed: $64 million

- $62 million for six current service routes
- $3 million for Demonstrations
  - Sea Change Hydrogen
  - Oakland Estuary
- Increase of 9% over prior year for ongoing routes



OPERATIONS BUDGET: FERRY SERVICES

Revenue Sources: $64 million



OPERATIONS BUDGET: FERRY SERVICES

Ferry Services (Regular Routes) - Labor and Fuel: $34 million

- Labor+Fuel comprises over 50% of service budget
- Fuel cost increased last year 40%
- Continuing to budget at the higher level $4.20/gallon (no further increases)
- Labor contracts resulted in 6% increase ($1 million) on top of prior year increases (13% prior year/year increase)

OPERATIONS BUDGET: FERRY SERVICES

Vessel Maintenance and Repair: $6 million

- Cost increases of $1 million over prior year (22%)
- More vessels in service – 17 total
- Investments in spare parts and preventive repairs to improve reliability
- Inflationary increases to most aspects of maintenance
- One-time investments related to wifi, boat fueling process

OPERATIONS BUDGET: FERRY SERVICES

Facilities: $11 million

- Engineering labor = more than half of facility costs
- Increase of $1.4 million (14%) over prior year associated with two separate increases:
  - Wage increases for engineering staff
  - Six new “fuelers” to improve maintenance efficiency and crew availability -- made possible by RM3

OPERATIONS BUDGET: FERRY SERVICES

System Expenses: $10.8 million

- Budget increase of $1.6 million over prior year (18%)
- Additional WETA staff costs to pay for COLAs, improved communications, better cost analysis
- One time investment in a new Bay Ferry/WETA website
- Increase in dispatcher pay for better recruiting and retention
- Clipper costs = double for running two systems prior to Clipper 2

OPERATIONS BUDGET: FERRY SERVICES

Demonstration Projects for Ferry Services

- **Hydrogen Ferry Demonstration Project: $1.7 million**
  - World's first commercial hydrogen fuel cell passenger ferry, assumed to begin in June and continue for five months
- **Oakland Estuary Shuttle: $1 million**
  - Service connecting Alameda's northern waterfront to Jack London Square in Oakland operated by a private contractor for a trial period during the fiscal year

PLANNING AND ADMINISTRATION

Proposed $3.9 million in FY 2023/24:

Planning and Administration	Proposed Budget	
	Total	% of Total
Salaries, Wages & Fringe Benefits	$ 2,437,349	62%
Professional / Contract Services	2,046,600	52%
Info. Tech., Office Needs	148,800	4%
Utilities, Comm, Insurance	57,208	1%
Dues, Memberships, Miscellaneous	123,440	3%
Leases, Rentals and Fees	267,040	7%
Transfer of Administrative Expense	(1,135,242)	-29%
Total	$ 3,945,194	

PLANNING AND ADMINISTRATION

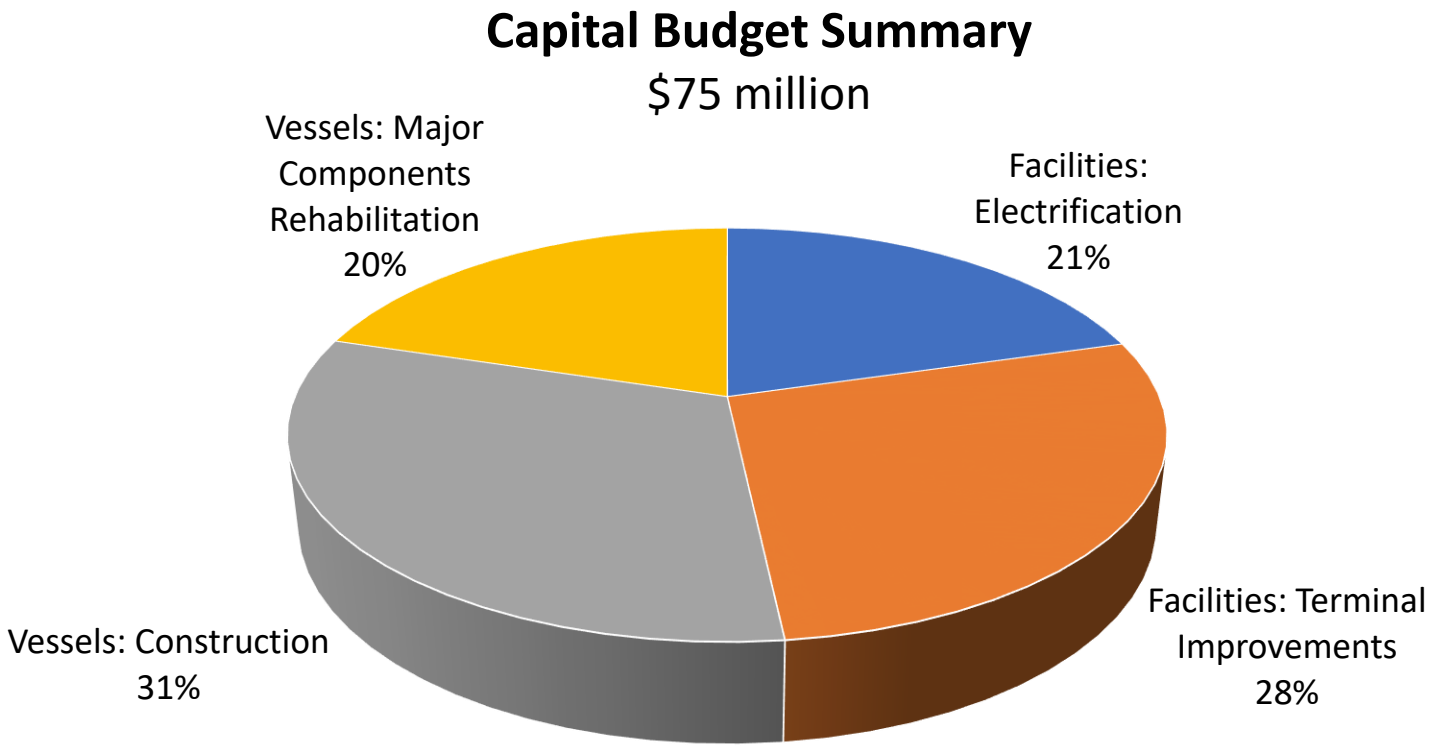
Increased cost of $352,000 (7%) over prior year, made possible by RM3:

- Increased staff in management, operations and capital planning:
  - Accountant
  - Administrative Specialist
  - Communications Specialist
  - Two Project Managers for capital projects
- Proposed COLA of 5.3% reflects Bay Area CPI

PLANNING AND ADMINISTRATION

- New Project Managers to manage significant new capital project needs
- 15 ongoing and 12 new projects
- Planning work on Business Plan and future service vision, RM3-related operating and capital plans, and preparation for new Operating Contract process
- Increased investments in HR, community memberships, DBE work

CAPITAL PROJECTS



CAPITAL PROJECTS

Proposed spending of $75 million

- 15 ongoing projects
- 12 additional projects

- Current year spending delayed and carried over to new budget -- primarily large vessel projects
  - Solano/Bay Breeze Replacements: Significant Shipyard delays due to COVID supply chain and labor shortages
  - Intintoli and Mare Island replacements: 1st large electric vessels delayed to allow for electric system integration

CAPITAL PROJECTS

Capital Budget includes significant electrification expense:

- Five Electric Vessels: TIRCP and FTA funded
- Waterside (Float) Electric Infrastructure: TIRCP funded
- Shoreside Electrification: RM3 and future TIRCP

Also includes new RM3 initiatives (planning/design):

- Mission Bay
- Berkeley
- Oakland Expansion
- Temporary (Emergency) Floats

RESERVES

Operating Reserve: Held in STA Account at MTC $13.3 million

Emergency/Cashflow Reserve: Held in WETA LAIF Account $10 million

Capital Reserve: Held in MTC RM1 Accounts: $25 million (used for matching federal funds)