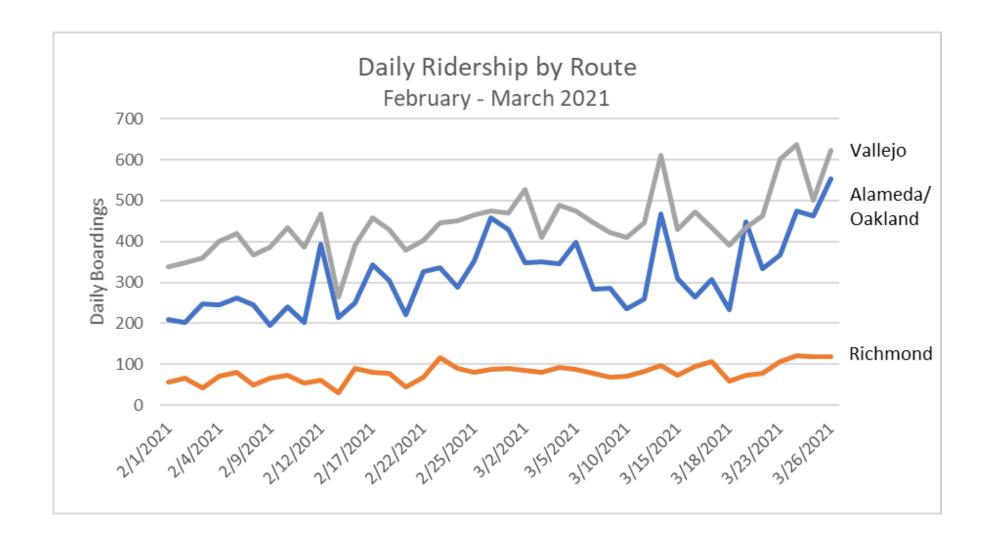
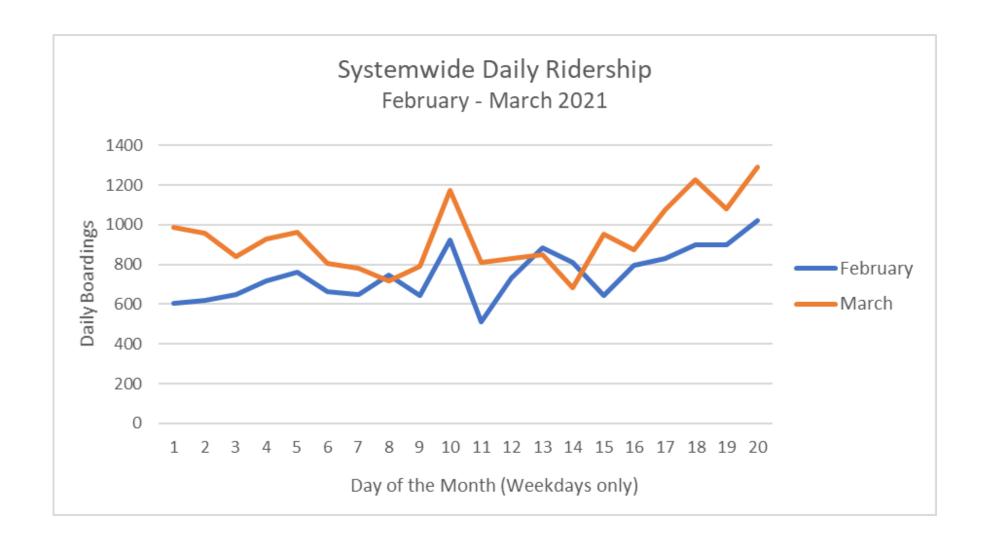
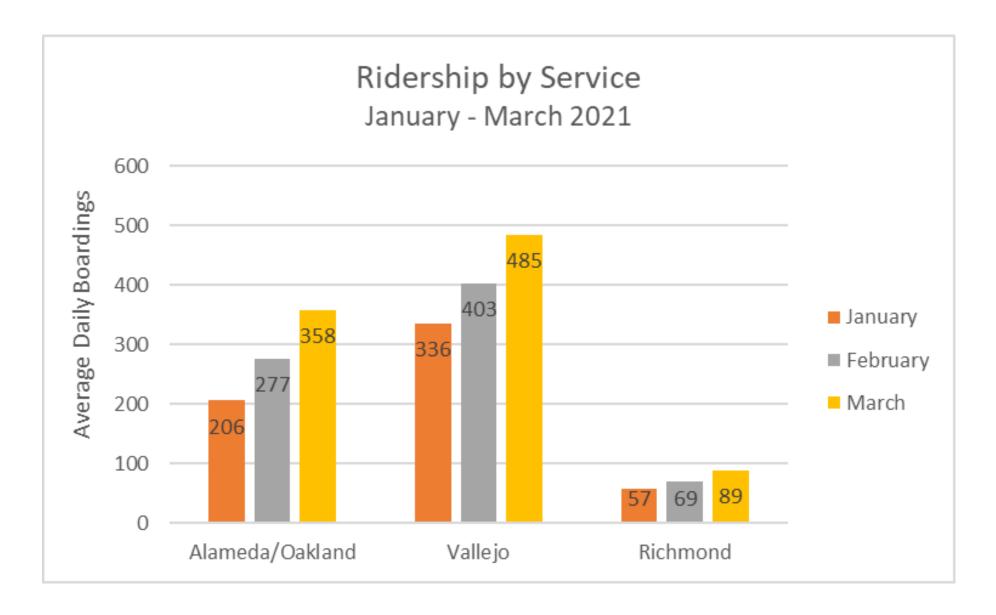


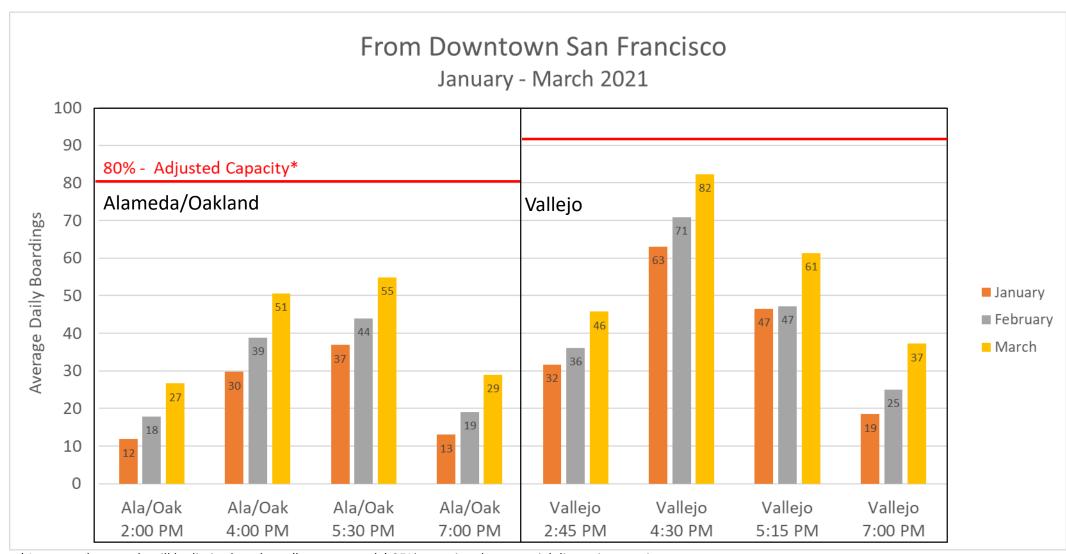
Presentations for April 1, 2021 Board of Directors Meeting











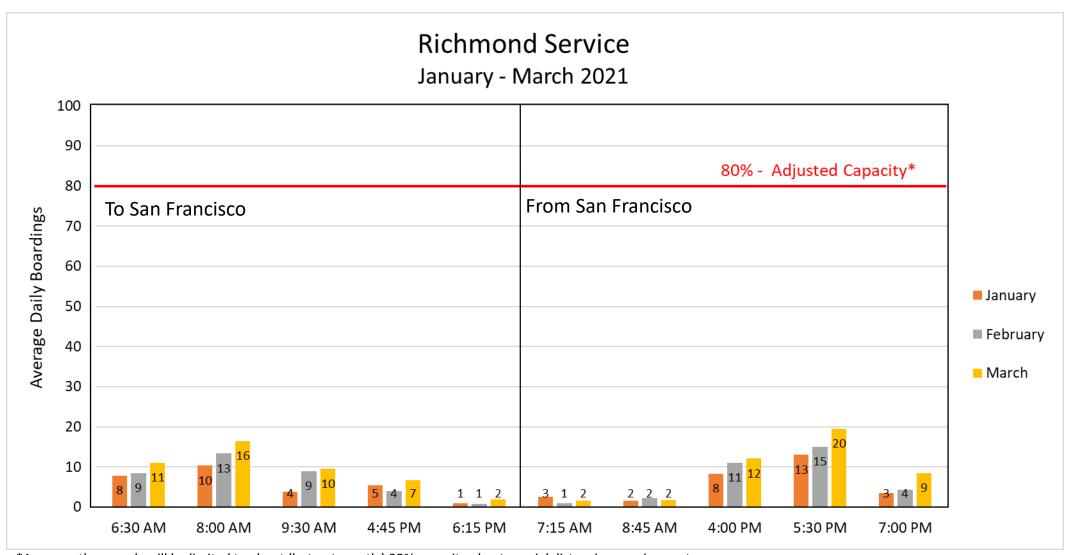
^{*}Assumes the vessels will be limited to about (but not exactly) 25% capacity, due to social distancing requirements





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2021 WETA On-Board Passenger Survey

Board of Directors Meeting April 1, 2021

WETA On-Board Surveys

Past Surveys

- Every three years (2011, 2014, 2017)
- Postponed the 2020 survey due to COVID

Survey Logistics

- Sampled all three WETA routes on February 24th and February 25th 2021
- 267 completed surveys (Compared to 1,944 in 2017)
- Provided in English, Spanish, and Simplified Chinese
- This survey captures current WETA riders. It does not capture WETA riders who have not been riding during the pandemic, or future WETA riders

Next Steps

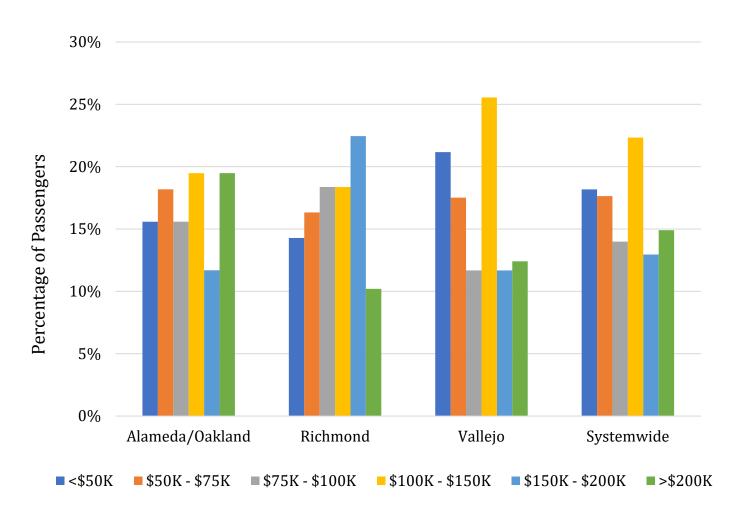
- The following slides are preliminary data from the survey
- The Final Survey Report will be published and posted online in April
- Conduct another survey once significant ridership returns (likely Fall 2021)

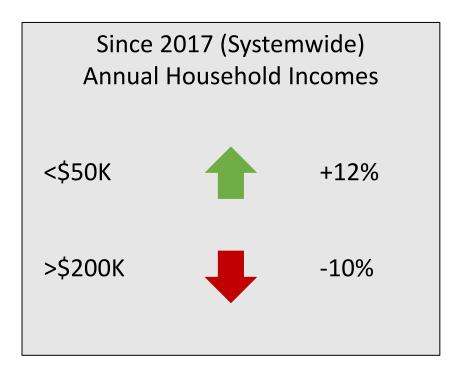
Income Levels



Higher percentage of lower-income riders vs 2017

Fewer office workers. More essential workers

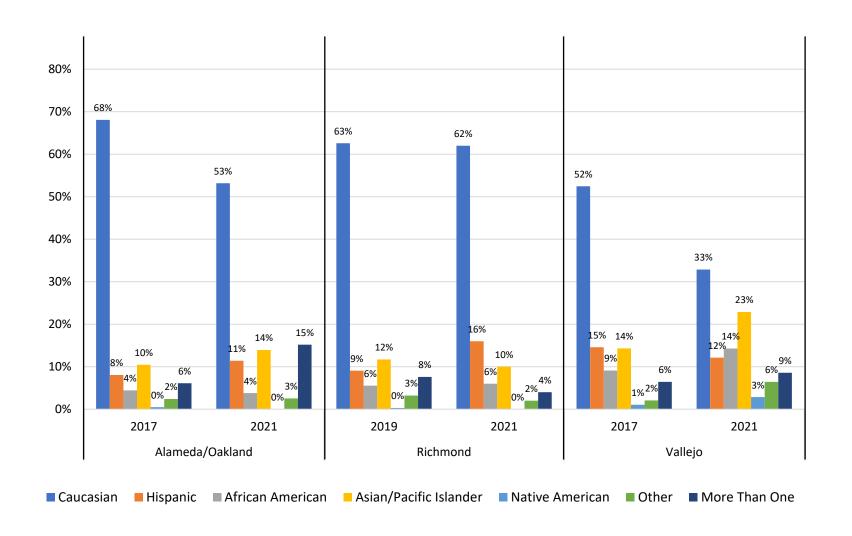




Racial and Ethnic Demographics

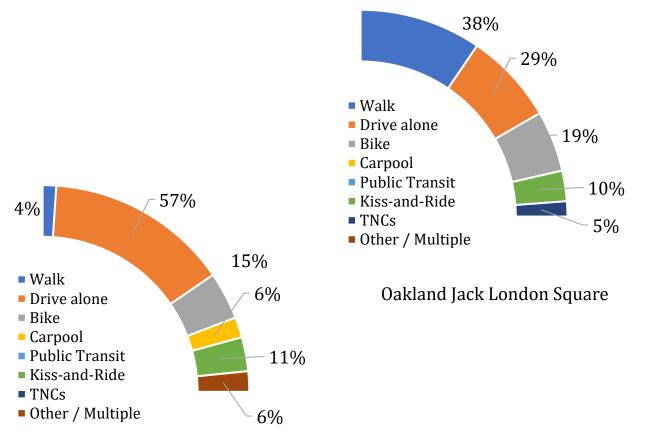
Compared to Past Surveys

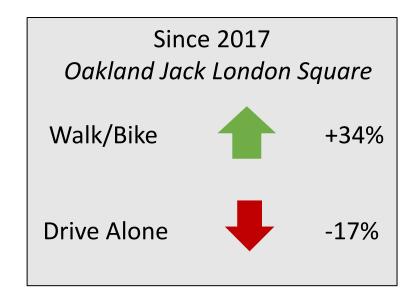
- Higher percentage of riders identified as Hispanic, African American, Asian/Pacific Islander, Native America, Other, or More Than One Race
- Lower percentage of riders identified as Caucasian



Accessing Alameda Main St and Oakland Terminals

- No significant change in access to Alameda Main Street. Drive alone still the primary mode.
- Walk and bike access share to the Oakland terminal increased 34% from 2017
 - New residential developments near the terminal

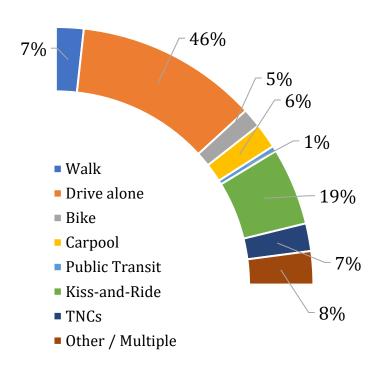


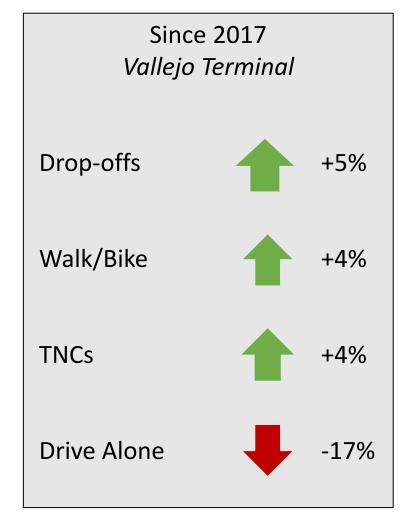


WATER EMERGENCY TRANSPORTATION AUTHORITY

Accessing the Vallejo Terminal

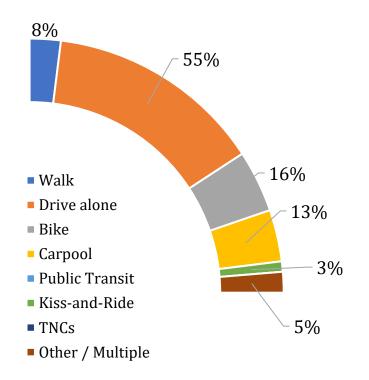
- Significant drop in drive alone access share
- Increase in drop-offs, walking, biking, and ridesharing/TNCs
 - New residential developments near the terminal





Accessing the Richmond Terminal

- Increase in driving alone, with decreases in walking, carpooling, drop-offs, and public transit
- Compared to Vallejo and Oakland which have seen drops in drive alone access

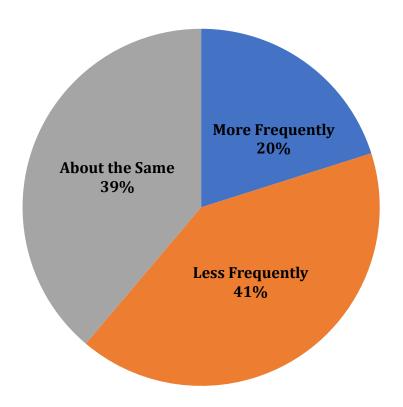


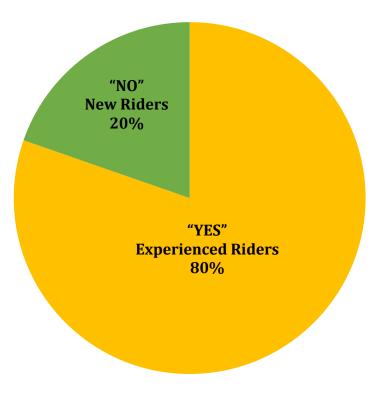


How has COVID affected your travel?

Since March 2020,

- 20% of surveyed riders are new to the ferry
- 41% of surveyed riders have used the ferry less frequently
- 20% of surveyed riders have used the ferry more frequently



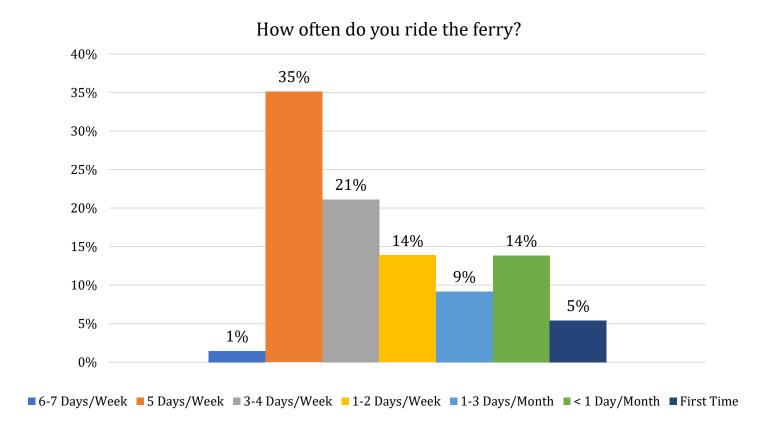


Did you ride the Ferry prior to March 2020?

WATER EMERGENCY TRANSPORTATION AUTHORITY

How often do our riders use the Ferry?

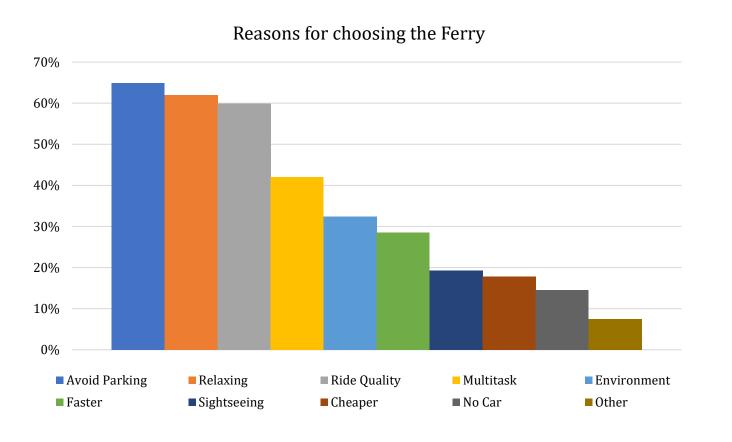
A smaller percentage of riders are using the ferry at least 5 days per week than in the past, down 7% from 2017

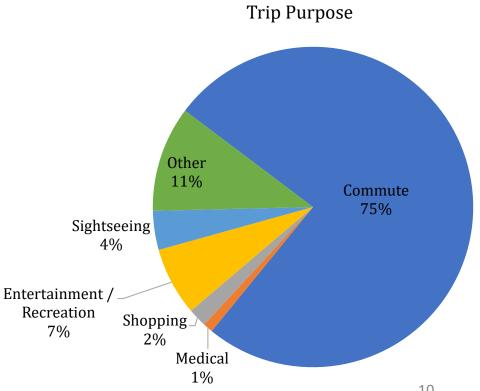


Why do our riders use the Ferry?

Commute share was up while recreational trips were expectedly down.

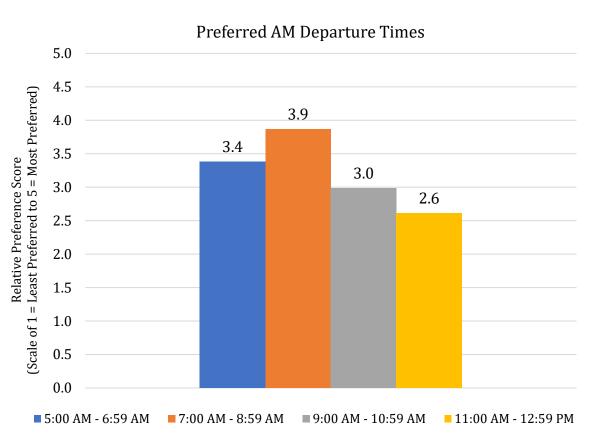
Despite lower traffic levels during the pandemic, riders still ranked "Avoid Traffic/Parking" as their top reason for riding the ferry. Overall, reasons for riding the ferry did not change significantly from 2017.

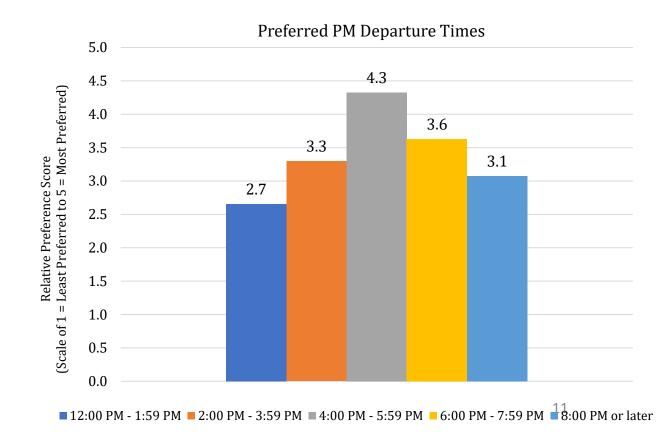




How will you ride after the Pandemic?

- 84% of surveyed riders plan to use the ferry the same amount of more in 2021
- Desire for all-day service, including midday and late-night trips

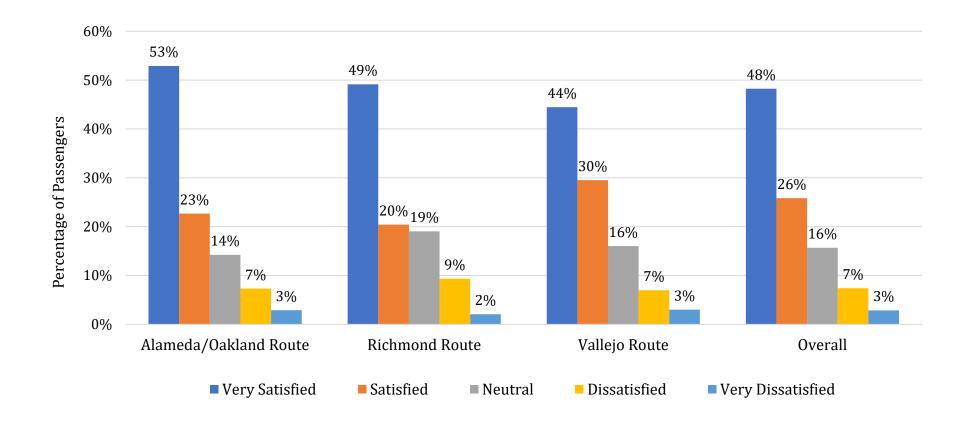




74% of riders are Satisfied or Very Satisfied with the Ferry, down from 88% in 2017

Primary Compliments – Ride quality, helpful crews, and clean vessels

Primary Concerns – Low service levels, lack of late-night service, lack of weekend service, and high fares





Board of Directors Meeting April 1, 2021



Program Goals

- Primary objective is to increase ridership
- Restore service, build system back better
 - Equitable, broad market appeal
 - > Integrated with regional network
- Temporary program for FY 2022
- Create pathway to re-establishing financial sustainability as long-term core system goal



Challenges

- When will recovery start and how fast it will progress?
- Evolving marketplace, how will new workplace policies alter commute patterns?
- Strength of regional economy?
- How soon will congestion return to bridge and BART?
- Other unknowns?



13 Core Principles

- Adopted by WETA Board at February 2021 meeting
- Focus areas:
 - Service
 - > Fares
 - Coordination
 - Process



Proposed FY 2022 Pandemic Recovery Program

- Public outreach process authorized by WETA Board at March 2021 meeting
- Program highlights:
 - > Service restart and enhancement
 - New service design approach
 - Lower fares
 - Regional integration

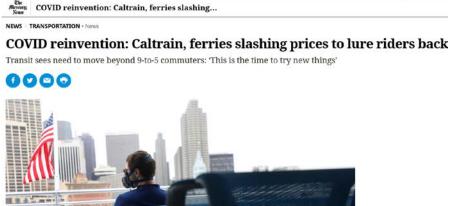


Media Outreach

- Major stories in Chronicle, East Bay Times
- Local television and radio coverage









Community Outreach

- Partner toolkit sent to 33 local community organizations
- Distributed to Bay Area legislative delegation and local elected officials from communities we serve
- Social media campaign resulted in 52,000 impressions and 960 engagements
- Appeared in multiple e-blasts, newsletters and more



Passenger Outreach

- Postings on all vessels and at Vallejo Ferry Ticket Office
- 2 BayAlerts sent to approx. 10,000 former ferry riders
- Virtual Open House held on March 16
 - A main presentation followed by breakout Q&A sessions by route or route cluster
 - > 23 participants with lots of questions and feedback



Public Comment Takeaways

- Comments via email, social media (91)
 - Covered multiple areas
 - ➤ Service plan: Support 40; Oppose 0
 - ➤ Fare change: Support 18; Oppose 0
 - ➤ Support weekend service 17
- Common questions from virtual open house (49)
 - What will be the route schedule?
 - When will the service start?



Public Comment Snapshots

"As someone who lives in SF without a car, I was thrilled to see your plan to actively come back with lower fares and expanded service".....

"Please add off commute hours to the Richmond ferry."

"I am a Richmond resident who works in SF, and I commute across the Bay primarily via the ferry"....

"Please resume Harbor Bay ferry services during peak hours."

"Happy to hear that the Harbor Bay Ferry Service is planned to begin service again"...

"Please bring back the weekend ferry. We use the ferry often and really miss it!"

"I support the proposed changes that are being considered by WETA. In particular more routes and lower fares"....



Program Revisions

- Weekend service
 - > Oakland, Alameda
 - Vallejo
 - > Richmond
- Earlier launch Harbor Bay
- Short Hop fare adjustment

Short Hops	Current Fares	Initial Proposed Fares (March 2021)	Revised Proposed Fares (April 2021)
Clipper	\$1.70	\$2.25	\$1.00
Discount Clipper	\$0.80	\$1.00	\$0.50
Paper Ticket	\$1.70	\$2.75	\$1.25
Discount Paper Ticket	\$0.80	\$1.25	\$0.50



Ridership and Financial Analysis

Scenario	Scenario Description	Modeled Fare Revenue (\$)	Modeled Ridership	Estimated Farebox Recovery
1	Current Fares (Base case)	9,317,000	1,270,000	21%
2	Proposed Fares (Base case)	8,268,000	1,442,000	18%
3	Current Fares (Lower bound)	2,973,000	402,000	7%
4	Proposed Fares (Lower bound)	2,636,000	459,000	6%

- Anticipated impacts of implementing proposed fares:
 - > 13-14% increase in ridership
 - > 11% decrease in fare revenue
- Preliminary service plan cost budget estimate = \$45 million



Marketing and Community Outreach Plan

- Aggressive broad-based marketing plan in development
 - > Out-of-home billboard advertising (freeway and within communities)
 - Radio advertising (English and Spanish)
 - > Digital (social, search and video) advertising to reach younger demographics
 - Activation events to earn attention and build goodwill



Marketing and Community Outreach Plan

- Community outreach plan in development
 - Working with consultants with local expertise to tailor broad-based campaign to local communities (Vallejo, Richmond, Oakland and Alameda)
 - > Goal is to reach new riders for whom cost or schedule was previously a barrier
 - Raise awareness of Clipper START discount
- Full marketing and community outreach plan to be presented in May

WATER EMERGENCY TRANSPORTATION AUTHORITY

Overview of CARB Commercial Harbor Craft Regulations and WETA Alternative Compliance Pathway Plan

Board of Directors Meeting April 1, 2021

Presentation Overview



- California Air Resources Board's (CARB) proposed amendments to the Commercial Harbor Craft (CHC) regulations
- In-use and new vessel requirements
 - Diesel Emissions Control System
- Status of WETA fleet
- How will the CARB regulations affect WETA?
- WETA's Alternative Compliance Pathway (ACP)
 - Zero emission vessels and infrastructure study
 - Cost and funding opportunities
- Future actions

CARB's Proposed Amendments - CHC Regulations WETA



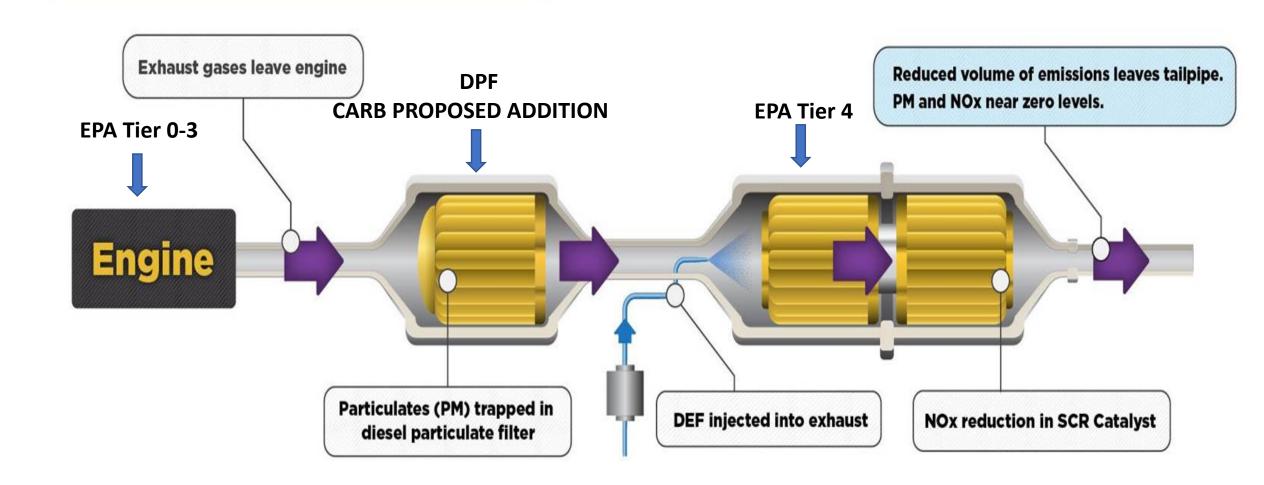
- CARB is amending the existing CHC regulations to attain more emission reductions from the maritime industry
- If approved, regulations would start in 2024 with phased implementation through 2037
- Proposed amendments include:
 - Zero-emission vessel requirement for short routes (less than 3 miles)
 - Idling restrictions at terminals
 - Opacity testing requirements
 - Operating reporting requirements
 - \$1.9 million in new fees to be paid by the industry
 - In-use and new vessel requirements: cleaner engines and emission reduction systems

In-use and New Vessel Requirements



- In-use vessels, including all WETA vessels, are required to be repowered with Tier 4 engines and a diesel particulate filter (DPF) referred to as the Tier 4 + DPF standard.
- Alternative Compliance Pathway (ACP):
 - Alternatively, vessel owners can develop an ACP that achieves equal or greater emission reductions as the Tier 4 + DPF standard.

Diesel Emissions Control System



Status of WETA Fleet

Vessels	Qty	Tier Status	Primary Route	Can Accommodate DPF?	Compliance Year	End of Useful Life*	
Existing Fleet (15)							
Hydrus Class	4	Tier 3	Alameda	?	2026	2044-2046	
Pyxis Class	3	Tier 4	Vallejo	?	2027	2045-2047	
Gemini Class	4	Tier 2 (Tier 4: 2022)	SSF/Richmond	Yes	2024	2035-2037	
Peralta	1	Tier 2	Harbor Bay	?	2024	2030	
Bay Breeze	1	Tier 2	Harbor Bay/Alameda	?	2024	2020	
Intintoli & Mare Island	2	Tier 2	Vallejo	?	2024	2024-2025	
Under Construction (4)							
Dorado 1 & 2	2	Tier 4	Universal	?	2028	2048-2049	
Dorado 3 & 4	2	Tier 4	Universal	Yes	2029	2049-2050	
Future (1)							
Mission Bay	1	Electric	SF-Mission Bay	N/A	TBD	TBD	
*25 year useful life plus 2 years for construction							

^{*25} year useful life plus 2 years for construction

How will the CARB Regulations Affect WETA?

Hydrus Class (4)

Compliance Year: 2026

 Convert from Tier 3 to Tier 4 + DPF

Cost: \$46M

Pyxis Class (3)

Compliance Year: 2027

Install DPFs

Cost: \$29M

Gemini Class (4)

Compliance Year: 2024

Install DPF

Cost: \$2.5M

Peralta (1)

Compliance Year: 2024

- Apply for 6 yr extension
- Useful life ends in 2030
- Replace with CARB compliant vessel

Cost: FTA Funded

How will the CARB Regulations Affect WETA?

Bay Breeze (1)

Compliance Year: 2024

- Useful life ends in 2024
- Replace with CARB compliant vessel

Cost: FTA Funded

Mare Isl. & Intintoli (2)

Compliance Year: 2024

- Useful life ends in 2024 & 2025
- Replace with CARB compliant vessel

Cost: FTA Funded

Under Construction

Dorado 1 & 2 (2)

Compliance Year: 2027

Install DPFs

Cost: \$21M

Dorado 3 & 4

(2)

Compliance Year: 2028

Install DPFs

Cost: \$3M

Future

Mission Bay (1)

All Electric Vessel

Cost: Funded

Total Cost \$101.5M

WETA Alternative Compliance Pathway



- Preserve flexibility/minimize risk
- Availability of DPF technology
- Cost and funding opportunities
- Advancement of zero emission technology
- Cost effective?
- Operationally feasible?

WETA's ACP Plan

Hydrus Class (4)

Convert to zero emissions

o **Hydrus: 2030**

o Cetus: 2031

o Argo: 2032

o Carina: 2033

Cost: \$25M

Pyxis Class (3)

Continue to operate until the end of useful life in 2045- 2047

Cost: \$0

Gemini Class (4)

Install DPF in 2024-26

Cost: \$2.5M

Replace with zero emission vessels

o Gemini: 2035

o Pisces: 2036

o Scorpio: 2036

o Taurus: 2037

Cost: FTA funded

Peralta (1)

Continue to operate until end of useful life in 2030

Replace with CARB compliant vessel

Cost: FTA funded

WETA's ACP Plan

Bay Breeze (1)

Retire at end of useful life in 2024

Replace with CARB compliant vessel

Cost: FTA funded

Mare Isl. & Intintoli (2)

Retire at end of useful life in 2024 & 2025

Replace with CARB compliant vessel

Cost: FTA funded

Under Construction

Dorado 1 & 2 (2)

Continue to operate until the end of their useful life 2048-2049

Cost: \$0

Dorado 3 & 4

(2)

Install DPFs

Cost: \$2M

Future

Mission
Bay
(1)

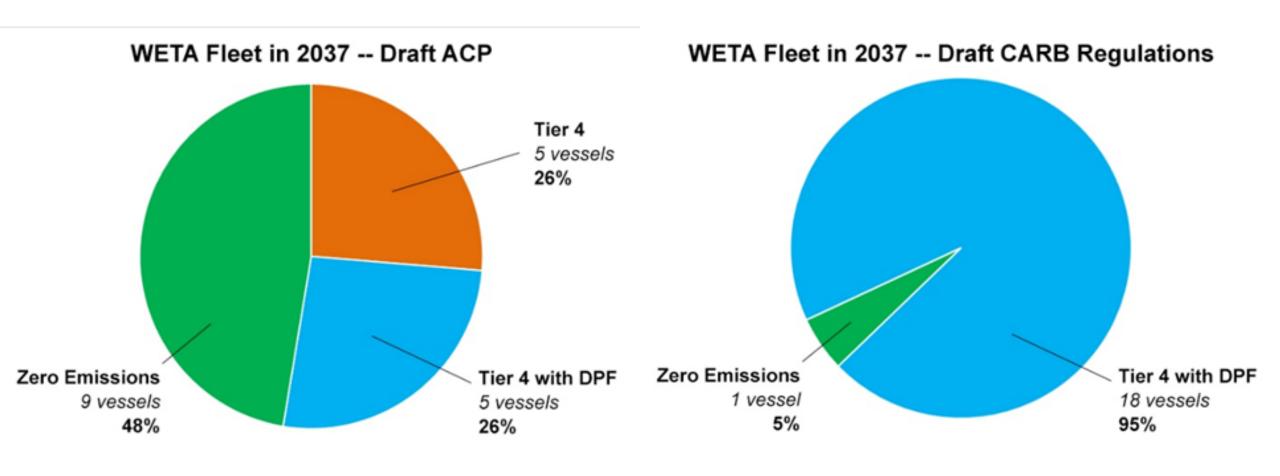
All Electric Vessel

Cost: Funded

Total Cost \$29.5M

WETA ACP vs CARB Regulations





Cost and Funding Opportunities



- No funds are identified for the work required under CARB's proposal
- The majority of the cost of the vessel work in WETA's ACP plan is eligible for Carl Moyer funding
- Shoreside infrastructure costs are unknown at this time

	CARB's Proposal	WETA Draft ACP
Total vessel cost	\$101.5M	\$29.5M
Eligible for Carl Moyer funds	\$0	\$25.3M
Shoreside infrastructure cost	\$0	\$?
Potential Funding Gap	\$101.5M	\$?

Shoreside Infrastructure Study



- Shoreside infrastructure study started in March 2021
- Goal of the study is to evaluate existing infrastructure and capacity to determine electric needs to support zero emission vessels
- Initial phase: Downtown SF Terminal, Central Bay Operations Facility and Alameda Main St Terminal
- All other existing WETA terminals and expansion terminals will be evaluated in subsequent phases
- Retrofitting existing WETA vessel and construction of new vessels cannot be fully defined until initial infrastructure study is complete

Future Actions



Milestone	Date
CARB Releases revised regulatory language	March 2021
Agency comment on revised regulatory language	April 16, 2021
Shoreside Infrastructure Study Board presentation	June/July 2021
Interim findings of Shoreside Infrastructure Study	August 2021
Completion of Shoreside Infrastructure Study	Fall 2021
CARB 45-day public comment period	September 20, 2021
CARB Commission meeting to consider approval of proposed regulations	November 4, 2021
WETA Board consideration of fleet plan based on study results and regulations	Early 2022