



2016 SHORT RANGE TRANSIT PLAN

San Francisco Bay Area Water Emergency Transportation Authority

FY2015-16 to FY2024-25

February 2016

Federal transportation statutes require that the Metropolitan Transportation Commission (MTC), in partnership with state and local agencies, develop and periodically update a long-range Regional Transportation Plan (RTP), and a Transportation Improvement Program (TIP) which implements the RTP by programming federal funds to transportation projects contained in the RTP. In order to effectively execute these planning and programming responsibilities, MTC requires that each transit operator in its region which receives federal funding through the TIP, prepare, adopt, and submit a Short Range Transit Plan (SRTP).



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I EXECUTIVE SUMMARY

I.1 SRTP BACKGROUND AND PURPOSE

I.1.1 Purpose of the Short Range Transit Plan

Federal statute requires the Metropolitan Transportation Commission (MTC), in partnership with state and with local agencies, to develop and periodically update a long-range Regional Transportation Plan (RTP), and a Transportation Improvement Program (TIP) which implements the RTP by programming federal funds to transportation projects contained in the RTP. In order to effectively execute these planning and fund programming responsibilities, MTC, in cooperation with Region IX of the Federal Transit Administration (FTA), requires each transit operator receiving federal transit funding to prepare, adopt, and submit a Short Range Transit Plan (SRTP) outlining its public transit services and related operating and capital costs and projects over a ten-year projection period. These plans are used, amongst other things, to verify compliance with various federal requirements and to validate system capital rehabilitation and replacement projects and needs submitted for funding through separate MTC and FTA grant processes. SRTPs must be updated every three to four years, in order to incorporate new information about performance and finances.

In January 2013, the San Francisco Bay Area Water Emergency Transportation Authority (WETA) adopted its first and only SRTP to date, setting forth an operating and capital improvement plan for FY2011-12 to FY2021-22. In accordance with MTC guidelines for SRTP updates, this document presents the SRTP for the ten-year period from FY2015-16 to FY2024-25. This SRTP provides an overview of WETA's public transit ferry services and recent system performance, as well as a financially constrained ten-year projection of transit operating and capital expenses and revenues for system.

I.1.2 Relationship to Other Plans and Policies

In addition to this SRTP, WETA also carries out planning activities for other agency purposes:

- **Strategic Planning** – Prior to the creation of WETA, its predecessor agency, the Water Transit Authority, developed an Implementation and Operations Plan (IOP) that called for more funding for water-based transit and proposed an ambitious expansion plan for ferry services on the San Francisco Bay. As a strategic plan, the IOP reflects a broad vision for how the agency should position itself over the long term and respond to unanticipated opportunities that may arise. In contrast, an SRTP must be somewhat more conservative, setting out the near-term expectations for what is possible within existing financial resources under current market conditions. WETA is currently preparing a 2016 Strategic Plan, which will present a vision for the next 20 years of ferry service in the San Francisco Bay Area upon adoption by the WETA Board.
- **Annual Budget** – Each year, the WETA Board of Directors reviews and adopts a workplan and annual budget, including a detailed forecast of the planned operating and capital expenses for the year and the use of available revenues to cover those costs. The annual budget is not necessarily derived directly from this SRTP, as conditions may change after the SRTP is adopted.

- **Emergency Response Plan** – Under its enabling legislation, WETA is responsible for coordinating and providing ferry transportation response to emergencies or disasters affecting the Bay Area transportation system. To help develop and maintain an emergency response capability within the organization, WETA has prepared, and periodically updates, an Emergency Water Transportation System Management Plan (EWTSMP) was adopted in 2008, which details the roles and responsibilities of WETA and other actors in the event of a regional emergency. This SRTP is intended to address WETA’s functional role as an operator of public transit services, and does not explicitly detail its activities related to emergency response. WETA is currently updating its emergency response plans, and will be adopting an Emergency Response Plan (ERP) and an internal Emergency Operations Plan (EOP) in 2016.
- **Board-Adopted Policies** – Through its Board of Directors, WETA has adopted a variety of policy documents that provide guidance to staff and stakeholders about how WETA intends to execute its mandates. These policy documents cover topics such as minimum requirements for terminal access, principles for implementing a system-wide fare structure, system expansion, and metrics and standards for managing ferry service performance over time. The text of this SRTP makes reference to the specific policy guidance where relevant. Further details of each adopted policy are available on WETA’s website.

1.2 HIGHLIGHTS OF SRTP

1.2.1 Overview of Transit System

Chapter 2 provides an overall summary of WETA. Topics include a summary of the history and governance structure of the agency, a description of its current organizational structure and management, and a detailed explanation of existing facilities and current services. Separate sections detail each of WETA’s four publicly operated ferry routes, the twelve vessels currently in WETA’s revenue fleet, and the ten different terminal, maintenance, and administrative facilities used to provide the services.

1.2.2 Goals, Objectives, and Standards

Chapter 3 discusses WETA’s Mission and Vision of the agency and defines the set of performance standards that are used to measure and manage the system, together with performance targets for each standard.

1.2.3 Service and System Performance

Chapter 4 provides an evaluation of route-level and system-wide service statistics and performance metrics for a three-year period from FY2012-13 to FY2014-15. During this period, WETA ridership increased by an average of 11% per year, surpassing 2 million total annual passengers for the first time in FY2014-15. System-wide, service levels increased slightly over the three-year performance period, with annual increases averaging 2% per year for vehicle revenue hours and 1% per year for vehicle revenue miles. Due to increasing ridership and relatively stable operating costs, WETA’s farebox recovery ratio for the performance period improved from 44.1% to 52.5% of system-wide operating costs. This section includes an evaluation of other specific statistics and metrics based on both MTC requirements and policy standards set forth by the WETA Board.

I.2.4 Operating Plan and Budget

Chapter 5 provides an overview of the operating costs and revenues anticipated to be available to support WETA’s existing ferry system as well as new expansion services that are planned for implementation during the ten-year period. The plan recognizes the importance of maintaining a core level of existing services while accounting for the new Richmond and Treasure Island expansion services that are anticipated to be operational prior to FY2024-25. The plan also includes a set-aside Operating Reserve with funds equal to two months of total ferry operating expenditures to guard against service disruptions in the event of unexpected temporary revenue shortfall or unpredicted one-time expenses.

Overall, the WETA operating budget is projected to increase from \$34.2 million in FY2015-16 to \$59.7 million in FY2024-25. Of the \$59.7 million in operating costs for FY2024-25, \$54.2 million will be required to sustain WETA’s existing services, taking into account a planned service increase of 7% in vehicle revenue hours and 17% in vehicle revenue miles in FY2016-17 and historical rates of cost inflation averaging approximately 3% per year. The remaining \$5.4million of the FY2024-25 annual operating budget would support the Richmond service, which is anticipated to begin operations in FY2018-19. While operating costs are not yet available for the Treasure Island service, this project is expected to begin operations in FY2021-22 and will be funded entirely through fare revenues and a dedicated source of local operating funds, similar to the Richmond project.

Over the course of the ten-year plan, WETA will entirely exhaust its available operating subsidies on an annual basis, relying upon projected increases in ridership and fares to cover increasing operating costs for existing services. Because existing operating subsidies will be exhausted, both the Richmond and Treasure Island services will be subsidized exclusively by new dedicated sources of local funding. WETA’s ability to increase service levels and meet future demand for ferry service will be restricted until new regional or local sources of operating subsidy are secured. While ridership is projected to continue steady growth during the initial years of the plan, growth rates will eventually slow as vessel and service capacity constraints are reached in later years of the plan.

I.2.5 Capital Improvement Program

Chapter 6 provides an overview of WETA’s capital program needs to support the Operating Plan presented in Chapter 5. The 10-Year Capital Improvement Program (CIP) consists of approximately \$515 million in core capital needs from FY2015-16 to FY2024-25, including four types of projects needed to support WETA’s existing regional program of public transit services and planned expansion projects:

- **Revenue Vessels** – Approximately \$329 million is planned for rehabilitation, replacement, and expansion of WETA’s ferry vessel fleet, which will consist of a total of 18 revenue vessels by FY2024-25.
- **Major Facilities Rehabilitation and Replacement** – Approximately \$17million is planned for rehabilitation and replacement of WETA ferry terminals and berthing facilities, as well as related dredging activities.
- **Terminal Expansion** – Approximately \$93 million is planned for new construction of the new Richmond Ferry Terminal and expansion of the Downtown San Francisco Ferry Terminal.
- **Maintenance Facilities and Equipment** – Approximately \$75 million will be dedicated to complete construction of the North Bay and Central Bay Operations and Maintenance Facilities.

Chapter 6 also describes the Capital Reserve of \$3 million, which is set aside to support unanticipated capital repairs of major systems components. Tables within Chapter 6 provide a high-level summary of each type of capital expense. A more detailed version of the ten-year CIP is presented in Appendix A.

1.2.6 Other Requirements

Chapter 7 summarizes some of the additional information that MTC requires in each SRTP. In particular, it summarizes the status of each WETA project that is a part of the Regional Transit Expansion Program (also known as MTC Resolution 3434 projects) and it presents information about WETA's activities related to environmental justice and public involvement.

1.2.7 Future Expansion Services

Chapter 8 discusses WETA's activities to plan future ferry services beyond those listed within the ten-year Operating Plan. The chapter describes the status of five different routes for which some level of formal planning has been initiated, but which are not currently expected to be ready to commence design, construction, or operations within the ten-year planning horizon of the SRTP. These projects may be able to move forward in the planning process within the next ten years, but at this time, it is not possible to predict when market demand and available funding will make construction and operation of the services financially feasible.

2 OVERVIEW OF TRANSIT SYSTEM

2.1 BRIEF HISTORY

In October 1999, the California state legislature formed the Water Transit Authority (WTA), a regional agency mandated to create a long-term plan for new and expanded water-transit and related services on the San Francisco Bay. The enabling legislation (Senate Bill 428) directed the WTA to prepare an Implementation and Operations Plan (IOP) in order to evaluate ridership demand, cost-effectiveness, and environmental impact of an expanded water transit system. In July 2003, the state legislature approved this plan and authorized the WTA to operate a comprehensive public water transit system of ferries, feeder buses and terminals.

Effective January 1, 2008, a new state law, Senate Bill 976, dissolved the WTA and replaced it with the San Francisco Bay Area Water Emergency Transportation Authority (WETA). This new regional agency is responsible for consolidating and operating public ferry services in the Bay Area, planning new service routes, and coordinating ferry transportation response to emergencies or disasters affecting the Bay Area transportation system. Under SB 976, WETA was directed to assume control over publicly operated ferries in the Bay Area, except those owned and operated by the Golden Gate Bridge Highway and Transportation District. Senate Bill 1093 was subsequently adopted by the state legislature to clarify the transition of existing City of Alameda and City of Vallejo services to WETA and a Transition Plan was developed and adopted by the Board of Directors in 2009.

In October 2010, the Alameda City Council and WETA Board adopted the transition agreement for the Alameda/Oakland and Alameda Harbor Bay services. The transition was completed in April 2011, transforming WETA into a transit operating entity. In October 2011, the Vallejo City Council and WETA Board adopted the transition agreement for the Vallejo service. Transition of the Vallejo Service was completed on July 1, 2012. In addition to operating the three routes transitioned from the cities of Alameda and Vallejo, WETA initiated its first expansion service to South San Francisco in June 2012.

All ferry services operated by WETA—including both the four routes with regular scheduled service, as well as ballpark and other special event services—are now collectively branded and marketed as “San Francisco Bay Ferry.”

2.2 GOVERNANCE

As directed by SB 976 and as amended by SB 1093, the WETA Board is comprised of five members. Members of the board are appointed as follows:

- Three members shall be appointed by the Governor, subject to confirmation by the Senate
- One member shall be appointed by the Senate Committee on Rules
- One member shall be appointed by the Speaker of the Assembly

Each Board member has one vote and is appointed for a term of six years. The Board holds regular meetings once a month and additional meetings as required. Its meetings are subject to prior public notice and are open to the public. The WETA Board of Directors currently consists of the following members:

- Jody A. Breckenridge - Chair, Governor's Appointee

- James Wunderman - Vice Chair, Governor's Appointee
- Anthony J. Intintoli, Jr. - Governor's Appointee
- Jeff DelBono - Senate Committee on Rules Appointee
- Timothy Donovan - Speaker of the Assembly Appointee

2.3 ORGANIZATIONAL STRUCTURE

2.3.1 Management and Staff

WETA staff consists of 13 regular employees including the Executive Director, as shown in the organizational chart in Figure 2-1. The agency is divided into four departments including Operations and Maintenance; Public Information and Marketing; Planning and Development; and Finance and Administration. The current responsibilities of WETA staff include:

- Planning for existing service operations and facilities, as well as potential future service expansion
- General agency administration, including identifying, securing and managing funding for existing and new services
- Management and administration of system operating and maintenance service contractors and system facilities and assets
- Customer service support and marketing the ferry system
- Planning and implementation of emergency response and disaster recovery efforts

2.3.2 Contracted Transportation Services

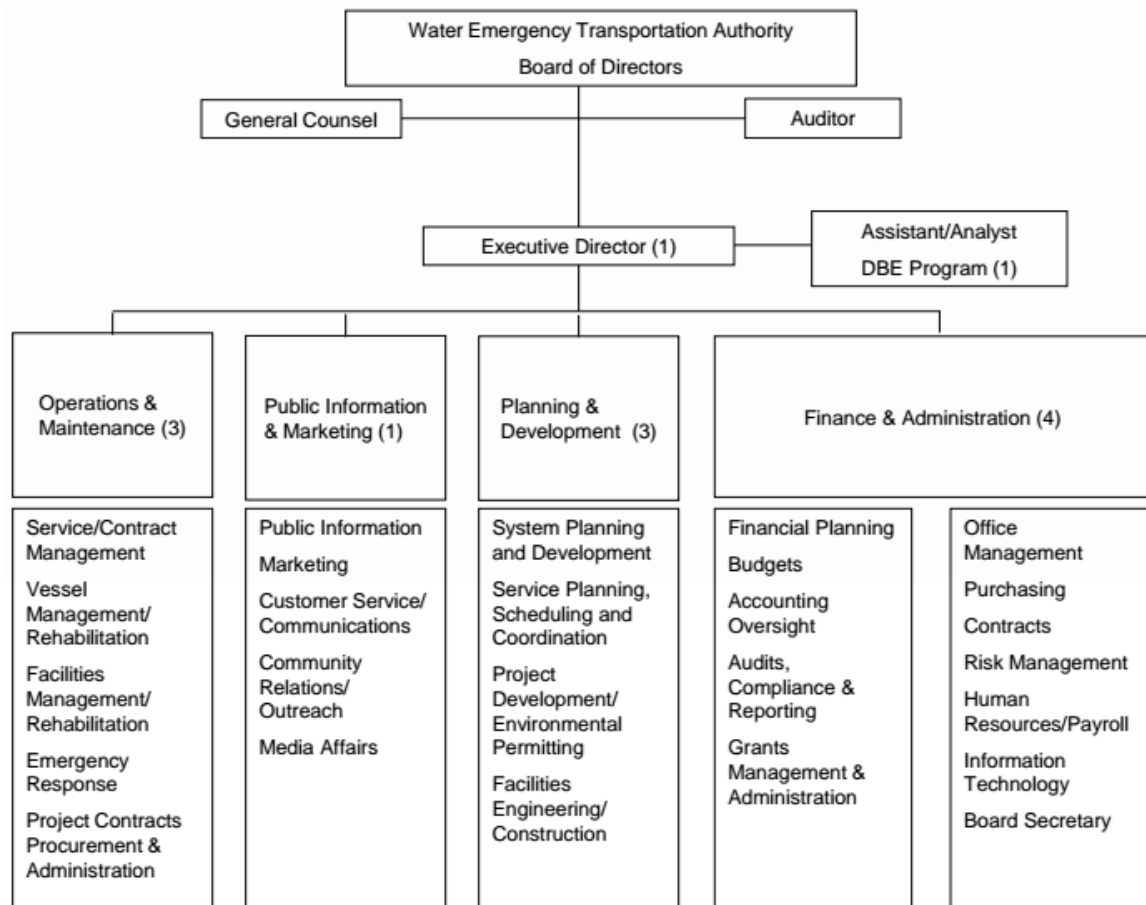
WETA currently contracts with a third party entity for the daily operations and maintenance of its vessel fleet and facilities. Essential duties of WETA's contract operator include vessel operations and basic maintenance; equipment and facilities management; terminal operations; communications, dispatching and notification systems; provision of fueling and lubricants, fare collection; and delivery of on-board services such as food and beverage sales. In 2012, WETA awarded a system operation and maintenance contact to the Blue & Gold Fleet (B&GF) for a contract term of five years with options for up to five additional years (for a total of up to ten years). While WETA plans to continue contracting for its system operations and maintenance, staff will periodically assess the potential advantages of directly providing for some or all of these responsibilities. WETA also contracts directly with Solano County Transit (Soltrans) for operation of the complementary Route 200 bus service from Vallejo to San Francisco. The nature of complementary bus service will also be evaluated periodically as demand changes and other transit services come on line.

2.3.3 Labor Union Representation

WETA employees are not represented by labor unions. Labor unions do represent B&GF employees as follows:

- International Organization of the Masters, Mates and Pilots (MMP)
- Inlandboatmen's Union of the Pacific (IBU)

Figure 2-1 WETA Organizational Chart



2.4 DESCRIPTION OF SERVICES

WETA operates four ferry routes on San Francisco Bay, providing transbay service from the East Bay and North Bay to San Francisco and from the East Bay to South San Francisco. The Oakland/Alameda, Alameda Harbor Bay, and Vallejo routes provide service to the San Francisco Ferry Building with limited service to Pier 41 at San Francisco’s Fisherman’s Wharf. The South San Francisco route provides service between Oakland, Alameda, and Oyster Point in South San Francisco with limited service to the San Francisco Ferry Building. Figure 2-2 illustrates the existing routes within the WETA system.

Figure 2-2 San Francisco Bay Ferry Existing Services



2.4.1 Alameda/Oakland Ferry Service

The Alameda/Oakland Ferry Service was started after the Loma Prieta Earthquake on October 17, 1989, in direct response to the collapse of a section of the San Francisco-Oakland Bay Bridge and the nearly month-long closure that followed. In May 2011 the responsibility and ownership of the Alameda/Oakland service was transferred from the City of Alameda to WETA.

The Alameda/Oakland provides all-day weekday and weekend service between the Alameda Main Street and Oakland terminals in the East Bay and the Downtown San Francisco Ferry Terminal and San Francisco Pier 41 terminal. Local “Short Hop” service is provided between Alameda and Oakland and between Downtown San Francisco and Pier 41. Special event service is provided to AT&T Park/China Basin terminal for select San Francisco Giants games and other events. The service has an annual ridership of approximately 910,000. Figure 2-3 summarizes the Alameda/Oakland service.

Figure 2-3 Alameda/Oakland Route Description

Terminals	Service Hours	Transit Time
Year-Round		
Oakland	May through October Weekdays: 6:00 AM to 9:25 PM	20-45 minutes
Alameda Main Street	Weekends: 8:30 AM to 11:59 PM	
San Francisco Downtown Ferry Terminal	November through April	
San Francisco Pier 41	Weekdays: 6:00 AM to 9:25 PM Weekends: 10:00 AM to 7:50 pm	
Special Event		
AT&T Park/China Basin	One roundtrip for weekday and weekend San Francisco Giants games; other events, as scheduled.	25-30 minutes

2.4.2 Alameda Harbor Bay Service

The Alameda Harbor Bay Ferry Service began service in March 1992 in conjunction development of Harbor Bay Island development near Oakland International Airport. In January 2012 the responsibility and ownership of the Harbor Bay service was transferred from the City of Alameda to WETA.

The Alameda Harbor Bay service provides commute-only weekday service between the Alameda Harbor Bay terminal and the Downtown San Francisco Ferry Terminal. The service has an annual ridership of approximately 265,000. Figure 2-4 summarizes the Alameda Harbor Bay service.

Figure 2-4 Alameda Harbor Bay Route Description

Terminals	Service Hours	Transit Time
Year-Round		
Alameda Harbor Bay	Weekdays: 6:30 AM to 8:55 AM, 4:35 PM to 8:00 PM	25 minutes
San Francisco Downtown Ferry Terminal	Weekends: None	

2.4.3 Vallejo Ferry Service

The Vallejo ferry service began operations in 1986 with limited commuter ferry service to San Francisco and midday service from San Francisco to Marine World/Vallejo. In July 2012 the responsibility and ownership of the Vallejo service was transferred from the City of Vallejo to WETA.

The Vallejo service provides all-day weekday and weekend service between the Vallejo terminal and the Downtown San Francisco Ferry Terminal and San Francisco Pier 41 terminal. Local “Short Hop” service is provided between Downtown San Francisco and Pier 41. Special event service is provided to AT&T Park/China Basin for select San Francisco Giants games and other events. WETA contracts with Soltrans to provide Route 200 bus service as a complement to the

ferry service with early morning, midday and afternoon trips when ridership demand does not justify running a large-capacity ferry and to provide back-up bus service when ferries are unable to provide scheduled service. The service has an annual ridership of approximately 860,000. Figure 2-5 summarizes the Vallejo service.

Figure 2-5 Vallejo Route Description

Terminals	Service Hours: Ferry	Service Hours: Bus	Transit Time
Year-Round			
Vallejo San Francisco Downtown Ferry Terminal	May through October Weekdays: 5:30 AM to 8:15 PM Weekends: 8:30 AM to 10:00 PM	May through October Weekdays: 6:00 AM to 11:30 PM Weekends: 7:15 AM to 9:15 AM	60 minutes
	November through April Weekdays: 5:30 AM to 8:15 PM Weekends: 10:00 AM to 8:00 PM	November through April Weekdays: 6:00 AM to 11:30 PM Weekends: 7:30 AM to 9:40 AM	
San Francisco Pier 41			
Special Events			
AT&T Park/China Basin	One roundtrip for weekday (day) and weekend games; Return-trip only for weekday (night) games; other events, as scheduled.	N/A	60 minutes

2.4.4 South San Francisco Ferry Service

The South San Francisco Ferry Service was launched by WETA in June 2012 and provides commute-only weekday service between the Alameda Main Street and Oakland terminals in the East Bay and the South San Francisco terminal at Oyster Point. In November 2014, WETA added limited mid-day service between the South San Francisco terminal and Downtown San Francisco Ferry Terminal. The service has an annual ridership of approximately 105,000. Figure 2-6 summarizes the South San Francisco ferry service.

Figure 2-6 South San Francisco Route Description

Terminals	Service Hours	Transit Time
Year-Round		
Oakland Alameda Main Street South San Francisco	East Bay to/from SSF Weekdays: 6:30 AM to 8:45 AM 4:20 PM to 7:10 PM Weekends: None	30-45 minutes
	SSF to/from SF Weekdays: 9:00 AM to 9:30 AM 3:30 PM to 4:00 PM Weekends: None	
San Francisco Downtown Ferry Terminal		
San Francisco Pier 41		

2.4.5 Paratransit

Under the American’s with Disabilities Act (ADA), requirements for complementary paratransit do not apply to ferry service. As stated in Section 37.121(c) of this Act, the requirement for complementary paratransit service applies to all fixed route bus and rail transit service; however ferries, commuter bus, commuter rail, and intercity rail are all exempt. WETA is required to comply with ADA requirements for general nondiscrimination, complaint handling, facility design, vehicle acquisition, and provision of service as a grantee of the U.S. Department of Transportation.

2.4.6 Terminal Access: Connecting Transit Services and Bicycle Facilities

As shown in Figure 2-7, WETA terminals are accessible via connecting service and transfer agreements with other transit operators at WETA terminal facilities. As detailed in Section 2.5, all WETA vessels have bicycle racks and additional space for passengers standing with bicycles. Passengers wishing to leave their bicycle at the terminal can utilize available bicycle racks and lockers on a first-come-first-served basis, as described further in Section 2.6.

Figure 2-7 Connecting Transit Services

WETA Terminal	Connecting Service	Routes	Transfer Agreement
Alameda Main Street	None	None	None
Harbor Bay	<ul style="list-style-type: none"> • AC Transit • Harbor Bay Business Park Shuttle 	AC Transit: <ul style="list-style-type: none"> • Line 21 	<ul style="list-style-type: none"> • Free AC Transit transfer with WETA ticket.
AT&T Park	<ul style="list-style-type: none"> • SFMTA • Caltrain (4th & King Station) 	SFMTA: <ul style="list-style-type: none"> • K-Ingleside/ T-Third Street • N-Judah • 10-Townsend • 30-Stockton • 45-Union/Stockton • 47-VanNess 	<ul style="list-style-type: none"> • SFMTA & WETA offer \$0.50 reciprocal transfer discount to adult Clipper users.
Oakland Jack London Square	<ul style="list-style-type: none"> • AC Transit • Amtrak • Broadway B Shuttle 	AC Transit: <ul style="list-style-type: none"> • Line 11 • Line 58 • Line 59 • Line 72 • Line 73 	<ul style="list-style-type: none"> • Free AC Transit transfer with WETA ticket. • Broadway B shuttle is free.
San Francisco Ferry Terminal	<ul style="list-style-type: none"> • SFMTA • BART (Embarcadero Station) • Golden Gate Ferry 	SFMTA: <ul style="list-style-type: none"> • F-Market & Wharves • California Cable Car • Muni Metro @Embarcadero • 82X-Presidio Express • 2-Clement • 7-Haight • 9-San Bruno • 12-Folsom • 21-Hayes • 71-Haight/Noriega • 14-Mission •14L •14X • 31-Balboa 	<ul style="list-style-type: none"> • SFMTA & WETA offer \$0.50 reciprocal transfer discount to adult Clipper users.
San Francisco Pier 41	<ul style="list-style-type: none"> • SFMTA • Blue & Gold Fleet (B&GF) to Sausalito and Angel Island 	SFMTA: <ul style="list-style-type: none"> • F-Market & Wharves • Powell-Mason-Hyde Cable Car • 19-Polk • 30-Stockton • 39-Coit • 47-VanNess • 49-VanNess/Mission 	<ul style="list-style-type: none"> • SFMTA & WETA offer \$0.50 reciprocal transfer discount to adult Clipper users.
South San Francisco	<ul style="list-style-type: none"> • Employer Shuttles • Commute.org shuttles 	<ul style="list-style-type: none"> • Employer shuttles & Commute.org shuttles transport employees to/from ferry to employment sites, Oyster Point Business Park, Sierra Point & SSF Caltrain 	<ul style="list-style-type: none"> • Employer shuttles only available to company employees. • Commute.org shuttles open to general public and free of charge.
Vallejo	<ul style="list-style-type: none"> • Soltrans • Vine Transit 	Soltrans: <ul style="list-style-type: none"> • Local Routes 1-8 • Express Routes 78, 80, 85 VINE Transit: <ul style="list-style-type: none"> • Route 29-Express to BART • Route 11-N Vallejo/Redwood PNR 	<ul style="list-style-type: none"> • Soltrans & WETA provide reciprocal Clipper transfer discounts: \$1.75 for Adults, \$1.50 for Youth, and a \$0.85 for Senior/Disabled.

2.4.7 Fare Structure

The WETA Board adopted a fare policy in November 2011 that was designed to both support system cost recovery and promote ridership. The policy encourages developing and maintaining a system of fares that maximizes ridership while maintaining target farebox recovery rates, formally articulating the following seven policy principles:

- **System Cost Recovery**
 - ▶ Meet farebox recovery requirements
 - ▶ Consider local contributions
 - ▶ Maintain operating cost recovery
 - ▶ Annual fare adjustments
 - ▶ Fare surcharge for unanticipated expenses
- **Promote Ridership**
 - ▶ Provide frequent rider discounts
 - ▶ Offer other fare incentives

In November 2013, staff began a study to assess WETA’s current fare structure and identify a program of changes to foster greater consistency. The fare program modifications proposed as a result of this work achieve specific objectives consistent with WETA’s fare policy and the overall objectives of achieving fiscal sustainability and system wide consistency. Specifically, the fare program goals are:

- **Standardize Fare Categories** – Define a uniform set of fare categories and related eligibility criteria for all WETA services that are consistent with regional standards.
- **Establish Common Fare Products** – Identify a common set of fare products for all WETA services.
- **Streamline Fare Offerings** – Consider the elimination of certain products based on utilization, redundancy with other products, fraud vulnerability, ease of sale and distribution, and promote Clipper use.
- **Promote Consistent Discount Pricing** – Establish standard discount rates for fare categories and fare products offered by WETA, including frequent riders, youth, senior, disabled, and group fares/fare products.
- **Provide a Multi-Year Fare Increase Program** – Develop a planned set of regular fare increases over a multi-year period that will generally allow revenues to keep pace with the anticipated inflation of operating costs while minimizing impacts to ridership.

After significant study and public outreach, the WETA Board approved the FY2015-20 Fare Program in September 2014, which establishes consistent fare categories, streamlines fare products, promotes consistent discount pricing, and provides for an annual fare increase. WETA implemented the following fare changes for passengers on November 1, 2014. The Youth Fare eligibility was expanded from 5-12 to 5-18 years of age, and the discount was expanded from 44% to 50% of the Adult cash fare. The Active Military fare category was eliminated, but a more robust Adult discount is provided through the Clipper Program. The 10, 20, and 40 ticket books were discontinued, but a discount comparable to the 20-ticket book is provided through the Clipper Program. The first annual 3% fare increase (rounded to nearest dime) took effect on July 1, 2015 and will be increased annually for the duration of the program. Figure 2-8 shows the WETA fare structure effective as of July 2015.

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Figure 2-8 WETA Fares FY2015-16

	Alameda/ Oakland	Alameda Harbor Bay	South San Francisco	Vallejo
One-Way	Standard	Standard	Standard	Standard
Adult	\$6.40	\$6.70	\$7.40	\$13.40
Adult (Clipper Only)	\$4.80	\$5.00	\$7.20	\$10.10
Youth (5-18 yrs.)	\$3.20	\$3.30	\$3.70	\$6.70
Senior/Disabled/Medicare (65+ valid ID) ¹	\$3.20	\$3.30	\$3.70	\$6.70
Children (under 5 with paying adult)	Free	Free	Free	Free
School Groups ²	\$2.10	\$2.20	\$2.40	\$4.40
Short Hop - Adult ³	\$1.50	N/A	N/A	N/A
Short Hop - Youth/Senior/Disabled ³	\$0.75	N/A	N/A	N/A
Monthly Pass	N/A	N/A	N/A	\$307.00
AT&T Park Event Service (one-way)	Special	No Service	No Service	Special
Adult	\$7.50	N/A	N/A	\$14.20
Youth (5-18 yrs.)	\$5.60	N/A	N/A	\$10.60
Senior/Disabled/Medicare (65+ valid ID) ¹	\$5.60	N/A	N/A	\$10.60
Children (under 5 with paying adult)	Free	N/A	N/A	Free

¹ Seniors, persons with disabilities and Medicare cardholders may ride at a discount if they hold a Regional Transit Connection Discount Card, Medicare card, DMV Disabled Placard ID or proof of age 65 or older.

² To qualify, school groups must call (415) 705-8214 for advance approval and reservations.

³ One-way between Oakland and Alameda or between the SF Ferry Building and Pier 41.

2.5 REVENUE FLEET

The WETA fleet currently consists of 12 vessels. All vessels have capacity for bicycles and at least four mobility devices and can accommodate additional devices on a case-by-case basis. Vessel capacity and other key attributes are detailed in Figure 2-9.

Figure 2-9 WETA Vessel Fleet

Vessel	Year Built	Passenger Capacity	Bike Racks/ Max Bikes	Service Speed (knots)
Peralta	2001	331	20 / 50	26
Encinal	1985	395	20 / 60	25
Bay Breeze	1994	250	20 / 50	26
Gemini	2008	149	34 / 34	26
Pisces	2009	149	34 / 34	26
Scorpio	2009	199	34 / 34	26
Taurus	2010	199	34 / 34	26
Vallejo	1991	267	20 / 30	34
Intintoli	1996	349	20 / 30	34
Mare Island	1996	330	20 / 30	34
Solano	2004	320	20 / 30	34
Express II ¹	1995	149	20 / 30	28

1. The Express II was retired early (2012) due to its poor operating condition.

2.6 EXISTING FACILITIES

Figure 2-10 provides a summary of the WETA system facilities. As noted in the figure, some of the facilities WETA uses are owned and maintained by other entities.

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Figure 2-10 Existing WETA Facilities

Facility	Year Built	Location	Features	Bike Racks/ Lockers	Vehicle Parking
Alameda Main Street Terminal	1990	2990 Main Street, Alameda, CA 94501	One berthing slip, covered passenger waiting area, restrooms. The City of Alameda retains ownership of landside facilities; WETA owns waterside facilities including floats and gangways.	62 / 8	324
Alameda Harbor Bay Terminal	1992	215 Adelphian Way, Alameda, CA 94502	Two berthing slips, covered passenger waiting area, restrooms. The City of Alameda retains ownership of landside facilities; WETA owns waterside facilities including floats and gangways.	20 / 16	250
AT&T/China Basin Terminal	2000	24 Willie Mays Plaza, San Francisco, CA 94107	One berthing slip. The Port of San Francisco owns all landside and waterside facilities, which are licensed for use by WETA.	20 / 0	0
Oakland Terminal	1990	10 Clay Street, Oakland, CA 94607	Two berthing slips, covered passenger waiting area, public access pier. The Port of Oakland retains ownership of landside facilities and pier; WETA owns waterside facilities including floats and gangways.	6 / 0	0
Downtown San Francisco Ferry Terminal - Gates B & E	2003	1 Ferry Building, San Francisco, CA 94105	Four berthing slips and 1 bus loading zone licensed for WETA use by the Port of San Francisco. This is the principal terminal for WETA services. The Port of San Francisco owns all landside and waterside facilities, which are licensed for use by WETA.	30 / 0 + bike share	0
San Francisco WETA Administrative Office	2011	Pier 9, Suite 111, The Embarcadero, San Francisco, CA 94111	Administrative offices and two layover berths (no passenger loading). The pier and office facility is owned by the Port of San Francisco and leased to WETA; WETA owns waterside facilities including floats and gangways.	0 / 0	0
San Francisco Pier 41	1981	Pier 41, San Francisco, CA 94133	Four slips owned by the Port of SF, leased to Blue & Gold Fleet and licensed for use by Blue and Gold Fleet, WETA's contract operator.	10 / 0	0
South San Francisco Terminal	2012	911 Marina Boulevard, South San Francisco, CA 94080	Two berthing slips, covered passenger waiting area, pier, restrooms. The San Mateo County Harbor District retains ownership of landside facilities; WETA owns waterside facilities including floats and gangways.	12 / 12	35
Vallejo Terminal	1999	289 Mare Island Way, Vallejo, CA 94590	Two berthing slips, bus loading zone, covered passenger waiting areas, ticket sales outlet, restrooms. The City of Vallejo retains ownership of landside facilities; WETA owns waterside facilities including floats and gangways.	26 / 16	0
North Bay Operations and Maintenance Facility	1997	477 Waterfront Ave, Vallejo	Operation and maintenance base for WETA's North Bay ferry vessel fleet, five berthing slips for overnight mooring (limited passenger loading). The City of Vallejo/Lennar Mare Island retains ownership of landside facilities; WETA owns waterside facilities including floats & gangways.	0 / 0	0

3 GOALS, OBJECTIVES AND STANDARDS

3.1 BACKGROUND

In developing this chapter, the agency revisited historical planning studies and the goals and metrics proposed in the agency's first SRTP (FY 2012-21), as well as more recent planning efforts that inform WETA's overall strategic management approach.

3.2 MISSION AND VISION

In August 2008, the WETA Board adopted the following Mission Statement for the organization:

WETA is a regional agency with responsibility to develop and operate a comprehensive Bay Area regional public water transportation system. WETA shall also provide water transportation services in response to natural or man-made disasters.

At the same time, the Board approved a Vision for how WETA would pursue its Mission:

Establish and operate a regional ferry system that connects communities, reduces congestion and provides an emergency response capability.

Taken together, the Mission and Vision describe and characterize WETA's multiple functional roles in the regional transportation network.

3.3 PERFORMANCE MEASURES AND STANDARDS

3.3.1 System-wide Performance Targets Policy

Transit system performance measures help provide a consistent framework for measuring the efficiency and quality of transit services and also serve as a tool for the effective management and planning of transit services. In June 2015, the WETA Board developed and adopted a policy¹ for managing the ferry system on a regular basis, utilizing a set of performance measures and related standards for WETA services. This policy calls for ferry service to be evaluated against the adopted metrics on a quarterly and annual basis, and for service enhancements to be planned in such a way that performance on existing services is not significantly impaired.

Each of the performance measures defined in the policy includes a minimum value, target value, and maximum value. Services will be managed towards the target, but it is understood that performance fluctuates over time; the minimum and maximum values define a range of acceptable outcomes to allow for variability around the target. The maximum value is a new concept, essentially representing a trigger that will justify new or enhanced service for routes that are experiencing an excess of demand. While service enhancements such as increased frequency or larger vessels will be popular with riders, they will also reduce the productivity of a service for

¹ WETA System Performance Targets Policy, adopted June 4, 2015.

a period of time as the service attracts new riders. Therefore, after an enhancement in service, it may take some time for a service to return to minimum or target levels of productivity.

The performance targets policy establishes minimum levels of performance to provide a goal for expansion projects and also as a threshold of fiscal sustainability for existing services. In the case of a service drop below the minimum standards for a sustained period of time, WETA shall consider service alterations such as cutting service, redesigning schedules or re-structuring routes. WETA will strive to design any remedial actions to minimize effects on passengers and will hold its mission as an emergency response agency above all whenever it re-designs its services.

3.3.1 Performance Measures and Standards

The performance evaluation measures from the System Performance Targets Policy and the associated minimum, target, and maximum standards for WETA services are summarized in Figure 3-1 and then described in more detail below. The performance measures are intended to evaluate the competitiveness and fiscal sustainability of both existing and new WETA ferry services. The measures are expressed in three ways: minimum, target and maximum (as applicable). Minimum levels are what will be required after the initial 10 years of operation. Target levels are consistent with expected performance of mature services such as Alameda/Oakland, Vallejo, and Harbor Bay. When a particular service achieves maximum levels, this indicates that a service enhancement or increase may be justified. After a service enhancement has been introduced, there will be a four year recovery period, allowing the service to regain minimum and target levels of productivity.

Figure 3-1 Summary of Performance Measures and Standards

Measure	Standard
Passengers per Revenue Hour (Commute-only services)	Minimum: 100 Target: 150 Maximum: 250
Passengers per Revenue Hour (All-day services)	Minimum: 100 Target: 125 Maximum: 250
Farebox Recovery	Minimum: 40% Target: 50-70% Maximum: 100%
Peak Hour Occupancy	Minimum: 50% Target: 60-75% Maximum: 80%

For future iterations of the SRTP, WETA will fully report on the performance metrics described here. To enable the agency to collect, analyze, and report on its performance more efficiently, WETA has begun the process to create a data collection and tracking system that will allow consistent and efficient data reporting across all services. The agency will work closely with the contractor to ensure that their reporting allows performance on these adopted standards to be measured and reported.

Passengers per Revenue Hour – Commute-only services

Measures: Ratio of total passenger boardings to total revenue service hours

Standard: *Minimum: 100*
Target: 150
Maximum: 250

Discussion: This measure provides an evaluation of ridership and the efficiency of operating resources. Services that have high two-way ridership along with a short travel time, enabling vessels to offer multiple runs in a given commute period will be strong performers.

Passengers per Revenue Hour – All-day services

Measures: Ratio of total passenger boardings to total revenue service hours

Standard: *Minimum: 100*
Target: 125
Maximum: 250

Discussion: This measure provides an evaluation of ridership and the efficiency of operating resources. All-day services typically operate seven days per week and generally from 6 AM up to 8 PM. Today, only Alameda/Oakland and Vallejo are all day services. The target for Passengers per Revenue Hour is slightly lower, given lower volumes in the midday and off-peak periods.

Farebox Recovery

Measure: The ratio of total fare revenue to total operating cost

Standard: *Minimum: 40%*
Target: 50-70%
Maximum: 100%

Discussion: The farebox recovery ratio reflects ridership and fare levels operating expense, and financial sustainability. This illustrates service effectiveness, efficiency and productivity. Note that for special event services, WETA’s objective is to recover the full incremental cost of this discretionary service through farebox or other special revenues identified for this event.

Peak Hour Occupancy

Measure: Ratio of the number of boardings to available vessel capacity, measured for all peak direction departures during the highest ridership hour of a given commute service

Standard: *Minimum: 50%*
Target: 60-75%
Maximum: 80%

Discussion: Peak hour occupancy indicates ridership demand and provides guidance for vessel deployment and service planning. High levels of peak hour occupancy indicate the possibility of leave-behinds or standees and would require corrective action.

4 SERVICE AND SYSTEM EVALUATION

4.1 SYSTEM-WIDE EVALUATION

In FY2012-13, WETA began its first full year operating each of the three ferry services that were transitioned from the cities of Alameda and Vallejo to WETA over the course of 2011 and 2012. WETA also began a new service to South San Francisco in June 2012, which has now been in operation for three full fiscal years. This chapter provides an overview of service levels, ridership, expenses, revenues, and performance metrics from FY2012-13 through FY2014-15, first at a system-wide level, and subsequently for each individual route.

4.1.1 Service and Usage

The three statistics used for tracking service and usage are vehicle revenue hours, vehicle revenue miles, and total passengers. System-wide, service levels increased slightly over the three-year period, with a per-year average increase in vehicle revenue hours of 2% and an average increase in vehicle revenue miles of 1% per year. Though the net change in hours and miles was small, individual routes did experience more significant changes in service levels, as schedules and vessel assignments were adjusted to capitalize on growth in passenger demand. Details of these changes are noted in the route-specific sections that follow the system-wide discussion.

During the three-year performance period, system ridership increased by an average of 11% per year from approximately 1.5 million total passengers in FY2012-13 to approximately 2.1 million in FY2014-15 as the Bay Area economy improved. Another factor contributing to increased ridership was the closure of the Bay Area Rapid Transit (BART) District system for a total of nine commute days due to labor strikes in July and October 2013. In FY2013-14, the year of the BART strikes, overall system ridership increased by 27%. The following year, passenger levels increased again, growing by 8% for FY2014-15. Many commuters cite the BART strike as being an impetus for trying the ferry, and many have remained customers since. Service and usage details for the WETA system as a whole are shown in Figure 4-1.

4.1.2 Performance

To determine system performance, the operating statistics above were combined with information about operating costs and revenues (both fares and subsidies). The following metrics were used to analyze the service productivity, cost-efficiency, and cost-effectiveness of WETA service:

Service Productivity: Passengers per revenue hour of service
Passengers per revenue mile of service

Cost-Efficiency: Operating cost per hour of revenue service
Operating cost per revenue mile of service

Cost-Effectiveness: Farebox recovery ratio (fare revenues as a percentage of operating costs)
Average fare (fare revenues divided by total passengers)

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In addition, per the WETA System Performance Targets Policy described in Chapter 3, a new occupancy metric is being introduced in this SRTP:

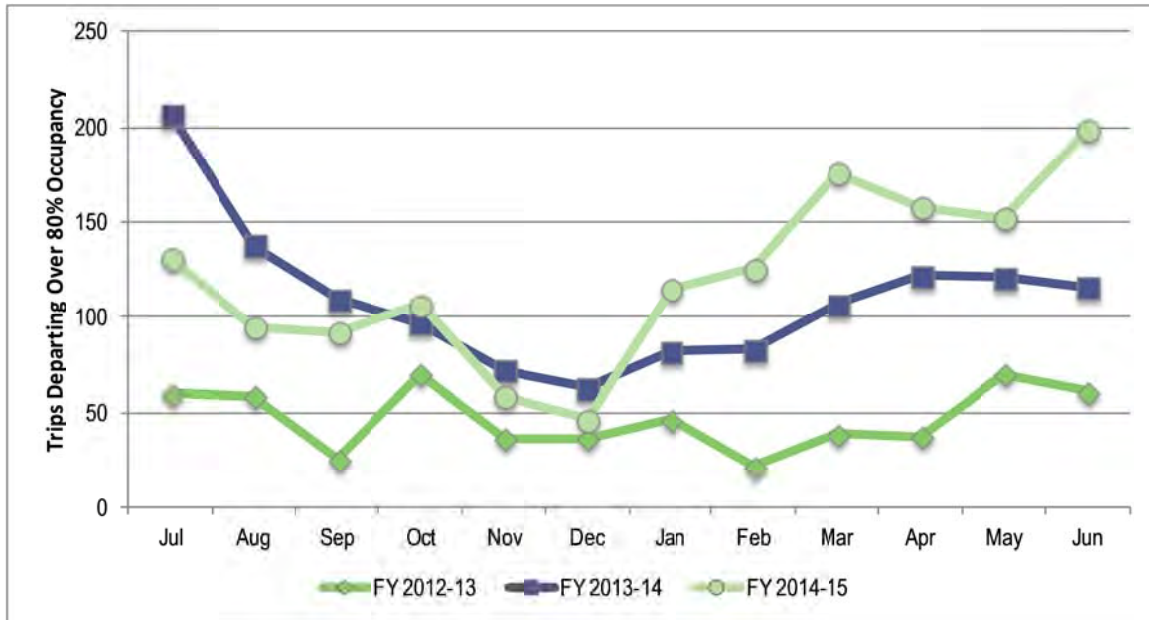
Peak Occupancy: For trips departing in the peak hour, in the peak direction, the number of passenger boardings as a fraction of available vessel capacity
The total number of trips each month that depart with passenger loads above the maximum occupancy standard

Figure 4-1 provides the systemwide values for the first seven of these performance metrics. The eighth metric—number of trips that depart over maximum occupancy—is depicted in Figure 4-2.

Figure 4-1 System-wide Operating Statistics and Performance Metrics

	FY2012-13	FY2013-14	FY2014-15
Operating Statistics			
Service and Usage			
Vehicle Revenue Hours	14,577	15,309	15,316
Vehicle Revenue Miles	294,996	310,613	308,102
Total Passengers	1,563,896	1,979,141	2,143,831
<i>Subtotal Ferry</i>	<i>1,510,336</i>	<i>1,925,648</i>	<i>2,091,276</i>
<i>Subtotal Route 200</i>	<i>53,560</i>	<i>53,493</i>	<i>52,555</i>
Cost			
Total Cost	\$23,812,955	\$25,874,415	\$26,544,848
<i>Subtotal Ferry</i>	<i>\$23,057,075</i>	<i>\$25,199,657</i>	<i>\$25,876,757</i>
<i>Subtotal Route 200</i>	<i>\$755,880</i>	<i>\$674,758</i>	<i>\$668,092</i>
Revenue			
Passenger Farebox Revenue	\$10,501,989	\$13,117,524	\$13,924,923
Other Revenue (Subsidy)	\$13,310,966	\$12,756,891	\$12,619,926
Performance Metrics			
Service Productivity			
Passengers per Rev. Hour	107.28	129.28	139.96
Passengers per Rev. Mile	5.30	6.37	6.96
Cost Efficiency			
Cost per Revenue Hour	\$1,631.94	\$1,690.14	\$1,733.03
Cost per Revenue Mile	\$80.64	\$83.30	\$86.16
Cost Effectiveness			
Farebox Recovery Ratio	44.1%	50.7%	52.5%
Cost per Passenger	\$15.21	\$13.07	\$12.38
<i>Subtotal Ferry</i>	<i>\$15.27</i>	<i>\$13.09</i>	<i>\$12.37</i>
<i>Subtotal Route 200</i>	<i>\$13.67</i>	<i>\$12.61</i>	<i>\$12.71</i>
Average Fare	\$6.72	\$6.63	\$6.50
Subsidy per Passenger	\$8.51	\$6.45	\$5.89
Peak Occupancy			
Peak Occupancy	49.7%	61.2%	58.3%

Figure 4-2 Systemwide Maximum Occupancy Trips by Month

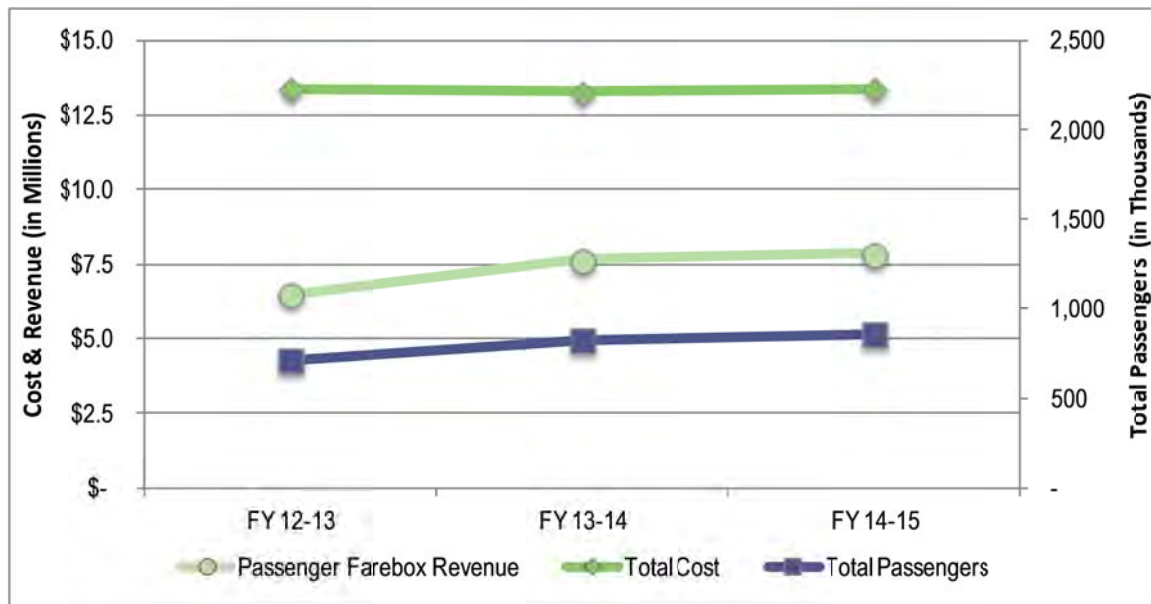


As shown in Figure 4-1, WETA has consistently improved its performance on nearly every performance measure in the past three years. The system has experienced year-over-year increases in all four service productivity and cost efficiency metrics. In the category of cost effectiveness, although average fare has decreased somewhat, cost per passenger has decreased by a wider margin, leading to a reduction in subsidy per passenger and corresponding increases in farebox recovery ratio. Peak period occupancy increased in FY2013-14, and then fell back somewhat in FY2014-15, though this can be attributed to service additions that increased total system capacity in order to accommodate strong ridership growth. This pattern can be seen more clearly in Figure 4-2, which displays the number of trips each month that departed with passenger loads over the maximum occupancy standard of 80%. Year over year, the chart shows that the increased number of full trips seen in FY2013-14 was somewhat mitigated in early FY2014-15, before increasing towards a historical record in the second half of the year.

4.2 VALLEJO SERVICE

From FY2012-13 through FY2014-15, total passengers on the Vallejo service increased by an average of 6% per year and passenger farebox revenue increased by an average of 7% annually. Total costs for service have remained relatively constant, as shown in Figure 4-3.

Figure 4-3 Vallejo Passenger Farebox Revenue, Total Cost, and Total Passengers



4.2.1 Service and Usage

The Vallejo service had a 6% average annual increase in total passengers during the three-year performance period, from approximately 713,000 to 859,000 total annual passengers (ferry and Route 200), as shown in Figure 4-4. Total passengers on the ferry service increased 7%, while total passengers on Route 200 declined by 1%. The Vallejo service saw a 5% net decrease in vehicle revenue hours and 3% net decrease in vehicle revenue miles from FY2012-13 through FY2014-15, as unproductive midday or reverse commute ferry trips were eliminated and replaced by bus service.

Figure 4-4 Vallejo Service Levels and Usage

	FY 2012-13	FY 2013-14	FY 2014-15
Operating Statistics			
Service and Usage			
Total Passengers	713,300	826,715	858,665
<i>Subtotal Ferry</i>	<i>659,740</i>	<i>773,222</i>	<i>806,110</i>
<i>Subtotal Route 200</i>	<i>53,560</i>	<i>53,493</i>	<i>52,555</i>
Vehicle Revenue Hours	6,847	6,889	6,472
Vehicle Revenue Miles	182,328	188,076	176,620

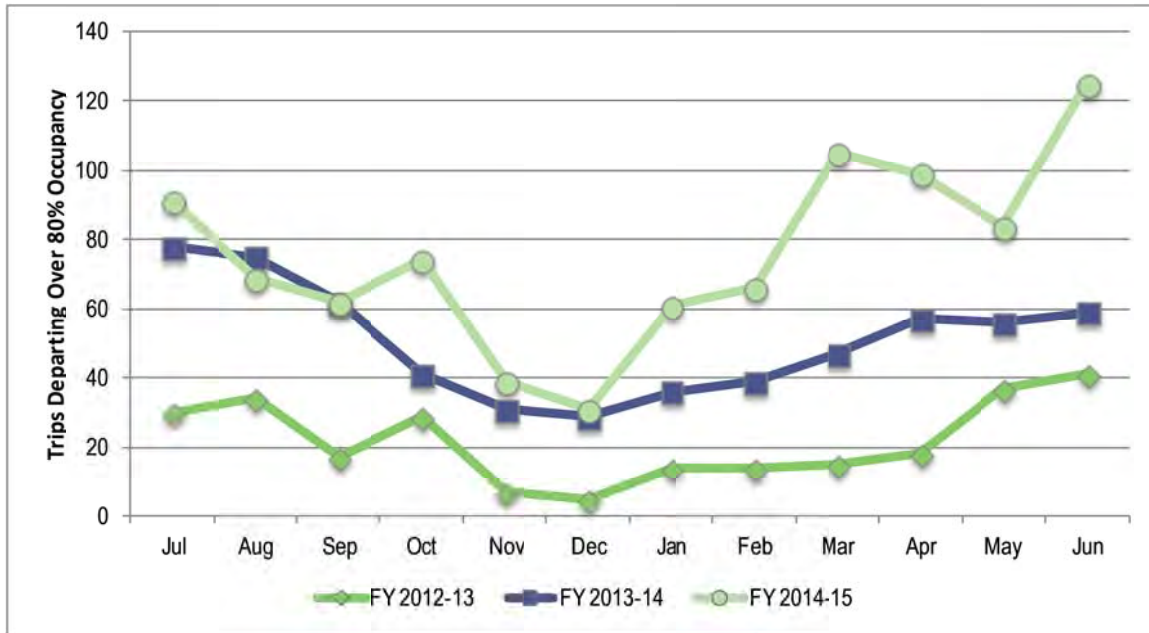
4.2.2 Performance

Figure 4-5 presents performance data for Vallejo service from FY2012-13 through FY2014-15. In the three-year performance period, the Vallejo service experienced an 8% average annual increase in passengers per revenue hour to 132 in FY2014-15, which exceeds the WETA Performance Target of 125 per hour for all day service. The Vallejo service had a 2% average annual increase in cost per revenue hour and a 1% average annual increase in cost per revenue mile, which is reflective of declining fuel prices and a net reduction in revenue miles during the three-year period. The farebox recovery ratio increased from 48.7% in FY2012-13 to 58.8% in FY2014-15, which meets the 50-70% performance target set by WETA. The cost per passenger declined by a net total of 17% over the three-year period, while subsidy per passenger decreased by a net total of 33%. Overall the average fare per passenger did not change within the performance period. Peak hour occupancy significantly increased to 74.5% in FY2014-15, which is at the top end of the target range for this metric. Figure 4-6 provides an illustration of the increase in occupancy over time, by displaying the number of trips each month that depart over the maximum occupancy standard of 80%. As can be seen in the figure, the number of full trips each month has been increasing year over year.

Figure 4-5 Vallejo Performance Metrics

	FY 2012-13	FY 2013-14	FY 2014-15
Performance Metrics			
Service Productivity			
Passengers per Rev. Hour	104.18	120.04	132.67
Passengers per Rev. Mile	3.91	4.40	4.86
Cost Efficiency			
Cost per Revenue Hour	\$1,845.16	\$1,828.46	\$1,966.12
Cost per Revenue Mile	\$69.29	\$66.95	\$72.05
Cost Effectiveness			
Farebox Recovery Ratio	48.7%	57.8%	58.8%
Cost per Passenger	\$18.74	\$16.05	\$15.60
<i>Subtotal Ferry</i>	<i>\$19.15</i>	<i>\$16.29</i>	<i>\$15.79</i>
<i>Subtotal Route 200</i>	<i>\$13.67</i>	<i>\$12.61</i>	<i>\$12.71</i>
Average Fare	\$9.13	\$9.28	\$9.18
Subsidy per Passenger	\$9.64	\$6.76	\$6.42
Peak Occupancy			
Peak Occupancy	65.2%	73.9%	74.5%

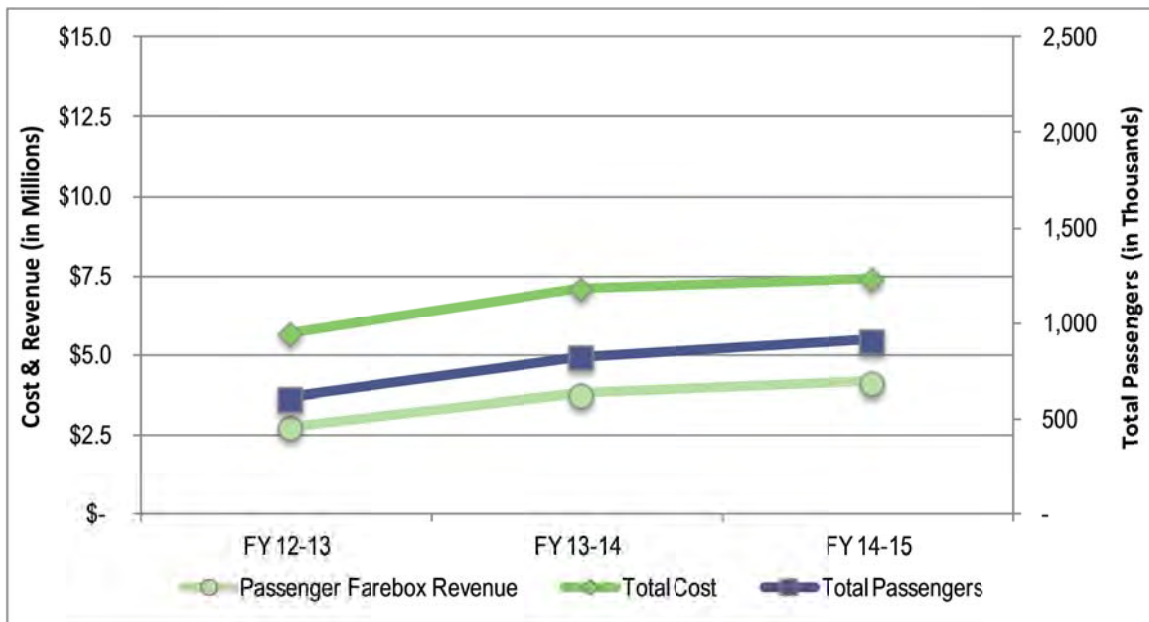
Figure 4-6 Vallejo Maximum Occupancy Trips by Month



4.3 ALAMEDA/OAKLAND SERVICE

From FY2012-13 through FY2014-15, total passengers on the Alameda/Oakland service increased by an average of 14% per year and passenger farebox revenue increased by an average of 15% per year. Total costs for the service increased by an average of 9% per year, as shown in Figure 4-7.

Figure 4-7 Alameda/Oakland Passenger Farebox Revenue, Total Cost, and Total Passengers



4.3.1 Service and Usage

Over the three-year performance period, total passengers increased by an average of 14% per year on the Alameda/Oakland service, from 609,000 to 911,000 total annual passengers. Over the same period, net vehicle revenue hours increased by 14% and net vehicle revenue miles grew by 19%, as shown in Figure 4-8. The most significant enhancement of the Alameda/Oakland service occurred in April 2014, when the frequency of peak period service increased from 60 to 30 minutes and gaps were closed in the off peak service schedule.

Figure 4-8 Alameda/Oakland Service Levels and Usage

	FY2012-13	FY2013-14	FY2014-15
Operating Statistics			
Service and Usage			
Total Passengers	608,960	821,633	911,473
Vehicle Revenue Hours	4,683	5,179	5,348
Vehicle Revenue Miles	55,262	61,742	65,706

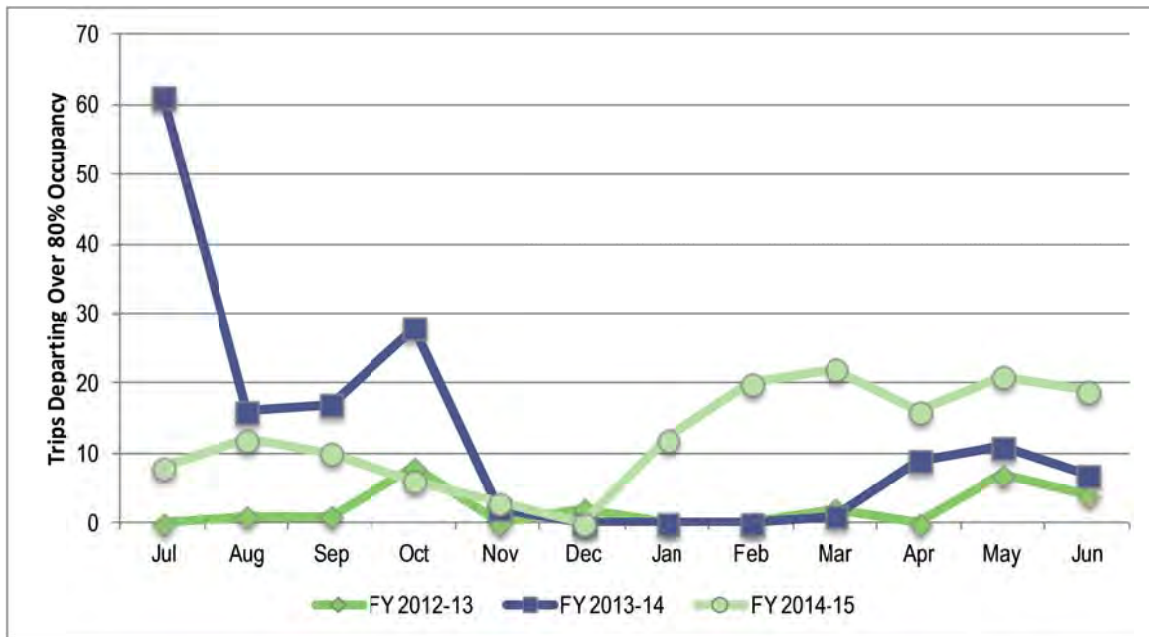
4.3.1 Performance

presents performance data for Alameda/Oakland service from FY2012-13 through FY2014-15. In the three-year performance period, the Alameda/Oakland service experienced a 9% average annual increase in passengers per revenue hour to 170 in FY2014-15, which exceeds the WETA Performance Target of 125 per hour for all day service. The Alameda/Oakland service had a 5% average annual increase in cost per revenue hour and a 3% average annual increase in cost per revenue mile in the three-year period. These increases are reflective of service level increases during this period. The farebox recovery ratio for Alameda/Oakland service increased from 48.5% in FY2012-13 to 56.0% in FY2014-15, which meets the 50-70% performance target set by WETA. The cost per passenger declined by a net total of 13% over the three-year period, while subsidy per passenger decreased by a net total of 25%. Overall the average fare per passenger did not change within the three-year performance period. Peak hour occupancy increased significantly in FY2013-14 due to ridership growth, but then decreased slightly the following year to 56.8% in FY2014-15 as service was enhanced, remaining slightly below the target range for this metric. Figure 4-10 shows the number of trips that departed over the maximum occupancy standard of 80%, by month, for the entire performance period. The chart shows the very high number of full trips in early 2014 that prompted service additions, as well as recent gains in occupancy in the latter half of FY2014-15.

Figure 4-9 Alameda/Oakland Performance Metrics

	FY2012-13	FY2013-14	FY2014-15
Performance Metrics			
Service Productivity			
Passengers per Rev. Hour	130.04	158.65	170.43
Passengers per Rev. Mile	11.02	13.31	13.87
Cost Efficiency			
Cost per Revenue Hour	\$1,216.54	\$1,372.93	\$1,392.77
Cost per Revenue Mile	\$103.09	\$115.16	\$113.36
Cost Effectiveness			
Farebox Recovery Ratio	48.5%	53.5%	56.0%
Cost per Passenger	\$9.36	\$8.65	\$8.17
Average Fare	\$4.54	\$4.63	\$4.57
Subsidy per Passenger	\$4.82	\$4.03	\$3.60
Peak Occupancy			
Peak Occupancy	47.5%	58.4%	56.8%

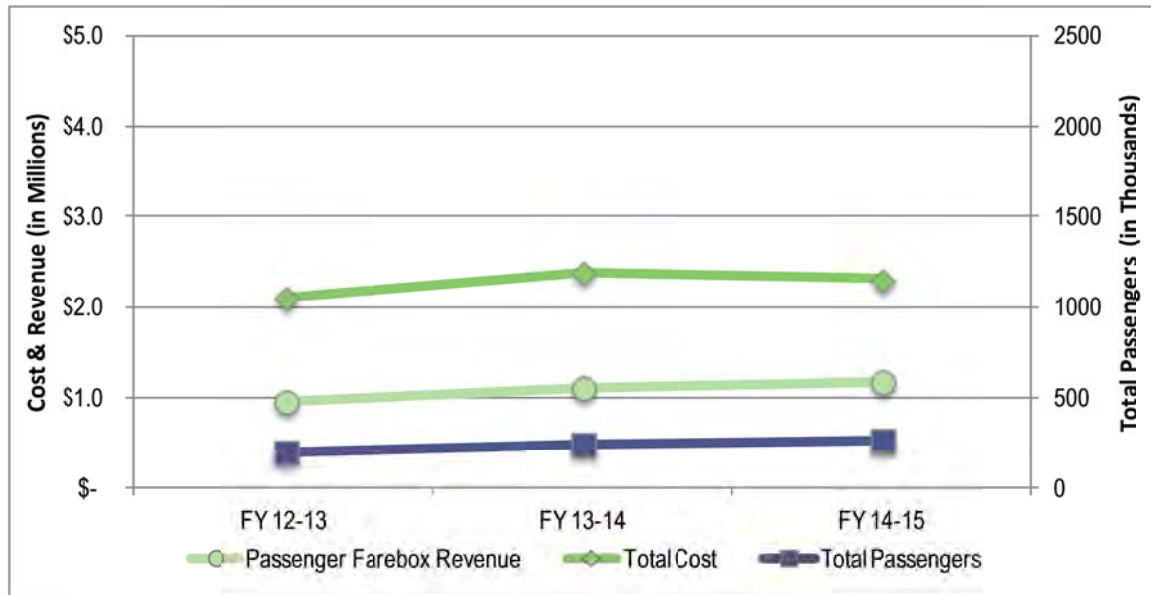
Figure 4-10 Alameda/Oakland Maximum Occupancy Trips by Month



4.4 ALAMEDA HARBOR BAY SERVICE

From FY2012-13 through FY2014-15, total passengers on the Alameda Harbor Bay service increased by an average of 9% per year and passenger farebox revenue increased by an average 7% per year. Total costs for service increased by 3% per year on average during the same period, as shown in Figure 4-11.

Figure 4-11 Harbor Bay Passenger Farebox Revenue, Total Cost, and Total Passengers



4.4.1 Service and Usage

The Alameda Harbor Bay service saw a 9% average annual increase in total passengers during the three-year performance period, increasing from 203,000 to 266,000 total annual passengers as shown in Figure 4-12. Vehicle revenue hours and vehicle revenue miles both peaked in FY2013-14 due to extra departures added during the BART strike and Bay Bridge closures; however, service levels return to historical levels in FY2014-15. In May 2014, an additional afternoon run was permanently added to the schedule. This enhancement did not result in a net change to vehicle revenue hours or miles for this service due to the subsequent interlining of Harbor Bay crews with other WETA services.

Figure 4-12 Alameda Harbor Bay Service Levels and Usage

	FY2012-13	FY2013-14	FY2014-15
Operating Statistics			
Service and Usage			
Total Passengers	203,131	246,695	266,304
Vehicle Revenue Hours	1,508	1,575	1,539
Vehicle Revenue Miles	34,052	35,265	34,569

4.4.2 Performance

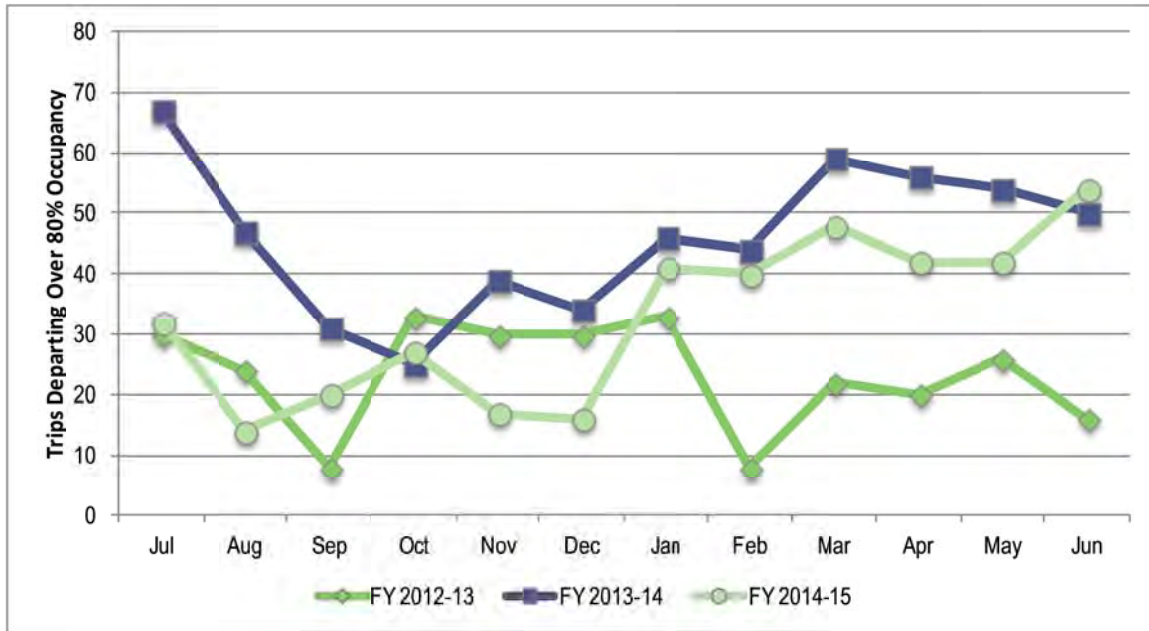
Figure 4-13 presents performance data for Alameda Harbor Bay service from FY2012-13 through FY2014-15. In the three-year performance period the Alameda Harbor Bay service saw a 9% average annual increase in passengers per revenue hour to 173 in FY2014-15, which exceeds the WETA Performance Target of 150 per hour for commute-only service. The Alameda Harbor Bay service cost per revenue hour and cost per revenue mile both increased by an average of 3% per year in the performance period, consistent with cost increases in the contract operator rates. The farebox recovery ratio increased from 45.7% in FY2012-13 to 51.0% in FY2014-15, which meets the 50-70% performance target set by WETA. The cost per passenger declined by net total of 16% during the three-year period, while subsidy per passenger decreased by a net total of 24%. The average fare per passenger declined during the three-year period, but is expected to increase going forward as annual inflation adjustments are made to fare levels across the WETA system. Peak hour occupancy increased significantly in FY2013-14 due to ridership growth, but then decreased significantly the following year to 56.8% in FY2014-15 as service was enhanced, remaining below the target range for this metric.

Figure 4-14 shows the number of trips that departed over the maximum occupancy standard, by month, during the three-year performance period. The service additions in early FY2014-15 reduced the number of full trips as compared to the prior year, but as ridership growth has continued, the number of trips over the maximum standard has increased as well.

Figure 4-13 Alameda Harbor Bay Performance Metrics

	FY2012-13	FY2013-14	FY2014-15
Performance Metrics			
Service Productivity			
Passengers per Rev. Hour	134.68	156.63	173.04
Passengers per Rev. Mile	5.97	7.00	7.70
Cost Efficiency			
Cost per Revenue Hour	\$1,389.24	\$1,508.16	\$1,498.50
Cost per Revenue Mile	\$61.53	\$67.36	\$66.71
Cost Effectiveness			
Farebox Recovery Ratio	45.7%	46.4%	51.0%
Cost per Passenger	\$10.32	\$9.63	\$8.66
Average Fare	\$4.71	\$4.47	\$4.41
Subsidy per Passenger	\$5.60	\$5.16	\$4.25
Peak Occupancy			
Peak Occupancy	66.3%	76.1%	51.3%

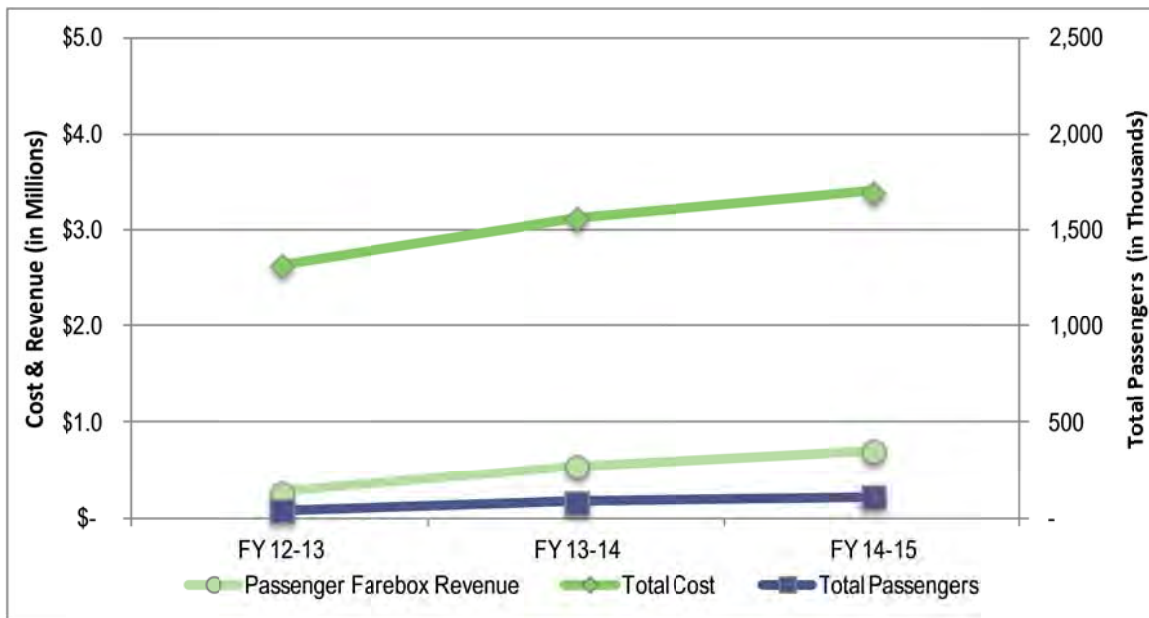
Figure 4-14 Alameda Harbor Bay Maximum Occupancy Trips by Month



4.5 SOUTH SAN FRANCISCO SERVICE

Since the launch of the South San Francisco service in June 2012, total passengers have increased by an average of 38% per year and passenger farebox revenue has increased by an average of 37% per year during the three-year performance period. Total costs for service increased by 9% per year on average, as shown in Figure 4-15.

Figure 4-15 South San Francisco Passenger Farebox Revenue, Total Cost, and Total Passengers



4.5.1 Service and Usage

The South San Francisco service saw a 38% annual average increase in total passengers over the three-year performance period, increasing from 41,000 to 107,000 total annual passengers, as shown in Figure 4-16. Over the same period, net vehicle revenue hours increased by 8% and net vehicle revenue miles by 10%. Significant enhancements of the South San Francisco service occurred in May 2013, when an additional PM departure was added during the peak period, and in May 2014, when non-revenue deadhead service to San Francisco was converted to revenue service. After 3 years of operations, ridership on the South San Francisco service is approaching volumes similar to those seen on the Alameda Harbor Bay service after its first 15 years of operation.

Figure 4-16 South San Francisco Service Levels and Usage

	FY2012-13	FY2013-14	FY2014-15
Operating Statistics			
Service and Usage			
Total Passengers	40,505	84,098	107,389
Vehicle Revenue Hours	1,539	1,666	1,957
Vehicle Revenue Miles	23,354	25,530	31,207

4.5.2 Performance

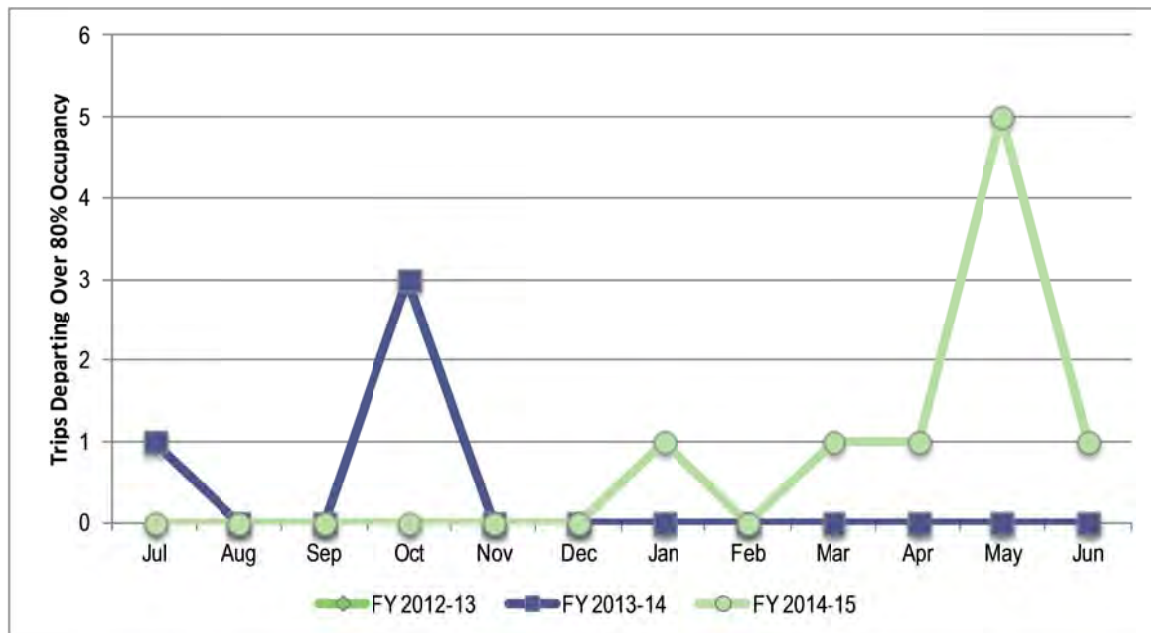
Figure 4-17 presents performance data for South San Francisco service between FY2012-13 and FY2014-15. In the three-year performance period, passengers per revenue hour on the South San Francisco service increased by an average of 28% per year to 54 in FY2014-15, which does not meet the WETA performance target of 150 passengers per revenue hour for commute-only service. This new service is still maturing, and strong passenger growth in the first few years suggests that the performance target could be reached within the next three to four years. Over the performance period, the service saw no significant changes in cost per revenue hour or revenue mile. The farebox recovery ratio doubled from 10.3% in FY2012-13 to 20.6% in FY2014-15, which does not meet the 50-70% farebox recovery performance target set by WETA. The cost per passenger declined by 51% over the three-year period, while the subsidy per passenger declined by net total of 57%. Overall the average fare per passenger did not change within the three-year performance period. Peak hour occupancy was very low at only 20.0% in FY2012-13. Since then, this metric has grown considerably, reaching 50.2% in FY2014-15, just above the minimum standard for this metric.

Figure 4-18 shows the number of trips that depart above the maximum occupancy standard, by month. At this time, very few trips on this route are full enough to prompt consideration of service additions.

Figure 4-17 South San Francisco Performance Metrics

	FY2012-13	FY2013-14	FY2014-15
Performance Metrics			
Service Productivity			
Passengers per Rev. Hour	26.32	50.42	54.85
Passengers per Rev. Mile	1.73	3.29	3.44
Cost Efficiency			
Cost per Revenue Hour	\$1,709.49	\$1,871.29	\$1,735.11
Cost per Revenue Mile	\$112.65	\$122.26	\$108.86
Cost Effectiveness			
Farebox Recovery Ratio	10.3%	17.3%	20.6%
Cost per Passenger	\$64.95	\$37.12	\$31.64
Average Fare	\$6.67	\$6.40	\$6.53
Subsidy per Passenger	\$58.28	\$30.71	\$25.11
Peak Occupancy			
Peak Occupancy	20.0%	36.1%	50.2%

Figure 4-18 South San Francisco Maximum Occupancy Trips by Month



4.6 OTHER SERVICE PLANNING ACTIVITIES

4.6.1 Community Based Transportation Plans

MTC Lifeline Transportation Program supports projects that address mobility and accessibility needs in low-income communities throughout the region. The program is funded by a combination of federal and state operating and capital funding sources, including the Federal Transit Administration’s (FTA) formula funding and the California State Transit Assistance fund. This program funds Community Based Transportation Plans (CBTPs) in low income and other identified “communities of concern.” The 2009 Alameda CBTP plan, led by staff from Alameda County, looked at ways to improve transportation from key neighborhoods in the City of Alameda and listed priorities including access to the Alameda/Oakland Ferry. The Alameda CBTP included significant outreach, and some of responses related to the Alameda/Oakland ferry service were:

- Respondents reported that the ferry terminal is difficult to access without a car.
- The majority of ferry passengers reported driving or getting dropped off at the Alameda terminal by car.
- In addition, transit buses are reportedly not well-timed with the ferry, causing passenger delays.

Since the Alameda CBTP was completed, WETA has worked with the cities of Alameda and Oakland on efforts to improve access to the ferry terminals; with AC Transit on how to better improve connections between the ferry and bus service; and with City and County staff on improving bicycle access to the ferry terminals. These activities are discussed in more detail below. WETA will continue to work with the County and other agencies as they consider the CBTP priorities in planning transportation improvements that connect or affect ferry service.

4.6.2 Alameda Terminal Access Study

In the spring of 2013, WETA began the Alameda Terminal Access Study to address the access issues to ferry service from limited parking, bicycle storage and bus service. WETA staff in coordination with City and AC Transit staff, held a series of public workshops that sought community feedback on ways to improve access to the Main Street and Harbor Bay terminals. Staff is working collaboratively with the City and other partners on parking strategies, and the final plan will include a focus on alternative modes such as buses, shuttles, bicycles, and pedestrian improvements, consistent with guidance provided in the Terminal Access Policy, which was adopted by the WETA Board in June 2015. WETA anticipates that a draft Access Plan for the Alameda terminal will be released in early 2016.

4.6.3 Transbay/Core Capacity Study

In 2014, a partnership between the Metropolitan Transportation Commission, SFCTA, SFMTA, BART, AC Transit and Caltrain secured a federal planning grant to study the Transbay corridor and capacity constraints in the “core portion” of the central Bay Area comprised of Oakland and San Francisco. WETA provided matching funding for the study and is an active participant in the study. It is anticipated the study will conclude in mid-2017 and identify short-, medium-, and long-term solutions for transit improvements in the Transbay corridor necessary to expand system capacity including new BART, bus, and ferry infrastructure and services. The study will provide information for the Regional Transportation Plan and any potential future tax or bridge toll measures funding transportation.

4.6.4 Title VI Analysis

As a recipient of federal funds, WETA prepared its 2015 Title VI Program in accordance with FTA Circular 4702.1B, dated October 1, 2012. Circular 4702.1B provides guidance for transit agencies and other federal funding recipients to ensure that services are provided in a manner that is nondiscriminatory and without respect to the minority or income status of its current or potential riders. Title VI of the Civil Rights Act of 1964 specifies that “no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”

The Title VI analysis concluded that WETA does not provide transit service in a discriminatory manner and that low-income and minority populations are provided with an equivalent level and quality of service as non-low-income and non-minority populations.

WETA strives to ensure that equal opportunities are afforded to all individuals in its service area without regard to race, color, religious creed or national origin, as they relate to community participation in local transit planning, policy and decision-making processes. Meaningful public outreach and involvement opportunities are created at initiation of planning efforts, consideration of fare or service changes, and implementation of new services. Participation is sought from all community members including minority, low-income, and LEP populations. Related activities include:

- Regular meetings to solicit input from riders about existing ferry service and proposed plans for ferry service expansion. Meetings are held in locations accessible to transit and at times that are convenient for low-income and minority communities.
- Notices to riders in English, Spanish, and Chinese regarding major service changes or decreases in benefits, which is consistent with the LEP plan. Additionally, WETA provides information on its website about free telephone translation services.
- WETA also provides notice for Spanish and Chinese speakers that free in-person translators are available for a scheduled meeting or public hearing regarding proposed decreases in benefits or services, if requested five business days prior to the event.

The WETA Title VI report, adopted by the Board May 7, 2015, can be found on the WETA website or by contacting WETA staff.

4.6.1 FTA Triennial Review

The FTA July 22, 2015 Triennial Review found WETA’s compliant in 14 of the 17 areas required, but found deficiencies in: Technical Capacity- Inactive grants/untimely grant closeouts; Procurement- No FTA clauses & Lacking required cost/price analysis; and Drug-Free Workplace/ Drug and Alcohol Program- Drug-free workplace policy lacking required elements. The FTA Report set out a corrective action and schedule for the deficiencies, which WETA resolved by the deadline of October 22, 2015.

5 OPERATING PLAN AND BUDGET

This chapter outlines the proposed Operating Plan and Operating Budget for WETA’s existing ferry system and potential new expansion ferry services that are expected to be implemented over the 10-year horizon of the SRTP. The Operating Plan recognizes the importance of offering a core level of existing services while also maintaining an operating reserve that will preserve flexibility into the future. The Operating Budget includes a description of major budget assumptions, a discussion of system operating revenues assumed to be available over the SRTP period, and a summary of system expenses by route.

5.1 OPERATING PLAN

This section describes the plans for continuation of existing ferry services as well as implementation of two new services within the 10-year horizon of the SRTP. Figure 5-3 (presented later in this chapter), provides further details on the Operating Plan for each year of the forecast period, including the timing of anticipated service changes and the revenue vehicle hours and service miles required to operate the ferry services described below.

5.1.1 Existing Services

In FY2012-13, WETA began its first full year operating each of the three ferry services that were transitioned from the cities of Alameda and Vallejo to WETA over the course of 2011 and 2012. WETA also began a new service to South San Francisco in June 2012, which has now been in operation for three full fiscal years. A brief profile of each service is provided in Figure 5-1.

Figure 5-1 WETA Existing Service, FY2014-15

Service	Service Began	Service Type	Vehicle Revenue Hours	Vehicle Revenue Miles	Total Passengers
Alameda/Oakland	April 29, 2011	All Day, Weekday & Weekend	5,348	65,706	911,473
Alameda Harbor Bay	April 29, 2011	Weekday peak only	1,539	34,569	266,304
Vallejo	July 1, 2012	All Day, Weekday & Weekend	6,472	176,620	858,665
South San Francisco	June 4, 2012	Weekday peak only	1,957	31,207	107,389

Alameda/Oakland Ferry Service

The Alameda/Oakland service continues to be a productive service. This route has experienced double-digit annual growth in passengers over each of the past three years, benefitting from the strength of the economic recovery in San Francisco and recent public exposure to the ferry service during the BART strikes. Increasing downtown employment levels and high housing prices within the city have led to a rapid rise in workers living in the East Bay who wish to commute across the Bay each day. Transbay demand is so high that other transportation options (bridges and other transit operators) are seeing record crowding, and increasing numbers of commuters from Alameda Island and Downtown Oakland are trying—and staying with—WETA service. The Operating Plan assumes an increase in service levels in FY2016-17 to accommodate recent demand growth. This service increase is anticipated to provide sufficient capacity to accommodate moderate ridership growth over the next 10 years. Based on historic ridership

trends, WETA assumes annual ridership growth rates of 15% from FY2016-17 through FY2019-20. Ridership growth is projected to slow to 8% in FY2020-21, then to 2% annually from FY2021-22 onward due primarily to peak hour vessel capacity constraints.

Alameda Harbor Bay Ferry Service

Ridership on the Alameda Harbor Bay service has significantly increased over the past five years. It is the most productive of the commute-only services serving 173 passengers per revenue hour in FY2014-15. Similar to the market trends for Alameda/Oakland service, passenger growth on the Alameda Harbor Bay ferry service is driven largely by the strong employment growth and high housing costs in San Francisco. These factors have led more and more San Francisco workers to choose to live in the East Bay. Bay Farm Island is relatively isolated from other transit options such as BART or AC Transit, making the ferry an even more attractive alternative for nearby residents. Surging ridership on the Harbor Bay service has resulted in full bicycle and automobile parking facilities. In response, WETA has launched a study of options for increasing terminal access in order to meet demand for ferry services. Based on historic ridership trends and anticipated landside access constraints, WETA is planning for growth of 5% per year. The deployment of a larger capacity vessel, as this plan assumes, will be required to accommodate forecasted ridership growth.

Vallejo Ferry Service

Ridership on the Vallejo service has increased steadily in recent years, with related improvements in farebox recovery, passengers per revenue hour, and cost per passenger measures. Continued peak period congestion on the I-80 corridor makes the ferry service highly time-competitive during commute periods with other travel modes including both automobile and bus transit options between Vallejo and San Francisco. In 2015, the route had increasing numbers of leave-behinds on multiple departures, especially the most popular evening return trips from San Francisco back to Vallejo. WETA made some adjustment to fleet assignments in FY2014-15 in order to try to accommodate the surging demand, but these changes are not enough to consistently accommodate all passengers. This plan assumes peak period service increases in FY2016-17 to accommodate this ridership growth. Based on historic ridership trends, annual ridership is assumed to grow at a rate of 11% per year from FY2016-17 through FY2019-20. Beginning in FY2020-21, ridership growth is anticipated to slow to 3% per year due to peak hour vessel capacity constraints.

South San Francisco Ferry Service

Ridership on the South San Francisco service has shown strong growth each year since service began in 2012, including 28% growth in FY2014-15 over the previous year. For workers heading to South San Francisco from residential locations in the East Bay, ferry service is an increasingly attractive commuting alternative. The South San Francisco terminal is located midway between the two transbay bridge crossings, so the quick ferry trip is more appealing than driving or having to utilize multiple transit providers via more indirect routes. Productivity levels are still on the low end for this service and it is expected that this service will still need several more years for ridership markets to mature. WETA is assuming a 12% annual increase in ridership on this service from FY2016-17 through FY2019-20 and a 10% annual increase from FY2020-21 through FY2024-25. The service has adequate capacity on current vessels to accommodate this growth. At this time, no service changes are planned.

5.1.2 Expansion Services

In June 2015, the Board of Directors approved the WETA System Expansion Policy and evaluation measures. The policy defines service goals and metrics, which will be shared with project partners in an effort to fund, develop and implement objectives for WETA services. The policy is a planning template for WETA staff and serves as an integral part of WETA’s plans to expand service.

The service expansion projects currently in the pipeline are at different stages of development based on a variety of factors, including availability of capital and operational funding. Projects can be generally grouped into two types:

- **Near-Term Expansion Projects** – These projects have completed major planning milestones and secured funding commitments; they are expected to begin construction and operation within the 10-year horizon of this SRTP and their capital and operating costs are included in the financially-constrained Operating Plan and CIP.
- **Future Expansion Projects** – These projects are either still in preliminary planning or have been proposed and studied in the past, but are not currently in active development, due to issues such as financial feasibility concerns, difficult environmental conditions, or shifting priorities from local sponsors. Because of funding or project implementation uncertainty, these projects cannot be assumed to begin operations within the SRTP planning horizon, so these projects are not currently in the financially constrained plan.

Both Near-Term Expansion Projects and Future Expansion Projects are depicted in Figure 5-2. Near-Term Expansion Projects are described in more detail in the text that follows. Future Expansion Projects are discussed separately in Chapter 8.

Figure 5-2 Map of Current and Future Terminals and Facilities



The Operating Plan assumes that only the Richmond and Treasure Island expansion services will be operational within the 10-year planning period of the SRTP. These two central Bay routes

have travel times similar to the existing central Bay services and have high projected ridership relative to other potential expansion services. WETA has completed environmental review and is now beginning design and construction for the Richmond terminal project. The Treasure Island service is being developed in conjunction with a larger Treasure Island redevelopment effort, as discussed further below.

Richmond Ferry Service

The proposed Richmond service will provide commute-only service between a new terminal constructed by WETA on the Ford Peninsula in the City of Richmond and the Downtown San Francisco Ferry Terminal. The project was initially proposed in MTC Resolution 3434, the 2004 Regional Transit Expansion program. It has recently cleared a number of development milestones, allowing design, construction, and operation to proceed. There are a number of factors influencing the decision to implement the Richmond to San Francisco ferry service:

- In June of 2015, WETA signed a Cooperative Agreement with Contra Costa Transportation Authority (CCTA), which will provide an operational subsidy for ferry service between Richmond and San Francisco for 10 years.
- The capital costs necessary to construct the ferry terminal in Richmond are far lower than other proposed expansion projects.
- Current land uses around the Richmond terminal are supportive of a new transit service and the future development potential on the land surrounding the terminal is higher than other locations.
- The City of Richmond is highly motivated and has begun actively exploring how to optimize multimodal access to the future ferry terminal, such as through shuttles.
- The location of the Richmond terminal at the mid-point between Vallejo and Oakland will allow WETA to tap into an entirely new ridership market in western Contra Costa County.

Annual ridership on the Richmond service is projected to be approximately 123,000 passengers in the first full fiscal year of operations and is projected to increase by 7.1% annually thereafter. Annual service hours and miles are assumed to be 1,518 and 33,092, respectively. Details of the capital project to construct the new Richmond ferry terminal are provided in Chapter 6.

Treasure Island Ferry Service

The proposed Treasure Island ferry service is being developed and implemented by the Treasure Island Mobility Management Agency (TIMMA) in conjunction with a large-scale proposed development project on Treasure Island that will include 8,000 new housing units, restaurants, retail and entertainment venues that is being overseen by the Treasure Island Development Authority (TIDA).² The new ferry service between Treasure Island and the San Francisco Ferry Building is required as a condition of approval for the project to address transportation impacts created by locating thousands of new residents and other uses on the island. WETA is not responsible for any capital or operating costs of the project, but is partnering with TIMMA to serve as the operating agency for the service. WETA staff has begun negotiation of a Memorandum of Understanding (MOU) with TIMMA that would set forth the terms and conditions under which WETA would operate the future Treasure Island ferry service.

The proposed development will be organized around the new Treasure Island Ferry Terminal, which will be designed to meet the transportation needs of future residents on the island. The

² More information about the project can be found here: www.sftreasureisland.org

2035 projected daily ridership for the Treasure Island service is 2,475 passengers. TIDA and its developers are responsible for construction of the terminal on Treasure Island, and the purchase (or lease) of ferry vessels needed for the service. In addition, TIMMA is underwriting the operating costs necessary to provide the required level of ferry service. The operating costs for this service will be paid for through homeowners' dues, monthly passes for all residents on the new development, bridge tolls, and other TIMMA operating subsidies.

WETA is not required to allocate any funding for capital or operating costs of this service, but has planned for accommodation of the new vessels in its Downtown San Francisco Ferry Terminal Expansion and Central Bay Operations and Maintenance Facility projects. The current assumption is that ferry service will begin in FY2022-23 with one vessel and that a second vessel will be added in FY2027-28.

5.2 OPERATING BUDGET

Projected system operational expenses and revenues for the existing services and near-term expansion services are shown in Figure 5-3 Figure 5-3, presented near the end of this chapter. The following discussion presents the assumptions underlying the forecast and provides more detail on the anticipated revenue sources and available reserve funding.

5.2.1 Budget Assumptions

Operating expenses and revenues for existing services are based upon actual FY2014-15 expenses projected out for the 10-year period, utilizing the major assumptions identified below:

- Unit costs for Purchased Transportation services, including fuel reimbursements, to increase 4% annually.³
- Other expenses to increase 2.2% annually.
- Step increases in operating costs due to increased service hours on Vallejo and Alameda/Oakland routes in FY2016-17, and new service to Richmond added in FY2018-19. The opening of the Central Bay Operations and Maintenance Facility will also create a one-time step increase in crew costs.
- Fares to increase annually at 3% starting in FY2015-16, and continuation of current FY2014-15 to FY2019-20 Fare Program through FY2025-26.⁴
- Annual ridership increases on each service between 2% and 15%.⁵ Expansion service costs for Richmond are WETA's projection of service costs based upon its existing operating agreement with Blue and Gold and the cost of other similar services. Fare revenues for Richmond service are based on the initial 10-year ridership forecast and planned passenger fares, consistent with fare levels in the Richmond MOU.
- Service costs and fare revenues for Treasure Island are still to be determined.

³ The current B&GF contract will expire on 12/31/2016 with guaranteed billing rates identified through 6/30/2016. WETA has the option to extend the contract term for up to 5 additional years, through 12/31/2021. The Operating Plan does not forecast any structural changes to the contract upon renegotiation.

⁴ The Vallejo Monthly pass and South San Francisco full fare are exceptions to the standard 3% annual fare increase. As described in more detail in the Board-approved FY2014-15 to FY2019-2020 Fare Program, the cost of a Vallejo Monthly pass will have slightly larger step increases over a five-year period to bring the frequent-rider discount into alignment with the discounts offered on the rest of the WETA system. Similarly, the Clipper discount on South San Francisco fares is being gradually adjusted over the next five years as part of the overall Fare Program.

⁵ Ridership forecasts for each existing route are summarized in Section 5.1.1.

5.2.2 Revenue Sources

A variety of state and local funding sources are programmed and available to support nearly \$500 million in operating costs contained in this 10-year plan. All revenue sources in the Operating Budget are fully committed. These include the following:

Fare Revenue

Passenger fares are projected to provide \$251.5 million in revenues to support system operation over the next 10 years. To ensure that fares marginally keep up with system cost inflation, fare levels are planned to increase at 3% annually. In addition to revenue increases due to higher fare-per-passenger levels, fare revenues will also increase due to ridership growth on various routes, as described previously in Section 5.1.

Regional Measure 1 – 5% Program

These funds are derived from an increase in tolls on the Bay Area’s state-owned bridges that was approved by the voters in November 1988. This plan assumes that these funds do not escalate over time, consistent with MTC projections. It is assumed that this source will contribute \$14.3 million to the operations budget over the next 10 years.

Regional Measure 2 Program

In 2004, voters passed Regional Measure 2 (RM2), which provides WETA with \$18.3 million annually to support existing services and fund WETA’s service expansion plans. Of this amount, \$3 million is specifically available to support WETA planning and administration, and \$15.3 million is available to support service development and operation. The Operating Budget does not escalate RM2 funds over time, consistent with MTC projections. This plan assumes RM2 expansion funds are used to support operating deficits for existing Alameda/Oakland, Harbor Bay, Vallejo, and South San Francisco services.

Alameda County Measure B / Measure BB

In 2000, Alameda County voters approved Measure B, the half-cent transportation sales tax and an accompanying 20-year expenditure plan. Alameda CTC administers Measure B funds to deliver transportation improvements and services in Alameda County and to address congestion in each major commute corridor in the county. Measure B funds are allocated annually to support the Alameda ferry services. On November 4, 2014 Alameda County voters approved Measure BB, a 30-year Transportation Expenditure Plan, which extends the existing 0.5 % Measure B sales tax, scheduled to terminate on March 31, 2022. Measure BB also augments the tax by 0.5% and dedicates the full 1% to transportation expenses. Measure BB will expire in 2045 without voter renewal.

A total of \$7.8 million of these funds are anticipated to be used to support operation of the Alameda ferry services in the 10-year horizon of this SRTP.

Contra Costa Measure J

On November 2, 2004, Contra Costa voters approved Measure J, which extended the half-percent local transportation sales tax first established by Measure C in 1988 for another 25 years, in order to provide funding for continued and new transportation projects in the county. This program included \$45 million to support capital development or transit operations for new ferry services to Richmond and Hercules. Approximately \$25 million will be provided to support Richmond ferry operations beginning in FY2018-19 through FY2024-25, per agreement between WETA and the CCTA.

City of Alameda Property Tax/Assessments

The plan assumes that the City of Alameda continues to provide funds from their property tax assessments, a total of \$3.8 million over the 10-year planning period, to support operation of the Alameda Harbor Bay service.

State Transit Assistance

State Transit Assistance (STA) funds are derived from the statewide sales tax on gasoline and diesel fuel and are used for transportation planning and mass transportation purposes. STA funds are appropriated by the State Controller's Office (SCO) and allocated to WETA through grant agreement with MTC. The formula used by the SCO allocates 50% of the funds based on population and the remaining 50% is allocated according to operator revenues from the prior fiscal year. The funds may be used to support both transit capital and operating needs. This plan assumes the use of \$7.8 million in STA revenue-based funds to support ferry operations over the 10-year planning period.

5.2.3 Other Potential Revenue Sources

WETA will continue to work with local, regional and state officials to pursue new transit operating funds to support existing and expanded ferry services over time. New and expanded revenue sources are especially critical as WETA's largest sources of funding subsidy do not increase with inflation. Some potential sources of additional funding are described below.

San Mateo Sales Tax

In 2004, San Mateo County voters approved an extension of the existing Measure A transportation sales tax measure to provide funding for continued and new transportation projects in the county. This program included \$30 million to support capital development of new ferry services to South San Francisco and Redwood City. WETA expended \$8 million of this amount to develop the South San Francisco terminal. WETA will work with the San Mateo County Transportation Authority to determine whether the remaining Measure A funds dedicated to the South San Francisco project could be flexed to support South San Francisco service operating costs in future years.

Regional Funds

This plan assumes no growth of regional toll dollars available to support ferry services over the 10-year planning horizon. However, as the economy picks up, and toll revenues increase, WETA anticipates potential discussions with MTC regarding cost inflation increases previously planned, but never offered to WETA services. WETA will also advocate for a portion of any future bridge toll, sales tax, gas tax or other transit operating increases planned by the region to support transit services.

New Local Sales Tax Initiatives

WETA will work with local entities and county transportation authorities, such as the Alameda, County Transportation Commission, Contra Costa Transportation Authority, Solano County Transportation Authority, San Francisco County Transportation Authority, and Santa Clara Valley Transportation Authority, as they develop and pursue countywide transportation sales tax initiatives in future years to support continued ferry transit operations.

Transit Performance Initiative Incentive Program

The Transit Performance Initiative (TPI) Incentive Program provides a financial reward to those Bay Area transit agencies that improve ridership and productivity. In October 2012, MTC

committed \$60 million in federal Cycle 2 regional Surface Transportation Program (STP) / Congestion Mitigation Air Quality Improvement Program (CMAQ) funds to the TPI Incentive Program for a four-year period, FY2012-13 through FY2015-16. Per the MTC distribution formula, WETA could receive approximately \$1.1 million in funding. WETA will work with MTC to identify eligible projects that would meet fund source requirements.

State – Low Carbon Transit Operations Program

The Low Carbon Transit Operating Program (LCTOP) provides operating and capital assistance for transit agencies to reduce greenhouse gas emissions and improve mobility. The funding program is part of the State’s Greenhouse Gas Reduction Fund. A portion of the Low Carbon Transit Operations Program (LCTOP) funds are allocated to operators based on the State Transit Assistance (STA) Revenue-Based formula. Per the formula, it is estimated WETA would receive \$19.3 million in LCTOP funds over 25 years. LCTOP funds can be used to support capital and operating expenses that enhance transit service and reduce greenhouse gas (GHG) emissions. These funds can also be used to support new or expanded transit services, expanded intermodal facilities and equipment, or fueling and maintenance for those facilities. WETA will work with Caltrans to identify projects that would qualify as GHG emission reducing expenditures.

5.2.4 Reserves

In addition to the previously described efforts to enhance overall revenues, WETA has also worked to establish sufficient reserve funds to allow for some amount of operating flexibility and to buffer against unanticipated capital maintenance expenses. Although individual funding sources have different restrictions on the types of projects they can fund, WETA has developed the following guidelines for the amount of reserve funding needed:

- **Operating Reserve** – The purpose of the Operating Reserve is to accumulate sufficient reserve funds necessary to guard against service disruption in the event of unexpected temporary revenue shortfall or unpredicted one-time expenses. The target fund level for the Operating Reserve is to maintain a balance, as of July 1st of each fiscal year, equal to two months (or 17%) of total ferry operating expenditures. For FY2015-16, the target fund level is \$5.3 million.
- **Capital Reserve** – The purpose of the Capital Reserve is to accumulate sufficient reserve funds necessary to support unanticipated capital repairs of major system components. The target fund level for the Capital Reserve is to maintain a balance, as of July 1st of each fiscal year, equal to \$3 million. This target fund level is equal to the estimated cost for: 1) two engine replacements, at \$1 million each; 2) two emergency dry docks, at \$250,000 each; and 3) one emergency float repairs, at \$500,000.

Reserve funding is maintained by accumulating a balance in those funding sources that are allowed to be held over from year-to-year, such as Regional Measure 1 – 5% funds, State Transit Assistance (STA) formula allocations, and designated funding from local sales tax expenditure plans. A 10-year projection of all reserve funding (both operations and capital) is provided in Figure 5-3 and Figure 5-4.

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Figure 5-3 WETA Operating Plan and Budget, FY2012-13 through FY2024-25

	FY2012/13	FY2013/14	FY2014/15	FY2015/16	FY2016/17	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25	TOTAL
	Actual	Actual	Actual	Budget	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	10-Year
PLANNED SERVICE HOURS & MILES														
Major Service Changes:						In Service - Central Bay OMF	Begin Richmond Service - Jul18				Begin Treasure Island Service - Jul22			
REVENUE VEHICLE HOURS														
Alameda/Oakland Ferry Service	4,683	5,179	5,348	5,400	5,784	5,784	5,784	5,784	5,784	5,784	5,784	5,784	5,784	57,456
Alameda Harbor Bay Ferry Service	1,508	1,575	1,539	1,520	1,520	1,520	1,520	1,520	1,520	1,520	1,520	1,520	1,520	15,200
Vallejo Ferry Service	6,847	6,889	6,472	6,660	7,428	7,428	7,428	7,428	7,428	7,428	7,428	7,428	7,428	73,512
South San Francisco Ferry Service	1,539	1,666	1,957	1,960	1,960	1,960	1,960	1,960	1,960	1,960	1,960	1,960	1,960	19,600
Richmond Ferry Service	0	0	0	0	0	0	1,518	1,518	1,518	1,518	1,518	1,518	1,518	10,626
Treasure Island Ferry Service											TBD	TBD	TBD	TBD
TOTAL SERVICE HOURS	14,577	15,309	15,316	15,540	16,692	16,692	18,210	18,210	18,210	18,210	18,210	18,210	18,210	176,394
SERVICE MILES														
Alameda/Oakland Ferry Service	55,262	61,742	65,706	65,320	77,992	77,992	77,992	77,992	77,992	77,992	77,992	77,992	77,992	767,248
Alameda Harbor Bay Ferry Service	34,052	35,265	34,569	34,200	34,200	34,200	34,200	34,200	34,200	34,200	34,200	34,200	34,200	342,000
Vallejo Ferry Service	182,328	188,076	176,620	181,475	222,793	222,793	222,793	222,793	222,793	222,793	222,793	222,793	222,793	2,186,616
South San Francisco Ferry Service	23,354	25,530	31,207	31,250	31,250	31,250	31,250	31,250	31,250	31,250	31,250	31,250	31,250	312,500
Richmond Ferry Service	0	0					33,092	33,092	33,092	33,092	33,092	33,092	33,092	231,644
Treasure Island Ferry Service											TBD	TBD	TBD	TBD
TOTAL SERVICE MILES	294,996	310,613	308,102	312,245	366,235	366,235	399,327	399,327	399,327	399,327	399,327	399,327	399,327	3,840,008
OPERATING COSTS														
WETA Planning & Administration	\$2,472,882	\$2,189,314	\$2,763,907	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$30,000,000
Alameda/Oakland Ferry Service	\$5,697,073	\$7,110,404	\$7,448,519	\$8,866,400	\$10,584,378	\$12,986,000	\$13,427,000	\$13,884,300	\$14,358,500	\$14,850,100	\$15,360,000	\$15,888,600	\$16,436,700	\$136,641,978
Alameda Harbor Bay Ferry Service	\$2,095,322	\$2,375,356	\$2,306,184	\$2,869,700	\$3,038,900	\$3,522,400	\$3,639,300	\$3,760,600	\$3,886,200	\$4,016,400	\$4,151,300	\$4,291,000	\$4,435,600	\$37,611,400
Vallejo Ferry Service	\$13,389,657	\$13,267,345	\$13,392,792	\$15,865,450	\$19,393,055	\$19,968,900	\$20,564,300	\$21,180,200	\$21,817,100	\$22,475,800	\$23,157,300	\$23,862,300	\$24,591,700	\$212,876,105
South San Francisco Ferry Service	\$2,630,903	\$3,121,309	\$3,397,354	\$3,600,100	\$3,821,700	\$4,581,300	\$4,734,300	\$4,893,000	\$5,057,300	\$5,227,700	\$5,404,400	\$5,587,600	\$5,777,400	\$48,684,800
Richmond Ferry Service	\$0	\$0	\$0	\$0	\$0	\$0	\$4,347,686	\$4,523,428	\$4,692,376	\$4,867,843	\$5,050,083	\$5,239,364	\$5,435,962	\$34,156,742
Treasure Island Ferry Service											TBD	TBD	TBD	TBD
TOTAL	\$26,285,837	\$28,063,729	\$29,308,755	\$34,201,650	\$39,838,033	\$44,058,600	\$49,712,586	\$51,241,528	\$52,811,476	\$54,437,843	\$56,123,083	\$57,868,864	\$59,677,362	\$499,971,025
OPERATING REVENUES														
Fare Revenues	\$10,501,989	\$13,117,524	\$13,924,923	\$14,507,900	\$16,831,000	\$19,407,100	\$23,273,693	\$25,204,381	\$26,783,542	\$28,525,144	\$30,368,853	\$32,318,144	\$34,281,012	\$251,500,769
Local - Bridge Tolls / RM1 5% Ferry Ops	\$308,655	\$0	\$0	\$825,200	\$3,362,155	\$991,500	\$167,400	\$1,651,400	\$1,678,500	\$1,476,200	\$1,500,200	\$1,325,200	\$1,350,800	\$14,328,555
Local - Bridge Tolls / RM2 WETA Plan & Admin	\$2,472,882	\$2,189,314	\$2,763,907	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$30,000,000
Local - Bridge Tolls / RM2 Ferry Ops	\$13,000,000	\$12,653,094	\$12,618,776	\$15,300,000	\$15,300,000	\$15,300,000	\$15,300,000	\$15,300,000	\$15,300,000	\$15,300,000	\$15,300,000	\$15,300,000	\$15,300,000	\$153,000,000
Local - MTC / Bay Bridge Closure	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Local - Sales Tax Measure B & BB	\$0	\$0	\$0	\$0	\$975,878	\$1,686,000	\$1,418,600	\$1,544,900	\$1,591,900	\$1,526,200	\$1,875,700	\$1,794,800	\$1,630,400	\$14,044,378
Local - Sales Tax Measure J	\$0	\$0	\$0	\$0	\$0	\$0	\$3,438,893	\$3,521,847	\$3,588,534	\$3,651,299	\$3,709,330	\$3,761,720	\$3,807,450	\$25,479,073
Local - Alameda Property Tax / Assessments	\$0	\$0	\$0	\$568,550	\$369,000	\$369,000	\$369,000	\$369,000	\$369,000	\$369,000	\$369,000	\$369,000	\$369,000	\$3,828,250
Local - Landing Fees / Advertising / Other	\$2,311	\$3,797	\$1,150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
State Transit Assistance (STA)	\$0	\$0	\$0	\$0	\$0	\$3,305,000	\$2,745,000	\$650,000	\$500,000	\$590,000	\$0	\$0	\$0	\$7,790,000
Other Funding (TBD) for Treasure Island service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	TBD	TBD	TBD	TBD
TOTAL	\$26,285,837	\$28,063,729	\$29,308,755	\$34,201,650	\$39,838,033	\$44,058,600	\$49,712,586	\$51,241,528	\$52,811,476	\$54,437,843	\$56,123,083	\$57,868,864	\$59,677,362	\$499,971,025
NET INCOME (DEFICIT)														
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Systemwide Farebox Recovery	44%	51%	52%	46%	46%	47%	50%	52%	54%	55%	57%	59%	60%	54%

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Figure 5-4 Operating and Capital Reserves, FY2014-2015 to FY2024-25

	FY2014/15	FY2015/16	FY2016/17	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25	TOTAL
	Actual	Budget	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	10-Year
Reserves												
Regional Measure 1 - 5% State General Funds												\$0
Annual Revenue		\$2,800,000	\$2,800,000	\$2,800,000	\$2,800,000	\$2,800,000	\$2,800,000	\$2,800,000	\$2,800,000	\$2,800,000	\$2,800,000	\$28,000,000
Set-aside: Operating and Capital Reserves		(\$8,314,300)	(\$1,458,200)	(\$717,500)	(\$961,100)	(\$260,000)	(\$266,900)	(\$276,400)	(\$286,500)	(\$296,800)	(\$307,500)	(\$13,145,200)
Used: Operations		(\$825,200)	(\$3,362,155)	(\$991,500)	(\$167,400)	(\$1,651,400)	(\$1,678,500)	(\$1,476,200)	(\$1,500,200)	(\$1,325,200)	(\$1,350,800)	(\$14,328,555)
Used: Capital		\$0	\$0	\$0	(\$2,004,206)	(\$2,160,080)	(\$1,906,523)	(\$245,220)	(\$2,968,320)	(\$1,249,680)	\$0	(\$10,534,029)
Total RM1 - 5% Available for Operating and/or Capital	\$10,963,339	\$4,623,839	\$2,603,484	\$3,694,484	\$3,361,778	\$2,090,298	\$1,038,375	\$1,840,555	(\$114,465)	(\$186,145)	\$955,555	
Regional Measure 1 - 2% Bridge Toll Revenues												
Annual Revenue		\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$10,000,000
Used: Capital		(\$1,323,414)	(\$348,113)	(\$214,080)	(\$827,280)	(\$1,690,960)	(\$914,280)	(\$2,252,937)	(\$2,213,860)	(\$2,325,558)	(\$48,660)	(\$12,159,142)
Total RM1 - 2% Available for Capital	\$2,191,526	\$1,868,112	\$2,519,999	\$3,305,919	\$3,478,639	\$2,787,679	\$2,873,399	\$1,620,462	\$406,602	(\$918,956)	\$32,384	
Alameda Measure B and Measure BB Sales Tax Revenues												
Estimated Annual Revenue - Measure B		980,475	1,000,100	1,020,100	1,040,500	1,061,300	1,082,500	828,150	-	-	-	7,013,125
Estimated Annual Revenue - Measure BB		641,520	654,400	667,500	680,900	694,500	708,400	903,250	1,474,100	1,503,600	1,533,700	9,461,870
Used: Operations		\$0	(\$975,878)	(\$1,686,000)	(\$1,418,600)	(\$1,544,900)	(\$1,591,900)	(\$1,526,200)	(\$1,875,700)	(\$1,794,800)	(\$1,630,400)	(\$14,044,378)
Used: Capital		(\$1,073,031)	(\$1,558,393)	(\$125,340)	(\$128,100)	(\$287,075)	\$0	(\$330,440)	(\$475,100)	(\$559,380)	\$0	(\$4,536,859)
Total Measure B and BB Available for Operating and or Capital	\$2,424,046	\$2,973,010	\$2,093,239	\$1,969,499	\$2,144,199	\$2,068,024	\$2,267,024	\$2,141,784	\$1,265,084	\$414,504	\$317,804	
State Transit Assistance (STA)												
Estimated Annual Revenue		\$1,291,642	\$1,420,913	\$1,551,850	\$1,684,453	\$1,818,719	\$1,954,652	\$2,092,250	\$2,231,512	\$2,372,400	\$2,515,031	\$18,933,422
Used: Operations		\$0	\$0	(\$3,305,000)	(\$2,745,000)	(\$650,000)	(\$500,000)	(\$590,000)	\$0	\$0	\$0	(\$7,790,000)
Used: Capital		\$0	(\$178,850)	(\$1,749,484)	(\$1,788,006)	(\$190,916)	(\$473,816)	(\$1,395,869)	(\$4,497,023)	(\$3,374,178)	(\$2,745,444)	(\$16,393,586)
Total STA Available for Operating and or Capital	\$3,888,233	\$5,179,875	\$6,421,938	\$2,919,304	\$70,751	\$1,048,554	\$2,029,390	\$2,135,771	(\$129,740)	(\$1,131,518)	(\$1,361,931)	
Alameda Property Tax & Assessment (Alameda Local \$)												
Estimate Annual Revenue - LLAD		\$74,000	\$74,000	\$74,000	\$74,000	\$74,000	\$74,000	\$74,000	\$74,000	\$74,000	\$74,000	\$740,000
Estimate Annual Revenue - TIF		\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$1,500,000
Estimate Annual Revenue - HBBPA		\$145,000	\$145,000	\$145,000	\$145,000	\$145,000	\$145,000	\$145,000	\$145,000	\$145,000	\$145,000	\$1,450,000
Used: Operations		(\$568,550)	(\$369,000)	(\$369,000)	(\$369,000)	(\$369,000)	(\$369,000)	(\$369,000)	(\$369,000)	(\$369,000)	(\$307,700)	(\$3,828,250)
Used: Capital		(\$90,000)	\$0	(\$1,154,255)	\$0	\$0	(\$278,700)	\$0	(\$791,900)	(\$149,000)	\$0	(\$2,463,855)
Total Alameda Local \$ Available for Operating and or Capital	\$2,687,817	\$2,398,267	\$2,398,267	\$1,244,012	\$1,244,012	\$1,244,012	\$965,312	\$965,312	\$173,412	\$24,412	\$85,712	
Total Available for Operating and/or Capital	\$22,154,961	\$17,043,103	\$16,036,927	\$13,133,218	\$10,299,379	\$9,238,567	\$9,173,500	\$8,703,884	\$1,600,893	(\$1,797,703)	\$29,524	

6 CAPITAL IMPROVEMENT PROGRAM

The 10-year Capital Improvement Program (CIP) provides an overview of capital projects that will be needed to support WETA’s current regional program of public transit and emergency response ferry services, as well as WETA’s planned system expansion. The CIP provides a basis for annual capital budgeting, long-term financial planning, and grant application development, and it will be revised periodically as projects develop and future system funding becomes more certain. A detailed table of project costs and revenues by year is provided in Appendix A.

6.1 CIP PROJECTS AND CAPITAL COSTS

The CIP is organized to reflect the multi-year nature of capital projects and the recurring cycles of many capital improvements. The program of projects included in the CIP includes both rehabilitation and replacement needs for existing services and expansion needs based upon WETA’s system expansion plans described in Chapter 5. All projects contained in the plan support WETA’s state-mandated mission to operate a comprehensive water transportation system and to coordinate and operate the water transportation response to regional emergencies.

Project categories included in the CIP program are summarized in Figure 6-1 and are described in more detail in the following pages.

Figure 6-1 Types of Capital Projects

Program	Description
Revenue Vessel Projects	Rehabilitation, replacement and expansion of ferry vessel fleet
Major Facilities Rehabilitation and/or Replacement	Rehabilitation and replacement of passenger ferry and vessel mooring facilities (e.g., terminals, floats, docks, etc.)
Service Expansion Projects	Ferry terminals necessary for near-term ferry expansion services and operations
Maintenance Facilities and Equipment Projects	Two new facilities to support the provision of existing and new ferry services and emergency response functions, plus capital expenses for maintenance tools and equipment.

6.1.1 Revenue Vessel Projects

WETA currently owns and maintains a fleet of 12 ferries used to support its regularly scheduled transit services. The plan assumes that WETA’s combined ferry fleet will consist of up to 18 vessels by FY2024-25, including eight of the existing vessels, six replacement vessels and four new expansion vessels as shown in Figure 6-2 through Figure 6-5. This plan assumes extending the use of four vessels beyond their 25-year life in order to meet near-term anticipated service demand and the need for extra vessels to support fleet maintenance and rehabilitation needs. WETA’s fleet will provide over 18,000 hours of revenue service annually during the course of the 10-year plan. A detailed Fleet Plan is provided in Appendix B.

This fleet configuration allows for six spare vessels to be available to provide back-up service when vessels must undergo Coast Guard required dry dock inspections or when regularly scheduled or unanticipated maintenance, rehabilitation or repair work is needed. These also serve as an emergency response fleet of vessels that is prepared to serve the Bay Area’s transportation

needs in the event of an emergency. Revenue vessel project needs are described below and organized into rehabilitation, replacement and expansion needs of the fleet.

Vessel Rehabilitation

Vessel rehabilitation includes projects to provide periodic rehabilitation and replacement of ferry boat components such as haul-outs, engines, generators, propulsion systems and other major components required to keep the vessels in service. The total estimated cost of vessel rehabilitation over the course of the 10-year plan is \$132.3 million. All vessel rehabilitation work will be performed by third-party vendors under contract to WETA. Vessel rehabilitation work is broken into two major categories for financial planning purposes, as described below.

- **Major Component Rehabilitation/Replacement:** Ferry vessels are required to undergo periodic haul-out and rehabilitation work to remain in working order over their 25-year lifespan. Major component rehabilitation/replacement life-cycles can include propulsion systems, navigation systems, onboard monitoring and alarm systems, interior components and boarding apparatus. The need for this type of rehabilitation is often cyclical and can be planned. For example, engine overhauls are generally required every 12,000 hours of operation. Other major component work, including rehabilitation/retrofit of passenger amenities, is determined by a preventative maintenance program and inspection process. Over the next 10 years, WETA has identified \$31.4 million of major component rehabilitation/replacement work that will be needed across the current and future fleet.
- **Quarter-Life/ Mid-Life/ End-of-Life Repower/Refurbishment:** A quarter-life repower/refurbishment is scheduled when a ferry reaches 6.5 and approximately 19 years of service life, and includes major dry-docking, overhauls to drive train running gear, passenger cabin refurbishment, HVAC and main engine overhaul work. A mid-life repower/refurbishment is scheduled when a ferry reaches 12.5 years of service life. Ferries are repowered at mid-life in order to provide for continued safe and reliable operation. This work generally includes replacement of major vessel systems, such as engines, electronics, propulsion systems and refurbishment of the passenger cabins, as well as sandblasting and repainting vessels. End-of-life repower/refurbishment may be undertaken to keep vessels operational beyond their typical useful lives of 25 years. End-of-life work activities are the same as quarter-life activities, except that the main engine is replaced rather than overhauled. Equipment service hours and specific vessel needs may affect the timing of the repower/refurbishment projects. The total anticipated cost for these projects is \$100.9 million within the 10-year planning period of the SRTP, including quarter-life repower/refurbishment of 13 vessels at a cost of \$62.9 million; mid-life repower/refurbishment of five vessels at a cost of \$32.4 million; and end-of-life repower/refurbishment for four vessels at a cost of \$5.6 million.

Vessel Replacement

Passenger ferry vessels are expected to have a useful life of 25 years. Vessel replacement is necessary when: 1) a vessel reaches the end of its useful life or 2) when a vessel is nearing the end of its useful life and major component rehabilitation and replacement is no longer cost effective. WETA is currently in the process of replacing three vessels, the Encinal, Express II and Vallejo, at a total cost of \$51.8 million. WETA anticipates replacement of three additional vessels over the next ten years including the Bay Breeze, Intintoli, and Mare Island at an estimated cost of \$65.8 million.

Vessel Expansion

WETA’s vessel fleet expansion program includes the purchase of up to four new ferry vessels to operate planned service for a total of approximately \$79.5 million. It is anticipated that these vessels will be funded through a combination of RM2 and state Proposition 1B funds.

Figure 6-2 Current Revenue Vessel Fleet

ID Name	ID #	MFG	Year MFG	Length of Vessel (Meters)	Capacity: Seated/ Wheelchairs	Passenger Ferry Type	Mode of Power	Major Rehab/ Years Added	Year Vessel Retired
Peralta	1118810	Nichols	2002	37	326 / 4	Catamaran	diesel	yes/13	2025
Encinal	682580	Nichols	1985	27.4	395 / 4	Catamaran	diesel	yes/ 13	2016
Bay Breeze	1020550	Nichols	1994	29.6	250 / 4	Catamaran	diesel	yes/12	2021
Gemini	1213097	Nichols/ Kvichak	2008	35.9	149 / 4	Catamaran	diesel	yes/12	2033
Pisces	1213095	Nichols/ Kvichak	2008	35.9	149 / 4	Catamaran	diesel	yes/ 13	2033
Scorpio	1215086	Kvichak/ Nichols	2009	35.9	199 / 4	Catamaran	diesel	yes/ 13	2034
Taurus	1215087	Kvichak/ Nichols	2009	35.9	199 / 4	Catamaran	diesel	yes/ 13	2034
Vallejo	972155	Gladding-Hearn	1991	33.67	267 / 4	Catamaran	diesel	yes/16	2017
Intintoli	1050665	Dakota Creek	1997	41.27	349 / 4	Catamaran	diesel	yes/ 11	2023
Mare Island	1053103	Dakota Creek	1997	41.27	349 / 4	Catamaran	diesel	yes/ 11	2023
Solano	1155022	Dakota Creek	2004	41.27	320 / 4	Catamaran	diesel	yes/11	2029

*The Express II was retired in 2012 and will be replaced in 2016.

Figure 6-3 Vessel Replacement Program

Replacement Vessels	Year of MFG	Year Vessel In service	Length of Vessel	Capacity: Seated/ Wheelchairs	Passenger Ferry Type	Mode of Power	Estimated Cost
Express III	2016	2016	TBD	399 / 4	Catamaran	diesel	\$15,317,700
Encinal	2016	2016	TBD	399 / 4	Catamaran	diesel	\$15,406,300
Vallejo	2017	2017	TBD	399 / 4	Catamaran	diesel	\$21,051,600
Bay Breeze	2021	2021	TBD	399 / 4	Catamaran	diesel	\$16,911,600
Intintoli	2023	2023	TBD	499 / 4	Catamaran	diesel	\$24,458,400
Mare Island	2023	2023	TBD	499 / 4	Catamaran	diesel	\$24,458,400

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Figure 6-4 Vessel Rehabilitation Program

ID Name	MFG	Year MFG	Length of Vessel (M)	Capacity: Seated/ Wheelchairs	Passenger Ferry Type	Mode of Power	Year Planned Rehab	Years Life Added	Estimated Cost
Peralta	Nichols	2002	37	326 / 4	Catamaran	diesel	FY 2022 -23	13	\$3,456,000
Encinal	Nichols	2016	27.4	395 / 4	Catamaran	diesel	FY 2022 -23	13	\$5,240,500
Bay Breeze	Nichols	2021	29.6	250 / 4	Catamaran	diesel	FY 2020 -21	12	\$557,500
Gemini	Nichols/ Kvichak	2008	35.9	149 / 4	Catamaran	diesel	FY 2019 -21	12	\$7,363,200
Pisces	Nichols/ Kvichak	2008	35.9	149 / 4	Catamaran	diesel	FY 2020 -22	13	\$7,525,200
Scorpio	Kvichak/ Nichols	2009	35.9	199 / 4	Catamaran	diesel	FY 2020 -23	13	\$7,690,800
Taurus	Kvichak/ Nichols	2009	35.9	199 / 4	Catamaran	diesel	FY 2022 -24	16	\$7,804,900
Vallejo	Gladding-Hearn	2017	33.67	267 / 4	Catamaran	diesel	FY 2023 -24	11	\$2,635,400
Intintoli	Dakota Creek	2023	41.27	349 / 4	Catamaran	diesel	FY 2018 -19	11	\$3,315,800
Mare Island	Dakota Creek	2023	41.27	349 / 4	Catamaran	diesel	FY 2019 -20	11	\$5,742,100
Solano	Dakota Creek	2004	41.27	320 / 4	Catamaran	diesel	FY 2018 -20	11	\$15,441,700
North Bay 1	TBD	2018	TBD	399 / 4	Catamaran	diesel	FY 2023 -24	7	\$9,164,300
North Bay 2	TBD	2018	TBD	399 / 4	Catamaran	diesel	FY 2024 -25	7	\$9,365,900

Figure 6-5 Vessel Expansion Program

Expansion Vessels	Year of MFG	Year Vessel Placed In Service	Capacity: Seated / Wheelchairs	Passenger Ferry Type	Mode of Power	Estimated Cost
North Bay 1	2018	2018	399 / 4	Catamaran	diesel	\$21,000,000
North Bay 2	2018	2018	399 / 4	Catamaran	diesel	\$21,000,000
Central Bay 1	2020	2020	399 / 4	Catamaran	diesel	\$18,149,000
Central Bay 2	2023	2023	399 / 4	Catamaran	diesel	\$19,373,400

6.1.2 Major Facilities Projects

The WETA ferry system includes five terminals and one vessel mooring facility owned and maintained by WETA, as identified in Figure 6-6. Programmed rehabilitation and maintenance of these facilities is critical to ensure the facilities remain operable at all times. This program also ensures that major WETA facilities are prepared and ready to serve the Bay Area in the event of an emergency. Facility projects include maintenance and rehabilitation of floats and gangways, dredging and general terminal facility maintenance.

Figure 6-6 WETA Terminal and Mooring Facilities

Facility	Year Built
Vallejo Terminal	1999
Oakland Terminal	1990
Alameda Main Street Terminal	1990
Alameda Harbor Bay Terminal	1992
South San Francisco Terminal	2012
Pier 9 Layover Berths	2011

Floats and Gangways

Floats and gangways provide passenger access as well as facilities to moor WETA vessels when they are out of service. Funds in this category provide for the rehabilitation and/or replacement of passenger and mooring ferry docks/floats and gangways. Periodic haul-out, inspection and repair of existing floats are scheduled to occur as a part of this plan. Nearly all of WETA’s float and gangway facilities will require some maintenance funding over the next 10 years at an estimated system-wide cost of \$5.7 million.

Dredging

The Vallejo ferry basin requires dredging approximately every three years to remove silt build-up that would otherwise prevent ferries from operating in this area. The timing of maintenance dredging depends on previous dredging depths and variable sedimentation rates. Dredge work for the Vallejo service is scheduled to take place in FY2015-16, FY2019-20 and FY2023-24. Dredging in South San Francisco is scheduled to take place in FY2022-23. No other channels are anticipated to require dredging during this SRTP period. Total planned dredge work is estimated to cost \$8.8 million.

Terminal Maintenance

Terminal facilities—including terminal buildings, parking lots and shelters—require periodic rehabilitation and replacement work to support ongoing ferry operations. WETA anticipates a variety of terminal maintenance projects over the next 10 years to ensure that ferry services are not interrupted and the facilities can function properly in the event of an emergency. The estimated cost of terminal maintenance is approximately \$2.7 million.

6.1.3 System Expansion Projects

Over the 10-year planning horizon of this SRTP, the following capital needs are anticipated to support existing services and the near-term expansion projects described in Chapter 5.

Downtown San Francisco Ferry Terminal Expansion Project

The Downtown San Francisco Ferry Terminal Expansion Project is being developed by WETA to expand and improve facilities at the Downtown San Francisco Ferry Terminal. WETA is working in close partnership with the Port of San Francisco to implement the project in support of WETA's IOP, which calls for the expansion of ferry service throughout the San Francisco Bay Area, as well as WETA's Emergency Water Transportation Management Plan, which sets forth the framework for WETA's emergency operations in the event of a regional disaster.

The Downtown San Francisco Ferry Terminal Expansion Project includes construction of up to three new ferry gates and vessel berthing facilities that will support new ferry services from San Francisco to Richmond and Treasure Island, as well other potential locations currently under study. The Project will also improve landside conditions at the Ferry Terminal by providing new amenities such as weather-protected canopies, the construction of a new plaza area south of the Ferry Building, the extension of pedestrian promenade areas, and other public access improvements. The new gates and amenities will significantly improve waiting and queuing conditions for existing riders and expand the space available for WETA to stage emergency water transit services in the event of a regional transportation disruption or disaster.

WETA has completed an environmental review of the project pursuant to requirements of the California Environmental Quality Act (CEQA) and the National Environmental Protection Act (NEPA) and is currently working with local, regional, state, and federal agencies to secure permits required for the Project. The Project will be built in separate construction phases, with construction of the South Basin improvements (Gates F and G) scheduled to begin in 2016 and be complete by 2018. Construction of the North Basin improvements will commence at a later date, as demand warrants and funding becomes available. The total estimated cost of the full project is \$115.6 million. The South Basin improvements are estimated to cost approximately \$79.5 million.

Richmond Terminal

The Richmond ferry service will require construction of a ferry terminal facility on the Ford Peninsula in the City of Richmond. The proposed terminal site is approximately 1.5 miles south of the Richmond downtown core, located at the southern point of Ford Peninsula adjacent to the Ford Building along an existing wharf. In general, the proposed new terminal will replace an existing ferry facility consisting of a gangway, float, ramping system and piles. The proposed terminal includes a gangway leading from the plaza adjacent to the existing wharf to a new passenger float that will be able to accommodate one vessel at a time. Other project features include an access gate with informational signage. The project includes minor reconfiguration of the existing parking lot and trail improvements in the vicinity. The estimated cost of the project is \$16.3 million.

6.1.4 Maintenance Facility and Equipment Projects

Central Bay Operations and Maintenance Facility

The Central Bay Operations and Maintenance Facility Project will provide a central San Francisco Bay base for WETA's ferry fleet. The facility will support running maintenance needs such as fueling, engine oil changes, concession supply and light repair work for all WETA ferry

boats operating in the San Francisco Bay. Day-to-day management and oversight of service, crew and facilities will also occur at this facility. In the event of a regional disaster, the facility would function as an Emergency Operations Center, serving passengers and sustaining water transit service for emergency response and recovery.

The project site is located southeast of the intersection of West Hornet Avenue and Ferry Point Road near Pier 3 in the City of Alameda, within the Naval Air Station Base Realignment and Closure area known as Alameda Point. The project includes a four-story landside building of approximately 25,000 square feet designed to Essential Facilities Standards in accordance with the California Building Code. The marine facility consists of floats, gangways and a pier structure providing berthing capacity for up to 12 WETA vessels with limited capacity to provide berthing for vessels in transit. Construction of the facility is planned to be complete in 2018 at an estimated cost of \$65 million.

North Bay Operations and Maintenance Facility

The North Bay Operations and Maintenance Facility Project will provide a north San Francisco Bay base for WETA's ferry fleet. The project includes both landside and waterside improvements undertaken in phases to ultimately provide administrative office space, maintenance and fueling facilities and berthing capacity for ferry vessels.

The project site is located on Mare Island across from the Vallejo Ferry Terminal, in the City of Vallejo. The project will replace an existing maintenance facility located on Waterfront Avenue about half a mile upstream from the project site. The waterside portion of the project is adjacent to Waterfront Avenue, between 6th and 7th Avenue. The new facility will be located at Building 165 within the area of the former Mare Island Naval Shipyard, which was in operation from 1854 until closure of its primary facilities in 1996.

The marine facility will consist of floats, gangways and a pier structure providing berthing capacity for at least five WETA vessels. New berths for the ferry vessels and required improvements for operation of the ferry maintenance facility, including the capability for loading and unloading passengers and performance of vessel maintenance, will also be included. The landside facility includes a mechanics shop for heavy maintenance, fuel storage, a new warehouse and renovation of Building 165 for office space. Construction of the facility began in 2013 and will be completed in 2016 at a total estimated cost of \$31 million, \$13.1 million of which will be within the SRTP period.

Capital Equipment / Other

WETA currently owns and operates eight non-revenue vehicles to support various operations and maintenance activities, including three work skiffs, a boat trailer, two shop trucks, a utility cart, and a forklift. Small scale capital expenditures are periodically required for new or replacement non-revenue vehicles. The agency also conducts a variety of minor maintenance and repair activities that are not classified as separate projects in the listing above.

Over the timeframe of this SRTP, WETA will incur \$1.3 million in expenditures for capital equipment, non-revenue vehicles (work skiffs, boat trailers, shop vans, and utility carts), and miscellaneous terminal maintenance projects.

6.1.5 Asset Management

WETA is required to establish and carry out a Transit Asset Management (TAM) Plan to monitor and manage public transportation capital asset to achieve and maintain a State of Good Repair, improve safety, and increase reliability and performance. Moving Ahead for Progress in the 21st

Century Act (MAP-21), 49 USC, Section 5326 establishes new requirements for transit asset management by FTA’s grantees as well as new reporting requirements to promote accountability. FTA is in the process of developing final program requirements. The goal of improved transit asset management is to implement a strategic approach for assessing needs and prioritizing investments to ensure that WETA assets are maintained in a State of Good Repair necessary to provide safe, reliable, on-time service to our riders.

WETA is working with MTC to develop a TAM plan to meet this new federal requirement.

6.1.6 Summary of CIP Costs

The CIP identifies projects requiring a total investment of approximately \$515 million over the 10-year plan period. A summary of how the different system needs contribute to this total cost is illustrated in Figure 6-7.

Figure 6-7 Capital Improvement Program Summary

Program	10-Year Total Cost
Revenue Vessel Projects	\$329,425,000
<i>Vessel Rehabilitation</i>	\$132,298,600
<i>Vessel Replacement</i>	\$117,604,000
<i>Vessel Expansion</i>	\$79,522,400
Major Facilities Rehabilitation/Replacement	\$17,221,600
<i>Floats and Gangways</i>	\$5,705,000
<i>Dredging</i>	\$8,781,400
<i>Terminal Maintenance</i>	\$2,735,200
Service Expansion Projects	\$92,581,000
<i>San Francisco Berthing Expansion - South Basin</i>	\$76,310,400
<i>Richmond Terminal</i>	\$16,270,600
Maintenance Facility and Equipment Projects	\$74,969,400
<i>Central Bay Facility</i>	\$61,866,100
<i>North Bay Facility</i>	\$13,103,300
Other	\$1,131,300
Total	\$515,476,600

6.2 CIP REVENUES

A variety of federal, state, and local funding sources can reasonably be projected to be available to support the approximately \$515 million CIP contained in this plan, as discussed below.

6.2.1 Federal Sources

Federal Grants

The majority of funds WETA receives and utilizes to fund CIP projects are Federal Section 5307 and 5337 formula program funds programmed annually by MTC based on regional criteria and secured through direct grant application and contract with FTA. The FTA formula funds provide up to 80% funding to support critical vessel replacement, rehabilitation and mid-life refurbishment work, float and gangway rehabilitation and replacement work, and periodic dredging. Additional federal funds secured and available include federal earmarks of Capital Investment Grant funds authorized through Public Laws, Federal Section 5309 funds. These funds are programmed to support the Central Bay Operations and Maintenance Facility, Richmond Terminal and the Downtown San Francisco Ferry Terminal Expansion projects.

WETA has also been successful in securing FTA Passenger Ferry Grant Program funds to support construction of the Central Bay Operations and Maintenance Facility. Additional federal funds assumed in this plan include future award of FTA Passenger Ferry Grant Program and FHWA Ferry Boat Formula Program funds. Across all federal sources, Federal Section 5309, FTA Passenger Ferry Grant Program, and FHWA Ferry Boat Program are designated for particular capital projects and uses, and cannot be transferred to other capital needs that may arise. Including both formula and discretionary sources together, the CIP forecasts the use of a total of \$223 million in federal funds over the 10-year forecast period in this SRTP. WETA anticipates the use of \$4 million in FTA Passenger Ferry Grant Program funds in FY2017-18, but this funding has not yet been fully secured. If these funds are not received, they will be backfilled with available Proposition 1B funds (a state-level revenue source).

6.2.2 State Sources

Proposition 1B

The Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act, approved by voters in 2006, allows the state to sell up to \$1.475 billion in bonds for security and disaster preparedness projects throughout the state. Over a ten year period, this program promises to provide WETA with \$250 million in Proposition 1B funds to support implementation of its regional emergency response ferry system. This plan assumes use of the Proposition 1B funds to construct terminal, float and gangway access projects, system maintenance and operations facilities and new vessels. Proposition 1B also include Public Transportation Modernization, Improvement, and Service Enhancement Account (PTMISEA) funds allocated to transit operators. A total of \$203.8 million in Proposition 1B funds are anticipated to be used for capital projects during the SRTP forecast period.

State Transit Assistance

State Transit Assistance (STA) funds are appropriated by the State Controller's office on a revenue and population formula basis and allocated annually to WETA through grant agreement with MTC to support transit capital and operating needs. This plan assumes use of \$16.4 million in STA funds for capital purposes over the 10-year planning period.

6.2.3 Regional and Local Sources

Assembly Bill 664

Assembly Bill 664 funds are programmed annually by MTC to provide partial local match to Federal Section 5307 and 5337 formula grant funds for projects serving the Bay Bridge transbay corridor. This plan assumes WETA eligibility for these funds for ferry rehabilitation and replacement projects and the use of \$7.1 million for capital purposes over the 10-year forecast period.

Regional Measure 1 – 2% Program

In November 1988, Bay Area voters approved Regional Measure 1 (RM 1), authorizing a \$1.00 toll increase for all seven state-owned Bay Area toll bridges. Approximately \$1 million RM 1 – 2% funds are available annually from this program, through MTC, to support capital expenses associated with transbay ferry services in the Carquinez and Bay Bridge corridors. The funding amount does not escalate over time, consistent with MTC projections. However, the funds can be banked year to year, and annual use of this revenue source fluctuates depending on the level of capital needs and the availability of other funding sources. This plan assumes the use of \$12.2 million in RM1 – 2% funds over the next ten years.

Regional Measure 1 – 5% Program

These funds are derived from an increase in tolls on the Bay Area’s state-owned bridges that was approved by the voters in November 1988. WETA receives \$2.8 million annually for ferry capital improvement projects and ferry operations. This plan assumes that these funds do not escalate over time, consistent with MTC projections. These funds can be banked from year to year, so annual use of this revenue source fluctuates depending on the level of capital needs and the availability of other funding sources. Over the next ten years, WETA has programmed \$10.5 million in funding from this source.

Regional Measure 2 Program

In 2004, voters passed Regional Measure 2 (RM2), raising the toll on the seven state-owned toll bridges in the San Francisco Bay Area by \$1.00. RM2 capital funds totaling \$84 million were made available to WETA to support specific capital projects, including system environmental and design studies, construction of new vessels and transbay services, construction of spare vessels, and development and construction of expanded berthing capacity in San Francisco. This plan assumes use of the remainder of RM2 capital funds available to WETA, which total \$33.3 million over the 10-year period.

San Francisco Proposition K

San Francisco Proposition K (Prop K) is a half-cent local sales tax for transportation that was approved by San Francisco voters in November 2003. Eligible projects are identified in the Prop K Strategic Plan’s associated 5-Year Prioritization Programs (5YPPs), which is updated every four years. The Downtown Ferry Terminal Expansion project is included in the 2014 5YPPs. WETA will receive \$1.1 million to support this project through grant agreement with the San Francisco County Transportation Authority.

Alameda County Measure B / Measure BB

In 2000, Alameda County voters approved Measure B, the half-cent transportation sales tax and an accompanying 20-year expenditure plan. Alameda CTC administers Measure B funds to deliver transportation improvements and services in Alameda County and to address congestion

in every major commute corridor in the county. Measure B funds are allocated annually to support the Alameda ferry services. On November 4, 2014 Alameda County voters passed Measure BB, a 30-year Transportation Expenditure Plan which extends the existing 0.5 % Measure B sales tax, scheduled to terminate on March 31, 2022. Measure BB also augments the tax by 0.5% and dedicates the full 1% to transportation expenses. Measure BB will expire in 2045 without voter renewal.

This plan assumes the use of \$4.5 million Measure B and Measure BB funds for capital projects over the 10-year SRTP period.

Other Miscellaneous Regional/Local Funds

Other grant funds assumed to be available to support WETA projects include City of Alameda Local Funds to support capital needs at the Alameda terminals, and other minor contributions and grants. Together these miscellaneous funds total \$2.5 million over the 10-year forecast period in this SRTP. .

6.2.4 Other Potential Revenue Sources

Transit Performance Initiative Incentive Program

The Transit Performance Initiative (TPI) Incentive Program provides a financial reward to those Bay Area transit agencies that improve ridership and productivity. In October 2012, MTC committed \$60 million in federal Cycle 2 regional Surface Transportation Program (STP) / Congestion Mitigation Air Quality Improvement Program (CMAQ) funds to the TPI Incentive Program for a four-year period, FY2012-13 through FY2015-16. Per the MTC distribution formula, WETA would receive approximately \$1.1 million. WETA will work with MTC to identify eligible projects that would meet fund source requirements.

State – Low Carbon Transit Operations Program

The Low Carbon Transit Operating Program (LCTOP) provides operating and capital assistance for transit agencies to reduce greenhouse gas emissions and improve mobility. The funding program is part of the State’s Greenhouse Gas Reduction Fund. A portion of the Low Carbon Transit Operations Program (LCTOP) funds are allocated to operators based on the State Transit Assistance (STA) Revenue-Based formula. Per the formula, it is estimated WETA would receive \$19.3 million in LCTOP funds over 25 years. LCTOP funds can to be used to support capital and operating expenses that enhance transit service and reduce GHG emissions. These funds can also be used to support new or expanded transit services, or expanded intermodal facilities and equipment, fueling and maintenance for those facilities. WETA will work with Caltrans to identify capital expenditures that qualify as a GHG reducing projects.

6.2.5 Summary of CIP Revenues

Over the 10-year period covered by this SRTP, WETA is projected to have sufficient revenues available to cover the entire \$515 million capital program described earlier in this chapter. A summary of the funding sources planned to be used to support the CIP is provided in Figure 6-8 Figure 6-8.

Figure 6-8 Summary of Capital Revenue Sources

Funding Program	10-Year Revenue Total
Federal Sources	\$223,911,100
<i>FTA Sources</i>	\$223,003,500
<i>FHWA Sources</i>	\$907,700
State Sources	\$220,238,500
<i>Proposition 1B</i>	\$203,844,900
<i>State Transit Assistance (STA)</i>	\$16,393,600
Regional / Local Sources	\$71,327,000
<i>Bridge Toll Funding</i>	\$63,176,300
<i>Sales Tax Measures</i>	\$5,636,900
<i>Other Regional / Local</i>	\$2,513,900
Total	\$515,476,600

6.2.6 Capital Funding Reserves

As discussed previously in Chapter 5, WETA is building reserve funding in order to be prepared for unexpected capital maintenance expenses such as replacements of engines and floats/gangways. The purpose of the Capital Reserve is to accumulate sufficient reserve funds necessary to support unanticipated capital repairs of major system components. The target fund level for the Capital Reserve is to maintain a balance, as of July 1st of each fiscal year, equal to \$3 million. This target fund level is equal to the estimated cost for: 1) two engine replacements, at \$1 million each; 2) two emergency dry docks, at \$250,000 each; and 3) one emergency float repairs, at \$500,000. Figure 5-4 contains the 10-year projection of the funds available for capital reserves.

7 OTHER REQUIREMENTS

7.1 MTC RESOLUTION 3434 – REGIONAL TRANSIT EXPANSION

MTC Resolution 3434 (the Resolution) was a cornerstone of MTC’s 2001 Regional Transportation Planning process and its 2008 Strategic Plan. It was designed to allow the region’s transit operators and planning agencies to “speak with one voice” in prioritizing large scale regional transit expansion projects seeking discretionary funding support. The original resolution included nine new rail extensions, significant service expansions and a comprehensive regional bus program, totaling roughly \$10.5 billion.

An update of the Resolution (effective April 26, 2006) included an expansion of ferry service based upon a subset of WTA’s Implementation and Operations Plan (IOP) including expansion of the Alameda/Oakland/Harbor Bay services and implementation of the following new ferry services and related support facilities:

- South San Francisco from Alameda/Oakland
- Berkeley to San Francisco
- Richmond to San Francisco
- Hercules to San Francisco

MTC did not include the Treasure Island to San Francisco ferry service in Resolution 3434 under the assumption that the developer/development would fund the cost of the terminal, vessels and service, and, therefore, no regional discretionary funds allocated by MTC would be needed.

Of the four expansion services included in Resolution 3434, the South San Francisco service is the only new service in operation at this time. Service began on June 4, 2012, and the ongoing operating and capital needs of this service are discussed in Chapters 5 and 6, respectively.

The Richmond to San Francisco Project is rapidly taking shape, and is on track for revenue service to begin in July 2018. The project is currently in the design and permitting phase. In August 2014, the WETA Board adopted a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the project, fulfilling requirements of the California Environmental Quality Act (CEQA). The Federal Transit Administration (FTA) completed its review of the project under the National Environmental Protection Act (NEPA) in October 2015. Also in the past year, full funding has been secured, and an MOU has been signed with the City of Richmond and the Contra Costa Transportation Authority. In December of 2015 WETA issued a Request for Proposals (RFP) for construction management services for the Richmond Ferry Terminal project. The capital portion of the project includes plans for replacement of the existing Richmond ferry terminal facility (float and gangway) and a phased parking plan, at a cost of \$16.2 million funded through state Proposition 1B and federal Capital Investment Grant funds. Contra Costa County has allocated Measure J transportation sales tax funds to help fund the majority of operation of the service, with the remaining funds coming from fare revenues.

Neither Berkeley nor Hercules are expected to be operational within the next 10 years due to several barriers to implementation, further discussed in Chapter 5, therefore work assumed to be completed under this SRTP’s is limited to planning.

7.1.1 Station Area Transit-Oriented Development

In accordance with MTC requirements, each transit extension project funded in Resolution 3434 must plan for a minimum number of housing units along the corridor. These minimum numbers, or thresholds, will be estimated on a case by case basis. The evaluation will be based on the potential for increased transit ridership, exemplary existing station sites in the Bay Area, local general plan data, predicted market demand for transit-oriented development (TOD) in each county and an independent analysis of feasible development potential in each transit corridor. In the case of the ferry services, the thresholds apply only to housing developed around new terminals (those built after 2006). This could include the planned terminal in Richmond, as well as future any terminal in Berkeley or Hercules.

The City of Richmond released a Draft Richmond Bay Specific Plan (RBSP)⁶ on October 1, 2015 for public review and comments. The RBSP will facilitate the implementation of City's General Plan and will focus on ways Richmond can take advantage of the planned Berkeley Global Campus at Richmond Bay⁷, future ferry service, and other area assets to create a transit oriented development providing jobs, housing, and transportation options. In June of 2015, WETA signed a Cooperative Agreement with Contra Costa Transportation Authority (CCTA), which will provide an operational subsidy for ferry service between Richmond and San Francisco for 10 years, with service to begin in 2018. Staff has completed environmental review of the project under CEQA and NEPA, including consultation with the State Historic Preservation Office and National Marine Fisheries Service. Terminal design activities and vessel procurement have begun and staff has held initial meetings with the San Francisco Bay Conservation & Development Commission (BCDC) and continues to work closely with the City of Richmond. Staff is also coordinating with City staff to draft the lease agreement for the project.

The City of Berkeley General Plan designates the site and vicinity as Waterfront/Marina and Open Space/Recreation. These land-use designations limit the TOD opportunities in the immediate vicinity of this terminal. WETA will continue to work with the City of Berkeley as planning progresses at opportunities to improve transit, pedestrian, and bicycle connections from residential, and employment areas in the city.

The City of Hercules has completed various plans associated with the development of Hercules Intermodal Station and the Hercules Waterfront.

7.2 ENVIRONMENTAL JUSTICE AND PUBLIC INVOLVEMENT

7.2.1 Environmental Justice and Title VI

In order to integrate considerations expressed in Executive Order 12898 on Environmental Justice, WETA integrates environmental justice analysis into the National Environmental Policy Act (NEPA) documentation for its expansion projects. This analysis was incorporated into the NEPA documents prepared for the South San Francisco and Berkeley terminal projects. The ongoing NEPA analysis of the Downtown San Francisco Ferry Terminal Expansion, Richmond terminal, and the maintenance facility projects will include an environmental justice analysis as appropriate.

⁶ <http://www.ci.richmond.ca.us/2647/Richmond-Bay-Specific-Plan>

⁷ <http://www.ci.richmond.ca.us/2397/Berkeley-Global-Campus>

Environmental justice analyses will also be conducted for long-term expansion projects as required. As noted previously in the discussion of WETA's Title VI policy in Chapter 4, WETA actively seeks out and considers the viewpoints of minority and low-income populations in the course of conducting public outreach and involvement activities.

7.2.2 Major Service Change Policy

Federal Transit Administration regulations require that transit operators develop and use a process for soliciting and considering public comments before increasing fares or making significant changes in service. WETA defines a major service change as one that affects 25% or more of the trips within a route that WETA is operating at the time it is considering making the service modifications.

As adopted by the WETA Board of Directors, WETA will undertake the following actions as part of the process for receiving public comments, ideas and feedback on proposed fare changes and/or major service changes:

- WETA will begin the public notification process for proposed changes 30 days or more before holding a public hearing to consider public comments.
- The public notification process will provide information about the proposed fare increase or service modification in sufficient detail that a member of the general public can readily understand the specifics of the change. This information may be contained in materials that are referenced in the Public Notice as space and the need for clarity and simplicity in communication of information reasonably dictates.
- At a minimum, the Public Notice will clearly explain the manner(s) in which the public can obtain details of the proposed changes, how they can comment on them and the date time and location of the public hearing.
- The Public Notice will be published and posted on the applicable ferry vessels that are used for the affected services, on WETA's website and using other forms of mass media that will provide economical and effective announcements to the public.
- Any comments made before the public hearing will be transmitted to the Board at the official public hearing and will, in all intents and purposes, be considered a part of the official record.

The above policy reflects the agency's commitment to a process that is open, transparent and considerate of public input. It requires that WETA establish procedures that the public can use to provide input other than attending and testifying at a formal public hearing; recognizing the value of personal time as well as the variety of options for receiving input through online or social media accounts. The policy is flexible to allow use of informal public meetings, written comments via email or letter and other ways the public can voice its comments to the Board concerning any proposed fare increase or major service change.

7.2.3 Other Public Involvement

In addition to outreach conducted as part of capital and operations planning, WETA regularly surveys its existing passengers to learn about their concerns and issues. The most recent onboard survey was conducted in October 2014. The survey asked a series of questions on travel patterns, rider demographics, rider attitudes, and rating of various services. This was a follow up to the previous on-board survey completed in 2011. For the 2014 survey, WETA selected trips on each service, to achieve a representative cross section of riders during all time periods, including weekday peak, weekday off peak, and weekends. A total of 2,310 surveys were completed and

processed. WETA will continue to seek outreach and public involvement for riders to provide feedback on ferry service.

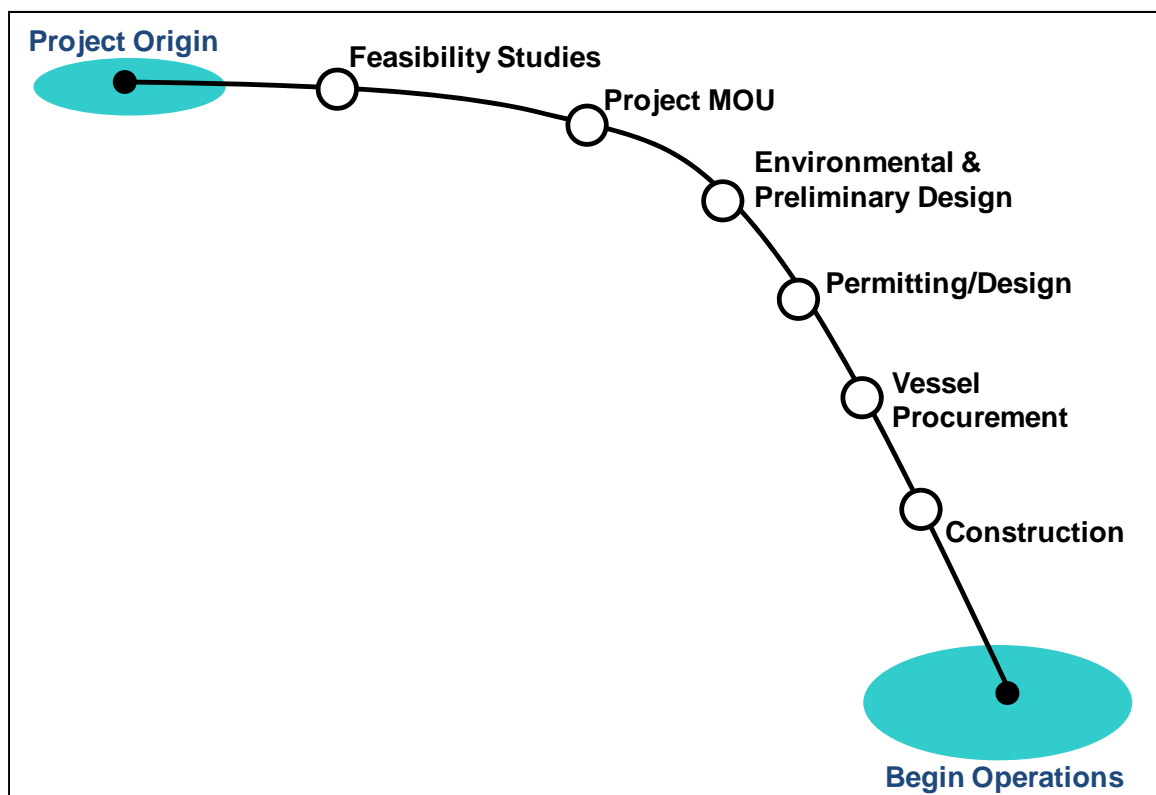
8 FUTURE EXPANSION PROJECTS

8.1 PLANNING OF EXPANSION SERVICES

In addition to the near-term expansion services described in Chapter 5, there are a number of potential additional expansion services in various stages of local and regional development that could move forward over the next ten years in order to expand water transit services for both regular commuting and disaster recovery needs. These include potential services to Seaplane Lagoon in Alameda, Mission Bay in San Francisco, Berkeley/Albany, Redwood City, and Carquinez Strait (Antioch, Martinez, or Hercules) in Contra Costa County.

Developing, and ultimately implementing new ferry services and associated facilities requires an extensive process, including environmental review, design, and construction, as well as securing funding and developing long-term operating plans for new services. This process is illustrated in Figure 8-1.

Figure 8-1 WETA Project Implementation Timeline



8.2 DESCRIPTION OF POTENTIAL SERVICES

The following projects are not anticipated to begin operations within the budget horizon of this SRTP (FY2024-25). However, in the event that a sustainable funding source is secured for planning, design, construction, and long-term operations in the future, WETA will update the subsequent SRTP to reflect the new conditions.

8.2.1 Seaplane Lagoon

WETA continues to work with the City of Alameda to study the feasibility of establishing passenger ferry service in the Seaplane Lagoon as part of the City of Alameda’s redevelopment of Alameda Point. This new terminal would not replace the Alameda Main Street ferry terminal used by the Alameda/Oakland service and the South San Francisco service, but would instead provide the opportunity to expand service to western Alameda. WETA has been working with the City of Alameda to set forth the terms and conditions under which a Seaplane Lagoon Ferry Service would be implemented, including construction of new facilities and details of service levels and funding. After initially exploring the potential for a private operator at Seaplane Lagoon, the City and its developer, Alameda Point Partners, have concluded that WETA is the only viable potential operator at this time. WETA and the City of Alameda staff are currently developing a Memorandum of Understanding defining the project and framing the project implementation process.

8.2.2 Mission Bay

The Golden State Warriors basketball team has identified a preferred arena site at the foot of 16th Street in the Mission Bay neighborhood of San Francisco. The Mission Bay neighborhood has also become a large employment site in recent years with the University of California San Francisco expanding their campus and several large employers building offices in the neighborhood. A Mission Bay ferry terminal has been identified in both WETA and City of San Francisco planning documents as a potential future infrastructure investment, but no significant planning or development work has been conducted to date and no funding exists to develop this as a terminal site. WETA will continue to work with the City and Port of San Francisco to further evaluate how a potential Mission Bay terminal can meet the needs and requirements of the ferry system.

8.2.3 Redwood City

Redwood City ferry service was identified in the IOP to provide service between Redwood City and downtown San Francisco. The potential terminal would be at the northern-most point of the Port of Redwood City near the Pacific Shores office complex.

While there is partial funding for system capital and operating needs in the form of \$15 million in San Mateo County Measure A sales tax funds, this service lacks full capital and operating funds to build and operate service at this time. WETA will continue to coordinate with the City and Port of Redwood City, the SMCTA, and other stakeholders, such as private businesses, that express interest in exploring the feasibility of the Redwood City service and identifying additional funding for construction and long-term operations.

8.2.4 Berkeley/Albany

Berkeley/Albany ferry service was identified in the IOP to provide service between Berkeley/Albany and downtown San Francisco. The potential terminal would be along Seawall Drive near the Berkeley Marina, south of the Berkeley Fishing Pier.

WETA provided funding for the environmental and conceptual design work and the final EIS/EIR was submitted to FTA for review in early October 2012. Staff originally coordinated with FTA to discuss the process for completion of the Final EIS/EIR, but FTA ultimately informed WETA that it will not be able to complete the NEPA process and issue a Record of Decision because a long-term operational funding source is not available for the service. While Regional Measure 2 (RM2) funds were originally identified as an operating source when the

environmental review process commenced in 2006, the RM2 source is no longer available. As currently configured, the project requires a significant amount of dredging, which, in turn, requires a significant mitigation program, driving up the capital cost. A Memorandum of Understanding defining the project and identifying committed funding sources will need to be developed for adoption by the Berkeley City Council and the WETA Board when the project is ready to move forward.

8.2.5 Carquinez Strait Terminals

Ferry services to Antioch, Martinez, and Hercules were all identified in the IOP to provide service between Contra Costa County communities along the Carquinez Strait and downtown San Francisco. A voter-approved sales tax measure in Contra Costa County passed in 2004 identified funding for ferry services from both Hercules and Richmond in west Contra Costa County. An Agreement is in place between the City of Richmond and the City of Hercules concerning the use of these funds. The Contra Costa Transportation Authority (CCTA), as the county transportation planning and funding authority, developed a Financial Feasibility of Contra Costa Ferry Service Report (completed June 2014) to identify site constraints and design requirements, and better understand project feasibility and costs associated with development of terminals and services to these cities along with Martinez and Antioch. The report concluded that of the candidate ferry terminals in Contra Costa County, only the Richmond project is financially feasible at this time given existing WETA ferry service funding formulas and the need to identify local and regional funding sources beyond those already in place to support the Richmond service. Findings from the Report regarding other potential Contra Costa County ferry terminal sites along the Carquinez Strait can be found at http://www.ccta.net/_resources/detail/45/1.

There are no capital or long-term operating fund sources secured to build and operate these three projects at this time. WETA will continue to coordinate with the cities, CCTA, and other stakeholders to explore the long-term feasibility of these services.

APPENDIX A: DETAILED CAPITAL IMPROVEMENT PLAN

SHORT RANGE TRANSIT PLAN -- FY2015-16 to FY2024-25
San Francisco Bay Area Water Emergency Transportation Authority
10-Year Capital Plan

Projects Category/Description	FY2015/16 Budget	FY2016/17 Projected	FY2017/18 Projected	FY2018/19 Projected	FY2019/20 Projected	FY2020/21 Projected	FY2021/22 Projected	FY2022/23 Projected	FY2023/24 Projected	FY2024/25 Projected	TOTAL 10-Year
Revenue Vessel Projects											
Major Component Rehabilitation/Replacement											
Major Dry Dock - Encinal	\$0	\$0	\$0	\$0	\$218,200	\$0	\$0	\$0	\$0	\$0	\$218,200
Engine Overhaul - Encinal	\$0	\$0	\$0	\$160,100	\$0	\$0	\$512,800	\$0	\$0	\$182,500	\$855,400
Quarter-Life Overhaul - Peralta	\$1,886,068	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,886,068
Major Dry Dock - Peralta	\$0	\$0	\$0	\$0	\$218,200	\$0	\$0	\$0	\$0	\$0	\$218,200
Engine (10,000 Hour) Overhaul - Peralta	\$0	\$0	\$0	\$213,500	\$0	\$0	\$0	\$1,048,100	\$0	\$0	\$1,261,600
Engine (7,000 Hour) Overhaul - Bay Breeze	\$0	\$231,000	\$0	\$561,500	\$0	\$111,500	\$257,500	\$0	\$119,000	\$0	\$1,280,500
Major Dry Dock - Bay Breeze	\$0	\$0	\$0	\$213,500	\$0	\$0	\$0	\$0	\$238,000	\$0	\$451,500
Main Engine Intermediate Overhaul - Gemini	\$0	\$0	\$104,400	\$0	\$0	\$252,000	\$0	\$0	\$0	\$121,600	\$478,000
Selective Catalyst Reduction System Overhaul - Gemini	\$350,000	\$0	\$0	\$0	\$0	\$0	\$0	\$407,600	\$0	\$0	\$757,600
Engine (10,000 Hour) Overhaul - Gemini	\$542,073	\$0	\$0	\$0	\$0	\$0	\$626,700	\$0	\$0	\$0	\$1,168,773
Replace Primary Lifesaving Equipment - Gemini	\$0	\$0	\$23,500	\$0	\$0	\$0	\$0	\$0	\$0	\$27,400	\$50,900
Main Engine Intermediate Overhaul - Pisces	\$0	\$0	\$0	\$106,700	\$0	\$252,000	\$0	\$0	\$0	\$121,600	\$480,300
Selective Catalyst Reduction System Overhaul - Pisces	\$0	\$350,000	\$0	\$0	\$0	\$0	\$0	\$407,600	\$0	\$0	\$757,600
Engine (10,000 Hour) Overhaul - Pisces	\$0	\$537,600	\$0	\$0	\$0	\$0	\$0	\$640,500	\$0	\$0	\$1,178,100
Replace Primary Lifesaving Equipment - Pisces	\$0	\$0	\$23,500	\$0	\$0	\$0	\$0	\$0	\$0	\$27,400	\$50,900
Main Intermediate Engine Overhaul - Scorpio	\$0	\$0	\$0	\$106,700	\$246,600	\$0	\$0	\$0	\$119,000	\$274,900	\$747,200
Selective Catalyst Reduction System Overhaul - Scorpio	\$0	\$357,700	\$0	\$0	\$0	\$0	\$0	\$407,600	\$0	\$0	\$765,300
Engine (10,000 Hour) Overhaul - Scorpio	\$0	\$537,600	\$0	\$0	\$0	\$0	\$626,700	\$0	\$0	\$547,400	\$1,711,700
Replace Primary Lifesaving Equipment - Scorpio	\$0	\$0	\$23,500	\$0	\$0	\$0	\$0	\$0	\$0	\$27,400	\$50,900
Main Engine Intermediate Overhaul - Taurus	\$0	\$0	\$104,400	\$0	\$246,600	\$0	\$0	\$116,500	\$269,000	\$0	\$736,500
Selective Catalyst Reduction System Overhaul - Taurus	\$350,000	\$0	\$0	\$0	\$0	\$0	\$398,800	\$0	\$0	\$0	\$748,800
Main (Port) Engine Overhaul - Taurus	\$300,000	\$0	\$0	\$0	\$0	\$613,200	\$0	\$0	\$0	\$0	\$913,200
Replace Primary Lifesaving Equipment - Taurus	\$0	\$0	\$23,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$23,500
Engine Overhaul - Express II	\$0	\$0	\$0	\$0	\$163,600	\$0	\$0	\$524,000	\$0	\$0	\$687,600
Major Drydock - Express II	\$0	\$0	\$0	\$0	\$218,200	\$0	\$0	\$0	\$0	\$0	\$218,200
Major Drydock - Vallejo	\$0	\$0	\$0	\$0	\$0	\$446,000	\$0	\$0	\$0	\$0	\$446,000
Engine Overhaul - Vallejo	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,189,400	\$2,189,400
Major Component Rehab - Solano	\$430,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$430,000
Major Drydock - Solano	\$0	\$0	\$0	\$0	\$0	\$446,000	\$0	\$0	\$0	\$0	\$446,000
Engine Overhaul - Solano	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,189,400	\$2,189,400
Major Component & Waterjet Rehab - Intintoli	\$2,860,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,860,000
Major Drydock - Intintoli	\$0	\$0	\$0	\$0	\$0	\$0	\$455,800	\$0	\$0	\$0	\$455,800
Major Component & Waterjet Rehab - Mare Island	\$0	\$2,922,900	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,922,900
Major Drydock - Mare Island	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$465,800	\$0	\$0	\$465,800
Major Drydock - San Pablo 2	\$0	\$0	\$0	\$0	\$0	\$446,000	\$0	\$0	\$0	\$0	\$446,000
Major Drydock - San Pablo 2	\$0	\$0	\$0	\$0	\$0	\$446,000	\$0	\$0	\$0	\$0	\$446,000
Major Drydock - Central Bay 1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$232,900	\$0	\$0	\$232,900
Engine Overhaul - Central Bay 1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$174,700	\$0	\$0	\$174,700
Subtotal	\$6,718,141	\$4,936,800	\$302,800	\$1,362,000	\$1,311,400	\$3,012,700	\$2,878,300	\$4,425,300	\$745,000	\$5,709,000	\$31,401,441

SHORT RANGE TRANSIT PLAN -- FY2015-16 to FY2024-25
San Francisco Bay Area Water Emergency Transportation Authority
10-Year Capital Plan

Projects Category/Description	FY2015/16	FY2016/17	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25	TOTAL
	Budget	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	10-Year
Revenue Vessel Projects											
Quarter-Life / Mid-Life / End-of-Life Repower & Refurbishment											
End-Of-Life Repower & Refurbishment - Vallejo (return to service Jan21)	\$0	\$0	\$1,566,700	\$1,601,200	\$0	\$0	\$0	\$0	\$0	\$0	\$3,167,900
End-Of-Life Refurbishment - Bay Breeze (return to service Apr21)	\$0	\$0	\$0	\$0	\$0	\$557,500	\$0	\$0	\$0	\$0	\$557,500
Quarter-Life Overhaul - Encinal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,240,500	\$0	\$0	\$5,240,500
Quarter-Life Overhaul - Peralta	\$0	\$0	\$0	\$0	\$0	\$0	\$1,709,200	\$1,746,800	\$0	\$0	\$3,456,000
Quarter-Life Refurbishment - Gemini	\$2,400,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,400,000
Mid-Life Refurbishment - Gemini (return to service Jan21)	\$0	\$0	\$0	\$0	\$2,454,600	\$2,508,600	\$0	\$0	\$0	\$0	\$4,963,200
Quarter-Life Refurbishment - Pisces	\$0	\$2,452,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,452,800
Mid-Life Refurbishment - Pisces (return to service Jan22)	\$0	\$0	\$0	\$0	\$0	\$2,508,600	\$2,563,800	\$0	\$0	\$0	\$5,072,400
Quarter-Life Refurbishment - Scorpio	\$0	\$0	\$2,506,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,506,800
Mid-Life Refurbishment - Scorpio (return to service Jan23)	\$0	\$0	\$0	\$0	\$0	\$0	\$2,563,800	\$2,620,200	\$0	\$0	\$5,184,000
Quarter-Life Refurbishment - Taurus	\$0	\$0	\$2,506,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,506,800
Mid-Life Refurbishment - Taurus (return to service Jan24)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,620,200	\$2,677,900	\$0	\$5,298,100
Quarter-Life Refurbishment - Express II	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,240,500	\$0	\$0	\$5,240,500
Quarter-Life Refurbishment - Vallejo	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,498,000	\$0	\$7,498,000
Mid-life Refurbishment - Solano (return to service Jan20)	\$0	\$0	\$0	\$5,871,000	\$6,000,200	\$0	\$0	\$0	\$0	\$0	\$11,871,200
Quarter-Life Refurbishment - Solano	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,570,500	\$0	\$3,570,500
Quarter-life Refurbishment - Intintoli (return to service Jan19)	\$0	\$0	\$0	\$4,696,800	\$0	\$0	\$0	\$0	\$0	\$0	\$4,696,800
End-Of-Life Refurbishment Intintoli (return to service Jan24)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$465,800	\$476,100	\$0	\$941,900
Quarter-life Refurbishment - Mare Island (return to service Apr20)	\$0	\$0	\$0	\$0	\$4,800,200	\$0	\$0	\$0	\$0	\$0	\$4,800,200
End-Of-Life Refurbishment - Mare Island (return to service Jan24)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$465,800	\$476,100	\$0	\$941,900
Quarter-Life Refurbishment - San Pablo 1 (return to service Jul25)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,164,300	\$0	\$9,164,300
Quarter-Life Refurbishment - San Pablo 2 (return to service Jan25)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,365,900	\$9,365,900
Subtotal	\$2,400,000	\$2,452,800	\$6,580,300	\$12,169,000	\$13,255,000	\$5,574,700	\$6,836,800	\$18,399,800	\$23,862,900	\$9,365,900	\$100,897,200
Vessel Rehabilitation Total	\$9,118,141	\$7,389,600	\$6,883,100	\$13,531,000	\$14,566,400	\$8,587,400	\$9,715,100	\$22,825,100	\$24,607,900	\$15,074,900	\$132,298,641
Vessel Replacement											
Vessel Replacement - Encinal (in service Jan17)	\$8,543,050	\$6,863,240	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,406,290
Vessel Replacement - Bay Breeze (in service Jan21)	\$0	\$0	\$0	\$4,136,400	\$8,454,800	\$4,320,400	\$0	\$0	\$0	\$0	\$16,911,600
Vessel Replacement - Express II (in service Jan17)	\$8,543,949	\$6,773,760	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,317,709
Vessel Replacement - Vallejo (in service Jan18)	\$4,999,613	\$10,000,000	\$6,052,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,051,613
Vessel Replacement - Intintoli (in service Jan23)	\$0	\$0	\$0	\$0	\$0	\$0	\$5,982,300	\$12,227,700	\$6,248,400	\$0	\$24,458,400
Vessel Replacement - Mare Island (in service Jan23)	\$0	\$0	\$0	\$0	\$0	\$0	\$5,982,300	\$12,227,700	\$6,248,400	\$0	\$24,458,400
Vessel Replacement Total	\$22,086,612	\$23,637,000	\$6,052,000	\$4,136,400	\$8,454,800	\$4,320,400	\$11,964,600	\$24,455,400	\$12,496,800	\$0	\$117,604,012
Vessel Expansion											
New Vessel Construction - North Bay 1 (in service Jan18)	\$1,000,000	\$15,000,000	\$5,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,000,000
New Vessel Construction - North Bay 2 (in service Jan18)	\$1,000,000	\$15,000,000	\$5,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,000,000
New Vessel Construction - Central Bay 1 (in svc Jan20)	\$0	\$0	\$4,439,100	\$9,073,400	\$4,636,500	\$0	\$0	\$0	\$0	\$0	\$18,149,000
New Vessel Construction - Central Bay 2 (in svc Jan23)	\$0	\$0	\$0	\$0	\$0	\$4,738,500	\$9,685,600	\$4,949,300	\$0	\$0	\$19,373,400
Vessel Expansion Total	\$2,000,000	\$30,000,000	\$14,439,100	\$9,073,400	\$4,636,500	\$4,738,500	\$9,685,600	\$4,949,300	\$0	\$0	\$79,522,400

SHORT RANGE TRANSIT PLAN -- FY2015-16 to FY2024-25
San Francisco Bay Area Water Emergency Transportation Authority
10-Year Capital Plan

Projects Category/Description	FY2015/16	FY2016/17	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25	TOTAL
	Budget	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	10-Year
Major Facilities Projects Rehabilitation / Replacement											
Floats and Gangways											
Regional Spare Float Replacement	\$2,404,571	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,404,571
Replace Moring Piles - Harbor Bay Float	\$450,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$450,000
Replace Terminal Fendering - East Bay Terminals	\$0	\$92,000	\$0	\$0	\$0	\$0	\$0	\$104,800	\$0	\$0	\$196,800
South San Francisco Gangway and Ramps Rehabilitation	\$0	\$0	\$208,900	\$0	\$0	\$0	\$0	\$0	\$0	\$243,300	\$452,200
Passenger Float Drydock and Rehab - Main Street Terminal	\$0	\$0	\$626,700	\$0	\$0	\$0	\$0	\$116,500	\$0	\$0	\$743,200
Passenger Float Drydock and Rehab - Harbor Bay Terminal	\$0	\$0	\$0	\$640,500	\$0	\$0	\$0	\$0	\$119,000	\$0	\$759,500
Passenger Float Drydock and Rehab - Clay Street Terminal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$698,700	\$0	\$0	\$698,700
Subtotal	\$2,854,571	\$92,000	\$835,600	\$640,500	\$0	\$0	\$0	\$920,000	\$119,000	\$243,300	\$5,704,971
Dredging											
Channel Dredging - Vallejo Ferry Terminal	\$1,842,146	\$0	\$0	\$0	\$2,181,900	\$0	\$0	\$0	\$2,380,300	\$0	\$6,404,346
Channel Dredging - South San Francisco Ferry Terminal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,377,100	\$0	\$0	\$2,377,100
Subtotal	\$1,842,146	\$0	\$0	\$0	\$2,181,900	\$0	\$0	\$2,377,100	\$2,380,300	\$0	\$8,781,446
Facility and Terminal Maintenance											
Install Electronic Bicycle Lockers	\$79,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$79,500
Terminal Access Improvements - East Bay Terminals	\$250,000	\$0	\$0	\$0	\$0	\$278,700	\$0	\$0	\$0	\$0	\$528,700
Terminal Passenger Notification and Security Systems Upgrade	\$0	\$0	\$261,100	\$0	\$0	\$0	\$0	\$291,100	\$0	\$0	\$552,200
North Bay Maintenance Facility- Minor Rehab	\$0	\$0	\$0	\$0	\$0	\$278,700	\$0	\$0	\$0	\$0	\$278,700
Central Bay Maintenance Facility- Minor Rehab	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$291,100	\$0	\$0	\$291,100
Other Terminal Rehabilitation & Improvements	\$0	\$102,200	\$104,448	\$106,746	\$109,095	\$111,495	\$113,948	\$116,454	\$119,016	\$121,635	\$1,005,038
Subtotal	\$329,500	\$102,200	\$365,548	\$106,746	\$109,095	\$668,895	\$113,948	\$698,654	\$119,016	\$121,635	\$2,735,238
Major Facilities Rehabilitation/Replacement Total	\$5,026,217	\$194,200	\$1,201,148	\$747,246	\$2,290,995	\$668,895	\$113,948	\$3,995,754	\$2,618,316	\$364,935	\$17,221,655
Planning and Study of Long-Term Expansion Projects											
Berkeley Ferry Terminal / Environ Studies & Concept Design	\$148,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$148,200
Planning and Study of Long-Term Expansion Projects	\$148,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$148,200
Terminal Expansion Projects											
Richmond Ferry Terminal	\$1,240,569	\$10,521,000	\$4,509,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,270,569
San Francisco Berthing Expansion - South Basin	\$4,180,398	\$36,065,000	\$36,065,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$76,310,398
Terminal Expansion Projects Total	\$5,420,967	\$46,586,000	\$40,574,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$92,580,967
Maintenance Facility Projects											
North Bay Operations and Maintenance Facility	\$13,103,334	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,103,334
Central Bay Operations and Maintenance Facility	\$14,317,102	\$38,100,000	\$9,449,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$61,866,102
Maintenance Facility Projects Total	\$27,420,436	\$38,100,000	\$9,449,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$74,969,436
Capital Equipment / Other											
Other Capital Equipment	\$155,000	\$76,650	\$250,636	\$80,060	\$81,821	\$133,821	\$85,461	\$87,341	\$89,261	\$91,226	\$1,131,277
TOTAL CAPITAL EXPENSES	\$71,375,573	\$145,983,450	\$78,848,985	\$27,568,106	\$30,030,516	\$18,449,016	\$31,564,708	\$56,312,895	\$39,812,278	\$15,531,061	\$515,476,588

SHORT RANGE TRANSIT PLAN -- FY2015-16 to FY2024-25
San Francisco Bay Area Water Emergency Transportation Authority
10-Year Capital Plan

Projects Category/Description	FY2015/16	FY2016/17	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25	TOTAL
	Budget	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	10-Year
REVENUES											
Federal											
FTA Section 5307/5337 - Rehab	\$8,855,359	\$5,985,280	\$4,921,600	\$10,056,240	\$13,398,640	\$6,423,920	\$7,772,080	\$20,152,480	\$20,924,000	\$12,254,560	\$110,744,159
FTA Section 5307/5337 - Replace Vessels	\$10,834,130	\$13,490,592	\$8,126,534	\$10,023,436	\$10,194,850	\$3,456,320	\$9,571,680	\$19,564,320	\$9,997,440	\$0	\$95,259,302
FTA Section 5309	\$7,780,000	\$1,110,000	\$1,110,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000,000
FTA Passenger Ferry Grant Program	\$3,000,000	\$0	\$4,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,000,000
FHWA Ferry Boat Program	\$60,000	\$423,827	\$423,827	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$907,654
Subtotal Federal Revenues	\$30,529,489	\$21,009,699	\$18,581,961	\$20,079,676	\$23,593,490	\$9,880,240	\$17,343,760	\$39,716,800	\$30,921,440	\$12,254,560	\$223,911,115
State											
Proposition 1B (CTSGP-RPWT)	\$25,367,757	\$97,891,913	\$56,785,514	\$2,359,084	\$1,205,490	\$4,738,500	\$9,685,600	\$4,949,300	\$0	\$0	\$202,983,158
Public Transportation Modernization, Improvement (PTMISEA)	\$861,723	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$861,723
State Transit Assistance (STA)	\$0	\$178,850	\$1,749,484	\$1,788,006	\$190,916	\$473,816	\$1,395,869	\$4,497,023	\$3,374,178	\$2,745,444	\$16,393,586
Subtotal State Revenues	\$26,229,480	\$98,070,763	\$58,534,998	\$4,147,090	\$1,396,406	\$5,212,316	\$11,081,469	\$9,446,323	\$3,374,178	\$2,745,444	\$220,238,467
Local											
Bridge Toll AB664	\$2,473,982	\$236,467	\$170,125	\$381,754	\$902,505	\$256,957	\$310,883	\$700,592	\$1,233,042	\$482,397	\$7,148,704
Bridge Toll RM1-2%	\$1,323,414	\$348,113	\$214,080	\$827,280	\$1,690,960	\$914,280	\$2,252,937	\$2,213,860	\$2,325,558	\$48,660	\$12,159,142
Bridge Toll RM1-5%	\$0	\$0	\$0	\$2,004,206	\$2,160,080	\$1,906,523	\$245,220	\$2,968,320	\$1,249,680	\$0	\$10,534,029
Bridge Toll RM2 - Capital	\$8,506,177	\$14,760,015	\$10,068,225	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$33,334,417
Sales Tax - San Francisco Prop K	\$1,100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,100,000
Sales Tax - Alameda Measure B / Measure BB	\$1,073,031	\$1,558,393	\$125,340	\$128,100	\$287,075	\$0	\$330,440	\$475,100	\$559,380	\$0	\$4,536,859
Alameda Transportation Improvement Funds	\$0	\$0	\$1,154,255	\$0	\$0	\$0	\$0	\$791,900	\$0	\$0	\$1,946,155
Alameda Lighting & Landscape Assessment District	\$90,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$149,000	\$0	\$239,000
Harbor Bay Business Park Association	\$0	\$0	\$0	\$0	\$0	\$278,700	\$0	\$0	\$0	\$0	\$278,700
Transportation Funds for Clean Air	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000
Subtotal Local Revenues	\$14,616,604	\$16,902,988	\$11,732,025	\$3,341,340	\$5,040,620	\$3,356,460	\$3,139,480	\$7,149,772	\$5,516,660	\$531,057	\$71,327,006
TOTAL CAPITAL REVENUES	\$71,375,573	\$135,983,450	\$88,848,984	\$27,568,106	\$30,030,516	\$18,449,016	\$31,564,709	\$56,312,895	\$39,812,278	\$15,531,061	\$515,476,588

APPENDIX B: FLEET PLAN

No.	Vessel Name	Capacity	Built	Jet/Prop	Fy 2016				Fy 2017				Fy 2018				Fy 2019				Fy 2020				Fy 2021				Fy 2022				Fy 2023				Fy 2024				Fy 2025			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
In Operation (2014)																																												
1	Encinal	395	1985	Prop																																								
2	Vallejo	267	1991	Jet																																								
3	Bay Breeze	250	1994	Prop																																								
4	Intintoli	349	1997	Jet																																								
5	Mare Island	349	1997	Jet																																								
6	Peralta	326	2002	Prop																																								
7	Solano	320	2004	Jet																																								
8	Gemini	149	2008	Prop																																								
9	Pisces	149	2008	Prop																																								
10	Scorpio	199	2009	Prop																																								
11	Taurus	199	2009	Prop																																								
Replacements																																												
12	Express III	399	2016	Prop																																								
1.2	Encinal Replacement	399	2016	Prop																																								
2.2	Vallejo Replacement	399	2017	Jet																																								
3.2	Bay Breeze Replacement	399	2021	Prop																																								
4.2	Intintoli Replacement	499	2023	Jet																																								
5.2	Mare Island Replacement	499	2023	Jet																																								
Near-term Expansion																																												
13	San Pablo One	399	2018	Jet																																								
14	San Pablo Two	399	2018	Jet																																								
15	Central Bay One	399	2020	Prop																																								
16	Central Bay Two	399	2023	TBD																																								
Vessels					11	11	10	10	11	10	11	12	12	11	13	13	13	13	14	14	14	13	14	15	15	14	15	16	16	16	15	14	15	15	16	17	16	16	17	17	17	17	18	18
Vessels in Operation					10	10	10	10	10	10	10	10	10	10	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	12	12	12	12	12	12	12	12	12	12
Spare Vessels					1	1	0	0	1	0	1	2	2	1	2	2	2	2	3	3	3	2	3	4	4	3	4	5	5	5	5	4	3	4	4	4	5	4	4	5	5	5	5	6
Average Vessel Age					15.6				12.8				11.1				12.1				12.3				12.5				13.5				12.3				11.3				12.3			
Average Pax Capacity					268.4				279.6				303.5				303.5				309.4				314.7				314.7				337.4				346.1				346.1			