Executive Summary

E.1 Introduction

Source: City of Redwood City, 2020

This Study assesses the feasibility of establishing public ferry service in Redwood City (RWC). This Study was funded by the San Mateo County Transportation Authority (SMCTA) and led by the City of Redwood City and the Port of Redwood City (collectively the City and the Port shall be referred to as Redwood City) with technical assistance from the San Francisco Bay Water Emergency Transportation Authority (WETA). The multi-year effort was conducted by a consultant team lead by CDM Smith, with outreach lead by PlaceWorks, conceptual terminal engineering performed by COWI, and the financial feasibility/economic impacts analyses prepared by Economic & Planning Systems Inc. (EPS). This Study provides a pivotal step before ferry service can be established in Redwood City.

Ferry feasibility was evaluated from five interconnected perspectives, as shown in **Figure E-1**. Each of these five perspectives or questions (Consistency, Operations, Economics, Financial and Engineering) was a focus of the efforts during the Study. The process that was used first addressed the engineering requirements and options. Then operations planning and ridership forecasting were conducted. This work was a key input into the assessment of the economics and financial performance of the project alternatives. Consistency of the project with Redwood City and WETA plans and policies was another factor that was considered.

Figure E-1: The Five Feasibility Questions

Source: CDM Smith, 2020

Based on the results of these evaluations the Study concludes that a Redwood City based ferry service is feasible and that the project should move to the next phase, business plan development. Should Redwood City decide to pursue a new ferry terminal and ferry services, the next phase, the Business Plan, will identify how to fund capital and operational ferry expenditures, grow and maintain ridership, and support last-mile connections.

Ferry service to and from Redwood City requires a significant and ongoing public investment. Funding for capital and operation expenditures is anticipated to come largely from regional sources such as San Mateo County's Measure A and Regional Measure 3. Redwood City can play a role in ensuring successful ferry service. This can include requiring new developments in the area to contribute to transportation demand management measures that support ferry service and last-mile connections, or to secure/advocate for shuttle operation funding. While the Study does identify possible funding sources for ferry service, the Study largely focuses on determining whether the new service is feasible as defined by the five areas above.

E.2 Summary and Key Findings by Section

The following subsections summarize major work tasks findings relative to the five feasibility perspectives. The summary is based on the content of the eight sections of this report starting with the introduction in **Section 1**.

E.2.1 Existing Conditions Analysis

Section 2 of the report examines if this potential ferry service would be consistent with existing planning in the area, and it examines the existing conditions related to potential public commuter ferry service in Redwood City.

Source: WETA, 2020

Consistency with Redwood City Plans and Goals – As the lead agency for this Study, Redwood City has seen the potential for establishing public ferry service for many years. The mid-Peninsula location and active, deep-water port make Redwood City a viable location for a public ferry terminal.

- *The Circulation Element of the 2010 Redwood City General Plan* – Redwood City's Blueprint for the Future, calls out support for establishing ferry service. The General Plan identifies ferry service as an environmentally sustainable alternative to car commuting that has the additional benefit of being a water-based emergency evacuation route in the event of a major disaster.
- *2018 Citywide Transportation Plan RWCmoves* – Commuter Ferry Service is one of ten "Signature Projects" that also include six railroad grade separations, three transit projects, and a highway interchange improvement project. The plan established that once ferry service is deemed feasible and fundable, the next step would be to design and construct a terminal and coordinate with WETA for operations. Signature Projects are major changes to infrastructure

initiatives that require significant resources to plan and deliver, typically over many years, and represent larger or more complex projects. In RWCmoves, projects were prioritized based on scores from eleven performance measures, such as safety, a project's ability to encourage multi-modal transportation and to reduce congestion on local streets. Signature Projects' evaluation scores ranged from 69 to 54. According to RWCmoves, this prioritization system across 11 performance measures, Commuter Ferry Service had a score of 54, placing it just behind two grade separation projects, the lowest score among the ten signature projects and programs. The prioritization is based on performance measures that include community values on safety and a project's ability to encourage multi-modal transportation, and to contribute to congestion relief on local streets.

RWCmoves' priority ranking did not evaluate or consider a project's viability, nor does the policy document provide a recommendation for whether or not a project should be pursued based on its ranking. Whether Signature Projects are studied or advanced varies by project, funding, and leveraging/partnership opportunities. Ferry service in Redwood City has long been considered a potential project for which the City has sought to evaluate its feasibility.

- Consistency with WETA's Mission and Vision – As seen in **Figure E-2**, establishing new ferry service to/from Redwood City would be consistent with WETA's mission and vision, as defined in their Strategic Plan. This new service would further develop the comprehensive ferry network that WETA currently operates, and expand regional ferry service into the South Bay for the first time.

Figure E-2: WETA's Mission and Vision

Mission and Vision

In 2008, the WETA (then WTA) Board of Directors adopted Mission and Vision statements for the newly-created organization. Since then, WETA services have matured, and its role in the region has evolved. In particular, regional leaders have looked to WETA to help fill gaps in the transportation network following major disruptions to the regional system, such as bridge closures and BART service disruptions and breakdowns. In recognition of the increasingly significant role that WETA plays in supporting the regional transportation network and economy, the WETA Board of Directors developed and adopted new Mission and Vision statements in June 2016:

WETA Mission

WETA is a regional agency with a responsibility to develop and operate a comprehensive Bay Area regional public water transportation system. WETA shall also coordinate water transportation services following natural disasters and transportation disruptions.

WETA Vision

WETA develops, operates and manages an expanded and enhanced region-wide ferry system that provides a reliable, state-of-the-art and attractive transportation option for the Bay Area and plays a critical role in coordinating and providing water transportation to serve emergency response and economic recovery needs.

Source: San Francisco Bay Area WETA 2016 Strategic Plan

E.2.2 Public Outreach

Section 3 of the report describes two phases of public outreach effort lead by PlaceWorks. The first phase, traditional outreach events, asked residents their opinions about potential ferry service in Redwood City. At those events, San Francisco (SF) and Oakland (OAK) were both heavily favored as possible destinations for serving Redwood City. Those responding tended to prefer SF as the main

destination, and they responded positively to using the potential ferry for both commuting and "Recreation and Leisure" purposes.

The second phase of outreach involved workshops with major Redwood City area employers and the Redwood City Chamber of Commerce. Employer responses revealed a heavier preference towards OAK as the origin location rather than SF, due to the potential to reach employees (existing and new) that currently reside outside of range of easily accessible transit service to the mid-Peninsula. While recreational users of the Port facilities indicated some ferry frequency/water wake concerns, most water users supported the concept. Some concerns were raised about potential traffic impacts on Seaport Boulevard.

E.2.3 Ferry User Demand

Section 4 prioritizes routes for the Redwood City ferry service market, develops draft service schedules, and presents the results of a Travel Demand Model (TDM) analysis which estimated ridership for a base year of 2019 and for the year 2040.

Primary Markets – Comparative travel times, labor markets, and existing ferry facilities were evaluated. The primary markets for Redwood City ferry service are links to mid-Peninsula employment centers from OAK (Jack London Square) and SF (Ferry Building). The mid-Peninsula is currently served by an array of public and private transportation services, mainly connecting to SF and the South Bay.

- *Public Transportation* – links include Caltrain and SamTrans, while "Tech Buses" serve as private transportation for major employers in the area. Direct public transit links from the East Bay are limited, leaving these workers few options.
- *Private Transportation* – Tech buses serve the East Bay market, but experience, and contribute to, the same congestion as private automobiles, even while utilizing the available HOV and express lanes. It is likely that many more workers could live in the East Bay and commute to mid-Peninsula employment centers, including those in Redwood City, if high-quality public transportation options were provided.

Figure E-3: Service Scenarios – SF/RWC and OAK/RWC

Source: CDM Smith, 2020

Ridership Forecasts – Based on the identified ridership market areas, the proposed ferry service schedule, and the service characteristics of ferry operations, the following forecasts were developed:

- *OAK to/from RWC* – forecast to attract around 850 daily boardings today with 89 percent in the peak commute direction from OAK to RWC. Boardings would increase to 1,870 in 2040. If ridership were to be split evenly between the three boat trips, there should be enough capacity on the 320-passenger vessels through 2040. However, based on their experience,

WETA notes that peak boardings are typically 50 percent higher than shoulder-boardings, suggesting a larger boat size or an additional peak boat trip could be needed by 2040.

- *SF to/from RWC* – forecast to attract 1,300 boardings on weekdays today with about two-thirds in the peak commute direction from SF to Redwood City. In 2040, weekday ridership is forecast to increase to 2,190 boardings. Like the OAK service, the SF service suggests a larger boat or an additional peak boat trip could be needed by 2040.

Figure E-3 displays the preferred routing concept for the OAK/RWC and SF/RWC routes. Also, there is a combined service scenario that looks at running both routes simultaneously. **Table E-1** summarizes the TDM analysis results for the three service scenarios.

Based on the forecasts, the OAK-RWC and SF-RWC routes and the Combined Service Scenario would meet the WETA Performance Measures and Standards for minimum Peak Hour Occupancy of 50 percent by the 10th year of operation and the minimum Passengers Per Revenue Hour of 100 boardings.

Table E-1: Daily Ferry Ridership Estimates – by Scenario, Direction, Year

	2019			2040			Change	
	Peak	Reverse	Total	Peak	Reverse	Total	Boardings	Percent
Scenario 1: OAK/RWC (6 peak dep.)	381	45	**852**	756	181	**1,874**	1,022	120%
Scenario 2: SF/RWC (8 peak dep.)	441	206	**1,294**	730	363	**2,186**	892	69%
Scenario3: Combined (14 peak dep.)	822	251	**2,146**	1,486	544	**4,060**	1,914	89%

Source: CDM Smith analysis (2020)

E.2.4 Terminal Facility and Vessels

Section 5 summarizes an engineering report that COWI produced which provides conceptual designs for two Redwood City ferry terminal options. COWI updated the conceptual layout from the 2012 Redwood City Ferry Terminal Feasibility Report (Option 1) for the ferry terminal located on the north side of the preferred site, and developed a new conceptual layout (Option 2) for the ferry terminal on the west side of the preferred site.

Construction Costs – Ferry terminal estimates range between $15 million and $20 million in 2019 dollars, depending on terminal location and functionality.

- *Option 1* – includes a one-sided float, which would limit the number of vessels that could access the terminal around the same time.
- *Option 2* – includes a two-sided float accessible by two vessels at the same time.

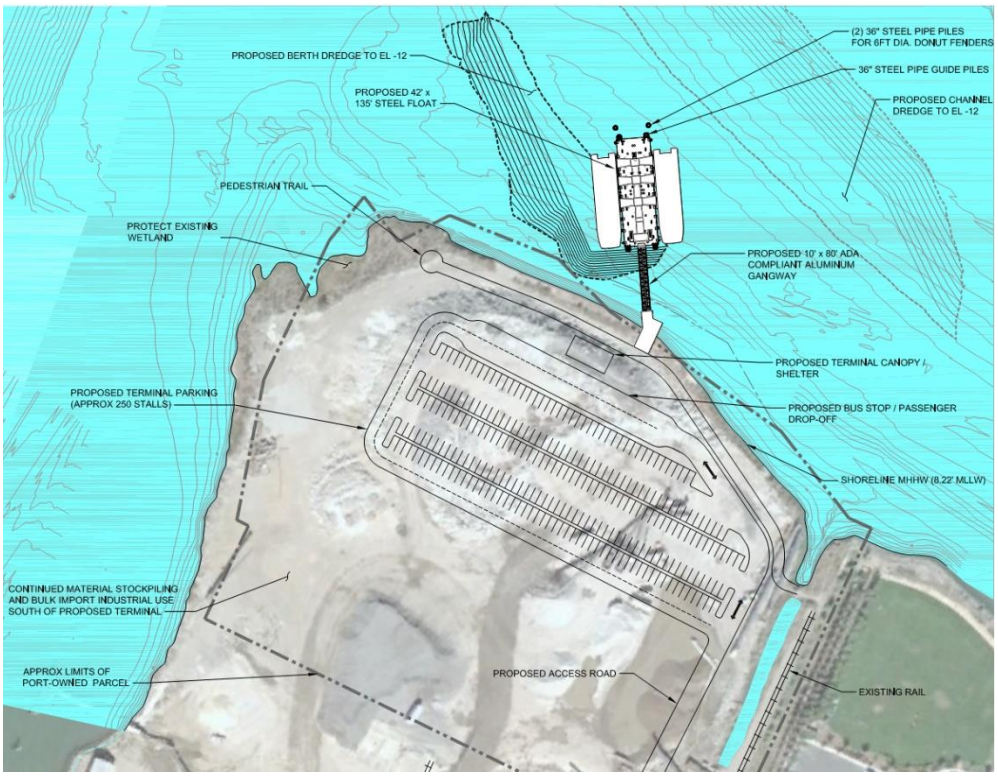
These construction costs are in line with recent WETA Ferry Terminal projects at other locations (e.g., Richmond Ferry Terminal cost $19 million). It is estimated that Redwood City would be eligible to receive $14.5 million in Measure A Ferry Program funding of capital related costs administered by the SMCTA.[1] Regional Measure 3 has programmed $300 million for ferry capital projects managed by WETA which can include vessel procurement or construction.

Source: CDM Smith, 2020

Figure E-4 and **Figure E-5** display the conceptual designs for Option 1 and Option 2, respectively. **Table E-2** illustrates the pros and cons of each option.

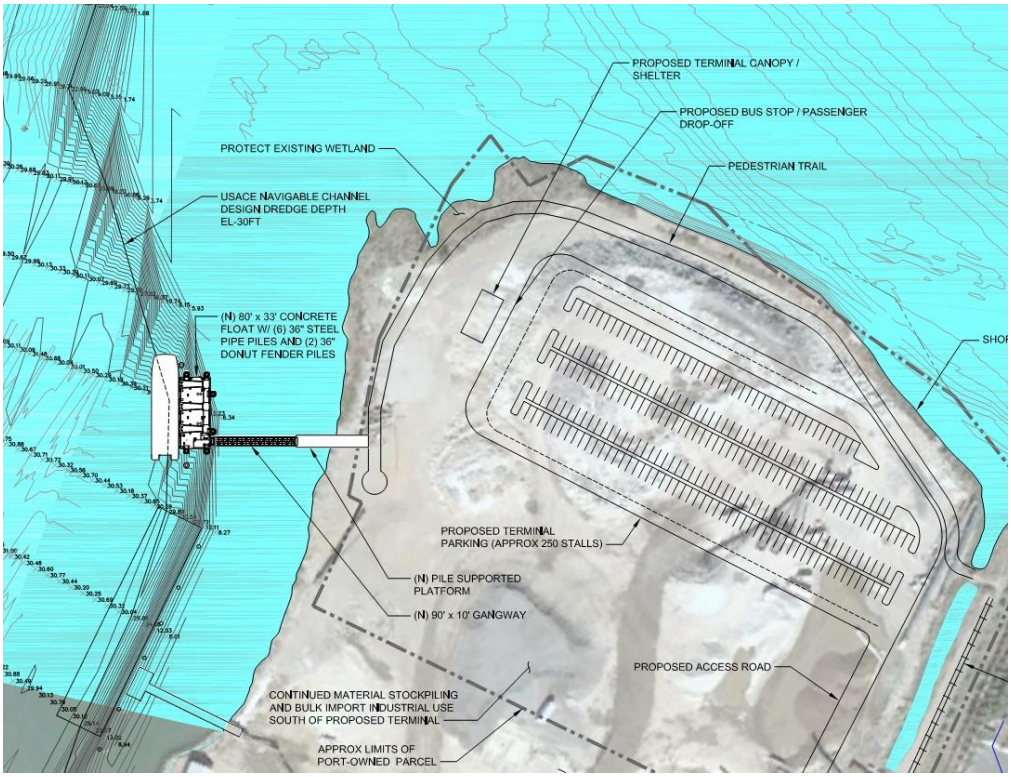
[1] Redwood City was awarded $450,000 from Measure A to fund this Study.

Figure E-4: Option 1 Conceptual Layout



Source: COWI, 2020

Figure E-5: Option 2 Conceptual Layout



Source: COWI, 2020

Table E-2: Waterside Options Pro/Con Table

Option 1 – North Side at Westpoint Slough Location	
Pros	Cons
Allows for two boats to berth at the same time	Requires dredging during construction as well as maintenance dredging
Compatible with WETA's spare float which is used for boarding, when the main float would be taken out of service for maintenance	Higher cost
Reduces interferences with vessels using the turning basin	Closer to wetland area
Option 2 – West Side at Westpoint Slough Location	
Pros	Cons
Eliminates/Reduces need for dredging both during original construction and in future	Within turning basin and adjacent to facilities to the south.
Lower cost float, due to smaller float	Limited to 1 sided boarding
Eliminates need to demolish old wharf structure	Float not compatible with WETA's spare float
Lower overall cost	

Source: CDM Smith, 2020
Note: At this time, the assumed landside improvements are similar for both options.

Vessel needs – Regardless of market served, ferry service requires purchase of two 320 passenger vessels, like the water jet propelled vessels in WETA's "Dorado" class, plus a portion of a spare vessels (to be shared with other WETA ferry services). At $16 million each in 2020 dollars, vessel costs are a significant capital investment with fleet requirements for a single route costing $40 million and a combined route at $80 million.

E.2.5 Financial Analysis

Section 6 summarizes the financial feasibility of a new ferry service, from a capital and operational perspective, for all three service scenarios. Assumed fares are priced comparatively to other long-distance WETA services (i.e., Vallejo). Service assumptions, capital costs, operating metrics, and farebox recovery ratios are summarized in **Table E-3**.

- *Farebox Recovery* – Considering WETA's minimum 40 percent farebox recovery ratio, projected passenger revenues indicate that both services exceed ferry farebox recovery requirements (40 percent) by the 10th year of operation.
  - *Oakland Route* – farebox recovery ratio increases from 52 percent in the first operating year (2025), to 71 percent by year 10 (2034). Over ten years, farebox recovery averages 61 percent.
  - *San Francisco Route* – farebox recovery ratio increases from 67 percent in the first operating year, to 81 percent in Year 10. Over ten years, farebox recovery averages 74 percent.
  - *Combined Route* – farebox recovery ratio increases from 60 percent in the first operating year, to 76 percent in Year 10. Over ten years, farebox recovery averages 68 percent.

- *Operating Subsidies* – Operating subsidies are the net difference between operating costs and fare revenues as shown in **Table E-3**. The annual operating subsidies are most often the responsibility of public agencies, although private funding coverage is sometime present. While projected ridership meets WETA's farebox revenue ratios, the service would require operating subsides, like most public transit systems. However, estimated annual subsidies decline over time as ridership increases.
  - *Oakland Route* – annual subsidies fall from $2.9 million in 2025 to $2.4 million in 2034.
  - *San Francisco Route* – annual subsidies fall from $2.2 million in 2025 to $1.7 million in 2034.
  - *Combined Route* – annual subsidies fall from $5.1 million in 2025 to $4.1 million in 2034.

Table E-3: Summary Assumptions, Costs, and Financial Metrics

Item	OAK/RWC *Jack London Sq.*	SF/RWC *Ferry Building*	Combined[1]
Service Assumptions			
AM Trips (Peak Dir./Rev.	3/3	4/4	7/7
PM Trips (Peak Dir./Rev.)	3/3	4/4	7/7
Capital Costs			
Vessels[2]	$40,000,000	$40,000,000	$80,000,000
Terminal	*estimates range from $15 million to $20 million[3]*		
Operating Metrics (2019/20 Dollars)			
Expenses			
Year 1 (2025)	$6,100,000	$6,700,000	$12,800,000
Year 10 (2034)	$8,200,000	$9,000,000	$17,200,000
Revenues			
Year 1 (2025)	$3,200,000	$4,500,000	$7,700,000
Year 10 (2034)	$5,800,000	$7,300,000	$13,100,000
Subsidy Gap			
Year 1 (2025)	$2,900,000	$2,200,000	$5,100,000
Year 10 (2034)	$2,400,000	$1,700,000	$4,100,000
Farebox Recovery Ratio			
Year 1 (2025)	52%	67%	60%
Year 10 (2034)	71%	81%	76%

Sources: CDM Smith; WETA; Economic & Planning Systems

[1] "Combined" service assumes both routes start operation at the same time. If both services are pursued, it may be that start dates are staggered.

[2] Assume two vessels and a shared spare for each route, resulting in five new vessels for both routes. Estimate ferry costs at $16 million each, depending on size and technology.

[3] Costs for terminal are in FY 2019$

Potential Operation Funding Sources – Unlike Contra Costa County which subsidizes ferry service from Richmond, San Mateo County does not have an existing, local funding source to subsidize ferry service. Measure A Ferry Program funding is only allowed for capital related costs; there is no local funding source currently identified for ferry service operations. However, the City may require new office development to participate in a transportation demand management association, levy an assessment or special property tax, or use transportation impact program fees to help finance ferry or connecting shuttle service. Regional Measure 3, although currently tied up in court, has programmed funds for new or expanded ferry service. These funds are not programmed for any specific service and routes must be operational ready to be eligible. Regional Measure 3 funding for ferry operations is limited to $35 million annually. WETA's FY 19/20 operating budget was $50.7 million.

E.2.6 Benefit Cost Analysis

Section 7 summarizes the benefit-cost analysis (BCA)[2] for the three service scenario alternatives. The BCA quantifies the net societal benefits to ferry riders. It compares monetized benefits (savings in travel time, passenger vehicle operating costs, accidents, emissions, and parking fees/tolls) to the costs of constructing a terminal, acquiring ferries, and annual O&M.

User Benefits – Ferry services provide a relatively pleasant alternative to a grueling drive around the SF Bay or up and down the Peninsula. Attracting drivers to ferry services, removes vehicles from the roadway network, resulting in reduced vehicle miles traveled and vehicle operating-, accident-, and emission-cost-saving benefits. Also, avoided parking fees and tolls benefit users.

Of these benefits, time is the most noteworthy, especially time on the ferry. On-ferry time can be valued as a benefit due to the multitasking opportunities afforded by ferry rides (i.e., high-speed Wi-Fi for electronic teleworking, social media, streaming media use, etc., purchasing food and drink and entertainment, and enjoying the vistas and weather).

Net benefits – Net benefits after costs are relatively close for both route alternatives, given identical capital outlays, and similar Operations and Maintenance (O&M) costs. As such, the economic feasibility results are nearly identical at the various discount rates considered, with a slight favor towards SF.

Project Economic Feasibility – The economic feasibility of ferry service hinges on how best to evaluate on-ferry time. Deliberation suggests that on-ferry time is a user benefit, as long as it is not excessive compared to other travel modes. Using an assumption that half the average time value per hour on-board the ferry would be considered as a benefit was considered to be conservative. This assumption results in positive net benefit findings for the three scenarios.

Source: WETA, 2020

[2] Sometimes called a cost-benefit analysis

E.2.7 Economic Impacts

Section 8 is a summary of the economic quantitative and qualitative impacts of the proposed ferry service as prepared by EPS. Quantitative impacts comprise the development and operation of both the new Redwood City Terminal and ferry-routes. Qualitative impacts comprise a broader discussion of the ferry service support role in local and regional development and growth.

Quantifiable Impacts – Terminal and ferry-route operation impacts were estimated using the IMPLAN economic model. Direct expenditure and job impacts were used to estimate total impacts including multiplier effects (indirect supplier and induced responding) in terms of jobs, income, and output.

- *Terminal Construction* – Terminal facilities costs range from $15 million to $20 million depending on size and location. The high-end project cost will create approximately 185 one-time construction jobs.
- *Terminal Operation* – Once in operation, the terminal will require maintenance (security, landscaping, electricity, water/wastewater, telecommunications, trash service, etc.) costing approximately $200,000 annually, generating, at most, one new job.
- *Ferry Operations* – WETA stated that four crews would operate a new Redwood City ferry service. Including multiplier effects, ferry service will generate "indirect" and "induced" economic activity that will range from $4.8 million to $10 million.

Qualitative Impacts – The proposed ferry service could help mid-Peninsula employers recruit workers from the large market of East Bay residents, which currently has limited transit options to the mid-Peninsula. Ferry service also provides another Redwood City amenity that bolsters residential and commercial development. However, a myriad of other economic, social, and political factors affects the extent of both mid-Peninsula business and Redwood City development impacts.

Source: City of Redwood City, 2020

Changing commercial/economic markets affects mid-Peninsula employers – both at the retail and production side of the market. Social factors include changing demographics of where people want to live and work, especially amidst COVID-19 and other societal trends. Political factors include public sentiment and legislation regarding the how, where, and why of Redwood City/mid-Peninsula growth (both commercial and residential). For these and other reasons it is difficult to quantify the economic impacts associated with RWC ferry development in terms of jobs, income, and output. Nonetheless, ferry service will provide another amenity to the region and better enable Redwood City/mid-Peninsula to retain existing jobs, accommodate future growth, and stimulate new development.

E.2.8 Recommendations, Concerns, and Next Steps

This Study concludes that a new Redwood City ferry service would satisfy all the five measures of feasibility (Consistency, Engineering, Economic, Operational and Financial), as seen in **Table E-4**. More detail is available in **Section 9**, which presents the recommendations, considerations, risks and outlines next steps to implement a ferry service which are also summarized below.

Table E-4: Ferry Feasibility in the Five Areas

Area	Feasibility
Consistency: with broader Redwood City and WETA plans?	Yes
Operations: can demand be accomodated?	Yes
Engineering: can a terminal facility be built?	Yes
Financial: are farebox revenues sufficient and are other operational funds available?	Yes
Economics: do user benefits outweigh public investment/operation costs?	Yes

Source: CDM Smith, 2020

Recommendation – All three service alternatives (OAK/RWC, SF/RWC, and Combined Service) have varying levels of feasibility when measured against the five areas that define feasibility for this project. It is recommended that Redwood City's City Council, the Redwood City Port Commission and the WETA Board of Directors consider moving the project to the next phase of development and begin to develop a Business Plan that also includes how the project and service would be funded.

Concerns – In addition to the costs and factors analyzed, many known and unknown factors affect Redwood City ferry ridership, and the resulting financial and/or economic feasibility. Capital and operating concerns include the terminals, ferries, construction windows. Ownership and operation concerns include terminal ownership, private ferry operations, and public/private investment opportunities. Ridership factors include fares schedules, first/last-mile costs and responsibilities, regional transportation development, new/emerging technology, and COVID-19 related ridership effects

- *Capital and Operating Costs/Concerns*
  - *Terminals* – Construction and maintenance costs are not fixed and could change over time (increase or decrease) versus those analyzed.
  - *Ferries* – Acquisition costs are not fixed, nor are fuel costs, which are subject to change annual operating costs (both up and down) over the project life.
  - *Construction Window* – There is a tight construction window due to environmental requirements. A short construction delay could delay overall construction by a year.
  - *Operating Funding* – Regional Measure 3 funds are not set aside for a specific route and could be diverted to another service that is operational ready.
- *Ownership and Operations*
  - *Terminal Ownership* – Which entity ultimately owns the ferry terminal, is it split between the landside and waterside facilities? What are the possible grant funding implications for ownership (e.g. WETA is eligible for federal grants for maintenance of waterside facilities)?

- *Private Ferry Operations* – Could privately-operated ferry operations use the terminal or develop a parallel facility that benefits from shared landside connections?
- *Public-Private Investment Opportunities* – Investment may facilitate mid-Peninsula employer and/or Redwood City development impacts (land value increase, new labor market access). Do such impacts entice private project capital or operational expenses?

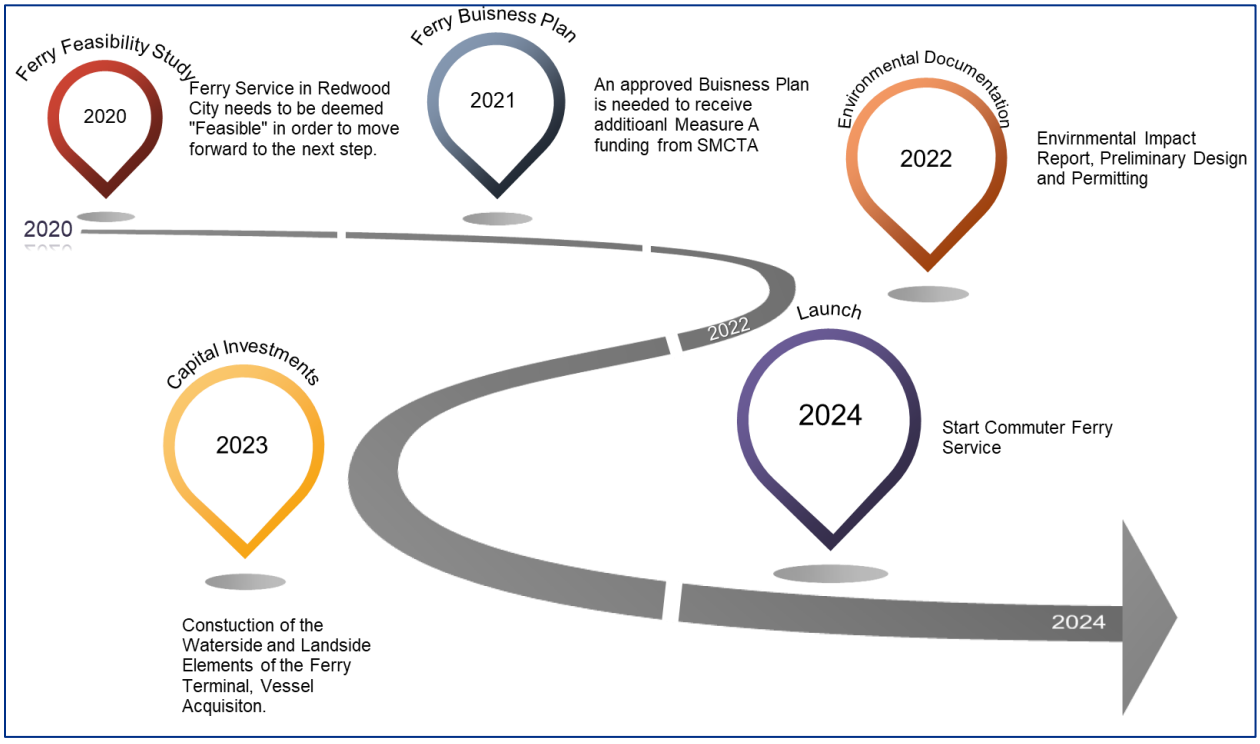
- Ridership – factors that may affect ferry user decisions:
  - *Fare schedules* – Long-haul ferry trip may be too high for individuals, affect ridership, and require employer subsidies to offset.
  - *First/Last Mile Costs and Responsibilities* – Ferry terminal location at the Port of Redwood City requires identifying First/Last Mile connections. Partnering services include public transit (SamTrans), employer-based Transportation Management Associations, public shuttle service (commute.org), or privately funded shuttles (like were operated for the Facebook Pilot Ferry Service).
  - *Regional Transportation Development* – Notable transit and/or highway improvements that greatly improve travel times between the mid-Peninsula and the proposed markets could lower ferry ridership. Conversely, ferry travel times are fixed, so if comparable ground travel times for other modes continues to degrade, ferry ridership could rise.
  - *New and Emerging Technology* – Autonomous Vehicles (AVs) could impact ferry ridership, either negatively if people see AV travel time as a productivity gain, or positively if AVs cause even more congestion on freeways. Similarly, ferry service may also benefit by advancements in vessel technology (lower capital or operating costs).
  - *COVID-19 ridership effects* – Lasting effects on commuting are currently unknown, but it is generally accepted that commute and work patterns should return to pre-COVID-19 conditions in the four to five years it takes to implement ferry service.

Source: CDM Smith, 2020

Next Steps – Ferry service timeline, **Figure E-6**, outlines steps needed to implement ferry service in Redwood City in 2024. It is noted that waterside improvements can only happen during an annual construction window between June 1st and November 30th, so it is possible that the project could be delayed due to construction timing or other unanticipated challenges.

- *Business Plan Development* – Given the project's financial feasibility, the SMCTA requires the City and Port of Redwood City to develop a Business Plan to identify how riders will be attracted to the new service, and how the service will be funded and operated. When the Business Plan is accepted by the SMCTA, the project will likely advance into Environmental and Preliminary Design, and subsequent permitting activities. The costs for these activities are eligible for SMCTA funding. The existing Memorandum of Understanding (MOU) between the City and WETA which covers the Feasibility and Business Plan phase of the ferry project will need to be amended as needed for future phases of work.

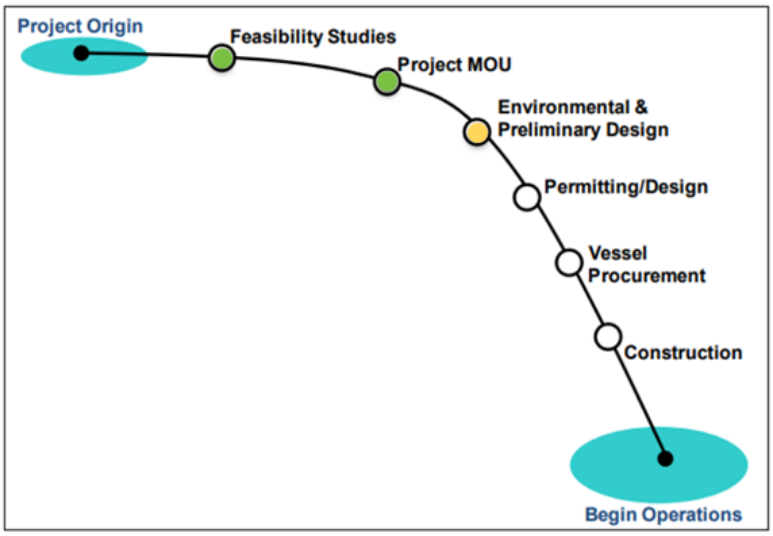
Figure E-6: Timeline to Launch



Source: CDM Smith, 2020

- *WETA's Project Implementation Process* – If the Business Plan is approved by SMCTA and funds are made available for construction of the ferry terminal, the next step in WETA's process would be an "Environmental and Preliminary Design" of the ferry terminal and service plan, as seen in **Figure E-7**.

Figure E-7: WETA's Project Implementation Process



Source: WETA 2020 Short Range Transit Plan