Emeryville Berkeley Oakland Transit Study

Final Report

January 2015

City of Emeryville

1333 Park Avenue

Emeryville, CA 94608

This project was completed in coordination with:

City of Berkeley

City of Oakland

Alameda-Contra Costa Transit

Bay Area Rapid Transit

Amtrak Capitol Corridor

Emeryville Transportation Management Association

West Berkeley Transportation Management Association

Alameda County Transportation Commission

Metropolitan Transportation Commission

Caltrans District 4

Federal Transit Administration

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Prepared by:

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In association with:

CHS Consulting Group

BAE Urban Economics

MIG Inc.

Nancy Whelan Consulting

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City of Emeryville

1333 Park Avenue

Emeryville, CA 94608

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Bay Area Rapid Transit Board of Directors

Emeryville Transportation Management Association

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Emeryville Economic Development Committee

Emeryville Planning Commission

Emeryville Transportation Committee

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Executive Summary

Background

Beginning in June 2013, the Emeryville-Berkeley-Oakland Transit Study (EBOTS) has focused on engaging numerous stakeholders and experts to develop visions for improving transit access throughout the Emeryville, West Berkeley, and West Oakland corridor. Using a Federal Transit Administration grant through Caltrans, the City of Emeryville has been working with the cities of Oakland and Berkeley, five transit agencies and the Alameda County Transportation Commission as well as a team of transportation and planning experts. A Policy Advisory Committee, which includes elected and appointed representatives from the participating agencies, Chambers of Commerce, disabled and housing organizations, and residents, has met three times, most recently on September 8, 2014. Outreach meetings and community-based engagement has been ongoing, while a Technical Advisory Committee, consisting of staff members of these agencies, is guiding the work.

In the fall of 2013, the team elicited comments about trips people wish to make, problems with transit, and ideas for solutions, through three community workshops and a questionnaire that received 800 responses. Based on this input and comments from various groups including the Emeryville City Council on January 21, 2014, the consultants devised options for review at a round of workshops and meetings and through a questionnaire in the spring of 2014.

Preliminary draft recommendations were discussed at meetings of the Oakland Economic Development Committee, West Oakland Business Alert, Oakland Broadway Transit Study staff, West Oakland Neighbors, Emeryville Economic Development Advisory Committee, EBOTS Technical Advisory Committee, EBOTS Policy Advisory Committee, and Berkeley Transportation Commission.

Discussion

Summarized below are the study's chapters on project background, planning process, transit context, recommended transit improvements, evaluation of improvements, and funding and implementation.

Project Background

The EBOTS project focuses on cultivating an environment within the EBOTS corridor that provides a transit-pedestrian-bicycling oriented environment for people to work, live, shop, and play. Goals to achieve this include:

- Creating an environment where a car is not required for mobility
- Using transit to create a well-connected and cohesive corridor with improved access to jobs, education and recreation
- Coordinating transit improvements with future population and job growth to help spur economic development

- Making near-term transportation improvements including bus route modifications, new shuttle operations, transit reliability and transit frequency increases

- Enhancing long-term mobility within the corridor, including state-of-the-art transit modes such as a modern streetcar or enhanced bus service.

Transit Context

The report assumes that the Emery Go-Round and other shuttles will continue as planned. The report includes a description of AC Transit's potential service improvements (which were the subject of public workshops in October 2014) and Oakland's Broadway Transit Project. Recommended improvements are intended to supplement the current shuttle services.

Planning Process

The report describes the process of developing options, including the identification of major origin and destinations that currently generate high demand for trips, as well as areas with high potential for future job and population growth. Streets linking major destinations, yet also providing fast, safe and efficient service were evaluated. The planning process outlines initial concepts leading to the creation of a north-south trunkline option presented in the second round of meetings that connects West Oakland, Emeryville, and West Berkeley. Several options were evaluated, with focus on future options that would not duplicate, but complement and support existing transit operations.

The draft report was discussed at meetings of the Emeryville Planning Commission and City Council; the Oakland Planning Commission, City Council and Council Public Works Committee; the Emeryville Transportation Management Association Board; the Berkeley City Council; and the BART and AC Transit Boards, and at a community meeting in West Oakland.

Proposed Transit Improvements

Based on the input described above, the team developed a set of preliminary draft recommendations, including short-term improvements; an Enhanced Bus Trunkline route, and two Streetcar Routes.

Short-Term Improvements

Short-term improvements would include shuttle service modifications, recommended changes to current AC Transit routes, as well as bus stop upgrades and amenity improvements. Shuttle improvements include expanding the West Berkeley shuttle and working with major developers to initiate a shuttle in West Oakland. These changes compliment AC Transit's proposed route modifications designed to better connect central Emeryville with downtown Berkeley and transbay service. These include routing the new 48 line from Emeryville Public Market to Shattuck and Bancroft between downtown Berkeley and UC Berkeley.

Enhanced Bus Trunkline (5-10 Years)

The Enhanced Bus Trunkline would be a branded hybrid bus with level boarding, 10-minute frequency during peak periods and 15-minute frequencies during non-peak periods, signal priority for faster travel, shelters with cameras and bike racks, marketing to create a branded image, and real-time arrival information. It would provide bi-directional service from Jack London Square to West Oakland BART and north through Emeryville and West Berkeley, traveling on 3rd, Mandela, Hollis, 7th, 6th and Gilman. This north-south route was chosen over east-west service to ensure that a new route not only provides

connections to destinations with currently low transit access, but compliments rather than duplicates current AC Transit and shuttle service. The report describes route options for the north end including potential service to Downtown Berkeley, as suggested the City of Berkeley and by the Emeryville Economic Development Advisory Committee.

Streetcar Routes (10-20 Years)

The Emeryville Streetcar service would connect Emeryville to MacArthur BART by running in two directions on 40th, Shellmound, 64th, Christie, Powell, Hollis and back on 40th. This "figure 8" route would supplement the Emery Go-Round by adding service where ridership is highest.

The West Oakland Streetcar would connect MacArthur BART, the East BayBridge shopping area, West Oakland BART, and Jack London Square, traveling on 40th, Mandela and 3rd. It would connect two ends of the Broadway transit service, forming the "O" envisioned in the West Oakland Specific Plan. If the Broadway service does not extend on 40th to MacArthur BART, the EBOTS service would need to extend on 40th to Broadway. Broadway Transit Study staff held workshops in October and present the study to the Oakland City Council by January, 2015.

Evaluation of Improvements

The Evaluation of Improvements analyzes projected ridership demand for the new transit lines, reduction in vehicle miles traveled, effects on environmental justice communities, safety and security, costs, compatibility with existing transit, and economic development impact.

Ridership

The report estimates ridership based on current AC Transit demand, comparable system demand, as well as projected population and employment increase. Each of the proposed routes (the Enhanced Bus trunkline route. The Emeryville Streetcar, and the West Oakland Streetcar) are projected to add between 3,000-6,000 new transit riders. When including the estimated number of current riders who switch to the new lines due to improved service and new route options, the total demand for each line is projected to be approximately 4,000-7,000 riders per line.

Reduction in Vehicle Miles Traveled (VMT)

Based on the estimated percentage new transit riders who switch from automobile modes to transit modes, the Enhanced Bus Trunkline would reduce VMT by about 4,700 to 6,200 miles, the West Oakland Streetcar would reduce VMT by about 5,300 to 6,500 miles, and the Emeryville Streetcar would reduce VMT by about 8,300 to 10,200 miles.

Effects on Environmental Justice Communities

Of the communities served with ¼-mile of each route, about 72% are minority communities and 43% low-income communities. Information concerning populations with disabilities was also compiled as additional information about the protected classes of population that are the subject of this environmental justice assessment. Data regarding disabled, transit dependent, and senior populations was considered when looking into the federally-protected environmental justice community areas.

Benefits could include improved access to appropriate education and employment opportunities, and attraction of retail and services that would reduce sales leakage out of the area. Sales leakage is when people have few stores in their neighborhood and have to shop elsewhere, draining their money out of the neighborhood.

Safety and Security

The report points out factors to bear in mind when transit stops are designed, including visibility and effects of bulb-outs on bike lanes. Street design will need to minimize risks associated with tracks, such as bicycle wheels getting stuck in tracks and streetcars not being able to change lanes. Security measures will include lights and cameras at the bus shelters.

Costs

The combined annualized capital cost and annual operations and maintenance cost of the recommendations is estimated as shown below. Both the Enhanced Bus trunkline and the Streetcars would involve extensive street improvements, including full-amenity shelters and curb extensions for level boarding. The Enhanced Bus trunkline route is a longer route, and the lifecycle of the vehicle and transit stop capital costs are estimated at 12 years. The streetcar routes are shorter, and the lifecycle for streetcar tracks and vehicle capital costs are approximately 30 years.

- Enhanced Bus Trunkline (8.1 mile one-way, 12 years): $9-10 million/year
- Emeryville Streetcar (5.3 mile loop, 30 years): $10-12 million/year
- West Oakland Streetcar (4.3 mile one-way, 30 years): $13-15 million/year

Compatibility with Existing Transit

The proposed transit lines are designed to complement, not duplicate, existing transit routes. However, there are service overlaps in several areas, especially those where demand exceeds or nears current transit capacity. The Enhanced Bus trunkline route would overlap Emery Go-Round service on part of Hollis, and would overlap the part of AC Transit's potential rerouted 26 line that would run on Mandela. The Emeryville Streetcar would overlap the part of the Emery Go-Round routes that connect to BART on 40th, and would overlap AC Transit's potential 57 line extension on 40th and Shellmound. The Oakland Streetcar would overlap the Mandela and 3rd Street parts of the Enhanced Bus trunkline, and part of AC Transit's potential rerouted 26 line on Mandela.

Economic Development Potential

The Enhanced Bus trunkline would enhance access to development opportunity sites, promote trips within the study area, and expand access to and quality of transit in West Oakland. The Streetcars would connect West Oakland to Jack London Square and MacArthur BART, and would connect Shellmound to MacArthur BART. Phasing could be done by routes with value capture by each city. The West Oakland Streetcar would complete the "O" envisioned by Oakland. The Emeryville Streetcar could handle increasing ridership in parts of Emery Go-Round routes with the heaviest demand.

Funding and Implementation

The report lists potential funding sources, explains what types of agencies can receive Federal formula funds, and lists funding sources and operator types that could work for the Enhanced Bus trunkline and Streetcar routes. The Enhanced Bus trunkline could be operated by a transportation management association or AC Transit. The streetcars could be operated by a transportation management association, AC Transit, BART, or a tri-city joint powers authority. The report also lists fund readiness strategies that could be used if non-traditional transit funding is to be sought.