

Appendix G

Technical Memorandum #8
Complementary ADA
Paratransit Strategies

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Complementary ADA Paratransit Strategies
Countywide Transit Plan
 FINAL Technical Memorandum #8



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 Alameda County Transportation Commission

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Acronyms

Acronym	Definition
ACE	Altamont Corridor Express
AC Transit	Alameda-Contra Costa Transit District
ADA	Americans with Disabilities Act
Alameda CTC	Alameda County Transportation Commission
BART	Bay Area Rapid Transit
BRT	Bus Rapid Transit
CFR	Code of Federal Regulations
FTA	Federal Transit Administration
LAVTA	Livermore Amador Valley Transit Authority
MBTA	Massachusetts Bay Transportation Authority
MTC	Metropolitan Transportation Commission
NTD	National Transit Database
PAPCO	Paratransit Advisory and Planning Committee
ParaTAC	Paratransit Technical Advisory Committee
SRAC	East Bay Paratransit's Service Review Advisory Committee
TCRP	Transit Cooperative Research Program
TNC	Transportation Network Company
TOD	Transit Oriented Development
VA	Veterans Affairs
VRF	Vehicle Registration Fee
WETA	San Francisco Bay Area Water Emergency Transportation Authority

Introduction

The Alameda County Transportation Commission (Alameda CTC) Countywide Transit Plan identified Transit Network Recommendations¹ for modifications to improve fixed-route transit in Alameda County. The objectives of this analysis are to:

1. Evaluate the near-term and long-term cost and service delivery impacts on Americans with Disabilities Act (ADA) Paratransit services associated with implementation of the proposed Transit Network Recommendations.
2. Identify opportunities and strategies to more effectively meet Alameda County ADA Paratransit requirements and other accessibility needs in conjunction with the implementation of the proposed Transit Network Recommendations.

The Technical Memorandum incorporates input received from Alameda CTC staff and the February 22, 2016 joint meeting of Paratransit Advisory and Planning Committee (PAPCO) and Paratransit Advisory and Planning Committee (ParaTAC). The primary purpose of this analysis is to determine the cost and service delivery impacts of the Transit Network Recommendations for the Alameda Countywide Transit Plan on ADA Paratransit services. This Memorandum contains the following sections:

1. Summary of Key Findings
2. Overview of Existing Paratransit Programs in Alameda County
3. Overview of Transit Network Recommendations
4. Technical Memorandum Methodology
5. Transit Network Recommendations Impact on the ADA Paratransit Program's Ability to Meet Complementary Paratransit Service Criteria
6. Impact of Capital Improvements in the Transit Network Recommendations Impact on ADA Paratransit
7. Measure B and BB Program Impacts
8. Progress on Implementation of Paratransit Strategies Recommended in the Metropolitan Transportation Commission (MTC) Transit Sustainability Project Paratransit Report

¹ Described in Alameda Countywide Transit Plan, Technical Memorandum #5: Transit Network Recommendations, October 2015.

- Summary of National Research on Strategies to Enable Increased Utilization of Fixed-Route Services for Persons with Disabilities

1.0. Summary of Key Findings

The Transit Network Recommendations were developed to help Alameda County realize its vision to create an efficient and effective transit network that enhances the economy and the environment and improves quality of life. In Technical Memorandum #5, Transit Network Recommendations, a transit service tier structure is utilized as an organizing principle. The Transit Network Recommendations are focused on service upgrades between these major transit nodes within each tier:

Regional Express Tier

- R1. BART Extension from Dublin/Pleasanton to Livermore/ACE
- R2. Brooklyn Basin-SF Ferry Terminal
- R3. Alameda SF Ferry Terminal
- R4. Berkeley-Emeryville-SF Transbay Transit Center
- R5. Eastmont Transit Center-Oakland-SF Transbay Transit Center
- R6. Tri-Cities-Palo Alto
- R7. Emeryville-Berkeley-San Rafael

Urban Rapid Tier

- U1. Emeryville-Bayfair BART Station
- U2. Richmond Parkway Transit Center-Brooklyn Basin
- U3. Berkeley-Alameda
- U4. Berkeley-Fruitvale BART
- U5. Bayfair BART-Union City BART
- U6. Bayfair BART-Warm Springs BART
- U7. Dublin/Pleasanton BART-Livermore ACE

One of the key rationales for making the transit network improvements is that capital and operating investments, which improve the capacity and operating effectiveness (in terms of travel time, frequency and reliability) of transit services within the Regional Express and Urban Rapid Tiers, are likely to have the greatest effect on increasing transit ridership, improve transit efficiency and sustainability, and achieve the Transit Plan's adopted vision and goals. The recommendations include dedicated or semi-exclusive lanes for buses, queue jump lanes, bus bulbs, transit signal prioritization and adaptive traffic signal control, more frequent service, longer spans of service (with six routes operating 24 hours a day), low floor buses on many routes, and enhanced stations with level boarding platforms.

The primary evaluation criteria for determining the cost and service delivery impacts on ADA Paratransit service are the Complementary Paratransit Service Criteria in the Federal Transit Administration's (FTA) ADA regulations (49 Code of Federal Regulations (CFR) Part 37 *Transportation services for Individuals with disabilities (ADA)*). The regulations provide guidance on how ADA Paratransit service should provide service for individuals who are unable to use fixed-route transit that is comparable to fixed-route transit.

Overall, the evaluation found that the only Complementary Paratransit Service criterion impacted by the Transit Network Recommendations is the expanded hours of the day during which fixed-route transit services would be provided. Six of the Network Recommendations increase the span of service to 24 hours a day on AC Transit routes in the East Bay Paratransit service area. East Bay Paratransit currently operates from 4:00 am to 1:00 am. It would cost approximately \$284,000 (2016 dollars) annually to operate ADA Paratransit 24 hours a day, 7 days a week, in the East Bay Paratransit service area. The Transit Network Recommendations have no impact on the Complementary Paratransit Service Criteria in the LAVTA and Union City service areas.

The Transit Network Recommendations do not impact the other Complementary Paratransit Service Criteria:

- Service Area: The Transit Network Recommendations do not expand the service area boundaries of East Bay Paratransit, Union City, or LAVTA.
- Response Time: no impact
- Fares: no impact
- Trip Purpose: no impact

- Capacity Constraints: no impact
- Subscription Trips: no impact

The second objective of the analysis was to identify opportunities and strategies to more effectively meet Alameda County ADA Paratransit and other accessibility needs in conjunction with the implementation of the proposed Transit Network Recommendations. Discussions were held with Measure B and BB program managers of the cities of Fremont, Oakland, Pleasanton, San Leandro, and Union City, and with ADA Paratransit program managers to determine if and how elements of the Transit Network Recommendations would impact the mobility of individuals eligible for ADA Paratransit service.

As part of the Transit Network Recommendations, capital improvements will enhance stations/stops for bus service in the Regional Express and Urban Rapid tiers. In particular, raised platforms with level boarding and bus bulbs will improve accessibility at bus stops. Dedicated and semi-exclusive lanes will improve overall travel time for eligible ADA Paratransit individuals who can utilize fixed-routes for some trips. If ADA Paratransit vehicles are able to use the dedicated or semi-exclusive lanes, their travel time and on-time performance could be improved.

Many of the Measure B and BB city-based and gap paratransit programs already improve mobility opportunities for individuals eligible for ADA Paratransit service. According to program managers, taxi voucher programs are currently utilized mostly for local trips in the community of origin. However, there may be opportunities for utilizing both the taxi voucher programs and transportation network companies (TNC), such as Lyft and Uber, as feeder services for first- and last-mile trips.

National research based on a survey of 1,927 individuals with disabilities found that 31percent of the respondents use both fixed-route transit and ADA Paratransit. The researchers from Transit Research Cooperative Program Report (TCRP) Report 163² note that many people with disabilities eligible for ADA Paratransit services can use fixed-route transit for some trips. There are many factors that determine when persons with disabilities are functionally able to use fixed-route transit and when they are considered eligible for ADA Paratransit service. The researchers found that deep fare discounts or free fixed-route service, travel training, and improved accessibility for the path of travel to fixed-route bus stop were all important in encouraging increased utilization of fixed-

² TCRP Report 163, "Strategy Guide to Enable and Promote the Use of Fixed-Route Transit by People with Disabilities," Transportation Research Board of the National Academies, Washington D.C., 2013.

route service by individuals certified as eligible for ADA Paratransit. These factors could be further considered as the Transit Network Recommendations are implemented.

2.0. Overview of Paratransit Programs in Alameda County

2.1. ADA Paratransit Programs

FTA's ADA guidelines included requirements for the provision of complementary paratransit service for individuals unable to use fixed-route bus or train service due to a disability. ADA Paratransit is meant to provide a parallel and comparable level of service for persons with a disability. The requirements are the same for all public transportation systems in the United States.

Three ADA Paratransit programs serve different portions of Alameda County:

- East Bay Paratransit
- Union City Paratransit
- Wheels Dial-A-Ride

AC Transit and BART partner with the East Bay Paratransit Consortium to manage East Bay Paratransit in their respective service areas. The East Bay Paratransit's Service Review Advisory Committee (SRAC) provides input on policies, budgets, driver training, outreach and a general public forum for expressing and addressing concerns about paratransit issues.

Union City Paratransit is managed by Union City as part of Union City Transit. Union City also offers Paratransit Plus, a limited service to southern Hayward, northern Fremont, and Newark. The Accessibility Advisory Committee holds quarterly meetings to discuss transit issues in Union City and advise Union City Paratransit.

Wheels Dial-A-Ride is managed by LAVTA. The Wheels Accessible Advisory Committee provides input on accessibility issues facing senior and disabled residents on both fixed-route and paratransit services.

ADA Paratransit regulations provide the baseline of what is required by ADA. Entities have the policy choice of going beyond the requirement to meet the needs of their constituents. In Alameda County, there are minor differences in how the ADA

Paratransit services are provided by the three entities. Some services, such as Wheels Para-Taxi service which provides same-day reservation trips 24/7, go beyond ADA minimum requirements.

2.2. City-Based Paratransit Programs

Ten cities in Alameda County have city-based paratransit programs. Each has designed its program to meet the needs of consumers in their local jurisdiction.

The major difference between the city-based/non-mandated programs and ADA-mandated programs, aside from the absence of federal funds and federally-regulated service requirements, is that they also provide transportation services to seniors rather than exclusively to persons with disabilities. They also offer a range of different types of services, including accessible door-to-door, shuttles and group trips, taxi, and volunteer driver services.

The goal of the city-based programs is to ensure that seniors and people with disabilities are able to meet their daily transportation needs and maintain a high quality of life.

Most city-based programs have incorporated mobility management concepts and practices into their services to improve efficiency and customers' ability to access services. Mobility management is a comprehensive approach to transportation that is focused on individual customer travel needs rather than a "one size fits all" solution.

Through efforts such as standardized Measure B Implementation Guidelines and the 2011 Coordination and Mobility Management Planning efforts, eligible city-based program components are designed to expand and enhance available services, rather than duplicate existing ADA services.

The Paratransit Implementation Guidelines for the Special Transportation Program for Seniors and People with Disabilities, adopted by Alameda CTC in November 2013 and revised in January 2014, lay out the service types eligible for Measure B funding. For most types of service, the Guidelines include both cost per trip and fare limitations to ensure programs remain cost-effective and affordable to the consumer. All programs funded partially or in their entirety through Measures B, BB or the vehicle registration fee (VRF), including ADA-mandated Paratransit services, city-based non-mandated programs, and discretionary or gap grant funded projects, had to be in full compliance with these guidelines by the end of FY 2012-2013.

City-based program fund recipients are able to select which of these service types is most appropriate in their community to meet the needs of seniors and people with disabilities. Programs should be designed to enhance quality of life for seniors and people with disabilities by offering accessible, affordable, and convenient transportation options to major medical facilities, grocery stores and other important travel destinations.

2.3. Gap Grant Program

The Alameda CTC Gap Grant Program is one of three programs funded by Measure B and BB focused on special transportation for seniors and disabilities. The 2014 Alameda County Transportation Expenditure Plan allocates one percent of Measure BB net revenue for “the purposes of coordinating services across jurisdictional lines or filling gaps in the system to meet the mobility needs of seniors and people with disabilities.” The funds go toward projects and programs that:

- Improve mobility for seniors and people with disabilities by filling gaps in the services available to this population.
- Provide education to seniors and people with disabilities who are able to use standard public transit and encouragement to do so.
- Improve the quality and affordability of transit and paratransit services for those who are dependent on them.
- Improve the efficiency and effectiveness of ADA mandated and local (paratransit) services.³

Eligible recipients include public agencies, nonprofit community-based organizations, and Alameda CTC for projects that include⁴:

- Mobility Management/Travel Training
- Volunteer Driver Programs
- Group Trips
- Customer Outreach
- City-based Door-to-Door Services

³ Alameda County Transportation Expenditure Plan. 2014.

⁴ Cycle 5 Gap Grant Program Guidelines.

- Taxi Subsidy Programs
- Wheelchair Van Program
- Accessible Fixed-Route Shuttles

An example of a Gap Grant funded project is VIP Rides. This volunteer driver program provides rides and assistance for seniors and persons with disabilities in Fremont, Newark, Union City, and Hayward who have no other means of transportation for essential errands.

3.0. Overview of Transit Network Recommendations

Technical Memorandum #5 of the Transit Network Recommendations for the Alameda Countywide Transit Plan provides significant detail on:

1. Five transit tiers that form the transit network and how they are integrated to form a complete transit system in Alameda County.
2. The network development methodology that describes the market analysis that identified the most competitive transit markets in Alameda County.
3. Transit improvements for the Regional Express and Urban Rapid tiers, including a brief description of each recommendation.

This Memorandum is intended to provide an evaluation of ADA Paratransit impacts from the Transit Network Recommendations. The recommendations in the Transit Network Recommendations focus on the Regional Express and Urban Rapid tiers, summarized as follows.

3.1. Regional Express Tier Recommendations

The distinguishing features of Regional Express tier service are:

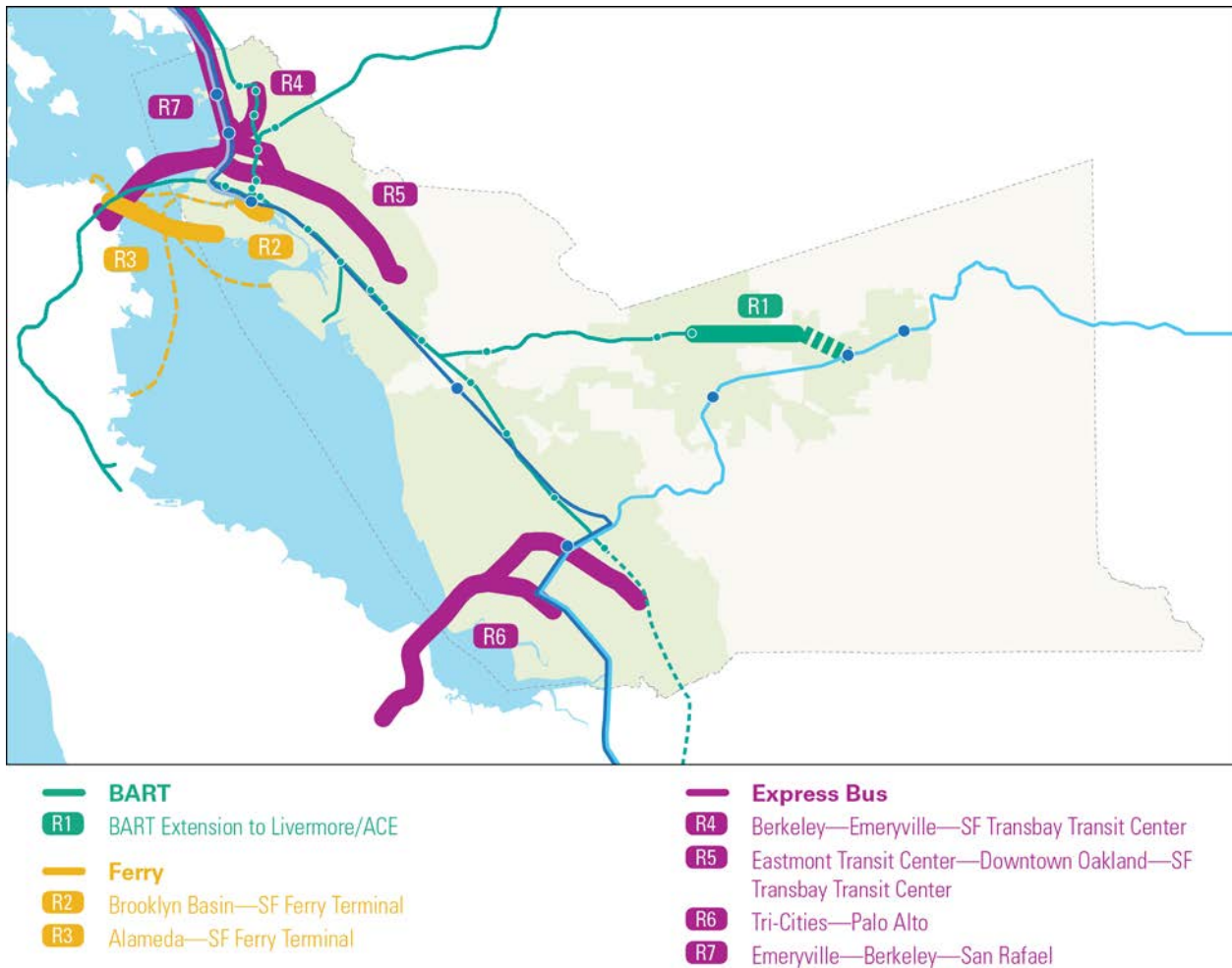
- Serves multiple counties
- Travel occurs between major nodes where there is substantial point to point travel, such as between downtown Oakland, Berkeley and downtown San Francisco
- Carries a large portion of Alameda's County transit trips

- Generally includes heavy rail, intercounty, and ferry services

Existing Regional Express services include:

- BART
- AC Transit Transbay Service
- Ferry services

Figure 1: Regional Express Tier Recommendation



Transit Network Recommendations for Regional Express tier include:

- **R1. BART Extension to Livermore/ACE** based on the current preparation of Draft Environmental Impact Report for this extension.

- **R2. Brooklyn Basin–SF Ferry Terminal:** Ferry service between Brooklyn Basin and San Francisco Ferry Terminals via Jack London Square, building on the existing service, with 15 hours of service daily and 30 to 60 minute headways. . . .
- **R3. Alameda-SF Ferry Terminal:** Ferry service between a new terminal at Alameda Point and the San Francisco Ferry Terminal, with 15 hours of service a day and 30 to 60 minute headways.
- **R4. Berkeley-Emeryville-SF Transbay Transit Center:** Upgrade of the existing F-Line operated by AC Transit to serve the Transbay and local markets between Berkeley, Emeryville and downtown San Francisco. Includes new low floor buses, dedicated transit lanes, transit priority treatments, 20 hours of service/day for the transbay portion, 24 hour service on the local portion, and 10 minute headways.
- **R5. Eastmont Transit Center-Oakland-SF Transbay Transit Center:** Upgrade of the existing AC Transit routes 57 and NL that operate along MacArthur Boulevard and serves Mills College and Eastmont Transit Center. Includes new buses, dedicated or semi-exclusive lanes on portions of the route, 20 hours of service/day for the transbay portion, 24 hour service on the local portion, and 10 minute headways.
- **R6. Tri-Cities-Palo Alto:** Upgrade of existing bus lines, including the U, DB and DB1, on Dumbarton Bridge. Includes new buses, expanded park and ride facilities, dedicated bus lanes on portions of the route, 16 hours of service/day, and 15 minute headways.
- **R7. Emeryville-Berkeley-San Rafael:** Upgrade of Golden Gate Transit’s Route 580 from San Rafael to Emeryville with 16 hours of service/day.

Regarding R6 implementation planning, a comment was received from a ParaTAC member stressing the importance of providing direct service or good connections to medical facilities in Palo Alto for persons with disabilities living in Fremont, Newark and Union City. This should be considered as detailed planning for implementation of R6 moves forward.

3.2. Urban Rapid Tier Recommendations

Key characteristics of the urban rapid tier include:

- Frequent all day service.
- Transit signal priority and adaptive traffic signal control.

- Preferential transit treatments on streets, including bus bulbs, queue jump lanes or transit priority lanes.
- Generally includes bus service enhancements/improvements.

Figure 2: Urban Rapid Tier Recommendations



Transit Network Recommendations for the Urban Rapid tier include:

- **U1. Emeryville-Bayfair BART Station:** Extends the East Bay BRT improvements on International Boulevard to Emeryville and Bay Fair BART station. Includes dedicated bus lanes on selected segments, transit signal priority and adaptive traffic signal control, 24 hour service, and 5 minute headways.
- **U2. Richmond Parkway Transit Center-Brooklyn Basin:** BRT improvements will be made on this corridor along San Pablo and Macdonald Avenues, which will consist of new low floor buses, dedicated or semi-exclusive lanes on portions of

the corridor, transit signal priority and adaptive traffic signal control, 24 hour service, and 5 minute headways.

- **U3. Berkeley-Alameda:** BRT improvements will be made on Telegraph Avenue, which will include new floor buses, dedicated or semi-exclusive lanes on portions of the corridor, transit signal priority and adaptive traffic signal control, 24-hour service, and 5 minute headways.
- **U4. Berkeley-Fruitvale BART:** Upgrade on the corridor along College Avenue and University Avenue, which include bus bulbs, queue jump lanes, semi-exclusive lanes, transit signal priority and adaptive traffic signal control, 20 hours of service/day, and 12 minute headways.
- **U5. Bay Fair BART-Union City BART:** Transit improvements on this corridor on Hesperian Boulevard with transit signal priority and adaptive traffic signal control, queue jump lanes, bus bulbs, 20 hours of service/day, and 12 minute headways on Rapid Bus service and 20 minutes on local service.
- **U6. Bay Fair BART-Warm Springs BART:** BRT improvements along East 14th Street and Mission Boulevard corridor, which will include new low floor buses, dedicated lanes on most portions of the corridor, transit signal priority and adaptive traffic signal control, 24-hour service, and 5 minute headways.
- **U7. Dublin/Pleasanton BART-Livermore ACE:** Realignment of the existing Rapid Line to capture more ridership with primarily dedicated transit lanes, along with 20 hours of service/day and 12 minute headways.

4.0. Analysis Methodology

The Transit Network Recommendations propose changes to the fixed-route transit service in Alameda County. This analysis determines the cost and service delivery impacts of the Transit Network Recommendations on ADA Paratransit services. There were three primary methods employed for this analysis:

1. Application of ADA Complementary Paratransit Service Criteria to the Transit Network Recommendations.
2. Interviews and email correspondence with Alameda CTC staff and consultant, ADA Paratransit program managers, and city-based and gap funding program managers.
3. National research on the utilization of fixed-route service by persons with disabilities.

4.1. ADA Complementary Paratransit Service Criteria

The determination of the costs and service delivery impacts on ADA Paratransit services in Alameda County is based on the Complementary Paratransit Service Criteria that guide how ADA Paratransit should be comparable to fixed-route service for individuals who cannot utilize fixed-route transit for at least some of their trips. The basic requirement of ADA Paratransit service is defined in the 49 CFR, Part F, commencing with 37.121:

"...each public entity operating a fixed-route system shall provide paratransit or other special service to individuals with disabilities that is comparable to the level of service provided to individuals without disabilities who use the fixed-route system."

The service policies for ADA Paratransit are specified in the ADA Paratransit regulations.⁵ Key provisions on how the three ADA Paratransit programs in Alameda County currently meet the Complementary Paratransit Service Criteria are discussed below. These criteria are utilized in the next section to determine the impacts, if any, that the Transit Network recommendations would have on the ADA Paratransit programs in Alameda County. The quotations below are directly from the FTA's Circular.

Service Area

ADA Paratransit regulations require that operating entities "provide complementary paratransit service to origins and destinations within corridors with a width of three-fourths of a mile on each of side of each fixed route."⁶

The service areas for the ADA Paratransit Programs are shown below in Figure 3. Union City Paratransit's service area includes the areas served by Paratransit Plus in southern Hayward, northern Fremont and Newark. LAVTA provides Dial-A-Ride service within the entire LAVTA service area, not just within the required $\frac{3}{4}$ mile buffer of a fixed route.

Fares

ADA Paratransit regulations require that the "fare for a trip charged to an ADA Paratransit eligible user of the complementary Paratransit service shall not exceed twice the fare charged to an individual paying full fare (i.e. without regard to

⁵ FTA Circular FTA C 4710.1. November 2015

⁶ 49 CFR 37.131 - Service Criteria for complementary paratransit

discounts) for a trip of similar length, at a similar time of day, on the entity’s fixed-route system.”

The operative phrase in the regulations is “shall not exceed”. Alameda County ADA Paratransit Programs have discretionary policies that result in fares that are less than twice the full fare. Union City’s full fare is \$2.00; its ADA Paratransit fare is \$2.75. Fares on East Bay Paratransit are distance-based with different fare matrices for trips within East Bay and trips to or from San Francisco. LAVTA has a \$2.00 full fare; its ADA Paratransit fare is \$3.75.

Figure 3: Alameda County ADA and City-Based Paratransit Programs



Source: *Access Alameda, Transportation Services for Seniors and People with Disabilities in Alameda County. Fall 2012, 4th edition, p. 15.*

Hours and Days of Service

ADA Paratransit regulations require that “the complementary paratransit service shall be available throughout the same hours and days as the entity’s fixed route service.”

All Alameda County ADA Paratransit programs meet the minimum requirements. By offering LAVTA’s Para-Taxi for ADA Paratransit Eligible individuals, service is provided during hours when LAVTA fixed route buses are not operating. In the LAVTA service area, service is expanded to serve ADA-eligible riders in Pleasanton when City of Pleasanton Paratransit service does not operate or cannot accommodate a trip.

Trip Reservations and Response Time

ADA Paratransit regulations require that “the entity shall schedule and provide paratransit service to any ADA paratransit eligible person at any requested time on a particular day in response to a request for service made the previous day.”

The regulations specifically require that a reservation service be made available during business hours, but also “as well as during times, comparable to normal business hours, on a day when the entity’s offices are not open before a service day.” Other response time provisions include:

“...may negotiate pickup times with the individual, but the entity shall not require an ADA paratransit eligible individual to schedule a trip to begin more than one hour before or after the individual’s departure time.”

With a public participation process, advanced reservation policies can be established to meet local needs with a maximum 14-day reservation period.

Policies for advance reservation vary in Alameda County. For Wheels Dial-A-Ride and East Bay Paratransit, passengers can make reservations up to seven days in advance. For Union City Paratransit, it is up to three days in advance.

No Trip Purpose

ADA Paratransit regulations require that the operating entity “*shall not impose restrictions or priorities based on trip purpose.*” None of the Alameda County ADA Paratransit programs have trip purpose restrictions.

Capacity Constraints

ADA Paratransit regulations require that “the entity shall not limit the availability of complementary paratransit service to ADA Paratransit eligible individuals by any of the following:

- Restrictions on the number of trips an individual will be provided.
- Waiting lists for access to the service.
- Any operational pattern or practice that significantly limits the availability of service to ADA Paratransit eligible persons.”

Subscription Service

Subscription service is regularly scheduled service by a passenger. For example, an ADA eligible individual who needs dialysis every Tuesday can have a standing reservation for the time slot needed for treatment. ADA Paratransit regulations require that:

“Subscription service may not absorb more than 50% of the number of trips available at a given time of day, unless there is non-subscription capacity.”

4.2. Interviews and Correspondence with Alameda CTC Staff, ADA Paratransit Programs and City-Based Paratransit Program Managers

To address both of the objectives of the analysis, interviews and email correspondence were conducted with the following individuals:

Alameda CTC Staff and Consultants

- Alameda CTC Paratransit Coordinator – Naomi Armenta
- Alameda CTC Paratransit Consultant – Richard Weiner, ADA Paratransit Services

The purpose of the interviews, conducted at the outset of the work for this Memorandum, included:

- Explore the ADA Paratransit Service Criteria relevant to the Transit Network recommendations.
- Provide input on recommendations on candidate names of individuals with the ADA Paratransit services and city-based programs to interview.
- Provide perspectives on progress on the MTC Sustainability Project Paratransit recommendations in Alameda County.

Transit Agency Program Managers for ADA Paratransit

- East Bay Paratransit – Laura Timothy (BART, Manager of Access and Accessible Services), Mallory Nestor-Brush (AC Transit, Accessible Services Manager) & Mary Rowlands (Program Coordinator)

- Union City Paratransit – Wilson Lee, Transit Manager
- LAVTA – Kadri Klm, Paratransit Planner

The purpose of the interviews with transit agency program managers for ADA Paratransit included:

- Evaluate the near-term and long-term cost delivery impacts on ADA Paratransit associated with the proposed transit network recommendations and ADA service criteria.
- Document the progress made on the MTC Sustainability Paratransit Report recommendation.

Explore opportunities and strategies to more effectively meet the mobility needs of Alameda County ADA Paratransit individuals as it relates to the Transit Network Recommendations.

Measure B and BB Paratransit Program Managers

Interviews were held with key staff at five of the city-based paratransit programs funded by Measure B and BB. The five city-based programs were selected in conjunction with Alameda CTC staff based on geographic and programmatic diversity:

- City of Fremont – Shawn Fong, Program Manager, Mobility & Transportation Services
- City of Oakland – Scott Means, Aging & Adult Services Manager & Hakeim McGee, Senior Services Supervisor
- City of Pleasanton – Pam Deaton, Recreation Supervisor & Julie Parkinson
- City of San Leandro – Diane Atienza, Senior Services Supervisor & Sandra Rogers, Paratransit Coordinator
- City of Union City – Wilson Lee, Transit Manager

The purpose of the interviews with the City-based Program was to determine:

- Whether Measure B and BB city-based and gap funding programs have expanded mobility for ADA Paratransit eligible individuals, and if the programs have helped to dampen demand for ADA Paratransit services.

- How various paratransit programs might evolve between now and 2040, with a focus on the relationship between the Transit Network Recommendations and the city-based and gap funding programs.
- Effective strategies for meeting the mobility needs of ADA eligible and non ADA eligible individuals.
- If and how technology advancement and the presence of TNCs such as Uber/Lyft, crowd-sourced applications such as Chariot, and other technology advancement might have an impact on various ADA Paratransit market segments.
- The potential effects of the Transit Network Recommendations features on persons with disabilities.

4.3. Literature Research on Network Recommendations and Utilization of Fixed-route Service by Persons with Disabilities

The third methodology draws upon national research on the utilization of fixed route service by persons with disabilities for at least some of their trips. TCRP 163⁷ includes national research on this subject; key findings and conclusions are summarized at the end of this memorandum.

5.0. Transit Network Recommendations Impact on ADA Paratransit Program's Ability to Meet Complementary Paratransit Service Criteria

Three ADA Paratransit programs, which each currently meet or exceed the minimum ADA Paratransit requirements in Alameda County:

- East Bay Paratransit
- Union City Paratransit
- Wheels Dial-A-Ride

⁷ TCRP Report 163, "Strategy Guide to Enable and Promote the Use of Fixed-Route Transit by People with Disabilities," Transportation Research Board of the National Academies, Washington D.C., 2013.

This section discusses the potential impact of the Transit Network Recommendations on ADA Paratransit services in Alameda County based on the Complementary Paratransit Service Criteria. Most of the Transit Network Recommendations are improvements to existing or planned services or routes. The following is a review of the Complementary Paratransit Service Criteria as they relate to the Transit Network Recommendations.

5.1. Hours and Days of Service

Complementary Paratransit Service Criterion: The complementary paratransit service shall be available throughout the same hours and days as the entity’s fixed-route service.

Analysis: The proposed Transit Network Recommendations include several service span expansions for the Regional Express and Urban Rapid tiers, particularly from 20 to 24 hours of service a day. The following table shows the existing service hours for the three ADA Paratransit services.

Table 1: Span of Service of Existing ADA Paratransit Services in Alameda County

Union City Paratransit	Wheels Dial-a-Ride	East Bay Paratransit
Mon-Fri 4:15am - 9:20pm Sat 7:00am - 7:30pm Sun 8:00am - 6:30pm	Mon-Sun 4:30am - 1:30am (following day)	Depends on Location, maximum Mon-Sun 4:00 am to 1:00 am (following day).

Union City Paratransit and Wheels Dial-a-Ride each have set hours of operation for their entire service area. East Bay Paratransit’s hours of operation for any given location within its service area are determined by the service hours of fixed-route transit within three quarters of a mile. In order to estimate the impact on the cost and service delivery of East Bay Paratransit service, the difference in hours between current fixed-route service and the Transit Network Recommendations was calculated. As a first step, the current hours of operation for individual fixed-route transit lines proposed to be improved or replaced were determined. These were then compared to the recommended service spans to calculate the number of increased hours per day, if any. In most cases, the Transit Network Recommendations include only a span of service, e.g. 20 hours, and not specific service hours, e.g. 5 am to 10 pm.

The methodology described above was used to produce Table 2 which shows the impact on ADA Paratransit service hours of each of the Transit Network Recommendations. The first three columns describe the parameters of the recommendation. The fourth column, “Impact on Paratransit,” shows the difference in

hours between the current hours of operation and the recommended service spans. The last column shows which of the three ADA Paratransit services is affected by the recommendation.

Table 2: Transit Network Recommendations' Impact on ADA Paratransit Service Hours

Transit Network Recommendations	Affected Fixed-Route Service	Recommended Hours	Impact on Paratransit	Service Area
Regional Express:				
R1. BART Extension from Dublin/Pleasanton to Livermore/ACE	BART	20 hours	None	Wheels
R2. Brooklyn Basin - SF Ferry Terminal	WETA	15 hours. No weekends	None	EBP
R3. Alameda - SF Ferry Terminal	WETA	15 hours	None	EBP
R4. Berkeley-Emeryville-SF Transbay Transit Center	AC Transit Transbay and Local service – Line F	24 hours for local 20 hours for Transbay	3.75 hrs/day	EBP
R5. Eastmont Transit Center - Oakland-SF Transbay Transit Center	AC Transit Transbay and Local service – Lines 57, NL	24 hours for 57 20 hours for Line NL	3.75 hrs/weekday 4.25 hrs/weekend	EBP
R6. Tri-Cities-Palo Alto	Dumbarton Express	16 hours. No weekends	0.5 hrs/weekday	EBP
R7. Emeryville - Berkeley - San Rafael	Golden Gate Transit 580	16 hours. 5am to 9pm. No weekend service	None	EBP
Urban Rapid:				
U1. Emeryville-Bayfair BART Station	AC Transit East Bay BRT	24 hours	4.5 hrs/weekday 3.75 hrs/weekend	EBP
U2. Richmond Parkway Transit Center-Brooklyn Basin	AC Transit 72, 72M, 72R	24 hours	3.25 hrs/day	EBP
U3. Berkeley-Alameda	AC Transit Route 1, 1R	24 hours	4.5 hrs/weekday 3.75 hrs/weekend	EBP
U4. Berkeley-Fruitvale BART	AC Transit 51A, 51B	20 hours. 5am to 1am.	0.5 hrs/day	EBP
U5. Bayfair BART-Union City BART	AC Transit 97	20 hours. 5am to 1am.	1.75 hrs/weekday 2.25 hrs/weekend	EBP
U6. Bayfair BART-Warm Springs BART	AC Transit 99	24 hours	4.25 hrs/day	EBP
U7. Dublin/Pleasanton BART-Livermore ACE	LAVTA Rapid	20 hours	None	Wheels

Wheels = LAVTA Wheels, EBP = East Bay Paratransit.

The hours of operation for Wheels Dial-A-Ride and Union City Paratransit are not affected by the Transit Network Recommendations. Nine of the recommendations result in an increase in service hours for East Bay Paratransit, six of which involve 24-hour service. East Bay Paratransit currently operates a maximum of 21 hours, from 4 am to 1 am. The East Bay Paratransit program managers ascertained that there would be an additional fixed annual cost of approximately \$284,000 in order to provide 24-hour service for any portion of the service area. This estimate represents the base cost to keep the broker’s office open for 24 hours and pay the contracted service providers for 24-hour service. The estimate also takes into account that East Bay Paratransit must have adequate coverage of the service area throughout its stated daily service period.

In order to estimate potential ridership from 1 am to 4 am, East Bay Paratransit provided a count of the total trips provided from 12 am to 1 am and 4 am to 5 am in December 2015 as shown in the table below. There is a range of 21 monthly one-way trips between 12:00 am and 1:00 am and 688 monthly trips between 4:00 am and 5:00 am, when transportation for dialysis begins. . . . In the long term, the demand levels for ADA Paratransit between 1:00 am and 4:00 am are likely to remain very low. Based on the available statistics and stakeholder input on the trend of dialysis centers operating a longer span of service, ADA Paratransit demand between 1:00 am and 4:00 am. It is estimated to be about 200 trips per hour, or about 600 additional monthly trips.

Table 3: East Bay Paratransit One-Way Trips in December 2015

Time Period	Total Trips in Dec. 2015
12 am to 1 am - Weekday	18
12 am to 1 am - Weekend/Holiday	3
12 am to 1am - Total	21
4 am to 5 am - Weekday	590
4 am to 5 am - Weekend/Holiday	98
4 am to 5 am - Total	688

Finding: The primary impact of the Transit Network Recommendation is an expansion of service hours in the East Bay Paratransit service area from 21 to 24 hours a day. The estimated cost for providing East Bay Paratransit service between 1:00 am and 4:00 am is approximately \$284,000 in 2016 dollars. The factors utilized for this estimate included:

- Staffing and overhead for the broker's office

- Providing an adequate number of vehicles to serve an anticipated very low demand in a large service area
- Providing a contingency to cover unexpected costs

5.2. Service Area

Complementary Paratransit Service Criterion: The complementary paratransit service provide complementary paratransit service to origins and destinations within corridors with a width of three-fourths of a mile on each of side of each fixed-route.

Analysis: East Bay Paratransit's service area extends east along the Highway 580 corridor to the Dublin/Pleasanton BART station. If a rider is going beyond the Dublin/Pleasanton BART station they can transfer to Wheels Dial-a-Ride or City of Pleasanton Paratransit, depending on their destination and the time of day. One of the Transit Network Recommendations is to extend BART east to the City of Livermore. The program managers at East Bay Paratransit indicated, and those at LAVTA confirmed, that implementation of BART to Livermore would not affect the East Bay Paratransit service area and that transfers to Wheels Dial-a-Ride would continue to occur at the Dublin/Pleasanton BART station. There are no other Transit Network Recommendations that would impact the service area for any of the ADA Paratransit providers.

Finding: The Transit Network Recommendations do not have an impact on the service area criterion for ADA Paratransit programs in Alameda County.

5.3. Trip Reservations and Response Time

Complementary Paratransit Service Criterion: The entity shall schedule and provide Paratransit service to any ADA Paratransit eligible person at any requested time on a particular day in response to a request for service made the previous day. Reservations may be taken by reservation agents or by mechanical means.

1. The entity shall make reservation service available during all normal business hours of the entity's administrative offices, as well as during time, comparable to normal business hours, on a day when the entity's offices are not open before a service day.
2. The entity may negotiate pickup time with the individual, but the entity shall not require an ADA Paratransit eligible individual to schedule a trip to begin more than one hour before or after the individual's desired departure time.

3. The entity may use real-time scheduling in providing complementary paratransit service.
4. The entity may permit advance reservations to be made up to 14 days in advance of an ADA Paratransit eligible individual's desired trips. When an entity proposes to change its reservation system, it shall comply with public participation requirements equivalent to those of 49 CFR 37.137 (b) *Public Participation* and (c) *Ongoing requirement*.

Analysis: This service criterion is internal to the operation of the ADA Paratransit program and is not affected by the Transit Network recommendations.

Finding: The Transit Network Recommendations do not have an impact on the trip reservation and response time criterion for ADA Paratransit programs in Alameda County.

Fares

Complementary Paratransit Service Criterion: Fare for a trip charged to an ADA Paratransit eligible user of the complementary Paratransit service shall not exceed twice the fare charged to an individual paying full fare (i.e. without regard to discounts) for a trip of similar length, at a similar time of day, on the entity's fixed-route system.

Analysis: The Transit Network Recommendations do not address fare policy. The Transit Plan may make policy recommendations for fixed-route transit at a later date, at which point this Memorandum may be updated.

Finding: The Transit Network Recommendations do not have an impact on the service area criterion for ADA Paratransit programs in Alameda County.

No Trip Purpose Restrictions

Complementary Paratransit Service Criterion: The entity shall not impose restrictions or priorities based on trip purpose.

Analysis: The Transit Network Recommendations do not restrict trip purpose and the current status of no trip purpose restrictions by each of the three ADA Paratransit programs in Alameda County will not be affected.

Finding: The Transit Network Recommendations do not have an impact on trip purpose criterion for ADA Paratransit programs in Alameda County.

Capacity Constraints

Complementary Paratransit Service Criterion: The entity shall not limit the availability of complementary paratransit service to ADA Paratransit eligible individuals by any of the following:

- Restrictions on the number of trips an individual will be provided.
- Waiting lists for access to the service.
- Any operational pattern or practice that significantly limits the availability of service to ADA Paratransit eligible persons.

Analysis: Capacity constraints are caused by internal operational policies and procedures of the ADA Paratransit programs and are not directly caused by the transit network improvements. From the interviews, the only case where the Transit Network Recommendations could potentially cause a capacity constraint is at ADA Program boundaries where a hand-off occurs between agencies for ADA Paratransit trips. An example of this situation is a trip that crosses ADA Paratransit program's boundaries, where an ADA Paratransit bus from one agency meets an ADA Paratransit bus from a different agency B. The ADA Paratransit passenger transfers buses to complete an origin-destination ADA Paratransit trip comparable to a trip made on fixed-route transit. Unless the two vehicles meet at about the same time an excessive trip length may result. Excessive trip length is in comparison to the time required to make a similar trip using the fixed-route system.

Upon extension of BART to Livermore, the volume of hand-offs between East Bay Paratransit and LAVTA Wheels at the Dublin/Pleasanton BART station may increase; however, no estimates have been made at this time. If the volume of hand-offs increases, East Bay Paratransit and LAVTA Wheels would need to adjust operational practices to ensure that the travel time of the ADA Paratransit trip is not excessive when compared to a trip by BART. This involves internal operational practices for East Bay Paratransit and LAVTA Wheels. According to ADA Program managers, there should be no difference in timely handoffs between East Bay Paratransit and LAVTA Wheels at Dublin/Pleasanton station than at present. . . .

Finding: If hand-offs between East Bay Paratransit and LAVTA Wheels at the Dublin/Pleasanton BART station are served through timed transfers between vehicles,

the Transit Network Recommendations may not have an impact on the capacity constraints criterion.

5.4. Subscription Service

Complementary Paratransit Service Criterion: Subscription service may not absorb more than 50 percent of the number of trips available at a given time of day, unless there is non-subscription capacity.

Part 37 does not prohibit the use of subscriptions service by public entities as part of a complementary paratransit system, subject to the limitation in this section.

Notwithstanding any other provision of 49 CFR Part 37, the entity may establish waiting list or other capacity constraints and trip purpose restrictions or priorities for in the subscription service only.

Analysis: Subscription service is internal to the operating policies and procedures of the ADA Paratransit program and is not affected by the Transit Network Recommendations.

Finding: The Transit Network Recommendations do not have an impact on subscription service criterion for ADA Paratransit programs in Alameda County.

6.0. Impact of Capital Improvements in the Transit Network Recommendations on ADA Paratransit

The Transit Network Recommendations include several capital improvements for fixed-route services that could impact ADA Paratransit program users. The recommended capital improvements are summarized below with regard to their potential to affect the mobility of seniors and persons with disabilities, especially those individuals eligible for ADA Paratransit. It should be noted the specific improvements vary by Recommendation. A rendering of a future East Bay BRT station is provided to illustrate examples of different improvements.⁸ The rendering is annotated with numbers that correspond to the proposed improvements.

Enhanced stations (1) are an integral part of most of the recommendations. They can include different combinations of amenities. Additional station amenities that are generally associated with services recommended in the Urban Rapid tier include

⁸ Source: Rama Pochiraju, PE, Senior Project Manager, East Bay Bus Rapid Transit Program, AC Transit

improved pedestrian access, larger boarding areas and shelters, seating, lighting, and trash receptacles. Some stations planned for proposed Bus Rapid Transit lines are positioned in the median while others will be on the curb. A comment was received from a ParaTAC member that enhanced stations need to be implemented with an ADA compliant path of access improvements to the stations and along the corridors.

Figure 4: Enhanced Stations



Raised platforms (2) at transit stops enable riders to board transit vehicles at the same level without having to ascend or descend steps or use a lift. The raised platforms proposed in the Transit Network Recommendations are ADA compliant.

Real-time information (3) displays at transit stops provide riders with information about when the next vehicles are estimated to arrive. Real-time information has been shown to reduce passengers' anxiety about when the next transit vehicle will arrive.⁹

New buses (4) proposed in the Recommendations are zero emission with special styling and doors on both sides.

⁹ National Center for Transit Research at the Center for Urban Transportation Research, University of South Florida. "Enhancing the Rider Experience: The Impact of Real-Time Information On Transit Ridership." 2004.

Dedicated transit lanes (5) allow transit vehicles to operate in lanes segregated from regular traffic flow which results in faster travel times. Fully dedicated transit lanes are generally situated in the middle of a roadway. **Semi-exclusive transit lanes** give priority to buses in specific areas to help passengers bypass traffic. They are generally constructed next to the curb or parking lane.

Other features include:

Off-vehicle fare payment allows the rider to pay their fare using a prepaid smart card (e.g., Clipper) or at a ticket vending machine at the transit stop prior to entering the vehicle. This speeds up the loading time and allows for boarding through all doors. Off-board payment coupled with raised platforms can significantly ease the boarding process for passengers with limited ability to ascend steps and those using mobility devices.

Bus bulbs are an area of the sidewalk that extends or “bulbs” into the roadway to accommodate a bus boarding area. This allows buses to stop in the travel lane, therefore reducing delay cause by having to re-enter the flow of traffic. Bus bulbs can benefit pedestrians by reducing crosswalk distance and sidewalk congestion. Additionally, bus bulbs may provide ADA Paratransit vehicles with the necessary sidewalk space to deploy a ramp or lift.

ADA Paratransit individuals who are able to utilize fixed-route transit should find that the level boarding platforms and bus bulbs would improve accessibility at the bus stop.

Transit signal priority systems enable buses to move through intersections faster by prioritizing traffic signals for transit vehicles.

Figure 5: Semi-exclusive and Queue Jumps Lanes

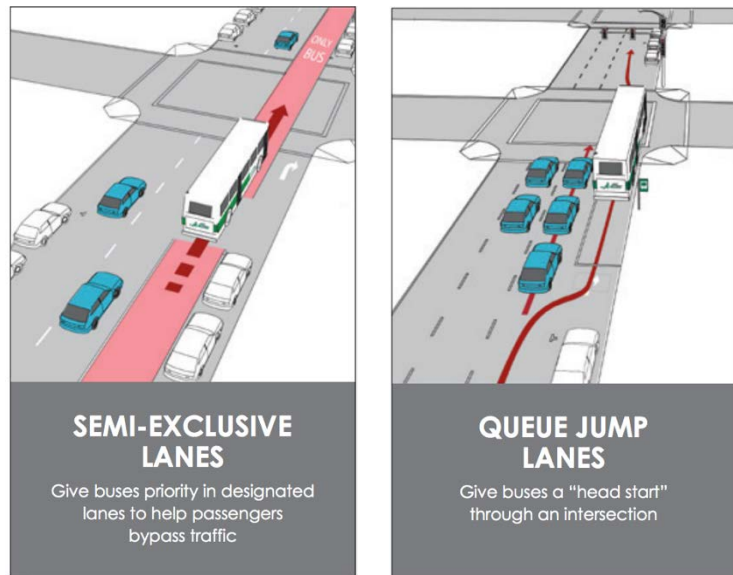
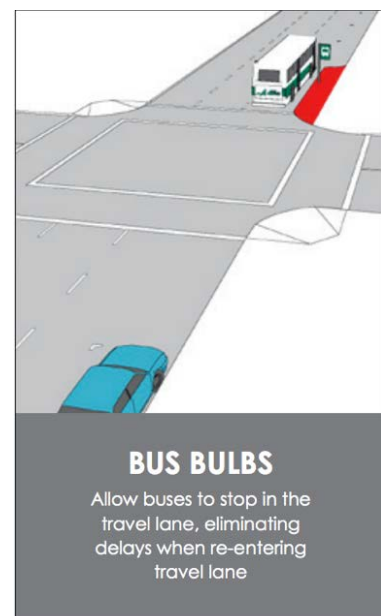


Figure 6: Bus Bulbs



Last, **queue jump lanes** allow transit vehicles to move ahead of vehicles stopped at an intersection.

An ADA Paratransit provider noted that many of the capital improvements could potentially result in reduced travel time for ADA Paratransit riders and better on-time performance if paratransit vehicles are allowed to use the exclusive and semi-exclusive lanes.

7.0. Measure B and BB Program Impacts

Ten cities in Alameda County have city-based paratransit programs funded by Measure B and Measure BB. As described earlier in the overview of paratransit programs in Alameda County, each program is successful in meeting the unique needs of seniors and people with disabilities in their respective communities. The Measure B and BB local funding sources enable the city-based programs to provide a variety of services to seniors and people with disabilities, whether or not they are ADA eligible. Furthermore, the city-based programs are able to offer a range of different types of services, including accessible door-to-door, flex shuttles, group trips, taxi, and volunteer driver. They have expanded the mobility options available to individuals with disabilities, including those individuals eligible for ADA Paratransit services.

Based on interviews with representatives of five of the city-based programs, this section considers opportunities and strategies to more effectively meet ADA Paratransit and other accessibility needs in conjunction with the implementation of the proposed Transit Network Recommendations. In addition, the potential for the programs to reduce demand for ADA Paratransit trips is explored. The five city-based paratransit programs that informed this discussion are:

- City of Fremont
- City of Oakland
- City of Pleasanton
- City of San Leandro
- City of Union City

Each of the programs above offer multiple services and, in some cases, program participants are eligible to utilize programs in neighboring cities.

7.1. Opportunities and Strategies Related to Transit Network Recommendations

Potential opportunities and strategies to more effectively meet ADA Paratransit and other accessibility needs in conjunction with the implementation of the proposed Transit Network Recommendations include:

Taxi voucher programs and TNCs could potentially connect riders with regional and urban rapid fixed-route services for longer trips, but are currently mostly utilized for local trips within the community. Taxi voucher programs and services like Lyft and Uber could potentially provide first- and last-mile connections with the Regional Express and Urban Rapid fixed-route services in the Transit Network Recommendations.

Fremont and Oakland operate robust and well-utilized taxi voucher programs. The Fremont program, which also serves clients in Union City and Newark, provided 2,800 trips in the 6-month period between July and December 2015. It offered vouchers worth \$16 for a cost to the customer of \$4. The Oakland program provided 29,080 trips in the 24-month 2013-2014 period. It supplied vouchers worth \$28 for a cost to the customer of \$3. San Leandro Flex Shuttle participants are eligible to use the Hayward taxi voucher program. According to the interviewees, San Leandro riders like the door-to-door aspect of the Hayward taxi voucher program but sometimes complain that the taxi company does not prioritize their pickups.

Interviews with representatives of a sample of city-based taxi voucher programs revealed that participants primarily take trips within their local community. Fremont, Oakland and San Leandro indicated that their participants tend to stay within the local community. In Pleasanton, most participants are over 80 years of age and only make local trips within the community. According to city-based paratransit program managers, the exception to the use of city-based paratransit for local community trips is the program participants' use of taxi voucher programs for return medical trips. Fremont and Oakland indicated that their clients regularly use taxi vouchers to return home from medical appointments.

Although currently available information from the five city-based program managers is largely anecdotal, TNCs such as Uber and Lyft are not currently used by most city-based program participants, because few of them use smart phones, which are necessary to access service. In Fremont, a few program participants with disabilities have mentioned that they use and appreciate TNC services. In San Leandro, TNCs do not impact Flex Shuttle participants. It was indicated that if they want same day service they would get a taxi voucher.

Use of the internet is increasing among elderly populations and younger persons with disabilities tend to use technology at a higher rate than seniors. There is anecdotal evidence that persons with visual disabilities are using TNCs for some of their mobility needs. Overall, more definitive research is needed to fully assess the potential for TNCs in expanding mobility options for individuals who are eligible for ADA Paratransit services.

A common theme from the interviews with city-based program managers is the need for taxis and TNC vehicles to be accessible for ADA Paratransit individuals. Trips made on ADA Paratransit and city-based paratransit programs could be shifted to less expensive taxi voucher programs if accessible taxi vehicles were available, but taxi companies that serve Oakland and Fremont are thus far unwilling or unable to operate accessible vehicles. An ADA Paratransit Program Manager pointed out that simply having accessible vehicles is not enough on its own. There is also a need to incentivize taxi companies and TNCs to operate them so the accessible vehicle is available for use by ADA Paratransit individuals. Increased availability of accessible vehicles could overcome a barrier for individuals with a need for accessible vehicles to have better first- and last-mile access to improve fixed-route services contained in the Transit Network Recommendations.

Overall, there is no quantitative data available from the city-based programs as to what extent the taxi voucher programs are used as a feeder to service for longer trips on BART, for example. However, both the taxi voucher programs and TNCs could potentially provide cost-effective and first- and last-mile feeder services to many of the services included in the Transit Network Recommendations. The future utilization of these programs would be at the discretion of individuals who are eligible for the taxi voucher programs and can decide what trip to take with the available taxi voucher subsidy.

City-based mobility management and travel training programs could encourage riders to use new services proposed in the Transit Network Recommendations. Fremont's successful mobility management approach and travel training program could help familiarize seniors and people with disabilities with recommended new programs, such as BRT. Fremont's travel training program is offered "a-la-carte" style to enable participants to pick and choose the trainings relevant to their needs.

Additionally, Fremont currently partners with BART to distribute senior Clipper cards and also provides education for their use. In the first year 4,090 senior Clipper cards were distributed.

Some fixed-route services in the Transit Network Recommendations will increase mobility for city-based program participants. The recommendation to expand service hours on the Dumbarton Express routes from Tri-City to Palo Alto would be helpful for Fremont residents if the route continues to serve Stanford Medical Center and the Veteran Affairs (VA) facility in Palo Alto.

7.2. Effects on ADA Paratransit Demand

It is unclear whether the implementation of the Transit Network Recommendations would have an impact on ADA Paratransit demand. As summarized in the last section of this Memorandum, national research described in TCRP Report 163 found that 31percent of on-line survey respondents indicated they use both fixed-route transit and ADA Paratransit services. There is no known quantitative data available in Alameda County to determine the potential for increased use of fixed-route transit, especially when the Transit Network Recommendation are implemented. However, for the city-based and gap paratransit programs, there are perceptions that some of city-based paratransit programs are having some impact on reducing the demand for ADA Paratransit service based on discussions with five paratransit program managers.

The city-based programs, and taxi voucher programs in particular, likely dampen demand for ADA Paratransit services, although there is no available data to estimate the number of trips diverted. Fremont estimates that approximately 80percent of their program participants would be ADA eligible while Oakland estimates that approximately 90percent of their 1,211 participants would be ADA eligible. Oakland indicated that participants use the taxi voucher program for dialysis, which helps to dampen demand for East Bay Paratransit. Pleasanton estimates that most of their riders would be ADA eligible, but riders under the age of 70 who are ADA eligible comprise a small percentage of total riders. Their participants occasionally inquire about ADA Paratransit when they need to make medical trips outside of the county. The San Leandro program manager indicated that the Flex Shuttle definitely dampens demand for ADA Paratransit, although no more than 40 of their 293 participants would likely be ADA eligible. Clients prefer the Flex Shuttle because it affords them more independence and less of a wait time than ADA Paratransit.

In several cases among the five city-based programs interviewed, demand for services has been increasing. Demand in Fremont/Newark for the Fremont paratransit program is increasing rapidly. From July 2015 to January 2016, 9,341 trips were provided compared with 7,237 between July 2013 and January 2014. The substantial increase in paratransit ridership was due in part to an expansion of service in anticipation of

approval of Measure BB. San Leandro has 293 people registered for their fixed-route shuttle and ridership is increasing. Demand for Oakland's group trips program is increasing. Oakland provides trips for groups at a flat rate of \$35, which allows senior centers and other organizations to provide more outings for their clients. This program is very appreciated by the organizations that utilize the service, since accessible chartered services can be difficult to procure and expensive. While it is not known if this increasing demand is taking pressure off of East Bay Paratransit, it does provide a mobility option for individuals who are commonly eligible for ADA Paratransit services.

Volunteer driver programs could be utilized to escort clients onboard regional fixed-route transit to medical destinations in other counties. The VIP Rides volunteer driver program serves Fremont, Newark, Union City, Hayward, and the greater Hayward area. From July 2015 to January 2016, it provided 2,652 one-way door-through-door trips for ambulatory riders. A volunteer driver program for cancer patients, Drivers for Survivors, provided 1,518 trips during the same time period for Union City residents.

In some cases, it may not be feasible or affordable to transport clients into other counties in a volunteer driver's vehicle. However, volunteer drivers could transport clients to a transit stop or park and ride and then travel with the client on fixed-route transit to their destination in order to provide assistance. For example, the Transit Network Recommendations include an expanded park and ride and increased service hours and frequencies as part of the Dumbarton Express improvements. Volunteer driver programs could potentially take advantage of these improvements to transport clients to medical destinations in Palo Alto.

8.0. Progress on Implementation of Paratransit Strategies Recommended in the MTC Transit Sustainability Project Paratransit Report

The MTC's Transit Sustainability Project (2012) established a "framework and implementation plan for a more robust, financially viable transit system that is both cost-effective and customer-focused."¹⁰ The ADA Paratransit component of this project (the Paratransit Report) identified six regional priority strategies "based on their potential to manage costs, impacts on riders' mobility, the number of operators that could apply them, and ease of implementation,"¹¹ five of which are implementable by

¹⁰ MTC. Transit Sustainability Project - Draft Paratransit Final Report. 2012.

¹¹ Ibid.

ADA Paratransit operators. This section discusses progress made by Alameda County ADA Paratransit providers on implementation of these five priority strategies from MTC's Transit Sustainability Project Paratransit Report, which include:

Travel Training and Promotion to Seniors: Expanding travel training would increase mobility and help reduce growth of ADA Paratransit demand, especially working with the schools and Regional Centers. Ideally, training and outreach can be conducted before individuals apply for paratransit, such as with school children and seniors who may need to curtail driving in the near future.

Enhanced ADA Paratransit Certification Process: Depending on the transit agency, available cost savings range from none to substantial. While a centralized regional process is not necessary, many transit agencies can enhance their processes. Some smaller agencies could combine this function for efficiency and to support staff with specialized skills.

Implementing Conditional Eligibility: Opportunities exist at several transit operators in combination with an enhanced eligibility process. Some operators already have an eligibility process that can support enforcement of conditional eligibility.

Premium Charges for Service beyond ADA Requirements: The main opportunity is establishment of fares for special service to human service agencies that exceeds ADA requirements.

Human Service Transportation Coordination and Vehicle Sharing: A cooperative effort, based on mutual mandates applying to human service agencies and transportation agencies could achieve cost savings for all parties. A regional effort to change state policy would be needed. In the short term, local agencies can make arrangements to share vehicle capacity, but this has only been demonstrated with a non-profit operator or broker.

Table 4 provides a summary of the progress made by East Bay Paratransit and Union City Paratransit on the five relevant regional priority strategies, based on interviews with ADA Paratransit program managers.

Of particular relevance to the Transit Network Recommendations is the continued success of travel training in Alameda County. Continued efforts when implementation of the Transit Network improvements occur should enable more individuals to utilize fixed-route transit when they are able. . . .

Further implementation on the enforcement of conditional eligibility by ADA Paratransit Programs in Alameda County could facilitate more feeder trips from ADA Paratransit services to fixed-route transit. ADA Paratransit regulations permit transit agencies to use “feeder service” to transport certain complementary paratransit riders to and from fixed-route service. This includes using ADA Paratransit to take individuals to bus stops if there are barriers to the pedestrian environment for access to the bus stop or station. The enhanced stations associated with the Transit Network Recommendations should enable more individuals eligible for ADA Paratransit to utilize a feeder service to one of new fixed-route enhancements for at least some of their trips.

Table 4: MTC Transit Sustainability Project Implementation Progress

Priority Strategy	East Bay Paratransit	Union City Paratransit	Wheels Dial-A-Ride
Travel Training and Promotion to Seniors	Refer clients to other travel training programs, such as the Center for Independent Living and Fremont programs.	Partner with the Fremont and Newark program to provide travel training.	Part-time staff member provides individual and group travel training.
Enhanced ADA Paratransit Certification Process	Yes: In person assessments No: Functional assessments are not practiced because of the cost to benefit ratio.	None	In process of releasing RFP for in-person assessments for ADA Paratransit certification.
Implementing Conditional Eligibility	Conditional eligibility criteria have been established, but are not currently utilized.	None	Not now, may start conditional eligibility with new certification process.
Premium Charges for Service Beyond ADA Requirements	Not applicable	None	Not now, but considering for the future for agency trips.
Human Service Transportation Coordination and Vehicle Sharing	Coordination with the 211 information and referral service and currently evaluating the feasibility of becoming a one-call one-click center. Primarily coordinate with Regional Centers.	Union City stores vehicles for Fremont Paratransit.	Coordinate closely with Pleasanton Paratransit service and Tri-Valley Senior Support Service for volunteer driver program.

9.0. National Research on Strategies to Enable Increased Utilization of Fixed-Route Transit by Persons with Disabilities

This final section provides insights from national research on strategies that enable greater fixed-route utilization by people with disabilities, including those who are certified as being eligible for ADA Paratransit. Most of the findings and insights are derived from TCRP Report 163 *Strategy Guide to Enable and Promote the Use of Fixed-Route By People With Disabilities*. The goals of this research were to:

1. Develop a better understanding of the current use of fixed-route transit by persons with disabilities.
2. Develop a better understanding of the factors considered by persons with disabilities when use fixed-route transit versus ADA Paratransit services.
3. Identify efforts currently being made by transit agencies to enable and promote increased use of fixed-route transit by persons with disabilities.
4. Develop a practitioner's strategy guide to enable and promote the use of fixed-route transit service by people with disabilities.

In many cases, the findings of TCRP Report 163 are cited directly or paraphrased as appropriate to provide the reader a quick synopsis of this research.

As the Transit Network Recommendations will improve fixed-route transit service in Alameda County, national research provides insights into the potential opportunities for increased utilization of fixed-route transit by ADA Paratransit individuals.

9.1. Current Use of Paratransit by People with Disabilities

In general, people with disabilities are only eligible to use ADA Paratransit if a disability prevents them from using fixed-route transit services. However, many people with disabilities, who have been determined eligible for ADA Paratransit services, can use fixed-route transit for some trips. As a result, there are many factors that determine when individuals are functionally able to use fixed-route transit and when they are eligible for ADA paratransit service. For example, long distances to or from bus stops and transit stations, or inaccessible paths of travel to and from bus stops and transit stations may be factors that result in use of ADA paratransit.

In many instances, transit agencies do not track ridership by disabilities. The National Transit Database (NTD) does not request or contain data about the use of fixed transit services by riders with disabilities. Some transit agencies do, however, track ridership by fare type and have specific fare categories related to disability. This includes reduced fares, and in some cases, free fares, made available to riders with disabilities. This information can be used to get a sense of current use of fixed-route transit by people with disabilities. It is important to note, though, that actual reduced fare data are undercounted since some people with disabilities may not be aware of the reduced fares, may not have bothered to apply for reduced fares, or may choose to ride fixed-route transit services at the full fare. To develop an understanding of the current use of transit services by people with disabilities, information on ADA paratransit ridership and fixed-route reduced fare ridership was collected from seven selected transit agencies. Data utilized was from 2009- 2011.

To determine the relative use of fixed-route transit and ADA paratransit by persons with disabilities at each of the seven selected agencies, the ratio of trips made on each mode was calculated. A value of 1.00 means that for a specified year and a specified transit agency, the fixed-route transit ridership by persons with disabilities and the ADA Paratransit ridership was equal. A value greater than 1.00 means that the fixed-route transit ridership by persons with disabilities was greater than the ADA Paratransit ridership. For six of the seven transit agencies, the fixed-route transit ridership for persons with disabilities was greater than the ADA Paratransit ridership. For the Massachusetts Bay Transportation Authority (MBTA) in the Boston Area, for example, the ratio was 4.84 to 1 for use of fixed-route versus ADA Paratransit. In Portland in 2011, the ratio was even higher at 6.23 to one.

It is not known what the ratio is between fixed-route utilization and ADA Paratransit utilization for AC Transit. However, for BART use in Alameda County, Union City Transit, and LAVTA, there are significant fare discounts in Alameda County that make a fixed-route trip more affordable for the eligible ADA Paratransit individual for at least some of the trips they make. An example is the BART red ticket that provides a 62.5percent discount for persons with disabilities, Medicare card holders and children 5-12. A \$24 ticket is sold for \$9.00. With AC Transit, the cash fare seniors and disabled is the federally required 50percent of general adult fare. However, a monthly pass is sold for \$20 per month for seniors and disabled individuals sold on the Senior Clipper card, which represents a deep discount compared to the \$75 local monthly adult pass. Disabled individuals, including those who are eligible for ADA Paratransit have the financial incentive to utilize fixed-route transit for at least some of their trips.

As indicated earlier, TCRP Report 163 researchers also conducted a nationwide online survey of 1,927 disabled individuals. The responses included individuals from every U.S. state and territory. 31percent of respondents (499) indicated that they use both the fixed-route transit service and ADA Paratransit service. 24percent indicated they use ADA Paratransit service but don't use the fixed-route transit service (382). 26percent indicated they use the fixed-route transit service but not ADA Paratransit service (426), and 19percent indicated that they don't use either service.

9.2. Overcoming Barriers to the Utilization of Fixed-route Transit

Barriers in the pedestrian environment in getting to and from bus stops was the highest ranked factor in being able to utilize fixed-route transit, with 48percent of respondents saying this was very important. To the degree that the implementation of the enhanced stations proposed for the Transit Network Recommendations address path of access to the enhanced bus stop, it will improve the ability of some individuals eligible for ADA Paratransit to utilize fixed-route transit for some of their trips. . . .

Continued use of travel training can also be utilized to continue to overcome barriers to utilization for fixed-route transit service. The national research also emphasized that well-designed and well-implemented travel training programs are almost always the most cost-effective means to facilitate increased use of fixed-route services by persons with disabilities. Alameda County already has a good example of travel training that should be utilized to promote fixed-route use when the Transit Network recommendations are implemented.