



City of Alameda

# TRANSPORTATION CHOICES PLAN:

*Transit and Transportation Demand Management*

PUBLIC REVIEW DRAFT

August 2017

**City of Alameda**  
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Alameda, CA 94501  
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**Transit and Transportation Demand Management**

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**AUGUST 2017**

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*Photo source: CDM Smith*

# EXECUTIVE SUMMARY



# EXECUTIVE SUMMARY

## BACKGROUND AND PURPOSE

Transportation is fundamental to every aspect of Alameda's future: economic development, housing-jobs balance, quality of life, and its environmental footprint. As an island, its connections to adjacent communities are uniquely limited and therefore, particularly sensitive. As an island, access to Alameda is not just constrained by its existing bridges, tubes, and waterways, but by the challenges associated with expansion of current capacities or creation of new facilities. Access points to and from the island are located only on the northern and eastern edges of the city, so many trips to and from Alameda require travel through the city, which also contributes to congestion. Alameda's unique geography immediately adjacent to Interstate-880, a major regional highway operating at or above capacity, further complicates vehicle access. Access to BART stations in Oakland, which provide access to jobs and amenities across the region, are relatively close, but require using the already congested crossings. Furthermore, ferry parking facilities are at capacity, and the ferry terminals also are located in the far extremes of Alameda.

Implementation of this plan will help reduce drive alone trips to and from Alameda, and within the city which, in turn will:

- Increase the number of people who bicycle, walk, carpool, and take the bus or ferry
- Reduce the total number of vehicles on roadways
- Reduce congestion and travel time
- Reduce parking demand
- Reduce environmental impacts from transportation
- Mitigate impacts of new growth
- Improve safety and accessibility

This plan will also help maintain and improve community-wide access for residents, employees and visitors in the following ways:

- Residents - commute trips, local trips, school trips
- Employees - commute trips into Alameda

- Visitors - primarily coming from outside the city for shopping, school or entertainment

## Planning Process

The City of Alameda has taken a comprehensive approach to this planning effort that has involved community stakeholders, including the business community and transportation agencies. The planning process (see Figure 1) began in January 2016 and will continue through completion of the Transportation Choices Final Plan, when it is reviewed by the Transportation Commission and Planning Board, and approved by the City Council.

## Community Engagement

The coordinated planning effort behind the City of Alameda Transportation Choices Plan includes a comprehensive community engagement process consisting of community workshops, organizational advisory group meetings, a public opinion survey, a webpage (<http://alamedaca.gov/citywide-transit-tdm-plans>), two web-based surveys, and Transportation Commission, Commission on Disability Issues, Planning Board, Mayor's Economic Development Advisory Panel and City Council meetings.

## Vision and Goals

The purpose of the City of Alameda Transportation Choices Plan is to help ensure that the city sustains its high quality of life during a time of anticipated population and employment growth. The City has identified goals and objectives that will help it achieve that outcome. The goals and objectives are derived from outreach efforts and conversations with City staff, commissions/boards, and the City Council.

## Vision

Sustain a high quality of life in Alameda by improving mobility for all over the next 15 years and beyond.

## Goals

The goals of this plan are devised to provide two overarching measures for decreasing drive alone trips and increasing walking, bicycling, transit, carpooling and other non-drive alone trips in the city of Alameda. One goal relates to estuary crossings to/from Alameda and the other relates to trips within the city.

- Goal 1 Estuary Crossings: Decrease drive alone trips at estuary crossings, especially in the peak period (Figure 1).
- Goal 2 Alameda Trips: Increase the share of walking, bicycling, bus, and carpooling trips within Alameda (Figure 2).

Baseline and future conditions were assessed to determine the percent increase in walking, bicycling, transit, and carpooling trips to meet the two goals.

Goal 1 is to decrease drive-alone trips across the estuary in the morning peak by increasing non-drive alone trips by eight percentage points from 27 percent to 35 percent. This relates to an increase of 1,700 additional walking, bicycling, transit, and carpool morning peak-hour person trips at estuary crossings (in 2030) (see Figure 1).

Goal 2 is to increase the share of walking, bicycling, transit, and carpooling trips in Alameda by increasing non-drive alone trips by five percentage points from 37 percent to 42 percent. This relates to an increase of 3,300 walking, bicycling, transit, and carpool person trips in Alameda throughout the day (in 2030) (see Figure 2).

The priority strategies and list of projects and programs referred to in Chapters 3 and 4 are designed to meet the quantified goals.

Figure 1: AM Peak Hour Estuary Crossings Goal for Non-Drive Alone Trips

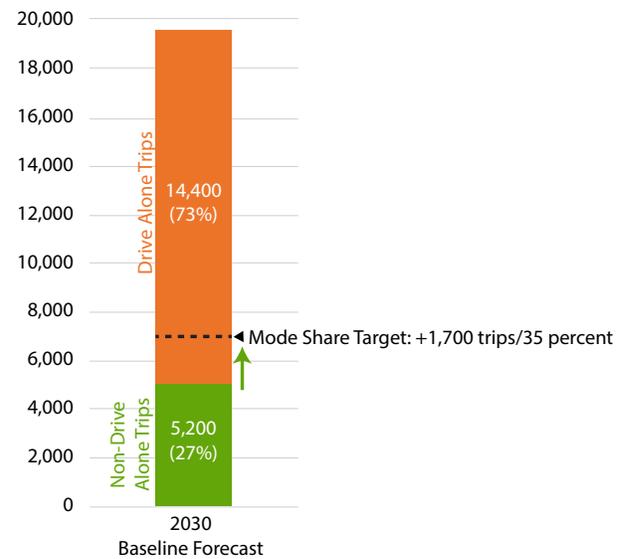


Figure 2: Weekday Daily Person Trips within Alameda Goal for Non-Drive Alone Trips





## EXISTING CONDITIONS

In terms of transportation, much has changed in Alameda over the past few years. Economic recovery has resulted in record traffic on Interstate-880. Job growth in the South Bay has resulted in increasing numbers of Alameda residents traveling south on Interstate-880. Younger commuters are opting for transportation options beyond traditional automobile purchases and recent changes in technology have made on-demand rideshare and carshare a popular option. This chapter describes existing transportation conditions as well as provides an overview of important factors that impact transportation conditions, such as housing, jobs, and travel behaviors.

The findings presented in this chapter describe the current conditions, and identify specific problems facing Alameda. In the following chapter, priority strategies are presented that describe solutions to these problems and will help the City achieve its goals.

### Congestion Is Increasing

Delay from region wide congestion has increased 70 percent since 2010. This congestion has impacts on island crossings in Alameda with congestion on Park Street, the Webster/Posey Tubes, as well as ridership increases on the ferries and transbay buses. Significant bottlenecks also form during morning and afternoon school drop-off and pick-up times, especially at local magnet and charter schools. While fluctuations in delay have occurred, the overall trajectory displays a steady increase in Bay Area delay over time (see Figure 2). In 1998, the congested delay per worker was 1.7 minutes. In 2015, that number increased to 3.2 minutes.

### Housing and Jobs Are Growing

Alameda is experiencing moderate growth in housing and jobs, and is now back to pre-base closure housing levels. According to the 2015 Census, there are 76,733 residents living in 30,708 households. And as of 2014 there are 24,655 jobs in Alameda (LEHD, 2014). Over the next 10 years, approved and entitled developments in Alameda Point and the Northern Waterfront will account for 2,260 units (a 7 percent increase over 2015) and 7,909 jobs (a 30 percent increase over 2014).

### Commute Patterns Are Changing

Since 2010, there have been two notable trends in commute patterns in the Bay Area: One is that the percentage of auto commuters is declining and the other is that the percentage of transit commuters is increasing. This pattern reflects trends in Alameda with a drop in drive alone commuting between 2010 and 2015 from 64 percent to 60 percent and a related increase in transit use.

Another trend for Alameda is that there are more commuters leaving the island for work, nearly 5,000 more compared to 2005 (see Figure 5). An increasing number of commuters head to San Francisco, South Bay and Peninsula each day. Figure 6 shows changes in commute totals over a nine year period to nearby counties. Alameda residents commuting to Santa Mateo County increased from 1,613 in 2005 to 2,172 in 2014, to San Francisco the number increased from 4,667 to 7,189, and to Santa Clara County the number increased from 1,682 to 2,096.

San Francisco and Oakland are the two highest destinations for Alameda residents commuting to work, but commute mode choice to these cities are very different. Only one out of every five Alamedans commuting to San Francisco drives alone. Nevertheless, for those commuting to Oakland, nearly four out of every five residents drive alone.

### Alameda is a Multimodal City

Alameda has many characteristics, existing policies and infrastructure that supports multimodal mobility.

As of 2015, 40.1 percent of commuters travel by modes other than driving alone. These alternative modes to driving alone are described below.

**Transit:** The City of Alameda is served by multiple transit agencies and services, including five local bus routes, three transbay bus routes, three school routes, two ferry terminals providing service to Oakland and San Francisco, five nearby BART stations (within two miles of island crossings), a door-to-door paratransit service, a senior/paratransit fixed route shuttle, and three private shuttles connecting to BART. In the public opinion survey, web surveys and community workshops, suggested improvements to transit focused on three primary areas:

- Improving bus access to regional transit hubs, including ferry terminals and BART stations;
- Improving the frequency, speed and reliability of buses; and
- Providing more direct bus access to destinations within Alameda.

**Carpooling:** There are limited carpool programs in Alameda and residents looking to carpool are left on their own to find rides. Nevertheless, the city has recognized casual carpool pick up locations used by residents to share rides into San Francisco. Carpool parking is not currently given preference at ferry terminals or other locations with limited parking.

**Walking:** Walking is healthy and environmentally friendly means of getting to nearby destinations within Alameda and nearly all streets have sidewalks and most are separated from the street with a landscape strip with street trees, bike racks and other amenities. Issues related to walking are related to safe crossings, improving visibility, and calming traffic and speeding motorists. At estuary crossings into Oakland where pedestrian facilities are limited and intimidating to use, improvements are needed. This plan identifies streets where traffic calming and improvements to pedestrian amenities at sidewalks are needed.

**Bicycling:** Bicycling is a convenient option for people traveling within Alameda. A network of bikeways is provided throughout the City. Nevertheless, several gaps exist for bicycles. Also, speeding traffic can make bicycling feel unsafe on some streets. At estuary crossings into Oakland, where bicycle facilities are limited and intimidating to use, improvements are needed. This plan identifies the gaps in the network and makes suggestions on where to focus resources to better connect residents with key destinations, including shopping, jobs, and transit hubs.

### **TDM and Private Sector Participation**

The City requires new development to mitigate their transportation impacts and increase transportation choices, which is referred to as transportation demand management (TDM). TDM strategies improve transportation efficiency by shifting drive alone trips to carpooling, walking, bicycling, and taking transit, among others. TDM requirements for new developments in Alameda have resulted in additional transit service, transit pass programs, a shuttle that connects

to BART, and bicycle and pedestrian facilities at new developments.

The City has adopted several plans and policies governing transportation impacts over the past few years. The Transportation Element of the General Plan focused on policies for new residential and commercial development. The Transportation Element of the General Plan requires all new developments establish trip reduction goals as follows: 10 percent peak hour trip reduction for new residential developments and 30 percent peak hour trip reduction for new commercial development.

## PRIORITY STRATEGIES

Based on the findings in the Existing Conditions chapter, Alameda is expected to see more solo driving trips unless community members are provided with better transportation options and change their travel behavior. The Priority Strategies chapter focuses on what could be done to reduce the amount of expected drive alone trips on/off the island and to increase the share of walking, bicycling and transit trips within Alameda in order to meet the City's goals. While long-term projects are discussed and explored, the plan focuses primarily on projects that can be implemented over the next 15 years, many of which are already underway. The priority strategies (see figure 3) include groups of

Figure 3: Priority Strategies Overview



projects focused on addressing specific issues impacting transportation, and are grouped by the goals of the plan.

## EVALUATION

Projects and programs were evaluated based on their relative effectiveness related to mode shift, climate change, equity, safety, and cost. Each set of improvements is evaluated using the evaluation criteria to gauge if proposed improvements and strategies meet the goals and objectives.

- Mode Shift: Measure shift from drive alone to other modes
- Climate Change: Assess the impact on greenhouse gas emissions
- Equity: Assess the impact on ADA compliance, low-income and minority populations
- Safety: Assess the impact on safety for all street users
- Cost: Assess planning-level operating and capital costs

The evaluation shows that targets to meet the goals can be met with implementation of the recommended strategies, including numerous projects and programs. Additionally, the projects and programs contribute to greenhouse gas reductions, provide an equitable distribution of improvements, and improve safety. Costs were also considered in the evaluation.

## Summary of Findings

Implementation of the strategies, including numerous projects and programs, would meet or exceed targets for the goals:

- Goal 1 At Estuary Crossings: An increase in non-drive alone person trips from 5,200 to 6,900 during the weekday AM peak hour, increasing non-drive alone mode share from 27 to 35 percent can be met by implementing the proposed strategy.
- Goal 2 Within Alameda: An increase in non-drive alone person trips from 24,200 to 27,500 during typical weekdays, increasing non-drive alone mode share to 37 to 42 percent can be met by implementing the proposed strategy.

The recommended improvements will also contribute to reductions in CO2 emissions based on fewer drive alone trips

and vehicle miles traveled (VMT) of those choosing to bicycle, walk, take transit, or carpool instead of driving alone.

- Annual reduction of between 5,900 and 14,000 metric tons of carbon dioxide, which represents 2.7 to 6.6 percent reduction from 2010 levels of carbon dioxide produced by transportation activities.

As part of the evaluation process, proposed projects were analyzed for their potential impact on minority and low-income Alameda residents.

- 14 of 27 projects (52 percent) improve access for areas with higher concentrations of minority populations and/or concentrations of low-income populations.

Projects and programs were assessed to determine if they contribute to safety improvements for walking, bicycling, carpooling, or taking transit.

- 11 of 30 projects (37 percent) will include safety improvements and 100 percent of projects will adhere to best practices for safety in design standards.

## IMPLEMENTATION

With multiple lead agencies - the City, Caltrans, AC Transit, WETA, Alameda CTC and the Transportation Management Associations (TMAs) - carrying out transportation improvements and effectively managing and monitoring transportation programs is a complex task that needs ongoing resources to address transportation issues and evaluate performance. Additionally, it takes dedicated staff resources to effectively implement projects from beginning to end, including planning, outreach, environmental review, design, and construction of transportation projects.

### Funding Programs

There are a variety of funding programs for different types of projects, including operating, maintenance, or capital projects. Funding programs were sourced from Alameda CTC modal plans and MTC's Plan Bay Area, both of which provide an extensive list of programs.

### Projects and Programs

Projects and programs were identified to support the priority strategies by increasing transportation choices and reducing drive alone trips.

Completion time frames and priority projects were identified to provide City staff with direction on which projects to focus on moving forward. Three time frames for completion are identified:

- Near-Term Completion: 1 to 3 Years
- Mid-Term Completion: 3 to 8 Years
- Long-Term Completion: 8 + Years

Each near-term and mid-term project was identified as either High Priority or Medium Priority (long-term projects will need further analysis for an assessment of priority). Projects with higher than average scores were considered High Priority and projects with lower than average scores were identified as Medium Priority.

A summary of projects and programs is presented in Table 1, and includes a description of the time frame for completion and priority. The projects and programs are organized by completion time-frame and priority and presented in alphabetical order.



Table 1: Summary of Projects and Programs

| Projects and Programs                     |  | Priority |
|---|--|----------|
| <b>Near-Term Completion (1 - 3 years)</b> |  |          |
| 1   | Bicycle Master Plan and Design Guidelines Update and Vision Zero Safety Policy/Plan    | High     |
| 2   | Bus Stop improvements  | High     |
| 3   | Parking Management & Demand Pricing  | High     |
| 4   | Parking Policies for New Development   | High     |
| 5   | Pedestrian Master Plan and Design Guidelines Update and Vision Zero Safety Policy/Plan | High     |
| 6   | Transit Signal Priority and Adaptive Traffic Signal Control                            | High     |
| 7   | Transportation Partnerships with Existing Businesses and Residences                    | High     |
| 8   | Bike Share   | Medium   |
| 9   | Casual Carpool Additional Pickup Locations   | Medium   |
| 10  | Constitution Way Carpool Lane  | Medium   |
| 11  | Estuary Water Shuttle Crossing or WETA Ferries to Oakland                              | Medium   |
| 12  | Island Drive and Westline Drive Bus Lanes  | Medium   |
| 13  | Shared Ride Service for Seniors and People with Disabilities                           | Medium   |
| 14  | Transportation Awareness Campaign  | Medium   |
| <b>Mid-Term Completion (3 - 8 years)</b>  |  |          |
| 15  | Alameda Point Bus Rapid Transit Service  | High     |
| 16  | Bicycle and Pedestrian Corridor Improvements   | High     |
| 17  | Citywide Safe Routes to School Audits and Improvements                                 | High     |
| 18  | Crosstown Express Bus Service  | High     |
| 19  | EasyPass Expansion   | High     |

| Projects and Programs                  |  | Priority |
|--|--|----------|
| 20                                     | Increase Frequency and Span of Service for Ferry Service   | High     |
| 21                                     | Increase Frequency and Span of Service for Local Bus Routes  | High     |
| 22                                     | Increase Frequency and Span of Service for Transbay Bus Service  | High     |
| 23                                     | Miller-Sweeney Multimodal Lifeline Bridge  | High     |
| 24                                     | New Seaplane Lagoon Ferry Terminal & Service   | High     |
| 25                                     | Regional Transit Hub Connector Bus Service   | High     |
| 26                                     | TDM Ordinance Update   | High     |
| 27                                     | Vision Zero Safety Improvements and Traffic Calming  | High     |
| 28                                     | Bikes in Buses through Webster/Posey Tubes   | Medium   |
| 29                                     | Citywide Transportation Management Association   | Medium   |
| 30                                     | Faster Line 51A Bus Service  | Medium   |
| 31                                     | Harbor Bay Ferry Terminal Access and Parking Management Improvements   | Medium   |
| 32                                     | Main Street Ferry Terminal Access and Parking Management Improvements  | Medium   |
| 33                                     | New Technologies and Innovations   | Medium   |
| <b>Long-Term Completion (8+ years)</b> |  |          |
| 34                                     | BART to Alameda  | n/a      |
| 35                                     | Comprehensive Congestion Management, (Citywide EasyPass Expansion, Increase Frequency to 15-minute Maximum for Local Bus Routes, Congestion Pricing) | n/a      |
| 36                                     | New Transit/Bike/Pedestrian Lifeline Tube  | n/a      |
| 37                                     | Webster/Posey Multimodal Lifeline Tubes  | n/a      |
| 38                                     | West End Bicycle/Pedestrian Crossing   | n/a      |



Photo source: AC Transit

# INTRODUCTION AND GOALS

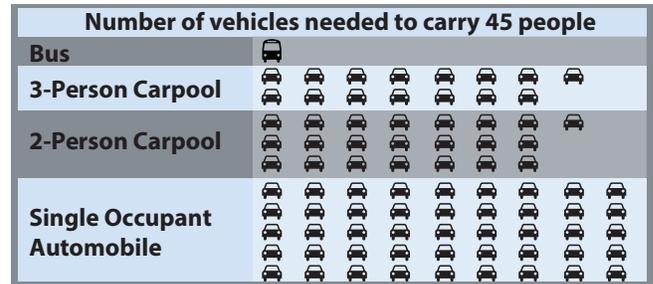
# CHAPTER 1: INTRODUCTION AND GOALS

## BACKGROUND AND PURPOSE

Transportation is fundamental to every aspect of Alameda’s future: economic development, housing-jobs balance, quality of life, and its environmental footprint. As an island, its connections to adjacent communities are uniquely limited and therefore, particularly sensitive. As an island, access to Alameda is not just constrained by its existing bridges, tubes, and waterways, but by the challenges associated with expansion of current capacities or creation of new facilities. Access points to and from the island are located only on the northern and eastern edges of the city, so many trips to and from Alameda require travel through the city, which also contributes to congestion. Alameda’s unique geography immediately adjacent to Interstate-880, a major regional highway operating at or above capacity, further complicates vehicle access. Access to BART stations in Oakland, which provide access to jobs and amenities across the region, are relatively close, but require using the already congested crossings. Furthermore, ferry parking facilities are at capacity, and the ferry terminals also are located in the far extremes of Alameda.

A central planning theme is to grow more sustainably, to keep pace with demand for housing and commercial development and with the needs of Alameda’s current community members, while reducing drive alone trips on or off the island and within the island. Drive alone trips are the least efficient way to travel causing increased congestion, greenhouse gas emissions, travel time delays and parking shortages. For example, a full bus can fit up to 45 bus passengers and takes up the same space on the road as 2 automobiles averaging 2 to 5 people (see Figure 4). Other examples of more efficient ways of traveling include people carpooling, taking ferries, walking, bicycling, or taking ride-hailing services that provide shared rides, such as Scoop or LyftLine or UberPOOL.

Figure 4: City of Alameda Transportation Choices Plan Planning Process



## WHAT WILL THIS PLAN ACCOMPLISH?

Reduce drive alone trips to and from Alameda, and within the city which, in turn will:

- Increase the number of people who bicycle, walk, carpool, and take the bus or ferry
- Reduce the total number of vehicles on roadways
- Reduce congestion and travel time
- Reduce parking demand
- Reduce environmental impacts from transportation
- Mitigate impacts of new growth
- Improve safety and accessibility

Maintain and improve community-wide access for residents, employees and visitors:

- Residents - commute trips, local trips, school trips
- Employees - commute trips into Alameda
- Visitors - primarily coming from outside the city for shopping, school or entertainment

The benefits of reducing drive alone trips to, from and within the city include:

- Increased number of community members who can travel on constrained street infrastructure
- Reduced congestion
- Reduced demand for parking
- Reduced environmental impacts such as reduced carbon footprint and improved air quality
- Improved travel times and reliability for 'internal' island trips and for trips on/off the island

City of Alameda Transportation Choices Plan focuses on creating more transportation options for Alamedans beyond solo driving. Chapter 2 of this plan describes the existing transportation options and how Alameda residents and visitors make their trips. Chapter 3 describes the priority strategies for improving transportation choices, and evaluates their ability to meet the drive alone reduction goals and the key objectives of equity, safety, and reductions of greenhouse gas emissions, among others. Chapter 4 describes implementation of the projects, programs, and actions to ensure high quality results and timely delivery.

## POLICY FRAMEWORK

The Transportation Choices Plan draws on a variety of policies that directed the plan recommendations. The City of Alameda's General Plan Transportation Element (adopted in 2009) provides targeted objectives and policies that seek to enhance the use of alternative modes of transportation, assist the development of an intermodal transportation system and reduce the overall drive alone mode share in Alameda. The four key goals are as follows:

**Circulation Goal:** Plan, develop and maintain a safe, barrier-free and efficient transportation system to provide the community with adequate present and future mobility.

**Livability Goal:** Balance the mobility needs of the community with the overall community objective of creating a livable human and natural environment. Coordinate the interaction of transportation systems development with land use planning activities.

**Transportation Choices Goal:** Encourage the use of transportation modes, especially at peak-period, other than the single-occupant automobile in such a way as to allow all modes to be mutually supportive and to function together as one transportation system.

**Implementation Goal:** Implement and maintain the planned transportation system in a coordinated and cost-effective manner.

The City of Alameda and its partner transportation agencies have prepared documents that support these General Plan goals and were used to guide the recommendations in the Transportation Choices Plan. These existing documents include:

- AC Transit Major Corridor Study (2016)
- AC Transit Service Expansion Plan (SEP) (2016)
- Alameda County Transportation Commission (Alameda CTC) Countywide Transit Plan (2016), Countywide Multimodal Arterial Plan (2016), Countywide Bicycle and Pedestrian Plan (2012)
- Alameda Landing Transportation Demand Management (TDM) Program (2007)
- Alameda Point TDM Plan (2014)
- City of Alameda Bicycle Master Plan (2010)



- City of Alameda Estuary Crossing Study (2009)
- City of Alameda Parking Study (2008)
- City of Alameda Pedestrian Plan (2009)
- City of Alameda Regional Transit Access Study (2013)
- City of Alameda Transit Plan (2001)
- City of Alameda Draft Transportation Systems Management/TDM Plan (2012)
- City of Alameda Water Shuttle Feasibility Study (2013)
- Water Emergency Transportation Authority (WETA) System Expansion Policy, Short-Range Transit Plan (2016), and Strategic Plan (2016)

The City is a key stakeholder on the following ongoing transportation projects, and works to ensure that the City's priorities are carried forward in the below partner agency efforts:

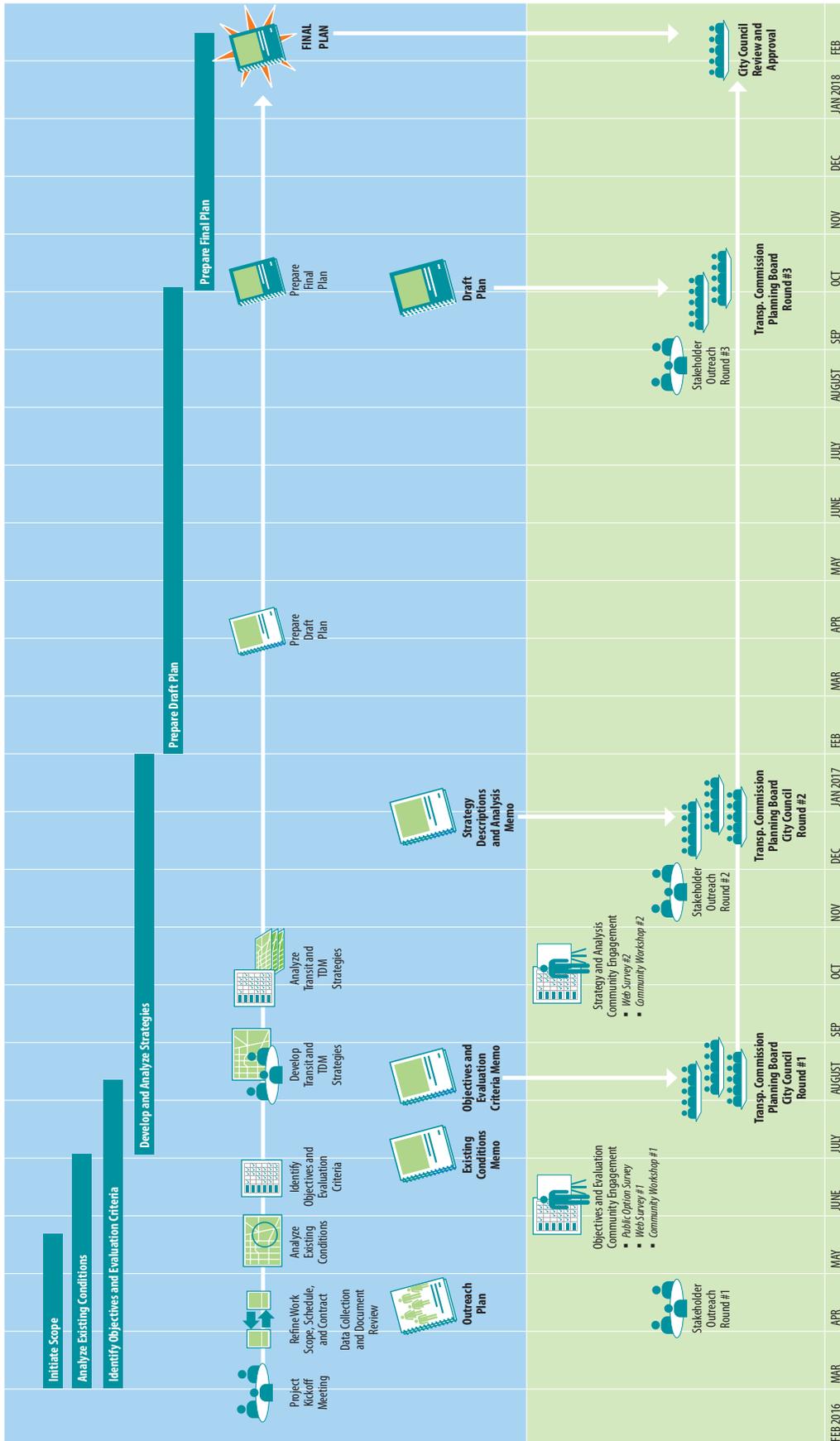
- AC Transit Multimodal Corridor Guidelines
- AC Transit Transbay Tomorrow Study
- Alameda CTC Freeway Access Study (formerly the Broadway/Jackson Study) to address improved freeway access between west Alameda and the freeways
- City of Oakland Downtown Oakland Circulation Study
- Metropolitan Transportation Commission (MTC) Core Capacity Transit Study
- WETA Ferry Access Plans

## PLANNING PROCESS

The City of Alameda has taken a comprehensive approach to this planning effort that has involved community stakeholders, including the business community and transportation agencies. The planning process (see Figure 5) began in January 2016 and will continue through completion of the Transportation Choices Final Plan, when it is reviewed by the Transportation Commission and Planning Board, and approved by the City Council. The following key City Council actions have occurred during the planning process for this effort:

- On January 21, 2015, the City Council directed staff to begin efforts to conduct a holistic approach to transportation citywide.
- On April 1, 2015 and September 15, 2015, the City Council directed staff to move forward with a refined approach and a request for proposal for the citywide transportation planning effort.
- On January 19, 2016, the City Council approved the CDM Smith consulting team, which began this planning effort with data collection/review, existing conditions, goals/objectives and the first round of outreach.
- On September 6, 2016, the City Council reviewed the existing conditions, goals and objectives, and were briefed on the initial stages of the consulting team's effort to prepare draft strategies, projects and actions and the second round of outreach.
- On January 17, 2017, the City Council reviewed the draft strategies, projects and actions.
- Fall 2017, the City Council will be asked to approve the Draft Transportation Choices Plan.

Figure 5: City of Alameda Transportation Choices Plan Planning Process





## COMMUNITY ENGAGEMENT

The coordinated planning effort behind the City of Alameda Transportation Choices Plan includes a comprehensive community engagement process consisting of community workshops, organizational advisory group meetings, a public opinion survey, a webpage (<http://alamedaca.gov/citywide-transit-tdm-plans>), two web-based surveys, and Transportation Commission, Commission on Disability Issues, Planning Board, Mayor's Economic Development Advisory Panel and City Council meetings.

The following organizations were included in the planning process:

- Transit/Transportation Agencies
  - AC Transit
  - BART
  - Caltrans
  - WETA
- Developers / Transportation Management Associations (TMA) / Major Employers
  - Alameda Hospital
  - Alameda Landing - Catellus
  - Alameda Point Partners
  - College of Alameda
  - Harbor Bay Business Park Association
  - Marina Village - Brookfield Property Partners
  - Northern Waterfront developments
  - South Shore Center
  - West Alameda TMA
  - Wind River Systems
- Community Stakeholders
  - Alameda Housing Authority
  - Alameda Point Collaborative
  - Alameda Transit Advocates
  - Alameda Unified School District
  - ACLC Charter School
  - Academy Charter School
  - Bike East Bay

- Bike Walk Alameda
- Chamber of Commerce
- Commission on Disability Issues
- Community Action for a Sustainable Alameda
- Downtown Alameda Business Association
- Greater Alameda Business Association
- Jean Sweeney Open Space Park Fund
- Mastick Senior Center
- Homeowners Associations
- SPUR
- West Alameda Business Association

## Organizational Advisory Meetings

Organizational advisory meetings were held to present preliminary findings at each stage of the planning process. The City and consultant team used the input received from key agency and community stakeholders to refine the draft materials for subsequent community workshops. Organizational advisory meetings were held on the following dates:

- Wednesday, April 20, 2016
- Thursday, October 13, 2016

## Community Workshops

Members of the consultant team presented local economic and transportation trends, key concepts and supporting data, best practices and technologies guiding the planning effort, and their recommended strategies to address the issues faced by Alameda. Following each presentation, the participants discussed the materials in small groups facilitated by City staff or consultant team members. The small groups discussed the issues, reviewed recommendations made by the consultant team, and ranked the different strategies presented.

Community workshops were held on the following dates:

- Thursday, May 5, 2016
- Wednesday, October 19, 2016

## Public Opinion and Web Surveys

An extensive outreach effort was initiated beyond the advisory meetings and community workshops. A statistically valid, public opinion survey was conducted between August

and September 2016 to gather information on Alameda residents travel behaviors, their attitudes, and to provide insight on some potential projects. Five hundred interviews were conducted over the telephone with access to both landlines and cell phone numbers in English, Spanish, and Cantonese. The margin of error for the public opinion survey is +/-4.3 percent. Two different web-surveys were administered between June 2016 and August 2016 and between September 2016 and November 2016. The first web-survey garnered 246 responses and although it was not statistically valid, it helped provide City staff and consultants with more public input on existing transportation issues and potential strategies. The second web survey with 309 responses asked many of the same questions as the public opinion survey, and ultimately helped confirm the results of the public opinion survey.

Additionally, as part of a UC Berkeley student project a survey was administered to middle and high school students about their travel behavior and preferences.

Findings from these surveys can be found in Chapter 2 and in project technical reports.

## VISION, GOALS, AND OBJECTIVES

The purpose of the City of Alameda Transportation Choices Plan is to help ensure that the city sustains its high quality of life during a time of anticipated population and employment growth. The City has identified goals and objectives that will help it achieve that outcome. The goals and objectives are derived from outreach efforts and conversations with City staff, commissions/boards, and the City Council.

### Vision

Sustain a high quality of life in Alameda by improving mobility for all over the next 15 years and beyond.

### Goals

The goals of this plan are devised to provide two overarching measures for decreasing drive alone trips and increasing walking, bicycling, transit, carpooling and other non-drive alone trips in the city of Alameda. One goal relates to estuary crossings to/from Alameda and the other relates to trips within the city.

- Goal 1 Estuary Crossings: Decrease drive alone trips at estuary crossings, especially in the peak period. Increase non-drive alone person trips across the estuary in the morning peak by eight percentage points from 27 percent to 35 percent.
- Goal 2 Alameda Trips: Increase the share of walking, bicycling, transit, and carpooling trips within Alameda. Increase non-drive alone person trips within Alameda by five percentage points from 37 percent to 42 percent.



### Goal 1

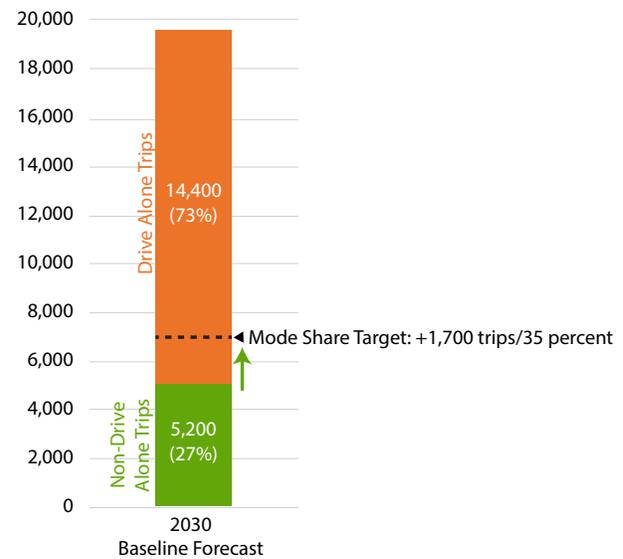
Estuary crossings are all person trips leaving Alameda including those by automobile, bus, ferry, biking or walking. This goal states there is to be a decrease in drive alone trips at island crossings, especially in the peak period. Baseline and future 2030 conditions were analyzed to determine AM peak hour and daily mode shift targets to meet this goal. The data show that an increase of 1,700 walking, bicycling, transit, and carpool morning peak hour person trips at estuary crossings is necessary to meet the goal in 2030. This relates to a mode shift of eight percentage points from 27 percent to 35 percent (see Table 2 and Figure 6).

Table 2: AM Peak Hour Estuary Crossings

| Mode   | AM Peak Hour Person Trips |                                     |   |
|--|---------------------------|-------------------------------------|---|
|  | 2015 Baseline Conditions  | 2030 Future Baseline Conditions [5] | 2030 Future Conditions with Target Mode Share [6] |
| Drive Alone [1]  | 12,700                    | 14,400                              | 12,700  |
| Non-Drive Alone (Carpool, Bike, Walk, Transit) [2][3][4] | 4,700                     | 5,200                               | 6,900   |
| Total Estuary Crossing Trips                             | 17,400                    | 19,600                              | 19,600  |
| <b>Non-Drive Alone Mode Share</b>                        | <b>27%</b>                | <b>27%</b>                          | <b>35%</b>  |

Notes: [1] Webster Posey tube data uses 2015/2016 average daily traffic data collected by City of Alameda Public Works. Park Street Bridge, Miller-Sweeney Bridge, High Street Bridge, and Bay Farm Island Bridge use 2011 and 2017 counts to determine 2015 baseline conditions. Data was confirmed with 2015 StreetLight Insight data. Future trips confirmed by Alameda Point EIR Forecasts. [2] Existing carpool trips assigned based on percentage of carpool commute trips from the U.S. Census American Community Survey (2015) and the Census Transportation Planning Products (2010). [3] Estimated 1.5% of trips are walk/bike based on Census Transportation Planning Products and data from the Public Opinion Survey. [4] Transit trips estimated based on boardings and alightings data from AC Transit and WETA San Francisco Bay Ferry. [5] Future conditions is based on ABAG projected growth in 2040 and adjusted to 2030 (this relates to 4,440 new households and 7,760 jobs). Growth in number of estuary crossing trips assumes the same number of trips per household and jobs that exists today. [6] Figures calculated by retaining 2015 drive alone trips and proportionally reallocating trips to other modes.

Figure 6: AM Peak Hour Estuary Crossings Goal for Non-Drive Alone Trips



### Goal 2

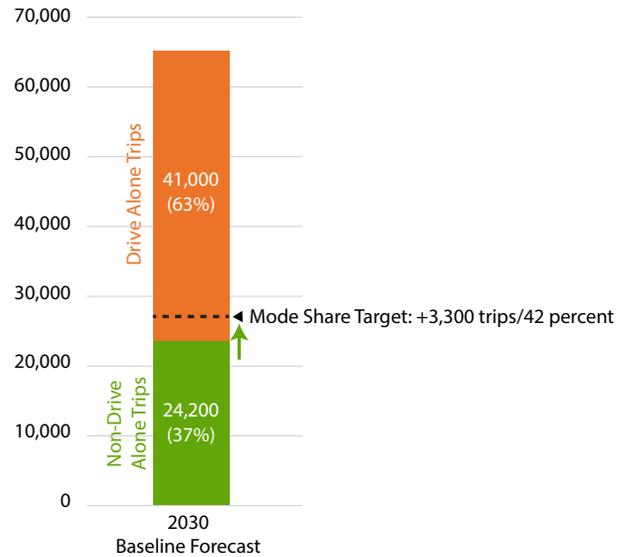
Goal #2 states there is to be an increase in walking, bicycling, bus and carpool trips within Alameda. The data show that an increase of 3,300 walking, bicycling, transit, and carpool morning average daily person trips within Alameda is necessary to meet goal in 2030. This relates to a mode shift of five percentage points from 37 percent to 42 percent (see Table 3 and Figure 7).

Table 3: Weekday Daily Person Trips within Alameda

| Weekday Daily Person Trips                               |                          |                                     |   |
|--|--------------------------|-------------------------------------|---|
| Mode   | 2015 Baseline Conditions | 2030 Future Baseline Conditions [5] | 2030 Future Conditions with Target Mode Share [6] |
| Drive Alone [1]  | 36,100                   | 41,000                              | 37,700  |
| Non-Drive Alone (Carpool, Bike, Walk, Transit) [2][3][4] | 21,310                   | 24,200                              | 27,500  |
| Total Estuary Crossing Trips                             | 57,410                   | 65,200                              | 65,200  |
| <b>Non-Drive Alone Mode Share</b>                        | <b>37%</b>               | <b>37%</b>                          | <b>42%</b>  |

Notes: [1] Daily trips based on StreetLight InSight data. [2] Existing carpool trips assigned based on National Household Travel Survey average weekday persons per vehicle (2009). [3] Estimated 18% of trips are walk/bike based on Census Transportation Planning Products. [4] Transit trips estimated based on boardings and alightings data from AC Transit. [5] Future conditions estimate is based on ABAG projected growth in 2040 and adjusted to 2030 (this relates to 4,440 new households and 7,760 jobs). This growth assumed the same number of trips within Alameda per household and jobs that exists today. [6] Figures calculated by applying an increase of five percentage points to non-drive alone mode share.

Figure 7: Weekday Daily Person Trips within Alameda Goal for Non-Drive Alone Trips





## Objectives

The objectives were developed to define specific outcomes and guiding principles that relate to the goals. Some of the objectives relate directly to the evaluation criteria.

- **Access:** Improve access to transportation facilities including BART stations, ferry terminals and bus stops.
- **Climate Change:** Provide programs and strategies that reduce greenhouse gas emissions.
- **Equity:** Ensure transportation improvements are applied equitably for all users including seniors, low income, people with disabilities and minorities, and are compliant with the Americans with Disabilities Act (ADA) requirements and guidelines.
- **Land Use:** Integrate land use changes and transportation improvements.
- **Parking:** Use parking management strategies to reduce incentives to driving.
- **Partnerships:** Maintain positive partnerships with transit operators, adjacent jurisdictions, the private sector and other key stakeholders to leverage monies and expertise.
- **Prioritize:** Elevate the priority of transit, bicycling, walking, carsharing and ridesharing, especially for youth and for first-mile/last-mile transportation choices.
- **Public Awareness:** Increase public, employee/employer and residential association awareness of transportation options.
- **Safety:** Emphasize safety in the planning, design and implementation of all transportation improvements.
- **Transit Frequency/Reliability:** Improve transit frequency, reliability and times, especially in the peak period.



Photo source: CDM Smith

## EXISTING CONDITIONS



## CHAPTER 2: EXISTING CONDITIONS

In terms of transportation, much has changed in Alameda over the past few years. Economic recovery has resulted in record traffic on Interstate-880. Job growth in the South Bay has resulted in increasing numbers of Alameda residents traveling south on Interstate-880. Younger commuters are opting for transportation options beyond traditional automobile purchases and recent changes in technology have made on-demand rideshare and carshare a popular option. This chapter describes existing transportation conditions as well as provides an overview of important factors that impact transportation conditions, such as housing, jobs, and travel behaviors.

The findings presented in this chapter describe the current conditions, and identify specific problems facing Alameda. In the following chapter, priority strategies are presented that describe solutions to these problems and will help the City Achieve its goals.

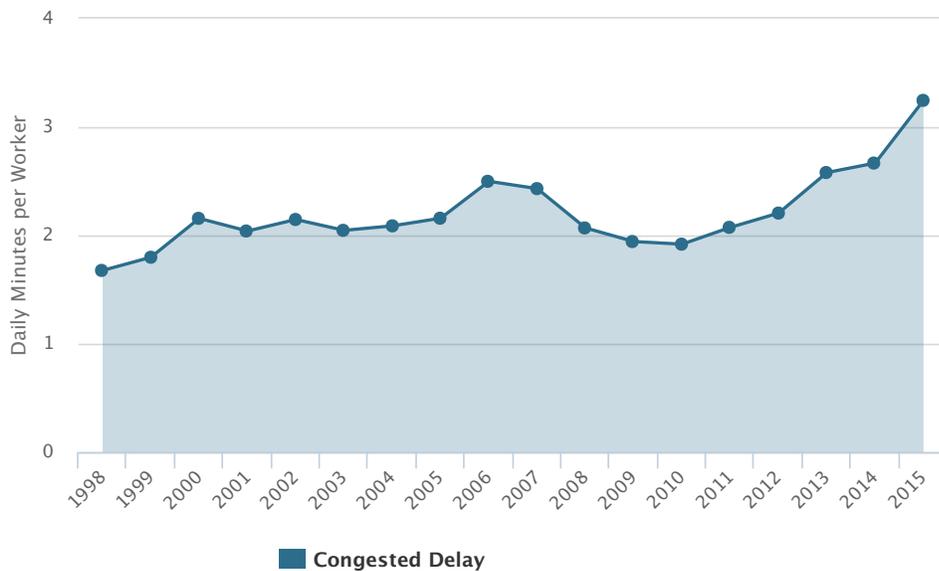
### CONGESTION IS INCREASING

Based on data from the Metropolitan Transportation Commission (MTC), delay from region wide congestion has surpassed 2006 levels and has increased 70 percent since 2010. This congestion has impacts on island crossings

in Alameda with congestion on Park Street, the Webster/Posey Tubes, as well as ridership increases on the ferries and transbay buses. Significant bottlenecks also form during morning and afternoon school drop-off and pick-up times, especially at local magnet and charter schools. While fluctuations in delay have occurred, the overall trajectory displays a steady increase in Bay Area delay over time (see Figure 8). In 1998, the congested delay per worker was 1.7 minutes. In 2015, that number increased to 3.2 minutes.

This increase in congestion not only impacts drivers, but also transit users when buses are delayed in traffic and when parking is limited at the ferry terminals. The estuary crossings and/or the adjacent intersections and ramps are bottlenecks that limit the amount of traffic that can leave or enter the island during peak periods. The result is increased queuing and delay as the travel demand grows, as well as a lengthening of the duration of the peak travel period. By shifting travel behavior away from driving alone, congestion increases can be minimized. The projects presented in this plan address congestion by increasing transportation choices for commuters, especially Alamedans going to BART, Oakland, and San Francisco.

Figure 8: Bay Area Delay Caused by Congestion



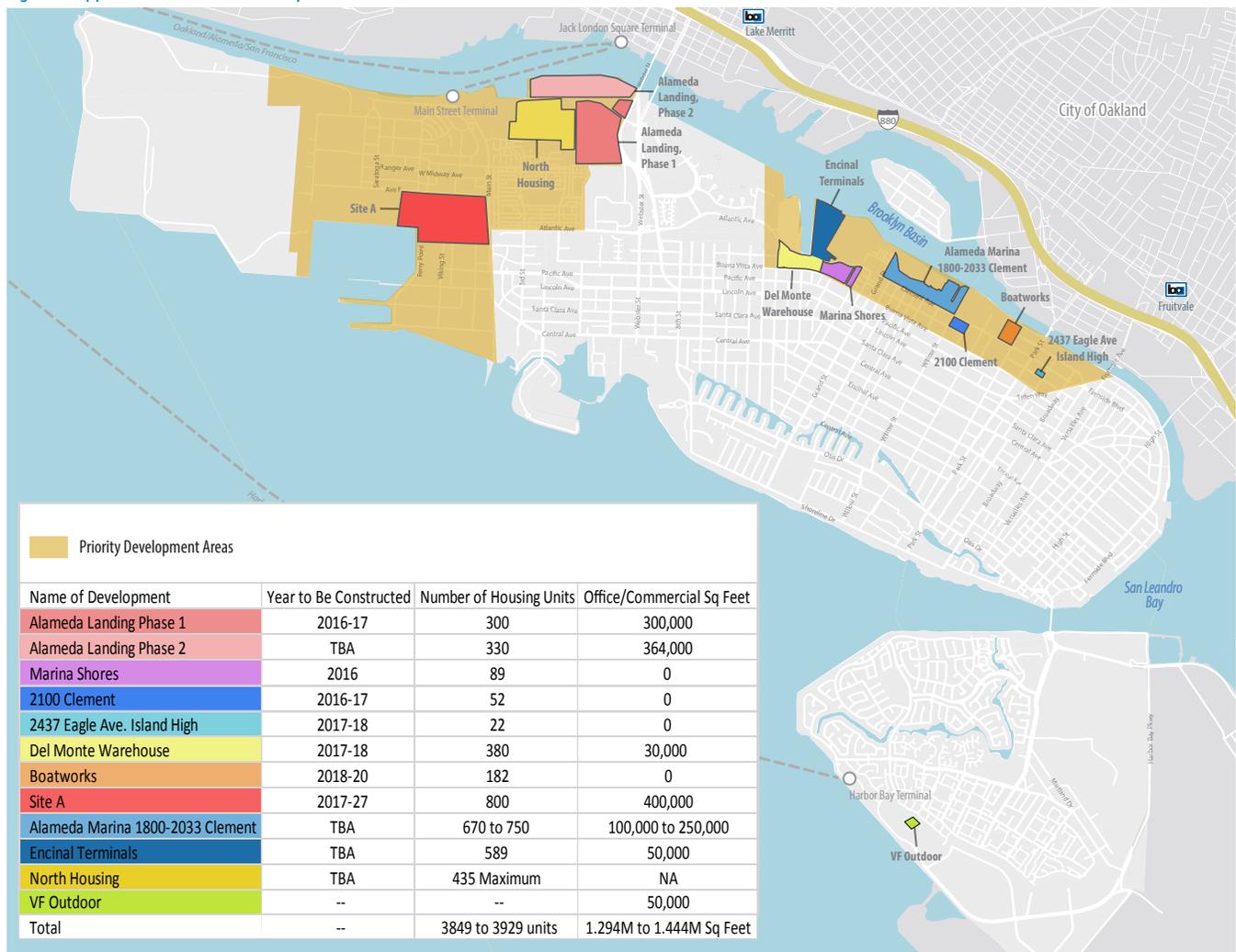
Source: Metropolitan Transportation Commission, Vital Signs. <http://www.vital signs.mtc.ca.gov/>

## HOUSING AND JOBS ARE GROWING

Alameda is experiencing moderate growth in housing and jobs, and is now back to pre-base closure housing levels. According to the 2015 Census, there are 76,733 residents living in 30,708 households. And as of 2014 there are 24,655 jobs in Alameda (LEHD, 2014). Over the next 10 years, approved and entitled developments in Alameda Point and the Northern Waterfront will account for 2,260 units (a 7 percent increase over 2015) and 7,909 jobs (a 30 percent increase over 2014). Figure 9 below provides an overview of approved, proposed, and entitled developments in Alameda, including two regionally identified Priority Development Areas specifically targeted for growth.

Growth in housing units is slower than the expected average Bay Area growth rate of 8.5 percent over 10 years. Nevertheless, job growth is expected to outpace the Bay Area average, which is forecasted at 11.4 percent over 10 years. The high job growth will help reduce the jobs-housing imbalance that currently exists in Alameda; however, there is concern about whether Alameda employees can afford to live in Alameda. In the year 2000, there were 31,664 total housing units in Alameda. The number decreased to 31,572 by 2014. In the year 2002, there were 21,719 jobs in Alameda. Following a decline in jobs that began in 2000, the total number of jobs in Alameda has seen a steady increase since 2004. The total number of jobs in Alameda increased to 24,655 by 2014.

Figure 9: Approved and Entitled Developments



Source: City of Alameda



## COMMUTE PATTERNS ARE CHANGING

Since 2010, there have been two notable trends in commute patterns in the Bay Area: One is that the percentage of auto commuters is declining and the other is that the percentage of transit commuters is increasing. This pattern reflects trends in Alameda with a drop in drive alone commuting between 2010 and 2015 from 64 percent to 60 percent and a related increase in transit use. In actual numbers drive alone commuters remained about the same (just under 23,000) during this time period and transit commuters increased by more than 1,400.

Figure 10 presents 2015 mode choice preferences for Bay Area cities, including Alameda, and other large metro areas around the country. Alameda outperforms most other Bay Area cities and metro areas around the country in that Alamedans are more apt to use non-drive alone options than residents in other cities except for Berkeley and Oakland.

Another trend for Alameda is that there are more commuters leaving the island for work, nearly 5,000 more compared to 2005 (see Figure 11). An increasing number of commuters head to San Francisco, South Bay and Peninsula each day. Figure 12 shows changes in commute totals over a nine year period to nearby counties. Alameda residents commuting to

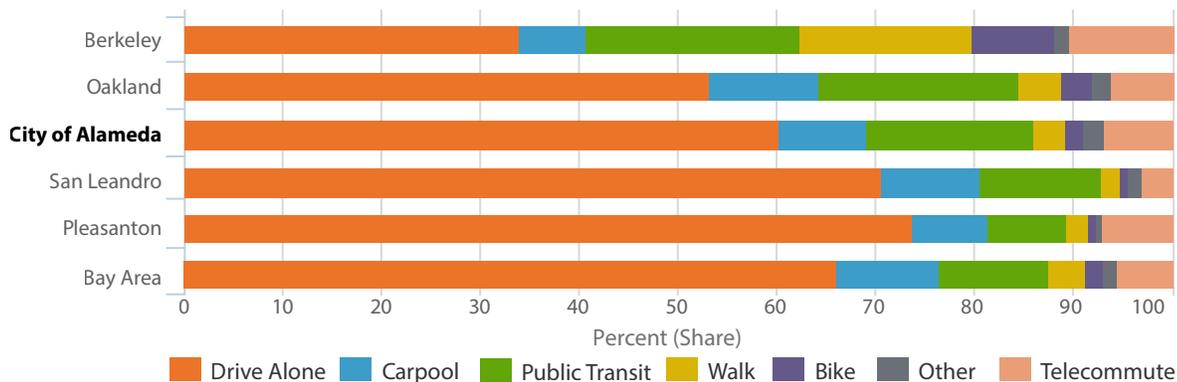
Santa Mateo County increased from 1,613 in 2005 to 2,172 in 2014, to San Francisco the number increased from 4,667 to 7,189, and to Santa Clara County the number increased from 1,682 to 2,096.

San Francisco and Oakland are the two highest destinations for Alameda residents commuting to work, but commute mode choice to these cities are very different. Only one out of every five Alamedans commuting to San Francisco drives alone. Nevertheless, for those commuting to Oakland, nearly four out of every five residents drive alone. Figure 13 shows the commute patterns of Alameda residents to the Inner East Bay (Oakland, Berkeley, Emeryville, San Leandro, Hayward, and Fremont), San Francisco, San Mateo, and Santa Clara counties.

Telecommuting and working from home is also a trend that has increased steadily over the last five years. Since 2010 working from home has increased from 5.6% in 2010 to 6.9% in 2015.

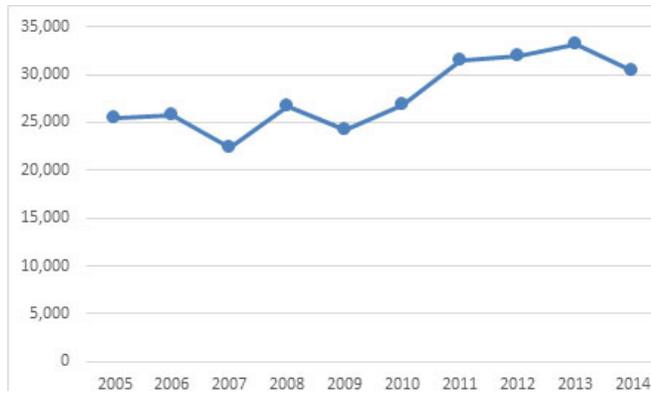
By increasing the number of transit options, such as additional bus service to BART, and increasing ferry service operations, additional workers commuting outside Alameda will have more alternatives to driving.

Figure 10: Mode Split (Select Cities and Metro Areas)



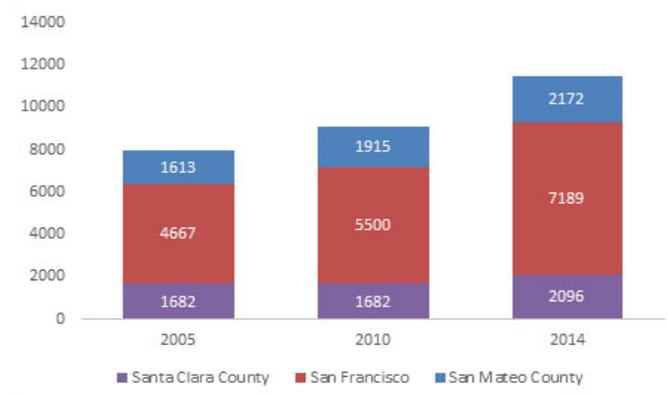
Source: Metropolitan Transportation Commission, Vital Signs. <http://www.vitalsigns.mtc.ca.gov/> (Commute Mode Choice)

Figure 11: Off-Island Commuters



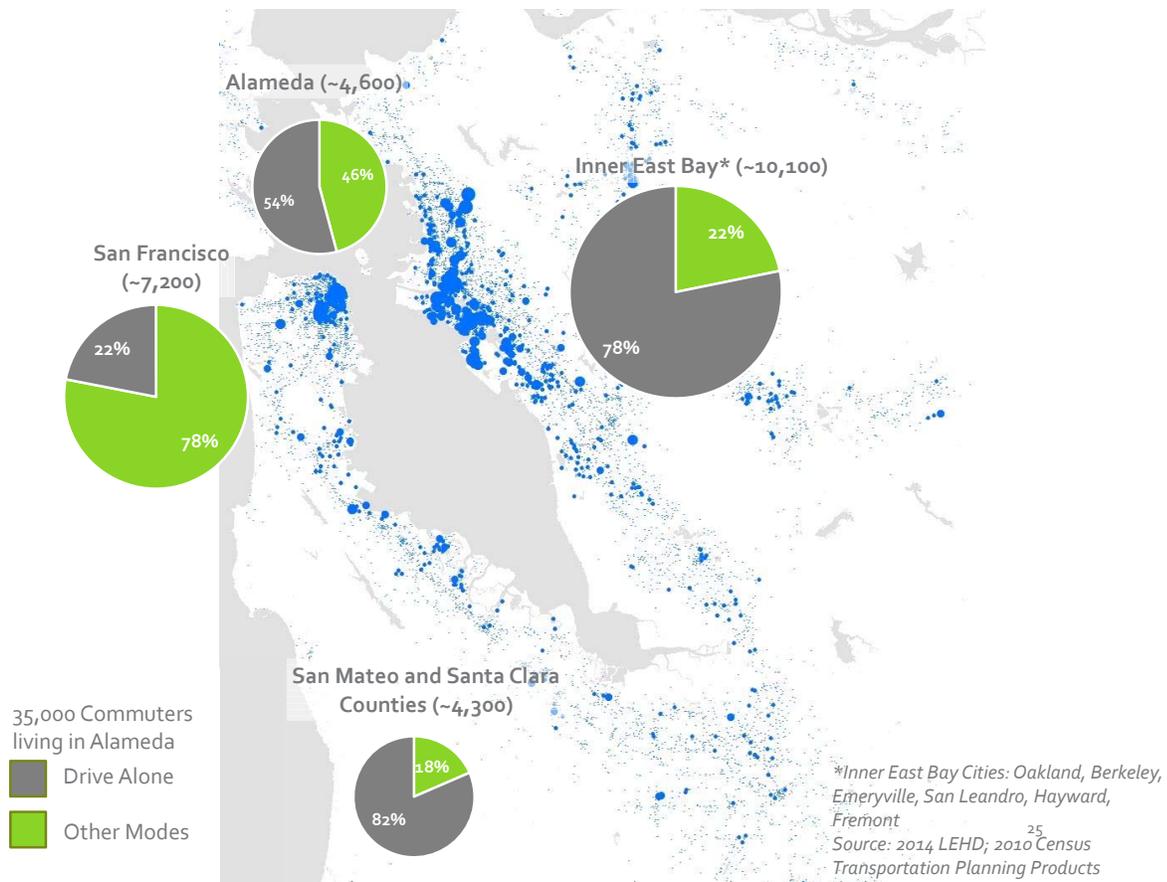
Source: Longitudinal Employer-Household Dynamics (LEHD, 2014)

Figure 12: Number of Alameda Commuters to Nearby Destinations



Source: Longitudinal Employer-Household Dynamics (LEHD, 2014)

Figure 13: Commute Patterns from Alameda to East Bay vs San Francisco



Source: Longitudinal Employer-Household Dynamics (LEHD, 2014; 2010 Census Transportation Planning Products)



## Findings from Public Opinion and Web Surveys

### DRIVE ALONE COMMUTER RESPONSES

The public opinion survey provided insight on the attitudes and behavior of drive alone commuters and meeting the goals of this plan will rely on shifting behavior of these commuters. This information was used in determining and validating the priority strategies and projects. The most common reasons for driving alone include:

- Needing a car for personal use before, during, or after work (73%)
- Alternatives to driving increase commute time too much (71%)
- There is free parking at work location (65%)

Regarding the question of how the city can encourage more transit use, bicycling, and walking, respondents stated:

- More frequent, reliable, and accessible public transit (32%)
- Expanded and improved bicycle facilities (6%)
- A free shuttle (6%)
- Improved access to BART (6%)

*A Note on the public Opinion Survey: A total of 500 interviews were conducted during the period August 17, 2016 to September 30, 2016. Interviews were conducted in English, Spanish, and Cantonese, reaching Alameda residents with landlines and mobile phones. The statistical margin of error was +/-4.3%. The following key findings highlight attitudes, behavior, and barriers to transportation for Alameda Residents*

### ALL RESPONDENTS

Other key findings related to Alameda residents' transportation behavior and attitudes from all respondents include the following.

- Free Bus Service: Two-thirds of respondents (69%) would use locally sponsored free buses (supplementing existing AC transit) serving BART, ferry terminals and Alameda shopping. Only a third (33%) would support higher sales or property taxes to pay for locally sponsored free buses.
- BART to Alameda: Two-thirds of respondents (65%) would strongly support (47%) or support somewhat (18%) a BART station in Alameda.
- School Access: 64% of respondents strongly agreed (46%) or agreed (18%) that Alameda should make it easier to walk, bicycle or take transit to and from school.
- Island Crossings: 61% of respondents stated that traffic congestion at island crossings at rush hour is either a major issue (42%) or an issue (19%).
- Multimodal Destinations: 58% of respondents strongly agreed (37%) or agreed (21%) that Alameda should make it easier to walk, bicycle or take transit to destinations rather than relying on a car. Only 29% of respondents would support higher sales or property taxes to improve transit, bicycling and walking conditions in Alameda.
- Bike Share: 58% of respondents strongly disagreed (48%) or disagreed (10%) that they would use a bike share system in Alameda.
- Parking: 54% of respondents strongly disagreed (39%) or disagreed (15%) that more of Alameda's parking spaces should be dedicated to bicycle, transit and walking uses.
- Driving/Parking Easier: 50% of respondents strongly agreed (33%) or agreed (17%) that Alameda should make it easier to drive and park in Alameda.

## MOST FREQUENT WEB SURVEY COMMENTS

### Most frequent web survey comments

Two web surveys were administered to engage community members and to obtain input from the community. The following are the most frequent comments expressed organized by travel mode. “(1)” represents the most frequent comment, “(2)” represents the second most frequent comment, and so on.

- BART: (1) Reaching nearby BART stations is difficult. (2) Bring BART to Alameda.
- Ferry: (1) Increase ferry frequencies. (2) Increase/improve parking at ferry terminals.
- Bus: (1) Improve reliability and frequency of service, especially to nearby BART Stations and WETA ferry terminals. (2) Implement an Alameda-only free shuttle, similar to Emeryville.
- Bicycling: (1) Increase the number of bikeways throughout Alameda, including those going to/from Oakland. (2) Increase safety for bicyclists. (3) Improve existing bicycling facilities.
- Walking: (1) Increase pedestrian safety. (2) Improve existing pedestrian facilities.
- Drive Alone: (1) People should have the option to drive places, such as to daycare or when shopping.
- Estuary Crossings: (1) Improve bicycling options to/from Oakland, especially on the west end of Alameda. (2) Improve traffic flow during peak hours. (3) Add another option for entering and leaving the island.

## YOUTH TRANSPORTATION SURVEY KEY FINDINGS

The Youth Transportation Survey was conducted in Fall 2016 to better understand the current transportation needs and experiences of Alameda middle and high school students.

- Nearly half of respondents who reported driving or being driven to school use an alternative mode to get home.
- Most respondents live within three blocks of a bus stop.
- Students who commute using transit are most concerned with time, distance and adequate bus service.
- Students who commute by bicycle are most concerned with poor weather, safety at intersections, and riding home when it's dark outside.
- Students expressed concern that buses are too crowded and frequency is inadequate.

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[in](#)
[t](#)

**Please share your thoughts about transportation issues in the City of Alameda to help with future planning for the city.**

[Introduction](#)
[Feedback](#)
[Your Response](#)
[Outcome](#)

**Introduction**  
 This survey effort is part of the citywide Transit/TDM\* Plan, which we are developing to help ensure that Alameda sustains its high quality of life during a time of population growth throughout the Bay Area.

Please take a few minutes to answer five questions by clicking on ["Take the Survey."](#)

\*Transportation Demand Management (TDM) refers to strategies that shift drive alone trips



## ALAMEDA IS A MULTIMODAL CITY

Alameda has many characteristics, existing policies and infrastructure that supports multimodal mobility, including:

- Well-suited geography: A flat topography and temperate climate makes Alameda an ideal place for walking and bicycling.
- General Plan has strong goals and policies: The general plan's goals, objectives, and policies provide strong support for and encourage alternatives to driving alone.
- City requires transportation alternatives for new development projects: The transportation demand management funding and requirements for new developments provide transportation alternatives for residents and employees at new developments.
- Funding for multimodal improvements: The City actively pursues and obtains funding for pedestrian, bicycle, and transit infrastructure improvements.
- Coordinating services with transit agencies: The City is proactively engaging with transit agencies to improve transit service in Alameda.

Figure 14 shows commute mode share for Alameda commuters. The number of drive alone mode share went up between 2000 and 2010, but declined in 2015. As of 2015, more than 40 percent of commuters travel by modes other than driving alone. These alternative modes to driving alone are described below and in the next section, Alameda's Transit Access.

**Carpooling:** There are limited carpool programs in Alameda and residents looking to carpool are left on their own to find rides. Nevertheless, the city has recognized casual carpool

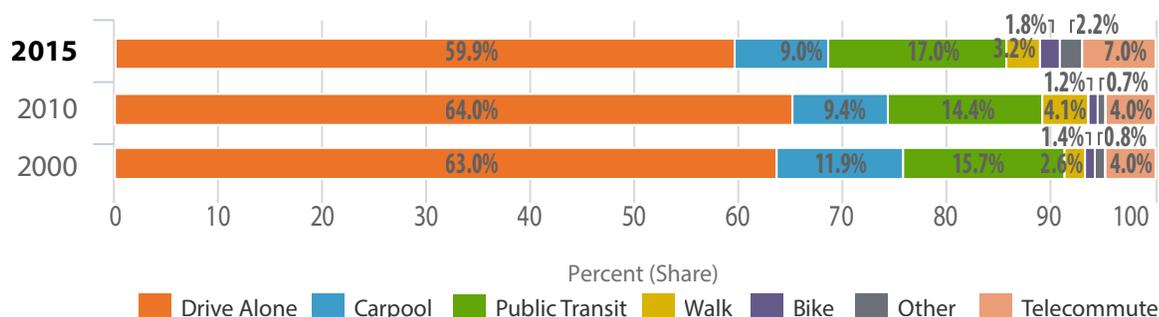
pick up locations used by residents to share rides into San Francisco. Carpool parking is not currently given preference at ferry terminals or other locations with limited parking.

**Walking:** Walking is a healthy and environmentally friendly means of getting to nearby destinations within Alameda and nearly all streets have sidewalks and most are separated from the street with a landscape strip with street trees, bike racks and other amenities. Issues related to walking are related to safe crossings, improving visibility, and calming traffic and speeding motorists. At estuary crossings into Oakland where pedestrian facilities are limited and intimidating to use, improvements are needed. This plan identifies streets where traffic calming and improvements to pedestrian amenities at sidewalks are needed.

**Bicycling:** Bicycling is convenient and an often used option for people traveling within Alameda. A network of bikeways is provided throughout the City. Nevertheless, several gaps exist for bicycles. Also, speeding traffic can make bicycling feel unsafe on some streets. At estuary crossings into Oakland where bicycle facilities are limited and intimidating to use; improvements are needed. This plan identifies the gaps in the network and makes suggestions on where to focus resources to better connect residents with key destinations, including shopping, jobs, and transit hubs.

The recommended projects and programs described in the following chapters expand mobility, including increasing awareness of transportation options, addressing public perceptions of public transit, making multimodal choices more attractive than driving, tackling island crossing issues for all modes, balancing the needs of all users on public rights-of-way, and adapting to new technologies as they arise.

Figure 14: City of Alameda Commute Choice (2000-2015)



Source: U.S. Census (2000); U.S. Census American Community Survey 5-Year Data (2009-2014)

## ALAMEDA'S TRANSIT ACCESS

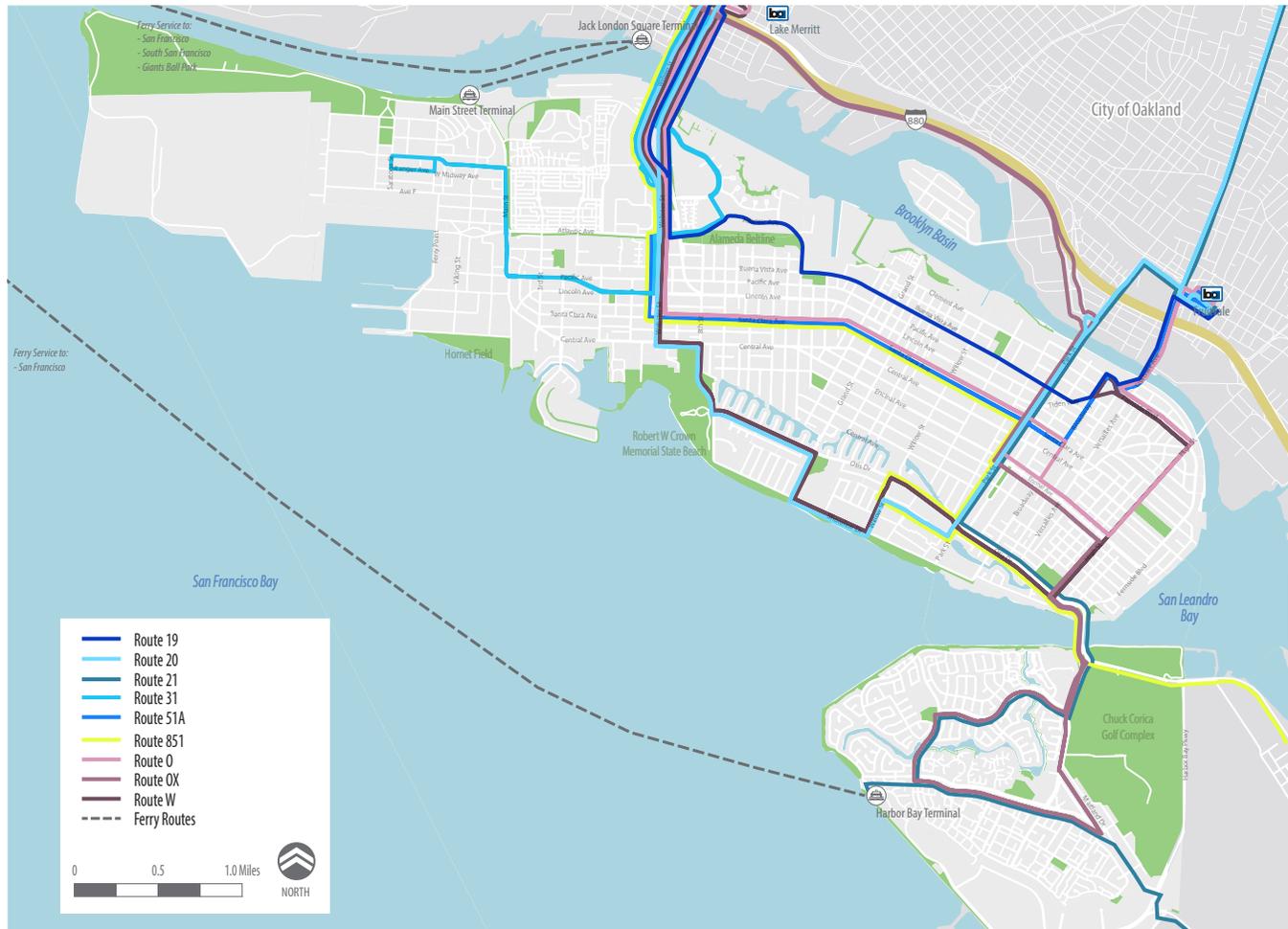
The City of Alameda is served by multiple transit agencies and services, including five local bus routes, three transbay bus routes, three school routes, two ferry terminals providing service to Oakland and San Francisco, five nearby BART stations (within two miles of island crossings), a door-to-door paratransit service, a senior/paratransit fixed route shuttle, and three private shuttles connecting to BART. Sixteen percent of Alameda residents commute using transit, and there are more than 12,000 transit boardings each weekday in Alameda. Comparing Alameda's transit commute mode share to other nearby cities, Berkeley's is 21 percent, Oakland's is 19 percent, San Leandro's is 12 percent and Hayward's is 8 percent. Furthermore, access to bus service is good with two-thirds of residents and jobs located within a ¼-mile of a bus stop and 92 percent located within a ½ mile of a bus stop.

Figure 15 provides an overview of existing fixed-route transit service in Alameda. While access to transit is good, transit usage could be increased, especially within Alameda and to Oakland and BART. In the public opinion survey, web surveys and community workshops, suggested improvements to transit focused on three primary areas:

- Improving bus access to regional transit hubs, including ferry terminals and BART stations;
- Improving the frequency, speed and reliability of buses; and
- Providing more direct bus access to destinations within Alameda.

The recommended projects and programs described in the following chapters address these areas with new routes, improvements to frequency, and several projects aimed at improving speed and reliability.

Figure 15: Existing Transit Service





## TDM AND PRIVATE SECTOR PARTICIPATION

The City requires new development to mitigate their transportation impacts and increase transportation choices, which is referred to as transportation demand management (TDM). TDM strategies improve transportation efficiency by shifting drive alone trips to carpooling, walking, bicycling, and taking transit, among others. TDM requirements for new developments in Alameda have resulted in additional transit service, transit pass programs, a shuttle that connects to BART, and bicycle and pedestrian facilities at new developments. Nevertheless, TDM programs only are required for new developments. Programs have been adopted in the former Naval Air Station, Alameda Landing and the Northern Waterfront areas (see Figure 16). These three development areas are required to be part of a Transportation

Management Association (TMA) to efficiently manage the TDM programs and successfully meet TDM goals and targets. Alameda Landing TMA and Alameda TMA (Alameda Point and Northern Waterfront) currently exist with the potential to further expand to other parts of the city. The challenge for TDM is expanding these programs to include the established neighborhoods and commercial areas, which represent the vast majority of Alameda’s residents and employee population.

## Current City Policies

The City has adopted several plans and policies governing transportation impacts over the past few years. The Transportation Element of the General Plan focused on policies for new residential and commercial development.

Figure 16: Areas with Adopted TDM Programs



The Transportation Element of the General Plan requires all new developments establish trip reduction goals as follows: 10 percent peak hour trip reduction for new residential developments and 30 percent peak hour trip reduction for new commercial development.

Included in all recent Development Agreements for projects requiring Planning Board approval is perpetual funding dedicated to transportation services to assure the General Plan targets will be reached. Annual monitoring requirements assure compliance. Table 4 summarizes the annual fee structures for several new developments as of 2017. Table 5 provides a description of TDM requirements for these developments.

## TDM's Future in Alameda

Moving forward in the process, it will be important to examine how new policies in the three major development areas – Alameda Landing, Northern Waterfront and Alameda Point – have worked since implementation. Which programs have been most successful locally and how can the City establish similar policies or guidelines that are able to be implemented in other areas of Alameda? The three major development areas provide an opportunity for the City of Alameda to test creative policies and plans to improve transportation options then can be used for developed areas like Central Alameda or Bay Farm Island.

Table 4: TDM Funding Requirements for Approved Developments (2017\$)

|  | Alameda Landing | Alameda Point Site A (Zone 1) | Alameda Point Adaptive Reuse (Zone 2) | Del Monte | Marina Shores | 2100 Clement | Wind River        |
|--|-----------------|-------------------------------|---------------------------------------|-----------|---------------|--------------|-------------------|
| Annual Per Condominium                           | \$495           | \$798                         | \$1,435                               | \$362     | \$568         | \$465        | N/A               |
| Annual Per Townhome w/Garage                     | \$495           | \$2,844                       | \$2,258                               | NA        | \$568         | \$465        | N/A               |
| Annual Per Single Family Home w/ Detached Garage | \$495           | N/A                           | N/A                                   | NA        | \$568         | \$465        | N/A               |
| Annual Per Square Footage for Commercial         | \$0.57          | \$0.55                        | \$0.55                                | \$0.57    | N/A           | N/A          | \$76 per employee |

Dollar amounts are shown in 2017 dollars and may differ from the current amount charged to developers.

Table 5: TDM Requirements by Development

|  | Alameda Landing | Alameda Point | Del Monte | Marina Shores | 2100 Clement | Wind River |
|--|-----------------|---------------|-----------|---------------|--------------|------------|
| TDM Strategy (Required to be in place on day one of occupancy) | x               | x             | x         | x             | x            | N/A        |
| Operational TMA with a coordinator                             | x               | x             | x         | x             | N/A          | N/A        |
| Bus to BART at 15 to 20-minute headways in AM/PM peak          | x               | x             | x         | x             | x            | x          |
| Website  | x               | x             | x         | x             | N/A          | N/A        |
| Marketing/Information  | x               | x             | x         | x             | N/A          | N/A        |
| Annual monitoring and reporting                                | x               | x             | x         | x             | x            | N/A        |
| Transit subsidy or pass program                                | x               | x             | x         | x             | x            | N/A        |
| Water shuttle service  | x               | N/A           | N/A       | N/A           | N/A          | x          |



## TDM and Private Sector Participation Best Practices

Cities throughout the nation as well as around the Bay Area have embraced public-private partnerships as an integral way to create sustainable growth strategies. Seattle, Boulder, Denver and Portland have long been leaders in using private sector dollars for improved transportation. Here in the Bay Area, San Francisco, Mountain View, South San Francisco and Palo Alto are all actively engaged with private sector stakeholders to help mitigate the impacts of continued growth and prosperity. Each has a slightly different approach. Boulder, for instance, instituted paid parking and a robust shuttle and express bus system, while Portland invested heavily in light rail around which new developments were built. These communities are also examples of communities that are thriving, despite growth and the vicissitudes of the economy. Below is a closer look at best practices from Seattle, San Francisco, and Palo Alto.

### SEATTLE

Seattle requires all work sites with 100 or more employees to mitigate the impacts of their business by working to reduce drive alone rates. Seattle has lowered its drive alone rate by eight percent over the past decade. It has done so through strong public-private partnerships led by its local transportation management association working closely with local and regional transit providers, business associations, and King County. Transit agencies, the City and County, and the private sector all financially support Commute Seattle – the local TMA - and its ongoing services, and aggressive commute policies.

Seattle's Commute Trip Reduction program's success to date has largely been the result of activities by large employers. In 2017, the City set a new citywide goal of reducing the city's drive alone rate by an additional ten percent and is striving to bring in properties of all sizes and types. To achieve this, eight geographic areas were established within the city, each with a specific drive alone rate goal that locations within that area will work to achieve. These goals are based on several variables: geography, land uses, transit availability and other factors, allowing programming to be more responsive to local conditions. The goals range from a drive alone rate of 20 percent in the downtown to 58 percent in Fremont/Green Lake, 69 percent in Northgate and 63 percent in South Seattle.

Programs include mandatory elements, such as hiring an employee transportation coordinator and distributing



Photo source: CDM Smith

information, and other flexible elements that can be selected by program participants to ensure that the transportation options best meet their needs. Sites can choose two more TDM measures selected from a list ranging from providing bike parking facilities and transit fare subsidies to preferential parking for high occupancy vehicles, reduced parking charges for high occupancy vehicles, providing shuttles and working with transit agencies to provide additional regular or express service. Program participants must submit a TDM Plan for review and approval when launching, and employee commute surveys must be conducted (or equivalent data that shows commute behavior and progress towards the trip reduction goals) every two years.



## SAN FRANCISCO

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Locally, San Francisco recently enacted new legislation that establishes a citywide TDM program. The City's Planning code now requires all new development, which is defined as changes in existing properties of more than 10,000 square feet or changes in use, to incorporate a combination of design features, tools and incentives that support more sustainable forms of transportation.

The new program articulates a points-based TDM approach based on land use and parking. The four land use categories are: retail, office, residential, and other. Individual properties and projects within each classification know clearly what they must achieve (i.e., a minimum of 13 points), but can then choose from a comprehensive toolbox on how they will satisfy the requirements.

TDM Plans for both new and existing projects now need approval from the Planning Department as part of the project-approvals process. Confirmation of certain physical aspects, as well as that projects have staff and other resources in place, are now required before a Certificate of Occupancy is issued. Lastly, periodic reporting is also now required.

Within San Francisco, two entities provide transportation brokerage services. San Francisco's Transportation Management Association (TMA SF) provides transportation brokerage services for over 80 Downtown and Financial District buildings while the Mission Bay Transportation Management Association provides services to members at the 300-acre SOMA redevelopment site. Each entity provides a distinctive array of services – TMA SF provides education, incentives and other 'carrots' for its members in addition to conducting periodic surveys and reporting to the City, while the Mission Bay Transportation Management Association's primary focus is to provide shuttle and other 'last mile' transportation services to its members.

## PALO ALTO

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Downtown Palo Alto, a much smaller community, formed a TMA in early 2016. The primary work program for this organization is customized for a special segment of downtown workers – service employees – who have the highest drive alone rates of any employment category. The Palo Alto TMA is subsidizing transit passes, carpooling and 'first' and 'last' mile solutions for this group of employees, for whom using a more sustainable alternative is often the most expensive commute.

# CHAPTER 3



*Photo source: CDM Smith*

## PRIORITY STRATEGIES

# CHAPTER 3: PRIORITY STRATEGIES

## PRIORITY STRATEGIES OVERVIEW AND APPROACH

Based on the findings in the previous Existing Conditions chapter, Alameda is expected to see more drive alone trips unless community members are provided with better transportation options and change their travel behavior. The Priority Strategies chapter focuses on what could be done to reduce the amount of expected drive alone trips on/off the island and to increase the share of walking, bicycling and transit trips within Alameda and meet the stated goals of this plan. While long-term projects are discussed and explored, the plan focuses primarily on projects that can be implemented over the next 15 years, many of which are already underway. The priority strategies (see Figure 17) include groups of projects focused on addressing specific issues impacting transportation, and are grouped by the goals of the plan.

As summarized in Tables 6 and 7, each priority strategy includes:

- The specific transportation issues it addresses;
- The specific projects and programs included within the strategy; and
- The strategy's ability to meet the plan's two goals.

The evaluation of how the priority strategies meet the two goals is provided within this chapter with evaluation criteria related to mode share targets, climate change, equity, and safety. Each specific project and program is described in more detail later in this chapter.

Long-term projects are identified as part of our visioning for future projects, but are not included in the evaluation for meeting the goals because most would not likely be implemented by 2030. The eventual implementation of any or all of these projects could significantly help the City meet or exceed the goals.

Figure 17: Priority Strategies Overview

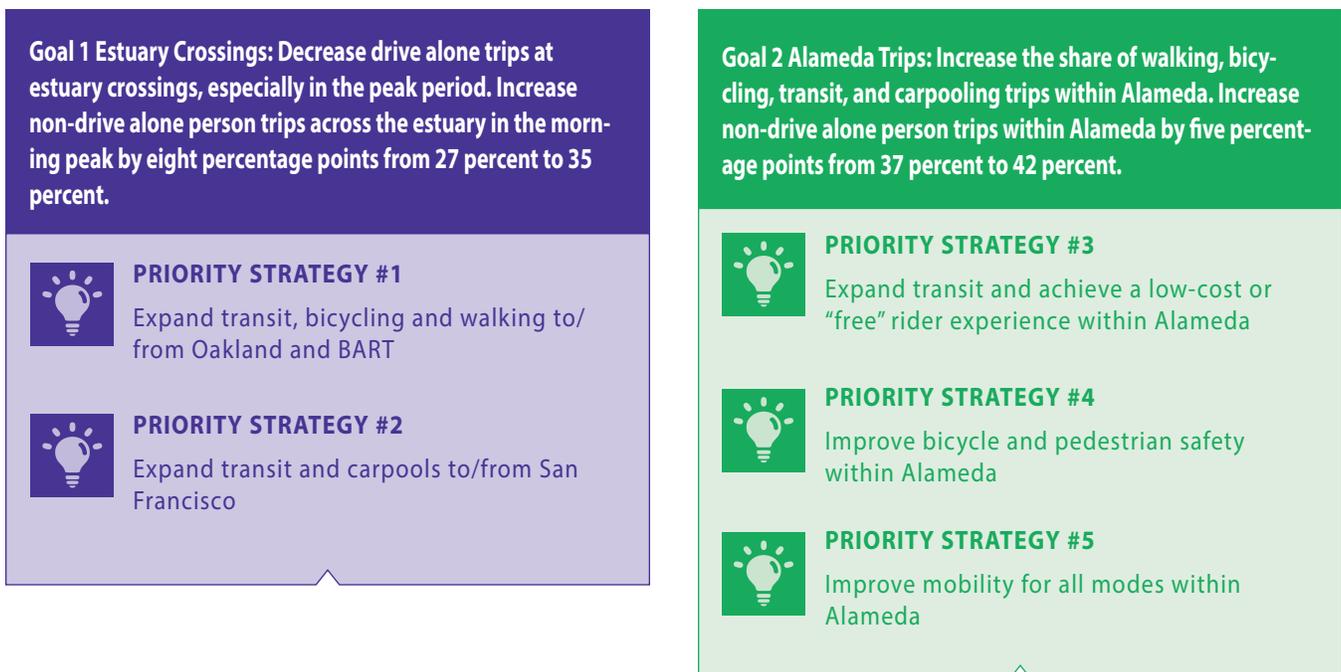




Table 6: Priority Strategy Framework for Goal 1 Estuary Crossings

| Goal 1 Estuary Crossings: Decrease drive alone trips at estuary crossings, especially in the peak period. Increase non-drive alone person trips across the estuary in the morning peak by eight percentage points from 27 percent to 35 percent. |  |  |
|--|--|--|
| Priority Strategy  | Projects and Programs  |  |
| Priority Strategy 1: Expand transit, bicycling and walking to/from Oakland and BART  | <ul style="list-style-type: none"> <li>• Bicycle Master Plan and Design Guidelines Update and Vision Zero Safety Policy/Plan</li> <li>• Estuary Water Shuttle Crossing or WETA Ferries to Oakland</li> <li>• Pedestrian Master Plan and Design Guidelines Update and Vision Zero Safety Policy/Plan</li> <li>• Alameda Point Bus Rapid Transit Service</li> <li>• Bikes in Buses through Webster/Posey Tubes</li> <li>• Increase Frequency and Span of Service for Local Bus Routes</li> </ul>   | <p>Projects and Programs that apply to both Strategies 1 and 2</p> <ul style="list-style-type: none"> <li>• Bus Stop improvements</li> <li>• Island Drive and Westline Drive Bus Lanes</li> <li>• Transit Signal Priority and Adaptive Traffic Signal Control</li> <li>• Transportation Awareness Campaign</li> <li>• Transportation Partnerships with Existing Businesses and Residences</li> </ul> |
| Priority Strategy 2: Expand transit and carpools to/from San Francisco   | <ul style="list-style-type: none"> <li>• Casual Carpool Additional Pickup Locations</li> <li>• Constitution Way Carpool Lane</li> <li>• Crosstown Express Bus Service</li> <li>• Harbor Bay Ferry Terminal Access and Parking Management Improvements</li> <li>• Increase Frequency and Span of Service for Ferry Service</li> <li>• Increase Frequency and Span of Service for Transbay Bus Service</li> <li>• Main Street Ferry Terminal Access and Parking Management Improvements</li> <li>• New Seaplane Lagoon Ferry Terminal &amp; Service</li> </ul> | <ul style="list-style-type: none"> <li>• Citywide Transportation Management Association</li> <li>• EasyPass Expansion &amp; Expanded TDM Participation</li> <li>• Faster Line 51A Bus Service</li> <li>• Miller-Sweeney Multimodal Lifeline Bridge</li> <li>• Regional Transit Hub Connector Bus Service</li> <li>• TDM Ordinance Update</li> </ul>  |
| Evaluation Results   | <p>An increase in non-drive alone person trips from 5,200 to 6,900 during the weekday AM peak hour, increasing non-drive alone mode share from 27 to 35 percent can be met by implementing the proposed strategies.</p>  |  |
| Priority Strategies 1 and 2 – Long Term (not part of evaluation since the expected completion is beyond the time horizon of the plan; included as part of vision and to ensure implementation)   | <ul style="list-style-type: none"> <li>• BART to Alameda</li> <li>• Comprehensive Congestion Management               <ul style="list-style-type: none"> <li>• Citywide EasyPass Expansion</li> <li>• Increase Frequency to 15-minute Maximum for Local Bus Routes</li> <li>• Congestion Pricing or Parcel Tax</li> </ul> </li> <li>• New Transit/Bike/Pedestrian Lifeline Tube</li> <li>• Webster/Posey Multimodal Lifeline Tubes</li> <li>• West End Bicycle/Pedestrian Bridge</li> </ul>  |  |

Table 7: Priority Strategy Framework for Goal 2 Alameda Trips

| Goal 2 Alameda Trips: Increase the share of walking, bicycling, transit, and carpooling trips within Alameda. Increase non-drive alone person trips within Alameda by five percentage points from 37 percent to 42 percent. |  |   |
|---|--|---|
| Priority Strategy   | Projects and Programs  |   |
| Priority Strategy 3: Expand transit and achieve a low-cost or “free” rider experience within Alameda  | <ul style="list-style-type: none"> <li>• Bus Stop improvements</li> <li>• Island Drive and Westline Drive Bus Lanes</li> <li>• Transit Signal Priority and Adaptive Traffic Signal Control</li> <li>• Citywide Safe Routes to School Audits and Improvements</li> <li>• Citywide Transportation Management Association</li> <li>• Crosstown Express Bus Service</li> <li>• EasyPass Expansion &amp; Expanded TDM Participation</li> <li>• Faster Line 51A Bus Service</li> <li>• Increase Frequency and Span of Service for Local Bus Routes</li> <li>• Increase Frequency and Span of Service for Transbay Bus Service</li> </ul> | <p>Projects and Programs that apply to both Strategies 3, 4, and 5:</p> <ul style="list-style-type: none"> <li>• Citywide Safe Routes to School Audits and Improvements</li> <li>• Citywide Transportation Management Association</li> <li>• Vision Zero Safety Improvements and Traffic Calming</li> </ul> |
| Priority Strategy 4: Improve bicycle and pedestrian safety within Alameda   | <ul style="list-style-type: none"> <li>• Bicycle Master Plan and Design Guidelines Update and Vision Zero Safety Policy/Plan</li> <li>• Pedestrian Master Plan and Design Guidelines Update and Vision Zero Safety Policy/Plan</li> <li>• Bicycle and Pedestrian Corridor Improvements</li> <li>• Bike Share</li> </ul>  |   |
| Priority Strategy 5: Improve mobility for all modes within Alameda  | <ul style="list-style-type: none"> <li>• Parking Management &amp; Demand Pricing</li> <li>• Parking Policies for New Development</li> <li>• Shared Ride Service for Seniors and People with Disabilities</li> <li>• Transportation Awareness Campaign</li> <li>• Transportation Partnerships with Existing Businesses and Residences</li> <li>• New Technologies and Innovations</li> <li>• TDM Ordinance Update</li> <li>• Vision Zero Safety Improvements and Traffic Calming</li> </ul>   |   |
| Evaluation Results  | An increase in non-drive alone person trips from 24,200 to 27,500 during typical weekdays, increasing non-drive alone mode share to 37 to 42 percent can be met by implementing the proposed strategies.   |   |
| Priority Strategies 3, 4, and 5 – Long Term (not part of evaluation since the expected completion is beyond the time horizon of the plan; included as part of vision and to ensure implementation)                          | <ul style="list-style-type: none"> <li>• Comprehensive Congestion Management                             <ul style="list-style-type: none"> <li>• Citywide EasyPass Expansion</li> <li>• Increase Frequency to 15-minute Maximum for Local Bus Routes</li> <li>• Congestion Pricing or Parcel Tax</li> </ul> </li> </ul>   |   |



## STRATEGY #1: EXPAND TRANSIT, BICYCLING AND WALKING TO/FROM OAKLAND AND BART

Downtown Alameda is less than four miles from downtown Oakland and a short distance from three Oakland BART stations (Fruitvale, Lake Merritt, and downtown Oakland). Nevertheless, more than 70 percent of Alameda residents drive alone to Oakland. Combined with increasing traffic along Interstate-880, the car-centric daily commute results in traffic congestion at bridge and tube crossings. Expected growth in population and jobs will worsen congestion if transportation remains status quo. Furthermore, it is difficult to cross the estuary to/from Oakland for people on a bike or walking, especially in the west end where the only option is a narrow pathway through the Webster/Posey Tubes.

This strategy improves access to/from Oakland and BART so as to offer residents, employees and visitors fast, safe, and reliable options now and for years to come. Concurrently, the projects and programs in this strategy also will make it attractive for employees in Alameda to shift to transit, bicycling and carpooling.

### ➔ KEY ISSUES

The following are key issues to be addressed by this strategy:

1. **Bus speeds to Oakland need to be faster.** Congestion slows bus speeds to/from Oakland.
2. **Buses to Oakland and BART need to be more reliable and frequent.** Buses are not as reliable and frequent compared to driving. In the telephone survey, 40 percent of drive alone survey respondents stated that “transit service is not frequent enough” as one reason why the respondent drives to work.
3. **Boosting public perception and awareness of public bus options will help increase ridership.** Currently, there is a lack of public awareness and a poor perception of public transit. Coupled with improved transportation options, an awareness campaign will educate and empower community members to choose more sustainable ways of traveling.
4. **Including existing residences and business in TDM programs will increase their reach and effectiveness.** Discount bus pass programs need to be available to more Alameda residents and employees. Most TDM transit incentive tools are focused on new development and existing developments do not have program participation options. Expanding participation to existing businesses and residential areas will help them gain access to more transportation options such as discounted bus passes.
5. **Improving estuary crossing access through Webster/Posey Tubes for people bicycling will make it easier to bike on/off the island.** Due to the narrow pathway within the Webster/Posey tubes, it is difficult and uncomfortable to use.
6. **Improve bicycle and pedestrian access to and over bridges.** Connections across bridges connecting to/from Oakland can be difficult with narrow walkways and no bicycle lanes.

## ➔ RELATED PROJECTS AND PROGRAMS

The following are related projects and programs that address the key issues of this strategy:

- **Alameda Point Bus Rapid Transit Service.** This project will provide bus service with 15-minute peak frequency and the construction of bus-only lanes on Appezzato Parkway, a major east-west thoroughfare, between Webster Street and Main Street.
- **Bicycle and Pedestrian Corridor Improvements.** This project will close gaps in the current bicycle and pedestrian network.
- **Bicycle Master Plan and Design Guidelines Update and Vision Zero Safety Policy/Plan.** This effort will update the City's Bicycle Master Plan (adopted 2010), including updating the vision, goals and policies, identifying bicycle network gaps, prioritizing projects, and developing implementation and funding strategies that promote bicycling.
- **Bikes in Buses through Webster/Posey Tubes.** This effort will involve working with AC Transit to allow bikes inside buses through the Webster/Posey tubes
- **Bus Stop improvements.** This project will improve bus stops to enhance rider comfort and the speed of buses at stops.
- **Citywide Transportation Management Association.** This effort will establish a combined Transportation Management Association (TMA) to administer TDM programs throughout the city.
- **EasyPass Expansion.** This improvement will expand the EasyPass program for discounted bus passes beyond new developments and the current participants to existing businesses, residents, and homeowner associations (HOAs).
- **Estuary Water Shuttle Crossing or WETA Ferries to Oakland.** This improvement will provide a water shuttle (or water taxi) for bicyclists and pedestrians across the estuary.
- **Faster Line 51A Bus Service.** This project will improve the speed of Line 51A bus service by buses alternating or skipping stops or by acting similar to a rapid such as 72R and only stopping at key destinations.
- **Increase Frequency and Span of Service for Local Bus Routes.** This project will provide increased service frequencies and span for local bus routes serving Alameda and Oakland.
- **Island Drive and Westline Drive Bus Lanes.** This project will include the installation of bus lanes at two key segments to allow buses to bypass traffic at intersections.
- **Miller-Sweeney Multimodal Lifeline Bridge.** This improvement will incorporate multimodal designs for the reconstruction of the Miller-Sweeney Bridge Lifeline Bridge, including bus-only lanes, bikeways and walkways.
- **Pedestrian Master Plan and Design Guidelines Update and Vision Zero Safety Policy/Plan.** This effort will update the City's Pedestrian Master Plan (adopted in 2009), including updating the vision, goals and policies, identifying pedestrian gaps, prioritizing projects, and developing implementation and funding strategies.
- **Regional Transit Hub Connector Bus Service.** This new service will provide a cross-island bus route with 20-minute peak frequency between the Main Street Ferry Terminal and Fruitvale BART.
- **Shared Ride Service for Seniors and People with Disabilities.** Alameda will consider subsidizing shared rides for seniors and people with disabilities either with traditional taxi companies or TNCs.
- **TDM Ordinance Update.** This improvement will update the existing TDM Ordinance to reflect revised standards, phasing, and tools.
- **Transit Signal Priority and Adaptive Traffic Signal Control.** This effort involves the installation of transit signal priority (TSP) and adaptive traffic signal (ATS) controls around Alameda to improve the performance of buses
- **Transportation Awareness Campaign.** This improvement will increase transportation awareness in Alameda through media and public relations campaigns.
- **Transportation Partnerships with Existing Businesses and Residences.** Expand the reach of TDM programs by partnering with existing businesses and residences to offer incentives, discounted bus passes, and information.

*Note: Additional project details provided in Chapter 4.*



## STRATEGY #2 EXPAND TRANSIT AND CARPOOLS TO/FROM SAN FRANCISCO

The transit mode share of Alameda residents commuting to/from San Francisco is high (78 percent); however, these transit options are often congested and are not expected to meet future demand. AC Transit Transbay buses and WETA ferries have experienced growth in ridership resulting in Transbay buses and ferry parking facilities that are at capacity and a renewed interest in improving access to the existing and proposed ferry terminals. Expanding the existing carpool network and transit services, and improving access to ferry terminals will ensure continued growth in transit ridership.



Photo source: CDM Smith, Inc.

### ➔ KEY ISSUES

The following are key issues to be addressed by this strategy:

1. **Accommodate more people commuting to/from San Francisco.** Between 2010 and 2014, travel between Alameda and San Francisco has increased with 1,700 more people living in Alameda and working in San Francisco.
2. **Transit, bicycle and pedestrian access to ferry terminals needs to be improved.** Since the ferry terminals are located in the far extremes of Alameda, improved access is needed to make it easier to take the ferry.
3. **Boosting awareness of transportation options will help increase transit ridership and carpooling.** There is a lack of public awareness of transit and carpooling options to/from San Francisco.
4. **Transbay bus speeds need to be faster.** Slow speeds for Transbay buses is in part caused by traffic congestion at estuary crossings.
5. **Providing carpool lanes and more pickup spots will make it easier to carpool.** Carpooling to San Francisco occurs at “casual carpool” formal stops on Santa Clara Avenue in the west end and on Encinal Avenue in downtown Alameda and informally at bus stops along Transbay lines. New carpool services such as Scoop and Waze allow carpool passengers and drivers to find matches on third-party apps.

## ➔ RELATED PROJECTS AND PROGRAMS

The following are related projects and programs that address the key issues of this strategy:

- **Bus Stop improvements.** This project will improve bus stops to enhance rider comfort and the speed of buses at stops.
- **Casual Carpool Additional Pickup Locations.** This improvement identifies additional locations for casual carpool where commuters can meet and continue on their trip.
- **Citywide Transportation Management Association.** This effort will establish a combined Transportation Management Association (TMA) to administer TDM programs throughout the city.
- **Constitution Way Carpool Lane.** This improvement will create a carpool lane for three or more occupants in a vehicle on Constitution Way to bypass traffic approaching the Posey Tube.
- **Crosstown Express Bus Service.** This new service will provide a cross-island bus route with 20-minute peak frequency between the Main Street Ferry Terminal and Harbor Bay.
- **EasyPass Expansion.** This improvement will expand the EasyPass program for discounted bus passes beyond new developments and the current participants to existing businesses, residents, and homeowner associations (HOAs).
- **Faster Line 51A Bus Service.** This project will improve the speed of Line 51A bus service by buses alternating or skipping stops or by acting similar to a rapid such as 72R and only stopping at key destinations.
- **Harbor Bay Ferry Terminal Access and Parking Management Improvements.** This effort will improve multimodal access to the station and appropriately managing parking will help increase ridership and minimize neighborhood impacts.
- **Increase Frequency and Span of Service for Ferry Service.** The improvement will provide increased peak frequency and expanded span of service for ferry service, consistent with WETA's 15/30 Strategic Plan.
- **Increase Frequency and Span of Service for Transbay Bus Service.** The improvement will increase the frequency and span of service for Transbay buses.
- **Island Drive and Westline Drive Bus Lanes.** This project will include the installation of bus lanes at two key segments to allow buses to bypass traffic at intersections.
- **Main Street Ferry Terminal Access and Parking Management Improvements.** This effort will improve multimodal access to the station and appropriately managing parking will help increase ridership.
- **Miller-Sweeney Multimodal Lifeline Bridge.** This improvement will incorporate multimodal designs for the reconstruction of the Miller-Sweeney Bridge Lifeline Bridge, including bus-only lanes, bikeways and walkways.
- **New Seaplane Lagoon Ferry Terminal and Service.** This project will provide ferry access to residents of the growing West Alameda neighborhood, including Alameda Point.
- **Regional Transit Hub Connector Bus Service.** This new service will provide a cross-island bus route with 20-minute peak frequency between the Main Street Ferry Terminal and Fruitvale BART.
- **TDM Ordinance Update.** This improvement will update the existing TDM Ordinance to reflect revised standards, phasing, and tools.
- **Transit Signal Priority and Adaptive Traffic Signal Control.** This effort involves the installation of transit signal priority (TSP) and adaptive traffic signal (ATS) controls around Alameda to improve the performance of buses
- **Transportation Awareness Campaign.** This improvement will increase transportation awareness in Alameda through media and public relations campaigns.
- **Transportation Partnerships with Existing Businesses and Residences.** Expand the reach of TDM programs by partnering with existing businesses and residences to offer incentives, discounted bus passes, and information.

*Note: Additional project details provided in Chapter 4.*



## STRATEGY #3 EXPAND TRANSIT AND ACHIEVE A LOW-COST OR “FREE” RIDER EXPERIENCE WITHIN ALAMEDA

The current mode share of people riding the bus within Alameda is 5 percent for commuters and 2.6 percent of all trips (2015 AC Transit ridership, 2010 CTPP). The bus network is underutilized because there is a lack of awareness about bus options, and riding the bus is perceived as inconvenient, uncomfortable, and unreliable. Improving bus service can make Alameda safer and more welcoming to people who live, work, learn and visit in Alameda. Offering bus pass discounts and faster, more frequent and reliable bus service can promote bus use by creating a low-cost or “free” rider experience.



Photo source: City of Alameda

### ➔ KEY ISSUES

The following are key issues to be addressed by this strategy:

1. **Bus speeds within Alameda need to be faster with more direct routes.** Congestion and frequent bus stops contribute to slow bus speeds and limit the viability of buses as an alternative mode to people who typically drive. Bus travel between some parts of Alameda require multiple transfers, which can be time-consuming.
2. **Buses within Alameda need to be more reliable and frequent and with a longer span of service.** Infrequent buses, reliability issues caused by congestion, and limited span of service can make it inconvenient to use the bus.
3. **Boosting public perception and awareness of public bus options will help increase ridership.** There is a lack of public awareness and poor perception of using bus service within Alameda. Coupled with improved transit options, an awareness campaign will educate and empower community members to choose transit.
4. **Including existing residents and businesses in TDM programs will increase their reach and effectiveness.** Discount bus pass programs need to be available to more Alameda residents and employees. Most TDM transit incentive tools are focused on new development and existing developments do not have program participation options. Expanding participation to existing businesses and residential areas will help them gain access to more transportation options such as discounted bus passes.
5. **Improving affordable door-to-door options for seniors and people with disabilities.** New shared ride services such as LyftLine, UberPOOL or a taxi equivalent could be subsidized to provide seniors and people with disabilities with more affordable door-to-door options.

## ➔ RELATED PROJECTS AND PROGRAMS

The following are related projects and programs that address the key issues of this strategy:

- **Alameda Point Bus Rapid Transit Service.** This project will provide bus service with 15-minute peak frequency and the construction of bus-only lanes on Appezzato Parkway, a major east-west thoroughfare, between Webster Street and Main Street.
- **Bus Stop improvements.** This project will improve bus stops to enhance rider comfort and the speed of buses at stops.
- **Citywide Safe Routes to School Audits and Improvements.** This improvement will build on the countywide Safe Routes to School Program for all schools, including public and private, to reduce vehicle trips to and from schools, and to improve safety around schools.
- **Citywide Transportation Management Association.** This effort will establish a combined Transportation Management Association (TMA) to administer TDM programs throughout the city.
- **Crosstown Express Bus Service.** This new service will provide a cross-island bus route with 20-minute peak frequency between the Main Street Ferry Terminal and Harbor Bay.
- **EasyPass Expansion.** This improvement will expand the EasyPass program for discounted bus passes beyond new developments and the current participants to existing businesses, residents, and homeowner associations (HOAs).
- **Faster Line 51A Bus Service.** This project will improve the speed of Line 51A bus service by buses alternating or skipping stops or by acting similar to a rapid such as 72R and only stopping at key destinations.
- **Increase Frequency and Span of Service for Local Bus Routes.** This project will provide increased service frequencies and span for local bus routes serving Alameda and Oakland.
- **Increase Frequency and Span of Service for Transbay Bus Service.** The improvement will increase the frequency and span of service for Transbay buses.
- **Island Drive and Westline Drive Bus Lanes.** This project will include the installation of bus lanes at two key segments to allow buses to bypass traffic at intersections.
- **Transit Signal Priority and Adaptive Traffic Signal Control.** This effort involves the installation of transit signal priority (TSP) and adaptive traffic signal (ATS) controls around Alameda to improve the performance of buses

*Note: Additional project details provided in Chapter 4.*



## STRATEGY #4 IMPROVE BICYCLE AND PEDESTRIAN SAFETY WITHIN ALAMEDA

Alameda has a robust network of sidewalks and paths for people interested in walking whereas the bicycle network in Alameda is incomplete in places. For commuting, 15 percent of people who live and work within Alameda commute by walking or bicycling. The perception of safety for bicycling is that most Alamedans are interested but concerned due to the lack of bicycling infrastructure. The safety concerns for people walking relate mainly to street crossings at intersections with visibility issues and speeding by motorists as common complaints. Gaps in accessible routes with the need for improved curb ramps, sidewalk repairs and enhanced signals make travel for individuals with disabilities unnecessarily difficult.



Photo source: CDM Smith

### ➔ KEY ISSUES

The following are key issues to be addressed by this strategy:

1. **Bicycle and pedestrian safety is a key concern for Alamedans.** Alamedans are “interested but concerned” about bicycling and want more bikeways with 31 percent of public survey respondents stating that poor safety for bicyclists is an issue. For pedestrian safety, 24 percent of respondents stated that it is a “major issue” or an “issue.” The gaps in the bicycle and pedestrian networks need to be connected.
2. **Bicycle and pedestrian plans and design guidance need to be updated.** The bicycle and pedestrian master plans provide guidance and standards on the location and design of routes throughout the city. These documents need to be updated to include current needs and best practices.
3. **Visitors and commuters to Alameda need access to bicycles within Alameda.** Alameda does not currently participate in any bike share programs and people arriving to Alameda do not have access to temporary or rental bicycles, which are common now in Oakland and San Francisco.

## ➔ RELATED PROJECTS AND PROGRAMS

The following are related projects and programs that address the key issues of this strategy:

- **Bicycle and Pedestrian Corridor Improvements.** This project will close gaps in the current bicycle and pedestrian network.
- **Bicycle Master Plan and Design Guidelines Update and Vision Zero Safety Policy/Plan.** This effort will update the City's Bicycle Master Plan (adopted 2010), including updating the vision, goals and policies, identifying bicycle network gaps, prioritizing projects, and developing implementation and funding strategies that promote bicycling.
- **Bike Share.** This improvement will implement a bike share program as part of the Regional Bike Share Program or as part of a standalone dockless bike share system for Alameda.
- **Citywide Safe Routes to School Audits and Improvements.** This improvement will build on the countywide Safe Routes to School Program for all schools, including public and private, to reduce vehicle trips to and from schools, and to improve safety around schools.
- **Citywide Transportation Management Association.** This effort will establish a combined Transportation Management Association (TMA) to administer TDM programs throughout the city.
- **Pedestrian Master Plan and Design Guidelines Update and Vision Zero Safety Policy/Plan.** This effort will update the City's Pedestrian Master Plan (adopted in 2009), including updating the vision, goals and policies, identifying pedestrian gaps, prioritizing projects, and developing implementation and funding strategies.
- **Vision Zero Safety Improvements and Traffic Calming.** This improvement will increase safety through several capital improvements, including new bikeways, reduced vehicle travel lanes, pedestrian improvements, and realigned streets.

*Note: Additional project details provided in Chapter 4.*



## STRATEGY #5 IMPROVE MOBILITY FOR ALL MODES WITHIN ALAMEDA

This strategy relates to issues that impact mobility for more than one mode within Alameda, including traffic calming, safe routes to school, transportation technology and parking management. For traffic calming, speed is a contributing factor to severe injuries and fatalities, which are avoidable with improved streets designed foremost to reduce speeds. According to the National Highway Traffic Safety Administration, a person who is hit while walking in a 30 miles per hour (mph) zone is three times more likely to die than someone walking and hit in a 25 mph zone. Most of Alameda streets have a maximum speed limit of 25 mph, which is an ideal speed for the comfort of all street users including people who drive, walk or bike. Nevertheless, parents often choose to drive their children to school because there are limited alternatives, speeding issues or there is a perception of safety concerns. Through traffic calming and creating safer school routes, car congestion around schools will be alleviated as more children walk or bike to/from school without adult supervision.

Transportation technology has played a key role in shaping the way we live and is expected to continue to do so at an even faster pace with new carpooling and ride hailing apps and the introduction of connected and autonomous vehicles as prominent examples. By staying informed, educating

community members and upgrading infrastructure, Alameda will be able to take advantage of these new technologies so as to improve safety and access or to reduce traffic congestion, greenhouse gas emissions and heat island impacts.

An example of technology advances is parking management with the new parking apps, dynamic parking pricing capabilities and enforcement processes. Currently in Alameda, there is an abundance of free or low-cost parking in many parts of Alameda, thus incentivizing driving. In business districts, areas of high parking demand can exceed supply, which in turn limits customer access and causes congestion by drivers looking for a parking space. Regulated parking using new technologies will reduce incentives to driving, will make parking more available so as to achieve the City's goal of 85 percent parking occupancy on every block, will reduce congestion, and will generate income for the city through parking fees, which will provide more revenue for additional services such as more street trees, sidewalk repair or police enforcement. Best practices cities such as San Francisco have achieved their occupancy goals with demand based parking – charging more for high demand parking spots at peak times. Other best practices include new technologies for payment systems, enforcement and drivers to show parking availability.

### ➔ KEY ISSUES

The following are key issues to be addressed by this strategy:

1. **An overarching policy for improving safety needs to be adopted.** The City does not currently have a Vision Zero policy, which prioritizes safety on streets and public rights-of-way and works to eliminate severe injury and fatal collisions.
2. **Speeding and safety issues at key locations need to be addressed.** Central Avenue, Clement Avenue, Tilden Way, Stargell Avenue, Main Street and Otis Drive have been identified for roadway safety or traffic calming improvements.
3. **Infrastructure for new transportation technologies needs to be planned for and implemented within Alameda.** Staying informed, educating community members and adapting to new transportation technologies will help the city meet its goals of improving safety, providing more transportation options and reducing our carbon footprint.

*Key issues continued on next page.*

## → KEY ISSUES

4. **Bicycling, walking, carpooling, and bus access to schools needs to be improved.** Significant bottlenecks form during morning and afternoon school drop-off and pick-up times, especially at local magnet and charter schools that have a citywide enrollment. A total of 35 percent of telephone respondents stated that traffic from drop-off or pick-up at schools is an issue.
5. **Parking management needs to be implemented to ensure parking supply and demand are balanced.** There is an abundance of free or low-priced parking in many parts of Alameda, thus making it attractive to drive. The City's policies support parking management and pricing with a goal of 85 percent parking occupancy on any given block. A total of 65 percent of telephone respondents stated that free parking is a key reason why they choose to drive to work.

## → RELATED PROJECTS AND PROGRAMS

The following are related projects and programs that address the key issues of this strategy:

- **Citywide Safe Routes to School Audits and Improvements.** This improvement will build on the countywide Safe Routes to School Program for all schools, including public and private, to reduce vehicle trips to and from schools, and to improve safety around schools.
- **Citywide Transportation Management Association.** This effort will establish a combined Transportation Management Association (TMA) to administer TDM programs throughout the city.
- **New Technologies and Innovations.** This effort will develop a policy and implementation plan for incorporating new technology upgrades, including connected vehicle and automated vehicle technology and improving traffic signals to incorporate the latest best practices.
- **Parking Management and Demand Pricing.** This effort includes establishing a parking management program with techniques to improve parking efficiency, effectively manage parking resources, and adapt to changing travel behavior.
- **Parking Policies for New Development.** New policies may include unbundling parking, parking cash-out programs, priced off-street parking, and review of current zoning requirements.
- **Shared Ride Service for Seniors and People with Disabilities.** Alameda will consider subsidizing shared rides for seniors and people with disabilities either with traditional taxi companies or TNCs.
- **TDM Ordinance Update.** This improvement will update the existing TDM Ordinance to reflect revised standards, phasing, and tools.
- **Transportation Awareness Campaign.** This improvement will increase transportation awareness in Alameda through media and public relations campaigns.
- **Transportation Partnerships with Existing Businesses and Residences.** Expand the reach of TDM programs by partnering with existing businesses and residences to offer incentives, discounted bus passes, and information.
- **Vision Zero Safety Improvements and Traffic Calming.** This improvement will increase safety through several capital improvements, including new bikeways, reduced vehicle travel lanes, pedestrian improvements, and realigned streets.

*Note: Additional project details provided in Chapter 4.*



## EVALUATION

Near-term and mid-term projects and programs were evaluated based on their relative effectiveness related to mode shift, climate change, equity, safety, and cost. Transit, bicycle/pedestrian, TDM, and multimodal improvements were evaluated using the below evaluation criteria to gauge if proposed improvements and strategies meet the goals and objectives.

- **Mode Shift:** Measure shift from drive alone to other modes
- **Climate Change:** Assess the impact on greenhouse gas emissions
- **Equity:** Assess the impact on ADA compliance, low-income and minority populations
- **Safety:** Assess the impact on safety for all street users

The evaluation shows that mode shift targets can be met with implementation of the recommended projects and programs. Additionally, the projects and programs contribute to greenhouse gas reductions, provide an equitable distribution of improvements, and improve safety.

Long-term projects were not included in the evaluation for meeting the goals because most would not likely be implemented by 2030. The eventual implementation of any or all of these projects could significantly help the City meet or exceed the goals.

## Summary of Findings

Regarding mode shift, implementation of the projects and programs would meet or exceed mode share targets.

- **Goal 1 Estuary Crossings:** An increase in non-drive alone person trips from 5,200 to 6,900 during the weekday AM peak hour, increasing non-drive alone mode share from 27 to 35 percent can be met by implementing the proposed strategy.
- **Goal 2 Within Alameda:** An increase in non-drive alone person trips from 24,200 to 27,500 during typical weekdays, increasing non-drive alone mode share to 37 to 42 percent can be met by implementing the proposed strategy.

The recommended improvements will contribute to reductions in CO2 emissions based on fewer drive alone trips and vehicle miles traveled (VMT) of those choosing to bicycle, walk, take transit, or carpool instead of driving alone.

- Annual reduction of between 5,900 and 14,000 metric tons of carbon dioxide, which represents 2.7 to 6.6 percent reduction from 2010 levels of carbon dioxide produced by transportation activities (Alameda Climate Action Plan, 2010).

As part of the evaluation process, proposed projects were analyzed for their potential impact on minority and low-income Alameda residents.

- 14 of 27 projects (52 percent) improve access for areas with higher concentrations of minority populations and/or concentrations of low-income populations.

Projects and programs were assessed to determine if they contribute to safety improvements for walking, bicycling, carpooling, or taking transit.

- 11 of 30 projects (37 percent) will include safety improvements and 100 percent of projects will adhere to best practices for safety in design standards.

# CHAPTER 4



*Photo source: H. Der*

## IMPLEMENTATION OF PROJECTS AND PROGRAMS



## CHAPTER 4: IMPLEMENTATION OF PROJECTS AND PROGRAMS

Bridging the gap between planning and action is critical to this planning process. Implementation of this plan relies on multiple jurisdictions and agencies. Furthermore, funding for the strategies may be acquired from a variety of sources, including local, regional, state and federal sources. This chapter describes the specific projects, programs, and actions that the City will implement to increase transportation choices, and to reduce drive alone trips. This chapter also describes a plan of action to establish an implementation process and timeline, secure commitments by lead agencies and project partners, and pursue required funding.

This chapter includes the following sections:

- City Administration
- Funding Sources
- Implementation Priorities
- Projects and Programs

### CITY ADMINISTRATION: MANAGING AND MONITORING TRANSPORTATION EFFORTS

With multiple lead agencies - the City, Caltrans, AC Transit, WETA, Alameda CTC and the Transportation Management Associations (TMAs) - carrying out transportation improvements, effectively managing and monitoring transportation programs is a complex task that needs ongoing resources to address transportation issues and to monitor and evaluate performance. Additionally, it takes dedicated staff resources to effectively implement projects from beginning to end, including planning, outreach, environmental review, design, and construction of transportation projects.

In addition to specific operational and capital improvements to transportation services and facilities, ongoing review and management of the transportation goals and strategies are necessary to ensure that projects and programs adequately reflect the needs of the community.

Specific actions for City staff include the following:

- Performance Monitoring, including:
  - Mode shift away from drive alone trips for trips to/from Alameda and within Alameda
  - Transit performance (reliability, ridership, travel time)

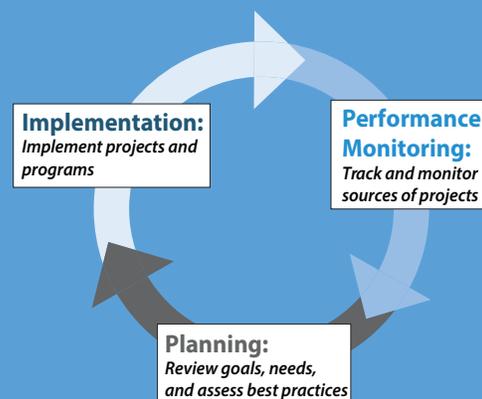
- Parking occupancy (availability)
- TDM program participation and effectiveness
- Bicycle, pedestrian, and motorist counts at major intersections and estuary crossings

### PERFORMANCE MONITORING

Performance monitoring is an important part of tracking the effectiveness of projects and programs. The following indicators have been identified to help track mode shift and meeting targets. Monitoring uses readily available data, including census data, ridership information, and traffic counts.

- Alameda Residents Means of Transportation to work
  - Reduce drive-alone percentage from 60 percent to 53 percent by 2030
- Estuary Crossing Traffic Counts
  - Remain at or below 12,700 drive-alone vehicles at morning peak hour
- Bicycle and Pedestrian Counts
  - Increase by 35 percent over most recent counts by 2030\*
- Transit Performance
  - Increase ridership by 40 percent over 2015 levels by 2030

*\*Existing bicycle and pedestrian counts not available at time of publication.*



- Annual/Bi-annual Review of Transportation Projects:
  - Seek input from community members and transportation partners on transportation issues and priorities
  - Assess priorities and adjust based on performance monitoring and community/stakeholder input
- Best Practice Guidelines and Policies: Incorporate into project approval processes and include best practice materials from local transit operators, Caltrans, and national sources, such as the National Association of City Transportation Officials (NACTO)
- On-going Coordination with Transportation Partners: Includes transit operators, adjacent jurisdictions, the private sector and the general public to align priorities, monies and expertise
- City Staff Resources: Evaluate needs and provide staffing resources to effectively implement projects
- Program Operations: Manage operations of transportation programs such as bicycle locker maintenance, ferry terminal maintenance, Paratransit Program and bike share, if applicable
- Project Funding Applications: Apply for local, state and federal funding for projects and seek partnerships with private entities and others, as appropriate
- Project Implementation: Manage project implementation through all the project stages--plans, concepts, designs and construction--with adequate public involvement and inter-departmental and multiple jurisdictional collaboration

By effectively managing transportation projects, continuing to seek funding, implementing the various stages of projects from plans and concepts to designs and construction and monitoring progress, the City will be able to meet its goals of reducing drive alone trips and of improving transportation options.

## FUNDING PROGRAMS

There are a variety of funding programs for different types of projects, including operating, maintenance, or capital projects. The following list is sourced from Alameda CTC modal plans and MTC's Plan Bay Area, which provide an extensive list of funding programs.

### Federal Programs

- Federal Transit Administration (FTA) Programs
  - Section 5307 (Urbanized Area Formula)
  - Section 5337 (State of Good Repair)
  - Section 5339 (Bus and Bus Facilities)
  - Section 5309 (Capital Investment Grants)
- Federal Highway Administration (FHWA):
  - Fixing America's Surface Transportation Act (FAST)
  - Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD)
  - Highway Trust Fund (Federal Gas Tax)
  - Congestion Mitigation and Air Quality (CMAQ)
- One Bay Area Grant (OBAG) Program: Surface Transportation Program/Congestion Mitigation and Air Quality (STP/CMAQ), Transportation Alternatives (TA)
- United States Department of Transportation (US DOT):
  - Transportation Investment Generating Economic Recovery (TIGER)
  - Transportation Infrastructure Finance and Innovation (TIFIA)

### Local, Regional and State Programs

- Alameda County Transportation Commission (Alameda CTC):
  - Transportation Expenditure Plans
  - Measures B and BB (One cent sales tax for transportation projects in Alameda County)
  - Measure F (\$10 annual vehicle registration fee)
- Bay Area Air Quality Management District (BAAQMD):
  - Transportation Fund for Clean Air (TFCA)
- California Air Resources Board: Greenhouse Gas Reduction Fund (GGRF or Cap and Trade)
- Caltrans:



- Local Assistance Programs
- Active Transportation Program
- Sustainable Transportation Planning Grant Program
- Transportation Development Act (TDA)
- MTC: Regional Measure 2 (RM2)
- State of California:
  - AB 1107 (One-half-cent sales tax for transit projects)
  - SB-1 Transportation funding
  - State Transportation Improvement Program (STIP)
  - State Infrastructure Bank Financing
  - Vehicle Registration
- Public-Private Partnerships: The private sector can help fund transportation infrastructure and services that provide mutual benefits.

## IMPLEMENTATION PRIORITIES

While all projects and programs recommended in the plan are important, completion time frames and priority were identified to provide City staff with direction on which projects to focus on moving forward. Three time frames for completion are identified:

- Near-Term Completion: 1 to 3 Years
- Mid-Term Completion: 3 to 8 Years
- Long-Term Completion: 8 + Years

Each near-term and mid-term project was identified as either High Priority or Medium Priority (long-term projects will need further analysis for an assessment of priority). Project priority was determined using the following five categories: ability to address the goals for trips to/from Alameda and within Alameda, mode shift, carbon dioxide reduction, equity, and safety. Projects with higher than average scores were considered High Priority and projects with lower than average scores were identified as Medium Priority.

A summary of projects and programs is presented in Table 8, and includes a description of the time frame for completion, priority, lead agency, and partner agencies. The projects and programs are organized by completion time-frame and priority and presented in alphabetical order. Figures 18, 19 and 20 are maps of near-term, mid-term, and long-term completion projects and programs. Detailed descriptions of each project are provided in the final section of this chapter, "Projects and Programs."

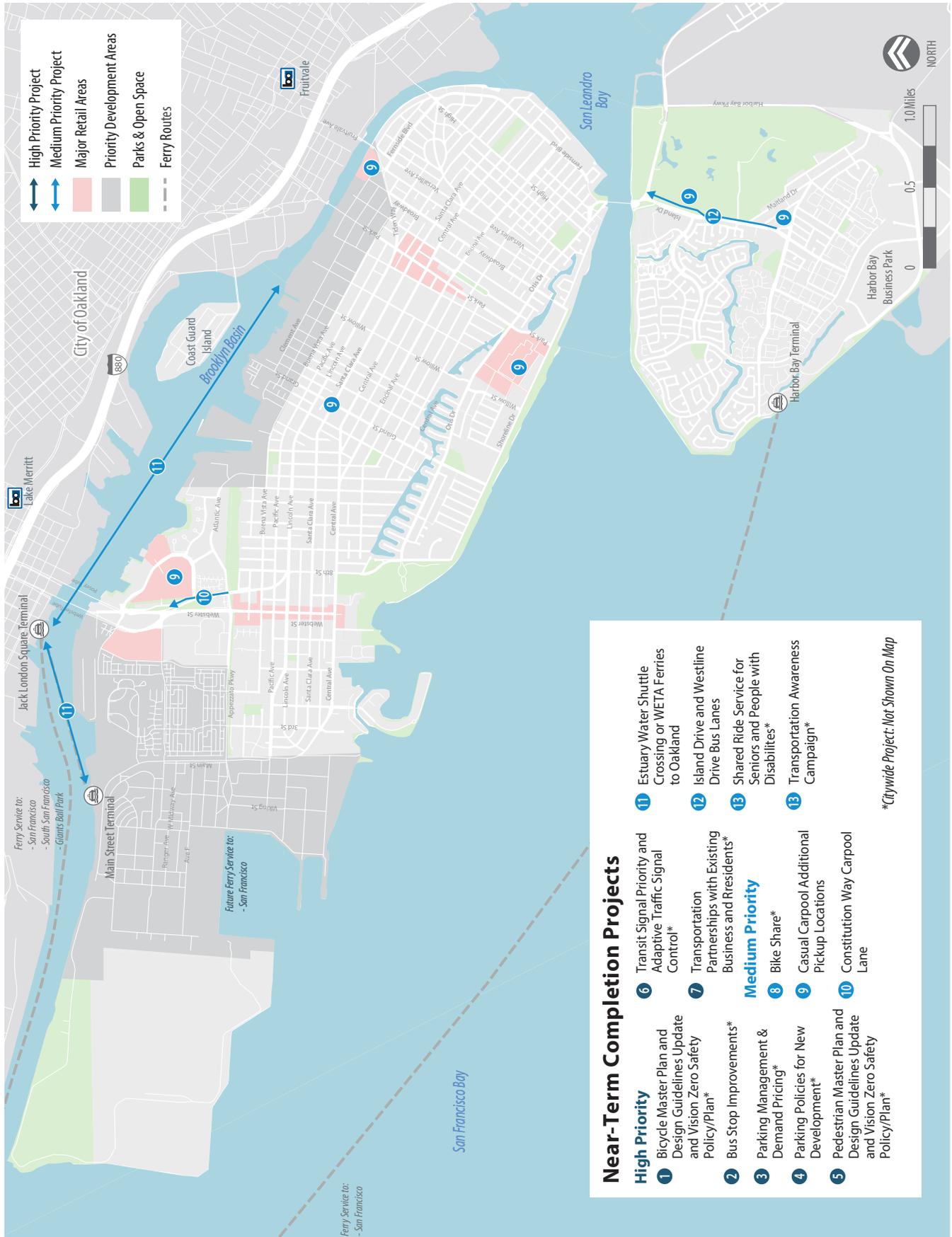
Table 8: Projects and Programs by Completion Time Frame and Priority

| Projects and Programs                     |  | Priority | Lead                             | Partner Agencies  |
|---|--|----------|----------------------------------|---|
| <b>Near-Term Completion (1 - 3 years)</b> |  |          |                                  |   |
| 1   | Bicycle Master Plan and Design Guidelines Update and Vision Zero Safety Policy/Plan    | High     | City of Alameda                  | Caltrans  |
| 2   | Bus Stop improvements  | High     | City of Alameda                  | AC Transit  |
| 3   | Parking Management & Demand Pricing  | High     | City of Alameda                  | WABA, DABA  |
| 4   | Parking Policies for New Development   | High     | City of Alameda                  | TMA   |
| 5   | Pedestrian Master Plan and Design Guidelines Update and Vision Zero Safety Policy/Plan | High     | City of Alameda                  | Caltrans  |
| 6   | Transit Signal Priority and Adaptive Traffic Signal Control                            | High     | City of Alameda                  | AC Transit, Caltrans  |
| 7   | Transportation Partnerships with Existing Businesses and Residences                    | High     | City of Alameda                  | TMA, HOAs   |
| 8   | Bike Share   | Medium   | City of Alameda                  | TMA   |
| 9   | Casual Carpool Additional Pickup Locations   | Medium   | City of Alameda                  | Caltrans  |
| 10  | Constitution Way Carpool Lane  | Medium   | City of Alameda                  | Caltrans  |
| 11  | Estuary Water Shuttle Crossing or WETA Ferries to Oakland                              | Medium   | City of Alameda, WETA, TMA       | City of Oakland, Coast Guard, Oakland waterfront developments |
| 12  | Island Drive and Westline Drive Bus Lanes  | Medium   | City of Alameda                  | AC Transit, Caltrans  |
| 13  | Shared Ride Service for Seniors and People with Disabilities                           | Medium   | City of Alameda                  | Alameda CTC   |
| 14  | Transportation Awareness Campaign  | Medium   | City of Alameda                  | AC Transit, TMA, CASA   |
| <b>Mid-Term Completion (3 - 8 years)</b>  |  |          |                                  |   |
| 15  | Alameda Point Bus Rapid Transit Service  | High     | City of Alameda                  | TMA, AC Transit   |
| 16  | Bicycle and Pedestrian Corridor Improvements   | High     | City of Alameda                  | City of Oakland, Caltrans, Alameda CTC                        |
| 17  | Citywide Safe Routes to School Audits and Improvements                                 | High     | City of Alameda                  | Alameda CTC, Alameda Unified School District, Caltrans        |
| 18  | Crosstown Express Bus Service  | High     | AC Transit                       | City of Alameda, WETA   |
| 19  | EasyPass Expansion   | High     | City of Alameda, TMA, AC Transit | DABA, WABA, HOAs  |



| Projects and Programs                  |  | Priority | Lead                                 | Partner Agencies   |
|--|--|----------|--------------------------------------|--|
| 20                                     | Increase Frequency and Span of Service for Ferry Service   | High     | WETA                                 | City of Alameda  |
| 21                                     | Increase Frequency and Span of Service for Local Bus Routes  | High     | AC Transit                           | City of Alameda  |
| 22                                     | Increase Frequency and Span of Service for Transbay Bus Service  | High     | AC Transit                           | City of Alameda  |
| 23                                     | Miller-Sweeney Multimodal Lifeline Bridge  | High     | Alameda County                       | City of Alameda/<br>Oakland                                      |
| 24                                     | New Seaplane Lagoon Ferry Terminal & Service   | High     | WETA                                 | City of Alameda  |
| 25                                     | Regional Transit Hub Connector Bus Service   | High     | AC Transit                           | City of Alameda, City<br>of Oakland, WETA                        |
| 26                                     | TDM Ordinance Update   | High     | City of Alameda                      | TMA  |
| 27                                     | Vision Zero Safety Improvements and Traffic Calming  | High     | City of Alameda                      | Caltrans   |
| 28                                     | Bikes in Buses through Webster/Posey Tubes   | Medium   | AC Transit                           | City of Alameda  |
| 29                                     | Citywide Transportation Management Association   | Medium   | City of Alameda                      | TMA  |
| 30                                     | Faster Line 51A Bus Service  | Medium   | AC Transit                           | City of Alameda  |
| 31                                     | Harbor Bay Ferry Terminal Access and Parking Management Improvements   | Medium   | WETA                                 | City of Alameda  |
| 32                                     | Main Street Ferry Terminal Access and Parking Management Improvements  | Medium   | WETA, City of<br>Alameda, AC Transit |  |
| 33                                     | New Technologies and Innovations   | Medium   | City of Alameda                      | Caltrans   |
| <b>Long-Term Completion (8+ years)</b> |  |          |                                      |  |
| 34                                     | BART to Alameda  | n/a      | BART                                 | Cities of Alameda,<br>Oakland and San<br>Francisco               |
| 35                                     | Comprehensive Congestion Management, (Citywide EasyPass Expansion, Increase Frequency to 15-minute Maximum for Local Bus Routes) | n/a      | City of Alameda                      | Alameda CTC, TMA,<br>AC Transit                                  |
| 36                                     | New Transit/Bike/Pedestrian Lifeline Tube  | n/a      | Caltrans                             | Cities of Alameda<br>and Oakland, Port of<br>Oakland             |
| 37                                     | Webster/Posey Multimodal Lifeline Tubes  | n/a      | Caltrans                             | City of Alameda/<br>Oakland, Alameda<br>CTC                      |
| 38                                     | West End Bicycle/Pedestrian Crossing   | n/a      | City of Alameda                      | Port of Oakland, City<br>of Oakland, Coast<br>Guard, Alameda CTC |

Figure 18: Near-Term Completion (1 - 3 years)



### Near-Term Completion Projects

#### High Priority

- 1 Bicycle Master Plan and Design Guidelines Update and Vision Zero Safety Policy/Plan\*
- 2 Bus Stop Improvements\*
- 3 Parking Management & Demand Pricing\*
- 4 Parking Policies for New Development\*
- 5 Pedestrian Master Plan and Design Guidelines Update and Vision Zero Safety Policy/Plan\*
- 6 Transit Signal Adaptive Traffic Signal Control\*
- 7 Transportation Partnerships with Existing Business and Residents\*

#### Medium Priority

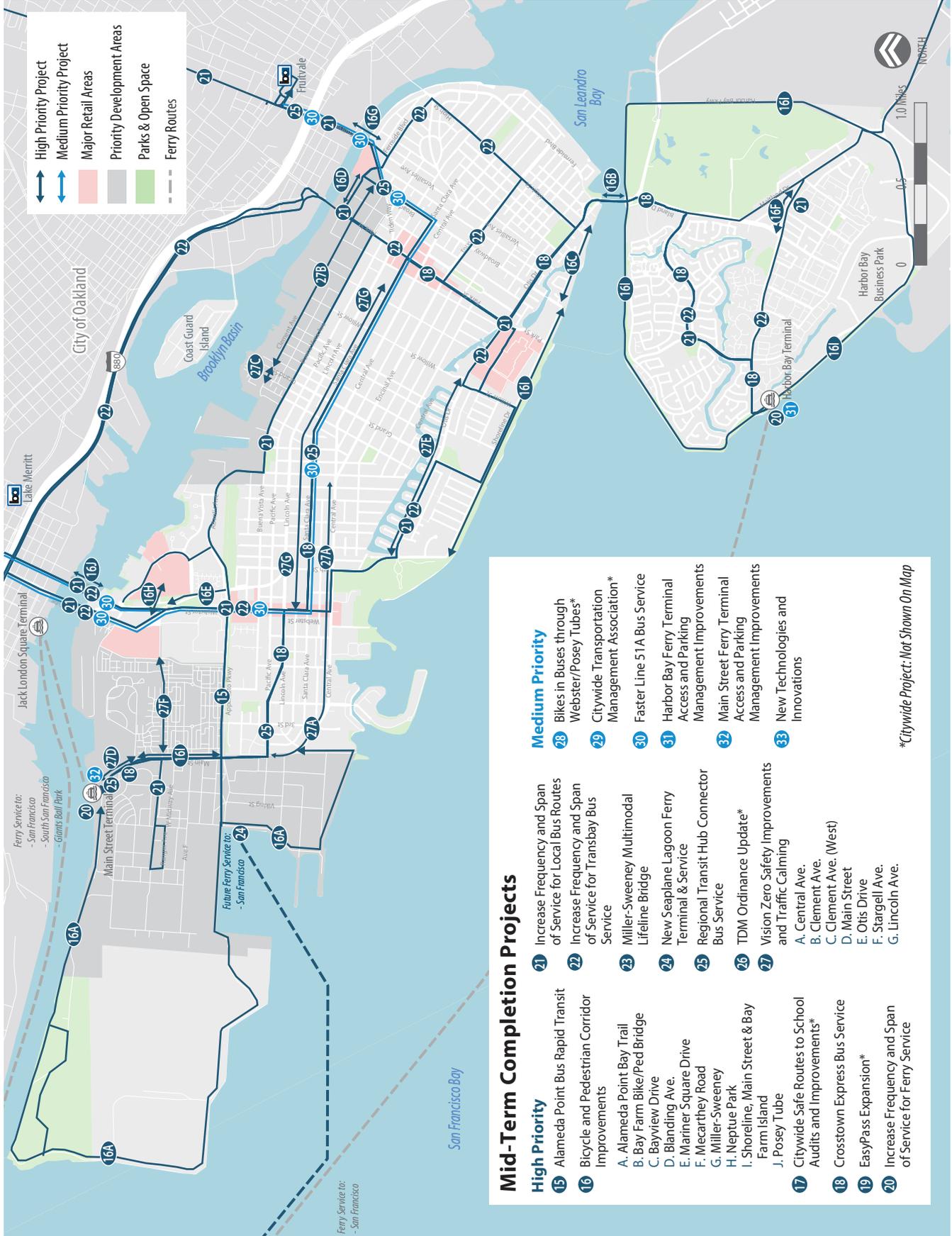
- 8 Bike Share\*
- 9 Casual Carpool Additional Pickup Locations
- 10 Constitution Way Carpool Lane

- 11 Estuary Water Shuttle Crossing or WETA Ferries to Oakland
- 12 Island Drive and Westline Drive Bus Lanes
- 13 Shared Ride Service for Seniors and People with Disabilities\*
- 13 Transportation Awareness Campaign\*

\*Citywide Project: Not Shown On Map



Figure 19: Mid-Term Completion (3 - 8 years)



**Mid-Term Completion Projects**

**High Priority**

- 15 Alameda Point Bus Rapid Transit Improvements
- 16 Bicycle and Pedestrian Corridor Improvements
  - A. Alameda Point Bay Trail
  - B. Bay Farm Bike/Ped Bridge
  - C. Bayview Drive
  - D. Blanding Ave.
  - E. Mariner Square Drive
  - F. MeCarthy Road
  - G. Miller-Sweeney
  - H. Neptune Park
  - I. Shoreline, Main Street & Bay Farm Island
  - J. Posey Tube
- 17 Citywide Safe Routes to School Audits and Improvements\*
- 18 Crosstown Express Bus Service
- 19 EasyPass Expansion\*
- 20 Increase Frequency and Span of Service for Ferry Service

**Medium Priority**

- 21 Increase Frequency and Span of Service for Local Bus Routes
- 22 Increase Frequency and Span of Service for Transbay Bus Service
- 23 Miller-Sweeney Multimodal Lifeline Bridge
- 24 New Seaplane Lagoon Ferry Terminal & Service
- 25 Regional Transit Hub Connector Bus Service
- 26 TDM Ordinance Update\*
- 27 Vision Zero Safety Improvements and Traffic Calming
  - A. Central Ave.
  - B. Clement Ave.
  - C. Clement Ave. (West)
  - D. Main Street
  - E. Otis Drive
  - F. Stargell Ave.
  - G. Lincoln Ave.

**Medium Priority**

- 28 Bikes in Buses through Webster/Posey Tubes\*
- 29 Citywide Transportation Management Association\*
- 30 Faster Line 51A Bus Service
- 31 Harbor Bay Ferry Terminal Access and Parking Management Improvements
- 32 Main Street Ferry Terminal Access and Parking Management Improvements
- 33 New Technologies and Innovations

\*Citywide Project: Not Shown On Map

Figure 20: Long-Term Completion (8+ years)



### Long-Term Completion Projects

- 34** BART to Alameda\*
- 35** Comprehensive Congestion Management, (Citywide EasyPass Expansion, Increase Frequency to 15-minute Maximum for Local Bus Routes)\*
- 36** New Transit/Bike/ Pedestrian Lifeline Tube
- 37** Webster/Posey Multimodal Lifeline Tube
- 38** West End Bicycle/ Pedestrian Crossing

*\*Citywide Project: Not Shown On Map*



## DETAILED PROJECTS AND PROGRAMS

This section describes the specific projects and programs that the City will implement to increase transportation choices and reduce drive alone trips.

Each project and program includes the following descriptors:

- **Community Input.** Relates findings shared by community members through the stakeholder outreach process.
- **Estimated Costs.** Provides an order-of-magnitude planning level cost estimate. These costs are preliminary estimates, and include outreach, design, environmental review, construction, operating, or program costs, as applicable.
- **Status.** Provides a description of the current status of the project, and identifies the policy or origin document for reference.

- **Benchmarks.** Provides 2-year or 5-year benchmarks that the City of Alameda will use to measure progress toward achieving its goals and implementing the strategies.
- **Assessment.** Provides an evaluation based on the projects' ability to meet the following objectives: drive alone trips and greenhouse gas emissions reduced, equity, and safety. The assessment table also includes information on time frame and identifies which of the two goals are applicable. See Table 3 for how the ratings are applied. Also, a cumulative evaluation is presented at the end of this chapter.

The projects and programs are categorized by completion time-frame and priority and presented in alphabetical order.

Table 9: Ranges Used in Project Assessments

| Measure                                     | Assessment Range   |
|---|--|
| Time Frame for Completion                   | Near-Term Completion: 1 to 3 Years<br>Mid-Term Completion: 3 to 8 Years<br>Long-Term Completion: 8 + Years   |
| Goals                                       | <ul style="list-style-type: none"> <li>✓ Goal 1 Estuary Crossings: Decrease drive alone trips at estuary crossings, especially in the peak period.</li> <li>✓ Goal 2 Alameda Trips: Increase the share of walking, bicycling, transit, and carpooling trips within Alameda.</li> </ul> |
| New Access for Jobs and Population (2030)   | <ul style="list-style-type: none"> <li>+ Up to 2,000 population and jobs</li> <li>++ 2,000 to 4,000 population and jobs</li> <li>+++ &gt;4,000 population and jobs</li> </ul>  |
| 2030 Mode Shift (Drive Alone Trips Reduced) | <ul style="list-style-type: none"> <li>+ Up to 100 trips per day (average weekday)</li> <li>++ 100 to 200 trips per day (average weekday)</li> <li>+++ &gt;200 trips per day (average weekday)</li> </ul>  |
| CO2 Annual Reductions (metric tons)         | <ul style="list-style-type: none"> <li>+ Up to 44 metric tons</li> <li>++ 44 to 88 metric tons</li> <li>+++ &gt;88 metric tons</li> </ul>  |
| Equity                                      | <ul style="list-style-type: none"> <li>N/A Does not improve conditions for areas with higher concentrations of low-income and minority populations</li> <li>✓ Improves conditions for areas with higher concentrations of low-income and minority populations</li> </ul>               |
| Safety                                      | <ul style="list-style-type: none"> <li>N/A Does not improve safety</li> <li>✓ Improves safety</li> </ul>   |

# 1. Bicycle Master Plan and Design Guidelines Update and Vision Zero Safety Policy/Plan

This effort will update the City's Bicycle Master Plan (adopted 2010), including updating the vision, goals and policies, identifying bicycle network gaps, prioritizing projects, and developing implementation and funding strategies that promote bicycling. Improvements will seek to reduce drive alone trips and make bicycling safe and convenient for users of all ages and abilities within Alameda and to and from Oakland. It is recommended that the City also updates its current Bicycle Facilities Design Standards, which will include the NACTO bicycle design guidelines for bicycle facilities and a "Vision Zero" policy aimed at eliminating severe injury and fatal collisions in part through the encouragement of island travel speeds at or under 25 miles per hour.

This project will:

- Improve safety for people who are bicycling.
- Improve convenience and access for bicycling within Alameda and to or from Oakland.

## Community Input

- Input during the first round of community and stakeholder meetings resulted in an emphasis on safety in the goals and objectives of the plan. 31 percent of telephone survey respondents stated that "poor safety for bicyclists" is an issue.
- 58 percent of telephone survey respondents said they "strongly agree" or "agree" that Alameda should make it easier to walk, bicycle, or take transit to destinations rather than relying on a car.

## Estimated Costs

- \$150,000 for plan and design guidelines update effort. Costs for full construction/implementation of the plan is not yet determined.

## Status

- This planning process will be an update to the existing Bicycle Master Plan. It will be combined with the Pedestrian Plan and Design Guidelines update effort.
- The project is consistent with General Plan goals 4.3.3.a "Maintain and implement the Bicycle Master Plan..." and 4.3.3.c "Identify gaps and deficiencies in the City's existing bike network and develop strategies to rectify them."

## Benchmarks

- 2-year: Initiate project planning process.
- 5-year: Complete planning process with City Council approval.

Assessment: High Priority

Lead: City of Alameda

| Time Frame              | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction            | CO2 Reductions | Equity<br>Improvement                                   | Safety<br>Improvement |
|-------------------------|-------------------------------|------------------------------|--|----------------|---|-----------------------|
| Near-Term<br>Completion | ✓                             | ✓                            | Specific improvements not yet identified |                | Not yet determined,<br>depends on populations<br>served | ✓                     |



## 2. Bus Stop improvements

This project will improve bus stops to enhance rider comfort and the speed of buses at stops. Improvements may include benches, bike racks, shelters, lighting, street pavement, bus pads or bulb outs, near-level platforms, expanded red curbs at stops, and signs stating “right-turn only – buses exempt” in right turn only lanes before far side bus stops. . The assessment assumes speed improvements at ten stop locations.

This project will:

- Decrease dwell time due to faster boarding and alighting.
- Provide faster bus service from bus queue jump lanes in right-turn only lanes.
- Improve safety and comfort for bus riders.

### Community Input

- 58 percent of telephone survey respondents "Strongly Agree" or "Agree" that Alameda should make it easier to walk, bicycle, or take transit to destinations rather than relying on a car.
- A frequent web survey comment about buses is that respondents want more reliable and faster buses.

### Estimated Costs

- \$300,000 to \$1 million for capital costs. Costs will vary depending on the extent of improvements.

### Status

- This is a new project. Collaboration with AC Transit and adjacent properties will be necessary to identify spot improvements.
- The Transportation Element of the General Plan recommends enhanced bus stops for transit streets.

### Benchmarks

- 2-year: Work with AC Transit to identify locations for improvements. Identify funding opportunities and apply for grant funding.
- 5-year: Complete at least ten bus stop improvements.

Assessment: High Priority

Lead: City of Alameda

| Time Frame              | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement                                   | Safety<br>Improvement |
|-------------------------|-------------------------------|------------------------------|-------------------------------|----------------|---|-----------------------|
| Near-Term<br>Completion | ✓                             | ✓                            | +                             | +              | Not yet determined,<br>depends on populations<br>served | ✓                     |

### 3. Parking Management and Demand Pricing

This effort includes establishing a parking management program with techniques to improve parking efficiency, effectively manage parking resources, and adapt to changing travel behavior. The program will include a parking pricing plan to ensure an 85 percent occupancy rate for parking spaces on each block, which is important so that community members can easily access their destinations. Parking management techniques may include parking pricing, shared parking, location of loading zones, accessible on-street parking spaces and motorcycle parking, as well as considering the implications of ride hailing services and autonomous vehicles on parking demand. The improvement also may include priority parking for carpools and consider implementing fees for charter buses that use park and ride lots and bus stops. The fees collected will go towards maintenance costs and improving transit within Alameda. WETA in collaboration with the City of Alameda is seeking to improve parking management at the ferry terminals with the potential for parking pricing to help fund transportation improvements as shown in the Harbor Bay and Main Street ferry terminal access.

This project will:

- Establish a demand-based cost for parking, which may cause mode shift to carpooling, transit, walking or bicycling.
- Reduce congestion caused by people driving in search of parking.
- Manage parking and curb-use more efficiently.

#### Community Input

- 50 percent of telephone respondents "Strongly Agree" or "Agree" that Alameda should make it easier to drive and park in their city. Typically, community members are in support of free-parking and increased parking capacity rather than pricing parking and limiting supply.
- The web survey respondents stated that they want access to parking and are divided about using parking charges as a disincentive to driving and as an incentive to use other modes.

#### Estimated Costs

- Costs are not yet determined. With additional revenue, costs are typically net positive for the City.

#### Status

- This project has been previously studied in the 2008 Parking Study and is being implemented within the Public Works Department.
- The project is consistent with the City of Alameda General Plan Transportation Element objective 4.2.5. Manage both on-street and off-street parking to support access and transportation objectives."

#### Benchmarks

- 2-year: Establish Parking Pricing Plan, develop curb-use policy, and maintain 85 percent occupancy rate.
- 5-year: Maintain 85 percent occupancy rate; Implement curb management.

Assessment: High Priority

Lead: City of Alameda

| Time Frame              | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|-------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Near-Term<br>Completion | N/A                           | ✓                            | ++                            | ++             | N/A                   | N/A                   |



## 4. Parking Policies for New Development

The availability and cost of parking is an essential component influencing the commute mode choice decision. Parking policies and requirements can contribute to abundant free parking, which tends to encourage driving. The City is already limiting parking while simultaneously planning upgrades to pedestrian, bicycling, and transit infrastructure. These efforts include other parking strategies that reduce drive alone commuting, including:

- Unbundling of parking - Parking spaces appear as a separate line item on lease; number of parking spaces and parking charges to be negotiated between lessor and lessee.
- Parking cash-out programs - Employees can opt-out of receiving a parking space and receive a cash payment in return.
- Priced off-street parking - Charging motorists to park decreases parking demand, which in turn reduces vehicle miles traveled, increases carpooling, and encourages access by other modes.
- Review current zoning - Parking requirements should be reviewed to determine if reductions in the number of spaces required for specific land uses are consistent with the goals of reducing auto reliance. This effort also will apply to reuse or redevelopment of existing land uses.

This project will:

- Encourage the use of bicycling, walking and transit.
- Reduce development costs.
- Create incentives for lower car ownership rates.

### Community Input

- This effort relates to the community emphasis on reducing traffic impacts from new developments.

### Estimated Costs

- There will be minimal planning costs associated with this effort.

### Status

- This is an ongoing effort.
- The project is consistent with the City of Alameda General Plan Transportation Element objectives 4.2.5.b, "Support use of parking in-lieu fees where feasible to increase and encourage public transit options and evaluate the use of shared parking strategies in mixed-use areas," 4.3.1.i, "Develop parking management strategies for both new development projects and, as appropriate, for existing development," 4.3.4, "Manage demand placed on the street system through a TDM program", and 4.4.2, "Ensure that new development implement approved transportation plans."

### Benchmarks

- 2-year: Incorporate parking management into discretionary permits for planning board approval.
- 5-year: Update TDM program ordinance.

Assessment: High Priority

Lead: City of Alameda

| Time Frame              | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|-------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Near-Term<br>Completion | N/A                           | ✓                            | ++                            | ++             | N/A                   | N/A                   |

## 5. Pedestrian Master Plan and Design Guidelines Update and Vision Zero Safety Policy/Plan

This effort will update the City's Pedestrian Master Plan (adopted in 2009), including updating the vision, goals and policies, identifying pedestrian gaps, prioritizing projects, and developing implementation and funding strategies. Like the Bicycle Master Plan Update, improvements will seek to reduce drive alone trips and to make walking safe and convenient for users of all ages and abilities. It is recommended that the City also update its current Pedestrian Design Guidelines, which will include the NACTO design guidelines for pedestrian facilities and a "Vision Zero" policy aimed at fully eliminating severe injury and fatal collisions in part through the encouragement of island travel speeds at or under 25 miles per hour.

This project will:

- Improve safety for people who are walking.
- Improve access for people walking within Alameda and to or from Oakland.
- Encourage walking.

### Community Input

- 24 percent of telephone survey respondents said pedestrian safety is a "Major Issue" or "Issue".
- Community members voiced support for pedestrian safety and improvements at multiple outreach and stakeholder meetings as well as the web survey.

### Estimated Costs

- \$150,000 for plan and design guidelines update effort. Costs for full construction/implementation not yet determined.

### Status

- This planning process will be an update to the existing Pedestrian Master Plan. It is expected to kick off in 2017/2018, and will be combined with the Bicycle Plan and Facility Design Standards update effort to be efficient.
- The project is consistent with the City of Alameda General Plan Transportation Element objective 4.3.2 "Enhance opportunities for pedestrian access and movement by developing, promoting, and maintaining pedestrian networks and environments."

### Benchmarks

- 2-year: Initiate project planning process.
- 5-year: Complete planning process with City Council approval.

### Assessment: High Priority

Lead: City of Alameda

| Time Frame              | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction            | CO2 Reductions | Equity<br>Improvement                                   | Safety<br>Improvement |
|-------------------------|-------------------------------|------------------------------|--|----------------|---|-----------------------|
| Near-Term<br>Completion | ✓                             | ✓                            | Specific improvements not yet identified |                | Not yet determined,<br>depends on populations<br>served | ✓                     |



## 6. Transit Signal Priority and Adaptive Traffic Signal Control

This effort involves the installation of transit signal priority (TSP) and adaptive traffic signal (ATS) controls around Alameda to improve the performance of buses by allowing communication between buses and traffic lights. This technology allows buses and traffic lights to wirelessly communicate and to provide early or extended green time for buses at intersections. The upgrades will improve bus service, making it faster and more reliable. Estimates for time savings are 30 seconds for every mile of TSP/ATS, and assume an average of five miles of bi-directional signal priority for each route.<sup>1</sup>

This project will:

- Increase transit reliability.
- Encourage transit use over driving alone.
- Provide faster bus service.

### Community Input

- 58 percent of telephone survey respondents "Strongly Agree" or "Agree" that Alameda should make it easier to walk, bicycle, or take transit to destinations rather than relying on a car.
- A frequent web survey comment about buses is that respondents want more reliable and faster buses.

### Estimated Costs

- \$500,000 for capital costs

### Status

- This is an ongoing project and was recently installed for AC Transit Line 51A. Partnerships with Oakland and Caltrans are necessary to coordinate signals.
- The project is consistent with the City of Alameda General Plan Transportation Element goals 4.1.6.c "...utilize emerging technologies and Smart Corridor techniques...for the bridges and tubes" and 4.1.1.o.1, "Employ transportation system management measures to improve traffic and transit movements and safety for all modes of travel. For example, coordinating and synchronizing signals."

### Benchmarks

- 2-year: Work with Caltrans, AC Transit, and Oakland to create more detailed work scopes and budget. Identify and apply for grant funding.
- 5-year: Design and construction.

### Assessment: High Priority

Lead: City of Alameda

| Time Frame              | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|-------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Near-Term<br>Completion | ✓                             | ✓                            | +++                           | +++            | ✓                     | N/A                   |

<sup>1</sup> Time Savings Estimate: TCRP Synthesis Report 83, 2010. Bus and Rail Transit Preferential Treatments in Mixed Traffic.

## 7. Transportation Partnerships with Existing Businesses and Residences

This improvement seeks to establish partnerships with existing business associations, neighborhood associations, and others to reduce drive alone trips within and to areas outside of Alameda. Currently, TDM programs focus on new development, leaving existing businesses and residences without useful tools for increasing transportation options. By creating partnerships with business associations and homeowners associations, TDM programs can expand their reach by offering incentives, discounted bus passes, and information to these participants. Business and homeowner association staff can be effective liaisons, and can be trained to implement programs (e.g., distributing transit passes as needed), can serve as an intermediary between employers or employees needing assistance and the City (or a TMA), and can play an important role in conducting annual surveys. The newly expanded Alameda TMA encompasses all recent and in-progress residential AND commercial developments from Lincoln Avenue to the waterfront, and will have the express purpose of providing these services.

This project will:

- Encourage and create incentives for bicycling, walking and taking transit.
- Encourage a reduction in vehicle trips.
- Increase transportation options for local residents and employees.
- Provide information on transportation options.

### Community Input

- Community members responding to the web surveys and meetings are in favor of developing partnerships with private corporations/employers to participate more in TDM program options.

### Estimated Costs

- Up to \$400,000 for project administration and planning (costs combined with Update Existing TDM Ordinance).

### Status

- This is a new project identified as part of this planning process.
- The project is consistent with the City of Alameda General Plan Transportation Element objectives 4.3.4, "Manage demand placed on the street system through a TDM program."

### Benchmarks

- 2-year: Identify and reach out to potential partners.
- 5-year: Form public-private partnerships.

Assessment: High Priority

Lead: City of Alameda

| Time Frame              | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|-------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Near-Term<br>Completion | ✓                             | ✓                            | +++                           | +++            | ✓                     | N/A                   |

## 8. Bike Share

This improvement will implement a bike share program as part of the Regional Bike Share Program or as part of a standalone system for Alameda. The service provides public bicycles that are available as short-term rentals. There are multiple options for administration, including through local TDM programs, regionally as part of the Bay Area Bike Share program, or as a stationless system operated at little or no cost to the city. The system is expected to be used by local residents, employees, visitors and students for short trips between commercial areas or between transit hubs, such as the Main Street Ferry Terminal and College of Alameda. The City is working towards a short-term bike share using a stationless/dockless system with a potential pilot in Alameda Point key areas of the City, such as and the business districts, starting in 2017.

This project will:

- Encourage a reduction in local vehicle trips.
- Assist with first-mile and last-mile connections to transit.
- Encourage transportation options for local residents, visitors and employees.

### Community Input

- When asked if they agree with the statement that "I would use a bike share system in Alameda", 23 percent of telephone survey respondents said they "Strongly Agree" or "Agree"

### Estimated Costs

- Regional bike share program estimated costs assuming 120 bicycles as part of the initial bike share system:
  - \$460,000 to \$720,000 for initial capital costs
  - \$225,000 to \$350,000 for initial annual operating costs
- The stationless system is expected to have little to no cost to the city.

### Status

- This is a new project identified in this planning process and is in response to a City Council referral. A smaller program is part of the Alameda Point Mitigation Program. A feasibility study was done in 2016.

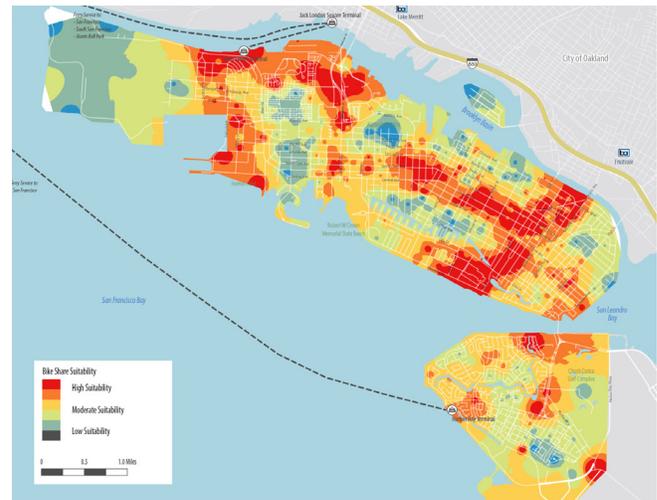
### Benchmarks

- 2-year: Identify bike share provider and confirm service areas. Initiate first phase of project or pilot.
- 5-year: Refine project first phase or pilot.

Assessment: Medium Priority

Lead: City of Alameda

| Time Frame           | Goal 1: To/From Alameda | Goal 2: Within Alameda | Drive Alone Trip Reduction | CO2 Reductions | Equity Improvement | Safety Improvement |
|----------------------|-------------------------|------------------------|----------------------------|----------------|--------------------|--------------------|
| Near-Term Completion | N/A                     | ✓                      | +                          | +              | ✓                  | N/A                |

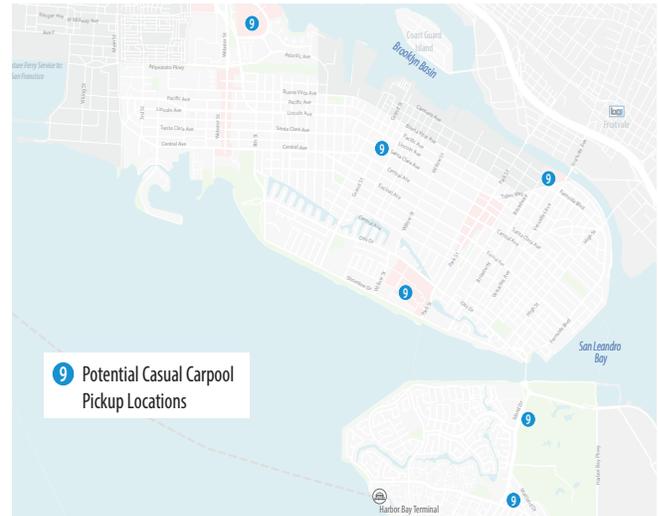


*An examination of potential bike share locations where it would be most likely to succeed was conducted as part of this study. As noted, areas with dark red have higher suitability for accommodating a bike share system. Several factors are included in this analysis, including nearby attraction centers, increased population densities, topography, and higher number of transit connections.*

## 9. Casual Carpool Additional Pickup Locations

Two casual carpool pickup locations exist in Alameda, one at Encinal Avenue and Park Avenue and another at Santa Clara Avenue and Webster Street. Drivers pick up commuters at these locations to meet three person minimum carpool requirements for their Transbay commute. This improvement identifies additional locations for casual carpool where commuters can meet and continue on their trip. While no formal study has yet examined the best locations, potential locations include:

- Santa Clara Avenue at Grand Street
- Pavilion Park & Ride on Island Drive
- Mecartney Road/Island Drive area
- South Shore Center area
- Nob Hill shopping area
- Marina Village shopping area
- All Transbay stops signifying where to stand as a casual carpooler such as ahead of the bus flag



This project will:

- Help reduce drive alone trips.
- Encourage carpooling.

### Community Input

- Online survey results showed community members have an interest in pursuing additional casual carpool pickup locations.

### Estimated Costs

- \$50,000 for planning and signage.

### Status

- This is a new project identified in this planning process.
- With the growth of ride sharing and transportation network companies (TNCs), the needs for carpooling are evolving, and will be monitored to determine the future need for additional carpool pickup locations.

### Benchmarks

- 2-year: Solicit input from carpooling community on additional pickup locations.
- 5-year: Complete pickup location improvements.

Assessment: Medium Priority

Lead: City of Alameda

| Time Frame              | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|-------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Near-Term<br>Completion | ✓                             | N/A                          | +                             | +              | N/A                   | N/A                   |



## 10. Constitution Way Carpool Lane

The City of Alameda experiences traffic congestion at choke points located near primary entry/exit points, including Constitution Way. This improvement will create a carpool lane for three or more occupants in a vehicle on Constitution Way to bypass traffic approaching the Posey Tube. The carpool lane will be an additional lane created by narrowing the existing lane and using unused pavement. These improvements will benefit commuters to San Francisco, and will create incentives for carpooling over driving alone, especially during commute hours.

This project will:

- Reduce travel time for people who carpool.
- Encourage a reduction in drive alone trips by encouraging carpooling, especially to San Francisco.

### Community Input

- Online survey results showed community members support carpooling and projects that encourage it.

### Estimated Costs

- \$570,000 for signal improvements, design, engineering, and construction.

### Status

- The project is consistent with the City of Alameda General Plan Transportation Element objective 4.3.1, "Develop programs and infrastructure to encourage the use of high occupancy vehicles."
- This is a new project identified in this planning process.

### Benchmarks

- 2-year: 30 percent design; Work with Caltrans to determine if further study is needed; Apply for grant funding or fold into Alameda CTC's Freeway Access Study project.
- 5-year: 100 percent design and construction.

Assessment: Medium Priority

Lead: City of Alameda



| Time Frame              | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|-------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Near-Term<br>Completion | ✓                             | N/A                          | +                             | +              | N/A                   | N/A                   |

## 11. Estuary Water Shuttle Crossing or WETA Ferries to Oakland

Bicyclists and pedestrians on the west side of Alameda have limited options for connecting to Oakland. This improvement will provide a water shuttle (or water taxi) for bicyclists and pedestrians between the Northern Waterfront/Alameda Landing and Jack London Square in Oakland, and will build on current developer requirements. Once the Seaplane Lagoon ferry service is in operation, estuary water crossings also could be improved via WETA's Main Street service to San Francisco, which could service Oakland before ending in San Francisco in the mornings and could do the reverse in the afternoon/evenings becoming a way for Alameda bicyclists to cross the estuary to/from Oakland during peak hours.

This project will:

- Increase pedestrian and bicyclist connectivity.
- Help reduce drive alone trips to Oakland.
- Provide multimodal transportation options for local residents, employees and visitors.
- Increase resiliency of local transportation network.

### Community Input

- 58 percent of telephone survey respondents "Strongly Agree" or "Agree" that Alameda should make it easier to walk, bicycle, or take transit to destinations rather than relying on a car.
- 61 percent of telephone survey respondents said traffic congestion at island crossings at rush hour is a "Major Issue" or "Issue."

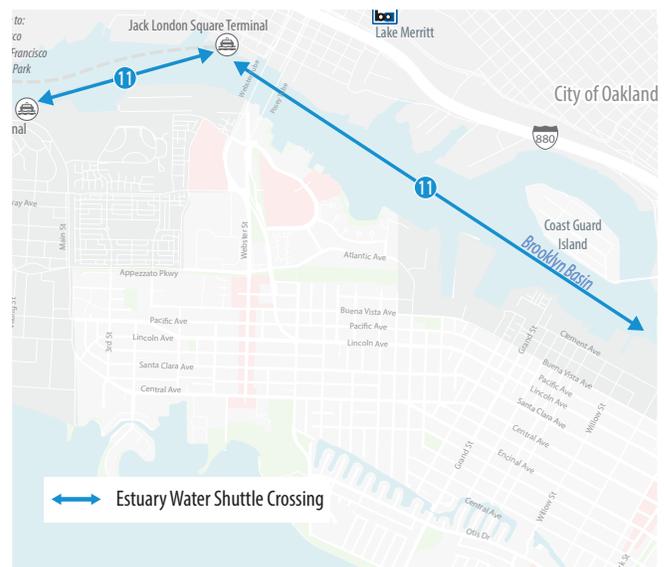
### Estimated Costs

- Costs are not yet determined; up to \$2 million in annual operating costs depending on frequency, routes, and hours of operation.
- \$200,000 for Estuary Water Shuttle Feasibility Study.
- There is no cost of the WETA ferries changing their routing and serving Alameda bicyclists commuting to Oakland.

### Status

- This project has been previously studied in the 2009 Estuary Crossing Study and included in the 2010 Bicycle Master Plan Update. It was recently included as part of the Del Monte development TDM Program.
- The project is consistent with the City of Alameda General Plan Transportation Element objectives 4.3.1, "Develop programs and infrastructure to encourage the use of high occupancy vehicles", and 4.1.1.g, "Work with appropriate regional agencies to identify the feasibility of...expanded ferry options."

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## Benchmarks

- 2-year: Work with developers to identify operator, ongoing budgeting, and funding and implementation plan.
- 5-year: Implement water shuttle/taxi or change in WETA ferry service.

Assessment: Medium Priority

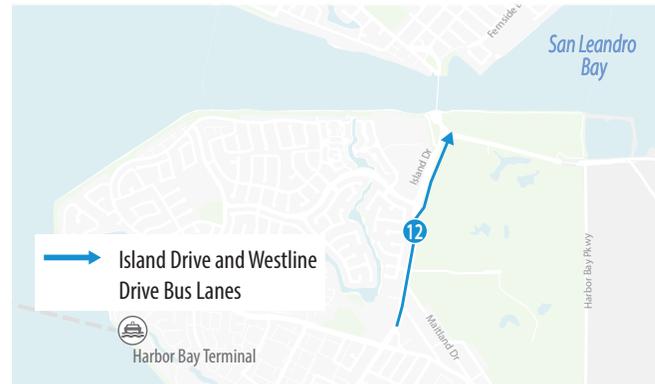
Lead: City of Alameda, WETA and TMA

| Time Frame              | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|-------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Near-Term<br>Completion | ✓                             | N/A                          | +                             | +              | N/A                   | ✓                     |

## 12. Island Drive and Westline Drive Bus Lanes

The quality of bus service in Alameda can be negatively impacted by congestion along major roadways. A bus lane allows buses to bypass traffic backed up before busy intersections and to be first in-line at the traffic signal. This project will include the installation of bus lanes at two key segments to allow buses to bypass traffic at intersections:

- A. Island Drive between Maitland Drive and Doolittle Drive/State Route 61
- B. Eighth Street/Westline Drive, between Otis Drive and Portola Avenue



The bus lane on Island Drive between Maitland Drive and Doolittle Drive/State Route 61 will be in the northbound direction and will allow buses (particularly AC Transit Lines 21 and OX) to save three to four minutes of wait time. The bus lane on Eighth Street/Westline Drive, between Otis Drive and Portola Avenue in the northbound direction, will provide about one minute of travel time savings for the AC Transit Line 20 and Line W buses. The Island Drive bus lane will be accommodated by narrowing the travel lanes and the landscaped median. The Westline Drive bus lane will be accommodated by removing the northbound on-street parking on the east side of the street south of Portola Avenue. No travel lanes will be eliminated for these projects.

This project will:

- Improve travel time and reliability for bus service along the corridor.
- Create incentives for bus usage over driving alone.
- Add capacity in the northbound direction so as not to negatively impact car traffic.

### Community Input

- 58 percent of telephone survey respondents "Strongly Agree" or "Agree" that Alameda should make it easier to walk, bicycle, or take transit to destinations rather than relying on a car.
- One in three of telephone survey respondents said that lack of frequent, fast, and reliable transit service is a "Major Issue" or an "Issue."
- A frequent web survey comment about buses is that respondents want more reliable and faster buses, which also was stated at community meetings.

### Estimated Costs

- Island Drive: \$2,340,000 for design, engineering, and construction.
- Westline Drive: \$340,000 for design, engineering, and construction.

### Status

- This is a new project identified in this planning process. The City of Alameda's Transportation Element of the General Plan supports the implementation of upgraded facilities to improve transit. The project is consistent with goals 4.3.1.b, "Consider the use of strategies to give high priority to high occupancy vehicles at the bridges and tubes", and 4.3.1.j, "implement queue jump lanes and other strategies for improving transit operations."

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## Benchmarks

- 2-year: Work with Caltrain to determine if further study is needed; Apply for grant funding.
- 5-year: Design and construction.

Assessment: Medium Priority

Lead: City of Alameda

| Time Frame              | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|-------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Near-Term<br>Completion | ✓                             | ✓                            | +                             | +              | N/A                   | N/A                   |

## 13. Shared Ride Service for Seniors and People with Disabilities

Expanding transportation options for seniors and people with disabilities is an important part of improving mobility. These populations often can have difficulty driving on their own or accessing public transportation. Around the country and bay area, cities and transportation agencies are working with transportation network companies (TNCs) (e.g. Lyft, Uber) to help improve transportation access for these groups. Alameda will consider subsidizing shared rides for seniors and people with disabilities either with traditional taxi companies, Lyft via their LyftLine service, Uber via their UberPOOL service or another emerging service. Alameda only will consider this service if it can be provided equitably to people in need of a wheelchair lift, which is a requirement of federal and Alameda CTC grants. The City will work with TNCs to expand the fleet of accessible vehicles and search for pilot projects that expand access for shared ride services that are wheel chair accessible.

This project will:

- Expand mobility for seniors and people with disabilities.
- Provide cheaper shared rides.

### Community Input

- In the web survey and at public hearings, community members voiced support for improved transportation options for seniors and people with disabilities.

### Estimated Costs

- There will be minimal planning costs for this effort. Grants for senior taxi subsidies range from \$50,000 to \$150,000 per year.

### Status

- This is a new project identified in this planning process.

### Benchmarks

- 2-year: Initiate project planning process.
- 5-year: Complete planning process with City Council approval.

Assessment: Medium Priority

Lead: City of Alameda

| Time Frame              | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|-------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Near-Term<br>Completion | ✓                             | ✓                            | +                             | +              | ✓                     | ✓                     |



## 14. Transportation Awareness Campaign

This improvement will increase transportation awareness in Alameda through media and public relations campaigns in multiple languages, highlighting the benefits of taking transit, walking and bicycling, providing information, and publicizing incentives and programs for students, employees, visitors, and commuters. Specific improvements may include establishing a website on transportation options for travel within and outside of Alameda, Clipper Card awareness and sign-ups, providing information on carbon footprint of transportation options, identifying bicycling and pedestrian options and safety campaigns, such as rules of the road, and other incentive programs that may be available, such as free or subsidized rides or Guaranteed Ride Home. Transit campaigns will seek to boost ridership on existing AC Transit lines serving Alameda by improving the image and by highlighting the benefits of using public transit. Bicycle education will inform people who bicycle how to bicycle safely and will target people who drive to be aware of people bicycling.

This project will:

- Encourage transit use over driving alone.
- Expand knowledge and information of transportation options.
- Increase pedestrian and bicyclist safety.
- Improve perception of public transportation.
- Educate on rules of the road.

### Community Input

- Web survey respondents and community members at public hearings requested more information on bicycling, walking, carpooling and bus options and to provide financial incentives.
- Attendees at the community workshops noted that they were unaware of the mobility options that are currently available.

### Estimated Costs

- \$50,000 - \$100,000 for campaign efforts.

### Status

- This is a new project identified in this planning process. Financing is expected to be partially provided by impact fees and existing TDM programs. The transportation awareness campaign is included in the City's budget for fiscal years 2017/18 and 2018/19.
- The project is consistent with the City of Alameda General Plan Transportation Element goals 4.3.2.d, "Develop and implement...programs and policies related to encouragement, education and enforcement", 4.3.3a, "Maintain and implement the Bicycle Master Plan...as well as programs and policies relating the encouragement, education, and enforcement", and 4.4.8, "Work with AUSD to include transportation choice awareness in education in the schools".
- Education and awareness are a component of existing bicycle and pedestrian plans.

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*Awareness campaigns will educate community members on the importance of public transit, discuss what options are available to residents, and illustrate many of the benefits provided by riding transit. (Photo source: CDM Smith)*

## Benchmarks

- 2-year: Complete awareness campaign strategy and website in collaboration with the citywide TMA. Conduct annual awareness campaigns, education classes, and incentive programs.
- 5-year: Monitor and initiate phase II of campaign efforts.

Assessment: Medium Priority

Lead: City of Alameda

| Time Frame              | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|-------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Near-Term<br>Completion | ✓                             | ✓                            | +                             | +              | ✓                     | ✓                     |



## 15. Alameda Point Bus Rapid Transit Service

This project includes a bus service with 15-minute peak frequency and the construction of bus-only lanes on Appezzato Parkway, a major east-west thoroughfare, between Webster Street and Main Street. These bus lanes will connect with the existing bus lane on Webster Street leading to the Webster/Posey Tubes and beyond to Oakland and with the dedicated bus lanes that the developer will construct west of the project limit to the Seaplane Lagoon. Appezzato Parkway, which is 0.81 miles in length, will feature dedicated bus lanes, bus stops and signal modifications for transit priority as well as landscaping, lighting, pedestrian improvements, signage and storm water management

This project will:

- Provide bus service to new developments in Alameda Point and existing development in West Alameda.
- Improve travel time and reliability for bus service along Appezzato Parkway.
- Increase transportation options for residents and employees working in West Alameda, the College of Alameda, or Oakland.

### Community Input

- 58 percent of telephone survey respondents "Strongly Agree" or "Agree" that Alameda should make it easier to walk, bicycle, or take transit to destinations rather than relying on a car.
- 61 percent of telephone survey respondents said rush-hour traffic congestion at island crossings are a "Major Issue" or "Issue".
- 15 percent of drive alone telephone survey respondents stated that more public transit routes, closer stops, and fewer transfers would encourage them to take transit.

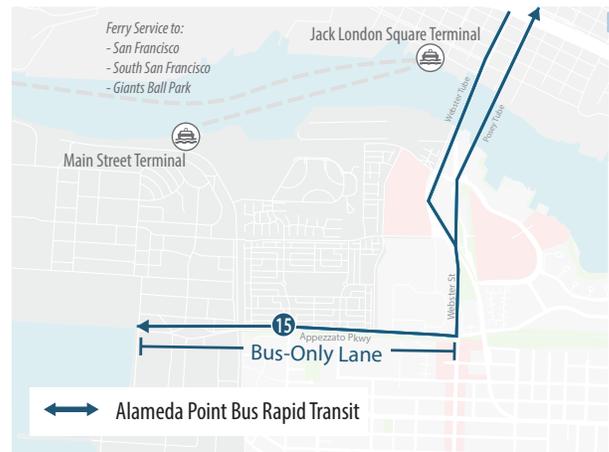
### Estimated Costs

- \$2.1 million in annual operating and maintenance
- \$9 million in upfront capital costs (includes street redesign and construction with bus lanes)

### Status

- This project is funded in Alameda CTC's 2018 CIP and is listed as a named project in the Measure BB Transportation Expenditure Plan. This project also is identified in the Alameda Point TDM Plan and in AC Transit's 2016 Major Corridors Study.
- The bus service will require a memorandum of understanding between AC Transit and the Alameda TMA for a public-private partnership.

*Continued Next Page*



## Benchmarks

- 2-year: Complete community outreach on a corridor concept and recommend it for City Council approval. Complete the preliminary engineering and design.
- 5-year: Complete the construction, project close-out, and evaluation, and operate the bus service.

Assessment: High Priority

Lead: City of Alameda/Alameda TMA/AC Transit

| Time Frame             | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Mid-Term<br>Completion | ✓                             | ✓                            | +++                           | +++            | ✓                     | N/A                   |



## 16. Bicycle and Pedestrian Corridor Improvements

The current bicycle and pedestrian network has some disconnected segments. While the planned Bicycle Master Plan and Pedestrian Master Plan updates will address these issues, some priority gaps already have been identified through previous studies and by this planning process. This project will close key gaps in the current bicycle and pedestrian network by installing new bikeways and pedestrian improvements, maintaining existing paths and studying the feasibility of potential improvements. Previous studies and City efforts have already confirmed locations where safety improvements for bicyclists and pedestrians may be completed. These projects may also be incorporated with Vision Zero plan recommendations.

Streets identified for gap closures related to bicycling and walking include the below list of projects whereas projects that relate to all modes with traffic calming components such as Central Avenue and Clement Avenue are shown in the Traffic Calming/Vision Zero project further in this section:



- A. Alameda Point Bay Trail that will run along the perimeter of Alameda Point
- B. Bay Farm Bike/Pedestrian Wooden Bridge: Retrofit or replace existing bicycle and pedestrian bridge (unfunded, East Bay Regional Park District Property and lead)
- C. Feasibility study for a formal waterfront path by Bayview Drive
- D. Blanding Avenue: new bike lanes to improve access to/from Oakland
- E. Mariner Square Drive: new trail by Tynan Avenue east of Mariner Square Drive as a Bay Trail connector
- F. Mecartney Road: bike lanes between Island Drive and Maitland Drive
- G. Miller-Sweeney Bridge: interim enhancements, such as signage and striping
- H. Neptune Park: path through the park between Webster Street and Constitution Way
- I. Resurfacing of existing paths (along Shoreline, Main Street, and Bay Farm Island)
- J. Posey Tube improvements for people bicycling and walking as part of Alameda CTC's Freeway Access Study

This project will:

- Provide first-mile and last-mile connections to transit.
- Increase pedestrian and bicyclist safety.
- Encourage a reduction in local vehicle trips.
- Provide more transportation options.
- Increase resiliency of the local transportation network.

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## Community Input

- Community members responding to the web surveys and at meetings and public hearings state the need to improve bicycle and pedestrian safety.
- 58 percent of telephone survey respondents "Strongly Agree" or "Agree" that Alameda should make it easier to walk, bicycle, or take transit to destinations rather than relying on a car.
- 31 percent and 24 percent of telephone survey respondents stated that "poor safety or bicyclists" and "poor pedestrian safety" is an issue.

## Estimated Costs

- \$1 million for Blanding Avenue bikeway
- \$9 million for Neptune, Bayview, and Mecartney bikeways
- \$12 to \$20 million for Alameda Point Bay Trail
- \$6 million for Clement Avenue, Broadway to Grand
- \$2 million for Bay Farm Wooden Bridge
- \$2 million for Mariner Square Drive Bay Trail Connector Path
- \$250,000 for Miller-Sweeney Bridge interim improvements
- \$5 million for resurfacing of paths
- \$10 million for Posey Tube walkway improvements as part of Alameda CTC's Freeway Access Study

## Status

- Many of these projects have been previously identified in other planning documents. The Mariner Square path, interim bridge crossing enhancements, and the Bay Farm bike/ped bridge are new projects identified through this planning effort.
- The project is consistent with the City of Alameda General Plan Transportation Element objectives 4.3.2, "Enhance opportunities for pedestrian access and movement", 4.3.3, "Promote and encourage bicycling as a mode of transportation", and 4.3.6, "Coordinate and integrate the planning and development of transportation system facilities to meet the needs of users of all transportation modes."

## Benchmarks

- 2-year: Identify funding opportunities and apply for grants.
- 5-year: Implement funded projects and work toward securing additional funds.

Assessment: High Priority

Lead: City of Alameda

| Time Frame             | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Mid-Term<br>Completion | ✓                             | ✓                            | ++                            | ++             | ✓                     | ✓                     |

## 17. Citywide Safe Routes to School Audits and Improvements

Up to 14 percent of morning traffic can be attributed to school drop-offs, according to SafeRoutesInfo.org. This improvement will build on the countywide Safe Routes to School Program for all schools, including public and private, to reduce vehicle trips to and from schools, and to improve safety around schools. The program will work with schools, parents, and students to perform or update audits on school access/egress throughout Alameda, based on audits that already have been done as part of the countywide program. The expanded program also may include: bicycle and pedestrian capital investments, partnerships with youth-oriented organizations to improve transportation for students; expanding bicycle safety education; bicycle safety gear distribution; and an expanded crossing guard program. These programs have been shown to be highly effective in improving safety, managing congestion around schools, and encouraging walking and biking.



Photo source: CDM Smith

This project will:

- Increase pedestrian and bicyclist safety.
- Encourage a reduction in local vehicle trips.
- Encourage transportation options for parents traveling to work.

### Community Input

- 64 percent of telephone survey respondents "Strongly Agree" or "Agree" that Alameda should make it easier for students to walk, bike, or take transit to and from school.

### Estimated Costs

- \$500,000 to \$1 million for program expansion and school audits. The costs for capital improvements have not yet been determined.

### Status

- This planning process will be an expansion of the ongoing Safe Routes to School efforts, which already have audited four schools.

### Benchmarks

- 2-year: Identify initial year participating schools; Conduct or update audits.
- 5-year: Implement improvements from initial schools; Identify other schools for participation in program for a phase II effort.

Assessment: High Priority

Lead: City of Alameda

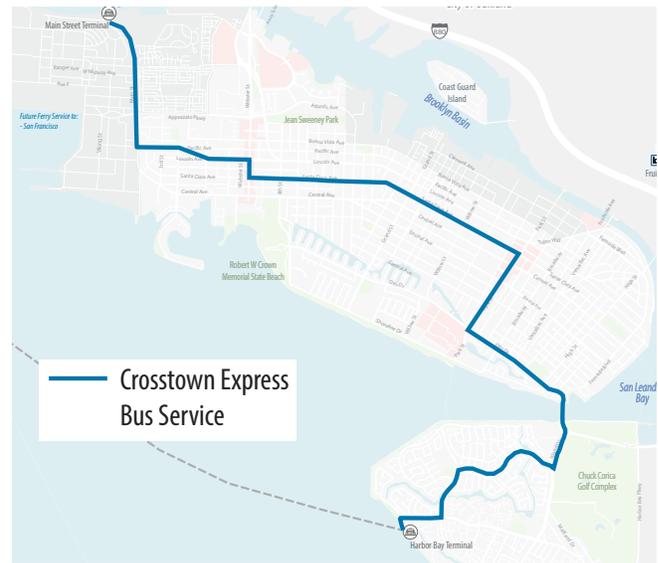
| Time Frame             | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement                                   | Safety<br>Improvement |
|------------------------|-------------------------------|------------------------------|-------------------------------|----------------|---|-----------------------|
| Mid-Term<br>Completion | N/A                           | ✓                            | ++                            | ++             | Not yet determined,<br>depends on populations<br>served | ✓                     |

## 18. Crosstown Express Bus Service

The new Crosstown Express Bus Service will provide a cross-island bus route with 20-minute peak frequency between the Main Street Ferry Terminal and Harbor Bay. The service will use the same route as portions of AC Transit Lines 96 (west end), 51A (central island) and 21 (east end), with limited stops, and will operate at a 20-minute frequency. Targeted users include individuals accessing the Webster Street and downtown business districts, schools with a citywide enrollment, Harbor Bay Business Park, Bay Farm Island, Alameda Point, Main Street and Harbor Bay ferry terminals and other cross-town destinations. The service will be considered for branding.

This project will:

- Improve bus access to the Main Street ferry terminal and Harbor Bay.
- Increase transportation options for city residents and employees who work in Alameda.
- Reduce cross-town transit travel times to help integrate Alameda as one self-sustaining community.
- Improve bus access to local business districts and schools



### Community Input

- Members of the business districts and the general public at community workshops have expressed support for greater crosstown transit with high frequency and reliability that serves the business districts and ferry terminals and with the potential for unique branding.
- 58 percent of telephone survey respondents "Strongly Agree" or "Agree" that Alameda should make it easier to walk, bicycle, or take transit to destinations rather than relying on a car.
- One in three telephone survey respondents said getting to key transit hubs, such as the ferry terminal, was a "Major Issue" or an "Issue."

### Estimated Costs

- \$4.2 million in annual operating costs.
- \$3 million in upfront capital costs (purchase of four buses).

### Status

- This is a new project identified in this planning process.

### Benchmarks

- 2-year: Identify and apply for grant funding opportunities.
- 5-year: Secure capital and operating funds for service implementation.

### Assessment: High Priority

Lead: AC Transit

| Time Frame             | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Mid-Term<br>Completion | ✓                             | ✓                            | +++                           | +++            | ✓                     | N/A                   |



## 19. EasyPass Expansion

The current AC Transit EasyPass program provides Peralta Community College students, Alameda Point Collaborative residents and residents of participating developments such as Marina Shores (89 residential units) and Park Alameda Apartments (62 affordable residential units) with subsidized Clipper cards that can be used for local and transbay bus service. This improvement will expand the EasyPass program for discounted bus passes beyond new developments and the current participants to existing businesses, residents, and homeowner associations (HOAs). The program could be administered through the citywide Alameda TMA, and will be available to city residents as well as people who work in Alameda. The program will further create incentives for transit ridership within and to areas outside of Alameda by making transit more affordable and easy to use for residents and employees. Estimates assume the program expansion will include 5,000 employees, students, and residents.

This project will:

- Encourage transit use for local and transbay trips by making it more affordable and easy.
- Reduce drive alone use for local and transbay trips.

### Community Input

- 69 percent of telephone survey respondents would use locally-sponsored free buses.

### Estimated Costs

- Costs need to be negotiated with AC Transit. For planning purposes, \$70 annual per rider (serving an estimated 5,000) is assumed. This cost will be \$350,000 and \$25,000 in program administration.

### Status

- This is a new project identified in this planning process.

### Benchmarks

- 2-year: Establish agreement with AC Transit for delivery of expanded EasyPass program; Outline program implementation by engaging residents, HOAs, business districts and the citywide TMA.
- 5-year: Implement with initial participants and monitor efforts.

Assessment: High Priority

Lead: Alameda TMA

| Time Frame             | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | C02 Reductions | Equity<br>Improvement                                    | Safety<br>Improvement |
|------------------------|-------------------------------|------------------------------|-------------------------------|----------------|--|-----------------------|
| Mid-Term<br>Completion | ✓                             | ✓                            | +++                           | +++            | Not yet determined,<br>depends on populations<br>served. | N/A                   |

## 20. Increase Frequency and Span of Service for Ferry Service

The improvement will provide increased peak frequency and expanded span of service for ferry service, consistent with WETA's 15/30 Strategic Plan. This project also will require capital funding for new ferry vessels to serve Alameda. The new vessels will help provide increased peak service frequency and span of service, which may prompt the need to consider increasing capacity at the Main Street ferry terminals. This improvement also will open up the possibility for new service destinations, such as new service to the Peninsula. The improvements will most greatly impact Alameda residents who commute to San Francisco, as well as commuters or students who travel from San Francisco to Alameda for work or school, respectively. With the addition of the Sea Plane Lagoon Ferry Terminal, the Main Street service could switch to serve Oakland before San Francisco for Alamedans commuting to Oakland, especially by bicycle.

### This project will:

- Provide high quality transit service to San Francisco and to potential expansion locations.
- Increase transbay travel options for existing and future Alameda residents, employees and visitors.
- Provide more frequent ferry service.

### Community Input

- One in three telephone survey respondents said lack of frequent, fast, and reliable transit service was either a "Major Issue" or "Issue" for the City of Alameda.
- A recurrent web survey comment about ferries is to increase the ferry frequency.

### Estimated Costs

- \$3 million in annual operating and maintenance.
- \$34 million for vessel procurement.
- \$18 million for Main Street terminal expansion.

### Status

- This project is identified in the WETA 15/30 Strategic Plan, Alameda CTC Transit Plan (2016) and Core Capacity Transit Study (2015).

### Benchmarks

- 2-year: Provide WETA with assistance, materials and documentation to support expanded service.
- 5-year: Assist WETA in identifying opportunities and applying for grant funding for capital, operations, and maintenance.

### Assessment: High Priority

Lead: WETA

| Time Frame             | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Mid-Term<br>Completion | ✓                             | N/A                          | ++                            | ++             | N/A                   | N/A                   |

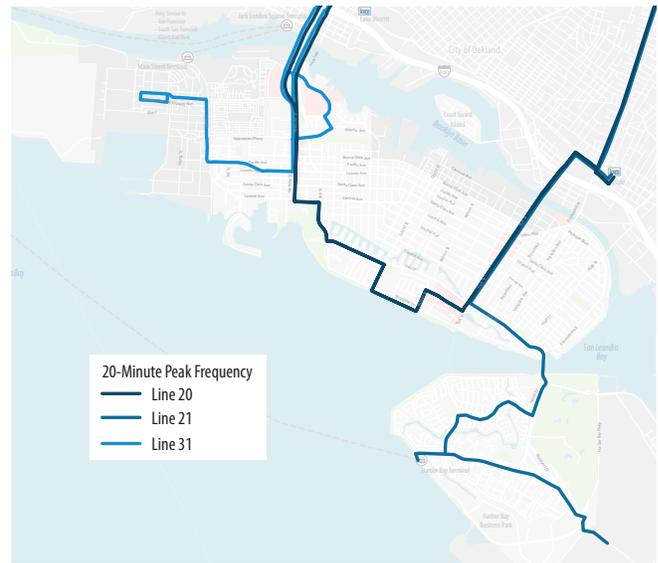


## 21. Increase Frequency and Span of Service for Local Bus Routes

This project will provide increased service frequencies and span for local bus routes serving Alameda and Oakland. Frequency improvements are identified for four AC Transit Lines 19, 20, 21, and 96. The four lines all provide bus service within Alameda and connect to popular destinations in Oakland, including multiple BART stations, downtown Oakland, Oakland International Airport, and Bay Farm Island.

This project will:

- Provide 15-minute peak frequency service within Alameda and to and from Oakland.
- Provide greater connectivity to BART and other key destinations.
- Address desire of residents for better bus service on the island.



### Community Input

- The most frequent web survey comments about buses are that respondents want improved bus service to and from BART, the west end, and Bay Farm Island.
- 58 percent of telephone survey respondents "Strongly Agree" or "Agree" that Alameda should make it easier to walk, bike, or take transit to destinations rather than relying on a car.
- 40 percent of drive alone telephone survey respondents stated that "transit service is not frequent enough" as one reason why the respondent drives to work.
- Members of the business districts and general public have expressed support for greater transit improved bus service within Alameda with high frequency and reliability that serves the business districts and ferry terminals.

### Estimated Costs

- \$3.5 million in annual operating and maintenance for all five lines.
- \$9 million in upfront capital costs (purchase of buses).

### Status

- This is a new project. Collaboration with AC Transit, adjacent developments, and the TMAs in the city will be necessary.
- The project is consistent with General Plan goals 4.3.1.c "Actively encourage increases in public transit, including frequency and geographic coverage", and 4.1.5.c "Continue to support the fixed-route AC Transit system."

### Benchmarks

- 2-year: Assist AC Transit in identifying funding opportunities such as public-private partnerships and applying for grant funding for capital, operations, and maintenance.
- 5-year: AC Transit to operate increased frequency on at least two local lines.

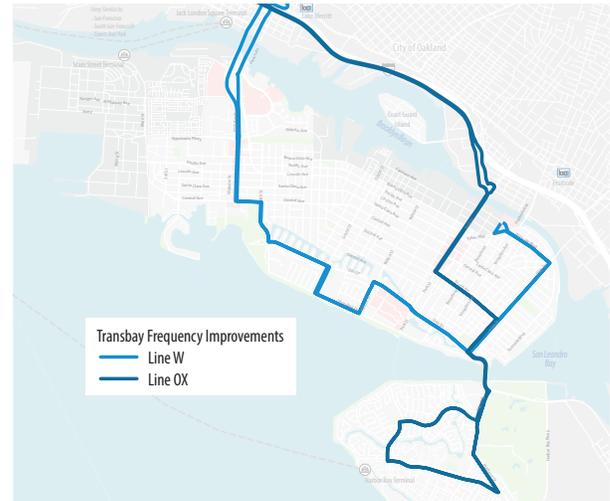
Assessment: High Priority

Lead: AC Transit

| Time Frame                     | Goal 1: To/From Alameda | Goal 2: Within Alameda | Drive Alone Trip Reduction | CO2 Reductions | Equity Improvement | Safety Improvement |
|--------------------------------|-------------------------|------------------------|----------------------------|----------------|--------------------|--------------------|
| Near-Term /Mid-Term Completion | ✓                       | ✓                      | +++                        | +++            | ✓                  | N/A                |

## 22. Increase Frequency and Span of Service for Transbay Bus Service

The improvement seeks to increase the frequency and span of service for Transbay buses. Transbay frequency improvements will focus on Lines OX and W. Line O will maintain the existing frequency and span of service level, with frequency increases expected if ridership grows. Line OX service will increase its peak span by one hour during the weekday morning peak, resulting in service from 5:30 AM to 10 AM, maintaining existing frequency, and will increase frequency between 6:30 PM and 8:30 PM on weekdays to achieve 15-minute frequency during the entire evening span of service. Line W service will expand the span of service to provide all-day service on both weekdays and weekends, operating from approximately 6 AM to 9 PM, and will increase peak frequency from 20 minutes to 15 minutes during the morning and afternoon peaks.



This project will:

- Increase Transbay travel options for Alameda residents and employees.
- Provide more frequent and accessible all-day Transbay bus service.
- Allow greater flexibility and reduce wait times for commuters.
- Reduce crowding by spreading peak-ridership over an extra hour of peak service.

### Community Input

- 61 percent of telephone survey respondents label rush-hour traffic congestion at island crossings as a "Major Issue" or "Issue."
- 40 percent of drive alone telephone survey respondents stated that "transit service is not frequent enough" as one reason why the respondent drives to work.

### Estimated Costs

- \$230,000 per year for additional Line OX span of service.
- \$2 million per year for all-day weekday and weekend Line W service and increased peak frequencies.

### Status

- This is a new project. Collaboration with AC Transit will be necessary.
- The project is consistent with General Plan goals 4.3.1.c "Actively encourage increases in public transit, including frequency and geographic coverage", and 4.1.5.c "Continue to support the fixed-route AC Transit system".
- AC Transit is in the process of a transbay service planning effort, Transbay Tomorrow, that includes a survey analysis and recommendations with expected completion in Fall 2017.

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## Benchmarks

- 2-year: Provide AC Transit with supporting materials and documentation to support expanded service. Assist AC Transit in identifying opportunities and applying for grant funding for capital, operations, and maintenance. Project is included in AC Transit's Transbay Tomorrow plan.
- 5-year: Operate improved Transbay service on Lines OX and W.

Assessment: High Priority

Lead: AC Transit

| Time Frame             | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Mid-Term<br>Completion | ✓                             | ✓                            | ++                            | ++             | ✓                     | N/A                   |

## 23. Miller-Sweeney Multimodal Lifeline Bridge

This improvement will incorporate multimodal designs for the reconstruction of the Miller-Sweeney Bridge Lifeline Bridge, including bus-only lanes, bikeways and walkways. The lifeline retrofit of the Fruitvale Avenue Bridge is needed to ensure that the bridge will be useable after an earthquake or other calamity. It will provide the sole lifeline access for Alameda. The retrofit also will increase safety by reducing collision risks between people bicycling, walking and driving.

This project will:

- Encourage bus use at estuary crossings.
- Improve pedestrian and bicyclist safety and access at estuary crossings.
- Improve pedestrian and bicycle facilities at estuary crossings.

### Community Input

- 58 percent of telephone survey respondents "Strongly Agree" or "Agree" that Alameda should make it easier to walk, bicycle, or take transit to destinations rather than relying on a car.
- 61 percent of telephone survey respondents said traffic congestion at island crossings at rush hour is a "Major Issue" or "Issue".

### Estimated Costs

- \$3 million for a project study report; \$90 million for bridge reconstruction.

### Status

- This is an ongoing project. It is in the Alameda Capital Budget as a long-term project, and is partially funded through Measure BB; however, incorporating transit design features is a newly recommended component identified in this planning process.

### Benchmarks

- 2-year: Develop design concepts; Work with funding and partner agencies to identify acceptable multimodal features; Apply for grant funding.
- 5-year: Complete the project study report and seek additional funding.

Assessment: High Priority

Lead: Alameda County

| Time Frame             | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Mid-Term<br>Completion | ✓                             | N/A                          | +++                           | +++            | N/A                   | ✓                     |



## 24. New Seaplane Lagoon Ferry Terminal and Service

A new Seaplane Lagoon Ferry Terminal and Service will provide ferry access to residents of the growing West Alameda neighborhood, including Alameda Point. The new terminal, at the foot of Atlantic Avenue in the heart of Alameda Point's redeveloped area, will provide residents and employees with ferry service to San Francisco. This new ferry terminal will supplement the existing ones in Alameda, and will create another transbay transit hub for Alamedans. The service will initially operate at 60-minute headways, or a frequency of one ferry per hour, during peak service, and will provide additional mid-day service with lower frequencies. To help Alamedans commuting to Oakland, the Main Street ferry could switch to an Alameda-Oakland-San Francisco service in the morning and to a San Francisco-Oakland-Alameda service in the evenings when the Seaplane Lagoon service begins.



This project will:

- Increase transbay travel options for existing and future Alameda residents and employees.
- Reduce travel times to San Francisco.
- Increase transit to new developments at Alameda Point.
- Reduce congestion at existing ferry terminals.
- Reduce drive alone trips and accommodate increasing transit demand on existing Transbay services.

### Community Input

- Responses to marketing and outreach indicate that current tenants and potential developers and users think that the ferry terminal would be a significant advantage to their business or developments.
- 58 percent of telephone survey respondents said they "Strongly Agree" or "Agree" that Alameda should make it easier to walk, bicycle, or take transit to destinations rather than relying on a car.

### Estimated Costs

- \$4 million in operating costs.
- \$18.2 million in capital costs.

### Status

- This project is part of the proposed Alameda Point development and is identified in the Alameda Point TDM Plan, the Alameda 2017/19 Capital Budget, the Core Capacity Transit Study (2015), the Alameda CTC Transit Plan (2016), and the WETA 2016 Strategic Plan.
- WETA and the city approved a memorandum of understanding on future ferry operations, WETA approved funding for a new ferry vessel, and the Bay Conservation and Development Commission Design Board approved the design for the terminal.

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## Benchmarks

- 2-year: Complete the preliminary engineering and design and start construction
- 5-year: Complete the construction, project close-out and project evaluation, and operate ferry service

Assessment: High Priority

Lead: WETA/City of Alameda

| Time Frame             | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Mid-Term<br>Completion | ✓                             | N/A                          | +++                           | +++            | N/A                   | N/A                   |

## 25. Regional Transit Hub Connector Bus Service

The new Express Regional Connector will provide a cross-island bus route with 20-minute peak frequency between the Main Street Ferry Terminal and Fruitvale BART. The service will use the same route as portions of AC Transit lines 51A and 96, with limited stops. This route could be used by ferry riders, students and by the general public for cross island trips and to access the ferry terminal and the Fruitvale BART Station. The service will increase access to charter and magnet schools located in west and central Alameda and to other areas currently underserved by transit.

This project will:

- Improve bus access to the Main Street ferry terminal and Fruitvale BART.
- Increase transportation options for Alameda residents and employees.
- Increase transit to new developments at Northern Waterfront and Alameda Point.
- Reduce cross-town transit travel times.
- Improve bus access to schools with citywide enrollment.



### Community Input

- 58 percent of telephone survey respondents "Strongly Agree" or "Agree" that Alameda should make it easier to walk, bicycle, or take transit to destinations rather than relying on a car.
- One in three of telephone survey respondents said accessing key transit hubs, such as BART and ferry terminals, was a "Major Issue" or an "Issue."
- A frequent web survey and community meeting comment is for bus service to and from the Main Street Ferry Terminal.

### Estimated Costs

- \$3.7 million in annual operating costs
- \$3 million in upfront capital costs (purchase of four buses)

### Status

- This is a new project identified in this planning process. AC Transit in the Service Expansion Plan (2016) had recommended a similar service. A grant application was submitted in October of 2016 as part of the Alameda CTC's 2018 CIP, yet it was unsuccessful.

### Benchmarks

- 2-year: Identify and apply for grant funding opportunities
- 5-year: Secure capital and operating funds for service implementation

### Assessment: High Priority

Lead: AC Transit

| Time Frame             | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Mid-Term<br>Completion | ✓                             | ✓                            | +++                           | +++            | ✓                     | N/A                   |

## 26. TDM Ordinance Update

This improvement will update the existing TDM Ordinance to reflect revised standards, phasing, and tools. It will standardize policies for residential and commercial neighborhoods and will extend to both existing and new developments. While new developments will be enrolled automatically in a TDM program, existing neighborhoods will be phased in as a condition to City approvals, as is appropriate. The improvement will help create consistent incentives for driving less and will establish regulations for working with existing businesses and residences.

This project will:

- Encourage and create incentives for bicycling, walking and taking transit.
- Encourage a reduction in local vehicle trips.
- Increase transportation options for local residents and employees.

### Community Input

- Web survey responses want new developments to offset transportation impacts and pay for transportation improvements.
- Web survey responses want new developments to offset transportation impacts and pay for transportation improvements.

### Estimated Costs

- Up to \$400,000 for project administration and planning (costs are combined with Transportation Partnerships with Existing Businesses and Residences).

### Status

- This is a new project identified as part of this planning process.
- The project is consistent with the City of Alameda General Plan Transportation Element objectives 4.3.4, "Manage demand placed on the street system through a TDM program..."; 4.4.2, "Ensure that new development implement approved transportation plans..."; and 4.4.7, "Require developers to contribute toward the implementation of appropriate TSM/TDM measures to mitigate the impacts of their projects on the bridges, tubes, specific intersections, and corridors".

### Benchmarks

- 2-year: Update TDM Ordinance with City Council Adoption

Assessment: High Priority

Lead: City of Alameda

| Time Frame              | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|-------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Near-Term<br>Completion | ✓                             | ✓                            | +++                           | +++            | N/A                   | N/A                   |



## 27. Vision Zero Safety Improvements and Traffic Calming

"Vision zero" is the goal of reducing traffic deaths and severe injuries to zero. Making roadway safety improvements and implementing traffic calming strategies is one aspect of implementing a vision zero goal. This improvement will increase safety through several capital improvements, including new bikeways, reduced vehicle travel lanes, pedestrian improvements, and realigned streets. Projects that focus on gap closures for people bicycling and walking are shown in a previous project titled: Bicycle and Pedestrian Corridor Improvements.

Corridors Identified for safety improvements include:

- A. Central Avenue: Between Sherman Street/Encinal Avenue and Pacific Avenue/Main Street, this project will Install a bikeway, safer three lane street, install pedestrian improvements and realigns Lincoln Avenue to Pacific Avenue/Main Street (funded).
- B. Clement Avenue Safety Improvements: Will remove abandoned railroad tracks, install bikeway and provide pedestrian improvements between Grand Street and Broadway (funded).  
Clement Avenue/Tilden Way:  
On Clement Avenue between Broadway and Tilden Way, will purchase Union Pacific right-of-way, connect Clement Avenue and Tilden Way for all modes; On Tilden Way, will install safety improvements for people walking and bicycling, as well as bus access improvements to the Miller-Sweeney Bridge (funded).
- C. Clement Avenue West Extension: Will close a gap on Clement Avenue between Grand Street and Hibbard Street by extending Clement Avenue west of Grand Street and then creating a street for all types of street users (unfunded).
- D. Main Street: Install bike lanes, improved parking as a short-term access improvement to/from the ferry terminal (unfunded).
- E. Otis Drive: Provides traffic calming and bikeway between Westline Drive and Willow Street (partially funded).
- F. Stargell Avenue: Installs separated bikeway, walkway, and bus lanes (unfunded).
- G. Lincoln Avenue/Pacific Avenue feasibility study for three-lane street with bike lanes (unfunded).

This project will:

- Increase safety and access for all street users.

### Community Input

- 58 percent of those interviewed "Strongly Agree" or "Agree" that Alameda should make it easier to walk, bicycle, or take transit to destinations rather than relying on a car.
- 31 percent and 24 percent of telephone survey respondents stated that "poor safety or bicyclists" and "poor pedestrian safety" is an issue.

### Estimated Costs

- \$12 million for Central Avenue (Main Street/Pacific Avenue to Sherman Street/Encinal Avenue) - funded
- \$6 million for Clement Avenue Safety Improvements - funded
- \$9.5 million for Clement Avenue/Tilden - funded \$800,000 for Otis Drive
- \$5 million for Clement Avenue West Extension - unfunded
- \$250,000 for Main Street interim bikeway - unfunded
- \$800,000 for Otis Drive – partially funded
- \$3.3 million for Stargell Avenue bikeway and bus queue jump lanes – unfunded
- \$300,000 for Lincoln Avenue/Pacific Avenue three-lane/bike lane feasibility study - unfunded

*Continued on Next Page*

### Status

- These projects have been previously identified in other planning documents and the City's capital budget except for the Main Street interim bikeway and the feasibility study for Lincoln Avenue/Pacific Avenue.
- The project is consistent with the City of Alameda General Plan Transportation Element objectives 4.3.2, "Enhance opportunities for pedestrian access and movement"; 4.3.3, "Promote and encourage bicycling as a mode of transportation"; and 4.3.6, "Coordinate and integrate the planning and development of transportation system facilities to meet the needs of users of all transportation modes."

### Benchmarks

- 2-year: Identify funding opportunities and apply for grants. Complete the outreach, environmental review and design for the funded projects.
- 5-year: Construct funded projects and work toward securing additional funds.

### Assessment: High Priority

Lead: City of Alameda

| Time Frame             | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Mid-Term<br>Completion | N/A                           | ✓                            | +                             | +              | ✓                     | ✓                     |

## 28. Bikes in Buses through Webster/Posey Tubes

Bicyclists in West Alameda seeking to reach downtown Oakland or any area north of Alameda without taking a ferry must ride their bicycles along a narrow sidewalk along the busy Posey Tube. The only other option available is to place their bike aboard a bus in Alameda and cross on transit. AC Transit buses come equipped with bike racks that accommodate two or three bikes. These bike racks can reach capacity, especially during peak hour commute. Current AC Transit policy prevents bicyclists from bringing bicycles inside buses. This effort will involve working with AC Transit to allow bikes inside buses through the Webster/Posey tubes on AC Transit Lines 19, 20, 96, and 51A as a pilot project. The City also will work with AC Transit to install bike racks that hold up to three bicycles on all buses to increase overall bicycle capacity.

This project will:

- Help reduce drive alone trips to Oakland.
- Increase pedestrian and bicyclist safety through Posey Tube.

### Community Input

- 58 percent of telephone survey respondents "Strongly Agree" or "Agree" that Alameda should make it easier to walk, bicycle, or take transit to destinations rather than relying on a car.
- Community members responding to the web surveys and at meetings state the need to improve bicycling options on and off the island.

### Estimated Costs

- Up to \$100,000 for coordination and bus retrofit.

### Status

- This is a new project identified in this planning process. Funding for capital equipment may require grant funding application in consultation with AC Transit.

### Benchmarks

- 2-year: Consult with AC Transit to determine methods for adjusting their policies; apply for funding.
- 5-year: Install interior bike racks.

### Assessment: Medium Priority

Lead: AC Transit

| Time Frame             | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Mid-Term<br>Completion | ✓                             | N/A                          | +                             | +              | ✓                     | ✓                     |



*Bus interiors have been modified to accommodate bicycles on Swift Express bus service operated by Community Transit in Washington State. (Photo source: CDM Smith)*

## 29. Citywide Transportation Management Association

This effort will establish a combined Transportation Management Association (TMA) to administer TDM programs throughout the city. This citywide TMA will provide a seamless, easy to find, and easy to use network of programs that relate to each other and are mutually supportive.

This project also will include developing a Standardized Request for New Development to ensure that new, large developments join the TMA with a standardized fee structure to provide certainty to developers. It also will allow developments to include participation in the TMA as a mitigation for environmental review.

This project will:

- Leverage funds by pooling public and private resources to create a more expansive citywide effort.
- Broaden the reach of private sector TDM programs and tools.
- Create a consistent and coordinated effort in reducing congestion and drive alone commuting.

### Community Input

- Survey responses show residents want a coordinated, integrated experience when using Alameda's transportation resources.

### Estimated Costs

- \$150,000 for administrative costs associated with start up.

### Status

- This effort is currently underway, with steps already being taken to establish this entity through a TDM implementation grant through the Metropolitan Transportation Commission.
- The project is consistent with the City of Alameda General Plan Transportation Element objectives 4.3.4, "Manage demand placed on the street system through a TDM program", 4.4.2, "Ensure that new development implement approved transportation plans", and 4.4.6, "Work with area employers and other stakeholders to develop one or more TMAs to implement TDM programs."

### Benchmarks

- 2-year: Establish citywide TMA.
- 5-year: Expand to include voluntary members and other existing residents and businesses.

Assessment: Medium Priority

Lead: City of Alameda

| Time Frame              | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction  | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|-------------------------|-------------------------------|------------------------------|--|----------------|-----------------------|-----------------------|
| Near-Term<br>Completion | ✓                             | ✓                            | N/A<br>This effort relates to program administration. Drive alone impacts are included within specific TDM projects. |                | N/A                   | N/A                   |

## 30. Faster Line 51A Bus Service

The Express Line 51A Bus Service will provide connections between Fruitvale BART, the City of Alameda, 12th Street BART Station, and downtown Oakland. The express services will involve restructuring the 51A line in Alameda to have less frequent stops (up to 50 percent fewer stops), helping improve travel time, speed, and reliability. This may be implemented by buses alternating or skipping stops or by acting similar to a rapid such as a 72R and only stopping at key destinations. The new service will get people to where they need to be faster than the existing Line 51A. The service will run during peak travel times and is geared towards serving commuters and students. The new service assumes using the existing bus fleet and will not require additional capital costs, and may be implemented using a phased approach.



Photo source: CDM Smith

This project will:

- Improve speed and reliability to and from Oakland with reduced travel times..
- Increase transportation options for city residents, employees, and students reaching Alameda from local connections served by the existing Line 51A.
- Provide additional options for Alameda residents seeking greater connectivity to BART and downtown Oakland.
- Improve bus access to College of Alameda.

### Community Input

- 61 percent of those interviewed in a telephone survey said traffic congestion at island crossings at rush hour are a "Major Issue" or "Issue."

### Estimated Costs

- Up to \$650,000 in annual operating and maintenance costs

### Status

- This is a new project identified in this planning process.

### Benchmarks

- 2-year: Study alternative approaches to implementing a faster Line 51A; Identify opportunities and apply for grant funding; Coordinate with AC Transit on future bus service operations
- 5-year: Secure capital and operating funds for service implementation.

Assessment: Medium Priority

Lead: AC Transit

| Time Frame             | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Mid-Term<br>Completion | ✓                             | ✓                            | +                             | +              | ✓                     | N/A                   |

## 31. Harbor Bay Ferry Terminal Access and Parking Management Improvements

Access to Harbor Bay ferry is limited due to its location. Bicycle infrastructure exists and AC Transit buses are timed to meet ferry departures. Nevertheless, an estimated 350 ferry riders drive and park at or near the terminal, while the Harbor Bay ferry terminal's lot only has a capacity of 250 spaces causing spillover parking within adjacent neighborhoods and in parking intended for visitors to the adjacent Shoreline Park. The adjacent HOAs – Columbia and Headlands – requested and obtained City Council approval to restrict parking in their neighborhoods to four-hour limits, which precludes ferry riders from parking there. WETA is considering parking charges to reduce the demand for parking and to help fund access improvement such as bicycle, pedestrian, carpool and bus improvements to the station. Improving multimodal access to the station and appropriately managing parking will help increase ridership and minimize neighborhood impacts.

This project will:

- Increase transit, walking, bicycling and carpooling over driving alone for accessing the ferry terminal.
- Reduce negative impact on the adjacent neighborhood.

### Community Input

- One in three of those interviewed said getting to key transit hubs, such as BART and Ferry Terminals, was a "Major Issue" or an "Issue."
- The web survey respondents and community member participants also stated concerns accessing this ferry terminal.

### Estimated Costs

- Short term bus improvements are costs in project #7: Increase Frequency and Span for Local Bus Routes
- Specific improvements are not yet determined and costs cannot be determined at this time

### Status

- The Harbor Bay Ferry Terminal Parking Plan was approved by the Alameda City Council in February 2017, and implementation began in August 2017 with a residential parking permit program.
- The project is consistent with the City of Alameda General Plan Transportation Element goal 4.3.1.i, "Develop parking management strategies for both new development projects and, as appropriate, for existing development."
- WETA approved a parking policy to help improve access to terminals with Harbor Bay as the first one to be considered for priced parking.

### Benchmarks

- 2-year: Complete access improvements and monitor efforts.
- 5-year: Implement phase II of improvements that are based on the monitoring and evaluation.

Assessment: Medium Priority

Lead: WETA, City of Alameda, HOAs

| Time Frame             | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Mid-Term<br>Completion | ✓                             | N/A                          | +                             | +              | N/A                   | N/A                   |



## 32. Main Street Ferry Terminal Access and Parking Management Improvements

Access to the Main Street Ferry Terminal is limited due to its location. There is a lack of bikeways, bus access, and parking demand management strategies to, around, and at the ferry terminal. This ongoing project being conducted by WETA in collaboration with the City of Alameda and AC Transit is seeking to improve in all three areas. Improvements may include parking reconfiguration, pricing, and management, bus service connecting downtown commercial centers and the rest of the island with the ferry terminal as stated in Projects 20 and 31, and bicycle gap closures on Main Street to make biking to/from the station easier and safer (as stated in Project 33). Multi-Modal/Vision Zero Safety Improvements and Traffic Calming). Improving multimodal access to the station and appropriately managing parking will help alleviate issues impacting the system and improve overall Transbay transit service. The City is considering parking management options in the existing parking facilities at the terminal, including parking pricing, permits, and reserved parking to improve the efficiency of parking at the terminal. With the initiation of the Seaplane Lagoon ferry terminal and service, the Main Street ferry service could switch its operations to better accommodate Alameda commuters traveling to Oakland, especially by bicycle. The ferry service could switch to serve Oakland and then San Francisco in the morning and the reverse, San Francisco to Oakland and then Alameda, in the afternoon and evening. WETA also is looking at ways to increase capacity at this terminal, which also could improve service.

This project will:

- Encourage transit, walking, bicycling and carpooling over driving alone for accessing the Main Street Ferry Terminal.
- Increase ferry ridership while decreasing drive alone mode share.
- Improve safety for all Main Street users.

### Community Input

- One in three telephone survey respondents said accessing key transit hubs, such as BART and ferry terminals, was a "Major Issue" or an "Issue."
- A frequent web survey and community meeting comment is that respondents want bus service to and from the Main Street Ferry Terminal.
- A frequent community comment is that there needs to be safer and better bicycle access to the Main Street Ferry Terminal.

### Estimated Costs

- Specific improvements are not yet determined and costs cannot be determined at this time.
- Estimated costs for other projects related to accessing the Main Street Ferry Terminal are included in Crosstown Express Bus Service (Project 20), Regional Transit Hub Connector Bus Service (Project 31), and Vision Zero Safety Improvements and Traffic Calming for the Main Street bikeway (Project 33).

### Status

- The study is on-going and improvements to the ferry terminal are being implemented.
- WETA approved a parking policy to help improve access to terminals.
- The project is consistent with the City of Alameda General Plan Transportation Element goal 4.3.1.i, "Develop parking management strategies for both new development projects and, as appropriate, for existing development. "

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## Benchmarks

- 2-year: Complete conceptual plan, implement improvements and monitor efforts.
- 5-year: Implement phase II improvements that are based on the monitoring and evaluation.

Assessment: Medium Priority

Lead: WETA/City of Alameda

| Time Frame             | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|------------------------|-------------------------------|------------------------------|-------------------------------|----------------|-----------------------|-----------------------|
| Mid-Term<br>Completion | ✓                             | N/A                          | +                             | +              | N/A                   | ✓                     |



### 33. New Technologies and Innovations

As the City of Alameda works to upgrade existing facilities to meet the needs of today, there will be an eye to the future to prepare for changes in transportation on the horizon. This effort will develop a policy and implementation plan for incorporating new technology upgrades, including connected vehicle and automated vehicle technology and improving traffic signals to incorporate the latest best practices such as emergency vehicle preemption systems for key corridors and accessible pedestrian signals. Application of connected vehicle technology may include signal controller upgrades, red light violation warnings, curve speed warnings, reduced speed warnings, and other safety warning systems that are integrated within City infrastructure. Interoperability with regional, state and national systems is an important consideration. The effort should help set up the City for applying for Highway Safety Improvement Program (HSIP) funding. These efforts are part of Smart Cities initiatives, which are focused on improving technology to better manage city infrastructure. Other Smart Cities initiatives include new technologies the reduce greenhouse gas emissions such as electric vehicle charging station and lighter colored pavements to reduce impacts of heat waves.

This project will:

- Establish policies for incorporating new connected vehicle and automated vehicle technology.
- Prepare the city for adapting to changes in technology.
- Improve safety for all street users.
- Reduce greenhouse gas emissions.

#### Community Input

- Community members at meetings and public hearings and in surveys stated the importance of improving safety and travel flow using new technologies.
- 31 percent and 24 percent of telephone survey respondents stated that "poor safety for bicyclists" and "poor pedestrian safety", respectively, is an issue.

#### Estimated Costs

- Costs are not yet determined.

#### Status

- This is a new project identified in this planning process.

#### Benchmarks

- 2-year: Coordinate with regional, state and federal planning agencies to identify applications and preferred technologies.
- 5-year: Apply and implement grant funds.

Assessment: Medium Priority

Lead: City of Alameda

| Time Frame             | Goal 1:<br>To/From<br>Alameda | Goal 2:<br>Within<br>Alameda | Drive Alone Trip<br>Reduction  | CO2 Reductions | Equity<br>Improvement | Safety<br>Improvement |
|------------------------|-------------------------------|------------------------------|--|----------------|-----------------------|-----------------------|
| Mid-Term<br>Completion | N/A                           | ✓                            | Assessment of these categories cannot be completed at this time, but a focus on improving safety and efficiency is at the center of this effort. |                |                       |                       |

## 34. BART to Alameda

This effort includes working with BART on potential BART to Alameda as part of second transbay tube project between Oakland and San Francisco. Potential stops may include the College of Alameda area or Alameda Point.

- Near-Term Actions: Coordinate with and participate in BART studies for a second Transbay tube. Identify and secure potential future right-of-way needs, as is feasible and appropriate.

## 35. Comprehensive Congestion Management

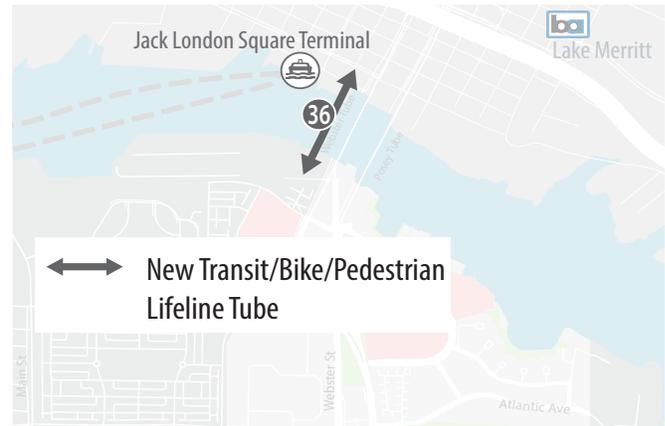
This effort will reduce congestion through the use of different tactics aimed at reducing drive alone trips and increasing bus service ridership. The primary strategy for this effort will be congestion pricing at estuary crossings and/or a parcel tax paired with more frequent bus service and a citywide EasyPass expansion.

- Near-Term Actions
  - Initiate discussions with business interests and AC Transit.
  - Monitor ridership increase with near-term frequency improvements. Identify funding sources. Work with AC Transit to incorporate into long-term transit plan.
  - Work with business interests and AC Transit to explore how Alameda could move toward a bus service that has more of a local identity and is free for Alameda residents and employees.

## 36. New Transit/Bike/Pedestrian Lifeline Tube

This improvement will enhance the west end Estuary Crossing with a tube that includes dedicated bus lanes, bikeways and walkways. The City will work with the key stakeholders including the Port of Oakland, City of Oakland, United States Coast Guard, Army Corps of Engineers and others to determine the feasibility, concept and preferred alignment. The ultimate need also will depend on whether BART to Alameda becomes a reality.

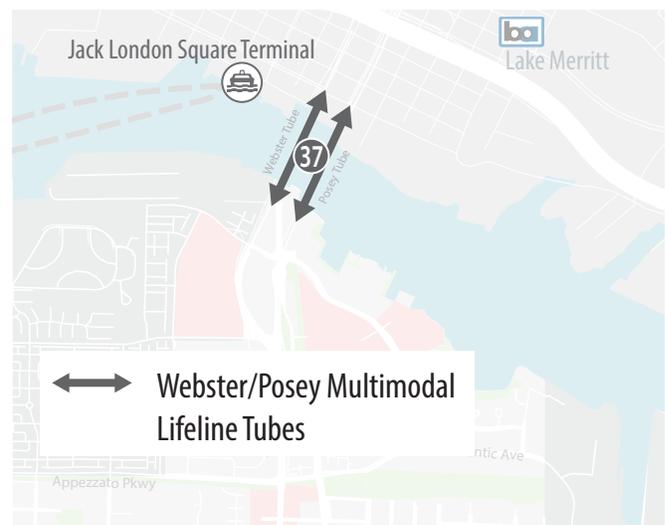
- Near-term Actions: Fund a project study report to determine the specifics and feasibility of an additional crossing for buses, bicyclists and pedestrians.



## 37. Webster/Posey Multimodal Lifeline Tubes

This improvement will enhance the west end Estuary Crossing, through a redesign of the existing Webster/Posey Tubes that will add bus lanes and dedicated bikeways and walkways to improve bicycle, pedestrian, and bus access along the corridor. If replacement of tubes is needed after a major seismic event, this redesign will help fast track the replacement during and after a state of emergency. A multimodal redesign of the existing Webster/Posey Tubes will encourage bus use over driving alone for estuary crossings, improve speed and reliability, increase pedestrian and bicyclist safety, and improve pedestrian and bicycle facilities.

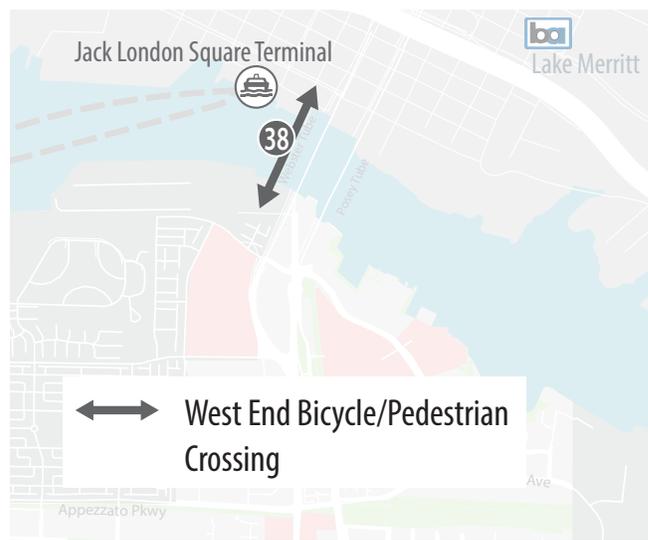
- Near-Term Actions: Work with Caltrans to identify project scope and funding. Identify multimodal concept designs and determine funding sources.



## 38. West End Bicycle/Pedestrian Crossing

Based on the results of a feasibility study and the progress of BART to Alameda, this bike/pedestrian only crossing project will construct an additional bike/pedestrian crossing to increase the redundancy on and off the island in the west end. This effort includes working with the Port of Oakland, the City of Oakland, the U.S. Coast Guard, U.S. Army Corps of Engineers, and other key stakeholders to determine the feasibility, concept, and preferred alignment. This project will need to meet design requirements or receive design exceptions and approval from the U.S. Coast Guard to move forward.

- Near-Term Actions: Fund a project study report to determine the specifics and feasibility of an additional crossing. Meet with the U.S. Coast Guard to identify issues, opportunities, and barriers to implementation.



City of Alameda

TRANSPORTATION CHOICES PLAN:

Transit and Transportation Demand Management

City of Alameda

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