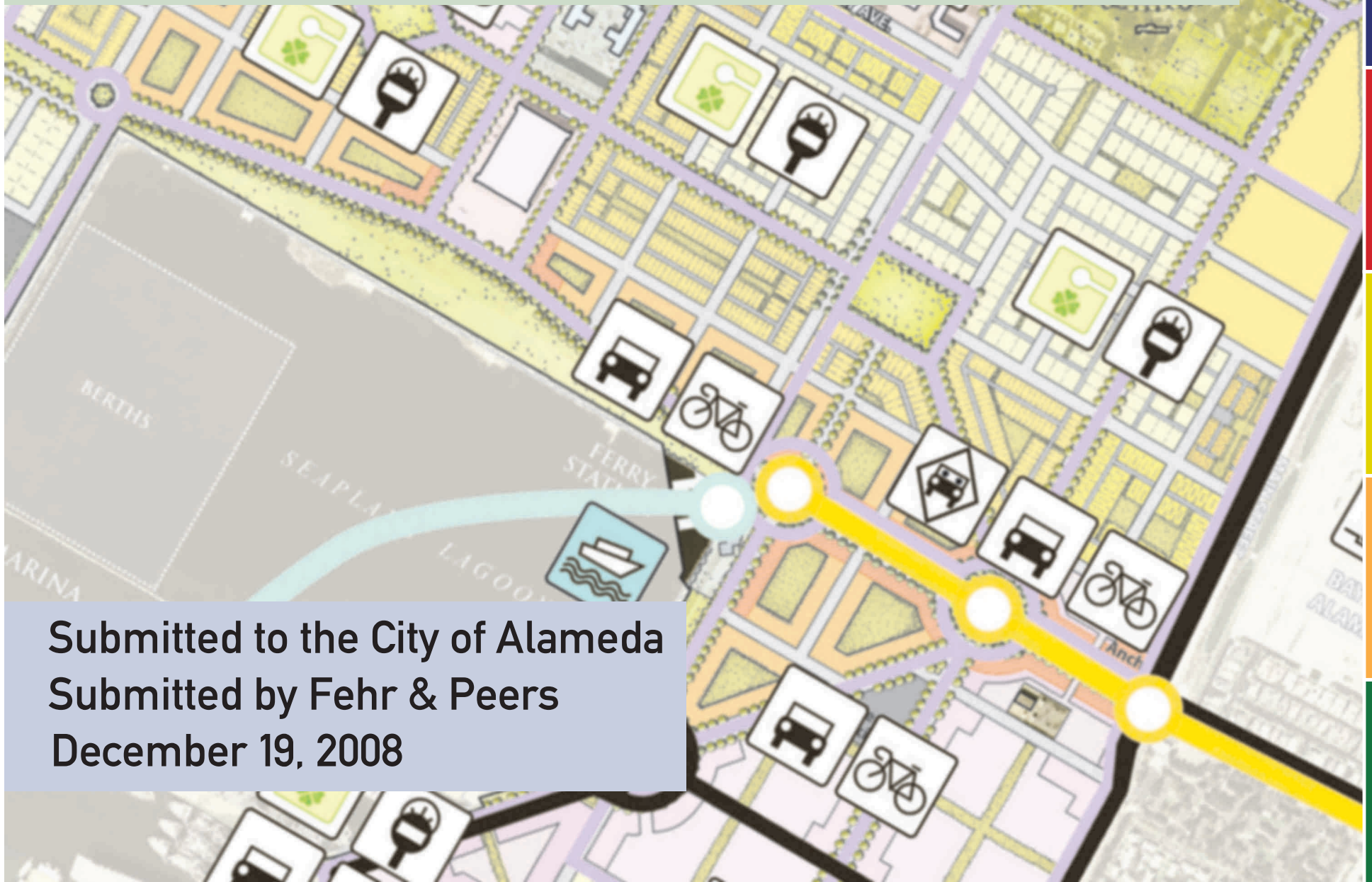


Alameda Point Transportation Strategy 2009



Submitted to the City of Alameda
Submitted by Fehr & Peers
December 19, 2008



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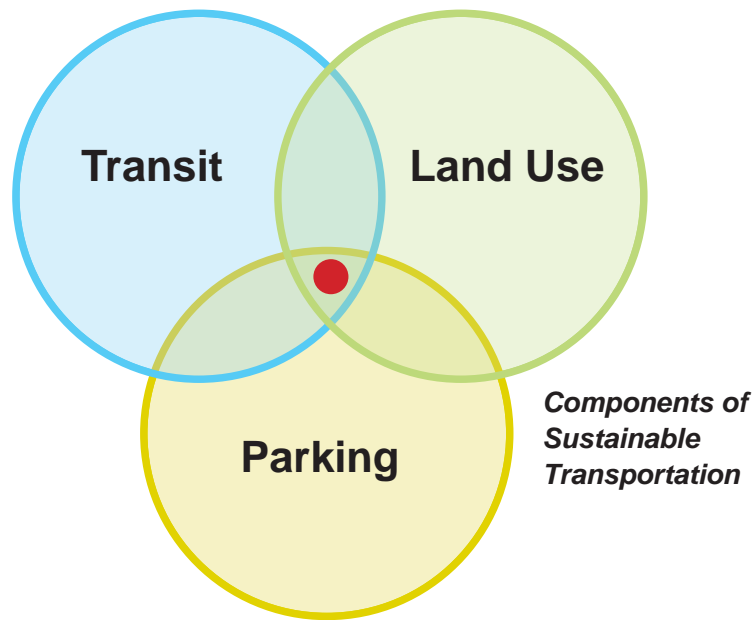
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Executive Summary



The Transportation Strategy

This document presents a transportation strategy for the redevelopment of Alameda Point. The strategy includes some of the best, most progressive programs in the country to create a unique transportation environment that will support the development of this unique site.

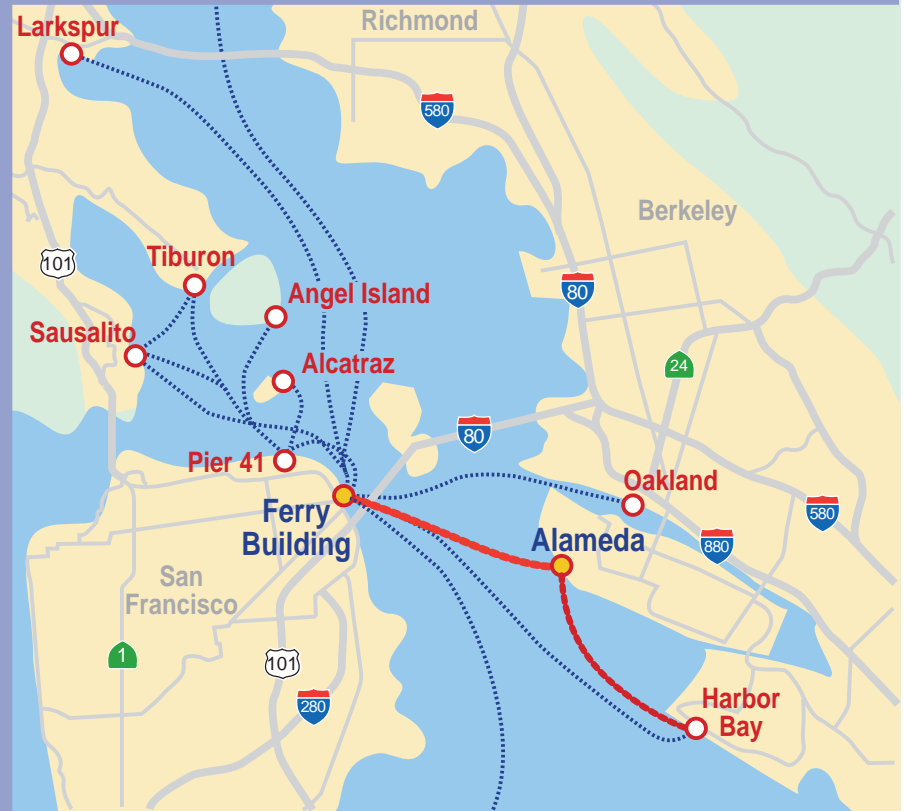
The Redevelopment Concept Plan for Alameda Point is one of sustainable infill development—reuse of previously developed land and buildings to create a walkable, transit-oriented community within the heart of the Bay Area. A quintessential example of smart growth, the Alameda Point development will at once meet the needs of its residents and businesses while enhancing livability and opportunities for all of Alameda and reducing the conventional regional impact of new development. This strategic development opportunity presents a 21st Century solution to the concerns of climate change, high fuel prices, and disconnected, sprawling communities.

The redevelopment of Alameda Point provides an opportunity for the City of Alameda to address and improve its transportation services and options.

- In the next 20 to 30 years, congestion on I-880 and in the Webster and Posey tubes will worsen... with or without development at Alameda Point. Regional traffic on I-880 is expected to grow by 10 to 20%. When the freeway backs up, the tubes back up and the Island will experience worsening congestion. Alameda cannot build its way out of congestion with new roads and bridges for automobiles.
- The City of Alameda needs alternative modes of transportation. The Community must have options in the future. Alamedans must have different ways of accessing the regional and local transit networks.
- This development offers a significant opportunity to fund the key transit systems for the Island. This project should fund capital improvements and generate significant annual operating funds for transportation improvements that can benefit all of Alameda by giving Alamedans choices for transportation in the future. No City of Alameda General Fund dollars should be used to pay for the new transit options.

Alternatives to contemporary patterns of urbanization and mobility are very much needed ... as a model for how to plan and design future cities and transit systems, the transit metropolis holds considerable promise.

- Robert Cervero



Executive Summary

The proposed development at Alameda Point includes a comprehensive, multi-faceted transportation strategy



1. Attract Eco-Minded Residents/ Tenants



The Alameda Point development will be **branded and marketed** to attract residents and tenants seeking a “**greener**”, **more sustainable** way of living and doing business. Alameda Point will provide an ideal location for those wishing to walk, bicycle, or take transit for most or all of their daily trips. The development will also be attractive to those seeking a **healthy, active lifestyle**, where walking, jogging, bicycling, or roller blading will be a safe and convenient option in one of the Bay Area’s most scenic settings. A comprehensive menu of “**carrots and sticks**” will be employed beyond the green marketing to ensure residents and tenants make full use of alternative transportation options for trips to, from, and within Alameda Point. The cornerstone of this menu will be a transit “EcoPass” which all residents and employees will receive. The EcoPass will be mandatory, will help fund many of the strategies presented in this document, and will offer unlimited use of bus and shuttle transit to, from, and within Alameda Point.



2. Create a Self-Sufficient Community



The mixed-use nature of the development will mean residents and employees can **remain on-site** for most of their needs, such as childcare, daily errands, shopping, recreation, and dining. Some residents may also work on-site with the development’s strong **jobs/housing balance**. Additionally, a school may be provided on Alameda Point, greatly reducing the AM peak hour traffic typically associated with school access.

3. Provide the Best Transit Services and Facilities in the City



According to the 2000 Census, 24.1 percent of current Alameda residents commute to work via transit, by walking or bicycling or simply work at home. The goal of the transportation strategy is to exceed this percentage for residents and employees of Alameda Point. The first step in achieving this is to create an environment attractive to people likely to use transit by providing good transit connections to employment centers and regional transit.



This component has several parts.

- A **dedicated shuttle** (similar to the Emery-Go-Round) will connect Alameda Point to 12th Street BART and Downtown Oakland with the initial phases of development
- A **bus rapid transit** network will facilitate cross-Island travel and connections to the 12th Street and Fruitvale BART stations in later phases, including
 - **Queue-jumping lanes for buses** approaching and exiting the Webster and Posey tubes and at the Fruitvale bridge to make transit a faster alternative than driving, and
 - **Dedicated transit lanes** to enable efficient cross-Island travel.
- **Island-wide bicycle network improvements** will include a new cross-Island bike path
- A **new ferry station and transit hub** will be provided with more frequent, high-speed ferry service between Alameda and San Francisco
- Strong **pedestrian and bicycle connections to transit** within Alameda Point will be provided, with an attended bicycle station at the Seaplane Lagoon Transit Hub.

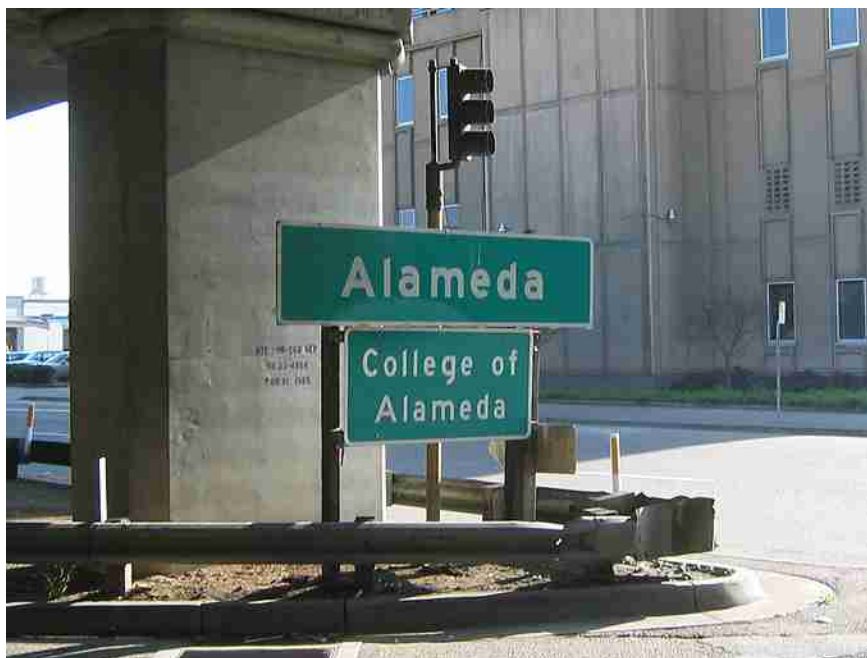
Non-auto options will be promoted by an **on-site Transportation Coordinator** at the new Transit Hub. The Coordinator will conduct **annual transportation “fairs”** and organize a **ridematching program** for Alameda Point residents and tenants.

Executive Summary

4. Provide Island-Wide Benefits for the City of Alameda



Tube and freeway congestion will worsen in the future with or without development at Alameda Point. The answer to this congestion must be transit. This development offers a significant opportunity to fund the key transit systems for the Island (a new ferry terminal and transit hub (with enhanced ferry service), a BRT system, and a cross-Island bicycle route) and may contribute to an Island-wide mode shift to transit by providing better transit options to existing Alameda residents and businesses.



5. Limit Vehicle Trips to and from Alameda Point



The goal of the City's *West End Transportation Demand Management (TDM) Program* is to reduce commercial trips by 30 percent and residential trips by 10 percent. The project at Alameda Point intends to meet or exceed these goals. The involuntary pay-in program described above will make riding transit seamless.

Other complementary TDM elements should include **parking strategies**, to the extent feasible, such as unbundled parking (employees and residents will pay for parking separately from their lease or purchase), residential parking permits, market rate parking pricing, premium parking for rideshare and alternative fuel vehicles, and a parking information system; **carsharing** and **bicycle sharing** pods located throughout neighborhoods to make it easier for residents to own a single car; and a **Guaranteed Ride Home** program making employees more comfortable with using transit to Alameda Point.



Implementation and Monitoring: Making the Strategy “Work”



A comprehensive set of implementation, partnering, and monitoring strategies will also be in place with the development to ensure the Transportation Strategy “works” in terms of efficiency and accessibility and also in terms of community acceptance.

Providing alternatives to driving alone is only successful if the alternatives are provided, well-managed and marketed. The on-site Coordinator will be responsible to schedule and manage data gathering and analysis. The results will be used to see which programs are most successful and fine-tune programs that are not meeting their goals. This process will allow investment in transportation for Alameda Point to be deployed to the strategies and programs where it has the greatest effect.

Although this transportation strategy will be fully funded by the project, strategic partnerships will also be identified to further leverage project and user (Eco Pass) fees with outside funding. Strategic partners may include:

- Bay Area Air Quality Management District
- Bay Area Water Emergency Transportation Authority
- Alameda Landing TMA
- AC Transit
- Caltrans
- Bay Area Rapid Transit District
- Jack London Square and Chinatown Residents
- Metropolitan Transportation Commission
- Association of Bay Area Governments
- Alameda County
- City of Alameda, Major Developments
- City of Oakland, Major Developments

Executive Summary



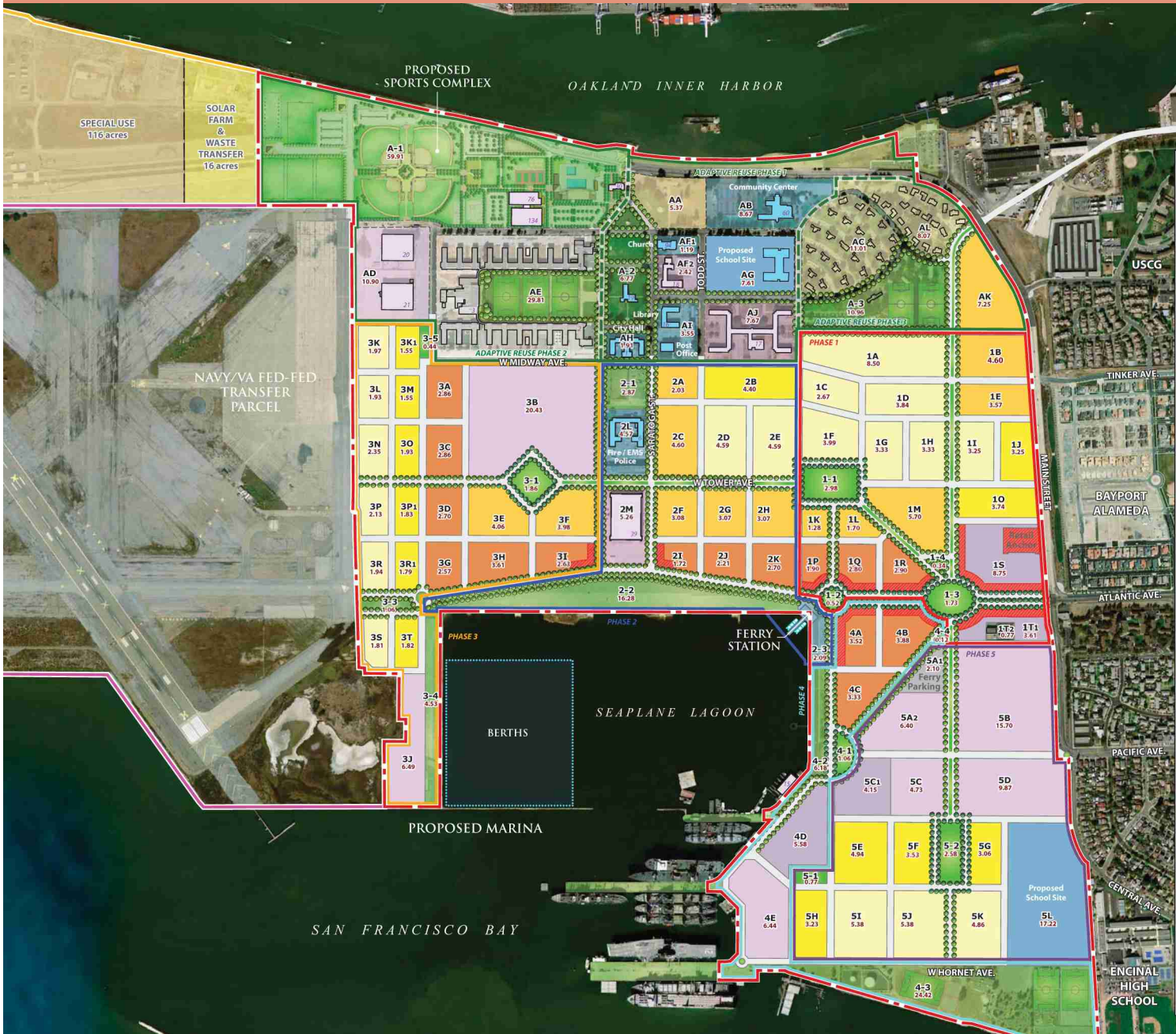
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ALAMEDA POINT REDEVELOPMENT MASTER PLAN

LEGEND

- Site Boundary
- 1C**
3.97 Parcel Number / Acreage

Residential Land Use - Block Types

	50 du/a	High Density	2,107 units
	30 du/a	Medium Density	974 units
	17 du/a	Low Density Attached	616 units
	10 du/a	Single-family Detached	649 units
		Other (Re-Use/Renovation)	157 units

Phases 1-5 Residential 4,503 units

Commercial Land Use

	Ground Floor Retail	350k SF
	Commercial 1.5 FAR	1,297k SF
	Commercial 0.5 FAR	1,385k SF
	Adaptive Re-Use/Other Commercial	500k SF

Phases 1-5 Commercial 3,532k SF

Parks & Open Space

	Civic	260k SF
	Wetlands	
	Parks	
	Greencourts/Paseos	

Phases 1-5 Open Space 145 acres
Commercial & Civic BUA 3,792k SF



December 9, 2008



CALTHORPE ASSOCIATES
URBAN DESIGNERS, PLANNERS, ARCHITECTS

Coordinating Land Use & Transportation

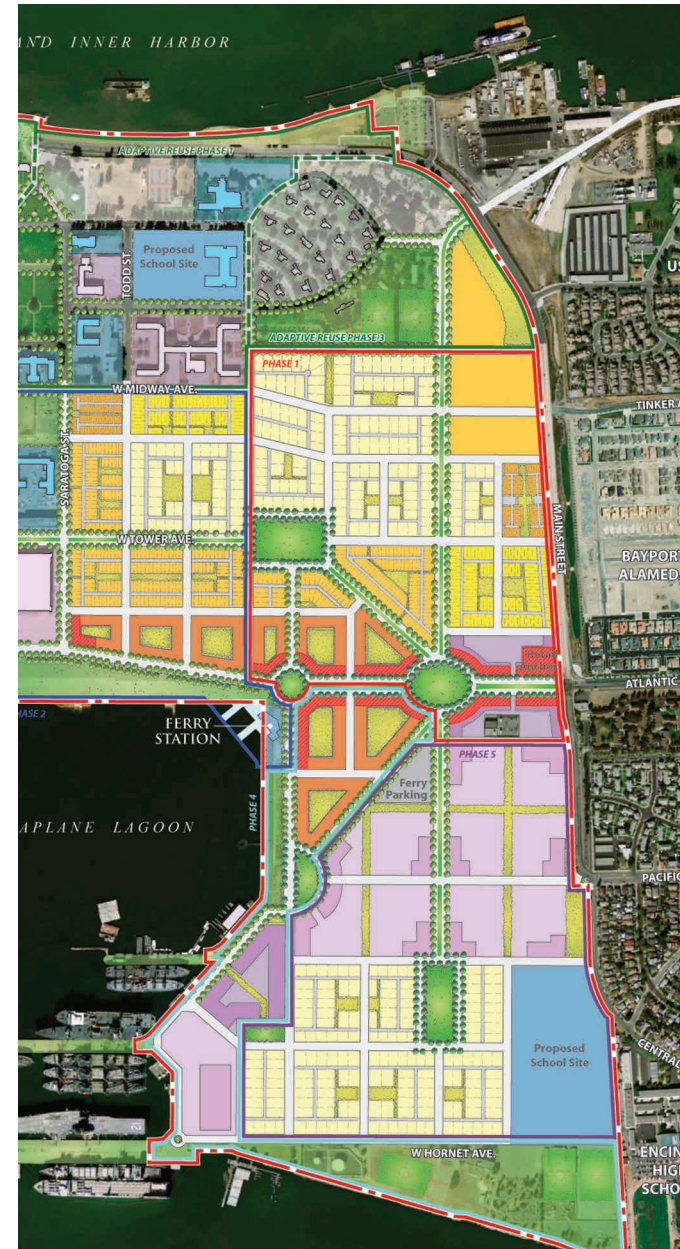
Jobs-Housing Linkage

While providing a mix of uses is a key element in reducing vehicle trips, having both employment and residential land uses is not sufficient. These jobs need to match the residents and vice versa. By providing a range of job types (retail, research, office, etc.) and a range of housing types from affordable apartments to single family homes, the Alameda Point development will maximize the potential jobs/housing “matches” on site. Each match reduces the number of vehicle trips that will enter/leave Alameda Point during peak hours.

Design streets for low speed and safe crossings

In addition to new residential and commercial buildings, the Alameda Point development will provide significant infrastructure, including streets. All new streets and intersection upgrades will consider the needs of pedestrians. Design principles include:

- Avoid the use of multilane streets.
- Ensure that multilane streets have raised medians and pedestrian refuges.
- Design short blocks and provide pedestrian pass-throughs on long blocks.
- Use short cycles and pedestrian actuation at all traffic signals.
- Design most streets to self-enforce speeds of 25 mph or less.



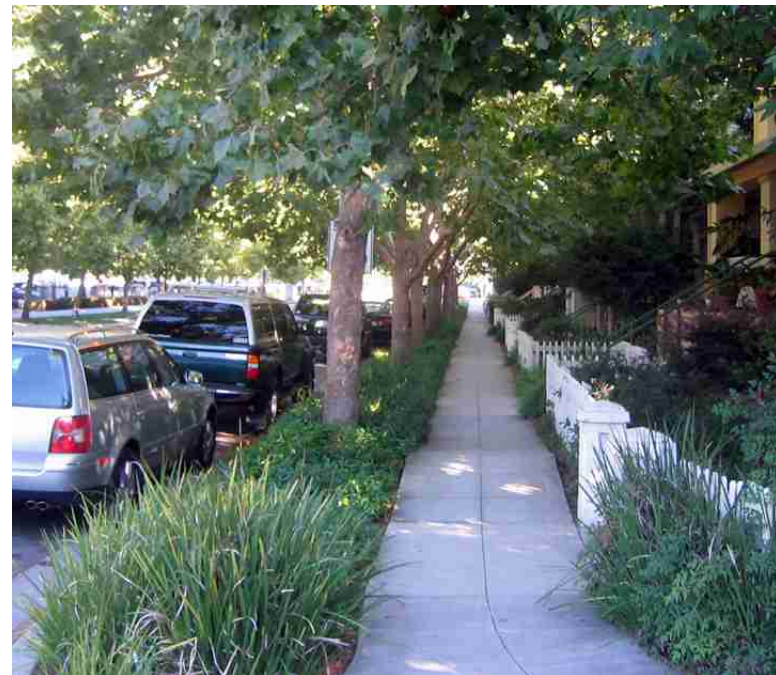


Coordinating Land Use & Transportation

Locate land uses and transit to encourage walking

Research has shown that people walk more when destinations are within close proximity, along flat routes with easy street crossings, and through interesting areas with storefronts, street trees, street furniture and other pedestrian-oriented amenities. To encourage walking trips, the Alameda Point development will:

- Design residential areas with sufficient density and proximity to transit to support transit
- Provide sidewalks on all streets except alleys and mews
- Maximize number of housing units within 2-minute walk of a food market
- Maximize number of housing units within a 5-minute walk of a bus or shuttle stop
- Maximize number of housing units within a 10-minute walk of the Ferry Terminal
- Locate the new school and civic/public uses so that residents can easily walk to them
- Make walking interesting through design, variation, landscaping, and mixed use





Transit Strategies

Transit service improvements to Alameda Point are the backbone of the recommended Alameda Point Transportation Strategy. Effective, efficient, regular, comfortable, and convenient bus and ferry service from and to Alameda Point is essential if Alameda Point is going to attract transit-minded residents and employers and if the redevelopment of Alameda Point is going to significantly improve transit services for all of Alameda. All the other transportation strategies recommended in this Plan, such as the transportation coordinator, the car share program, the guaranteed ride home program are important, but they are important because they improve the effectiveness and convenience of the backbone ferry and bus service.

The Transit Center

A central element of the transportation vision for Alameda Point is a strong intermodal transit hub that provides seamless linkages between local and regional transit services. A relocated Ferry Terminal and bus transit hub at the Seaplane Lagoon will serve as Alameda Point's Transit Center, providing a focus for ticket sales, travel and tourist information, and shelter. Strategically located at the terminus of Ralph Appazatto Memorial Parkway and at the center of the proposed transit-oriented land use program, the Transit Center will include the ferry terminal, bus stops and facilities for East Bay and San Francisco bus service providers, a shuttle stop, bicycle parking, a bicycle share station, a car share pod, and administration/office accommodation for the Island's Travel Coordinator.



Ferry Service Enhancements

Regular ferry service from Alameda Point is consistent with the NAS Alameda Community Reuse Plan and the Bay Area Water Emergency Transportation Authority's (WETA) Regional Ferry Plan. More recent regional efforts also indicate a potential connection to a new South San Francisco Ferry Terminal from Alameda. With the redevelopment of Alameda Point, the ferry terminal and regional ferry service would be relocated from the existing Main Street terminal on the northern edge of the property to the Seaplane Lagoon. The Seaplane Lagoon location shortens the ferry travel time from Alameda to San Francisco and facilitates the development of the Transit Center as the center of the Alameda Point transit-oriented land use program.

The Alameda Point project will provide an annual operating subsidy to the current ferry service in return for enhanced and more frequent ferry services.

Estimated Site Requirements for Alameda Point Ferry Terminal and Transit Center

Ferry Terminal	160,250 sq.ft (3.7 acres)
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Additional Requirements for Transit Center

Bus Terminal	4,640 sq.ft
Shuttle Service	2,880 sq.ft
Bike Station	1,300 sq.ft
Additional Parking	90,800 sq.ft

Source: WTA Authority and Fehr& Peers, 2004



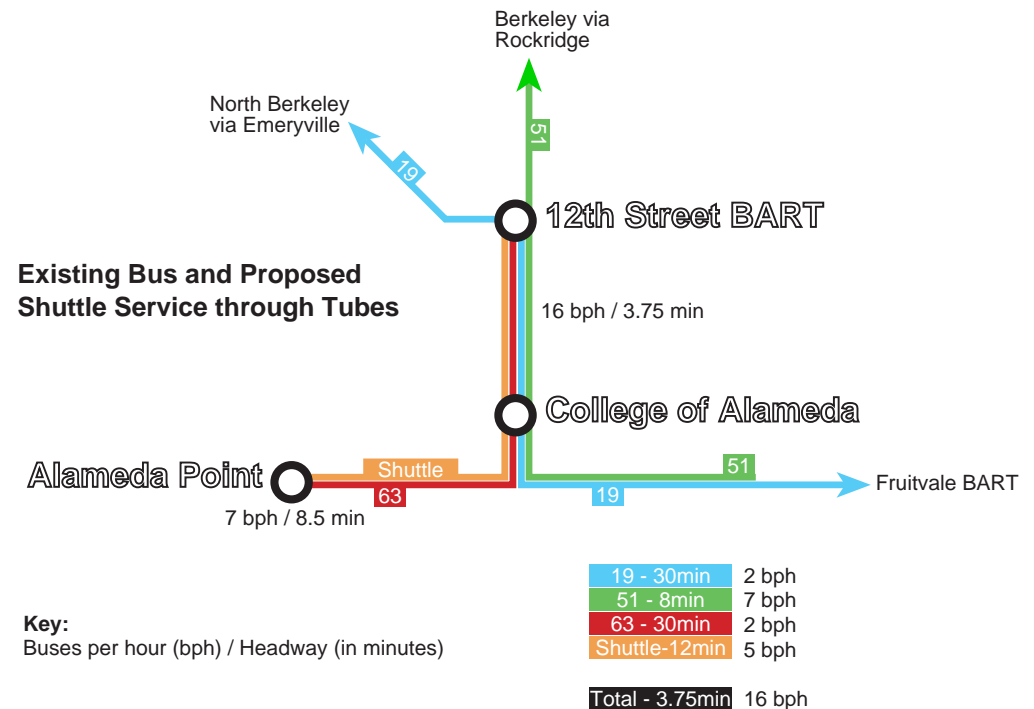
Transit Strategies

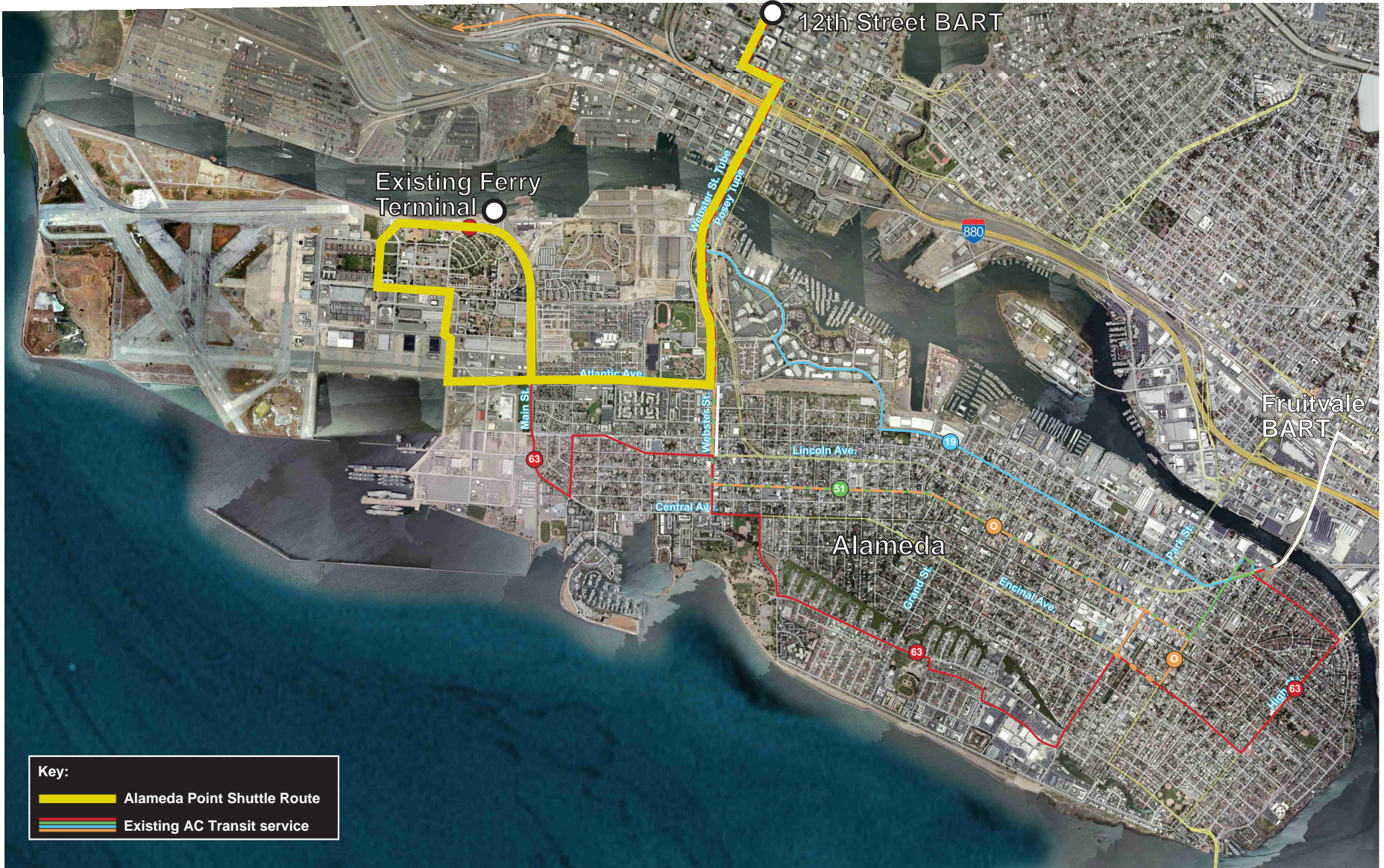
Shuttle / Bus / Rapid Bus / Bus Rapid Transit

Bus and shuttle service connecting Alameda Point to the Bay Area Regional Transit (BART) and regional employment centers such as Downtown Oakland and Downtown San Francisco is another essential component of the transportation strategy. As automobile congestion increases in the Bay Area and the economic and environmental impacts of the automobile become a greater concern to Bay Area residents, future residents and employees at Alameda Point will demand effective, convenient, and regular bus and shuttle service. The Alameda Point Transportation Strategy establishes a 10 to 15-minute headway (or four to six buses per hour) goal for bus and shuttle service from Alameda Point to Downtown Oakland and BART from 5:00 AM to 11:00 PM. Reduced headways and reduced hours may be appropriate during weekends when demand for the services is lower.

The transit strategy is based on two objectives:

- Excellent transit service must be provided on “day one” so that the project can successfully attract Eco-minded residents and employers.
- As each phase of the development is constructed and occupied, the transit service must improve and expand so that a larger number of residents and employees throughout the City of Alameda may begin to take advantage of the service or see their existing transit service improve because of the development.





Transit Strategy Phasing

In the first phases of the development, the transit strategies are focused expanded transit between Alameda Point and Downtown Oakland. In the later phases, service expands to include longer, cross-Island routes to Fruitvale BART and improved ferry service. The project's financial contributions to operating income will increase as transit expands in each phase. This section outlines the necessary phasing of the transit strategies to support the land use plan.

Day One and the Initial Phases of Development

On Day One and for the initial phases of the project, the required transit service will likely be provided through contracts with private firms to operate buses and shuttles between Alameda Point and Downtown Oakland. The buses and shuttles will run throughout Alameda Point and connect to the Main Street Ferry Terminal and Downtown Oakland. Alameda Point residents and employees will be able to board the buses at no charge by showing their "Eco-pass" Access to the buses will also be provided to non-Alameda Point residents and employees at an appropriate per-ride fare.

Coordination with existing transit services will be important in the initial phases. The Alameda Point shuttle/bus system can and should be coordinated with the Alameda Landing required shuttle/bus system. Economies of scale may exist with the two working together to provide more service and be more cost effective. The City also plans to coordinate these services with

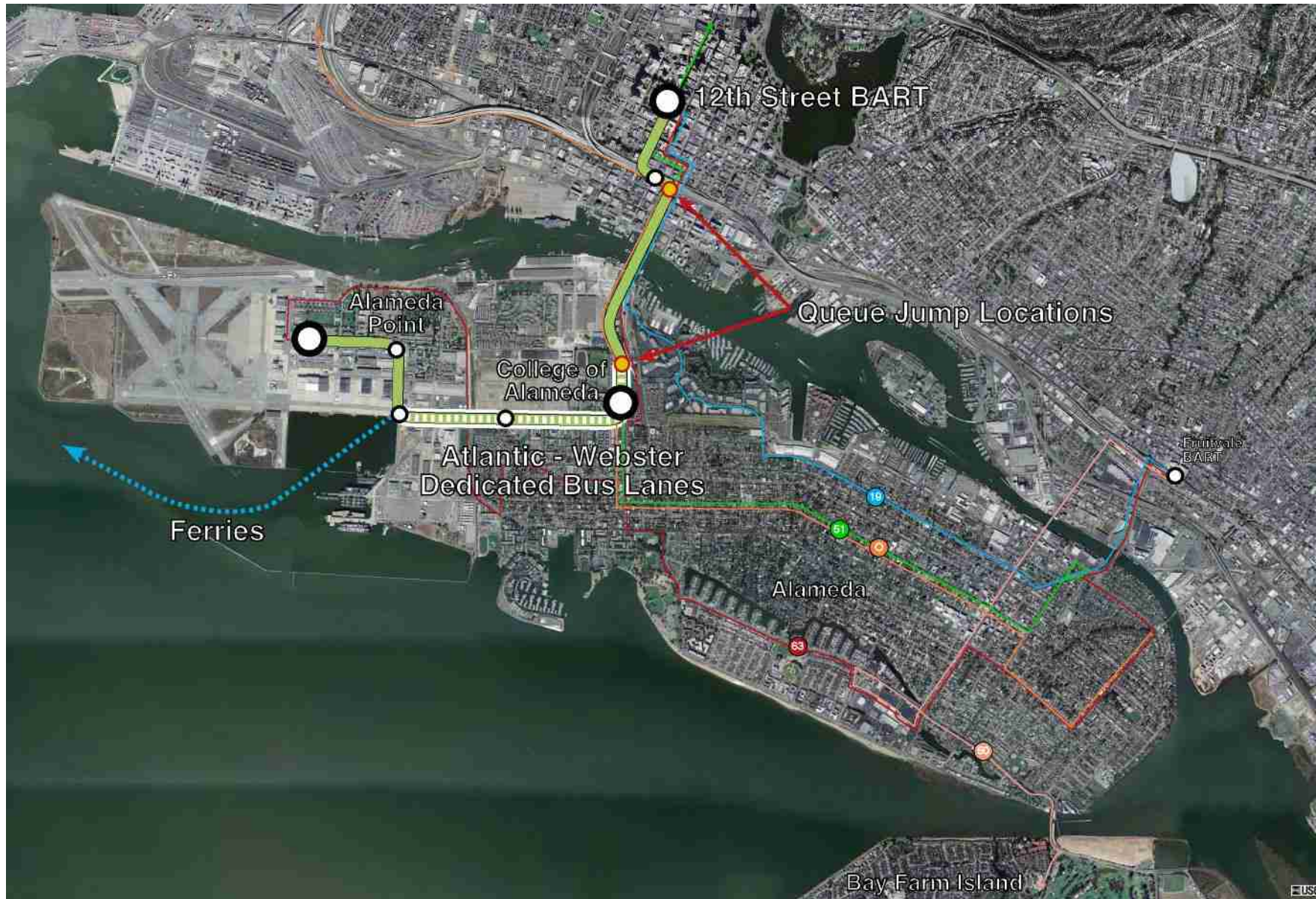
the Oak to Ninth Project required shuttle service in Oakland. The Alameda Point service must also be coordinated with AC Transit to ensure that the shuttles do not replicate existing AC Transit service, that they supplement AC Transit Service, and that the fare for non-Eco-pass riders does not detract from AC Transit fare box revenues.

Opportunities may also exist in the initial phases of the development to work with AC Transit to modify certain AC Transit routes to improve service to the rest of the City, while Alameda Point provides service on the west end. For example, AC Transit Line 63 currently connects Alameda Point to Downtown Oakland. It also provides cross-island service, operating on 30-minute headways.

If AC Transit were to split the current 63 into two lines, one of which would be paid for by the Alameda Point project, AC Transit could reallocate the resources dedicated to the existing 63 to create a shorter 63 route that would operate on shorter headways (i.e., the bus would arrive every 20 minutes instead of every 30 minutes), thus creating a benefit for residents in the east end. Riders traveling cross-Island would transfer at Ralph Appazatto Memorial Way and Webster Street.

By splitting the line, both the west and east end could benefit from improved service with no additional cost to AC Transit.

While cross-island service is important, it creates inefficiencies from a transit operations perspective and forces AC Transit to operate on 30-minute headways. This route also creates a long ride for residents boarding the bus in Downtown Oakland with destinations other than the western end of the island.



Bus service will also improve in the early phases because of planned queue jump lane construction at the new Stargell Avenue intersection at Webster Street. Queue jump lanes are lanes that allow transit vehicles to bypass congestion at critical intersections.

On the approach to the tubes, these lanes will allow buses to move past the queue of motorists waiting at the intersection to minimize the travel time for transit. This improvement is being funded by the Catellus (Alameda Landing) development.

In the short term, the Alameda Point transit program must not undercut or impede AC Transit services. In the long term, the entire Alameda Point program and annual transit operations budget may be transferred to AC Transit. In return, AC Transit would provide the required service and Alameda Point residents and employees would receive AC Transit Eco-passes, which would provide access to the entire AC Transit service area.

Second and Third Phases of Development

As the development of Alameda Point progresses into the second and third phases of the land use program, the project should continue to construct transit improvements throughout Alameda and increase the funds available for annual operations. During the second and third phases of the development, the transit service should mature from a shuttle/bus service to a “Rapid Bus” service. Additionally, improvements across the City, from Alameda Point to the Fruitvale BART station, can begin to attract additional riders

Several rapid bus lines are in operation locally. AC Transit is currently operating a rapid bus line along San Pablo Avenue, providing faster trip times and attracting new riders to the service.

Rapid bus service includes upgrades such as signal prioritization, where the bus can trigger a green light while a regular vehicle cannot, and improved bus stops that have shelters, seating, and sometimes real-time information about how long a passenger can expect to wait for the next bus. The stops for these buses are normally farther apart than for local buses. These improvements are relatively easy to construct and can be implemented incrementally.

To strengthen further the overall transit service for the City, the second and third phases of the transit strategy should also focus on providing additional queue jump lanes, not only through Alameda but also on the Oakland side of the tubes and bridges.

These lanes allow transit vehicles to bypass congestion at intersections by creating additional transit-only lanes. Similar to the High Occupancy Vehicle (HOV) lanes on the approach to the Bay Bridge, these lanes would be constructed on either side of the tubes, but not in the tubes themselves.

In Alameda, an additional set of queue jump lanes should be constructed at the entrance of the tubes at Mariner Square Drive and at the intersection of Ralph Appazatto Memorial Way.

On the Oakland side, initial concepts for queue jump lanes for buses must be developed in close coordination and in partnership with and the City of Oakland, the Chinatown Community, Caltrans, the Alameda County Congestion Management Agency, and other stakeholders.



Final Phases of Development

Ultimately, the goal of the Alameda Point Project Transportation Strategy is to establish a “Bus Rapid Transit” (BRT) system that would serve all of Alameda. Similar to the BRT system successfully operating in Eugene, Oregon, an Alameda BRT system would provide a congestion-free route for enhanced buses offering all the amenities of a light-rail system. This includes substantial sheltered stops with seating, real-time arrival displays, ticket machines to allow patrons to board through any bus door, traffic signal priority for buses, and dedicated travel lanes where feasible.

Throughout much of Alameda, the City has preserved the historic Beltline railroad right-of-way for transportation purposes. The former Beltline right-of-way could redevelop as a BRT right-of-way connecting Alameda Point to the Fruitvale BART Station. Alternatively, the Alameda BRT system could utilize Lincoln Avenue and the stations, which historically served Alameda’s original commuter rail system and the Southern Pacific Railway’s Red Car system. A Lincoln route would provide stations more convenient and central to the majority of Alameda’s existing neighborhoods.

Although ideal for BRT efficiency, dedicated estuary crossings are not assumed with this Transportation Strategy. For access to Downtown Oakland/ Jack London Square, a new transit bridge poses unique challenges that require cooperation and partnerships with the City of Oakland, the Port of Oakland, the Coast Guard, Union Pacific, the transit agencies, and a host of other agencies with regulatory or permitting authority, such as the US Coast Guard, the Army Corps of Engineers, and the Bay Conservation and Development Commission.

Based on initial studies, the bridge would require an elevated drawbridge that crosses both the Oakland Estuary and the Union Pacific (UP) tracks in Jack London Square. Adding to the cost, the bridge would

need approximately 175 feet of clearance in the open position to allow the largest of the Coast Guard ships to pass under. The bridge would likely need to align with 5th Street in Alameda and Clay and Washington Streets in Oakland. The drawbridge could allow bicycle and pedestrian access but would otherwise be transit-only.

Alternatively, a transit tube could provide a dedicated BRT right of way under the Estuary and under the UP tracks. Access from the end of the tube or drawbridge to 12th Street BART would require significant coordination with various stakeholders in the City of Oakland. Given the significant hurdles that would need to be overcome to construct an effective transit bridge for western Alameda, the Alameda Point Transportation Strategy recommends that the Alameda Point transportation resources be focused on improving transit access at either end of the Webster and Posey Tubes to enable the tubes to more effectively serve transit vehicles.

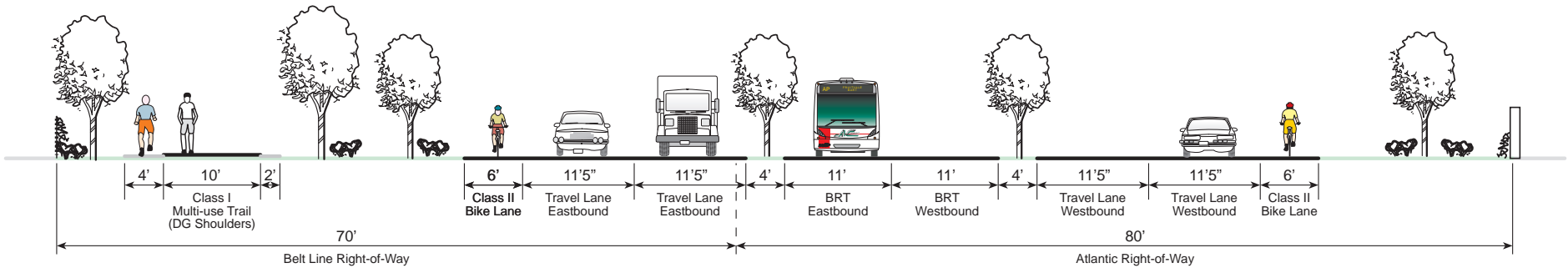
Providing a new dedicated transit right-of-way across the estuary to the Fruitvale BART station is less difficult, as the Fruitvale Bridge already includes a dedicated rail bridge. However, the bridge would require significant upgrades and a seismic retrofit to accommodate BRT. Oakland-side improvements, such as a redesign of Fruitvale Avenue, would also be needed to provide dedicated BRT travel lanes to the Fruitvale Village.

As opportunities arise to address the estuary crossing challenges, the BRT system could be incrementally expanded across Alameda and into Oakland. For example, the BRT line might use a dedicated right-of-way in Alameda, utilize queue jump lanes to exit and enter the tubes, but join the flow of traffic inside the tubes and on the Oakland city streets. This approach would avoid the very costly and potentially controversial improvements necessary to create a new dedicated transit crossing or “transit only” lanes in Oakland where they do not currently exist.

Ralph Appezato Parkway Proposed Cross Sections Main Street to Webster Street

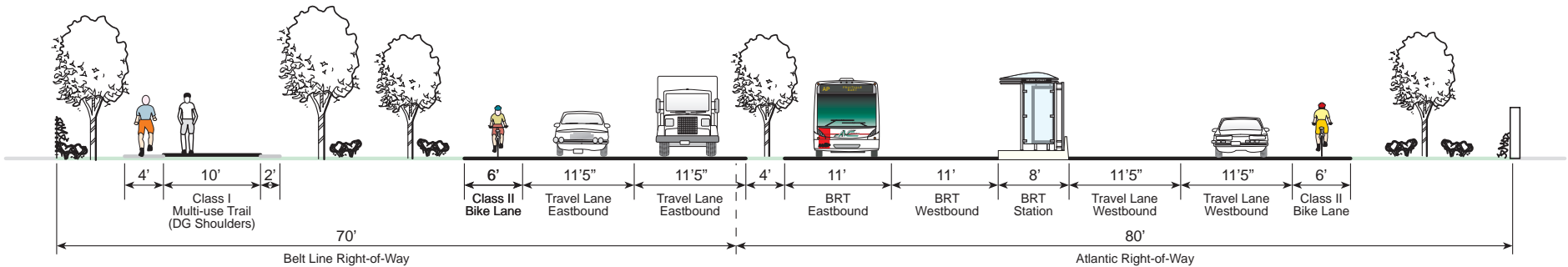
**Appezato Parkway looking West
near Third/Mosley**

Typical Section



**Appezato Parkway looking West
near Third/Mosley**

Section at BRT Station



Potential (Long-Term) Transit Strategies

Light Rail Transit/Streetcar

The Alameda Point Transportation Strategy is also designed to lay the groundwork for potential, long-term transit strategies that may be desirable for Alameda, such as a Light Rail Transit system (Streetcars) or even a Personal Rapid Transit system. Both transit systems require complete dedicated right-of-way for operation. With the BRT installation, this right-of-way will be reserved Island-wide with the exception of the two estuary crossings, thus laying the groundwork for these enhancements.

Light Rail Transit (LRT) and/or Streetcars are familiar to most residents of Alameda. Streetcars operate along Market Street in San Francisco and formerly operated throughout Alameda. The LRT/Streetcar alternative includes all of the same crossing and right-of-way issues as the BRT option described above but at a significantly higher cost.

In addition, crossing the UP main line at the Fruitvale BART Station with a light rail or streetcar will require either an elevated crossing or an underground crossing, according to Union Pacific.

While the community expressed interest in streetcars as a community-building element, this type of transit would require significant investments and higher ridership than the BRT in order to justify the construction and operating costs. Nonetheless, LRT or streetcars are a natural progression from BRT.

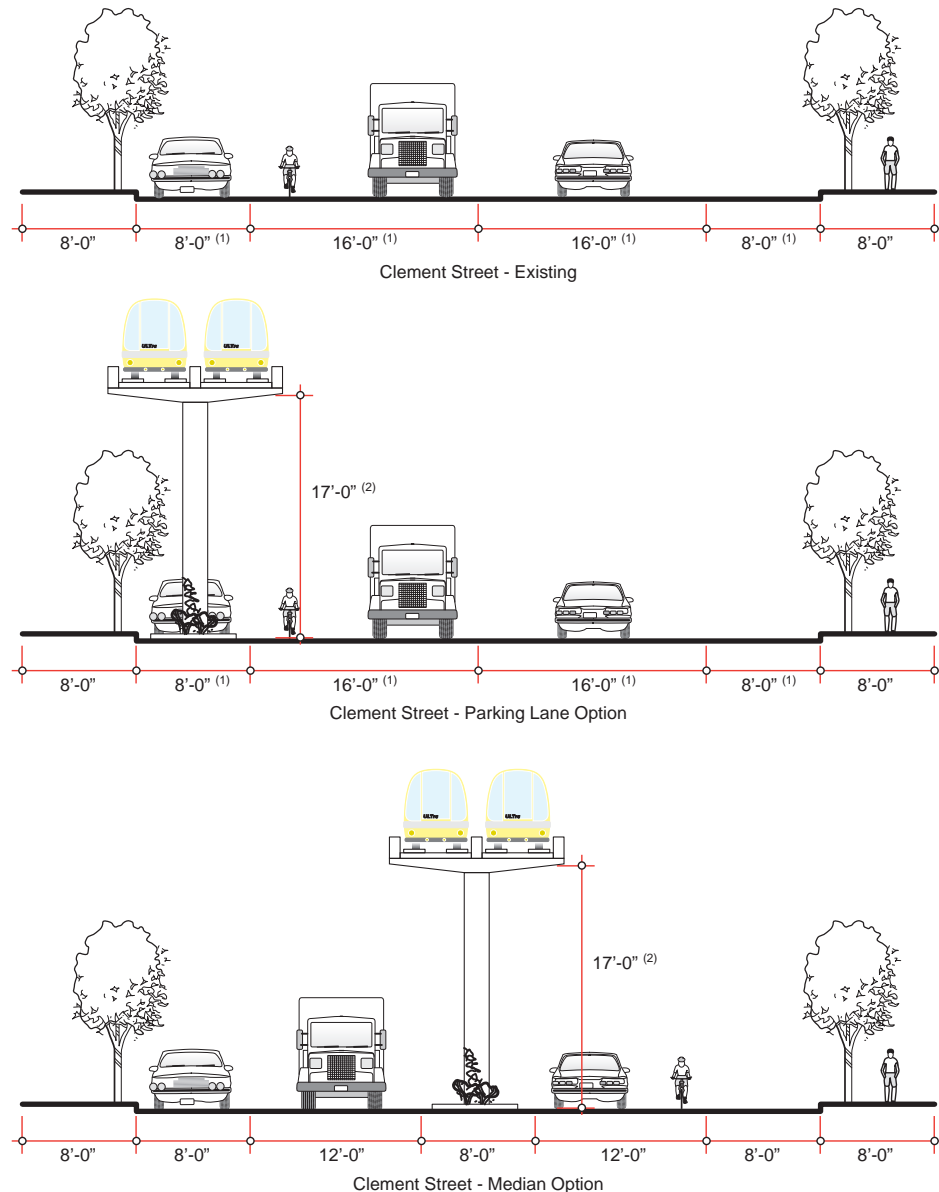




Potential (Long-Term) Transit Strategies

Personal Rapid Transit

Personal Rapid Transit (PRT) describes a number of technologies that allow flexibility for riders. A passenger enters the PRT station, selects a destination, and waits for no more than six to seven minutes for a transit vehicle. The vehicle carries the passenger directly to the destination after the initial wait time, bypassing stations in between. If others passengers at the same station have selected the same destination, the vehicle may also carry small groups of passengers. These technologies are computer-operated, generally without a driver. Due to the lower weight of the vehicle and computer operation, the construction and operating costs are projected to be less than a traditional light rail or streetcar system. However, because of computer operation, the system must be grade-separated from intersections, pedestrians, vehicles, or bicycles. Therefore, a PRT system would require extensive above ground or underground infrastructure throughout both Alameda and Oakland. Currently, few Personal Rapid Transit systems operate in the United States. A promising PRT system is under construction at London's Heathrow Airport, connecting a remote parking lot to its Terminal 5. As this technology matures and gains a foothold in other locations, the City may be interested in evaluating its feasibility.





Transit Support Strategies

On-Site Coordination

The community built at Alameda Point will be one where getting around by automobile is only one of many viable transportation modes. The goal is to have both residents and employees at Alameda Point avoid automobiles for the majority of their trips. But with the central role that automobiles play in most everyone's daily life, a plan must be in place to inform people how easy it can be to get around without a car. For Alameda Point, this plan will include a full-time, on-site coordinator, a marketing and promotional program, and information sharing via internet kiosks with free wi-fi.

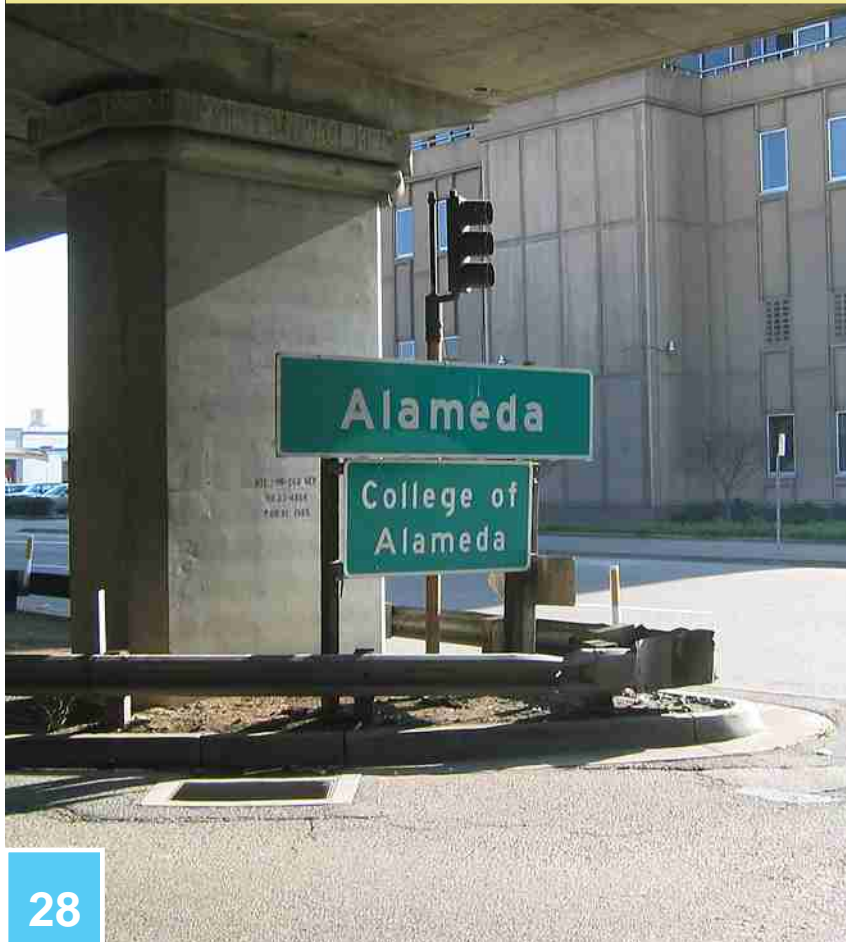
From the day that the first employee comes in to work and the first family moves in, there will be a plan in place and a person whose sole job is to help people discover alternatives to driving alone in a car. The On-Site Coordinator will be available to help people plan their trips and work with transportation agencies and others to promote transit, vanpooling, carpooling and carsharing, bicycling and walking. In other words, the Coordinator will be tasked with making the strategies presented in this document "work".

To attain and sustain the goals of the Alameda Point TDM plan, a full time position will be created for a TDM Coordinator. This person will work at Alameda Point and be the contact person and informational resource to support the goal to provide residents and employees with attractive alternatives to single occupant vehicle (SOV) use, or driving alone. They will plan and produce events to promote transit and non-SOV

transportation, like transportation information fairs, demonstrations of innovative transportation modes and bicycle- and pedestrian-focused celebrations. They will be the liaison between residents and employees of Alameda Point and transportation providers and they will be responsible for monitoring programs to measure the success of the varied TDM programs.

The TDM coordinator will work with commercial carshare programs to ensure parking is available to each program throughout the development, provided in locations to best serve the residents and employees. They will work with the companies to promote the carshare opportunities. The TDM coordinator will also work with the homeowners' association and the City of Alameda to implement and manage Alameda Point's residential parking permit program. The TDM coordinator's office will be the location where residents without parking will be able to purchase short-term parking for guests or themselves. The TDM coordinator will also be responsible for promoting the location of shower and locker facilities for cyclists, working with building owners with appropriate facilities and any on-site health clubs to identify themselves as a location where cyclists can take advantage of their showers.





The Guaranteed Ride Home (GRH) program will be administered by the TDM coordinator. The coordinator will work with the carshare providers to first see if a vehicle is available to provide the ride home. If not, the coordinator will liaise with the County program to secure the ride home for the person. Afterhours, participants would be able to access information via the web or a recorded message by phone to handle the coordination themselves. The TDM coordinator will coordinate updates of this information, along with all other aspects of the TDM program and links regional transportation providers, on a dedicated website.

The coordinator will also produce, perform or take part in providing employees and residents:

- Stock transportation materials, produced by transit agencies, and custom materials focused on Alameda Point
- Host quarterly transportation orientations to familiarize people with the TDM programs and transit options
- Coordinate employee travel information to match employees to TDM programs, such as car- and vanpools
- Operate and staff a central transportation office for Alameda Point
- Prepare a quarterly newsletter / website updates

Transit Support Strategies

Alameda Point Eco Pass

The Alameda Point Eco-Pass is a transit pass that will be issued to every new resident and employee at Alameda Point. The Eco-Pass will allow each employee and resident at Alameda Point unlimited access to shuttles, buses, and possibly ferry services provided by the project. The cost of the passes will be raised through an Alameda Point transit assessment district, collecting annual mandatory contributions from residents and employers. All residents and employees will receive Eco-Passes, regardless of their desire to utilize the transit. This should encourage the self-selection of residents attracted to the transportation options that will be provided at Alameda Point. The intent of the Eco-Pass is three fold:

- To encourage residents and businesses to use transit by providing them with unlimited access to extensive transit services.
- To create a financial incentive structure to attract households and businesses that are willing and interested paying higher fees in return for better transit service.
- To provide a permanent, on-going, annual funding source for expanded transportation service operations.

Ultimately the entire program could be transferred and operated by AC Transit, which would then provide unlimited access to the entire AC Transit system.



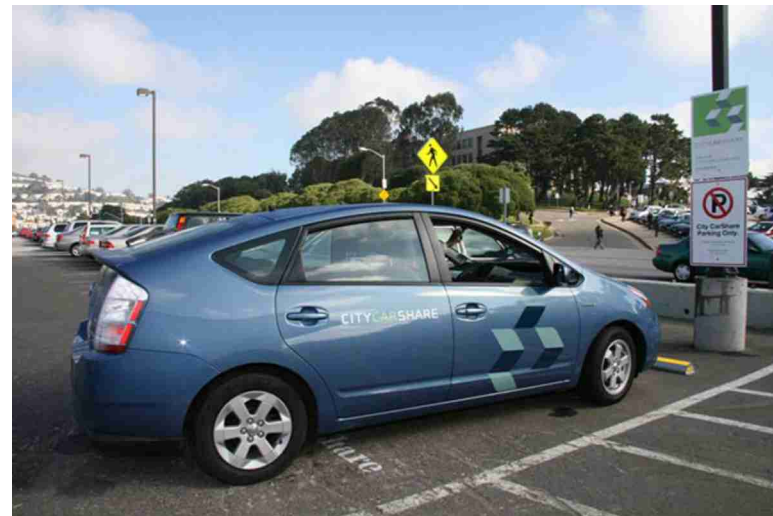


Transit Support Strategies

Carsharing

The Alameda Point project will work with local CarShare companies such as ZipCar and City CarShare to conveniently deploy car share pods near residential and commercial hubs. Pods are typically located within parking garages or surface lots, but may also be on street. For a small annual membership fee (around \$50), any resident or tenant will have access to these cars via an online reservation system and an electronic access (membership) card. Hourly usage rates include gas and insurance, and range from \$5 to \$10/hour. A variety of vehicles, from subcompact to trucks may be available, offering additional flexibility and benefit over private car ownership.

The car-share program is designed to provide cars to people who need them on an occasional basis. The cars will mainly be used on weekends (by site residents) and during weekday days (by site employees). Potential trip purposes include travel to a business meeting during the day and errands by residents during the evening or on weekends. Every effort will be made to offer energy-efficient vehicles for intra-island trips.



The number of vehicles available through the car-share program will increase over time as more employees and residents are located at Alameda Point. Carsharing pods will be located within quarter-mile buffers for the smaller neighborhood centers and a half-mile buffer for the main transit terminal at the northeast corner of the Seaplane Lagoon.



Transit Support Strategies

Carpools and Vanpools

Carpools consist of two or more people riding in one vehicle. A vanpool consists of seven to 15 passengers, including the driver, and the vehicle is either owned by one of the vanpoolers or their employer or leased by a vanpool rental company. Carpools and vanpools maximize the number of patrons that can be served by a parking or roadway facility, and thus should be encouraged. However, carpool and vanpool formations often require ridematching assistance.

Neighborhood carpooling would be incentivized through priority parking at the Transit Hub and potentially transit fare reductions. Additionally, the Guaranteed Ride Home program would provide an insurance plan to those hesitant to join carpools for concerns of being unable to respond to an emergency, sick child, etc.

To facilitate the formation of carpools, the Alameda Point Transportation Coordinator could administer an on-site carpool and vanpool matching service for residents and employees and maintain a list of available vanpools that provide service between Alameda Point and various employment and/or residential destinations. The Transportation Coordination can also advertise the 511.org Rideshare website for additional ridematching services (perhaps via an on-site web kiosk).

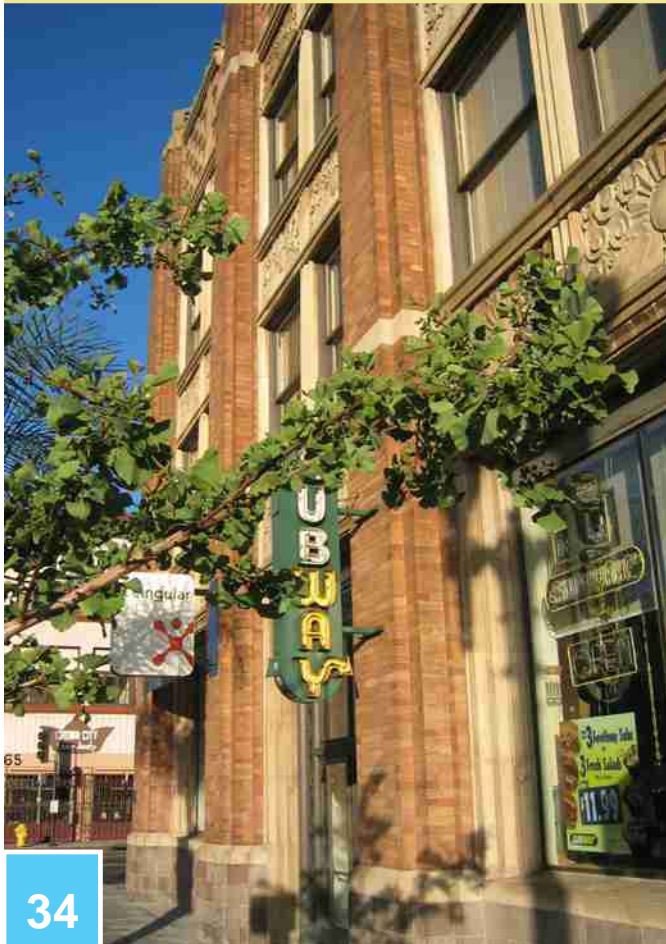


Guaranteed Ride Home Program

One of the reasons many commuters choose to drive to work and/or transit stations, rather than being dropped off or taking transit, is their inability to go home unexpectedly or the fear of being stranded if returning late without a car at the station. Guaranteed Ride Home (GRH) programs are designed to allay these fears. With this program, transit riders are able to use a complimentary or reduced price taxi service to get home.

The Alameda County Congestion Management Agency currently offers free Guaranteed Ride Home “commute insurance” for Alameda County employers with more than 75 employees.

The Transportation Coordinator will work with tenant contacts to register all businesses for the Alameda County Guaranteed Ride Home (GRH) program. In addition, the Transportation Coordinator will make cars from the car-share fleet available for Guaranteed Ride Home Purposes, when they are not reserved for other purposes. When they are reserved, the Transportation Coordinator will rely on the County program. The Guaranteed Ride Home program will be a Day One strategy.



Comprehensive Bicycle Programs

The climate and topography of Alameda Point are ideal for bicycling. Strategies to encourage bicycling to, from, and within the development include:

- Provision of secure short-term and long-term bicycle parking at transit hubs
- Provision of adequate bike racks and/or bike lockers at schools, community and commercial destinations
- Provision of wayfinding signage and user map
- Provision of educational and encouragement programs
- Coordination of enforcement needs with Alameda Police Department
- Employer-based bicycle facilities: showers, lockers and secure bicycle parking

Improve Island-wide bicycle network

The Alameda Point project will assist the City in the design and construction of an island-wide bicycle path through the existing cross-island greenway. This path will support recreational bicycling and better connect all island residents with transit options in the new Alameda Point Transit Hub.

Attended Bicycle Station

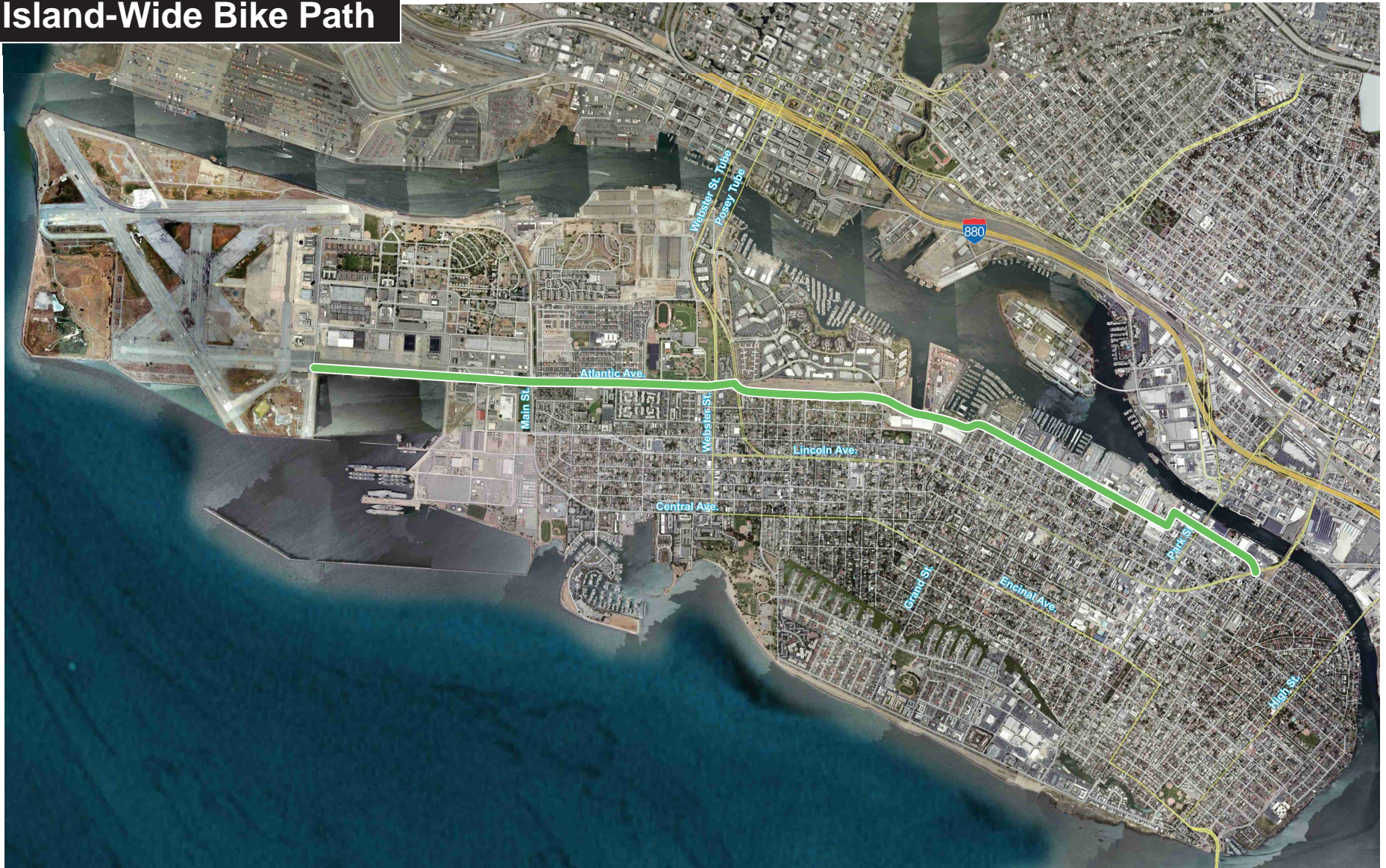
Another strategy to encourage bicycling on Alameda Point will be an attended bicycle station at the Transit Hub. An attended bicycle station would provide a high-capacity, secure parking option for Alameda Point residents, employees and visitors. The station will also provide bicycle maintenance and may serve as a bicycle retail store.

The bicycle station attendant could also staff the bicycle sharing program. Bicycle sharing is a concept that has enjoyed increasing popularity worldwide. Patrons obtain a bicycle at minimal cost from any share pod and return the bicycle to any other share pod. With funding from advertising on the bicycle and pods, bicycle share programs have operated at little or no cost.

Support Strategy: Wayfinding

A primary goal of wayfinding is to solve the “last mile” connection by facilitating transit, bicycle and pedestrian trip planning to and from a given destination (such as the transit hub and Alameda Point center). Additionally, pedestrian and bicycle safety are improved by delineating clear paths and access points for these modes to, from, and within Alameda Point.

Island-Wide Bike Path



Bicycle Strategies

Bicycle Sharing

Bicycle share programs are gaining popularity worldwide, offering a convenient, healthy, and green transportation option.

Bicycle sharing complements public transit, auto transportation, and walking, filling an important “missing link” for short to mid-range trips. The climate and topography of Alameda Point, the Island of Alameda, and indeed much of the Bay Area, are ideal for bicycling. A bicycle share program offers an opportunity to replace vehicle trips with bicycle trips, encourage bicycle use by those who may not own a bicycle or may not have a work commute conducive to cycling, and further enhance Alameda Point’s image as a sustainable, eco-friendly community.

Bicycle share “pods” will be strategically placed throughout Alameda Point. Each bicycle will include a basket for shopping, lights for nighttime riding, and a map of the Island. Patrons may pick up and drop off a bicycle at any pod, making one-way trips particularly convenient. Annual memberships will be available for purchase online as well as one-day passes (available at the pods). Patrons will need to provide their own helmet or rent/purchase one at the bicycle station, located within the Ferry Terminal at Seaplane Lagoon.

To view a video of the Paris bicycle share program, which has led to five percent decrease in vehicle traffic, visit: <http://www.streetfilms.org/archives/velib%E2%80%99/>





Parking Strategies

Parking policies are one of the cornerstones of a successful Transit Oriented Development (TOD). Traveler behavior, urban design, and financial feasibility of the development can be directly affected, both positively and negatively, by the placement, price, and supply of parking.

Many of the parking demand and supply management national best practices are applicable for the Alameda Point project. Based on the unique needs and characteristics of Alameda Point, the following parking policies and programs could be utilized at Alameda Point to compliment and support the transit program.

Unbundled Parking

Unbundling parking makes the cost of residential and commercial parking visible to households and commercial tenants, such as separating the cost of parking in lease agreements with tenants. Residents at Alameda Point could be offered the option to pay an additional amount for each off-street parking space they require beyond the first, which will be standard for all homes. Communicating the cost of additional off-street parking in this fashion will result in some residents choosing to save money by opting for a single off-street space, when two spaces per dwelling unit is the norm for most new developments.

Parking Pricing

Use variable pricing of on- and off-street parking to achieve an average occupancy of 85% in commercial areas reduces “cruising for parking” and enhances the economic vitality of businesses (with convenient parking).

Implement a phased parking pricing scheme at the Seaplane Lagoon transit center:

- Provide free parking until transit ridership reaches an acceptable threshold or lots fill to capacity
- Institute minimal parking fees thereafter in the range of \$5/day in line with BART station parking fees

Parking Technologies

Implement companion parking technologies (pay by cell phone, etc.) and parking informational brochure, website, and wayfinding signs

Residential Permit Parking

Create residential parking permit zones on residential-only streets within 1/2-mile of the ferry terminal to prevent parking spillover into residential neighborhoods. On-street parking could have two-hour time limits for vehicles not displaying residential permit parking passes. Residents who wish to use on-street parking for more than two hours will also have the opportunity to purchase annual, daily or 14-day passes allowing long-term parking for residents and visitors. All residential streets will provide adequate width for on-street parking along at least one side of the street (both sides in most cases).



Parking Maximums

Off-street parking is typically required at a minimum ratio per dwelling unit or square feet of retail, commercial, etc.. Setting a parking maximum limits the number of parking spaces provided, a strategy which is appropriate when significant non-auto transportation options exist. The following parking maximums should be considered during the entitlement process for Alameda Point:

0.75 to 1.0 space per residential unit and 1.5 to 2.0 spaces per 1,000 square feet of commercial space within a 1/4 mile “walkshed” of the new ferry terminal and BRT station

1.0 to 1.5 spaces per residential unit and 2.0 to 3.0 spaces per 1,000 square feet of commercial space in a 1/4 to 1/2 mile walkshed

1.5 to 2.0 spaces per residential unit and 3.0 to 4.0 spaces per 1,000 square feet of commercial outside the 1/2 mile walkshed

Allow parking requirements to be further reduced where significant opportunities for shared parking between land uses exist (to be reviewed on a case-by-case basis).

Allow on-street parking to satisfy off-street parking requirements for the parcels to which they front.

Allow flexibility for creative parking types, such as stacked parking and valet parking.

Successful implementation of these policies will require the support of strategies that focus on incentivizing transit and non-motorized modes through transportation demand management, as discussed in other sections of this document.

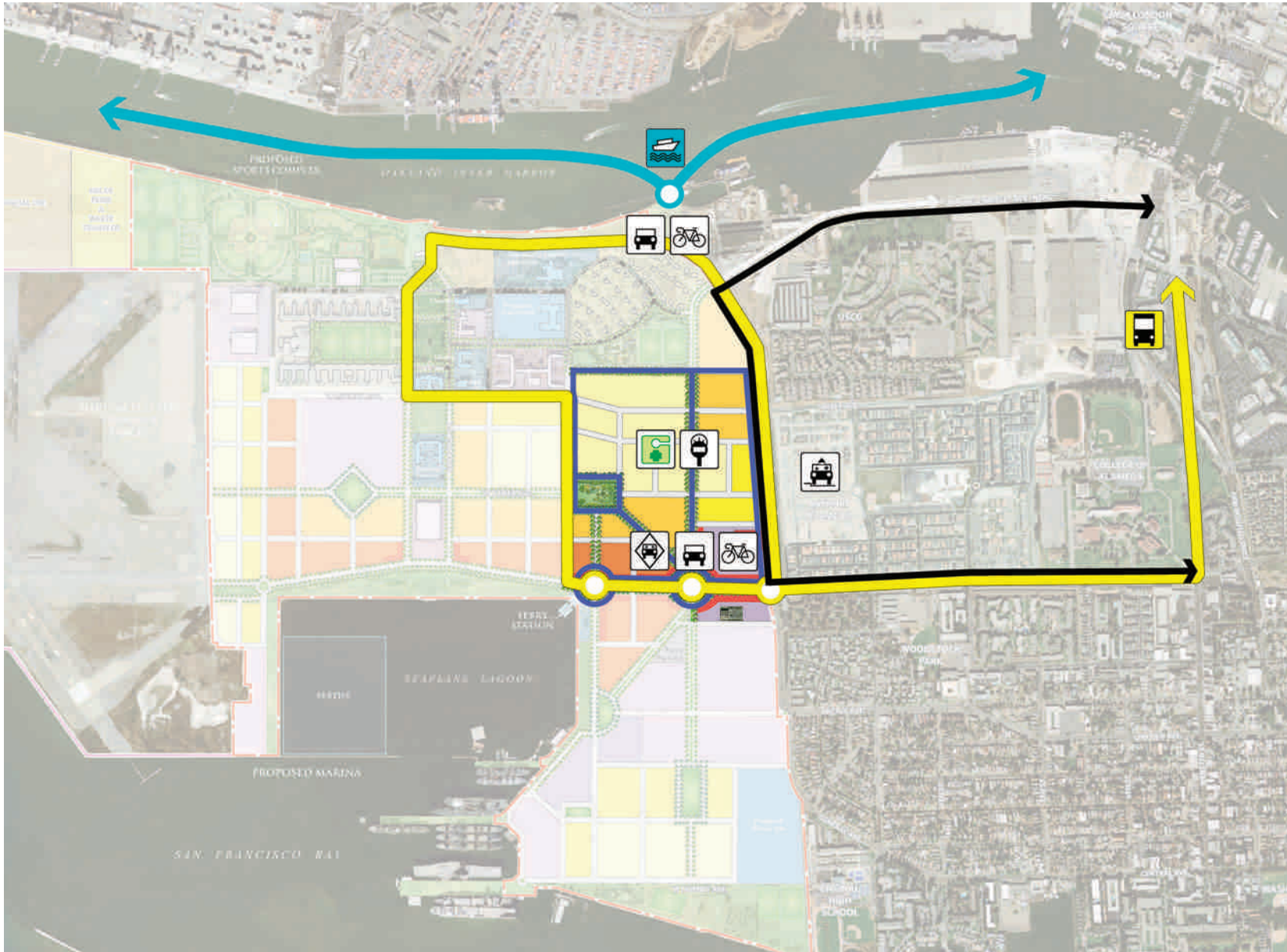


Implementation

Phased Deployment of Transportation Strategies

The proposed land use plan for Alameda Point includes five phases of development. To maximize program effectiveness and minimize traffic congestion, the transportation strategy must be implemented in phases. The following transportation-phasing plan is proposed for coordination with the land use phases.



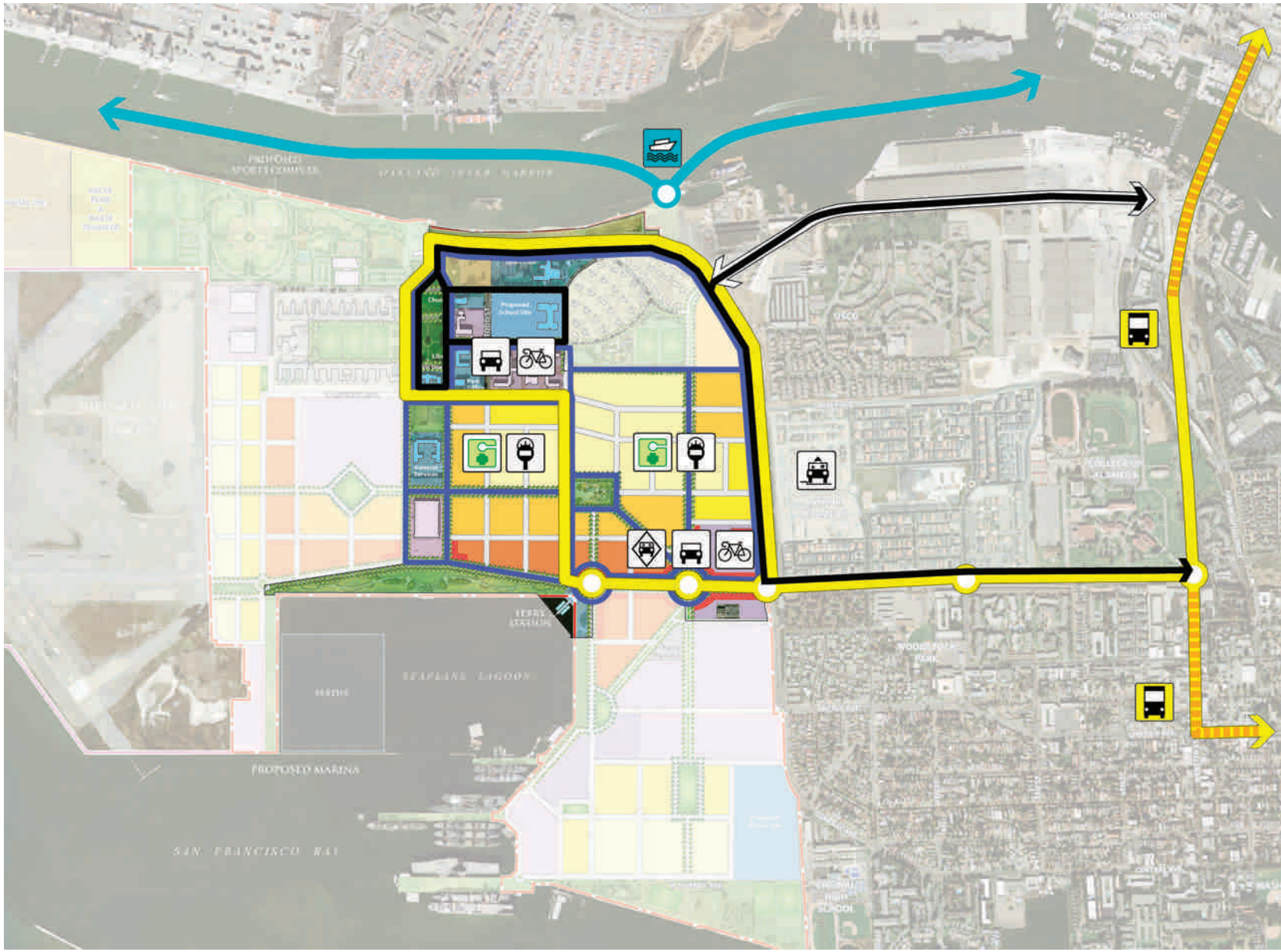


- TRANSPORTATION STRATEGIES PHASE 1**
-  Eco-Pass
 -  Ferry Services
 -  Bus / Shuttle Service to 12th St. BART
 -  Car Share Pods
 -  Bicycle Share Pods
 -  Ridematch & Rideshare
 -  Guaranteed Ride Home
 -  Parking Strategies
 -  Bus / Shuttle Route
 -  Bicycle Route
 -  Truck Route

Phase One

The first phase of the land use program should include “Day One” transportation strategies. From “Day One” the following transportation strategies should be in place:

- Every homeowner and every business pays annual fees for an “EcoPass” unlimited transit pass
- Ferry service from Main Street Terminal
- 10-15 minute headway dedicated shuttle service to 12th Street BART from 5am to 11pm
- Car Share pods
- Bicycle Share pods
- On-Site Transportation Coordinator to present, advertise, and support the following TDM programs
 - Ridematch and Rideshare services
 - Guaranteed Ride Home Program.
 - Premium parking for rideshare and alternative vehicles.
 - Parking information system
 - EcoPass
 - Free wifi and Internet kiosk available at Coordinator’s office
- Unbundled parking costs for commercial and residential
- Premium parking spaces for rideshare and alternative fuel vehicles
- Shared parking facilities
- Bicycle parking
- Multi-modal wayfinding system
- Traffic/Transit use monitoring program
- Off-site roadway improvements to improve automobile and transit access to and from Alameda Point



TRANSPORTATION STRATEGIES PHASE 2

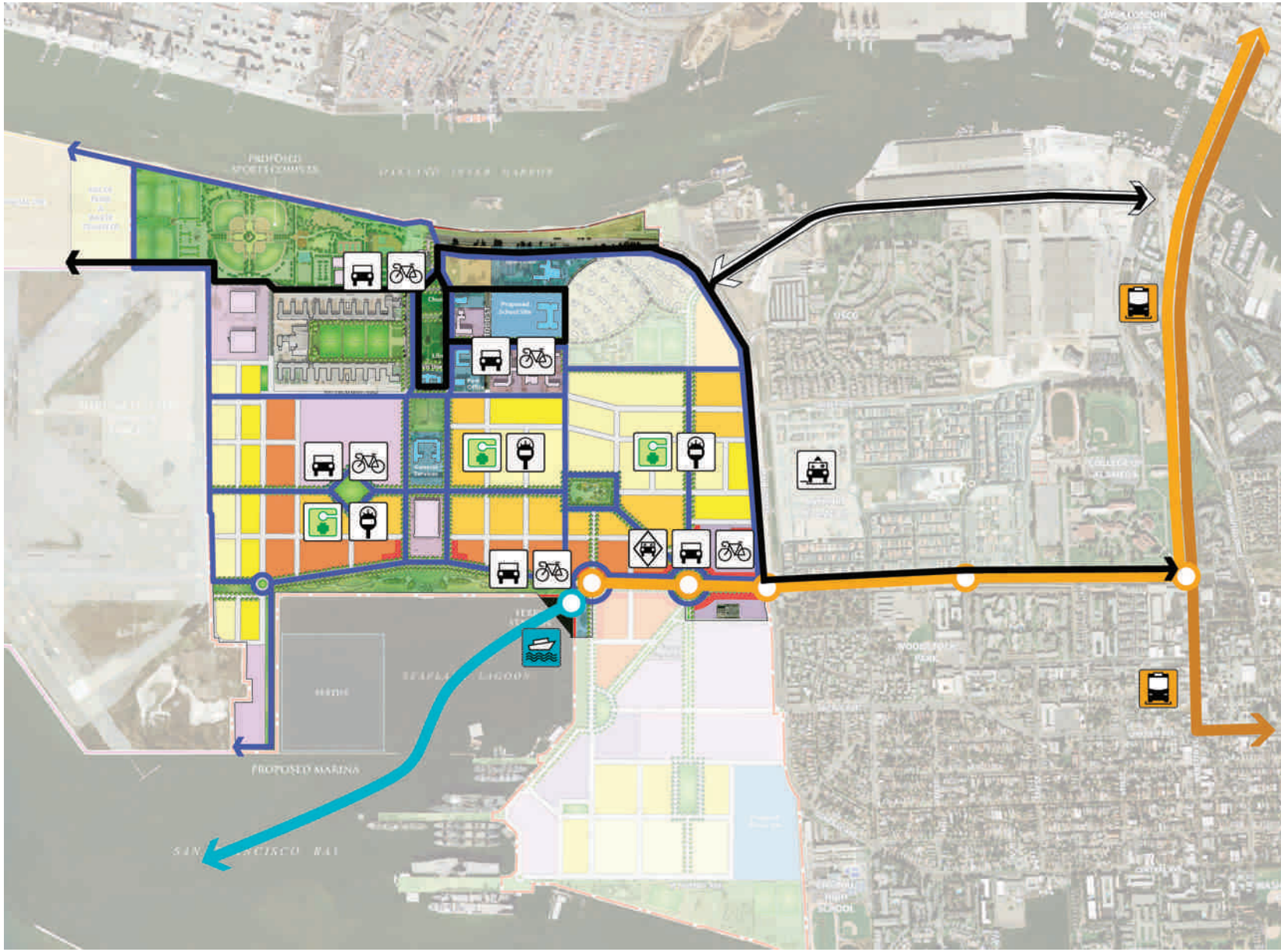
-  Eco-Pass
-  Ferry Services
-  Bus / Shuttle Service to 12th St. & Fruitvale BART
-  Car Share Pods
-  Bicycle Share Pods
-  Ridematch & Rideshare
-  Guaranteed Ride Home
-  Parking Strategies
-  Mitchell Mosley Avenue Extension
-  Bus / Shuttle Route
-  Bicycle Route
-  Truck Route
-  Future Dedicated Transit Right-of-Way & Q-jumpers

Phase Two

The second phase of the land use program should add the following transportation strategies and improvements to Phase One:

- Dedicated transit right-of-way from Main to Webster on Atlantic or Stargell with enhanced bicycle and pedestrian facilities constructed during this phase.
- Mitchell Extension from Alameda Landing to Main Street, unless completed by others, constructed during this phase.
- Transit Improvement Plan for dedicated transit lanes or transit queue-jumpers from Webster to Fruitvale Bridge approved during this phase.
- Plan for queue-jump lanes from Posey Tubes to 12th Street BART and from Fruitvale Bridge to Fruitvale BART approved during this phase.
- Ferry Terminal and Transit Center completed by end of Phase II or early in Phase III.
- Off-site roadway improvements to improve automobile and transit access to and from Alameda Point.
- Additional funds and riders through Eco-Pass program.
- Car Share program expanded
- Bicycle Share program expanded
- TDM programs expanded
- Market-rate pricing for on-street parking
- Residential permit parking





TRANSPORTATION STRATEGIES PHASE 3

-  Eco-Pass
-  Ferry Services
-  BRT Service to 12th St. & Fruitvale BART
-  Car Share Pods
-  Bicycle Share Pods
-  Ridematch & Rideshare
-  Guaranteed Ride Home
-  Parking Strategies
-  Mitchell Mosley Avenue Extension
-  Bicycle Route
-  Dedicated Transit Right-of-Way &/or Q-jumpers
-  Truck Route

Phase Three

The third phase adds the following transportation strategies and improvements to Phase One and Two:

- Enhanced Ferry Services from the new Ferry Terminal/transit station at Seaplane Lagoon.
- Transit Improvements in Oakland from the tubes to and from Webster to Fruitvale Bridge approach.
- Rapid Bus service on 10- 15 minute headway to 12th Street and Fruitvale BART replaces the initial shuttle service to 12th Street, including real time transit information, queue jump lanes, some dedicated right of way, and transit signal priority.
- Plan for Island-wide Bicycle Path along Belt Line approved in Phase III.
- Off-site roadway improvements to improve automobile and transit access to and from Alameda Point.
- Additional funds and riders through Eco-Pass program.
- Car Share program expanded
- Bicycle Share program expanded
- TDM programs expanded



Phases Four and Five

The final phases add the following transportation strategies and improvements to Phases One, Two, and Three:

- Bus Rapid Transit Services on 10 to 15-minute headways to 12th Street and Fruitvale BART, including dedicated right-of-way through most of the network.
- Off-site roadway improvements to improve automobile and transit access to and from Alameda Point.
- Construction of Island-wide Bicycle Path along Belt Line
- Bicycle station and maintenance hub installed at the Ferry Terminal
- Additional funds and riders through Eco-Pass program.
- Car Share program expanded
- Bicycle Share program expanded
- TDM programs expanded





Funding Sources

The funding for implementing the strategies presented in this document will come primarily from the redevelopment of Alameda Point.

On-going costs, such as funding the on-site transportation demand management coordinator, dedicated shuttle buses to BART's 12th Street Station or enhanced AC Transit should be subsidized by the project until the development reaches a size where the total cost of the programs and position can be fully borne by assessments paid by property owners and tenants of the project.

As the development reaches buildout, residents and tenants will contribute significant funds toward transportation programs through mandatory EcoPass user fees. The EcoPass, to be distributed to residents and employees, will provide a stable revenue stream to the operators, both public and private, who participate in the program.

Parking revenue, either in the form of metered street parking or paid parking lots and garages can also generate a significant source of revenue. Parking income can be used to bond against, for the purchase of vehicles and creation of infrastructure, or used to subsidize operations.



Monitoring

The transportation measures and programs that should be implemented at Alameda Point are designed to be monitored, self-sustaining and flexible enough to allow for adjustments and refinements to address the ever changing transportation needs of the Alameda Point community.

A Transportation Management Agency (TMA) should be established to be responsible for implementing the programs, regulating charges and collecting revenues associated with the various programs. The TMA should be established by the project. Major homeowner groups and employers at Alameda Point should have representatives on the Board. The TMA should allocate the additional revenues raised (once operating costs have been accounted for) to support transit operations and the various TDM programs. The TMA should include a Board of Directors, and should be staffed by the Transportation Coordinator. The Transportation Coordinator should monitor all operators of transportation services, such as the bus, ferry, car share operators and act as the link between the users and the TMA Board of Directors.

The programs should all be monitored on an annual basis to determine the success of the programs and to allow the Transportation Coordinator and the TMA Board of Directors to make decisions about the allocation of resources or changes in the services that may be needed to better address the needs of the Alameda Point community. The objective of the monitoring should be to maximize the use of alternatives to the single occupant automobile and reduce peak hour congestion.



A monitoring program that includes user surveys, automobile counts, transit ridership, bicycle and car share usage and costs should be implemented by the project and administered by the TMA annually. The monitoring program could also include requirements that all residents register their vehicles with the TMA office so that the trip characteristics and parking controls can be more effectively monitored for Alameda Point residents. A variety of technologies may be utilized to monitor transportation movements, including roadside cameras to read and record license plates, transponders similar to Fastrak, Radio Frequency Identification Devices (RFID) and residential parking permit stickers. The monitoring program will be established with the first phase of development.

Through annual monitoring and resident and employer surveys, the transportation programs can be modified accordingly to reach the desired travel outcome.

Partnerships

The Alameda Point redevelopment and transportation strategy is designed to be implemented without any partnerships. However, the transportation strategy could be improved and become more cost-effective and more expansive if certain partnerships are established.

To leverage developer and user fees with outside funding, opportunities for crafting funding partnerships should be identified to match programs and projects with available local, regional and Federal grant programs. For example:

Other nearby developments (such as Oak to 9th) currently plan to operate private shuttles to/from BART. Especially in the early phases of development, Alameda Point may benefit from economies of scale by partnering with other shuttle programs for expansion to Alameda Point.

The EcoPass program can be leveraged into a broader network of funding and service. As the project reaches full buildout, the EcoPass funding could be transferred to AC Transit. In return, AC Transit would provide the project's service commitments (10-15 minute headways) and each resident and tenant would receive an EcoPass to the entire AC Transit service area.

An electric car sharing program, electric shuttles, and electric car charging stations present an opportunity to partner with Alameda Power which supplies 80% of its power from clean sources, making this partnership beneficial for the City and its residents and eco-friendly.

Each partner holds the opportunity to leverage each other's funding to successfully bring a project to fruition. For longer-term projects, such as a full Bus Rapid Transit corridor or Streetcar project, state and federal funds will most likely be required. It is imperative to identify a project early and work to sufficiently define it so that it can qualify for inclusion at the regional level, in the Metropolitan Transportation Commission's Regional Transportation Plan. This step is key to begin the process to qualify for state and federal funds.





References and Resources

Many of the resources listed below are available on the City's Alameda Point website:

<http://www.alameda-point.com/AP.html>

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Conversations with AC Transit, BART, City of Oakland, City of Alameda, SunCal, the Water Emergency Transit Authority, City Car Share, MetroBike and Central Parking staff.