E. TRANSPORTATION AND CIRCULATION

This section describes transportation and circulation conditions in the project area, and assesses adoption and implementation of the proposed North Park Street Code in terms of whether it would (1) conflict with adopted policies or programs supporting alternative transportation (e.g., pedestrian, bicycles, and public transit travel modes), (2) cause an increase in traffic that is substantial in relation to background traffic load and capacity (i.e., increase congestion and delay at intersections), (3) exceed level of service standards established by the City of Alameda and by the Alameda County Transportation Commission, (4) substantially increase traffic safety hazards, or (5) result in inadequate emergency access. For project impacts that are determined to be significant, mitigation measures have been identified to avoid or reduce those impacts.

1. ENVIRONMENTAL SETTING

Regional Setting

The City of Alameda is an island separated from the City of Oakland by the Oakland Estuary. Access to the City of Alameda across the Oakland-Alameda Estuary is provided by a one-way couplet of under-Estuary tubes at Webster and Posey Streets (State Route 260), and draw bridges at Park Street / 29th Avenue, Tilden Way / Fruitvale Avenue, and High Street. Doolittle Drive / Otis Drive (State Route 61) crosses San Leandro Channel, providing access from Bay Farm Island.

Interstate 880 (I-880) is a north-south eight-lane freeway (though oriented east-west in the study area) between I-80 near the Bay Bridge and San Jose. Traffic generated by this project could use I-880 to travel to/from eastern Alameda and Contra Costa County, San Francisco (via the Bay Bridge), the Tri-Valley (via State Route 238 and I-580), and the South Bay. The closest access to/from the project site is provided via circuitous routes to/from the 23rd Avenue and 29th Avenue / Fruitvale Avenue interchanges.

Local Setting

The North Park Street plan area is generally bounded by the Oakland Estuary to the north, Oak Street to the west, and Lincoln Avenue to the south, and Tilden Way to the east.

Park Street is the street that carries the most traffic in the plan area. It consists of four travel lanes. One end is located at the Park Street Bridge (providing access to Oakland and I-880), while the other is located at Shoreline Drive, where it meets San Francisco Bay. Park Street is one of two major shopping streets in the City of Alameda. Park Street serves as the primary point of access from the plan area to Oakland and the larger region. Park Street is designated as a Regional Arterial and a Transit Priority Street in the General Plan.

Oak Street lies parallel to Park Street, and serves as a bypass to avoid congestion on Park Street. Oak Street is a two-lane street and is fronted by a mix of residential and commercial uses. Oak Street is designated as a Local Street between Lincoln Avenue and Clement Avenue ~~arterial~~ in the General Plan.

Lincoln Avenue is a major street in Alameda connecting with Tilden Way on its eastern end, which curves around to cross the Oakland Estuary via the Miller-Sweeney Bridge on the eastern side of the plan area. In the plan area, commercial properties front onto Lincoln Avenue, and residential and commercial uses front onto Tilden Way. Lincoln Avenue is designated as an Island Arterial and an Exclusive Transit Right of Way in the General Plan. Tilden Way is designated as a Regional Arterial.

Buena Vista Avenue runs parallel to Lincoln Avenue, but consists only of a single travel lane in each direction with parking on both sides. It is fronted primarily by residential development. The San Francisco Bay Trail runs on Buena Vista Avenue in the plan area until such time that it can be moved to a continuous waterfront trail. It is designated as an Island Collector in the General Plan.

Clement Avenue is a two-lane street that runs from Grand Street to Broadway, and serves primarily industrial land uses. Parking is permitted on both sides of the street. This street is planned to be extended from Grand Street to Sherman Street / Atlantic Avenue, and from Broadway to Tilden Way, in the future. When those extensions are completed, Clement Avenue will provide a continuous east west connection from Atlantic Avenue in Marina Village to Tilden Way and the Fruitvale Bridge. Clement Avenue is designated as a Regional Arterial, Truck Route, and an Exclusive Transit Right of Way in the General Plan.

Blanding Avenue is a two-lane street that runs parallel to Clement Avenue and connects Oak Street on the west to Tilden Way on the east. A mix of primarily industrial and commercial uses front onto Blanding Avenue in the Plan area. Blanding Avenue is designated as a Transitional Arterial in the General Plan.

Pedestrian Travel

Sidewalks exist along both sides of all of the streets in the plan area. There are numerous locations in the plan area where pedestrian access is partly obstructed by utility poles and other structures.

Pedestrian Plan: The City of Alameda Pedestrian Plan identifies Park Street from the Park Street Bridge to Clinton Avenue as a "High Priority Pedestrian District/Corridor". According to the Pedestrian Plan the purpose of these districts/corridors is to emphasize pedestrian needs. These areas are part of the primary citywide pedestrian network, include transit service, and include a mix of land uses that encourage walking. While maintaining consistency with the City's Street Functional Classification System needs for each street, important enhancements include: benches, bus bulb-outs, bus shelters, cross walks, curb extensions, gateway features, and a variety of other features that support pedestrians. Specifically for North Park Street Code area, the Pedestrian Plan recommends:

(a) Sidewalk Gap Closures (adding or extending sidewalks where they do not currently exist). Specifically the Plan identifies areas along Clement Avenue, Tilden Way, and Blanding Avenue where sidewalk gaps exist.

(b) Improved pedestrian access across and to the Park Street Bridge and adjacent waterfront developments.

(c) Improved street crossings, specifically at Park Street and Buena Vista Avenue, Tilden Way at Blanding/Fernside, Buena Vista Avenue at Broadway, Park Street at Blanding Avenue, and Park Street at Clement Avenue where enhanced Accessible pedestrian signals are recommended.

(d) Intersection Enhancement Projects to improve pedestrian safety at Broadway and Blanding, at Buena Vista and Tilden, and at Fernside and Tilden Way.

(e) The Cross Alameda Trail improvements including on-street bicycle improvements on Clement Avenue and shoreline paths.

Bicycle Travel

There are no bike lanes in the Plan area. The nearest north-south bike facility is a bike lane located on Broadway, just outside the Plan area. The nearest east-west bike facility is a bike lane located on Central Avenue.

There are proposed bicycle facilities shown in the City's Bicycle Master Plan. The plan shows a proposed Class I path along the waterfront, as well as bike lanes (Class II) along Clement Avenue, and a Class III route on Blanding Avenue from Park Street to Oak Street. A portion of the waterfront Class I facility has been completed at the Park Street Landing shopping center in the Plan area. The waterfront Class I (a bicycle facility separated from vehicular facilities) path at Park Street Landing is a shared-use path accessible to pedestrians. The San Francisco Bay Trail runs on Buena Vista Avenue in the plan area until such time that it can be moved to a continuous waterfront trail.

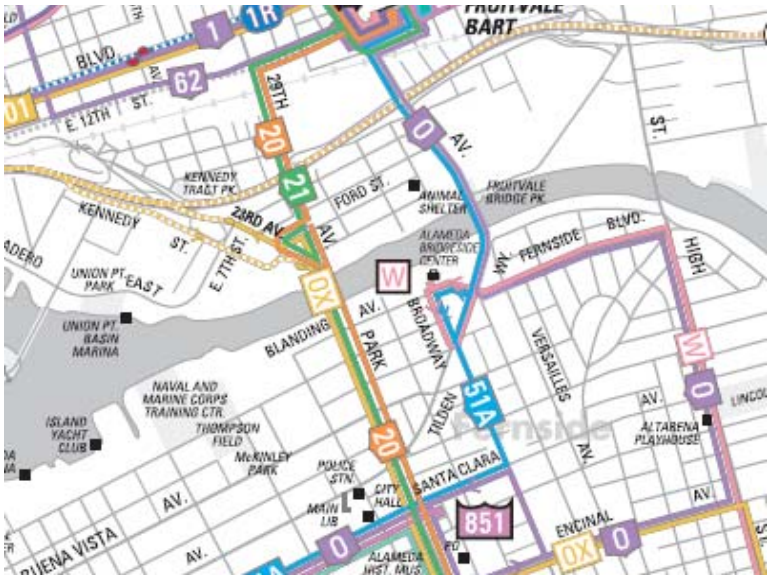
Bicycle Plan: The City of Alameda Bicycle Plan identifies the Cross Alameda Trail and the construction of Class II bike lanes on Clement, construction of Class II (or Class III lanes if removal of parking for Class II is unacceptable) on Oak Street, construction of Class II and Class III on Blanding Avenue, Constitution of Class II on Lincoln Avenue, and construction of Class III on Pacific Avenue as High Priority Bicycle Plan Projects. Signal detection loop detectors are also recommended as well as educational classes as "Medium Priority" projects.

Transit Travel

The plan area is well served by AC Transit. Every property in the plan area is within one or two blocks of at least one or more AC Transit routes.

Routes 20 and 21 travels between the Fruitvale BART station and Park Street It operates on 15-minute headways from approximately 5:00 a.m. to midnight on weekdays and on 30-minute headways from approximately 6:00 a.m. to midnight on weekends and holidays.

Route OX is an express transbay route that travels between both downtown Alameda and Bay Farm Island and downtown San Francisco, running along Park Street in the project site vicinity. It operates on 10-minute headways during peak periods on weekdays only.



Route 51A travels from Rockridge BART to the Fruitvale BART Station. The line runs along Santa Clara Avenue and Broadway in the City of Alameda from approximately 5:00 a.m. to midnight on weekdays (on 10-minute headways) and on weekends and holidays (on 15-minute headways).

Route 851 is the all-nighter bus running a similar route to Route 51, except service is shortened, extending only from the Berkeley BART station to the intersection of Park Street and Santa Clara Avenue. Service is hourly from approximately midnight to 5:00 a.m.

Truck Routes

Clement Avenue is one of two east-west truck routes in the City and with its planned extension to Tilden Way; it will become a primary truck route in the North of Lincoln planning area. Park Street and Broadway serve north-south truck travel at that end of the City. Tilden Way is also a truck route. A heavy vehicle percentage of 5 percent was used for truck routes in the intersection analysis (consistent with other City analyses).

3) Regulatory Considerations

State

The California Department of Transportation (Caltrans) is responsible for operations and maintenance of the state highway system, and serves as a reviewing agency for Environmental Impact Reports (EIRs) to ensure that proposed projects would not have a significant impact on state highway facilities.

Regional

The Alameda County Transportation Commission, through its Congestion Management Program (CMP), oversees how roads of regional significance function, and requires local jurisdictions to evaluate the impact of proposed land use changes (i.e., General Plan amendments, and developments with trip-generating potential of more than 100 new peak-hour vehicle trips) on the regional transportation systems.

Local

The City of Alameda General Plan Transportation Element sets forth goals, objectives and policies that provide guidance for residents, businesses, policymakers and elected officials in making choices that shape the City's environment. The Transportation Element includes an extensive number of goals, objectives and policies to support a multi-modal transportation system that supports all means of transportation. For the purpose of this EIR analysis, the following Transportation Element objective and policies are of particular importance and relevance:

4.1.1.b Enhance pedestrian safety and mobility, particularly in high pedestrian use areas, applying methods consistent with the hierarchy classification of streets identified in 4.1.1.a.

4.1.1.c Implement and maintain a Truck Route map coordinated with the private sector and neighborhood representatives.

4.1.1.i Design transportation facilities to accommodate current and anticipated transportation use.

4.1.1.j Maintain the historic street grid and maximize connectivity of new developments to the grid, as well as within any new developments.

4.1.1.l Develop and implement a list of priority projects that support level of service standards.

4.1.2.c Promote methods to increase vehicle occupancy levels.

Objective 4.1.3: Preserve mobility for emergency response vehicles and maintain emergency access to people and property.

4.1.3.c Develop a network of emergency response routes, balancing emergency service needs with vehicular, pedestrian and bicycle safety consistent with the adopted street classification system.

Objective 4.1.6: Increase the efficiency of the existing transportation system by emphasizing Transportation System Management (TSM) strategies and Transportation Demand Management (TDM) techniques.

4.1.6.a Identify, develop, and implement travel demand management strategies to reduce demand on the existing transportation system.

1. Establish peak hour trip reduction goals for all new developments as follows:
   - 10 percent peak hour trip reduction for new residential developments
   - 30 percent peak hour trip reduction for new commercial developments
2. Develop a TDM toolbox that identifies a menu of specific TDM measures and their associated trip reduction percentages.
3. Develop a citywide ITS infrastructure assessment using a Systems Engineering approach to determine capital investment needs.

4. Require implementation of ITS infrastructure as part of all new developments.

4.1.6.f Require monitoring programs to ensure that TSM and TDM measures mitigate impacts.

4.2.1.b Include landscaping in transportation projects to enhance the overall visual appearance of the facility.

4.3.1.b Consider the use of strategies to give priority to high occupancy vehicles at the bridges and tubes.

4.3.1.j Implement queue jump lanes and other strategies for improving transit operations.

Objective 4.4.1: Require developers to reserve and construct (if nexus exists) rights of way, transportation corridors and dedicated transportation facilities through the development process and other means.

Objective 4.4.2: Ensure that new developments implement approved transportation plans, including the goals, objectives, and policies of the Transportation Element of the General Plan and provides the transportation improvements needed to accommodate that development and cumulative development.

Policies:

4.4.2.a Roadways will not be widened to create additional automobile travel lanes to accommodate additional automobile traffic volume, with the exception of increasing transit exclusive lanes or non-motorized vehicle lanes.

4.4.2.b Intersections will not be widened beyond the width of the approaching roadway with the exception of a single exclusive left turn lane when necessary, with the exception of increasing transit exclusive lanes or non-motorized vehicle lanes.

4.4.2.c Speed limits on Alameda's new roads should be consistent with existing roadways and be designed and implemented as 25 mph roadways.

4.4.2.d All EIRs must include analysis of the effects of the project on the city's transit, pedestrian and bicycling environment, including adjacent neighborhoods and the overall City network.

4.4.2.e EIRs will not propose mitigations that significantly degrade the bicycle and pedestrian environment, which are bellwethers for quality of life issues, and staff should identify "Levels of Service" or other such measurements to ensure that the pedestrian and bicycling environment will not be significantly degraded as development takes place.

4.4.2.f Transportation-related mitigations for future development should first implement TDM measures with appropriate regular monitoring; transit, bicycle and pedestrian capital projects; and more efficient use of existing infrastructure such as traffic signal re-timing in order to reduce the negative environmental effects of development, rather than attempting to accommodate them. Should appropriate regular monitoring indicate that

these mitigations are unable to provide the predicted peak-hour vehicle trip reductions, additional TDM measures, development specific traffic caps, or mitigations through physical improvements of streets and intersections, consistent with policy 4.4.2.a and policy 4.4.2.b, may be implemented.

4.4.2.g After the implementation of quantifiable/verifiable TDM measures (verified through appropriate regular monitoring), and mitigation measures consistent with 4.4.2.f and identification of how multimodal infrastructure relates to congestion concerns, some congestion may be identified in an EIR process as not possible to mitigate. This unmitigated congestion should be evaluated and disclosed (including intersection delay length of time) during the EIR process, and acknowledged as a by-product of the development and accepted with the on going funding of TDM measures.

Objective 4.4.5: Develop service level standards for the operation and maintenance of public works infrastructure, including streets, bridges, pedestrian ways, bicycle facilities and intersections.

Objective 4.4.6: Work with area employers and other stakeholders to develop one or more TMAs to implement TDM programs

Policies

4.4.6.1 For new development projects, require residential, business associations, property owners, and lessees to be dues-paying members in the TMA, as allowed by law.

4.4.6.2 Encourage existing and previously approved developments to join a TMA, through which they would contribute toward, and benefit from, TDM programs.

Objective 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.

Citywide Development Fees: All new development within the North Park Street plan area will be required to pay citywide development fees to off-set the cumulative impacts of development on city facilities, including transporttion facilities.. The City of Alameda Municipal Code requires that Citywide Development Fees are charged as a condition of development to defray the cost of certain public facilities, services, improvements, and amenities. The purpose of the fee is to *"mitigate the impacts of new residential and new or intensified industrial and commercial development on traffic safety/capital replacement, parks and recreation, public facilities, public safety, and transportation."*[1] For traffic safety/capital replacement and transportation, the fees fund improvements such as traffic signals, street overlays, and handicap ramps at intersections to address public safety and mitigate the cumulative degradation in the levels of service on public roads from new developments. However, none of the improvements in the CDF are those needed to mitigate the impacts of the development contemplated in the North Park Street plan area

[1] City of Alameda Municipal Code. 27-3 Citywide Development Fees.

under the North Park Street Regulating Code. These needed improvements are listed under the North Park Street Area Transportation Facility Improvement Plan later in this document.

4) METHODOLOGY

This impact analysis considers the potential impacts of adopting and implementing the proposed North Park Street Regulating Code related to transportation and circulation services and facilities. The analysis considers the potential transportation impacts caused by new development and reuse of existing properties within the plan area. The analysis compares the existing (baseline) transportation conditions and services in and around the plan area to the future transportation conditions and services in the plan area in 2030. For the 2030 conditions, the analysis assumes that the entire plan area will build out in compliance with the North Park Street Regulating Code and the Alameda General Plan.

The 2030 scenario is often called the "cumulative" scenario, as it incorporates future growth within the plan area, within the rest of Alameda, and in the larger region. Cumulative scenario traffic forecasts were obtained from the City of Alameda travel demand model. The Citywide Travel Demand Model projects traffic volumes for a future year based upon the projected growth and development forecasts for that future year. The development projections for the North Park Street Plan area used for this analysis are consistent with City of Alameda General Plan development projects for growth in the plan area and the rest of the City. For regional and Oakland growth, the land use assumptions were developed from a variety of data sources including the Association of Bay Area Governments (ABAG) socioeconomic data, which was allocated to the traffic analysis zone (TAZ) level for the CMA model.

This analysis relies on a number of studies conducted by the City of Alameda. In 2008, the City completed a comprehensive study of citywide traffic conditions that may be expected with General Plan build-out by 2030 for the Transportation Element EIR. That assessment considered all of the signalized intersections in the City and in the North Park Street Plan area and included future TSM/TDM measures in the analysis such as transit and signal coordination improvements in the Plan area. In 2010, the City completed a focused study of the North Park Street plan area traffic conditions (both existing and future) for the Boatworks Residential Project at Oak and Clement. That study focused on current and future traffic conditions in the North Park Street plan area and included an assessment of pedestrian, transit and bicycle level of service in North Park Street plan area under General Plan build out.

***Pedestrian Level of Service*:** The 2000 *Highway Capacity Manual* method was used to compute pedestrian delay and level of service at the signalized study intersections (TRB, 2000). Pedestrian LOS is based on the average delay, in seconds per person, that pedestrians will encounter as they wait to cross a signalized intersection. Delay is computed using the following two data requirements: effective green time for pedestrians for each crossing "leg"; and the actuated cycle length of the signal.

LEVEL OF SERVICE (LOS) CRITERIA FOR PEDESTRIANS AT SIGNALIZED INTERSECTIONS

LOS	Pedestrian Delay
A	< 10
B	≥ 10 and ≤ 20
C	> 20 and ≤ 30
D	> 30 and ≤ 40
E	> 40 and ≤60
F	> 60

SOURCE: Transportation Research Board, *2000 Highway Capacity Manual*, 2000

Bicycle Level of Service: The Florida Department of Transportation (DOT) method for computing bicycle levels of service is used to calculate the Level of Service for bicycle travel. The Florida DOT method for bicycle LOS is based on bicyclists' perceptions of their level of comfort along a roadway segment (not at intersections). A numerical score (tied to a LOS letter grade), is computed using the following five variables:

1. Average effective width of the outside through lane (and presence of a bike lane),
2. Motorized vehicle volumes,
3. Motorized vehicle speeds,
4. Heavy vehicle (truck) volumes, and
5. Pavement condition.

LEVEL OF SERVICE (LOS) CRITERIA FOR BICYCLES ON ROADWAY SEGMENTS

LOS	Bicycle LOS Score
A	≤ 1.5
B	> 1.5 and ≤ 2.5
C	> 2.5 and ≤ 3.5
D	> 3.5 and ≤ 4.5
E	> 4.5 and ≤5.5
F	> 5.5

SOURCE: Florida Department of Transportation, *2002 Quality/Level of Service Handbook*, 2002

Vehicle Level of Service: The operation of a local roadway network is commonly measured and described using a level of service ("LOS") grading system, which qualitatively characterizes traffic conditions associated with varying levels of vehicle traffic, ranging from LOS A (indicating free-flow traffic conditions with little or no delay experienced by motorists) to LOS F (indicating congested conditions where traffic flows exceed design capacity and result in long queues and delays). That delay is a function of the signal timing, intersection lane configuration, hourly traffic volumes, pedestrian volumes, and parking and bus conflicts.

To establish the existing roadway operations, the intersection LOS were determined for all signalized intersections in the city. Using data, including signal timings, peak hour turning movement counts, and lane geometrics, that were provided by the City, a citywide intersection model was created with Synchro to assess intersection operations. The Synchro model takes into account signal coordination along particular corridors, such as Webster Street and Park Street. The Synchro model was also used to evaluate transit and pedestrian delays at the signalized intersections. The Synchro model included all existing 78 signalized intersection in the city and was developed for both AM and PM peak hour conditions.

LEVEL OF SERVICE DEFINITIONS

Level of Service (LOS)	Description
A	**Free Flow or Insignificant Delays:** Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at signalized intersections is minimal.
B	**Stable Operation or Minimal Delays:** The ability to maneuver within the traffic stream is only slightly restricted, and control delay at signalized intersections are not significant.
C	**Stable Operation or Acceptable Delays:** The ability to maneuver and change lanes is somewhat restricted, and average travel speeds may be about 50 percent of the free flow speed.
D	**Approaching Unstable or Tolerable Delays:** Small increases in flow may cause substantial increases in delay and decreases in travel speed.
E	**Unstable Operation or Significant Delays:** Significant delays may occur and average travel speeds may be 33 percent or less of the free flow speed.
F	**Forced Flow or Excessive Delays:** Congestion, high delays, and extensive queuing occur at critical signalized intersections with urban street flow at extremely low speeds.

Source: Highway Capacity Manual, Transportation Research Board, Washington, D.C., 2000.

Transit Level of Service: The 2000 *Highway Capacity Manual* arterial level-of-service analysis method (based on the average speed for the segment under consideration, computed from the running times on the street segment and the control delay of through movements at signalized intersections) was used to calculate the level of service for transit.

2. IMPACTS AND MITIGATION MEASURES

a) Significance Criteria

For the purpose of this analysis, the North Park Street Code would have a significant impact on the environment if it would:

a. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

b. Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the congestion management agency for designated roads or highways.

c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

d. Substantially increase hazards due to a design feature. (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

e. Result in inadequate emergency access.

f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

For the purpose of this EIR[2], the project or a proposed mitigation measure would be a significant transportation impact if the project has one or more of the following effects:

1. Level of Service:

a. ***Transit*** – If travel speed degrades by 10 percent or more along a street segment. A segment would be defined as the impacted bus stop location, plus the two previous stops and the two subsequent stops. A segment that crosses a City boundary shall also include five bus stops, but the last stop shall be the first bus stop outside the City of Alameda (Transit LOS for an arterial segment would be calculated using the Highway Capacity Manual's methodology for Urban Street (arterial) Level of Service, or LOS).

b. ***Automobile (intersections)*** – Causes an intersection to degrade below LOS D. If an intersection were already at LOS E or worse, an impact would be considered significant if there is a 3 percent or greater increase in the traffic volume. (Automobile LOS at intersections would be calculated using the Highway Capacity Manual's methodology for determining the average vehicle delay at an intersection.)

c. ***Automobile (arterial segments)*** – Causes an arterial segment to degrade below LOS D. If an arterial were already at LOS E or worse, an impact would be considered significant if the Average Travel Speed of a segment decreases by 10 percent or more. (Automobile LOS for an arterial segment would be calculated using the Highway Capacity Manual's methodology for Urban Street (arterial) LOS).

[2] The significance criteria used for this analysis are the transportation threshold of significance recommended by the City of Alameda Transportation Commission on April 22, 2009 to implement General Plan Policy 4.4.2d.

d. ***Bicycle*** – Causes the Bicycle segment LOS to degrade below LOS B. If a street segment were already below LOS B, an impact would be considered significant if the LOS score increases by 10 percent or more in value. If a segment has an existing adjacent Class I facility, and has not been recommended for a future bicycle lane, the degradation of the Bicycle LOS to E would not be considered a significant impact. (Florida Department of Transportation methodology for street segments will be used for the LOS analysis).

e. ***Pedestrian*** – Causes the Pedestrian LOS to degrade below LOS B at a signalized intersection. If the intersection were already below LOS B, an impact would be considered significant if the delay for a crosswalk increases by 10 percent. (Pedestrian LOS would be determined using the Highway Capacity Manual methodology for determining the average delay for pedestrians at a signalized intersection.) The removal of a marked or unmarked crosswalk to address project impacts will be considered a significant impact.

2. Planned Alternative Transportation Services and Facilities – Conflicts with, disrupt or interfere with planned transit, bicycle, or pedestrian services and facilities.

3. Short Term Construction – Causes short-term construction related traffic impacts on pedestrian circulation, bicycle access, transit or automobile circulation.

4. Safety – Results in an unsafe on-site circulation system, creates or contributes to an existing unsafe transportation condition or facility, or results in inadequate emergency access due to limited or circuitous access routes to the project site or lack of sufficient clear width on streets to provide emergency vehicle access. The removal of a marked or unmarked crosswalk to address project impacts will be considered a significant impact. The removal of a marked or unmarked crosswalk to address project impacts will be considered a significant impact.

Procedures for Ranking Modes at Locations Where the Transportation Element Designates Multiple Modal Priorities

The street functional classification system adopted as part of the City's Transportation Element includes a street type layer, a modal layer, and a land use layer. The modal hierarchy is based primarily on the street type layer, as follows:

<u>Regional and Island Arterials</u>

- Exclusive Right of Way Transit
- Primary Transit
- Secondary Transit
- Pedestrian
- Bicycle
- Automobiles

<u>Collectors</u>

- Bicycle
- Pedestrian

- Transit
- Automobiles

Local

- Pedestrian
- Bicycle
- Transit
- Automobiles

For all street types, if the LOS thresholds are not being achieved, the LOS for automobiles is reduced first. To determine which mode would be impacted next, the modal overlay is used to modify the hierarchy. Note that there are no pedestrian priorities designated in the modal layer, so the Commercial/Main and School/Recreation designations in the land use layer are used to identify the pedestrian priority areas. Below is a list of the types of potential conflicts that were identified and how they would be resolved using the method described above.

a. On Regional Arterials with Commercial/Main or School/Recreation land use designation, modal preference would be in the following order: transit, pedestrian, bicycles, automobiles. Since transit is the highest preference, if necessary, a queue jump lane may share space with a Class II bicycle facility.

b. On Regional Arterials with land use designations other than Commercial/Main or School/Recreation, modal preference would be in the following order: transit, bicycle, pedestrian, automobiles. Since transit is the highest preference, if necessary, a queue jump lane may share space with a Class II bicycle facility.

c. On Island Arterials with Primary Transit or Exclusive Transit Right of Way, modal preference will be prioritized in the following order: transit, pedestrians, bicycles, automobiles.

d. On Island Arterials with Primary Transit or Exclusive Transit Right of Way and bicycle preference, modal preference will be in the following order: transit, bicycles, pedestrians, automobiles.

e. On Island Arterials with Primary Transit or Exclusive Transit Right of Way, and bicycle preference, and a Commercial/Main or School/Recreational Zone, modal preference will be in the following order: transit, pedestrians, bicycles, automobiles.

f. On Island Arterials with bicycle preference and Commercial/Main or School/Recreational Zone, modal preference will be in the following order: bicycles, pedestrians, transit, automobiles.

g. On Island Arterials with Primary Transit or Transit Exclusive Right-of-Way and Commercial/Main or School/Recreation Zone, modal preference will be in the following order: transit, pedestrians, bicycles, automobiles.

h. On Island Collectors, modal preference will be in the following order: bicycles, pedestrians, transit, automobiles.

i. On Local Streets, modal preference will be in the following order: pedestrians, bicycles, transit, automobiles.

b.) Less Than Significant Impacts

(1) Safety

The proposed North Park Street Code would not change or affect the City's emergency response access; evacuations plans; or create safety problems.

Implementation of the Code is not expected to result in any significant on-site circulation or access impacts. The North Park Street Code does not propose to change the City's roadway infrastructure or public right of way. The North Park Street Code would not re-configure roadways in a manner that would result in unsafe design features, such as sharp turns or blind intersections.Potential safety impacts and design features with caused by proposed building or parking lot designs would be considered on a project-by-project basis.

In accordance with the existing City requirements standards and regulations, all development projects and transportation improvements will be reviewed by local emergency services (including police, fire department, and ambulance services) for consistency with their standards and provision of adequate emergency access. The City also maintains up-to-date emergency response plans that establish emergency response routes for emergency services that address emergency service needs. Existing City of Alameda requirements, proceedures, and plans ensure that the proposed Code would not result in a significant impct to emergency servcies.

Mitigation Measures: None required**.**

(2) *Planned Alternative Transportation Facilities*

The proposed North Park Street Code would not conflict with planned alternative transportation facilities.

The North Park Street Code does not include any proposals, recommendations or requirements that would conflict with existing or planned alternative transportation facilities. To the contrary, the Code is designed to encourage and support transit oriented, transit supportive, mixed use development on Park Street and the immediate surroundings that would support the existing transit on Park Street.

Mitigation Measures: None required**.**

c) Significant Impacts

***(1) Short Term* Construction Impacts**

Impact TRANS- 1: New construction in the plan area could generate temporary traffic impacts on area roadways. (Potentially Significant)

Construction activities would generate off-site traffic that would include the initial delivery of construction vehicles and equipment to the project site, the daily arrival and departure of construction workers, and the delivery of materials throughout the construction period and removal of construction debris. Deliveries would include shipments of concrete, lumber, and other building materials for on-site structures, utilities (e.g., plumbing equipment and electrical supplies), and paving and landscaping materials.

Construction-generated traffic would be temporary and therefore would not result in any long-term degradation in operating conditions on roadways in the project site vicinity. The impact of construction-related traffic would be a temporary and intermittent lessening of the capacities of streets in the project site vicinity because of the slower movements and larger turning radii of construction trucks compared to passenger vehicles. Most construction traffic would be dispersed throughout the day. Thus, the temporary increase would not significantly disrupt daily traffic flow on roadways in the project site vicinity in the long term.

Although the impact would be temporary, truck movements could have an adverse effect on traffic flow in the project site vicinity. As such, the impact is considered to be potentially significant.

Mitigation Measure TRANS-1: All project applicants and construction contractors shall develop a construction management plan for review and approval by the Public Works Department prior to issuance of any permits. The plan shall include at least the following items and requirements to reduce traffic congestion during construction:

1. A set of comprehensive traffic control measures shall be developed, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes.

2. The Construction Management Plan shall identify haul routes for movement of construction vehicles that would minimize impacts on motor vehicle, bicycle, and pedestrian traffic, circulation, and safety, and specifically to minimize impacts to the greatest extent possible on streets in the project area. The City shall approve the haul routes.

3. The Construction Management Plan shall provide for notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures would occur.

4. The Construction Management Plan shall provide for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant.

Significance after Mitigation: Less than Significant.

(2) Level of Service

Impact TRANS-2: Redevelopment of North Park Street consistent with the North Park Street Code will result in an increase in vehicle trips, which will contribute to reduce levels of service

for transit vehicles, automobiles, and bicyclists. Improvements to increase travel speed for transit and/or automobiles could result in secondary impacts on pedestrian levels of service. (Significant and Unavoidable)

Over the next 20 years, new development in the surrounding region, Alameda, and the North Park Street Plan area is expected to result in an increase in vehicular trips in the Plan area. This increase in traffic volume will result in increased congestion at a number of intersections throughout the City and reduced travel speeds on the affected streets. The decrease in travel speed will impact transit services on these streets. The increased traffic volumes will also impact bicycle levels of service. Improvements and mitigations to increase travel speed for transit and/or other vehicles would result in a decrease in pedestrian levels of service.

The study intersections forecasted to operate at an unacceptable level of service in 2030 are: 1. Eighth Street/Central Avenue 2. Oak/Clement, 3. Park/Clement, 4. Broadway/Tilden at Eagle, 5. Broadway/Otis Drive, 6. Tilden/Blanding at Fernside Blvd 7. High Street/Fernside Blvd., 8. High Street/Otis Drive, 9. Island Drive/Doolittle Drive, and 10. Park Street/Blanding Ave.

AM AND PM PEAK HOUR INTERSECTION LOS SUMMARY

	Intersection	Existing AM Peak		Existing PM Peak		2030 AM		2030 PM	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
	Main St./Ferry Terminal Way	5.3	A	6.4	A	2.8	A	4	A
	Main St./Singleton	9	A	6.8	A	8.8	A	6.6	A
	Main St./W. Midway Ave.	1.9	A	1.7	A	15.9	B	6.7	A
	Main St./Ralph Appezzatto Memorial Pkwy	14.6	B	13.3	B	21.2	C	18.2	B
	Main St./Central Ave./Pacific Ave.	25.8	C	22.4	C	44	D	32	C
	Third St./Atlantic Ave.	14.3	B	36.9	D	20.2	C	21.9	C
	Third St./Pacific Ave.	10.8	B	10.5	B	10.9	B	10.5	B
	Poggi St./Atlantic Ave.	12.3	B	8.7	A	16.1	B	11	B
	Fifth St./Ralph Appezzatto Memorial Pkwy	6.5	A	5.1	A	8.1	A	7.5	A
	Fifth St./Marshal Way/Lincoln Ave.	20.2	C	14.1	B	17.7	B	14.4	B
	Webster St./Atlantic Ave./Ralph Appezzatto Memorial Pkwy.	53.4	D	41.7	D	45.9	D	41.1	D
	Webster St./Buena Vista Ave.	16.2	B	13.4	B	17.3	B	19.8	B
	Webster St./Lincoln Ave.	15.3	B	19.2	B	15.2	B	18.1	B
	Webster St./Santa Clara Ave.	16	B	17.4	B	12.1	B	15.6	B
	Webster St./Central Ave.	21.8	C	23.6	C	27.2	C	25.4	C
	Fourth St./Ballena Blvd./Central Ave.	10.9	B	14.4	B	8.3	A	9.9	A
	Eighth St./Lincoln Ave.	30.2	C	26.3	C	33	C	53	D
	Eighth St./Santa Clara Ave.	19.8	B	16.8	B	28.7	C	24.9	C
	Eighth St./Central Ave.	**35.6**	**D**	**33.4**	**C**	**71.5**	**E**	**82.7**	**F**
	Westline Dr./Otis Dr.	9.5	A	10.3	B	10.1	B	10.7	B
	Sherman St./Lincoln Ave.	10.4	B	9.3	A	9.8	A	10.5	B
	Sherman St./Central Ave./Encinal Ave.	20.6	C	18.9	B	30.1	C	22.5	C

	Intersection	Existing AM Peak		Existing PM Peak		2030 AM		2030 PM	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
	Grand St./Buena Vista Ave.	19.2	B	19.2	B	20.8	C	19.5	B
	Grand St./Lincoln Ave.	14.5	B	16.9	B	15.8	B	17.2	B
	Grand St./Santa Clara Ave.	10.3	B	10.9	B	10.8	B	11	B
	Grand St./Central Ave.	10.4	B	9	A	12.4	B	10.8	B
	Grand St./Encinal Ave.	15.2	B	15.7	B	18.3	B	20	B
	Grand St./Otis Dr.	13	B	11.1	B	14.1	B	12	B
	Chestnut St./Lincoln Ave.	9.7	A	6.8	A	10.3	B	9.5	A
	Chestnut St./Encinal Ave.	8.4	A	6.9	A	8.6	A	12.2	B
	Willow St./Lincoln Ave.	7.6	A	9.9	A	9.1	A	12.5	B
	Willow St./Encinal Ave.	14.7	B	17.4	B	26.4	C	28	C
	Willow St./Otis Dr.	13	B	14.7	B	15.9	B	16.6	B
	Otis Dr./South Shore Access Dr	8.2	A	12.9	B	8.4	A	13	B
	Oak/Clement (all way stop control)	**37.8**	**D**	**24.7**	**C**	**80**	**F**	**80**	**F**
	Oak St./Buena Vista Ave.	7.7	A	8.9	A	10.6	B	12.7	B
	Oak St./Lincoln Ave.	11.5	B	8.7	A	19.5	B	30.1	C
	Oak St./Santa Clara Ave.	11	B	26.2	C	12.3	B	42.7	D
	Oak St./Central Ave.	14.5	B	14.1	B	18.4	B	16.1	B
	Oak St./Encinal Ave.	9.2	A	10.5	B	13.4	B	23.3	C
	Park St./Clement Ave.	**37.8**	**D**	**24.7**	**C**	**100**	**F**	**155**	**F**
	Park St./Buena Vista Ave.	9	A	13.5	B	13	B	19.3	B
	Park St./Lincoln Ave/Tilden Way.	9.9	A	10.3	B	20.1	C	17	B
	Park St./Santa Clara Ave.	12.1	B	16.4	B	15.4	B	19.7	B
	Park St./Central Ave.	15.7	B	11.4	B	41	D	16	B
	Park St./Encinal Ave.	24.2	C	31.5	C	40.3	D	47.5	D
	Park St./San Jose Ave.	15.3	B	8.5	A	16.5	B	12.5	B
	Park St./Otis Dr.	32.4	C	42.8	D	35.3	D	42	D
	Tilden/Buena Vista Ave.	14.1	B	7.6	A	16.1	B	8.3	A
	Broadway/Tilden Way/Eagle Dr.	**31.7**	**C**	**22.5**	**C**	**145.2**	**F**	**43.9**	**D**
	Broadway/Santa Clara Ave.	26.6	C	14.6	B	29.3	C	14.2	B
	Broadway/Central Ave.	12.5	B	12.1	B	15.9	B	13.3	B
	Broadway/Encinal Ave.	13.1	B	12.9	B	48.7	D	23.8	C
	Broadway/Otis Dr.	**21.5**	**C**	**29.4**	**C**	**75.5**	**E**	**99.7**	**F**
	Tilden/Blanding/Fernside Blvd.	**15.1**	**B**	**12.1**	**B**	**119.5**	**F**	**80.3**	**F**
	High St./Fernside Blvd.	**41.3**	**D**	**23.8**	**C**	**161.9**	**F**	**155.7**	**F**
	High St./Santa Clara Ave.	5.4	A	7.2	A	6.1	A	6.7	A
	High St./Encinal Ave.	14.4	B	17.5	B	30.7	C	32	C
	High St./Otis Dr.	**31.2**	**C**	**24.5**	**C**	**132.9**	**F**	**52.1**	**D**
	Island Dr./Doolittle Dr.	**35**	**D**	**22.8**	**C**	**79.8**	**E**	**22.7**	**C**
	Constitution Way/Marina Village	25	C	24.6	C	46.3	D	33	C
	Constitution Way/Atlantic Ave.	43.1	D	34.2	C	41.5	D	53.7	D
	Constitution Way/Buena Vista Ave.	13.1	B	26.3	C	16.4	B	32.7	C
	Bay Farm Island Bridge/Fernside Blvd.	13.1	B	16.8	B	26.9	C	51.5	D
	Island Dr./Robert Davey Jr. Dr. (Bridgeway)	23.9	C	33.9	C	26.5	C	42.9	D
	Broadway/Buena Vista Ave.	5.6	A	7.7	A	48.4	D	10.1	B

	Intersection	Existing AM Peak		Existing PM Peak		2030 AM		2030 PM	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
	Sherman St./Buena Vista Ave.	12	B	29.6	C	11.6	B	16.7	B
	Packet Landing Rd./Robert Davey Jr. Dr.	22	C	12.8	B	21.4	C	12.4	B
	Harbor Bay Pkwy./Doolittle Dr.	10.3	B	12.4	B	19.5	B	17.4	B
	Walnut St./Encinal Ave.	4.4	A	5.6	A	4	A	4.7	A
	Fernside Blvd./Encinal Ave.	11.7	B	16.5	B	28.2	C	43	D
	High St./Central Ave.	11.9	B	11.2	B	13.9	B	15	B
	W. Campus Dr./Atlantic Ave.	13.7	B	8	A	9.9	A	9.9	A
	Park St./Alameda Ave.	8.5	A	3.9	A	15.1	B	8.1	A
	Park St./Blanding Ave.	**91.5**	**F**	**22.2**	**C**	**164.9**	**F**	**101.6**	**F**
	Challenger Dr./Atlantic Ave.	15.5	B	17.5	B	26.7	C	45.4	D
	Challenger Dr./Marina Village Pkwy.	24.8	C	31.7	C	29.7	C	40.4	D
	Harbor Bay Pkwy./Ron Cowan Pkwy	25.2	C	21.9	C	26.7	C	25.9	C
	Harbor Bay Pkwy./Maitland Dr.	19.9	B	13.9	B	17.3	B	11.2	B
	Stargell (Tinker) Ave./Fifth St.	Future Intersection		Future Intersection		7.2	A	6.4	A
	Tilden Way/Clement Ave	Future Intersection		Future Intersection		6.6	A	10.8	B
	Mitchell Ave.-Mosley Ave./Mariner Square Loop	Future Intersection		Future Intersection		7.7	A	7.6	A
	Mitchell Ave.-Mosley Ave./Fifth St.	Future Intersection		Future Intersection		3.9	A	5.4	A
	Mitchell Ave.-Mosley Ave./Main St.	Future Intersection		Future Intersection		5.7	A	5.4	A
	Posey Tube/Bus Only Connector	Future Intersection		Future Intersection		3.2	A	3.3	A

Automobile Level of Service

The reduction in Level of Service on the ten study intersections as the result of Citywide and plan area growth is considered a **significant impact on automobile level of service**.

Transit Level of Services:

The anticipated congestion at the ten intersections will result in a reduction in travel speed on the corridors on which these intersections are located. In urban areas, traffic conditions are affected more by the operations of intersections than by the capacities of local streets because traffic control devices (signals and stop signs) at intersections control the capacity of the street segments. Therefore, the poor level of service at an intersection or series of intersections can affect travel speed and travel time for vehicles including transit vehicles.

Ten of the study intersections that are expected to experience congestion are located on existing transit routes, and one (Oak and Clement) is located on a Transportation Element planned transit route (Clement Avenue). Five of the intersections are within or adjacent to the North Park Street

Plan area: 1) Park and Blanding, 2) Park and Clement, 3) Broadway at Tilden and Eagle, 4) Tilden, Blanding, Fernside, and 5) Oak and Clement.

For this analysis, the 2000 *Highway Capacity Manual* arterial level-of-service analysis method (based on the average speed for the segment under consideration, computed from the running times on the street segment and the control delay of through movements at signalized intersections) was used to calculate the transit level of service along Park Street between Blanding Avenue and Buena Vista Avenue. As shown in the Table below, the congestion at the intersections at Park/Blanding and at Park/Clement is expected to cause a significant reduction in travel speed on Park Street between Blanding and Buena Vista Avenue for transit. This reduction in travel speed will result in a **significant impact on transit service.**

EXISTING AND CUMULATIVE (2030) TRANSIT LEVEL OF SERVICE (LOS)

Scenario	Corridor	Direction	AM Peak Hour		PM Peak Hour	
			LOS	Arterial Speed	LOS	Arterial Speed
Existing	Park Street: Blanding Ave. – Buena Vista Ave.	NB	D	9.5	D	11.0
		SB	C	14.2	D	12.6
Cumulative (2030)	Park Street: Blanding Ave. – Buena Vista Ave.	NB	F	1.7	*F*	*1.9*
		SB	D	9.4	E	7.6

Bold signifies significant impacts

SOURCE: Dowling Associates, Inc.

Bicycle Level of Service

As described above, bicycle level of service is determined by lane width, traffic volume, and traffic speed. The increase in traffic volume on the major streets in the Plan area is expected to impact the level of service for bicycles in the plan area, but for the most part the reduction in service is not significant. However, bicycle levels of service will be significantly degraded on Oak Street in the morning when the level of service will degrade from C to D for over a 10% decrease in service level. It should also be noted that Oak Street is designated as a Bicycle Lane and/or Route in the Bicycle Plan and General Plan. This reduction in level of service will result in a **significant impact on bicycle level of service.**

BICYCLE LEVEL OF SERVICE (LOS)

Scenario	Corridor	AM Peak Hour		PM Peak Hour	
		LOS	Score	LOS	Score
Existing	Clement Avenue: Grand Street – Park Street	D	3.9	D	3.8
	Oak Street: Blanding Avenue – Buena Vista Avenue	C	3.3	D	3.6
	Blanding Avenue: Oak Street – Park Street	D	3.7	D	3.7
Cumulative (2030)	Clement Avenue: Grand Street – Park Street	D	4.1	D	4.2
	Oak Street: Blanding Avenue – Buena Vista Avenue	D	3.6	D	3.7
	Blanding Avenue: Oak Street – Park Street	D	3.8	D	3.8

SOURCE: Dowling Associates, Inc.

Pedestrian Level of Service

Signal phasing and signal timing at intersections determine the level of service for pedestrians.

The revitalization, redevelopment, and reuse of properties in the North Park Street area consistent with the proposed Code and existing General Plan policies would increase pedestrian traffic in the project area, but the increase in pedestrians would not result in a decreased level of service for pedestrian travel. The pedestrian level of service would ~~not~~ be affected by development or development generated traffic in the North Park Street Plan area because those two factors would require the ~~not~~ change to the signal phasing and timing configurations at area intersections.

The table below shows the existing pedestrian delay and LOS conditions at six signalized intersections in the Plan area. The pedestrian crosswalks currently operate at an acceptable LOS B or better during both the a.m. and p.m. peak hours at the study intersections. However, given that the increased automobile volumes are expected to cause significant impacts to transit and automobiles, and given that City of Alameda policy supports improvements to signal timing to increase transit service on transit routes, it should be expected that the City of Alameda would take action to retime signals to improve transit travel time. These changes to the signals could increase pedestrian crossing time.

TABLE 5
EXISTING PEDESTRIAN LEVEL OF SERVICE (LOS) AND DELAY (seconds/person) BY CROSSWALK

		Peak	South[a]	North[a]	East[a]	West[a]
No.	**Intersection**					

		Hour	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
#1	Park Street and Blanding Avenue	AM	B	16	B	16	A	8	A	8
		PM	B	16	B	16	A	8	A	8
#2	Park Street and Clement Avenue	AM	B	15	B	15	B	10	A	6
		PM	B	16	B	16	B	10	A	5
#3	Park Street and Buena Vista Avenue	AM	B	12	B	12	A	8	A	8
		PM	B	12	B	12	A	8	A	8
#4	Oak Street and Buena Vista Avenue	AM	A	4	A	4	B	17	B	17
		PM	A	4	A	4	B	17	B	17
#5	Oak Street and Lincoln Avenue	AM	A	6	A	6	B	14	B	14
		PM	A	6	A	6	B	14	B	14
#6	Tilden Way and Blanding Avenue	AM	B	11	B	11	B	12	A	7
		PM	B	13	B	13	B	10	A	5

[a] The crosswalk name signifies its location relative the intersection (e.g., the South Crosswalk is located on the south side of the intersection, and is used by pedestrians crossing eastbound or westbound).

SOURCE: Dowling Associates, Inc. 2009

The table below shows the pedestrian delay for the same six intersections if the signals are optimized to improve travel speed and reduce transit and automobile congestions. As shown in the table, pedestrian delay would increase, and **a secondary impact to pedestrian level of service would occur**.

CUMULATIVE (2030) PEDESTRIAN LEVELS OF SERVICE (LOS) BY CROSSWALK

		AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS
Park St. and Blanding Ave.	South	21	C	23	C
	North	21	C	23	C
	East	18	B	16	B
	West	18	B	16	B
Park St. and Clement Ave.	South	14	B	15	B
	North	14	B	15	B
	East	26	C	27	C
	West	20	B	20	B
Park St. and Buena Vista Ave.	South	12	B	12	B
	North	12	B	12	B
	East	8	A	8	A
	West	8	A	8	A
Oak St. and Buena Vista Ave.	South	4	A	4	A
	North	4	A	4	A
	East	17	B	17	B
	West	17	B	17	B

Oak St. and Lincoln Ave.	South	6	A	6	A
	North	6	A	6	A
	East	14	B	14	B
	West	14	B	14	B
Tilden Way and Blanding Ave.	South	18	B	11	B
	North	18	B	11	B
	East	27	C	20	B
	West	15	B	14	B

[a] The crosswalk name signifies its location relative the intersection (e.g., the South Crosswalk is located on the south side of the intersection, and is used by pedestrians crossing eastbound or westbound).

SOURCE: Dowling Associates, Inc., 2009.

Mitigations to Improve Level of Service for Transit, Pedestrian, Bicycle, and Automobile Modes of Transportation

Mitigation TRANS-2: To ensure that new development in the Plan area mitigates its potential significant impacts to transit, automobile, bicycle and pedestrian levels of service, new development requiring discretionary actions by the City shall be:

a. Conditioned by the City to ensure that new driveway locations, parking areas, building locations, the adjacent public right of way and adjacent intersections are appropriately configured to minimize impacts to transit, automobile, bicycle, and pedestrian service.

b. Conditioned to close any sidewalk gaps that may exist along the project frontage, add street trees to any sidewalk frontage that does not currently include street trees, and close any unnecessary curb cuts on the project frontage to improve pedestrian safety and comfort and reduce pedestrian impacts.

Mitigation TRANS-3: To ensure that all new development within the plan area contributes a fair share to improvements in the area to support all modes of transportation, the City of Alameda should prepare and consider a traffic impact fee on all new construction in the plan area. The proposed ordinance should require that all new projects that would increase automobile trips in the area pay a fair share to the following transportation improvements:

a) Reconfiguration of the intersection at Blanding and Park to include new eastbound, westbound turn lanes, upgraded traffic signal at Blanding and Park, and replacement of the side street signal with a STOP sign.
b) New traffic signals at the intersection of Oak and Clement and the intersection of Pacific and Park
c) Property acquisition and construction costs to provide northbound and eastbound turn lanes and upgrade signal at Clement and Park.
d) Reconfiguration of the intersection at Park and Buena Vista to include new northbound, southbound, and westbound left turn lanes.
e) Reconfiguration of the intersection at Blanding/Fernside and Tilden Way to include new eastbound and westbound left turn lanes.

f) Property acquisition and construction of the Clement Avenue extension from Tilden Way from Broadway.

Alternative Mitigation TRANS-3: (Alternative Mitigation Measure Trans 3b shall be imposed only if the City does not prepare and adopt the traffic impact fee described in Mitigation TRANS-3a.) All new development requiring discretionary actions by the City shall be reviewed to determine if the project traffic would constitute a considerable contribution (3% or more) to one or more of the impacted intersections (Park Street/Blanding Ave, Park Street/Clement Avenue, Clement/Oak, and Tilden/Blanding at Fernside Blvd. High Street/Fernside Blvd., High Street/Otis Drive, Island Drive/Doolittle Drive, Eighth Street/Central Avenue, Broadway/Otis Drive, Broadway/Tilden/Eagle, and Park/Pacific.). If the project does contribute 3% or more to any individual intersection, then the project shall be conditioned to:

a) Implement a City-approved Transportation Demand Management (TDM) program with the goal of reducing the number of peak hour trips generated by the project at the impacted intersections to less than 3%. The TDM program may include a variety of strategies to reduce vehicular traffic including, but not limited to: participation in a shuttle program or carpool program, park and ride facilities, purchase of AC Transit passes for residents or employees, and/or improvements at or adjacent to the site to improve pedestrian, bicycle, and/or transit travel modes. The City of Alameda Bicycle Plan and Pedestrian Plan also identify a number of improvements that are needed in the area, which might help decrease automobile trips in the area by improving pedestrian and bicycle facilities. If the City determines that the TDM Program is not sufficient to minimize the trips to a less than significant level, then the project shall also be conditioned to pay a fair share contribution to the improvement plan for the intersections at which the project would contribute 3% or more to the total traffic volume at the intersection. The fair share contribution shall be determined by the Public Works Director.

The project shall also be reviewed to determine if the project traffic would constitute a considerable contribution (3% or more) to Oak Street. If the project does contribute 3% or more on Oak Street, then the project shall be conditioned to implement a City-approved Transportation Demand Management (TDM) program consistent with item a) above. If the TDM Program is not sufficient to minimize the trips to a less than significant level, then the project shall also be conditioned to pay a fair share contribution to a bicyle improvement plan for the Oak Street, Tilden Way, and Clement Street Bicycle routes and/or iimproved bicyclist access to/from Park Street bridge per the Bicycle Mater Plan. The improvement plan and fair share contribution shall be determined by the Public Works Director.

In accordance with the General Plan Transportation Element Street Classification System, the improvements at the locations described above should be designed to improve transit service as a first priority, pedestrians service as a second priority, and bicycles service as a third priority.

Although implementation of the Mitigation Measure TRANS-2 and TRANS-3 or Alternative Mitigation Measure TRANS-3 is expected to reduce the number of vehicle trips generated by the individual developments and enhance the overall transportation operations for all modes, the level of improvement cannot be guaranteed. Further, because these improvements would require a number of discretionary actions and potential funding sources that have yet to be identified, the significance of the potential impact on transit, vehicle, and pedestrian level of service is considered **significant and unavoidable**.

Cumulative Transportation Impacts

Impact TRANS-4: Implementation of the proposed North Park Street Coe would result in cumulative transportation impacts. This impact is considered cumulatively considerable.

The project's contribution to potential cumulative impacts to local and regional transportation facilities would be consistent with the impacts discussed under Transportation Impact #2. The traffic modeling analysis addressed the project's contribution to traffic conditions projected in 2030, which took into account existing, planned, approved, and reasonably foreseeable development. No new impacts or increase in significance of impacts is expected other than the impacts addressed under Impacts #2. As identified in Impact 2, cumulatively considerable impacts would occur at City intersections that would significantly impact transit, bicycle, and automobile. Measures to improve traffic flow would have a secondary impact on pedestrian level of service. These impacts would remain **cumulatively considerable** and a **significant and unavoidable** impact.

Mitigation Measure TRANS-4: Implement Mitigation Measures TRANS-2 and TRANS-3.