

APPENDIX F

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2270 BROADWAY PROJECT TRANSPORTATION ASSESSMENT



## DRAFT MEMORANDUM

Date: February 13, 2015  
To: Will Burns, David J. Powers & Associates  
From: Sam Tabibnia  
**Subject: 2270 Broadway Project – Transportation Assessment**

*OK14-0030*

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This memorandum summarizes the focused transportation assessment that Fehr & Peers conducted for the proposed development at 2270 Broadway in the City of Oakland. Fehr & Peers estimated the trip generation for the project, reviewed the proposed project for consistency with the assumptions in the Broadway Valdez District Specific Plan (BVSP) EIR, and assessed the project site plan for potential impacts on safety.

Our major findings include:

- The proposed project is estimated to generate about 68 AM and 96 PM peak hour automobile trips.
- The total automobile trips generated by the proposed project combined with the under construction, approved, and other proposed development projects in the Plan Area would remain below the levels estimated by the BVSP Draft EIR for the entire Plan Area, the Valdez Triangle, and Subdistrict 1.
- Since the project location, uses, and access points are consistent with the assumptions in the BVSP Draft EIR, and the BVSP Draft EIR analyzed impacts at all signalized intersections in the immediate vicinity of the project site, the proposed project would not cause additional impacts beyond the locations analyzed in the BVSP Draft EIR; nor would the project increase the magnitude of the impacts identified in the BVSP Draft EIR.
- The automobile traffic generated by the proposed project combined with the under construction, approved, and other proposed development projects in the Plan Area, would trigger the following mitigation measures as identified in the BVSP Draft EIR:



- Mitigation Measure TRANS-2 at the Perry Place/I-580 Eastbound Ramps/ Oakland Avenue intersection.
- Mitigation TRANS-10 at the 27th Street/24th Street/Bay Place/Harrison Street intersection.
- Mitigation TRANS-22 at the 27th Street/Broadway intersection.
- Based on a review of a project site plan received in January 2015, the proposed project would not cause a significant impact on safety; however, this memorandum includes recommendations to improve access and circulation at the project site.
- The proposed project would need to provide 2 additional long-term bicycle parking spaces and 19 additional short-term bicycle parking spaces to meet City of Oakland Planning Code requirements.
- The proposed project is required to implement a Transportation Demand Management (TDM) program.

Our analysis assumptions and findings are detailed below.

## PROJECT DESCRIPTION

The project is at the southeast corner of the 23rd Street/Broadway intersection in Oakland. Based on a site plan received in November 2014, the proposed project would consist of a 24-level building providing 223 multi-family dwelling units and about 7,800 square feet of ground-level retail. Currently, the project site is a 90-space public surface parking lot.

The proposed project would provide 261 parking spaces in a garage accessible through one driveway on 23rd Street about 60 feet east of Broadway. The project would provide 35 parking spaces for the retail uses in the basement and 226 spaces for the residents on levels one through seven of the building.

Primary pedestrian access for both the residential and retail components of the project would be on Broadway and 23rd Street. Additional pedestrian access for the residential component of the project would be provided on Webster Street.

The project identifies long-term bicycle parking for 112 bicycles in a separate secure facility accessible through the garage and the driveway on 23rd Street and also through a separate entrance on Webster Street. The project site plan does not identify any short-term bicycle parking.



## TRIP GENERATION

Trip generation refers to the process of estimating the amount of vehicular traffic a project would add to the local roadway network. **Table 1** summarizes the trip generation for the proposed Project. The estimates are based on rates and equations published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual* (9th Edition) with the following adjustment:

- **Non-Automobile Travel Modes** - The ITE trip generation rates are based on data collected at mostly single-use suburban sites where the automobile is often the only travel mode. However, the Project site is in a mixed-use urban environment with robust transit available and where many trips are walk, bike, or transit trips. Since the proposed project is less than one-half mile from the 19th Street BART Station, this analysis reduces the ITE based trip generation by 43 percent to account for the non-automobile trips. This reduction is consistent with City of Oakland *Transportation Impact Study Guidelines* and is based on the Bay Area Travel Survey (BATS) 2000 which shows that the non-automobile mode share within one-half mile of a BART Station in Alameda County is about 43 percent. A 2011 research study shows reducing ITE based trip generation using BATS data results in a more accurate estimation of trip generation for mixed use developments than just using ITE based trip generation.<sup>1</sup>

In addition, the project trip generation presented in Table 1 does not account for the following in order to present a “worst case” scenario:

- **Existing Trips** - The project would eliminate about 90 existing public parking spaces. The trip generation estimates conservatively do not account for the existing trips generated by the surface parking lot. Although the demolition of the parking spaces is expected to eliminate some of the existing automobile trips, other off-street parking facilities in the vicinity would provide adequate spaces to accommodate most of the motorists that currently park at the project site. Thus, these motorists would continue to travel to and from this area after the completion of the Project.

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<sup>1</sup> *Evaluation of the Operation and Accuracy of Five Available Smart Growth Trip Generation Methodologies*. Institute of Transportation Studies, UC Davis, 2011.



**TABLE 1  
 2270 BROADWAY  
 AUTOMOBILE TRIP GENERATION**

Land Use	Units <sup>1</sup>	ITE Code	Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
				In	Out	Total	In	Out	Total
Residential	223 DU	220 <sup>2</sup>	1,475	23	90	113	91	49	140
Retail	7.8 KSF	820 <sup>3</sup>	333	4	3	7	14	15	29
<i>Subtotal</i>			1,808	27	93	120	105	64	169
Non-Auto Reduction (-43%) <sup>4</sup>			-777	-12	-40	-52	-45	-28	-73
<b>Net New Project Trips</b>			<b>1,031</b>	<b>15</b>	<b>53</b>	<b>68</b>	<b>60</b>	<b>36</b>	<b>96</b>
1. DU = Dwelling Units, KSF = 1,000 square feet. 2. ITE Trip Generation (9th Edition) land use category 220 (Apartments): Daily: T = 6.06(X) + 123.56 AM Peak Hour: T = 0.49(X) + 3.73 (20% in, 80% out) PM Peak Hour: T = 0.55(X) + 17.65 (65% in, 35% out) 3. ITE Trip Generation (9th Edition) land use category 820 (Shopping Center): Daily: T = 42.7 * X AM Peak Hour: T = 0.96* X (88% in, 12% out) PM Peak Hour: T = 3.71* X (17% in, 83% out) 4. Reduction of 43.0% assumed. Based on City of Oakland Transportation Impact Study Guidelines using BATS 2000 data for development in an urban environment within 0.5 miles of a BART Station. Source: Fehr & Peers, 2015.									

- Pass-by Trips** - Pass-by trips are defined as trips attracted to a site from adjacent roadways as an intermediate stop on the way to a final destination. Pass-by trips alter travel patterns in the immediate study area but do not add new vehicle trips to the roadway network, and therefore, are typically excluded from trip generation estimates. Since the proposed project is on Broadway, a heavily traveled arterial, it is expected that many motorists already driving on Broadway would be attracted to the proposed project. According to ITE's *Trip Generation Handbook* (3rd Edition), the average weekday PM peak hour pass-by rate for retail uses is 34 percent. To be conservative, this analysis does not reduce the retail trip generation estimates.

As summarized in Table 1, the project would generate approximately 1,030 daily, 68 AM peak hour, and 96 PM peak hour trips.



### Trip Generation for Non-Auto Travel Modes

Consistent with City of Oakland *Transportation Impact Study Guidelines*, **Table 2** presents the estimates of project trip generation for all travel modes.

<b>TABLE 2 2270 BROADWAY TRIP GENERATION BY TRAVEL MODE</b>				
<b>Mode</b>	<b>Mode Share Adjustment Factors<sup>1</sup></b>	<b>Daily</b>	<b>AM Peak Hour</b>	<b>PM Peak Hour</b>
Automobile	57.0%	1,031	68	96
Transit	30.4%	550	36	51
Bike	3.9%	71	5	7
Walk	23.0%	416	27	39
<b>Total Trips</b>		<b>2,068</b>	<b>136</b>	<b>193</b>
<p>1. Based on <i>City of Oakland Transportation Impact Study Guidelines</i> assuming project site is in an urban environment within 0.5 miles of a BART Station. Per the City's TIS Guidelines, all mode share factors represent the ratio of each mode to the unadjusted ITE trip rate for automobile trips. The adjustment factors do not represent a portion of the total unadjusted ITE trip generation for automobiles and the factors do not sum to 100 percent.</p> <p>Sources: Fehr &amp; Peers, 2015.</p>				

### Trip Generation Consistency with BVSP EIR

The BVSP Draft EIR analyzed the impacts of the Broadway Valdez Development Program on the roadway network serving the Plan Area. As noted in the Draft EIR, the Development Program represents the reasonably foreseeable development expected to occur in the next 20 to 25 years in the Plan Area. The Specific Plan and the EIR intend to provide flexibility in the location, amount, and type of development. Thus, the traffic impact analysis in the Draft EIR does not assign land uses to individual parcels; rather, land uses are distributed to five subdistricts within the Plan Area.<sup>2</sup> Thus, as long as the trip generation for each subdistrict and the overall Plan Area remain below the levels estimated in the Draft EIR, the traffic impact analysis presented in the Draft EIR continues to remain valid.

**Table 3** lists the development projects within BVSP that are currently under construction, approved, and/or proposed. In addition to the proposed 2270 Broadway Project, Subdistrict 1 also includes

<sup>2</sup> See page 4.13-36 of the BVSP Draft EIR for more detail.



the currently under-construction HIVE mixed-use development at 2345 Broadway, which would consist of 105 residential units and 94,300 square feet of commercial space, and a proposed development at 2315 Valdez Street consisting of 235 residential units and 15,000 square feet of commercial space.

<b>TABLE 3 DEVELOPMENTS IN BVSP<sup>1</sup></b>				
<b>Development</b>	<b>Subdistrict</b>	<b>Status</b>	<b>Amount of Development <sup>2</sup></b>	
			<b>Residential (DU)</b>	<b>Commercial (KSF)</b>
3001 Broadway (Sprouts)	Subdistrict 5	Under Construction	0	36.0
2345 Broadway (HIVE)	Subdistrict 1	Under Construction	105	94.3
2425 Valdez Street	Subdistrict 3	Approved	70	0
3093 Broadway	Subdistrict 5	Proposed	435	24.0
2302 Valdez Street	Subdistrict 2	Proposed	196	31.5
2270 Broadway	Subdistrict 1	Proposed	223	7.8
2315 Valdez Street	Subdistrict 1	Proposed	235	15.0
<b>Total</b>			<b>1,264</b>	<b>208.6</b>
1. Information provided by City of Oakland in November 2014. 2. DU = Dwelling Units, KSF = 1,000 square feet Sources: Fehr & Peers, 2015.				

**Table 4** presents the combined trip generation of the currently under construction, approved, and proposed development projects for the Plan Area (Subdistricts 1 through 5), the Valdez Triangle (Subdistricts 1 through 3) and Subdistrict 1 using similar assumptions and methodology used to estimate the Development Program Buildout in the BVSP Draft EIR.

The trip generation by these projects combined is about 27 percent of the AM and 31 percent of the PM peak hour trips that the Draft EIR estimated for the entire Development Program and about 40 percent of the AM and 39 percent of the PM peak hour trips that the Draft EIR estimated for the Development Program in the Valdez Triangle. As shown in Table 4, automobile trips generated by the proposed 2270 Broadway Project combined with the other under construction and proposed projects (i.e., The HIVE and 2315 Valdez Street) would be about 78 percent of the AM and 80 percent of the PM peak hour trips that the BVSP Draft EIR assumed Subdistrict 1 would generate at buildout.



**TABLE 4  
 TRIP GENERATION COMPARISON**

	Weekday AM Peak Hour			Weekday PM Peak Hour		
	In	Out	Total	In	Out	Total
<b>Plan Area (Subdistricts 1 through 5)</b>						
Under Construction, Approved, and Proposed Development Projects <sup>1</sup>	168	364	532	631	505	1,136
Development Program Buildout <sup>2</sup>	1,152	829	1,981	1,702	2,007	3,709
% Completed	15%	44%	27%	37%	25%	31%
<b>Valdez Triangle (Subdistricts 1 through 3)</b>						
Under Construction, Approved, and Proposed Development Projects <sup>1</sup>	115	241	356	429	348	777
Development Program Buildout <sup>2</sup>	457	442	899	1,013	993	2,006
% Completed	25%	55%	40%	42%	35%	39%
<b>Subdistricts 1</b>						
Under Construction, Approved, and Proposed Development Projects <sup>3</sup>	77	143	220	229	175	404
Development Program Buildout <sup>2</sup>	118	165	283	273	233	506
% Completed	65%	87%	78%	84%	75%	80%
1. Based on application of the BVSP trip generation model with the developments shown in Table 3. 2. Based on Table 4.13-10 on page 4.13-43 of BVSP Draft EIR. 3. Trip generation estimated based on total of the following: 2270 Broadway project: Table 1 in this memorandum The Hive: Table 4.1-7 on page 4.1-30 of the Broadway-West Grand Mixed Use Project Addendum #3 (August 2013) 2315 Valdez Street: estimated based on similar methodology used for 2270 Broadway in Table 1. Source: Fehr & Peers, 2015.						

The location, uses, and access point for the proposed project are consistent with the assumptions used in the traffic impact analysis for BVSP Draft EIR. Therefore, the trip distribution and trip assignment assumptions used in the BVSP Draft EIR continue to remain valid for the proposed project. Considering that the project trip generation for the currently under construction, approved, and proposed development projects for the Plan Area, the Valdez Triangle, and Subdistrict 1 remain under the BVSP Draft EIR estimates for the Development Program, and that the BVSP Draft EIR analyzed the impacts of the BVSP Development Program at signalized intersections along Broadway, 27th Street, Harrison Street, and Grand Avenue that provide direct access to the project site, the proposed project would not add 50 or more peak hour trips to any signalized intersection that was not analyzed in the BVSP Draft EIR. Since the *City of Oakland Transportation Impact Study*





*Guidelines* requires analysis of project impacts at signalized intersections where the project would add 50 or more peak hour trips, analysis of additional intersections beyond the ones analyzed in the BVSP Draft EIR are not needed. Therefore, the proposed project is unlikely to result in impacts on traffic operations at the intersections beyond the ones identified in the BVSP Draft EIR. The proposed project also would not increase the magnitude of the impacts identified in the Draft EIR.

## IMPACTS AND MITIGATION MEASURE TRIGGERS

The BVSP Draft EIR identifies 28 significant impacts at intersections serving the Plan Area. For each impact and associated mitigation measures, the Draft EIR identifies specific triggers based on the level of development in the entire Plan Area and/or each subdistrict. Based on the review of the Draft EIR and the trip generation for the proposed project and the currently planned developments, the proposed project combined with the other planned developments would trigger the following impacts and mitigation measures:

- The proposed project combined with other under construction, approved, and proposed development projects in the Plan Area would trigger **Impact TRANS-2** under Existing Plus Project Conditions (and also Impact TRANS-7 under 2020 Plus Project and Impact TRANS-17 under 2035 Plus Project Conditions) at the Perry Place/I-580 Eastbound Ramps/Oakland Avenue intersection because these projects combined would generate more than 15 percent of the total traffic generated by the Development Program.

Mitigation Measure TRANS-2 in the Draft EIR includes the following improvements at this intersection:

- Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) for the PM peak hour
- Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group. This intersection is under the jurisdiction of Caltrans so any equipment or facility upgrades must be approved by Caltrans prior to installation.

If implemented, the mitigation measure would mitigate the significant impact at this intersection. However, it is not certain that this mitigation measure could be implemented because the intersection is under the jurisdiction of Caltrans. City of Oakland, as lead agency, does not have jurisdiction at this intersection and the mitigation would need to be approved and implemented by Caltrans. Therefore, the BVSP Draft EIR considered the impact significant and unavoidable.



- The proposed project combined with other under construction, approved, and proposed development projects in the Plan Area would trigger **Impact TRANS-10** under 2020 Plus Project Conditions (and also Impact TRANS-24 under 2035 Plus Project Conditions) at the 27th Street/24th Street/Bay Place/Harrison Street intersection because these projects combined would generate more than 10 percent of the total traffic generated by the Development Program.

Mitigation Measure TRANS-10 in the Draft EIR includes the following improvements at this intersection:

- Reconfigure the 24th Street approach at the intersection to restrict access to 24th Street to right turns only from 27th Street and create a pedestrian plaza at the intersection approach.
- Convert 24th Street between Valdez and Harrison Streets to two-way circulation and allow right turns from 24th Street to southbound Harrison Street south of the intersection, which would require acquisition of private property in the southwest corner of the intersection.
- Modify eastbound 27th Street approach from the current configuration (one right-turn lane, two through lanes, and one left-turn lane) to provide one right-turn lane, one through lane, and two left-turn lanes.
- Realign pedestrian crosswalks to shorten pedestrian crossing distances.
- Reduce signal cycle length from 160 to 120 seconds, and optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection).
- Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group.

The proposed mitigation measure would not mitigate the impact to a less than significant level. Therefore, the BVSP Draft EIR considered the impact significant and unavoidable.

- The proposed project combined with other under construction, approved, and proposed development projects in the Plan Area would trigger **Impact TRANS-22** under 2035 Plus Project Conditions at the 27th Street/Broadway intersection because these projects combined would generate more than 30 percent of the total traffic generated by the Development Program.

Mitigation Measure TRANS-22 in the Draft EIR includes the following improvements at this intersection:

- Upgrade traffic signal operations at the intersection to actuated-coordinated operations



- Reconfigure westbound 27th Street approach to provide a 150-foot left-turn pocket, one through lane, and one shared through/right-turn lane.
- Provide protected left-turn phase(s) for the northbound and southbound approaches.
- Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection).
- Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group.

The proposed mitigation measure would not mitigate the impact to a less than significant level. Therefore, the BVSP Draft EIR considered the impact significant and unavoidable.

According to the BVSP DEIR, the project sponsor shall fund the cost of preparing and funding these mitigation measures. Alternatively, if City of Oakland adopts the BVSP Transportation Impact Fee (TIF) program, the applicant may pay the TIF to mitigate the project impacts.

## SITE PLAN REVIEW

An evaluation of access and circulation for all travel modes, based on a site plan provided in November 2014 is summarized below.

### *Vehicle Access and Circulation*

As previously described, the proposed project would provide eight levels of parking accessed through a driveway on 23rd Street. Immediately after entering the driveway, a ramp down would provide access to 35 parking spaces in the basement designated for retail uses. The ground level (level one) would provide space for pick-up/drop offs and loading, and levels two through seven would provide 226 parking spaces for building residents.

Based on the provided site plan, the project driveway on 23rd Street may not provide adequate sight distance between exiting motorists and pedestrians on the adjacent sidewalks. In addition, motorists exiting the retail parking in the basement may have their sight distance to pedestrians on the sidewalk east of the project driveway further constrained.

**Recommendation 1:** While not required to address a CEQA impact, the following should be considered as part of the final design for the project:



- Ensure that the project driveway on 23rd Street would provide adequate sight distance<sup>3</sup> between motorists exiting the driveways and pedestrians on adjacent sidewalks.
- Install a mirror on the west side of the driveway so that motorists on the ramp from the basement and pedestrians on the sidewalk east of the driveway can see each other.

*Bicycle Access and Bicycle Parking*

Chapter 17.117 of the Oakland Municipal Code requires long-term and short-term bicycle parking for new buildings. Long-term bicycle parking includes lockers or locked enclosures and short-term bicycle parking includes bicycle racks. **Table 5** summarizes the bicycle parking requirement for the project. The project is required to provide 114 long-term and 19 short-term parking spaces.

<b>TABLE 5 BICYCLE PARKING REQUIREMENTS</b>					
<b>Land Use</b>	<b>Size<sup>1</sup></b>	<b>Long-Term</b>		<b>Short-Term</b>	
		<b>Spaces per Unit<sup>2</sup></b>	<b>Spaces</b>	<b>Spaces per Unit<sup>2</sup></b>	<b>Spaces</b>
Apartments	223 DU	1:2 DU	112	1:15 DU	15
Retail	7.8 KSF	1:8 KSF <sup>3</sup>	2	1:2 KSF	4
Total Required Bicycle Spaces			114		19
Total Bicycle Parking Provided			112		0
Bicycle Parking Surplus/Deficit			<b>-2</b>		<b>-19</b>
1. DU = dwelling unit; KSF = 1,000 square feet 2. Based on Oakland Municipal Code Sections 17.117.090 and 17.117.110 for D-BV zone. 3. Minimum number of bicycle parking spaces is two per use.					
Source: Fehr & Peers, 2015					

The site plan identifies long-term bicycle parking for 112 bicycles on the ground level of the building. The site plan does not identify any short-term bicycle parking spaces. The project would need to provide two additional long-term bicycle parking spaces and 19 short-term bicycle spaces.

**Recommendation 2:** While not required to address a CEQA impact, the following should be considered as part of the final design for the project:

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<sup>3</sup> Sight distance is dependent on each specific location; typically, adequate sight distance is defined as a clear line-of-sight between a motorist ten feet back from the sidewalk and a pedestrian ten feet away on each sides of the driveway.



- Provide at least 114 on-site long-term bicycle parking spaces.
- Provide at least 19 short-term bicycle parking spaces, consistent with the City of Oakland Bicycle Parking Ordinance. Bicycle racks on sidewalks should ensure that sidewalks would continue to provide adequate width for pedestrians.
- Allow retail employees to use the long-term bicycle facility.

### *Pedestrian Access and Circulation*

Primary access to both the residential and retail components of the project would be through Broadway and 23rd Street. Additional stairwells would be provided on Webster Street.

The proposed building would generally provide a five-foot setback on the ground level, increasing the effective width of the sidewalks adjacent to the project. The project site plan does not identify any improvements along the adjacent sidewalks.

**Recommendation 3:** While not required to address a CEQA impact, the following should be considered as part of the final design for the project:

- Provide a bulbout at the southeast corner of the 23rd Street/Broadway intersection (See Specific Plan, Section 6.5.1 and Figure 6.18)
- Provide landscaping and pedestrian amenities on the sidewalks along the project frontage consistent with Appendix C, Design Guidelines, of the Specific Plan.

### *Transit Access*

Transit service providers in the project vicinity include Bay Area Rapid Transit (BART) and AC Transit.

BART provides regional rail service throughout the East Bay and across the Bay. The nearest BART station to project site is the 19th Street BART Station, about 0.3 miles southwest. The proposed project would not modify access between the project site and the BART Station.

AC Transit is the primary bus service provider in the City of Oakland. AC Transit operates the following major routes in the vicinity of the project:

- Route 51A along Broadway with the nearest stop at Grand Avenue, about 200 feet south of the project site.
- Route 12 along Broadway and Grand Avenue with the nearest stops on Broadway south of Grand Avenue, about 300 feet south of the project site.



- Routes 1/1A along Telegraph Avenue with the nearest stops at Grand Avenue and 24th Street, about 1,000 feet west of the project site.

In addition, the Oakland Free Broadway shuttle ("Free B") also operates along Broadway with the nearest stop at Grand Avenue.

No changes to the bus routes operating in the vicinity of the project are planned and the proposed project would not modify access between the project site and these bus stops.

## TRANSPORTATION DEMAND MANAGEMENT

Since the proposed project would generate more than 50 net new PM peak hour trips, The City's Standard Condition of Approval (SCA), which requires the preparation of a Transportation Demand Management (TDM) plan as described below, is applicable.

***SCA TRA-1: Parking and Transportation Demand Management.*** *Prior to issuance of a final inspection of the building permit.*

The project applicant shall submit a Transportation and Parking Demand Management (TDM) plan for review and approval by the City. The intent of the TDM plan shall be to reduce vehicle traffic and parking demand generated by the project to the maximum extent practicable consistent with the potential traffic and parking impacts of the project.

The goal of the TDM shall be to achieve the following project vehicle trip reductions (VTR):

- Projects generating 50 to 99 net new AM or PM peak hour vehicle trips: 10 percent VTR
- Projects generating 100 or more net new AM or PM peak hour vehicle trips: 20 percent VTR

The TDM plan shall include strategies to increase pedestrian, bicycle, transit, and carpool use, and reduce parking demand. All four modes of travel shall be considered, as appropriate. VTR strategies to consider include, but are not limited to, the following:

- a) Inclusion of additional long term and short term bicycle parking that meets the design standards set forth in chapter five of the Bicycle Master Plan, and Bicycle Parking Ordinance (chapter 17.117 of the Oakland Planning Code), and shower and locker facilities in commercial developments that exceed the requirement.
- b) Construction of and/or access to bikeways per the Bicycle Master Plan; construction of priority Bikeway Projects, on-site signage and bike lane striping.



- c) Installation of safety elements per the Pedestrian Master Plan (such as cross walk striping, curb ramps, count-down signals, bulb outs, etc.) to encourage convenient and safe crossing at arterials, in addition to safety elements required to address safety impacts of the project.
- d) Installation of amenities such as lighting, street trees, trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan.
- e) Construction and development of transit stops/shelters, pedestrian access, way finding signage, and lighting around transit stops per transit agency plans or negotiated improvements.
- f) Direct on-site sales of transit passes purchased and sold at a bulk group rate (through programs such as AC Transit Easy Pass or a similar program through another transit agency).
- g) Provision of a transit subsidy to employees or residents, determined by the project sponsor and subject to review by the City, if the employees or residents use transit or commute by other alternative modes.
- h) Provision of an ongoing contribution to AC Transit service to the area between the development and nearest mass transit station prioritized as follows: 1) Contribution to AC Transit bus service; 2) Contribution to an existing area shuttle or streetcar service; and 3) Establishment of new shuttle or streetcar service. The amount of contribution (for any of the above scenarios) would be based upon the cost of establishing new shuttle service (Scenario3).
- i) Guaranteed ride home program for employees, either through 511.org or through separate program.
- j) Pre-tax commuter benefits (commuter checks) for employees.
- k) Free designated parking spaces for on-site car-sharing program (such as City Car Share, Zip Car, etc.) and/or car-share membership for employees or tenants.
- l) Onsite carpooling and/or vanpooling program that includes preferential (discounted or free) parking for carpools and vanpools.
- m) Distribution of information concerning alternative transportation options.
- n) Parking spaces sold/leased separately for residential units. Charge employees for parking, or provide a cash incentive or transit pass alternative to a free parking space in commercial properties.
- o) Parking management strategies; including attendant/valet parking and shared parking spaces.
- p) Requiring tenants to provide opportunities and the ability to work off-site.
- q) Allow employees or residents to adjust their work schedule in order to complete the basic work requirement of five eight-hour workdays by adjusting their



schedule to reduce vehicle trips to the worksite (e.g., working four, ten-hour days; allowing employees to work from home two days per week).

- r) Provide or require tenants to provide employees with staggered work hours involving a shift in the set work hours of all employees at the workplace or flexible work hours involving individually determined work hours.

The TDM Plan shall indicate the estimated VTR for each strategy proposed based on published research or guidelines. For TDM Plans containing ongoing operational VTR strategies, the Plan shall include an ongoing monitoring and enforcement program to ensure the Plan is implemented on an ongoing basis during project operation. If an annual compliance report is required, as explained below, the TDM Plan shall also specify the topics to be addressed in the annual report.

The project applicant shall implement the approved TDM Plan on an ongoing basis. For projects that generate 100 or more net new AM or PM peak hour vehicle trips and contain ongoing operational VTR strategies, the project applicant shall submit an annual compliance report for the first five years following completion of the project (or completion of each phase for phased projects) for review and approval by the City. The annual report shall document the status and effectiveness of the TDM program, including the actual VTR. If deemed necessary, the City may elect to have a peer review consultant, paid for by the project applicant, review the annual report. If timely reports are not submitted and/or the annual reports indicate that the project applicant has failed to implement the TDM Plan, the project will be considered in violation of the Conditions of Approval and the City may initiate enforcement action as provided for in these Conditions of Approval. The project shall not be considered in violation of this Condition if the TDM Plan is implemented but the VTR goal is not achieved.

**Recommendation 4:** Consistent with the Broadway Valdez Specific Plan, consider implementing the following strategies as part of the TDM program for the proposed project:

- Consider reducing the amount of off-street automobile parking provided. City of Oakland Planning Code requires no parking for the commercial component of the project and 0.5 spaces per unit for the residential component. The proposed project would provide 261 parking spaces, which is 149 spaces more than the minimum parking required by the City of Oakland. Providing excessive parking supply can encourage additional driving and be in conflict with the goals of the City and Specific Plan to encourage non-automobile travel modes.
- Consistent with Planning Code Section 17.116.110.D, the project shall unbundle the cost of parking from the cost of housing where residents pay separately for their parking spaces (Policy C-6.8).





- Consistent with Planning Code Section 17.116.110.D, explore allowing non-residents to use the parking level designated for residents for a fee during typical weekday business hours when residential demand is the lowest. At a minimum, consider allowing retail employees to use the residential parking during weekday business hours (Policies C-6.4 and C-6.5)
- Designate dedicated on-site parking spaces for car-sharing.
- Provide long-term and short-term bicycle parking beyond the minimum required by City of Oakland Planning Code.
- Cooperate with City of Oakland and/or other regional agencies to allow installation of a potential bike share station along the project frontage.
- Designate a TDM coordinator for the project.
- Provide all new residents and retail employees with information on the various transportation options available.

Please contact Sam with questions or comments.