RESOLUTION

A RESOLUTION OF THE COUNCIL OF THE CITY OF LOS ANGELES, CALIFORNIA, TO ADOPT FINDINGS PURSUANT TO THE MITIGATION FEE ACT, TO UPDATE TRANSPORTATION IMPACT FEES, TO ADOPT AN UPDATED LIST OF TRANSPORTATION IMPROVEMENT PROJECTS, AND TO ADOPT A NEXUS STUDY FOR THE COASTAL TRANSPORTATION CORRIDOR SPECIFIC PLAN AREA AND THE WEST LOS ANGELES TRANSPORTATION IMPROVEMENT AND MITIGATION SPECIFIC PLAN AREA.

This resolution establishes (1) the Transportation Impact Assessment Fee amounts to be collected pursuant to the Coastal Transportation Corridor Specific Plan and West Los Angeles Transportation Improvement and Mitigation Specific Plan, (2) fee credit amounts and credit calculation methods, (3) a list of transportation improvement projects to be partially funded by those fees and the process by which the lists may be updated, and (4) guidelines for administering the Coastal Transportation Corridor Specific Plan Trust Fund and West Los Angeles Transportation Improvement and Mitigation Specific Plan Trust Fund.

WHEREAS, State legislation, including SB 743 (2013), The Complete Streets Act of 2008 (AB 1358), The Global Warming Solutions Act of 2006 (AB 32), and The Sustainable Communities Act (SB 375), directs local jurisdictions to reprioritize transportation improvements to focus on access to transit and active transportation as strategies to reduce dependence on vehicular travel, and reduce VMT and associated greenhouse gas emissions;

WHEREAS, the City of Los Angeles has adopted Mobility Plan 2035 (2015) and The Plan for a Healthy Los Angeles (2015) demonstrating a renewed commitment to increasing transportation access, multimodal mobility, safe transportation facilities, and active transportation options;

WHEREAS, the Departments of City Planning and Transportation have engaged the public in a multi-year planning effort to identify multi-modal transportation improvements needed for the Westside of Los Angeles to be partially funded with TIA Fee monies;

WHEREAS, the City of Los Angeles is updating its existing mitigation fee programs in the Coastal Transportation Corridor Specific Plan (CTCSP) and West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP) to assess a fee on new development to help fund needed transportation improvements on the Westside of the City;

WHEREAS City Council motions called for the Departments of City Planning and Transportation to review and update the fees (Transportation Impact Assessment Fees or TIA Fees) and the lists of transportation improvement projects (TIA Fee Improvements) in the Coastal Transportation Corridor Specific Plan (CTCSP) (Council File 07-0287) and the West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP) (Council File 08-0229);

WHEREAS, on _____ the City Council adopted updates to the CTCSP and WLA TIMP, which identifies updated list of purposes for the TIA Fees to meet the intent and goals of MP 2035, SB 743, AB 1358, AB 32, SB 375 and a Plan for a Healthy Los Angeles;

WHEREAS, the Updated CTSCP and WLA TIMP authorize a TIA Fee to be set in an amount established by resolution based on a nexus study that complies with the Mitigation Fee Act;

WHEREAS, the City has completed a nexus study of TIA Fees and has based the proposed fees on that study;

WHEREAS, the Updated CTCSP and WLA TIMP authorize the City Council to establish, by resolution, fee credits to the TIA Fee and to adopt implementing regulations;

WHEREAS, the City of Los Angeles has established the Coastal Transportation Corridor Specific Plan Trust Fund and the West Los Angeles Transportation Improvement and Mitigation Specific Plan Trust Fund for the deposit of collected TIA Fees.

NOW, THEREFORE, BE IT RESOLVED, BY THE CITY COUNCIL OF THE CITY OF LOS ANGELES AS FOLLOWS:

SECTION 1. MITIGATION FEE ACT FINDINGS

Council, based upon its review and consideration of the Record, makes the following findings pursuant to the Mitigation Fee Act (Cal. Gov't Code §§ 66000, et seq.) to support the adoption of updated TIA Fees for the CTCSP and WLA TIMP areas.

1) **PURPOSE OF FEES:** The purpose of the Transportation Impact Assessment Fee (TIA Fee) program is to provide funding mechanisms to help the City reduce vehicle miles traveled (VMT) per capita on the Westside by providing partial funding for multi-modal transportation improvements as identified through the Westside Mobility Plan Study process and consistent with the City's General Plan Circulation Element (Mobility Plan 2035) and General Plan Land Use Element (the Community Plans).

2) **USE OF FEES:** The TIA Fee program revenues from new development will be used to fund transportation improvements that reduce VMT per capita, enhance multimodal connectivity, and increase transportation options on the Westside. Transportation improvements that have been identified for TIA Fee funding include active transportation projects including new or enhanced bicycle and pedestrian facilities; new dedicated transit routes; extensions to current transit routes or enhancements to current transit service; roadway and ITS improvements; and trip reduction programs.

3) **RELATIONSHIP BETWEEN USE OF FEES AND TYPE OF DEVELOPMENT PROJECT:** New development on the Westside will have both a direct and cumulative transportation impact through increased roadway trips and vehicle miles traveled on major streets. Completion of the necessary transportation improvements will ensure that the greater transportation demand caused by new development will not result in an increase in VMT per capita.

4) **RELATIONSHIP BETWEEN NEED FOR FACILITY AND TYPE OF DEVELOPMENT PROJ ECT:** New residential, commercial and industrial development that is forecast for the Westside will add to the incremental need for transportation infrastructure, and new development in the project area will benefit from the new infrastructure. The TIA Fee program seeks to improve transportation infrastructure on the Westside of the City given projected growth through the year 2035. Given that new development is expected to occur, multimodal transportation improvements identified by the City's MP 2035 and the Westside Mobility Plan Study process will be necessary to minimize increases in VMT on the Westside. The proposed transportation improvements provide for a transportation system on the Westside that better accommodates anticipated infill growth; the provision of transportation infrastructure that can support expected growth is called for in the General Plan Framework (Land Use Policy 3.3.2). Furthermore, the transportation improvements on the project lists provide a first-step in implementing Mobility Plan 2035 (the General Plan Circulation Element).

   As described in Section 4.6 of the Draft EIR (pages 4.6-69 to 4.6-80), the multimodal transportation improvements identified by the Proposed Project are necessary to minimize increases in vehicle miles travelled (VMT) that would otherwise be anticipated to occur on the Westside. Section 4.6 of the Draft EIR also described the benefits of the Proposed Project and provides the quantitative analysis necessary to determine that the Proposed Project helps to maintain transportation service on the Westside by minimizing increases in vehicle trips, minimizing increases vehicle miles travelled, shifting the mode-spit towards non-auto-centric modes.

5) **RELATIONSHIP BETWEEN AMOUNT OF FEES AND COST OF OR PORTIONS OF FACILITY ATTRIBUTED TO DEVELOPMENT ON WHICH FEE IS IMPOSED:** The Westside Mobility Plan Study process identified transportation improvements necessary to accommodate new development on the

Westside. City staff and consultant Fehr & Peers developed the TIA Fee Program Study Report (Nexus Study) for the CTCSP and WLA TIMP amendment project and estimated the cost of the improvements necessary to increase multimodal connectivity and access on the Westside, reduce VMT per capita, and otherwise meet the goals, objectives, and policies of the General Plan, including Mobility Plan 2035 and the Community Plans.

The following factors were considered in assessing new developments' fair share contribution to funding those improvements:

a. The amount of regional pass-through traffic in the area; not all vehicle trips within the plan areas are generated by development within the plan area.
b. Existing deficiencies of the roadway network, such as existing bottlenecks; new development is not responsible for correcting existing deficiencies.
c. The VMT benefits that are expected to occur in the future without the identified transportation improvements (such as the VMT reductions expected to be achieved due to implementation the Expo Phase II Light Rail and the Westside extension of the Purple Line).

Taking into account the operational improvements and VMT benefits attributed to existing trips, regional pass-through traffic, and other planned transit improvements, the maximum percentage of improvement costs that could be contributed by new development is 43%. The proposed TIA Fees cover approximately one-third of the total cost of the identified improvements. While a higher fair share cost percentage may be justified under the Mitigation Fee Act as part of the fee update, full cost recovery would be inconsistent with the collection of similar fees statewide and with the historic fair share cost percentage of the CTCSP and WLA TIMP fee programs.

Transportation improvement costs to be funded by new development in the City are allocated to each land use using a cost allocation method that measures the associated impact to the City's transportation system for each land use. The costs were allocated based on three factors: trip generation for each land use, average vehicle-trip length for each land use, and percent of new vehicle trips for each land use. Together, these factors best reflect each land use's relative impact on the system by accounting for the number of average daily trips, as well as length and purpose, to arrive at the total impact by each land use. The result is a fee for each unit (square foot or dwelling unit) of new development that is based on each land uses proportionate use of the transportation facilities and reflects the relative impact on the transportation system.

SECTION 2. FEE SCHEDULE

1) **TIA Fee Amounts.** Council adopts the fees attached as *Exhibit C* of this Resolution to pay for transportation improvements in the CTCSP and WLA TIMP Specific Plan areas. Council adopts the Nexus Study upon which those fees are based; the study is attached as *Exhibit D* of this Resolution.

2) **Effective Date.** The TIA Fee shall be effective on the 60th day following the adoption of this Resolution and the adoption of the CTCSP and WLA TIMP ordinances authorizing the TIA Fee.

3) **Phased Implementation of the Residential TIA Fee.**

   a) For the first 120 days following the effective date of the TIA Fee, no TIA Fee shall be imposed on the residential portion of any Development Project for which a Building Permit Application is submitted.

   b) An Applicant for a Development Project who submits a Building Permit Application 121 days following the effective date of the TIA Fee shall pay one-third of the total residential TIA Fee amount due, based on the fee schedule in effect at the time of the submittal of the Building Permit Application.

   c) An Applicant for a Development Project who submits a Building Permit Application 306 days following the effective date of the TIA Fee shall pay two-thirds of the total residential TIA Fee amount due, based on the fee schedule in effect at the time of the submittal of the Building Permit Application.

   d) An Applicant for a Development Project who submits a Building Permit Application 485 days or more after the effective date of the TIA Fee shall pay the total TIA Fee amount due, based on the fee schedule in effect at the time of the submittal of the Building Permit Application.

4) **Annual Indexing.**

   The TIA Fees shall be annually increased (or decreased) as follows:

   The Annual Index upon adoption of this Ordinance shall be 1.000. The TIA Fees shall each be increased (or decreased) as of January 1 of each year by the amount of the percent increase (or decrease) in the most recently available Construction Cost Index as determined by LADOT. The revised Annual Index shall be published by LADOT in a newspaper of citywide circulation before January 31 of each year.

   If the Department determines that the Construction Cost Index does not adequately reflect the annual increase in costs, then the Department shall recommend to the City Council, based on a written report, that the City Council adopt different cost figures. Upon receipt of such a report, and after public hearing, the City Council may, by resolution, adopt these different cost figures to be used for adjustment of the TIA Fees.

5) **Appeal Filing Fee.** An appeal filed pursuant to WLA TIMP Section 11 or CTCSP Section 11 shall be accompanied by a filing fee of $500 payable to LADOT.

SECTION 3. FEE EXEMPTIONS, CALCUATIONS, AND CREDITS

1) **Exemptions from the TIA Fee.** The TIA Fee Program shall exempt the following Projects from payment of a TIA Fee:

   a) Any Project exempt from the requirements of the CTCSP or WLA TIMP pursuant to Section 5.B in each Specific Plan.

   b) Affordable Dwelling Units (if they meet the same eligibility criteria as required for an Affordable Housing Fee Credit as described in the Section 8.B.2.b of the CTCSP and the WLA TIMP).

   c) One hundred percent affordable housing projects (including any managers units, on-site services, or on-site commercial uses).

   d) Projects providing housing or services for persons experiencing homelessness including but not limited to supportive housing projects, transitional housing projects, and supportive services.

   e) Accessory Dwelling Units as defined by the LAMC.

   f) All public and private K-12 educational institutions.

   g) Child Care Facilities as defined by the LAMC.

   h) Churches, Temples, and other buildings used for assembly, whether for religious or secular purposes.

   i) Hospitals

   j) Eldercare Facilities, as defined in the LAMC.

   k) Park and Ride Facilities.

   l) Temporary uses of less than six months in duration based on a building permit where no extension of times is permitted.

   m) Governmental or Public Facilities defined as capital improvements and/or buildings or structures used for the operation of City, County, State or Federal governments including, but not limited to, police and fire stations, government offices, government equipment yards, sanitation facilities, schools, parks, United States Federal Aviation Authority or Los Angeles World Airports (LAWA) administrative facilities, and other similar administrative facilities in which general government operations are conducted. Governmental or Public Facility does not include the use of publicly owned land, buildings, improvements or structures for private activities pursuant to lease agreements.

   n) Projects on property owned by LAWA and used for aircraft operations (commercial or noncommercial) or airport operation facilities (such as, terminals and other passenger processing related facilities such as gate areas and non-commercial spaces of passenger transportation such as the Intermodal Transportation Facility), not including cargo facilities or maintenance facilities.

2) The TIA Fee shall be calculated as follows:

Total TIA Fee = (number of units) x (fee rate per unit)

Where "units" can refer to dwelling units, hotel rooms, or square footage.
Where "fee rate per unit" is listed in Exhibit C.

3) Credits from the TIA Fee. Pursuant to the CTCSP and WLA TIMP, TIA Fee Credits can be granted for existing land uses, Affordable Dwelling Units, and transit oriented development. Qualifying requirements for credits are described in Section 8 of the CTCSP Ordinance and Section 8 of the WLA TIMP Ordinance. Credit amounts and calculations are as follows:

a) Existing Land Use Credit shall be calculated as follows:

i. Applicants for a Development Project on a site for which a TIA Fee has been paid pursuant to Ordinance Nos. 171,492, 160,394, or 168,999 may request and receive a full Trip credit for the existing land use.

ii. Applicants for Development Projects seeking credits for existing uses must provide LADOT with documentation supporting the existence and duration of the use (e.g. leasing agreements, utility bills, or previous environmental reviews). LADOT will validate credits for existing uses based on the provided documentation.

iii. Existing restricted Affordable Dwelling Units shall be excluded from the calculation of Existing Use Credit.

iv. If the existing use was active for at least six (6) consecutive months during the past two (2) years, 100% credit will be granted for the previous use. The start of the two-year period begins exactly two years prior to the Development Project's application filing completion date with the City of Los Angeles.

100% Credit Calculation:

Existing Use Credit = (number of existing units) x (fee rate per unit)

Where "units" can refer to existing dwelling units, hotel rooms, or square footage.
Where "Fee per unit" is listed in Exhibit C.

v. If the existing use was active for at least six (6) consecutive months during the past four (4) years, 50% credit will be granted for the previous use. The start of the four year period begins exactly four (4) years prior to the Development Project's filing completion date with the City of Los Angeles.

50% Credit Calculation:

Existing Use Credit = (number of existing units) x (fee per unit) x (50%)

Where "units" can refer to existing dwelling units, hotel rooms, or square footage.
Where "fee rate per unit" is listed in Exhibit C.

b) Affordable Housing Credit shall be calculated as follows:

i. *Calculation*. Credits will be awarded per Affordable Dwelling Unit, in an amount equal to the fee for two Apartment units (as shown in *Exhibit C*)

Affordable Housing Credit = (Affordable Dwelling Units) x [2 x (fee rate for an Apartment unit)]

ii. *Maximum Credits.* In no case shall the Affordable Housing Credit exceed 50 percent of the TIA Fee for a Development Project.

c) Transit Oriented Development (TOD) Credit shall be calculated as follows:

i. Parcels within ½ mile of a transit station or stop that serves a Dedicated Transit Line (as defined in the CTCSP and WLA TIMP) are eligible for 5% fee credit; or

ii. Parcels that are able to demonstrate a walking distance of ¼ mile to transit station/stop are eligible for a 10% fee credit (Applicant is required to submit, for LADOT review and approval, a map showing ¼ mile walking distance between an eligible transit station/stop and a pedestrian entrance to the Transit Oriented Development Project).

d) No Credit for Administrative Costs. Pursuant to the CTCSP and WLA TIMP Ordinances, a portion of each TIA Fee payment shall be designated for administrative costs. No Credit shall be granted for that portion of the TIA Fee designated for the City's administrative costs.

SECTION 4. ADMINISTERING THE LISTS OF TRANSPORTATION IMPROVEMENT PROJECTS

1) TIA Fee Transportation Improvements.

The TIA Fee may be used to fund the transportation improvements (also referred to as "TIA Fee Improvements" or "Improvements") identified in the tables attached as *Exhibits A* and *B* to this Resolution consistent with the terms in the tables.

See attached Exhibit A, Coastal Transportation Corridor – List of Transportation Improvements.
See attached Exhibit B, West Los Angeles TIMP – List of Transportation Improvements.

2) Guidelines for Updating and Deviating from the Approved List of Transportation Improvements.

a) **Intention.** The City has stated transportation goals to improve mobility; however, the specific improvements used to implement those goals may evolve over time. Therefore, the List of Transportation Improvements may be updated from time to time.

b) **Process for Amending the Lists of Transportation Improvements.** Upon recommendation by the Departments of Transportation (LADOT) and City Planning (LADCP), the City Council may amend specific Improvements listed under column three of Exhibits A and B of this Resolution. Substitutions, additions, or changes to the Improvements shall remain consistent with the "Primary Mode" (column one) and "Project Type" (column two). Amendments to the Improvements shall be evaluated using the criteria outlined in the following subsection c.

c) **Criteria**. The City shall consider the following criteria when proposing additions or substitutions to the Improvements:

i. The proposed transportation project achieves the purposes of the Specific Plans as described in Section 3 of the CTCSP and Section 3 of WLATIMP;
ii. The proposed transportation project is consistent with at least one of the "Primary Modes" and at least one of the "Project Types" identified in the Lists of Transportation Improvements.
iii. The proposed transportation project implements the goals, objectives and policies of Mobility Plan 2035 such as *Policy 4.6 Data-Driven Prioritization of Projects*: *Make the most of limited financial resources by utilizing data to prioritize transportation projects based upon safety, public health, equity, access, vulnerable social characteristics, social benefits, and/or economic benefits;*
iv. The project does not hinder equitable geographic distribution of transportation projects within the Specific Plan geographies;
v. The project is feasible, can be implemented in the near future, is "shovel ready" and/or is already partially funded but has a funding gap which may be filled through TIA Fee funds; and
vi. If the proposed improvement is a substitute improvement, it must generally fulfill the transportation objectives of the improvement which it is to replace.

d) **Funding Transportation Improvements that are not on the Approved List of Transportation Improvements**. It is within the authority of City Council to, by resolution, allocate TIA Fee funds for improvement projects that are not included on the approved List of Transportation Improvements. The criteria listed above in Subsection c shall guide the allocation of funds when deviations from the List of Transportation Improvements are considered. The allocation of TIA Fees for a particular improvement does not constitute environmental clearance for that improvement.

SECTION 5. PROPER USE OF MONIES

1) Interdepartmental TIA Fee Working Group

An interdepartmental working group will convene quarterly or as needed to discuss spending priorities, identify grant opportunities, determine additions and substitutions to the List of Transportation Improvements, and help prepare the required fee monitoring report. The working group shall include at least one representative from each of the following agencies or elected offices: LADOT, LADCP, Bureau of Engineering (BOE), and the Council Districts within the Specific Plan boundaries.

2) Guidelines for Use of TIA Fee Monies

The following considerations should guide decisions made by the City and Interdepartmental TIA Fee Working Group regarding the use of the TIA Fee funds.

a) Expenditure Goals per Improvement Project

i) Intention. The monies in the funds are intended to be used as "seed money" or local match money to leverage other money for transportation improvements.

ii) Guideline. TIA Fee Monies should not fund more than approximately one-third of the total cost of a single transportation improvement.

b) Expenditure Goals per Mode of Transportation

i) **Intention.** The intent of the CTCSP and WLA TIMP is to improve mobility options and accommodations for all modes of travel (i.e., transit, bicycle, pedestrian, vehicle), as part of a multimodal transportation system that is consistent with the City's Mobility Plan 2035 and Community Plans.

ii) **Guideline.** Over the lifetime of the Plans, funding should be distributed to all improvements for all modes of travel in a manner which is roughly proportional to the funding allocations envisioned in the nexus study. Over the lifetime of the Specific Plans, expenditures per mode of transportation should approximate the following proportions:

Transit	Approximately	55%	to	75%
Active Transportation	Approximately	10%	to	30%
Roadway	Approximately	10%	to	20%
Trip Reduction	Approximately	2%	to	5%

SECTION 6. TRUST FUND ADMINISTRATION

1) Allocation of Funds to Sub-Accounts

a) Intention. Over the lifetime of the Plans, funding should be distributed to all modes of travel in a manner which is roughly proportional to the funding allocations envisioned in the nexus study. Sub accounts can be utilized to guide this allocation goal and track spending per mode.

b) Guideline. Four sub-accounts should be set up within the mitigation fund corresponding to the four primary modes of transportation improvement projects. After accounting for the administrative portion of the fee, fee payments collected should be allocated and used consistent with the following proportions that were originally determined in the Nexus Study (TIA Fee Program Report June 2016 attached as Exhibit D):

	Allocation Proportions	
Sub-Account / Mode	CTCSP Fund	WLA TIMP Fund
Transit	67%	59%
Active Transportation	15%	25%
Roadway	15%	13%
Trip Reduction	3%	3%

2) Transfer of Funds

a) Intention. In order to provide the City greater flexibility to implement improvements, funds may be transferred between sub-accounts.

b) Findings. The City Council may transfer funds between accounts, not including the Administrative account, within the CTCSP Trust Fund or within the WLA TIMP Trust Fund based upon the following findings:

i. The transfer is consistent with the provisions of the Plan; and
ii. The transfer will not be materially detrimental to the transportation system within the Plan Area.

SECTION 7. REPORTING

Reporting Template. LADOT, with support from the Interdepartmental TIA Fee Working Group, shall develop a reporting template that shall include TIA Fee revenues, interest revenues, trust fund administration, encumbered monies, and expended monies.

SECTION 8. AMENDING THIS RESOLUTION

The process for amending the List of Transportation Improvements (Exhibits A and B of this Resolution) is provided in Section 4 of this Resolution.

Amendments to all other provisions of this Resolution shall occur pursuant to Charter Section 558.

Exhibits to the Administrative Fee Resolution

Exhibit A: Coastal Transportation Corridor Specific Plan – List of Transportation Improvements

Exhibit B: West Los Angeles TIMP Specific Plan – List of Transportation Improvements

Exhibit C: TIA Fees Per Land Use for the 2018 Calendar Year

Exhibit D: TIA Fee Program Study Report (Nexus Study)

Exhibit A

Coastal Transportation Corridor Specific Plan – List of Transportation Improvements

Column 1 Primary Mode	Column 2 Project Type	Column 3 Improvements *Project and Project Description*		Column 4 Total in Millions	Column 5 % of Project List
Active Modes	Mobility Hubs	Full-Service Mobility Hub	Install a full-service Mobility Hub at or adjacent to major transit stations & satellite hubs surrounding the station. A hub includes facilities such as bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	$48	15%
		Bicycle Transit Centers	Bike transit centers that offer bicycle parking, bike rentals, bike repair shops, lockers, showers and transit information and amenities		
	Enhance Pedestrian Access to Major Transit Stations	[Various Locations]	Implement pedestrian connectivity improvements at major transit stations by providing enhanced sidewalk amenities, such as landscaping, shading, lighting, directional signage, shelters, curb extensions, enhanced crosswalks, as feasible.		
	Streetscape Improvements	Livable Boulevards Streetscape Plan	Implement streetscape improvements along: • Venice Boulevard between Inglewood Boulevard and Lincoln Boulevard. • Centinela Avenue between Washington Boulevard & Jefferson Boulevard.		
		Sepulveda Pedestrian Improvements	Implement sidewalk and streetscape improvements, bus stop lighting at transit stops, and enhanced crosswalks. Sepulveda Boulevard between 76th Street and 80th Street.		
	Sidewalk Network & Pedestrian Enhancements	[Various Locations]	Complete gaps in the sidewalk network and provide pedestrian enhancements		
	Multi-use Paths	Sepulveda Channel Multi-use Path	Sepulveda Channel path from Ballona Creek to Washington Boulevard		
		Centinela Creek Multi-use Path	Centinela Creek path from Ballona Creek to Centinela Avenue east of the I-405		
	Cycle Tracks & Bike Lanes	Venice Blvd. Cycle Track	Venice Boulevard throughout the Coastal Transportation Corridor Area		
		Washington Blvd. Cycle Track	Washington Boulevard from Admiralty Way to Pacific Avenue		
		Lincoln Blvd. Cycle Track	Lincoln Boulevard from Jefferson Boulevard to Fiji Way. This project would be a feature of the reconstruction of the Lincoln Boulevard Ballona Creek Bridge project.		
		Culver Blvd. Bike Lane	Culver Boulevard from McConnell Avenue to Playa del Rey		
	Neighborhood Network Enhancements	[Various Locations]	Per Mobility Plan 2035, implement bicycle and neighborhood enhanced design features to provide a system of streets linking to major employment centers, transit stations, and educational, retail, entertainment, and recreational resources. Enhancements such as the following are described in Mobility Plan 2035: • **Beethoven Street / McConnell Avenue NEN**. Implement neighborhood enhanced design features as alternate route to major corridors		
	Bikesharing	Metro Bike Share	Provide public bicycle rental in "pods" located strategically throughout the CTCSP area.		
Transit	Bus Rapid Transit (BRT)	Lincoln BRT	Center Running BRT on Lincoln Boulevard from the border of the City of Santa Monica to 96th Street Transit Station.	$215	67%
		Sepulveda BRT	Center Running BRT on Sepulveda Boulevard from Wilshire Boulevard to the 96th Street Transit Station (within the City of LA).		
	Service Enhancements	Venice Rapid Bus Enhancements	Venice Boulevard – Rebrand existing Rapid Bus service to serve Venice Beach area, increased service frequency, implement stop improvements.		
	New Local Service	Circulator/Shuttle Service	Circulator bus/shuttle to connect activity centers to major transit stations, such as: • Loyola Marymount / Westchester Circulator • Venice / Playa Vista / Fox Hills Circulator • Venice Circulator		

Exhibit A

Coastal Transportation Corridor Specific Plan – List of Transportation Improvements

Continued

Column 1 Primary Mode	Column 2 Project Type	Column 3 Improvements *Project and Project Description*		Column 4 Total in Millions	Column 5 % of Project List
Roadway & ITS	Operational Improvements	Congestion Monitoring	Install a CCTV camera and necessary infrastructure to improve DOT's ability to monitor and respond to real-time traffic conditions	$48	15%
		ITS Corridor & Signal Upgrades	Install ITS improvements along major corridors. Install signal upgrades as part of the next evolution of ATSAC, including detector loops for traffic volume data and monitoring.		
		Major Intersection Improvements	Funding for spot intersection improvements, such as turn-lane or safety improvements, at major intersections.		
		Culver Boulevard Corridor	Improve traffic flow along Culver Blvd between Centinela Ave and I-405 Freeway including providing left-turn lanes at key signalized intersections (including Inglewood Blvd); Culver Blvd between Centinela Ave and I-405 Freeway.		
	Lincoln Blvd Bridge Enhancement	Lincoln Blvd Bridge Enhancement	Improve Lincoln Boulevard between Jefferson Boulevard and Fiji Way to remove the existing bottleneck by providing an additional southbound lane, transit lanes and on-street bike lanes. Improvements to serve all modes of travel would be implemented as follows: • an additional southbound lane for vehicles would be provided (currently, Lincoln narrows from three to two travel lanes in the southbound direction just south of Fiji Way whereas three travel lanes are provided in the northbound direction); • bus-only lanes would be provided in the median; • cycle tracks would be provided on both sides of the roadway to connect the existing bicycle lanes to the south with the Ballona Creek bicycle path; and • sidewalks would be provided on both sides of the street (the existing bridge does not provide sidewalks).		
	Access Improvements to LAX	[Various Locations]	On-going coordination with LAWA on airport related improvements, which may include a combination of roadway capacity enhancements, streetscape improvements, and multi-modal improvements.		
	Neighborhood Protection Program	[Various Locations and Strategies]	The objective of this Program is to discourage through-traffic from using local streets and to encourage, instead, use of the arterial street system. The Program will establish measures to make the primary arterial routes more attractive and local routes less attractive for through-traffic, and establish measures designed to facilitate vehicular and pedestrian egress from local streets in the adjacent neighborhoods onto the primary arterial street and highways system.		
Auto-Trip Reduction	Strategic Parking Strategies	[Various Strategies]	Update parking requirements to reflect mixed-use developments, support shared parking opportunities, and assess parking needs at developments adjacent to major transit stations.	$8	3%
	Parking Utilization Improvements & Reduced Congestion	ExpressPark	Implement an on-street intelligent parking program that includes vehicle sensors, dynamic demand-based pricing and a real-time parking guidance system to reduce VMT, congestion and to improve flow for cars/buses.		
		Real-Time Parking Information	Develop an on-line system for real-time parking information, including GIS database and mapping.		
		Wayfinding	Improve parking and wayfinding and guidance throughout commercial areas.		
	Transportation Demand Management (TDM) Programs	Rideshare Toolkit	The Toolkit would develop an online TDM Toolkit with information for transit users, cyclists, and pedestrians as well as ridesharing. It would include incentive programs for employers, schools, and residents. Additionally, it would be specific to City businesses, employees, and visitors and would integrate traveler information. It would also include carpooling/vanpooling and alternative work schedules.		
		TMOs	The program would provide start-up costs for Transportation Management Organizations/ Associations (TMOs/TMAs). It would also provide guidance and implementation of a TDM program.		
	Administrative Costs		Estimated at 5% of total project costs.	$16	5%

Total **$334,513,746**

Exhibit B

West Los Angeles TIMP Specific Plan – List of Transportation Improvements

Column 1 Primary Mode	Column 2 Project Type	Column 3 Improvements *Project and Project Description*		Column 4 Total in Millions	Column 5 % of Project List
Active Modes	Mobility Hubs	Full-Service Mobility Hubs	Install a full-service Mobility Hub at or adjacent to major transit stations & satellite hubs surrounding the station. A hub includes facilities such as bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	$58	25%
		Bicycle Transit Centers	Bike transit centers that offer bicycle parking, bike rentals, bike repair shops, lockers, showers and transit information and amenities		
	Enhance Pedestrian Access to Major Transit Stations	Expo Corridor Streetscape Plan	• Olympic Boulevard from Centinela Avenue to Barrington Avenue • Bundy Drive from Missouri Avenue to Pico Boulevard • Sepulveda Boulevard from Olympic Boulevard to National Boulevard • National Boulevard from Castle Heights Avenue to Mentone Avenue • Palms Boulevard from Motor Avenue to National Boulevard		
	Enhance Connectivity between Major Transit Station and Activity Centers	North-South Connections to Westwood Village/UCLA	Improvements along north-south streets connecting the Expo Line Westwood/Rancho Park Station to Westwood Village and UCLA could include transit, bicycle and pedestrian enhancements.		
	Streetscape Improvements	Livable Boulevard Streetscape Plan	• Streetscape improvements on Pico Blvd. from the 405 Freeway to Patricia Ave. • Streetscape improvements on Pico Blvd. from Centinela Ave. to the 405 Freeway. • Streetscape improvements on Motor Ave. from the I-10 Freeway to Venice Blvd.		
	Sidewalk Network & Pedestrian Enhancements	[Various Locations]	Complete gaps in the sidewalk network and provide pedestrian enhancements		
	Multi-use Paths	Exposition Light Rail Greenway Improvement Project	The project proposes to transform existing city-owned vacant parcels into a neighborhood greenway that includes construction of a multi-use path with drought tolerant landscaping, simulated stream to treat urban runoff, educational amenities and interpretive signs. Project is located along the Expo Line Railway.		
	Cycle Tracks & Bike Lanes	Santa Monica Blvd. Cycle Track	Santa Monica Boulevard in the "parkway" section east of Sepulveda Boulevard		
		Venice Blvd. Cycle Track	Venice Boulevard throughout the West Los Angeles TIMP Area		
		Motor Ave. Cycle Track	Motor Avenue between I-10 and Venice Boulevard		
		Bikeway Gap Closures	Bikeway gap closures, such as: • Gateway Blvd to Ocean Park Bike Lane. Gateway Blvd to Ocean Park Blvd gap closure		
	Neighborhood Network Enhancements	[Various Locations]	Per Mobility Plan 2035, implement bicycle and neighborhood enhanced design features to provide a system of streets linking to major employment centers, transit stations, and educational, retail, entertainment, and recreational resources. Enhancements such as the following are described in Mobility Plan 2035: • **Prosser/Westholme Avenue NEN.** Alternate route to major corridors, such as Westwood Blvd, connecting Expo Bike Path to UCLA. • **Veteran Avenue NEN.** Alternate route to major corridors, such as Westwood Blvd. • **Gayley Avenue / Montana Avenue (east of I-405) NEN.** Alternate route to major corridors, such as Westwood Blvd. • **Montana Avenue (west of I-405) NEN** • **Barrington Avenue / McLaughlin Avenue NEN** • **Ohio Avenue NEN** (including gap closure at Santa Monica Blvd.)		
	Bikesharing	Metro Bike Share	Provide public bicycle rental in "pods" located strategically throughout the WLA TIMP area.		
Transit	Bus Rapid Transit (BRT)	Sepulveda BRT	Center Running BRT on Sepulveda Boulevard from Wilshire Boulevard to the 96th Street Transit Station.	$139	59%
		Santa Monica BRT	Curb-running peak hour bus-only lanes on Santa Monica Boulevard from the border of the City of Santa Monica to the border of the City of Beverly Hills; BRT system includes enhanced bus stop amenities.		
	Service Enhancements	Olympic Rapid Bus Enhancements	Olympic Boulevard – Extension of the Rapid Bus service from its current terminus in Century City to the Metro Exposition Line station at Westwood Boulevard.		
		Pico Rapid Bus Enhancements	Pico Boulevard – Improve existing Rapid Bus service through increased frequency, stop improvements, and construction of a new rapid stop in Century City.		
		Venice Rapid Bus Enhancements	Venice Boulevard – Rebrand existing Rapid Bus service to serve Venice Beach area, increased service frequency, implement stop improvements.		
	New Local Service	Circulator/Shuttle Service	Circulator bus/shuttle to connect activity centers to major transit stations, such as: • Sawtelle service between Wilshire Blvd and the Expo Sepulveda Station • Bundy service between Brentwood, the Expo Bundy Station, and National Blvd • Palms Circulator to connect to Expo Station • Century City Circulator to connect to Expo Station		

Exhibit B

West Los Angeles TIMP Specific Plan – List of Transportation Improvements

Continued

Column 1 Primary Mode	Column 2 Project Type	Column 3 Improvements *Project and Project Description*		Column 4 Total in Millions	Column 5 % of Project List
Roadway & ITS	Operational Improvements	Congestion Monitoring	Install a CCTV camera and necessary infrastructure to improve DOT's ability to monitor and respond to real-time traffic conditions	$31	13%
		ITS Corridor & Signal Upgrades	Install ITS improvements along major corridors. Install signal upgrades as part of the next evolution of ATSAC, including detector loops for traffic volume data and monitoring.		
		Major Intersection Improvements	Funding for spot intersection improvements, such as turn-lane or safety improvements, at major intersections.		
		Sunset Boulevard Operations	Implement operational improvements along Sunset Boulevard. Improvements could include the following: ITS corridor improvements; signal upgrades as part of the next evolution of ATSAC; intersection improvements, such as turn-lane or safety improvements.		
		Olympic Boulevard Operations	Implement operational improvements along Olympic Boulevard between I-405 and Purdue Avenue (to the west of I-405). Improvements could include the following: Convert one westbound travel lane into an eastbound travel lane just west of I-405 by • In the westbound direction, provide two travel lanes (three during peak periods with on-street parking restrictions); • In the eastbound direction, provide three travel lanes (four during peak periods with on-street parking restrictions); and • Remove eastbound and westbound left-turn lanes at Beloit Avenue and eastbound center turn lane at Cotner Avenue to provide additional through lane capacity.		
		Bundy Drive / I-10 Ramp Improvement	Operational improvements at the I-10 ramp connections to Bundy Drive.		
	Neighborhood Protection Program	[Various Locations and Strategies]	The objective of this Program is to discourage through-traffic from using local streets and to encourage, instead, use of the arterial street system. The Program will establish measures to make the primary arterial routes more attractive and local routes less attractive for through-traffic, and establish measures designed to facilitate vehicular and pedestrian egress from local streets in the adjacent neighborhoods onto the primary arterial street and highways system.		
Auto-Trip Reduction	Strategic Parking Strategies	[Various Strategies]	Update parking requirements to reflect mixed-use developments, support shared parking opportunities, and assess parking needs at developments adjacent to major transit stations.	$8	3%
	Parking Utilization Improvements & Reduced Congestion	ExpressPark	Implement an on-street intelligent parking program that includes vehicle sensors, dynamic demand-based pricing and a real-time parking guidance system to reduce VMT, congestion and to improve flow for cars/buses.		
		Real-Time Parking Information	Develop an on-line system for real-time parking information, including GIS database and mapping.		
		Wayfinding	Improve parking and wayfinding and guidance throughout commercial areas.		
	Transportation Demand Management (TDM) Program	Rideshare Toolkit	The Toolkit would develop an online TDM Toolkit with information for transit users, cyclists, and pedestrians as well as ridesharing. It would include incentive programs for employers, schools, and residents. Additionally, it would be specific to City businesses, employees, and visitors and would integrate traveler information. It would also include carpooling/vanpooling and alternative work schedules.		
		TMOs	The program would provide start-up costs for Transportation Management Organizations/ Associations (TMOs/TMAs). It would also provide guidance and implementation of a TDM program.		
	Administrative Costs		Estimated at 5% of total project costs.	$12	5%

Total **$247,779,190**

Exhibit C

CTCSP and WLA TIMP TIA Fees Per Land Use for the 2018 Calendar Year

Land Use Category	Unit	TIA Fee per Unit	Description
Residential Land Uses			
Single Family	DU	**$8,847**	*Single family detached homes on individual lots*
Apartment	DU	**$4,646**	*Multi-family rental units (10 stories or less)*
High Rise Apartment	DU	**$2,804**	*Multi-family rental units with more than 10 stories*
Condominium/Townhouse	DU	**$6,248**	*Multi-family units with individual ownership (10 stories or less)*
High-Rise Condominium/Townhouse	DU	**$3,044**	*Multi-family units with individual ownership with more than 10 stories*
Affordable Dwelling Unit	DU	**$0**	*Units that qualify as Affordable Housing per City of Los Angeles requirements*
Hotel	Room	**$5,452**	*Provides sleeping accommodations and supporting facilities for short-term occupancy*
Retail & Service Land Uses			
Retail =< 250,000 SF	1,000 SF	**$13,347**	*General retail and service uses that are typically part of a shopping center or neighborhood center less than or equal to 250,000 SF (based on total square footage of retail uses on site)*
Retail >250,000 SF – 800,000 SF[3]	1,000 SF	**Interpolate**	*See above definition for retail uses; Apply this rate to uses totaling more than 250,000 SF and less than 800,000 SF[3]*
Retail >800,000 SF	1,000 SF	**$16,897**	*See above definition for retail uses; Apply this rate to uses totaling more than 800,000 SF*
Commercial Office & Medical Office Land Uses			
Office =< 50,000 SF	1,000 SF	**$25,000**	*A building of 50,000 SF or smaller that typically holds multiple tenants where affairs of businesses, commercial, or professional services are conducted. May contain an on-site cafeteria/café or retail services for use by on-site employees. Includes medical and dental office uses that provide outpatient care on a routine basis.*
Office >50,000 SF – 250,000 SF[4]	1,000 SF	**Interpolate**	*See above definition for office use. Utilize this rate for buildings greater than 50,000 SF but less than or equal to 250,000 SF[4]*
Office > 250,000 SF	1,000 SF	**$16,754**	*See above definition. Utilize this rate for buildings greater than 250,000 SF*
Industrial Land Uses			
Industrial	1,000 SF	**$10,975**	*An area that contains a mixture of manufacturing, service and warehouse facilities*
Manufacturing	1,000 SF	**$9,426**	*Facility that typically converts raw materials or parts into finished products; may include warehouse, office and research related functions*
Warehouse	1,000 SF	**$4,132**	*Facility that is primarily devoted to the storage of materials; may also include office and maintenance related functions*
Mini-Warehouse	1,000 SF	**$3,357**	*Self-storage facilities in which a number of storage units/vaults are rented for the storage of goods*
Cargo Facilities	1,000 SF	**$7,876**	*Cargo facilities associated with aviation uses on or adjacent to the LAX airport.*
Maintenance Facilities	1,000 SF	**$2,195**	*Maintenance facilities associated with aviation uses on or adjacent to the LAX airport.*

Notes:

1) ITE Trip Generation, 9th Edition per LADOT Traffic Study Policies and Procedures.
2) Pass-by Trips per LADOT Traffic Study Policies and Procedures.
3) For retail uses greater than 250,000 SF but less or equal to 800,000 SF, interpolate between the lower (=< 250,000 SF) and higher (>800,000 SF) rates provided.
4) For office uses greater than 50,000 SF but less or equal to 250,000 SF, interpolate between the lower (=< 50,000 SF) and higher (>250,000 SF) rates provided.
5) Trip rates for Cargo & Maintenance Facilities were derived by LAWA for aviation related uses in the CTCSP area.

Special Generators: If LADOT determines that a proposed use cannot be classified under the land use categories listed in the TIA Fee table, then LADOT will have the discretion to determine the appropriate data for input to the TIA Fee calculation; This may require a study to determine the trip rate, trip length, and pass-by rate data for the proposed use.

Exhibit D

TIA Fee Program Study Report (Nexus Study)



CTCSP & WLA TIMP Specific Plans Amendments

Report

June 2016

Transportation Impact Assessment (TIA) Fee Program Study
for
Coastal Transportation Corridor Specific Plan (CTCSP)
and West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP) Specific Plans Amendment Project

June 2016

Prepared for:

LOS ANGELES DEPARTMENT OF TRANSPORTATION

LOS ANGELES DEPARTMENT OF CITY PLANNING

Prepared by:

FEHR & PEERS

Los Angeles Office

(213) 261-2050

Ref: SM10-2416

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APPENDICES

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1. EXECUTIVE SUMMARY

This report provides the nexus analysis for the proposed amendments to the Transportation Impact Assessment (TIA) fee programs in the Coastal Transportation Corridor Specific Plan (CTCSP) and West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP). The report begins with the history of the TIA fee programs in the City of Los Angeles and the current status of the CTCSP and WLA TIMP fee programs, and follows with the proposed amendments to the two fee programs along with the nexus analysis used to determine the updated TIA fees.

Background & Overview of TIA Fees

The premise of the City of Los Angeles Transportation Improvement and Mitigation Specific Plan (TIMP) program is to prepare a transportation mitigation program to alleviate the expected impacts of new development on the circulation system. Under California law, "fees", as opposed to "taxes," can be adopted without the 2/3 vote of the public as required by Proposition 13. In 1987, legislation was adopted to counteract local agencies increasing adoption of new "fees" as replacement revenue after Prop 13. The State of California Mitigation Act (AB 1600) (Government Code, sections, 66000, *et seq.*) establishes a requirement for "nexus" in the establishment of a development fee. The nexus requirements are that (1) a development fee is directly related to the impacts of the development, and (2) the nature of the fee is roughly proportional to the impacts of the project.

Historically, fee programs in the City, including the current CTCSP and WLA TIMP fees, have funded roadway capacity enhancements with minimal emphasis on transit and active modes of transportation. The recent changes in legislation make the consideration of other transportation impacts and benefits applicable in the assessment of a TIA fee. For example, California SB 375 was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing and environmental planning. Under the law, the City must conform to a Sustainable Communities Strategy (SCS) that provides a plan for meeting emissions reduction targets set forth by the California Air Resources Board. This requires transportation plans and their associated fee programs to consider non-vehicular modes of travel, such as transit, biking and walking and the infrastructure needed to make these modes a viable options for those that live and work in the community.

The TIA fee for the CTCSP is $8,643 per PM peak hour trip and the fee in the WLA TIMP area is $3,498 per PM peak hour trip (as of January 2016). The fee is increased (or can also be decreased) on January 1 of each year by the amount of the percent change in the most recently available City Building Cost Index as determined by LADOT. The current fee programs require new development to mitigate their project specific impacts and to contribute a fair share to complete regional improvements to mitigate the cumulative impacts. LADOT has relied on the strategy of leveraging the collected developer TIA fees to secure outside transportation grants to help pay for the remaining project costs, primarily by submitting grant applications in the Metro Call for Projects process. **Table ES-1** presents a summary of the status of the fee programs[1].

[1] LADOT Accounting, Condition of Fund Report, January 2015.

TABLE ES-1
OVERVIEW OF CTCSP & WLA TIMP FUNDS

FUND OVERVIEW	CTCSP	WLA TIMP
Ordinance Details	Specific Plan - Ordinance No. 168,999 Trust Fund - Ordinance No. 169,000	Specific Plan - Ordinance No. 171,492 Trust Fund - Ordinance No. 171,493
Year Adopted	adopted by the City Council in 1993 and repealed the 1985 CTCSP	adopted by the City Council in 1997 and replaced an Interim Ordinance that had been in effect since 1988
Revenue Total from Inception	$35,347,770	$23,524,785
Current Fund Balance	$16,255,450	$4,275,021
Approximate Outstanding Obligation	$2,891,706	$2,610,423
Effective Net Available Balance	$13,363,744	$1,664,597
Additional Grants Leveraged by the Fund	Approximately $92,100,000	Approximately $90,000,000

It should be noted that the total revenue collected since inception of the fee program does not account for transportation projects that were constructed directly by developers as part of the TIA fee program. The Specific Plan ordinances permit developers to construct improvements identified as part of the Specific Plan project lists as part of their mitigation agreement. When these improvements are constructed directly by developers, the developer receives a credit towards its TIA fees in the amount paid to construct the project.

Proposed Amendments to CTCSP & WLA TIMP

The proposed amendments to the CTCSP and WLA TIMP are summarized below:

1. CTCSP – An updated Coastal Transportation Corridor Specific Plan, including an updated TIA fee and an updated project list of improvements.
2. WLA TIMP– An updated West Los Angeles Transportation Improvement and Mitigation Specific Plan, including an updated TIA fee and an updated project list of improvements.

The updates to the TIA programs consist of revisions to the fees, trip generation rates, exemptions, and in lieu credits, and an update to the list of transportation improvements and mitigation measures to be funded, in part, by the impact fees collected from new development. Other proposed changes would include administrative amendments and minor revisions that are consistent with transportation policies in the City's General Plan Elements, LADOT's Traffic Study Policies and Procedures, and in line with current best practices. **Table ES-2** provides an overview of the amendments to the Specific Plans.

TABLE ES-2 OVERVIEW OF SPECIFIC PLAN UPDATES

Updated Ordinances will…	Updated Ordinances will not…
▪ Update Project Lists ▪ Update TIA Trip Fees ▪ Update Fee Exemptions & Fee Credits ▪ Streamline and clarify administrative procedures	▪ Clear transportation improvements on updated project lists for construction ▪ Dictate how traffic impact studies are conducted, or what constitutes a significant CEQA impact, including: - Trip Monitoring - TDM - Trip Generation Rates for Traffic Impact Studies

The overall objective of the proposed Specific Plan amendments is to provide a mechanism, based on current land use trends and infrastructure requirements, for funding transportation improvements that would mitigate the cumulative impacts of new development by increasing mobility options within the Westside. However, the Specific Plan amendments would not, itself, entitle or otherwise approve any transportation projects. Nevertheless, the proposed amendments would result in a new list of transportation improvements for both the CTCSP and WLA TIMP areas.

The proposed updates to the project lists would provide transportation options and accommodations for multiple modes of travel (i.e., transit, bicycle, pedestrian, vehicle), within existing available right-of-way, as part of a transportation system that is consistent with the City of Los Angeles' General Plan Framework Element and General Plan Mobility Element; Community Plans for the Westwood, Brentwood-Pacific Palisades, West Los Angeles, Palms-Mar Vista-Del Rey, Venice, and Westchester-Playa Del Rey communities; and the LAX Specific Plan. The transportation improvements are targeted towards producing fewer auto trips and decreasing vehicle miles traveled (VMT) by increasing multimodal transportation options and promoting best practices in transportation demand management. Decreases in VMT will help to reduce greenhouse gas emissions, as mandated by Assembly Bill (AB) 32 and Senate Bill (SB) 375, by reducing automobile dependence and offering multiple modes of transportation.

The proposed Specific Plan amendments would revise the TIA fees required under each Specific Plan and corresponding ordinance. To determine the appropriate fee updates, this study was prepared to establish the nexus between new development that occurs in the study area and the need for new and expanded transportation facilities and programs, which include transit, bicycle, and pedestrian oriented improvements in addition to the more traditional roadway and signalization improvements. After establishing the nexus, the study calculates the TIA fees to be levied for each type of land use. The amount of the TIA fees is based on each land uses proportionate use of the transportation facilities.

TIA Fee Exemptions

In each Specific Plan area, some land uses, such as schools, residential uses, places of worship, and local serving uses are currently exempt from paying the TIA fee. The proposed CTCSP and WLA TIMP amendments would remove the exemption for single-family and multi-family residential development, with the exception of affordable housing units. In addition, retail and local serving uses would no longer be exempt from an impact fee. The uses shown in **Table ES-3** would continue to be exempt from paying the TIA fees.

TABLE ES-3
PROJECTS/LAND USES EXEMPT FROM TIA TRIP FEES WITH PROPOSED AMENDMENTS

▪ Public Facilities	▪ Tenant Improvements	▪ K-12 Public & Private Educational Institutions
▪ Demolitions	▪ Religious Institutions	▪ Child Care Facilities
▪ Structural Improvements	▪ Park & Ride Facilities	▪ Affordable Housing

In-Lieu Credits

The opportunities to receive in-lieu credit against the TIA fee would be updated to include affordable housing in both Specific Plans for projects that include affordable housing on-site. Previously, in-lieu credit for affordable housing units were only eligible in the CTCSP. A fee credit would be applied to the total TIA fees for a project for all affordable Housing units (very low income, low income and moderate income). For every affordable housing unit provided, the developer would receive an in-lieu credit of 2.0 VMT adjusted trip credits per MFDU for a maximum credit of 50 percent of the TIA fees for a project.

In addition, transit oriented developments that meet the criteria outlined per AB 3005 would also be eligible for a discount off their TIA fee with the specific plan amendments. The project must: 1) be located within a ½ mile of a dedicated transit line's station or stop, 2) have access to nearby retail uses, defined as a store that sells food within ½ mile of the project site, 3) provide either the minimum number of parking spaces required per the zoning code, or no more than one onsite parking space for zero to two bedroom units, and two onsite parking spaces for three or more bedroom units, whichever is less, and 4) the transit line must be in place and active at the time building permits are pulled. Parcels within ½ mile of a dedicated transit line's station or stop are eligible for 5% fee credit, and parcels that are able to demonstrate a walking distance of ¼ mile to a transit station or stop are eligible for a 10% fee credit (A map showing ¼ mile walking distance from front door of project site to transit station or stop is required to be submitted by the Applicant for City review and approval).

Updates to the Project Lists

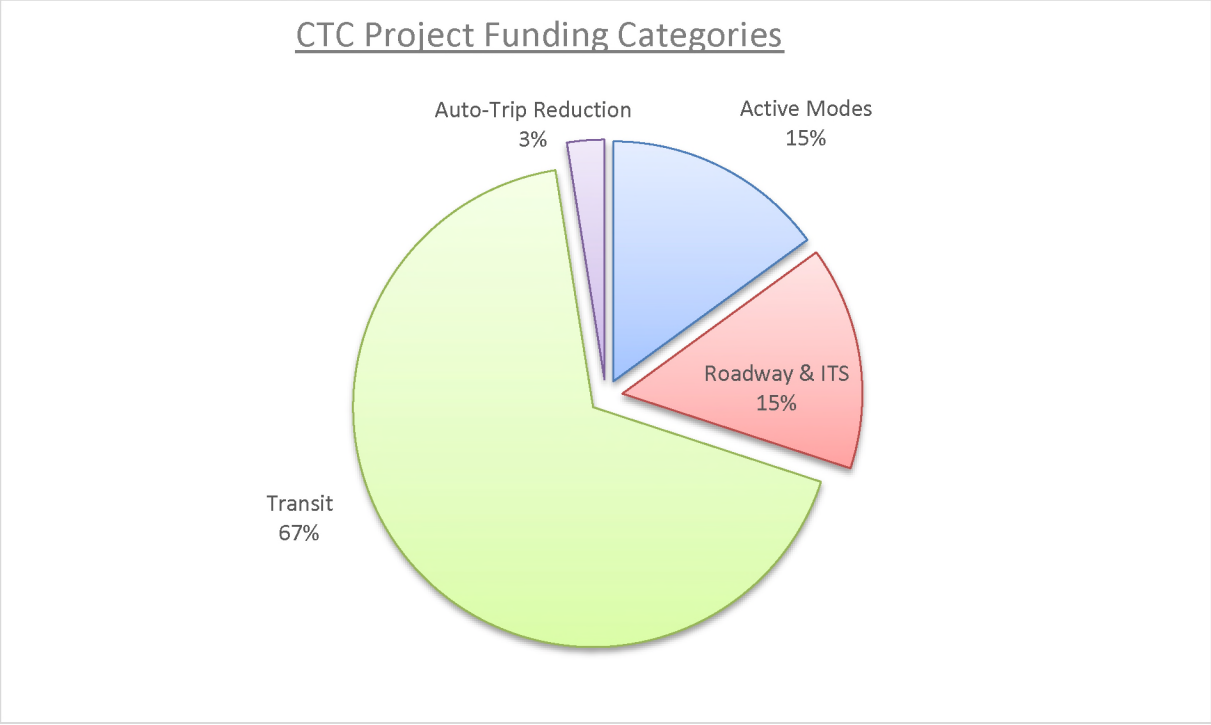
The proposed amendments include updating the list of transportation improvements funded in part by the TIA fees in each Specific Plan area. The new projects, identified through an analysis of completed projects and a public outreach component of the Westside Mobility Plan process (including consultation with neighboring jurisdictions, Metro, and Caltrans), are aimed at improving the existing transportation network, enhancing system capacity, reducing vehicle trips and VMT, and improving transit connectivity.

The updated project lists proposed for the CTCSP and WLA TIMP are not exhaustive but are representative of the types of improvements proposed for inclusion in the Specific Plan amendments. The proposed amendments to the Specific Plans state that the list of transportation projects may be updated from time to time by providing substitute or additional improvements if the City Council, upon recommendation by LADOT and DCP, has determined that the improvements are consistent with the objectives of the Specific Plans and that a substitute improvement fulfills the transportation objectives of the improvement which it is to replace.

The charts below summarize the total costs along with the costs for each type of project in the updated CTCSP and WLA TIMP project lists. Cost estimates were prepared for each of the transportation improvements in the updated CTCSP and WLA TIMP project lists. The cost estimates were based on the capital costs required to construct the projects. Operation and maintenance costs were not included in the TIA fee updates. An administrative fee of 5% was added to the project costs to provide oversight and implementation of the fee program by LADOT.

Chart ES-1: CTCSP Updated Project List Cost Allocation

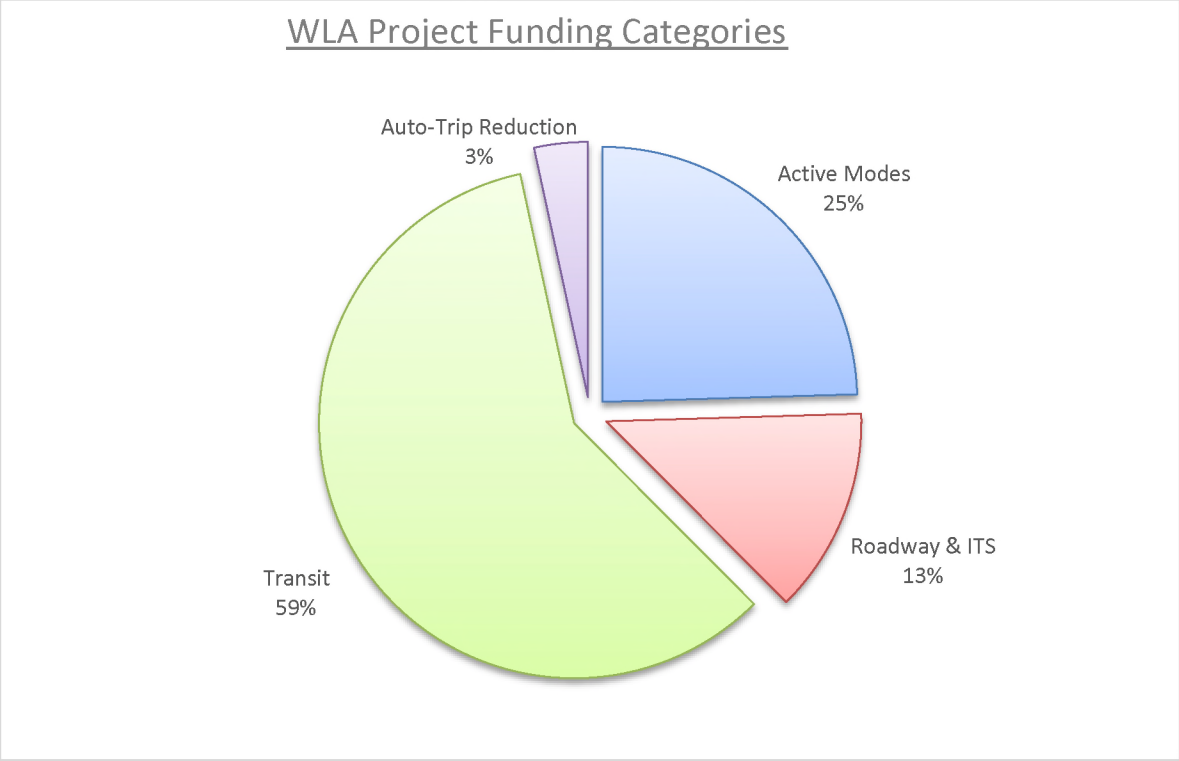
Total Cost = $334.5M



Note: The total CTCSP cost reflects a 5% administrative fee.

Chart ES-2: WLA TIMP Updated Project List Cost Allocation

Total Cost = $247.7M



Note: The total WLA TIMP cost reflects a 5% administrative fee.

Nexus Analysis & Proposed TIA Fees

The purpose of a nexus study is to establish the relationship, referred to as the "nexus," between new development expected to occur and the need for new and expanded major public facilities. After establishing the nexus, the TIA fees to be levied for each land use in the areas of benefit are calculated based on the proportionate share of the total facility use for each type of development.

The proposed updates to the project lists will provide transportation options and accommodations for multiple modes of travel (i.e., transit, bicycle, pedestrian and vehicles) as part of a transportation system that is consistent with local and statewide policies. Growth is expected in the project area with or without the amendments to the Specific Plans and the project does not change the amount of growth anticipated to occur. Therefore, if the amendments to the project lists can provide improvements that result in the production of fewer vehicle trips and VMT on a "per capita" basis compared to existing conditions and result in an overall reduction in VMT compared to Future No Project conditions, the study area will avoid an overall increase in comparison to a "do-nothing" scenario.

The updated TIA fees were computed as follows:

- Anticipated growth in the CTCSP and WLA TIMP areas was input into the Westside Travel Demand Forecasting model
- The number of new PM Peak Hour vehicle trips generated by the aforementioned growth was calculated
- A portion of total costs of the updated CTCSP and WLA TIMP project lists were divided by the total number of new trips to determine the cost per PM peak hour trip
- The percent of new trips generated by various land use types and trip length characteristics by land use were used to calculate the updated TIA fees to account for VMT

The following factors were considered in assessing new developments' fair share contribution:

1. ***Regional Pass-Through Traffic***: Traffic output from Westside TDF Model was used to determine the amount of regional pass-through traffic in the area (approximately 20%).

2. ***Existing Deficiencies***: Several projects on the updated project lists are focused on congestion relief at existing bottlenecks in the roadway network. The technology related improvements are expected to offer congestion relief in portions of the Specific Plan areas at levels similar to the effectiveness of the initial implementation of LADOT's ATSAC and ATSC systems (a total V/C benefit of 1.0, or 10%). Other operational improvements are expected to offer operational improvements at levels similar to the Vehicle Enhanced Network (VEN) improvements in the Mobility Plan 2035 (also a benefit of 10%). When both types of improvements are combined, existing trips could fairly be attributed 20% of the project costs. Taking into account regional pass-through traffic, 63% of project costs could be fairly attributed to new development.

3. ***VMT Benefits***: Although VMT is becoming a more common performance metric to quantify the change in vehicular travel demand and report the benefits of creating a more multimodal transportation system, the City of Los Angeles, similar to most cities, does not have a defined threshold for total VMT or VMT per Capita. Therefore, the threshold applied to the updated TIA fees is to decrease VMT per capita in comparison to Existing conditions and to decrease total VMT in comparison to Future without Project Conditions. The proposed updates to the project lists will provide transportation options and accommodations for multiple modes of travel (i.e., transit, bicycle, pedestrian and vehicles) as part of a transportation system that is consistent with local and statewide policies. In regards to decreasing VMT per Capita in comparison to Existing conditions, the Westside TDF output shows that 25% of the reduction in VMT per Capita that is projected with the Project (1.1% reduction out of a total 4.4% reduction study areawide) would be achieved due to implementation of baseline improvements such as the Expo Phase II LRT and the Westside extension of the Purple Line and the remaining 75% would be achieved due to implementation of the measures in the updated project lists. With new development generating new trips but without the implementation of the transportation projects contained in the updated project lists, however, the threshold of decreasing total VMT in comparison to Future No Project Conditions would not be achieved. Taking into account regional pass-through

traffic, these thresholds suggest that 59% of project costs could be fairly attributed to new development.

Taking into account the operational improvements and VMT benefits attributed to existing trips and regional pass-through traffic, the maximum percentage of project costs that could be contributed by new development is 43%. The WLA TIMP and CTCSP TIA fees have historically covered 35% of the total cost of the identified improvements. While a higher fair share cost percentage may be justified as part of the fee update, full cost recovery would be inconsistent with the collection of similar fees statewide. Therefore, the proposed fee levels have been identified that are comparable with other Southern California communities, and will provide funding for the proposed transportation improvement projects. Therefore, the baseline cost fair share contribution of 35% will continue to be applied to the updated fees, and LADOT will continue to rely on the strategy of leveraging the collected developer TIA fees to secure outside transportation sources to help pay for the remaining costs.

The updated CTCSP and WLA TIMP TIA fees were calculated by dividing the total number of PM peak hour trips by a portion (35%) of the updated project list costs. **ES-4** presents the average "per trip" fees within each of the Specific Plan areas.

TABLE ES-4
TIA FEES PER AVERAGE PM PEAK HOUR TRIP

Measure	WLA TIMP	CTCSP
Total Cost:	$247,779,190	$334,513,746
35% of Total Cost:	$86,722,717	$117,079,811
PM Trip Growth:	8,721	13,234
Average Cost Per PM Trip:	**$9,944**	**$8,847**

Following the calculation of the average "per trip" cost, two variables were added to the fee calculations to further account for the transportation impacts of various land use types.

- ***Average Vehicle-Trip Length***: The distance drivers are willing to travel is largely dependent on the purpose of their trip. For example, a person traveling to work may be willing to commute 10 miles each day (20 miles of total driving) but choose to shop and dine in their local community resulting in shorter trips. Average trip length data was used to generate a VMT factor for each land use type. The VMT factor was based on the average trip length generated by a single family household. Since single family households generate a variety of trip types, such as working, school and shopping trips, they are thought to reflect an average of a variety of trip types. Therefore, the VMT factor for a single family household is 1.0, and uses with longer average trip lengths, such as office, are greater (> 1.0) while uses with shorter trip lengths, such as locally serving retail, are lower (< 1.0).

- ***Percent of New Vehicle-Trips***: Trips generated by housing, employment centers, schools and other unique generators (e.g., hospitals) are considered to generate all "new" trips. However, a portion of trips associated with retail uses are not considered to be new trips; these trips are often referred to

as "pass-by" trips. Pass-by trips are vehicles that are already traveling along a corridor that stop at a use on the way to their ultimate destination. These pass-by trip credits are reflected in the fee calculations.

The updated TIA fees by land use type for the CTCSP and WLA TIMP amendments are shown in **Table ES-5**.

TABLE ES-5
PROPOSED TIA FEES

Land Use Category	Unit	ITE Code[1]	PM Trip Rate[1]	% New Trips[2]	Trip Length	VMT Factor	WLA TIMP TIA Fee per Unit	CTCSP TIA Fee per Unit
Residential Land Uses								
Single Family	DU	210	1.00	100%	7.4	1.0	$9,944	$8,847
Apartment	DU	221	0.58	100%	6.7	0.91	$5,222	$4,646
High Rise Apartment	DU	222	0.35	100%	6.7	0.91	$3,151	$2,804
Condominium/Townhouse	DU	231	0.78	100%	6.7	0.91	$7,023	$6,248
High-Rise Condominium/Townhouse	DU	232	0.38	100%	6.7	0.91	$3,421	$3,044
Senior Housing	DU	252	0.25	100%	6.7	0.91	$2,251	$2,003
Affordable Housing	DU	--	--	--	--	--	$0	$0
Hotel	Room	310	0.60	100%	7.6	1.03	$6,128	$5,452
Retail & Service Land Uses								
Retail =< 250 KSF	1,000 s.f.	820	4.43	70%	3.6	0.49	$15,001	$13,347
Retail >250 KSF - 800 KSF[3]	1,000 s.f.	820	Interpolate				Interpolate	Interpolate
Retail >800 KSF	1,000 s.f.	820	3.02	90%	5.2	0.70	$18,993	$16,897
Office & Medical Land Uses								
Office =< 50 KSF	1,000 s.f.	710	2.69	100%	9.8	1.32	$35,425	$31,517
Office >50 KSF - 250 KSF[4]	1,000 s.f.	710	Interpolate				Interpolate	Interpolate
Office > 250 KSF	1,000 s.f.	710	1.43	100%	9.8	1.32	$18,832	$16,754

Medical Office	1,000 s.f.	720	3.57	100%	9.3	1.26	$44,615	$39,693
Hospital	1,000 s.f.	610	1.16	100%	9.3	1.26	$14,497	$12,897
Industrial Land Uses								
Industrial	1,000 s.f.	130	0.85	100%	10.8	1.46	$12,336	$10,975
Manufacturing	1,000 s.f.	140	0.73	100%	10.8	1.46	$10,594	$9,426
Warehouse	1,000 s.f.	150	0.32	100%	10.8	1.46	$4,644	$4,132
Mini-Warehouse	1,000 s.f.	151	0.26	100%	10.8	1.46	$3,773	$3,357
Cargo Facilities	1,000 s.f.	--[5]	0.61	100%	10.8	1.46	N/A	$7,876
Maintenance Facilities	1,000 s.f.	--[5]	0.17	100%	10.8	1.46	N/A	$2,195

Notes:
1) ITE Trip Generation, 9th Edition per LADOT Traffic Study Policies and Procedures.
2) Pass-by Trips per LADOT Traffic Study Policies and Procedures.
3) For retail uses greater than 250 KSF but less or equal to 800 KSF, interpolate between the lower (=< 250 KSF) and higher (>800 KSF) rates provided.
4) For office uses greater than 50 KSF but less or equal to 250 KSF, interpolate between the lower (=< 50 KSF) and higher (>250 KSF) rates provided.
5) Trip rates for Cargo & Maintenance Facilities were derived by LAWA for aviation related uses in the CTCSP area.
Special Generators: If LADOT determines that a proposed use cannot be classified under the land use categories listed in the TIA Fee table, then LADOT will have the discretion to determine the appropriate data for input to the TIA Fee calculation. This will likely require a study to determine the trip rate, trip length, and pass-by rate data for the proposed use.

Economic Feasibility

The potential economic impact of an update to the TIA fee programs in the CTCSP and WLA TIMP was based on a series of static developer pro forma models that simulate the financial performance of a variety of real estate development prototypes under the proposed TIA fees. The financial performance of six residential and mixed-use developments with the existing and proposed TIA fees were considered in the economic feasibility review. Three of the prototypes were also analyzed under two fee credit scenarios for the provision of affordable housing. The feasibility review evaluated each development in the context of the WLA TIMP and CTCSP areas, including development costs and proposed TIA fees within each Specific Plan area.

The development feasibility results and key findings from the analysis are summarized below.

- ***Proposed TIA fees do not significantly affect development feasibility of the tested product types.*** While the updated TIA fee will increase development costs, the magnitude is unlikely to deter any feasible development from taking place. Specifically, the proposed TIA fee would represent between 0.6 to 2.6 percent of the total development cost for a typical project (excluding land). This level of impact will likely be overwhelmed by other factors that are significantly more important to project feasibility, such as fluctuations in rent or sale prices or changes in labor or construction material costs.

By way of example, both West LA and Coastal Corridor areas have experienced increases in rents and market sale prices in recent years that far exceed an increase in development costs that would result from the proposed TIA fee. Rents have increased by an average of 4 percent per year since 2011, while sale prices have increased by an annual average of 15 percent (attributed to the post-recessionary recovery). Not surprisingly, these price escalations have corresponded to a significant amount of new development activity in both the West LA and Coastal Corridor market areas.

Furthermore, because the Westside is mostly built out, many new developments could be eligible for existing use credit to offset a portion of the TIA fee obligation and lower the TIA fee as a percentage of the total development cost. Any increase in fees has the potential to result in a land value reduction for existing property owners. For example, the proposed TIA fee results in an estimated reduction in average residual land value of between 2 percent and 24 percent for certain product types. Fee increases may also slightly reduce investor return for developers that have already secured land with the intent of development in the near term. Ultimately, given their impact relative to overall development costs, the TIA fee is unlikely to significantly affect market dynamics and development decisions. The feasibility analysis did not incorporate any fee reductions due to TOD or existing use credits, and therefore, is based on the maximum fees that may be assessed.

- ***While current market conditions in both West LA and Coastal Corridor are highly favorable with rents and sale prices that support a wide range of new development, the financial performance of the building product types tested in this analysis varies by tenure, location, affordable housing component, and density bonus incentives, among other factors.*** For-sale condominiums would result in a higher residual land value (in comparison to rental units) in the Coastal Corridor whereas rental apartment units result in a higher residual land value in West LA. In all cases, the residual land value is positive with the proposed TIA fees, suggesting the development is economically viable. Development in the Coastal Corridor is stronger due to historically high rents and sales prices across all evaluated building product types, as indicated by the higher residual land value per square foot. Meanwhile the City's density bonus program may improve developer returns in some locations and circumstances (e.g., rental product), but this is not true across the board. Specifically, in many cases the economic benefits of additional development density may not offset the subsidy associated with building on-site affordable units. Nevertheless, developers will determine whether condos, apartments, or participation in the City's voluntary density bonus program makes sense for a particular project and the proposed TIA fee is unlikely to affect this decision. More important are evolving market dynamics which are currently highly favorable in both West LA and Coastal Corridor for most of the product types considered in this analysis.

- ***In cases where developers choose to participate in the City's density bonus program, TIA fee credits for the provision of affordable housing, whether tiered or flat, will not change the broader fundamental economics of new development.*** Both the flat and tiered TIA fee credit structures for affordable housing will result in fee levels that would be supported by the market. Developers of very low income units will experience slightly higher costs under the flat fee credit structure while developers of moderate income units will experience slightly lower costs under the flat fee credit structure. However, the minimal cost differences between the flat and tiered credit structures should be considered in the context of City policies and administration ease more so than economic feasibility.

2. INTRODUCTION AND BACKGROUND

This report provides the nexus analysis for the proposed amendments to the Transportation Impact Assessment (TIA) fee programs in the Coastal Transportation Corridor Specific Plan (CTCSP) and West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP). The report begins with the history of the TIA fee programs in the City of Los Angeles and the current status of the CTCSP and WLA TIMP fee programs, and follows with the proposed amendments to the two fee programs along with the nexus analysis used to determine the updated TIA fees. The final chapter provides a summary of the state of transportation funding. The report is organized into the following chapters:

1. Introduction and Background (current chapter)
2. Proposed Amendments to CTCSP and WLA TIMP
3. Nexus Analysis & Updated TIA Fees
4. Economic Feasibility
5. Status of Transportation Funding

Overview of TIA Fees

The premise of the City of Los Angeles Transportation Improvement and Mitigation Specific Plan (TIMP) program is to prepare a transportation mitigation program to alleviate the expected impacts of new development on the circulation system. The purpose of the adopted impact fees is to fund transportation improvements required to accommodate growth in the area and has is often used to augment other funding sources.

Under California law, "fees", as opposed to "taxes," can be adopted without the 2/3 vote of the public as required by Proposition 13. In 1987, legislation was adopted to counteract local agencies increasing adoption of new "fees" as replacement revenue after Prop 13. The State of California Mitigation Act (AB 1600) (Government Code, sections, 66000, *et seq.*) establishes a requirement for "nexus" in the establishment of a development fee. The nexus requirements are that (1) a development fee is directly related to the impacts of the development, and (2) the nature of the fee is roughly proportional to the impacts of the project. These requirements are in response to a series of court cases in favor of developers (e.g., Nolan v. California Coastal Commission; Dolan v. City of Tigard).

It is understood that the collected impact fees are not expected to fully pay for the planned transportation programs. It is expected that the fees will be combined with other sources of funding to implement the transportation program. To ensure that the fees are used for the identified transportation program, it is necessary that the impact payments be deposited into trust funds whose purpose is to fund implementation of the fee program.

Historically, fee programs in the City have funded roadway capacity enhancements with minimal emphasis on transit and active modes of transportation. Consequently, the process for demonstrating the nexus has been to compare the congestion levels under a scenario of no development against the expected congestion levels with new development and show that circulation impacts are mitigated by the proposed transportation

program. This incremental analysis showed the benefit of mitigating congestion impacts. To evaluate the proportionality of the program, the City estimated the total cost of the transportation improvements needed to provide acceptable transportation operations and calculated the costs based upon "total trips". The trips were then allocated to "existing" development and to "new" development and the fees were established based on the trips relating to new land use development.

The recent changes in legislation make the consideration of other transportation impacts and benefits applicable in the assessment of a TIA fee. For example, California SB 375 was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing and environmental planning. Under the law, the City must conform to a Sustainable Communities Strategy (SCS) that provides a plan for meeting emissions reduction targets set forth by the California Air Resources Board. This requires transportation plans and their associated fee programs to consider non-vehicular modes of travel, such as transit, biking and walking and the infrastructure needed to make these modes a viable options for those that live and work in the community.

History of TIA Fees in Los Angeles

Transportation impact fees are not new to Los Angeles. The CTCSP, originally adopted in 1985, was the first impact fee program in the City. The concept of an incremental fee on new development was vetted carefully as a means to address concerns that proposed transportation measures to mitigate traffic congestion impacts of new development could be implemented. The concept of developing a mitigation program became an important part of the Community Plan updates.

The adoption of the CTCSP lead to other efforts in the City to establish TIA fees as a developer mitigation tool. In the study area, two interim ordinances for impact fees and corresponding funds were established soon after the CTCSP for the following: the Westwood Regional Center and the Westwood/WLA Community Plan area. Both of these fees were repealed with the adoption of the WLA TIMP and accumulated funds were transferred to the WLA TIMP fund. Later, two other fees programs were also adopted within the CTCSP area: the Oxford Triangle Neighborhood Protection Fund (providing neighborhood traffic impact mitigation in Venice) and the Venice Coastal Parking Fund (providing a mechanism for "in-lieu" fees for parking within the Beach Impact Zone).

The CTCSP Ordinance was adopted by the City Council in 1993 and repealed the 1985 CTCSP established by Ordinance No. 160,394. The Specific Plan area includes all or parts of Westchester-Playa Del Rey District Plan Area, the Palms-Mar Vista-Del Rey District Plan Area, the Venice Community Plan Area and the Los Angeles International Airport Interim Plan Area, generally bounded by the City of Santa Monica on the north, Imperial Highway on the south, San Diego Freeway on the east, and the Pacific Ocean on the west.

The West LA TIMP Specific Plan Ordinance was adopted by the City Council in 1997 and replaced an interim ordinance that had been in effect since 1988. The Specific Plan consists of an area that includes all or parts of the Westwood, West Los Angeles, Brentwood-Pacific Palisades, and the Palms-Mar Vista-Del Rey District Plan Areas generally bounded by: the City of Beverly Hills, Beverwil Drive, Castle Heights Avenue, National Boulevard, Hughes Avenue on the east; Sunset Boulevard on the north; the City of Santa Monica and Centinela Avenue on the west; and Venice Boulevard on the south.

The CTCSP and WLA TIMP TIA fees were adopted to provide a funding mechanism for transportation improvements needed to address transportation impacts generated by the projected new development within the Specific Plan areas, and to require that new development projects mitigate project-related transportation impacts. New development projects are required to pay the TIA fee to DOT prior to the issuance of any building, grading or foundation permit.

Three other TIMP fees have been established within the City of Los Angeles: The Central City West Specific Plan, the Ventura/Cahuenga Boulevard Specific Plan, and the Warner Center Specific Plan. These traffic impact fees are compared in **Table 1**.

TABLE 1
CITY OF LOS ANGELES TIA FEE PROGRAMS

Program	Year Established	Current Fee	Exemptions/Notes
Coastal Transportation Corridor Specific Plan	1985	$8,643 per PM peak hour trip	Exempt: neighborhood retail; schools/government facilities; residential (excluding hotels) Airport projects not on Airport property specifically not exempt
West Los Angeles Specific Plan	1997	$3,498 per PM peak hour trip	Exempt: neighborhood retail; first 30,000 square feet (SF) of other retail; schools/ government facilities; residential (excluding hotels) Alternate per square foot calculation allowed
Ventura/Cahuenga Boulevard Corridor Specific Plan	1987	$0.99 - $8.87 per square foot *	Exempt: less than 10,000 SF; residential Drive thru window premium on impact fee
Warner Center Specific Plan **	1993/ Updated in 2013	$4,454 per peak hour trip	Exempt: Ground floor mixed uses of residential/office (up to 10% of total FAR), schools/government facilities, public trade schools/continuing education
Central City West Specific Plan***	1987	$8,471 per PM peak hour trip	Exempt: residential; neighborhood-serving retail; first 40,000 SF of retail; hospitals

*Ventura/Cahuenga impact fees are dependent upon the Community along the Corridor – with Sherman Oaks being the highest
**Warner Center TIMP was originally established in 1993 and updated in 2013; the exemption on residential fees was removed in the update
***Central City West – Phase I of the Specific Plan

Comparison to Other TIA Fee Programs

TIA fees in the City of Los Angeles were compared to other nearby Cities. **Table 2** presents trip fees that have been adopted by other cities in Los Angeles County and California (see Appendix A for more information). Not all of the cities assess the fee on a PM peak hour basis; hence, for comparison purposes, the data have been

normalized to a "per dwelling unit" or "per square foot" basis and allocated by specific land uses. Looking specifically at jurisdictions that might compete for economic development in the Westside area, **Table 2** shows how the current CTCSP and WLA TIMP TIA fees compare to nearby and/or similar areas for development.

TABLE 2
CURRENT TRAFFIC IMPACT FEES IN OTHER LOCAL JURISDICTIONS

Jurisdiction	Single Family Per DU*	Multi Family Per DU[1]	Office Per SF[2]	Industrial Per SF[2]	Retail Per SF[2]
Culver City	n/a	n/a	$1.00	$1.00	$1.00
El Segundo	n/a	n/a	$3.82	$2.51	$9.62
Long Beach	$1,125	$1,125	$3.00	n/a	$4.50
Pasadena	$2,616	$2,616	$3.92	$3.27	$9.09
Santa Monica[3]	$8,321	$3,521	$11.52	$1.39	$32.11
West Hollywood	$448	$448	$1.85	n/a	$1.85
Marina del Rey	n/a	$4,552	$8.53	$3.85	$16.31
Comparison to Westside Trip Fees					
CTCSP	n/a	n/a	$22.19	$6.89	$46.68
WLA TIMP	n/a	n/a	$6.45	$2.74	$7.09

1. DU = Dwelling Unit
2. SF = Square Feet
3. Santa Monica fees are for "Area 2" consisting of land uses outside of the downtown area.

In reviewing the fee comparison data, it is notable that residential development is exempt from the CTCSP and WLA TIMP fees. This is not the case in most of the comparable cities. The CTCSP fee is generally higher across all non-residential land uses, while the WLA TIMP fee is more comparable to the other comparison Cities.

The Los Angeles County Metropolitan Transportation Authority (Metro) has studied a Countywide Mitigation Fee as part of its responsibilities as the designated Congestion Management Agency for Los Angeles County. In 1990, Proposition 111, as a condition of receiving state gasoline tax revenues, began requiring the monitoring of land use development and accompanying transportation improvements throughout the County. Metro adopted a Congestion Management Plan (CMP) to implement these requirements. The CMP requires detailed reporting of congestion "debits" and "credits" to trace the conformance of cities in the mitigation of impacts caused by development. The effort to report these debits and credits is burdensome to cities, and the Metro Board directed its staff to see if the requirement could be relieved by the adoption of a countywide fee. In a December 2012 report, Metro staff proposed a minimum fee that could be waived if a local jurisdiction adopted an equivalent or higher fee. On June 20, 2013, the Metro Board adopted a resolution to postpone the adoption of a fee.

Status of CTCSP and WLA TIMP TIA Fee Programs

As of January 1, 2015, the TIA fee for the CTCSP is $8,643 per PM peak hour trip and the fee in the WLA TIMP area is $3,498 per PM peak hour trip (see Appendix B). The fee is increased (or can also be decreased) on January 1 of each year by the amount of the percent change in the most recently available City Building Cost Index as determined by LADOT.

The fee programs require new development to mitigate their project specific impacts and to contribute a fair share to complete regional improvements to mitigate the cumulative impacts. The fair share is based on a "nexus" and constitutes approximately 35% of the total cost of the identified improvements. The fair share payment (trip fee) is calculated in direct proportion to PM peak hour trips generated by new development. Because new development is not required to pay to improve traffic congestion caused by the existing traffic or by the cut-through traffic with destinations outside the Specific Plan areas, the developer TIA fees represent only a fraction of the total regional improvement costs. As a result, LADOT has relied on the strategy of leveraging the collected developer TIA fees to secure outside transportation grants to help pay for the remaining costs, primarily by submitting grant applications in the Metro Call for Projects process.

Table 3 presents a summary of the status of the fee programs. The information presented is based on the 2015 LADOT accounting report[2]. As shown in **Table 3**, both fee ordinances have been able to leverage additional funding (approximately $90 million each) through grant funding to construct improvements on the Westside.

TABLE 3
OVERVIEW OF CTCSP & WLA TIMP FUNDS

FUND OVERVIEW	CTCSP	WLA TIMP
Ordinance Details	Specific Plan - Ordinance No. 168,999 Trust Fund - Ordinance No. 169,000	Specific Plan - Ordinance No. 171,492 Trust Fund - Ordinance No. 171,493
Year Adopted	adopted by the City Council in 1993 and repealed the 1985 CTCSP	adopted by the City Council in 1997 and replaced an Interim Ordinance that had been in effect since 1988
Revenue Total from Inception	$35,347,770	$23,524,785
Current Fund Balance	$16,255,450	$4,275,021
Approximate Outstanding Obligation	$2,891,706	$2,610,423
Effective Net Available Balance	$13,363,744	$1,664,597
Additional Grants Leveraged by the Fund	Approximately $92,100,000	Approximately $90,000,000

It should be noted that the total revenue collected since inception of the fee program does not account for transportation projects that were constructed directly by developers as part of the TIA fee program. The Specific Plan ordinances permit developers to construct improvements identified as part of the Specific Plan project lists as part of their mitigation agreement. When these improvements are constructed directly by developers, the developer receives a credit towards its TIA fees in the amount paid to construct the project.

Many of the transportation improvements that were identified in the original Specific Plan project lists have been constructed. **Table 4** summarizes the projects that have been completed from the CTCSP and WLA TIMP project lists.

[2] LADOT Accounting, Condition of Fund Report, January 2015.

Additional transportation improvements beyond those specifically identified in the Specific Plans have been constructed in the Westside. **Table 5** summarizes the additional transportation projects that have been completed within the Specific Plan areas.

TABLE 4
STATUS OF SPECIFIC PLAN IMPROVEMENT PROJECTS

TRANSPORTATION IMPROVEMENTS	COASTAL TRANSPORTATION CORRIDOR	WEST L.A. TIMP
Corridor Improvements Completed or in Progress	• Sepulveda Boulevard Transportation Improvement; Lincoln Blvd to Centinela Ave • Marina Fwy Extension; Culver Blvd to Lincoln Blvd • Arbor Vitae Street Widening; La Cienega Blvd to Airport Blvd • Centinela Avenue Widening; Sepulveda Blvd to Culver Blvd [Playa Vista]	• Santa Monica Boulevard between Sepulveda Boulevard and Century Park East (also known as the Santa Monica Transit Parkway Project) • Sepulveda Boulevard between Santa Monica Boulevard and Sepulveda Pass •
Intersections Improvements	Of the 14 intersection improvements listed in Appendix B of the CTCSP, 13 projects have been completed, implemented primarily through the developer traffic mitigation requirements per CEQA. The remaining intersection improvement at La Tijera Boulevard and Airport Avenue would be completed as part of the CTCSP La Tijera corridor improvement, if pursued.	Of the 24 intersection improvements listed in Appendix C of the WLA TIMP, 15 projects have been completed. Of the signalized intersections, all 14 locations have been completed.

TABLE 5
OTHER IMPROVEMENT EXPENDITURES & FUNDING COMMITMENTS

FUNDING	COASTAL TRANSPORTATION CORRIDOR	WEST L.A. TIMP
Design	La Tijera Boulevard Bridge Widening over I-405 Freeway	• National Boulevard between Sawtelle and Sepulveda Intersection Improvements • Wilshire Boulevard between Selby and Comstock Corridor Enhancement • Overland Avenue Bridge Widening Over the I-10 Freeway Improvement
Construction	• I-105 Freeway Westbound Off-Ramp at Sepulveda Blvd • 83rd Street Improvement between Lincoln Blvd and Colegio Drive • Westchester Adaptive Traffic Control System (ATCS) • Fiji Way Permanent Street Closure	• Century City Adaptive Traffic Control System / Signal Upgrades • Constellation Place Neighborhood Traffic Management Program • Fox Studios Neighborhood Traffic Management Program • Overland Avenue Bridge Widening Over the I-10 Freeway Construction • Westchester ATCS Project
Funding	• ATSAC Center Expansion • Expansion of LAX ATSAC System • Expansion of Mar Vista ATSAC System • Expansion of Westchester Adaptive Traffic Control System (ATCS) • Lincoln Blvd Transit Priority • Westside Mobility Plan Study (Includes Sub-Regional Travel Demand Model, Rail Connectivity Study, CTCSP Update, Parking Study and, a Livable Boulevards Study)	• NTM Cheviot Hills • Westside Mobility Plan Study (Includes Sub-Regional Travel Demand Model, Rail Connectivity Study, CTCSP Update, Parking Study and a Livable Boulevards Study) • Century City Transportation Management Organization (TMO) • Wilshire Bus Rapid Transit (BRT) • Expo LRT Phase 2 – Sepulveda Grade Separation

3. PROPOSED AMENDMENTS TO CTCSP AND WLA TIMP

This chapter provides an overview of the proposed amendments to the CTCSP and WLA TIMP.

Project Overview

The proposed amendments to the CTCSP and WLA TIMP (Proposed Project) are summarized below:

1. CTCSP – An updated Coastal Transportation Corridor Specific Plan, including an updated TIA fee and an updated project list of improvements.
2. WLA TIMP– An updated West Los Angeles Transportation Improvement and Mitigation Specific Plan, including an updated TIA fee and an updated project list of improvements.

The updates to the TIA programs consist of revisions to the fees, trip generation rates, exemptions, and in lieu credits, and an update to the list of transportation improvements and mitigation measures to be funded, in part, by the impact fees collected from new development. Other proposed changes would include administrative amendments and minor revisions that are consistent with transportation policies in the City's General Plan Elements, LADOT's Traffic Study Policies and Procedures, and in line with current best practices. **Table 6** provides an overview of the amendments to the Specific Plans.

TABLE 6 OVERVIEW OF SPECIFIC PLAN UPDATES

Updated Ordinances will…	Updated Ordinances will not…
▪ Update Project Lists ▪ Update TIA Trip Fees ▪ Update Fee Exemptions & Fee Credits ▪ Streamline and clarify administrative procedures	▪ Clear transportation improvements on updated project lists for construction ▪ Dictate how traffic impact studies are conducted, or what constitutes a significant CEQA impact, including: - Trip Monitoring - TDM - Trip Generation Rates for Traffic Impact Studies

Project Background

The west side of Los Angeles, like many other urban areas throughout the country, experiences significant traffic congestion. The combination of many regional destinations, oversaturated roadways, unreliable travel times for autos and transit, and limited north-south transit options underlie the need for creating a transportation plan for the Westside that will better serve all modes of transportation, improve the efficiency of the overall system, and enhance the livability of the major boulevards in Westside communities.

To address the transportation issues on the Westside, the Los Angeles City Council directed the Department of Transportation, in conjunction with the Department of City Planning, to undertake a comprehensive study to develop potential near-term solutions and long-term plans to address congestion and mobility challenges within this section of the City. The comprehensive study, called the Westside Mobility Plan, was undertaken to develop a long range vision that would facilitate a more balanced approach toward improving mobility on the Westside.

The amendments to the CTCSP and WLA TIMP are being developed in conjunction with the Westside Mobility Plan. The Westside Mobility Plan study area is made up of the combined boundaries of the CTCSP and WLA TIMP areas. The CTCSP and WLA TIMP are intended to serve as the primary implementation tools for bringing to life the vision for future mobility conditions on the Westside as articulated within the Westside Mobility Plan.

Project Objectives

The Proposed Project includes updated TIA fees, as well as a new list of transportation improvements to be funded, in part, by the TIA fees from new development. The overall objective of the Proposed Project is to provide a mechanism, based on current land use trends and infrastructure requirements, for funding transportation improvements that would mitigate the cumulative impacts of new development by increasing mobility options within the Westside. However, the Proposed Project would not, itself, entitle or otherwise approve any transportation projects. Nevertheless, the Proposed Project would result in a new list of transportation improvements for both the CTCSP and WLA TIMP areas. In recognition of this distinction, project objectives for the proposed transportation improvements included in the updated Specific Plan project lists are articulated separately from project objectives that relate to the proposed amendments to the Specific Plans.

The objectives of the transportation improvements that would be funded by the proposed amendments to the Specific Plans are as follows:

Primary Objectives of the Transportation Improvements:

- Provide transportation options and accommodations for multiple modes of travel (i.e., transit, bicycle, pedestrian, vehicle), within existing available right-of-way, as part of a transportation system that is consistent with the City of Los Angeles' General Plan Framework Element and General Plan Mobility Element; Community Plans for the Westwood, Brentwood-Pacific Palisades, West Los Angeles, Palms-Mar Vista-Del Rey, Venice, and Westchester-Playa Del Rey communities; and the LAX Specific Plan.
- Produce fewer auto trips per capita and decrease vehicle miles traveled (VMT) per capita by increasing multimodal transportation options and promoting best practices in transportation demand management.

- Reduce greenhouse gas emissions, as mandated by Assembly Bill (AB) 32 and Senate Bill (SB) 375, by reducing automobile dependence and offering multiple modes of transportation.
- Enhance mobility along key Westside transportation corridors within the Specific Plan areas, particularly by planning for dedicated transit lines that serve north-south corridors and provide connections to planned east-west transit lines.
- Enhance the transportation system by planning for better regional transit connectivity and "first mile-last mile" solutions (such as better pedestrian conditions, bike share/improved bicycle facilities, and circulator bus service).
- Encourage walking and bicycling as a means to safely and conveniently access transit and circulate within and between neighborhoods.
- Develop a multimodal transportation plan for the Westside that reflects the collective input of Westside community members, as gathered through a formal public outreach process.
- Develop transportation improvements that reflect consultation with multiple neighboring jurisdictions, transit service providers, and transportation planning agencies on the Westside.
- Develop a transportation system on the Westside that is efficient, sustainable, feasible, and fiscally responsible.

Secondary Objectives of the Transportation Improvements:

- Enhance the streetscape environment on portions of major arterials by improving neighborhood aesthetics and identity; implementing sustainable landscaping practices; bolstering local business patronage; and providing a pleasant and safe active transportation experience.
- Identify different types of parking strategies, such as demand-based pricing schemes, capacity management, travel demand management programs, and urban design guidelines, to improve parking supply.

The objectives of the proposed amendments to the Specific Plans include the following:

Primary Objectives of the Specific Plan Amendments:

- Develop amendments to the CTCSP and WLA TIMP that are aligned with city and state policies concerning transportation, including the City of Los Angeles' General Plan Framework Element, General Plan Mobility Element, LADOT Traffic Study Policies and Procedures, and State legislation (including AB 3005 and SB 743) that reprioritize transportation improvements to focus on access to transit and active transportation as strategies to reduce dependence on vehicular travel, and reduce VMT and associated greenhouse gas emissions.
- Develop amendments to the CTCSP and WLA TIMP that are aligned with City policies for the study area, as articulated in the Community Plans for the Westwood, Brentwood-Pacific Palisades, West

Los Angeles, Palms-Mar Vista-Del Rey, Venice, and Westchester-Playa Del Rey communities, and the LAX Specific Plan.

- Ensure the costs for transportation improvements within the study area are fairly distributed among all future land uses that will contribute to transportation impacts.
- Update TIA fees to provide a mechanism to fund specific transportation improvements that aims to decrease the cumulative impacts of new development and increase person throughput by increasing mobility options within the Westside.
- Update the TIA fee methodology to better align with a multimodal approach to planning for future transportation improvements.
- Update the TIA fee methodology to reflect an improved approach for measuring and addressing transportation impacts.

Secondary Objectives of the Specific Plan Amendments:

- Establish TIA fees that do not hinder the development of housing for diverse income levels in the Westside, including affordable housing for moderate, low, and very low income levels.
- Streamline the Specific Plan implementation process by aligning the CTCSP and WLA TIMP Specific Plan procedures with established City procedures.
- Develop consistent policy language between the CTCSP and WLA TIMP in order to make them easier to implement and administer.

Project Description

The Proposed Project consists of amendments to the CTCSP and WLA TIMP. The updates of the CTCSP and WLA TIMP are consistent with the City's multimodal approach to transportation planning and apply such principles to the study area in a more targeted manner. The details are summarized below.

AMENDMENTS TO IMPACT FEE ASSESSMENT AND METHODOLOGY

Fees

The Proposed Project would revise the TIA fees required under each Specific Plan and corresponding ordinance. To determine the appropriate fee updates, this study was prepared to establish the nexus between new development that occurs in the study area and the need for new and expanded transportation facilities and programs, which include transit, bicycle, and pedestrian oriented improvements in addition to the more traditional roadway and signalization improvements. After establishing the nexus, the study calculates the TIA fees to be levied for each type of land use. The amount of the TIA fees is based on each land uses proportionate use of the transportation facilities. These updated fees will be incorporated into the proposed amendments to the Specific Plans.

The traditional approach to nexus studies has more often than not involved using automobile Level of Service (LOS) as a performance measure for the transportation system. As part of the proposed amendments to the

CTCSP and WLA TIMP, alternative performance measures, such as VMT and vehicle-trips, have been used to gauge the effectiveness of the proposed mobility improvements. The intent of this fee is to fund improvements for multiple modes of travel, such as motor vehicles, pedestrians, bicycles, and transit.

Trip Generation Tables

Each Specific Plan has trip generation tables (Appendix D in the CTCSP and Appendix A in the WLA TIMP) which assign trip generation rates for specific land uses. The trip generation rates are used to project the number of future trips associated with a new development and that trip number is used to assess the TIA fee. Under the proposed project, the trip generation rates are proposed to be incorporated into the TIA fee tables for each Specific Plan area based on the nexus study. Trip generation rates for application in traffic impact studies would continue to be based on the procedures outlined in LADOT's Traffic Impact Study Guidelines (LADOT, 2014).

TIA Fee Exemption

In each Specific Plan area, some land uses, such as schools, residential uses, places of worship, and local serving uses are currently exempt from paying the TIA fee. The proposed CTCSP and WLA TIMP amendments would remove the exemption for single-family and multi-family residential development, with the exception of affordable housing units. In addition, retail and local serving uses would no longer be exempt from an impact fee. The uses shown in **Table 7** would continue to be exempt from paying the TIA fees.

TABLE 7
PROJECTS/LAND USES EXEMPT FROM TIA TRIP FEES WITH PROPOSED AMENDMENTS

▪ Public Facilities	▪ Tenant Improvements	▪ K-12 Public & Private Educational Institutions
▪ Demolitions	▪ Religious Institutions	▪ Child Care Facilities
▪ Structural Improvements	▪ Park & Ride Facilities	▪ Affordable Housing

In-Lieu Credits

The opportunities to receive in-lieu credit against the TIA fee would be updated to include affordable housing in both Specific Plans for projects that include affordable housing on-site. Previously, in-lieu credit for affordable housing units were only eligible in the CTCSP. Transit oriented developments that meet the criteria outlined per AB 3005 would also be eligible for a discount off their TIA fee with the specific plan amendments. In addition, Transportation Demand Management (TDM) Plans would no longer be eligible for in-lieu credit or be subject to noncompliance fees. Previously, in-lieu credit could be awarded for meeting TDM objectives, and noncompliance fees could be assessed for failing to sustain the achievement of TDM goals.

Affordable Housing Credit

Affordable housing proposed within the CTCSP and WLA TIMP area would be exempt from paying a TIA fee. If the proposed affordable housing units were part of a larger development project, the applicant could receive an in-lieu credit towards their TIA fees for other uses proposed as part of the project site. The updated TIA fees related to affordable housing are as follows:

- ***Definition***: Affordable Housing is to be defined by the Housing Authority of the City of Los Angeles (HACLA)
- ***Fee Exemption***: Affordable Housing would be exempt from paying the CTCSP and WLA TIMP TIA Fee. This fee exemption is offered in the current CTCSP and not in the WLA TIMP.
- ***Fee Credits***: A fee credit would be applied to the total TIA fees for a project for all Affordable Housing units provided on-site; the fee credit would apply to all Affordable Housing types (very low income, low income and moderate income). For every affordable housing unit provided, the developer would receive an in-lieu credit of 2.0 VMT adjusted trip credits per MFDU (the VMT calculation is provided in the following chapter). The current CTCSP allows a fee credit for affordable housing both on- and off-site, while the current WLA TIMP does not offer the same credit.

Affordable Housing Dwelling Units (DU) provided on-site	**=**	**2.0 VMT adjusted trip credits/MFDU Credited to trip fees for other uses on site**

- ***Maximum Credits***: In no case shall the housing in-lieu credits exceed 50 percent of the TIA fee for a Project. The affordable housing in-lieu credit shall not be granted until issuance of the certificate of occupancy for the dwelling units. This policy of maximum credits remains consistent with the current CTCSP.

TOD Credit

AB 3005 was signed by the Governor on September 30, 2008. The legislation requires a local agency, when imposing a fee for the purpose of mitigating vehicular traffic impacts on a housing development located near a transit station and meeting other specified characteristics, to set the fee at a rate that reflects reduced automobile trip generation, unless the local agency finds that the development would not significantly reduce automobile trip generation.

The bill's supporters believed that many local governments are calculating traffic impact fees for housing developments near transit stations, where future residents could take advantage of transit and drive less, using the same methodology that they use for housing developments in areas where residents do not have access to transit. Thus, despite the requirement that fees cannot exceed the estimated reasonable cost of mitigating the project's impact, the supporter's suspected that some housing developments were being overcharged for traffic impact fees and not getting credit for the reduced impact they may have on traffic due to their proximity to transit.

Many of the transportation improvements that have been identified as part of the updated CTCSP and WLA TIMP project lists are projects that would improve transit, bicycling and walking in the Specific Plan areas. The

implementation of the projects on the updated project lists will allow TOD sites to have the infrastructure needed to result in reduced vehicle-trip generation. Without the identified improvements, such as high quality transit service and an enhanced pedestrian environment adjacent to the transit stations, the TOD sites may not achieve their full potential for reductions in vehicle-trip generation.

The following methodology was used to calculate the TOD fee credit:

- Roadway improvements comprise approximately 15% of total project cost in both the CTCSP and WLA TIMP updated project lists
- LADOT Traffic Study Guidelines allow for up to a 25% transit credit adjacent to Metro Rail, Metrolink, Orange Line or similar dedicated transit line stations
- Therefore, up to a 25% reduction/credit to the cost needed to fund the project list roadway improvements results in approximately a 5% fee credit for TOD sites (i.e., 25% of 15% equals 3.75, which was rounded to the nearest 5%)
- Up to a 10% fee credit for TOD sites can be achieved based on the project requirements below

Per AB 3005, to be eligible for a TOD credit, a project must meet the following requirements:

- Project must be located within a ½ mile of a dedicated transit line's station or stop
- Project must have access to nearby retail uses, defined as a store that sells food within ½ mile of the project site
- The project provides either the minimum number of parking spaces required per the zoning code, or no more than one onsite parking space for zero to two bedroom units, and two onsite parking spaces for three or more bedroom units, whichever is less.
- Transit line must be in place and active at the time building permits are pulled

TOD credits will be issued as follows:

- Parcels within ½ mile of a dedicated transit line's station or stop are eligible for 5% fee credit
- Parcels that are able to demonstrate a walking distance of ¼ mile to a dedicated transit line's station or stop are eligible for a 10% fee credit (A map showing ¼ mile walking distance from front door of project site to transit station or stop is required to be submitted by the Applicant for City review and approval)

AMENDMENTS TO THE LIST OF TRANSPORTATION IMPROVEMENTS

The proposed amendments include updating the list of transportation improvements funded in part by the TIA fees in each Specific Plan area. The new projects, identified through an analysis of completed projects and a public outreach component of the Westside Mobility Plan process (including consultation with neighboring

jurisdictions, Metro, and Caltrans), are aimed at improving the existing transportation network, enhancing system capacity, reducing vehicle trips and VMT, and improving transit connectivity.

The types of projects and programs that would be included as transportation Improvements for each Specific Plan are described below in **Table 8** and **Table 9**. These tables are not exhaustive but are representative of the types of improvements proposed for inclusion in the Specific Plan amendments. The proposed amendments to the Specific Plans state that the list of transportation projects may be updated from time to time by providing substitute or additional improvements if the City Council, upon recommendation by LADOT and DCP, has determined that the improvements are consistent with the objectives of the Specific Plans and that a substitute improvement fulfills the transportation objectives of the improvement which it is to replace.

TABLE 8: CTCSP PROPOSED PROJECT LIST

Active Modes	
Mobility Hubs	Install a full-service Mobility Hub at or adjacent to Major Transit Stations & Satellite Hubs surrounding the station. A hub includes facilities such as bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.
Enhance Pedestrian Access to Major Transit Stations	Implement pedestrian connectivity improvements at major transit stations by providing enhanced sidewalk amenities, such as landscaping, shading, lighting, directional signage, shelters, curb extensions, enhanced crosswalks, as feasible.
Streetscape Improvements	Implement the following streetscape plans currently being developed through various planning efforts in the Plan area: • **Venice Streetscape Improvements.** Implement streetscape improvements along Venice Blvd between Inglewood Blvd and Lincoln Blvd. • **Centinela Streetscape Improvements.** Implement streetscape improvements along Centinela Avenue between Washington Blvd & Jefferson Blvd • **Sepulveda Pedestrian Improvements.** Implement sidewalk and streetscape improvements, bus stop lighting at transit stops, and enhanced crosswalks. Sepulveda Blvd between 76th St and 80th St.
Sidewalk Network & Pedestrian Enhancements	Complete gaps in the sidewalk network and provide pedestrian enhancements
Multi-use Paths	• **Sepulveda Channel Multi-use Path.** Sepulveda Channel path from Ballona Creek to Washington Boulevard • **Centinela Creek Multi-use Path.** Centinela Creek path from Ballona Creek to Centinela Avenue east of the I-405
Cycle Tracks & Bike Lanes	• **Venice Boulevard Cycle Track.** Venice Boulevard throughout the Coastal Transportation Corridor Area • **Washington Boulevard Cycle Track.** Washington Boulevard from Admiralty Way to Pacific Avenue • **Lincoln Boulevard Cycle Track.** Lincoln Boulevard from Jefferson Boulevard to Fiji Way. This project would be a feature of the reconstruction of the Lincoln Boulevard Ballona Creek Bridge project proposed as an element of the Westside Mobility Plan. • **Culver Boulevard Bike Lane.** Culver Boulevard from McConnell Avenue to Playa del Rey
Neighborhood Network Enhancements as described in Mobility Plan 2035 (MP 2035)	Per MP 2035, implement bicycle and neighborhood enhanced design features to provide a system of streets linking to major employment centers, transit stations, and educational, retail, entertainment, and recreational resources. Enhancements such as the following are described in MP 2035: • **Beethoven Street / McConnell Avenue NEN.** Implement neighborhood enhanced design features as alternate route to major corridors
Bicycle Transit Centers	Bike transit centers that offer bicycle parking, bike rentals, bike repair shops, lockers, showers and transit information and amenities
Bikesharing	Provide public bicycle rental in "pods" located throughout the city.
Transit	
Lincoln BRT	Center Running BRT on Lincoln Boulevard from the border of the City of Santa Monica to 96th Street Transit Station.
Sepulveda BRT	Center Running BRT on Sepulveda Boulevard from Wilshire Boulevard to 96th Street Transit Station (within the City of LA).
Venice Rapid Bus Enhancements	Venice Boulevard – Rebrand existing Rapid Bus service to serve Venice Beach area, increased service frequency, implement stop improvements.
Circulator/Shuttle Service	Circulator bus/shuttle to connect activity centers to major transit stations, such as: • Loyola Marymount / Westchester Circulator • Venice / Playa Vista / Fox Hills Circulator • Venice Circulator

Roadway & ITS	
Congestion Monitoring	Install a CCTV camera and necessary infrastructure to improve DOT's ability to monitor and respond to real-time traffic conditions
ITS Corridor & Signal Upgrades	Install ITS improvements along major corridors. Install signal upgrades as part of the next evolution of ATSAC, including detector loops for traffic volume data and monitoring.
Major Intersection Improvements	Funding for spot intersection improvements, such as turn-lane or safety improvements
Culver Boulevard Corridor	Improve traffic flow along Culver Blvd between Centinela Ave and I-405 Freeway including providing left-turn lanes at key signalized intersections (including Inglewood Blvd); Culver Blvd between Centinela Ave and I-405 Freeway.
Lincoln Blvd Bridge Enhancement	Improve Lincoln Boulevard between Jefferson Boulevard and Fiji Way to remove the existing bottleneck by providing an additional southbound lane, transit lanes and on-street bike lanes. Improvements to serve all modes of travel would be implemented as follows: 1. an additional southbound lane for vehicles would be provided (currently, Lincoln narrows from three to two travel lanes in the southbound direction just south of Fiji Way whereas three travel lanes are provided in the northbound direction), 2. bus-only lanes would be provided in the median, 3. cycle tracks would be provided on both sides of the roadway to connect the existing bicycle lanes to the south with the Ballona Creek bicycle path, and 4. sidewalks would be provided on both sides of the street (the existing bridge does not provide sidewalks).
Access Improvements to LAX	On-going coordination with LAWA on airport related improvements, which may include a combination of roadway capacity enhancements, streetscape improvements, and multi-modal improvements.
Neighborhood Protection Program	The objective of this Program is to discourage through-traffic from using local streets and to encourage, instead, use of the arterial street system. The Program will establish measures to make the primary arterial routes more attractive and local routes less attractive for through-traffic, and establish measures designed to facilitate vehicular and pedestrian egress from local streets in the adjacent neighborhoods onto the primary arterial street and highways system.
Auto-Trip Reduction	
ExpressPark	Implement an on-street intelligent parking program that includes vehicle sensors, dynamic demand-based pricing and a real-time parking guidance system to reduce VMT, congestion and to improve flow for cars/buses.
Strategic Parking Program	Implement a Westside parking program and update parking requirements to reflect mixed-use developments, shared parking opportunities, and parking needs at developments adjacent to major transit stations.
Rideshare Toolkit	The Toolkit would develop an online Transportation Demand Management (TDM) Toolkit with information for transit users, cyclists, and pedestrians as well as ridesharing. It would include incentive programs for employers, schools, and residents. Additionally, it would be specific to City businesses, employees, and visitors and would integrate traveler information. It would also include carpooling/vanpooling and alternative work schedules.
Parking Utilization Improvements & Reduced Congestion	Develop an on-line system for real-time parking information, including GIS database and mapping. Improve parking and wayfinding and guidance throughout commercial areas.
Transportation Demand Management (TDM) Program	The program would provide start-up costs for Transportation Management Organizations/Associations (TMOs/TMAs). It would also provide guidance and implementation of a TDM program.

TABLE 9: WLA TIMP PROPOSED PROJECT LIST

Active Modes	
Mobility Hubs	Install a full-service Mobility Hub at or adjacent to Major Transit Stations & Satellite Hubs surrounding the station. A hub includes facilities such as bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.
Enhance Pedestrian Access to Major Transit Stations through Streetscape Improvements	Implement the following streetscape plans currently being developed through various planning efforts in West LA: • Olympic Blvd. from Centinela to Barrington (Expo Transit Neighborhood Plans) • Bundy from Missouri to Pico Blvd. (Expo Transit Neighborhood Plans) • Sepulveda from Olympic to National Blvd. (Expo Transit Neighborhood Plans) • National Blvd. from Castle Heights to Mentone Ave. (Expo Transit Neighborhood Plans) • Palms Blvd. from Motor to National Blvd. (Expo Transit Neighborhood Plans) • Pico Blvd. from the 405 Fwy to Patricia Ave. (Westside Mobility Plan) • Pico Blvd. from Centinela to the 405 Fwy (Westside Mobility Plan • Motor Ave from I-10 Fwy to Venice Blvd. (Westside Mobility Plan)
Sidewalk Network & Pedestrian Enhancements	Complete gaps in the sidewalk network and provide pedestrian enhancements
Westwood Boulevard	Improvements along Westwood Boulevard between the future Expo LRT station, Westwood Village, and UCLA could include transit, bicycle and pedestrian enhancements (that do not require removal of vehicular travel lanes or on-street parking) or bicycle enhancements on parallel roadways.
Cycle Tracks	• **Santa Monica Boulevard Cycle Track.** Santa Monica Boulevard in the "parkway" section east of Sepulveda Boulevard • **Venice Boulevard Cycle Track.** Venice Boulevard throughout the West Los Angeles Transportation Area • **Motor Avenue Cycle Track.** Motor Avenue between I-10 and Venice Boulevard
Other Neighborhood Network Enhancements as described in Mobility Plan 2035 (MP 2035)	Per MP 2035, implement bicycle and neighborhood enhanced design features to provide a system of streets linking to major employment centers, transit stations, and educational, retail, entertainment, and recreational resources. Enhancements such as the following are described in MP 2035: • **Prosser/Westholme Avenue NEN.** Alternate route to major corridors, such as Westwood Blvd, connecting Expo Bike Path to UCLA. • **Veteran Avenue NEN.** Alternate route to major corridors, such as Westwood Blvd. • **Gayley Avenue / Montana Avenue (east of I-405) NEN.** Alternate route to major corridors, such as Westwood Blvd. • **Montana Avenue (west of I-405) NEN** • **Barrington Avenue / McLaughlin Avenue NEN** • **Ohio Avenue NEN** (including Gap Closure at Santa Monica Blvd.)
Bikeway Gap Closures	Gap closures, such as: • **Gateway Blvd to Ocean Park Bike Lane.** Gateway Blvd to Ocean Park Blvd gap closure
Bicycle Transit Centers	Bike transit centers that offer bicycle parking, bike rentals, bike repair shops, lockers, showers and transit information and amenities
Bikesharing	Provide public bicycle rental in "pods" located throughout the Westside.
Exposition Light Railway Greenway Improvement Project	The project proposes to transform existing city-owned vacant parcels into a neighborhood greenway that includes construction of a multi-use path with drought tolerant landscaping, simulated stream to treat urban runoff, educational amenities and interpretive signs. Project is located along the Expo Line Railway.
Transit	
Sepulveda BRT	Center Running BRT on Sepulveda Boulevard from Wilshire Boulevard to 96th Street Transit Station.
Santa Monica BRT	Curb-running peak hour bus-only lanes on Santa Monica Boulevard from the border of the City of Santa Monica to the border of the City of Beverly Hills; BRT system includes enhanced bus stop amenities.
Olympic Rapid Bus Enhancements	Olympic Boulevard - Extension of the Rapid Bus service from its current terminus in Century City to the future Metro Exposition Line station at Westwood Boulevard.
Pico Rapid Bus Enhancements	Pico Boulevard – Improve existing Rapid Bus service through increased frequency, stop improvements, and construction of a new rapid stop in Century City.
Venice Rapid Bus Enhancements	Venice Boulevard – Rebrand existing Rapid Bus service to serve Venice Beach area, increased service frequency, implement stop improvements.
Circulator/Shuttle Service	Circulator bus/shuttle to connect activity centers to major transit stations, such as: • Sawtelle service between Wilshire Blvd and the Expo Sepulveda Station • Bundy service between Brentwood, the Expo Bundy Station, and National Blvd • Palms Circulator to connect to Expo Station • Century City Circulator to connect to Expo Station

Roadway & ITS	
Congestion Monitoring	Install a CCTV camera and necessary infrastructure to improve DOT's ability to monitor and respond to real-time traffic conditions
ITS Corridor & Signal Upgrades	Install ITS improvements along major corridors. Install signal upgrades as part of the next evolution of ATSAC, including detector loops for traffic volume data and monitoring.
Major Intersection Improvements	Funding for spot intersection improvements, such as turn-lane or safety improvements
Sunset Boulevard Operations	Implement operational improvements along Sunset Boulevard. Improvements could include the following: ITS corridor improvements; signal upgrades as part of the next evolution of ATSAC; intersection improvements, such as turn-lane or safety improvements.
Olympic Boulevard Operations	Implement operational improvements along Olympic Boulevard between I-405 and Purdue Avenue (to the west of I-405). Improvements could include the following: Convert one westbound travel lane into an eastbound travel lane just west of I-405 by 1) In the westbound direction, provide two travel lanes (three during peak periods with on-street parking restrictions); 2) In the eastbound direction, provide three travel lanes (four during peak periods with on-street parking restrictions); and 3) Remove eastbound and westbound left-turn lanes at Beloit Avenue and eastbound center turn lane at Cotner Avenue to provide additional through lane capacity.
Bundy Drive / I-10 Ramp Improvement	Operational improvements at the I-10 ramp connections to Bundy Drive.
Neighborhood Protection Program	The objective of this Program is to discourage through-traffic from using local streets and to encourage, instead, use of the arterial street system. The Program will establish measures to make the primary arterial routes more attractive and local routes less attractive for through-traffic, and establish measures designed to facilitate vehicular and pedestrian egress from local streets in the adjacent neighborhoods onto the primary arterial street and highways system.
Auto-Trip Reduction	
ExpressPark	Implement an on-street intelligent parking program that includes vehicle sensors, dynamic demand-based pricing and a real-time parking guidance system to reduce VMT, congestion and to improve flow for cars/buses.
Strategic Parking Program	Implement a Westside parking program and update parking requirements to reflect mixed-use developments, shared parking opportunities, and parking needs at developments adjacent to major transit stations.
Rideshare Toolkit	The Toolkit would develop an online Transportation Demand Management (TDM) Toolkit with information for transit users, cyclists, and pedestrians as well as ridesharing. It would include incentive programs for employers, schools, and residents. Additionally, it would be specific to City businesses, employees, and visitors and would integrate traveler information. It would also include carpooling/vanpooling and alternative work schedules.
Parking Utilization Improvements & Reduced Congestion	Develop an on-line system for real-time parking information, including GIS database and mapping. Improve parking and wayfinding and guidance throughout commercial areas.
Transportation Demand Management (TDM) Program	The program would provide start-up costs for Transportation Management Organizations/Associations (TMOs/TMAs). It would also provide guidance and implementation of a TDM program.

4. NEXUS ANALYSIS

This chapter presents the methodology and analysis for the proposed amendments to the TIA impact fees for the CTCSP and WLA TIMP.

Methodology

The purpose of a nexus study is to establish the relationship, referred to as the "nexus," between new development expected to occur and the need for new and expanded major public facilities. After establishing the nexus, the TIA fees to be levied for each land use in the areas of benefit are calculated based on the proportionate share of the total facility use for each type of development.

As outlined in the project objectives above, the proposed updates to the project lists will provide transportation options and accommodations for multiple modes of travel (i.e., transit, bicycle, pedestrian and vehicles) as part of a transportation system that is consistent with local and statewide policies. Growth is expected in the project area with or without the amendments to the Specific Plans and the project does not change the amount of growth anticipated to occur. Therefore, if the amendments to the project lists can provide improvements that result in the production of fewer vehicle trips and VMT on a "per capita" basis compared to existing conditions and result in an overall reduction in VMT compared to Future No Project conditions, the study area will avoid an overall increase in comparison to a "do-nothing" scenario.

Vehicle trips are defined as the number of trips undertaken in an automobile. Vehicle trips consist of single occupancy vehicles, such as private automobiles, and vehicles that contain two or more travelers, such as carpools, taxis, or ride-share vehicles. A reduction in the number of vehicle trips taken over time can be used as an indicator of reduced reliance on the automobile as well as an indicator of more travel by carpools. A reduction in the number of vehicle trips also helps meet the State's goals of reducing greenhouse gas emissions, as mandated by AB32 and SB375. The number of vehicle trips is one of the factors used when computing VMT.

VMT is a measurement of miles traveled by all vehicles (e.g., private automobiles, trucks and buses) in the study area. In comparison to vehicle trips, VMT accounts for a vehicle's true impact on the transportation system as it considers both the number of trips a driver makes along with the distance traveled during each of those trips. A reduction in VMT can be used as an indicator of reduced reliance on vehicular travel, primarily by private automobiles. Reducing VMT helps meet the State's goals of reducing greenhouse gas emissions, as mandated by AB32 and SB375.

VMT is the most common performance metric that provides a relationship between single-auto trips and travel by non-vehicular modes or high occupancy vehicles (i.e., 2 or more people traveling in the same car). Consequently, the nexus for the proposed CTCSP and WLA TIMP trip fee updates is based on "VMT" and "VMT per capita" as a performance measure. A comparison of the proposed VMT approach to calculating TIA fees to the more traditional method, such as measures of vehicle delay time, is described in **Table 10** below.

TABLE 10
COMPARISON OF NEXUS FEE METHODOLOGIES

Metrics	Traditional Nexus Existing Fees	VMT Nexus Fee Update
Existing Deficiencies	Westside Congestion	Westside Congestion
Performance Measures	Auto LOS	Vehicle Miles of Travel
Threshold	Maintain Auto LOS standard (LOS D)	Decrease VMT per capita in comparison to Existing Conditions and decrease total VMT in comparison to Future No Project Conditions
Goal	Move more cars & reduce vehicular travel delay	Reduce automobile trips on the roadway network
Pros	Understandable and traditional	Accounts for multi-modal changes; directly relates to Air Quality & GHG
Cons	Auto centric	Still auto focused
Fee	Fee per PM peak hour vehicle-trip	Fee per Unit of Development (accounting for VMT in calculation)

VMT Benefits from Updated Project lists

The mobility projects envisioned through the CTCSP and WLA TIMP updates are intended to reduce VMT and VMT per capita to provide better access and transportation options to residents, workers and visitors on the Westside. In addition to quantifying the VMT and VMT per capita reductions with the proposed project list updates (as described later in this chapter), a literature review was also conducted to compare the types of transportation improvements being considered to research related to VMT characteristics. The expected VMT reduction from each category of projects presented below is based on research documented in the *California Air Pollution Control Officers Association's Quantifying Greenhouse Gas Mitigation Measures* (CAPCOA). In addition to VMT reduction, many of the projects result in accessibility, mode-share, or safety improvements. Where applicable, these benefits have also been identified.

PEDESTRIAN PROJECTS

The pedestrian projects proposed in the CTCSP and WLA TIMP updates are contained within three categories of improvements: the quality of the pedestrian environment, pedestrian safety, and access to transit.

Pedestrian environment improvements include landscaping, shade, shelters, and directional signage. Pedestrian safety improvements include curb extensions, enhanced crosswalks, and upgraded lighting. Transit connection and streetscape projects include many of these same improvements, focused around high-volume transit stations.

Examples of pedestrian-oriented projects in the CTCSP and WLA TIMP project list updates are:

- Enhance Pedestrian Access to Major Transit Stations
- Streetscape Improvements
- Sidewalk Network and Pedestrian Enhancements

These projects can help reduce VMT by up to 2% for projects that improve pedestrian networks and 0.25%-1% for projects that improve pedestrian safety through traffic calming measures (CAPCOA 186, 190). This estimate is based on a variety of studies which include improvements to the pedestrian network, the design of the pedestrian environment, and the safety of pedestrian facilities.

In addition to VMT reduction, these pedestrian projects can improve pedestrian safety by reducing the width of a crossing, improving visibility, and addressing personal security concerns. They can also result in a higher percent of jobs that exist or people who live within a pedestrian-enhanced area, a metric that is used to quantify improved accessibility.

BICYCLE PROJECTS

Bicycle projects primarily fall into three categories of improvement: the presence and quality of bicycle facilities, access to bicycles, and transit connections. Improvements to the presence and quality of bicycle facilities include projects such as bike lanes, which demarcate space for bicyclists, cycle tracks, which provide separated and protected space for bicyclists, and Neighborhood Friendly Streets (identified as the Neighborhood Enhanced Network (NEN) in MP 2035), which include traffic calming measures and route signage for bicyclists. Improvements to bicycle access include the creation or expansion of a bikeshare system, which allows members to use bicycles on demand. Improvements to transit connections include mobility hubs, which provide information and secure bike parking at transit stations, intended to bridge the first and last mile of a rider's commute.

Examples of bicycle-oriented projects in the CTCSP and WLA TIMP project list updates are:

- Mobility Hubs
- Santa Monica Blvd Cycle Track
- Venice Blvd Cycle Track
- Washington Blvd Cycle Track
- Lincoln Blvd Cycle Track
- Montana Ave / Gayley Ave NEN
- Ohio Ave NEN

- Bicycle Transit Centers
- Bikesharing

According to CAPCOA, projects located near improved bicycle facilities can help reduce VMT by 0.625% (CAPCOA 181). Other sources cited in CAPCOA attribute a larger reduction of 1%-5% in VMT for projects that include comprehensive bicycle programs (CAPCOA 181). Projects that include traffic calming measures, which are included as part of the NEN, have reduced VMT between 0.25%-1% (CAPCOA 190).

Bicycle programs can also improve the accessibility of a neighborhood. For example, while bikeshare systems alone have been shown to have a negligible effect on VMT (0.03% reduction), a 2006 study done in London showed that 23% of bikeshare users said they would have not made the trip before bikeshare was an option (CAPCOA 256-257). This demonstrates that bikeshare can allow people to take more trips than they otherwise would have taken, without putting the burden of vehicle trips onto the transportation system. In addition, building bike facilities throughout a neighborhood would increase the percent of the population within proximity of a bicycle-enhanced area and the percent of jobs located within proximity of a bicycle facility.

TRANSIT PROJECTS

Transit projects proposed in the CTCSP and WLA TIMP updates consist of the creation of high-quality BRT service, improvements to existing local or rapid bus lines, and the creation of new circulator bus routes.

Examples of transit projects in the CTCSP and WLA TIMP project list updates are:

- Lincoln BRT
- Sepulveda BRT
- Venice Metro Rapid Bus Enhancements
- Pico Blvd Rapid Bus Enhancements
- Fox Hills to Venice Circulator
- Palms Circulator
- Century City Circulator

According to CAPCOA, BRT systems have been shown to result in a decrease in VMT between 0.02%-3.2%, depending on the characteristics of the system in terms of time savings, efficiency, cost, and way-finding (CAPCOA 270). Improvements to local or rapid service have also been attributed to a reduction in VMT, including up to 2.5% reduction as a result of speed and service frequency improvements and up to 8.2% reduction as a result of network expansions (CAPCOA 275, 280). A maximum of 10% VMT reduction exists for combined transit system improvements (CAPCOA 55).

In terms of improving accessibility, bus ridership grew 27%-84% in systems across North America (CAPCOA 273). In addition, any new service would increase the percent of both population and jobs located in proximity to a transit stop.

ROADWAY/ITS PROJECTS

Projects related to roadway improvements and Intelligent Transit Systems (ITS) focus on maximizing the efficiency of vehicle use on the road. These projects improve traffic flow by providing left turn lanes, dedicated lanes for buses and bikes, signal timing and coordination upgrades, signal detectors, and monitoring and response technology.

Examples of roadway and ITS projects in the CTCSP and WLA TIMP project list updates are:

- Congestion Monitoring
- ITS Corridor and Signal Upgrades
- Major Intersection Improvements
- Lincoln Blvd Bridge Enhancement
- Neighborhood Protection Program
- Bundy Dr / I-10 Ramp Improvement

While there are often emissions reductions associated with these types of projects as running time per mile decreases, there are no associated VMT reductions and in some cases, these projects can induce additional VMT by lowering the cost and delay of traveling by vehicle. The Neighborhood Protection Program, however, may reallocate VMT away from local streets and onto arterials which are better equipped to handle higher volumes of traffic. As a whole, these roadway improvements would help increase employment accessibility by increasing the number of jobs reachable by vehicle within a certain amount of time. The improvements may also reduce certain types of collisions by providing dedicated space and signal timing for turning movements.

AUTO-TRIP REDUCTION

Projects that directly reduce auto trips generally use either a direct financial incentive or disincentive to influence travel behavior. Some projects within this category focus on providing more information about transportation options, and others focus on connecting program participants to the resources they need to change behavior, like linking up with a carpool.

Examples of auto-trip reduction projects in the CTCSP and WLA TIMP project list updates are:

- ExpressPark
- Strategic Parking Program
- Rideshare Toolkit
- Transportation Demand Management (TDM) Program

CAPCOA attributes a 1%-6.2% reduction in commute VMT to voluntary Commute Trip Reduction Programs, which are described as a type of TDM program, providing both incentives and financial disincentives to taking trips in single-occupancy vehicles (CAPCOA 218). Required Commute Trip Reduction Programs, by contrast, can reduce between 4.2% and 21% of commute VMT, depending on the percent of employers for enrollment into the program (CAPCOA 223, 225). Rideshare programs, as a stand-alone Commute Trip Reduction Program, can

reduce as much as 8.3% of commute VMT, or 3.6% of total VMT (CAPCOA 229). Additionally, a 2.8%-5.5% reduction in VMT can be attributed to parking policies that set market rate prices for on-street parking, such as ExpressPark (CAPCOA 213). For projects which address parking standards and develop shared-parking policies, such as the Strategic Parking Program, 5%-12.5% of VMT can be reduced (CAPCOA 207).

While these improvements may not directly expand accessibility, the associated programs may incentivize the creation of new modes of travel, such as carpooling, car sharing, vanpooling, or bikesharing, which would, in turn, improve the mode split between single occupancy vehicles and other transportation options.

TIA Fee Calculations

The updated TIA fees were computed as follows:

- Anticipated growth in the CTCSP and WLA TIMP areas was input into the Westside Travel Demand Forecasting model
- The number of new PM Peak Hour vehicle trips generated by the aforementioned growth was calculated
- A portion of total costs (approximately 35%) of the updated CTCSP and WLA TIMP project lists were divided by the total number of new trips to determine the cost per PM peak hour trip
- The percent of new trips generated by various land use types and trip length characteristics by land use were used to calculate the updated TIA fees to account for VMT

Each of these steps is explained in further detail below.

TRAFFIC FORECASTS

The City of Los Angeles Travel Demand Forecasting Model provides the ability to evaluate the transportation system, use performance indicators for land use and transportation alternatives, provide information on regional pass-through traffic versus locally generated trips, and graphically display these results. The model captures planned growth within the project area, including special generators, such as the Los Angeles International Airport (LAX) and universities, and is sensitive to emerging land use trends through improved sensitivity to built environment variables. The model forecasts AM and PM peak period and daily vehicle and transit flows on the transportation network within the City. In essence, the travel demand model serves as a tool to implement, manage and monitor the City of Los Angeles' transportation plans, projects, and programs, providing a suitable starting point for additional refinement as part of a more local application, such as the CTCSP and WLA TIMP project.

The City of Los Angeles TDF Model provided the starting point for creating a more detailed, locally valid model for the project study area as part of the Westside Mobility Plan, known as the Westside TDF model, to which future roadway improvements and land use assumptions could be added. Starting with both a regionally and City-validated model ensured the model captured regional traffic flow patterns and transit ridership while the additional detail and model refinements within the study area allowed the model to more accurately capture local travel patterns. To develop a model for the Proposed Project, land use and roadway network detail were added within and around the study area. Additional modifications were also made to key model components

based on data provided by the City of Los Angeles to allow the model to more accurately capture traffic patterns within and around the Westside.

The *Westside Travel Demand Forecasting Model Development Report* (Fehr & Peers, 2015) was prepared to document the model development process. This report documents the model structure and methodology applied to the development of the Westside TDF model, including the assumptions and sources of data used to develop key model inputs and refine model components. A summary of how well the model performed against validation thresholds established by the California Transportation Commission is also provided. Compliance with these guidelines indicates that the model is suitable for developing traffic volume forecasts to evaluate future land use changes and transportation system improvements within the study area. Having a locally valid model is a critical step in ensuring a high level of confidence for traffic volume forecasts.

Since the development of the Westside TDF model, SCAG adopted the 2012-2035 RTP/SCS. The 2012-2035 RTP/SCS forecasts long-term transportation demands and identifies policies, actions, and funding sources to accommodate these demands. The 2012-2035 RTP/SCS Model provides a regionally consistent model of traffic conditions in the six-county SCAG region and serves as the platform for many sub-area models. As part of the Proposed Project, the socioeconomic data (SED) for the Westside TDF model was updated to reflect the most recent growth forecasts in 2012-2035 RTP/SCS within the SCAG region. Within the project area, the latest city growth forecasts were verified from the Los Angeles Department of City Planning. In addition, the roadway and transit networks have been updated to reflect the assumptions contained in the 2012-2035 SCAG RTP. **Table 11** summarizes the existing and future model growth assumptions in the study area.

TABLE 11
SUMMARY OF WESTSIDE TDF MODEL SOCIOECONOMIC DATA

SED Data	Location	Model Calibration Year[1]	Future (2035)	Growth	% Growth
Households	CTCSP Area	68,383	84,552	16,169	24%
	WLA TIMP Area	88,903	107,467	18,564	21%
	Project Area	**157,286**	**192,019**	**34,733**	**22%**
Employment	CTCSP Area	87,679	111,904	24,225	28%
	WLA TIMP Area	197,840	217,980	20,140	10%
	Project Area	**285,519**	**329,884**	**44,365**	**16%**
Population	CTCSP Area	157,466	182,305	24,839	16%
	WLA TIMP Area	197,190	219,330	22,140	11%
	Project Area	**354,656**	**401,635**	**46,979**	**13%**

Notes:
1. The Westside Travel Demand Forecasting Model was originally developed, calibrated and validated to 2008 conditions. 2008 is the most recent year in which a consistent data set of population, employment and households is available for the SCAG region (reported at the traffic analysis zone (TAZ) level of detail) for use in the model calibration process. A new TAZ data set will be available when SCAG produces its 2016 RTP update, which will reflect year 2012 conditions as a baseline. While the model calibration year reflects 2008, Year 2014 is used for the reporting of Existing Conditions.
Source: Westside TDF Model, 2015.

The updated Westside TDF model was used to generate the existing (Year 2014) and future (Year 2035) conditions data for the proposed Specific Plan updates. The Westside TDF model reflects the most recent and applicable data at a specific plan level to report existing and future transportation characteristics. Through the model updates described above, the Westside TDF model is consistent with the growth and transportation improvements in the adopted SCAG 2012-2035 RTP/SCS, which reflects both the City of LA and SCAG region.

The Westside TDF model was used to forecast the number of vehicle trips within the study area and VMT for the following scenarios:

- Existing Conditions (2014)
- Future without Project (2035)
- Future With Project (2035)

The transportation analysis reflects the same land use and growth assumptions for both *Future without Project* and *Future with Project* conditions. Under *Future with Project* conditions, the proposed updates to the project list were incorporated into the Westside TDF model.

VEHICLE TRIPS

The Westside TDF model was used to calculate the number of vehicle trips within each of the Specific Plan areas and for the overall study area with and without the proposed updates to the CTCSP and WLA TIMP project lists. Vehicle trips are defined as the number of trips undertaken in an automobile. A reduction in the number of Vehicle Trips taken over time can be used as an indicator of reduced reliance on the automobile as well as an indicator of more travel by carpools.

Table 12 summarizes the number of vehicle trips in the *Existing, Future without Project, and Future with Project* scenarios by Specific Plan area and for the overall project area. The table includes all vehicle trips that originate in the Specific Plan area, have a destination in the Specific Plan area, or both, but excludes trips that both start and end outside the Specific Plan areas (i.e., through traffic).

TABLE 12
VEHICLE TRIPS WITH ORIGINS AND/OR DESTINATIONS IN THE STUDY AREA

Locations	Vehicle Trips			Percent Change		
	Peak Period (7-Hour)	Off-Peak Period (17-Hour)	Daily Total	Peak Period (7-Hour)	Off-Peak Period (17-Hour)	Daily Total
EXISTING CONDITIONS (2014)						
CTCSP Area	292,771	269,578	562,349	-	-	-
WLA TIMP Area	403,751	315,361	719,112	-	-	-
Study Area	**696,523**	**584,939**	**1,281,461**	**-**	**-**	**-**
FUTURE WITHOUT PROJECT (Comparison to Existing)						
CTCSP Area	341,069	321,162	662,231	15.7%	17.0%	16.5%
WLA TIMP Area	429,625	341,002	770,626	6.1%	6.6%	6.4%
Study Area	**770,693**	**662,164**	**1,432,857**	**10.2%**	**10.9%**	**10.6%**
FUTURE WITH PROJECT (Comparison to Existing)						
CTCSP Area	332,810	316,332	649,142	12.9%	14.2%	13.7%
WLA TIMP Area	416,641	335,428	752,069	2.8%	3.4%	3.2%
Study Area	**749,451**	**651,759**	**1,401,211**	**7.1%**	**7.9%**	**7.6%**
FUTURE WITH PROJECT (Comparison to Future without Project)						
CTCSP Area	332,810	316,332	649,142	-2.4%	-2.4%	-2.4%
WLA TIMP Area	416,641	335,428	752,069	-3.1%	-3.0%	-3.0%
Study Area	**749,451**	**651,759**	**1,401,211**	**-2.8%**	**-2.7%**	**-2.8%**

SOURCE: Westside TDF Model, 2015.

Under *Existing* conditions, there are over 1.2 million daily vehicle trips in the project area. Under *Future without Project* conditions, daily vehicle trips increase by over 10 percent to 1.43 million trips, reflecting increases in the number of residents, workers and visitors. *Future with Project* conditions reduce the total number of vehicle trips 2.8 percent compared to *Future without Project* conditions to 1.40 million, which is a reduction of 31,600 trips every day. The same sociodemographic increases that apply to the *Future without Project* conditions also apply to the Project conditions, resulting in an increase in the number of vehicle trips over *Existing* conditions. However, the transportation improvements to transit, walk, and bicycle modes reduces the number of vehicle trips under Project conditions relative to *Future without Project* conditions.

VMT

The Westside TDF model was also used to calculate the amount of VMT within each of the Specific Plan areas and for the overall study area with and without the proposed updates to the CTCSP and WLA TIMP project lists. A reduction in VMT can be used as an indicator of reduced reliance on vehicular travel, primarily by private automobiles.

Table 13 summarizes changes in VMT in *Existing*, *Future without Project*, and *Future with Project* scenarios on surface streets by Specific Plan area and for the overall project area, as well as for mainline freeway segments in the project area. The table includes all VMT on roadways in the project area.

Under *Existing* conditions, motorists travel over 5.6 million vehicle miles on roadways within the project area on an average weekday. Over half of these vehicle miles are traveled during the seven-hour peak period. Freeways account for nearly a third of all daily VMT within the project area.

Under *Future without Project* conditions, daily VMT increases to 6.19 million, a 9.6 percent above *Existing* conditions. The increase occurs disproportionately on freeways, where VMT increases by 11.7 percent, compared with surface streets, where VMT increases by 8.7 percent.

Future with Project conditions reduce daily VMT to 5.98 million, which is approximately 200,000 fewer miles traveled every day compared to *Future without Project* conditions. VMT on surface streets is forecast to be 5 percent lower than *Future without Project* levels during the 7-hour peak period. Relative to *Existing*, daily freeway VMT increases by 8.7%, while daily VMT on surface streets increases by 4.7 percent. Compared to *Future without Project* conditions, daily freeway VMT decreases by 2.7 percent, while daily surface street VMT decreases by 3.7 percent. Moreover, daily surface street VMT decreases 5 percent during peak hours.

Table 14 summarizes changes in VMT on a per-capita basis by dividing total VMT on roadways in the Specific Plan areas by the total number of people and employees in the specific plan areas, including both residents and workers.

Under *Existing* conditions, motorists in the Specific Plan areas travel a daily average of 8.6 miles per capita on Westside roadways. Under *Future without Project* conditions, daily VMT per capita decreases to 8.5 miles, 1.1 percent below *Existing* levels. *Future with Project* conditions reduce daily VMT per capita to 8.2 miles. This is 4.4 percent lower than *Existing* levels and 3.4 percent lower than *Future without Project* levels on a daily basis, and 6.5 percent lower than *Existing* levels and 4.3 lower than *Future without Project* levels during the 7-hour peak period. The decreased in VMT per capita for surface streets is great than the freeways within the study area, with a 7.9 percent reduction compared to *Existing* conditions and 5 percent reduction compared to *Future without Project* conditions.

TABLE 13
VEHICLE MILES TRAVELED IN THE WESTSIDE

Location	Vehicle Miles Traveled			Percent Change		
	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily
Existing Conditions (2014)						
CTCSP Area	1,075,337	883,200	1,958,536	-	-	-
WLA TIMP Area	1,179,549	839,570	2,019,119	-	-	-
Surface Streets	***2,254,885***	***1,722,770***	***3,977,655***	**-**	**-**	**-**
Freeways (Mainline)	*792,436*	*879,696*	*1,672,132*	-	-	-
Study Area	**3,047,321**	**2,602,466**	**5,649,787**	**-**	**-**	**-**
FUTURE WITHOUT PROJECT (COMPARISON TO EXISTING)						
CTCSP Area	1,178,199	1,009,164	2,187,362	9.6%	14.3%	11.7%
WLA TIMP Area	1,241,692	893,368	2,135,059	5.3%	6.4%	5.7%
Surface Streets	***2,419,891***	***1,902,531***	***4,322,422***	***7.3%***	***10.4%***	***8.7%***
Freeways (Mainline)	*876,989*	*991,068*	*1,868,056*	*10.7%*	*12.7%*	*11.7%*
Study Area	**3,296,879**	**2,893,599**	**6,190,478**	**8.2%**	**11.2%**	**9.6%**
FUTURE WITH PROJECT (COMPARISON TO EXISTING)						
CTCSP Area	1,107,419	980,852	2,088,271	3.0%	11.1%	6.6%
WLA TIMP Area	1,192,318	883,875	2,076,193	1.1%	5.3%	2.8%
Surface Streets	***2,299,737***	***1,864,728***	***4,164,465***	***2.0%***	***8.2%***	***4.7%***
Freeways (Mainline)	*856,730*	*961,080*	*1,817,810*	*8.1%*	*9.3%*	*8.7%*
Study Area	**3,156,467**	**2,825,808**	**5,982,275**	**3.6%**	**8.6%**	**5.9%**
FUTURE WITH PROJECT (COMPARISON TO FUTURE WITHOUT PROJECT)						
CTCSP Area	1,107,419	980,852	2,088,271	-6.0%	-2.8%	-4.5%
WLA TIMP Area	1,192,318	883,875	2,076,193	-4.0%	-1.1%	-2.8%
Surface Streets	***2,299,737***	***1,864,728***	***4,164,465***	***-5.0%***	***-2.0%***	***-3.7%***
Freeways (Mainline)	*856,730*	*961,080*	*1,817,810*	*-2.3%*	*-3.0%*	*-2.7%*
Study Area	**3,156,467**	**2,825,808**	**5,982,275**	**-4.3%**	**-2.3%**	**-3.4%**

SOURCE: Westside TDF Model, 2015.

TABLE 14
VEHICLE MILES TRAVELED PER CAPITA (EMPLOYMENT PLUS POPULATION) IN PROJECT AREA

Locations	Vehicle Miles Traveled			Percent Change		
	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily
EXISTING CONDITIONS (2014)						
CTCSP Area	4.2	3.4	7.6	-	-	-
WLA TIMP Area	2.9	2.1	5.0	-	-	-
Surface Streets	*3.4*	*2.6*	*6.0*	-	-	-
Freeways (Mainline)	*1.2*	*1.3*	*2.5*	-	-	-
Study Area	**4.6**	**3.9**	**8.6**	**-**	**-**	**-**
FUTURE WITHOUT PROJECT (COMPARISON TO EXISTING)						
CTCSP Area	4.0	3.4	7.4	-4.6%	-0.6%	-2.8%
WLA TIMP Area	2.8	2.0	4.9	-2.6%	-1.6%	-2.2%
Surface Streets	*3.3*	*2.6*	*5.9*	*-3.1%*	*-0.3%*	*-1.9%*
Freeways (Mainline)	*1.2*	*1.4*	*2.6*	*-0.1%*	*1.7%*	*0.9%*
Study Area	**4.5**	**4.0**	**8.5**	**-2.3%**	**0.4%**	**-1.1%**
FUTURE WITH PROJECT (COMPARISON TO EXISTING)						
CTCSP Area	3.8	3.3	7.1	-10.4%	-3.3%	-7.2%
WLA TIMP Area	2.7	2.0	4.7	-6.5%	-2.6%	-4.9%
Surface Streets	*3.1*	*2.5*	*5.7*	*-7.9%*	*-2.3%*	*-5.5%*
Freeways (Mainline)	*1.2*	*1.3*	*2.5*	*-2.4%*	*-1.4%*	*-1.8%*
Study Area	**4.3**	**3.9**	**8.2**	**-6.5%**	**-2.0%**	**-4.4%**
FUTURE WITH PROJECT (COMPARISON TO FUTURE WITHOUT PROJECT)						
CTCSP Area	3.8	3.3	7.1	-6.0%	-2.8%	-4.5%
WLA TIMP Area	2.7	2.0	4.7	-4.0%	-1.1%	-2.8%
Surface Streets	*3.1*	*2.5*	*5.7*	*-5.0%*	*-2.0%*	*-3.7%*
Freeways (Mainline)	*1.2*	*1.3*	*2.5*	*-2.3%*	*-3.0%*	*-2.7%*
Study Area	**4.3**	**3.9**	**8.2**	**-4.3%**	**-2.3%**	**-3.4%**

SOURCE: Westside TDF Model, 2015.

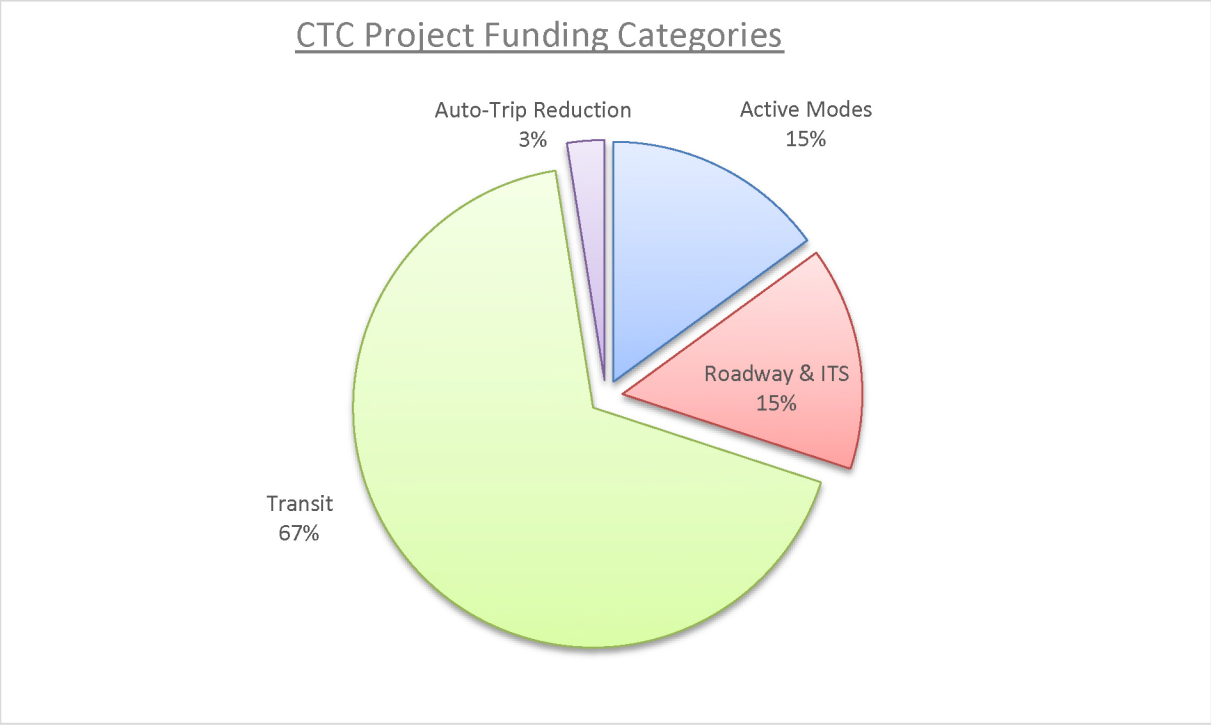
COST OF UPDATED PROJECT LISTS

Cost estimates were prepared for each of the transportation improvements in the updated CTCSP and WLA TIMP project lists. The cost estimates were based on the capital costs required to construct the projects. Operation and maintenance costs were not included in the TIA fee updates. Appendix C contains the detailed project cost estimates.

The charts below summarize the total costs along with the costs for each type of project in the updated CTCSP and WLA TIMP project lists. An administrative fee of 5% was added to the project costs to provide oversight and implementation of the fee program by LADOT. The total costs shown below include the 5% administrative fee.

Chart 1: CTCSP Updated Project List Cost Allocation

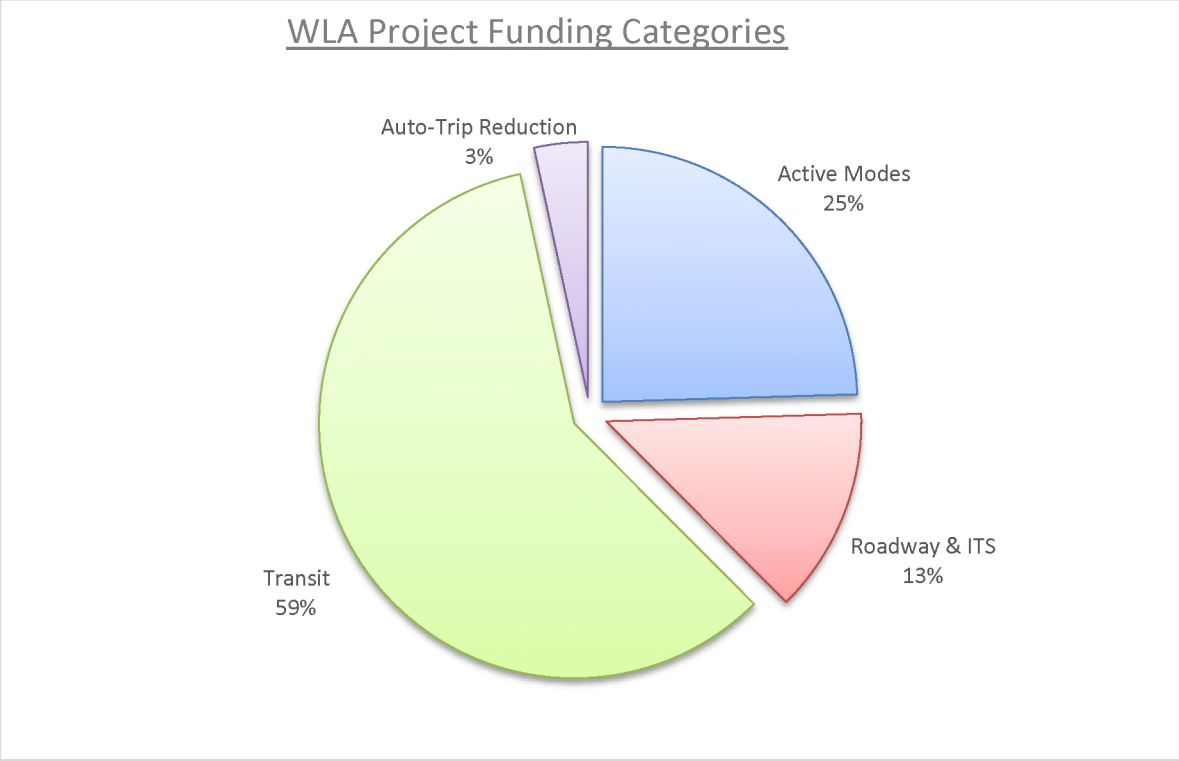
Total Cost = $334.5M



Note: The total CTCSP cost reflects a 5% administrative fee.

Chart 2: WLA TIMP Updated Project List Cost Allocation

Total Cost = $247.7M



Note: The total WLA TIMP cost reflects a 5% administrative fee.

Updated TIA Fees

The total number of new PM peak hour vehicle trips generated by land uses within the CTCSP and WLA TIMP were calculated to determine new development's fair-share towards the proposed project lists. To calculate the number of trips generated by new development, the Westside TDF model was used to calculate the number of "trip ends" during the PM peak hour. Trip ends account for both the origin and destination of a vehicle trip. Since the TIA fees are being assessed for new land uses, trip ends were calculated to capture the potential TIA fees that would be paid at the driver's origin and/or destination. This methodology captures the interaction between existing and new land uses, such as someone driving from a new condominium to a new office building or from an existing condominium to a new office building. In addition, it captures vehicles that may have an origin or destination outside of the specific plan area, such as someone driving to a new office building in West LA from the South Bay area. **Table 15** shows the process of calculating the number of new PM peak hour vehicle-trip ends for use in the fee calculations.

TABLE 15
PM PEAK HOUR TRIP GROWTH

Scenario	Specific Plan Area	PM Vehicle Trips[1]
2014 PM Peak Period	CTCSP[2]	304,989
	WLA TIMP	490,025
2035 Peak Period	CTCSP	354,004
	WLA TIMP	522,325
2014 to 2035 PM Peak Period Growth	CTCSP	49,015
	WLA TIMP	32,300
2014 to 2035 PM Peak Hour Growth	CTCSP	**13,234**
	WLA TIMP	**8,721**

Notes:
1. Based on traffic counts collected for the Westside TDF model calibration, approximately 27% of PM peak period trips occur during the PM peak hour. Since the trip generation rates used to determine the TIA fee for various land use types are for the PM Peak Hour, the nexus analysis was based on the number of new PM peak hour trips generated by growth in the Specific Plan areas.
2. Within the CTCSP, vehicle trips that travel from outside the Specific Plan areas to LAX are not included in the PM peak trip calculation.

Source: Westside TDF Model, 2015.

As explained previously, the fee programs require new development to mitigate their project specific impacts and to contribute a fair share to complete regional improvements to mitigate the cumulative impacts. The following factors were considered in assessing new developments' fair share contribution:

1. ***Regional Pass-Through Traffic***: Traffic output from Westside TDF Model found that the average amount of regional pass-through traffic for City roadways within the Specific Plan areas was 21%. The remaining trips (79%) have either an origin or destination or both within the Specific Plan areas. This suggests that 79% of the project costs could be fairly attributed to development within the Specific Plan areas.

2. ***Existing Deficiencies***: Several projects on the updated project lists are focused on congestion relief at existing bottlenecks in the roadway network. These projects include spot intersection improvements, such as turn-lane or safety improvements, ITS corridor improvements and signal upgrades as part of the next evolution of ATSAC, and congestion monitoring technology upgrades to improve LADOT's ability to monitor and respond to real-time traffic conditions. These improvements are expected to offer congestion relief in portions of the Specific Plan areas at levels similar to the effectiveness of the

initial implementation of LADOT's ATSAC and ATSC systems. LADOT assigns a volume-to-capacity (V/C) benefit of 0.07 (7%) to ATSAC and 0.03 (3%) to ATSC, for a total V/C benefit of 1.0 (10%). This suggests that 10% of the project costs could fairly be attributed to existing trips.

In addition to the above improvements, several specific improvements are identified at existing bottlenecks. The West LA TIMP potential list of projects contains improvements to the I-10 interchange at Bundy Drive, improvements on Olympic Boulevard adjacent to the I-405, and improvements on Sunset Boulevard. The CTCSP potential list of projects includes improvements to the Lincoln Bridge over Ballona Creek and Culver Boulevard corridor improvements. These improvements are expected to offer operational improvements at levels similar to the Vehicle Enhanced Network (VEN) improvements in the Mobility Plan 2035. The VEN improvement strategies were aimed at improving traffic operations by 10% at select locations throughout the City. This suggests that 10% of the project costs could fairly be attributed to existing trips. When combined with the above improvements, existing trips could fairly be attributed 20% of the project costs. Taking into account regional pass-through traffic, 63% of project costs could be fairly attributed to new development[3].

3. ***VMT Benefits***: Although VMT is becoming a more common performance metric to quantify the change in vehicular travel demand and report the benefits of creating a more multimodal transportation system, the City of Los Angeles, similar to most cities, does not have a defined threshold for total VMT or VMT per Capita. Therefore, the threshold applied to the updated TIA fees is to decrease VMT per capita in comparison to Existing conditions and to decrease total VMT in comparison to Future without Project Conditions. As discussed under the performance metrics above and outlined in the project objectives, the proposed updates to the project lists will provide transportation options and accommodations for multiple modes of travel (i.e., transit, bicycle, pedestrian and vehicles) as part of a transportation system that is consistent with local and statewide policies. In regards to decreasing VMT per Capita in comparison to Existing conditions, the Westside TDF output shows that 25% of the reduction in VMT per Capita that is projected with the Project (1.1% reduction out of a total 4.4% reduction study areawide) would be achieved due to implementation of baseline improvements such as the Expo Phase II LRT and the Westside extension of the Purple Line and the remaining 75% would be achieved due to implementation of the measures in the updated project lists. With new development generating new trips but without the implementation of the transportation projects contained in the updated project lists, however, the threshold of decreasing total VMT in comparison to Future No Project Conditions would not be achieved. Taking into account regional pass-through traffic, these thresholds suggest that 59% of project costs could be fairly attributed to new development[4].

Taking into account the operational improvements and VMT benefits attributed to existing trips and regional pass-through traffic, the maximum percentage of project costs that could be contributed by new development is 43%[5]. The WLA TIMP and CTCSP TIA fees have historically covered 35% of the total cost of the identified improvements. While a higher fair share cost percentage may be justified as part of the fee update, full cost

[3] 80% X 79% trips with O/D in Specific Plan = 63% attributed to new development.
[4] 75% X 79% trips with O/D in Specific Plan = 59% attributed to new development.
[5] 100% - 20% - 25% = 55%. Then, 55% X 79% trips with O/D in Specific Plan = 43% attributed to new development.

recovery would be inconsistent with the collection of similar fees statewide. Therefore, the proposed fee levels have been identified that are comparable with other Southern California communities, and will provide funding for the proposed transportation improvement projects. Therefore, the baseline cost fair share contribution of 35% will continue to be applied to the updated fees, and LADOT will continue to rely on the strategy of leveraging the collected developer TIA fees to secure outside transportation sources to help pay for the remaining costs.

The updated CTCSP and WLA TIMP TIA fees were calculated by dividing the total number of PM peak hour trips by a portion (35%) of the updated project list costs. **Table 16** presents the average "per trip" fees within each of the Specific Plan areas.

TABLE 16
TIA FEES PER AVERAGE PM PEAK HOUR TRIP

Measure	WLA TIMP	CTCSP
Total Cost:	$247,779,190	$334,513,746
35% of Total Cost:	$86,722,717	$117,079,811
PM Trip Growth:	8,721	13,234
Average Cost Per PM Trip:	**$9,944**	**$8,847**

Following the calculation of the average "per trip" cost, two variables were added to the fee calculations to further account for the transportation impacts of various land use types.

- ***Average Vehicle-Trip Length***: The distance drivers are willing to travel is largely dependent on the purpose of their trip. For example, a person traveling to work may be willing to commute 10 miles each day (20 miles of total driving) but choose to shop and dine in their local community resulting in shorter trips. Existing data on travel behavior in Southern California was used to determine average vehicle trip length for various land use types.

  The California Household Travel Survey (CHTS, 2010) is the most current source of travel behavior data for Los Angeles County and the Specific Plan areas. The CHTS data provides home-based travel information and surveyed approximately 415 households within the Specific Plan areas and 8,075 households in Los Angeles County (Appendix D contains the CTCSP data for various land use types). The San Diego Association of Governments (SANDAG) also reports trip length data for uses in their County. Based on available data sources, SANDAG trip length data was found to be the most applicable data source in Southern CA for application to the study area. In reviewing both data sources, the CHTS data was found to produce the most statistically valid data for trips that tend to start and end at home, such as work trips, while the SANDAG data was found to be most reliable for retail/shopping trips.

  The average trip length data was used to generate a VMT factor for each land use type. The VMT factor was based on the average trip length generated by a single family household. Since single family households generate a variety of trip types, such as working, school and shopping trips, they are thought to reflect an average of a variety of trip types. Therefore, the VMT factor for a single family

household is 1.0, and uses with longer average trip lengths, such as office, are greater (> 1.0) while uses with shorter trip lengths, such as locally serving retail, are lower (< 1.0).

- ***Percent of New Vehicle-Trips***: Trips generated by housing, employment centers, schools and other unique generators (e.g., hospitals) are considered to generate all "new" trips. However, a portion of trips associated with retail uses are not considered to be new trips; these trips are often referred to as "pass-by" trips. Pass-by trips are vehicles that are already traveling along a corridor that stop at a use on the way to their ultimate destination. For example, a person traveling on Santa Monica Boulevard from work to home may stop at a grocery store located along the corridor for a gallon of milk. In this case, the grocery store is not generating a new trip as that vehicle would have already been traveling along the roadway. LADOT's *Traffic Impact Study Guidelines* report pass-by trip credits for various retail uses. These pass-by trip credits are reflected in the fee calculations.

The updated TIA fees by land use type for the CTCSP and WLA TIMP amendments are shown in **Table 17**.

TABLE 17
TIA FEES BY LAND USE TYPE

Land Use Category	Unit	ITE Code[1]	PM Trip Rate[1]	% New Trips[2]	Trip Length	VMT Factor	WLA TIMP TIA Fee per Unit	CTCSP TIA Fee per Unit
Residential Land Uses								
Single Family	DU	210	1.00	100%	7.4	1.0	$9,944	$8,847
Apartment	DU	221	0.58	100%	6.7	0.91	$5,222	$4,646
High Rise Apartment	DU	222	0.35	100%	6.7	0.91	$3,151	$2,804
Condominium/Townhouse	DU	231	0.78	100%	6.7	0.91	$7,023	$6,248
High-Rise Condominium/Townhouse	DU	232	0.38	100%	6.7	0.91	$3,421	$3,044
Senior Housing	DU	252	0.25	100%	6.7	0.91	$2,251	$2,003
Affordable Housing	DU	--	--	--	--	--	$0	$0
Hotel	Room	310	0.60	100%	7.6	1.03	$6,128	$5,452
Retail & Service Land Uses								
Retail =< 250 KSF	1,000 s.f.	820	4.43	70%	3.6	0.49	$15,001	$13,347
Retail >250 KSF - 800 KSF[3]	1,000 s.f.	820	Interpolate				Interpolate	Interpolate

Retail >800 KSF	1,000 s.f.	820	3.02	90%	5.2	0.70	$18,993	$16,897
Office & Medical Land Uses								
Office =< 50 KSF	1,000 s.f.	710	2.69	100%	9.8	1.32	$35,425	$31,517
Office >50 KSF - 250 KSF[4]	1,000 s.f.	710	Interpolate				Interpolate	Interpolate
Office > 250 KSF	1,000 s.f.	710	1.43	100%	9.8	1.32	$18,832	$16,754
Medical Office	1,000 s.f.	720	3.57	100%	9.3	1.26	$44,615	$39,693
Hospital	1,000 s.f.	610	1.16	100%	9.3	1.26	$14,497	$12,897
Industrial Land Uses								
Industrial	1,000 s.f.	130	0.85	100%	10.8	1.46	$12,336	$10,975
Manufacturing	1,000 s.f.	140	0.73	100%	10.8	1.46	$10,594	$9,426
Warehouse	1,000 s.f.	150	0.32	100%	10.8	1.46	$4,644	$4,132
Mini-Warehouse	1,000 s.f.	151	0.26	100%	10.8	1.46	$3,773	$3,357
Cargo Facilities	1,000 s.f.	--[5]	0.61	100%	10.8	1.46	N/A	$7,876
Maintenance Facilities	1,000 s.f.	--[5]	0.17	100%	10.8	1.46	N/A	$2,195

Notes:
1) ITE Trip Generation, 9th Edition per LADOT Traffic Study Policies and Procedures.
2) Pass-by Trips per LADOT Traffic Study Policies and Procedures.
3) For retail uses greater than 250 KSF but less or equal to 800 KSF, interpolate between the lower (=< 250 KSF) and higher (>800 KSF) rates provided.
4) For office uses greater than 50 KSF but less or equal to 250 KSF, interpolate between the lower (=< 50 KSF) and higher (>250 KSF) rates provided.
5) Trip rates for Cargo & Maintenance Facilities were derived by LAWA for aviation related uses in the CTCSP area.
Special Generators: If LADOT determines that a proposed use cannot be classified under the land use categories listed in the TIA Fee table, then LADOT will have the discretion to determine the appropriate data for input to the TIA Fee calculation. This will likely require a study to determine the trip rate, trip length, and pass-by rate data for the proposed use.

5. ECONOMIC FEASIBILITY REVIEW

The potential economic impact of an update to the TIA fee programs in the CTCSP and WLA TIMP was evaluated by Economic & Planning Systems (EPS). The *Feasibility Review of Updated Transportation Impact Assessment Fee for Coastal Transportation Corridor and West LA TIMP Specific Plans Memorandum* dated December 2015 is contained in Appendix E. The economic review was based on a series of static developer pro forma models that simulate the financial performance of a variety of real estate development prototypes under the proposed TIA fees. The development prototypes along with the key findings from the economic review are presented below.

Development Prototypes

The current Specific Plans contain fees on commercial and industrial uses. As discussed in previous chapters, the proposed updates to the TIA fee program also introduce a fee on new residential uses. As such, the focus of this analysis is on the financial impact of the TIA fee in the context of new residential, commercial, and office development. The development prototypes focused on infill developments in the WLA TIMP and CTCSP areas that were adapted based on a review of recently completed or proposed developments in these markets. The actual developments were modified in some cases to consider various affordable housing components, fee credit scenarios and other parameters (e.g., tenure).

The financial performance of six residential and mixed-use developments with the existing and proposed TIA fees were considered in the economic feasibility review. The feasibility review evaluated each development in the context of the WLA TIMP and CTCSP areas, including development costs and proposed TIA fees within each Specific Plan area. The following six prototypes were considered:

- ***Prototype A***: Development contains *9 multi-family residential units* (8 market rate units and 1 affordable unit).
- ***Prototype B***: Development contains *34 multi-family residential units* (31 market rate units and 3 affordable units).
- ***Prototype C***: Development contains *115 multi-family residential units* (105 market rate units and 10 affordable units) and approximately *980 square feet of retail* space.
- ***Prototype D***: Development contains *157 multi-family residential units* (142 market rate units and 15 affordable units) and approximately *44,000 square feet of retail* space.
- ***Prototype E***: Development contains *660 multi-family residential units* (all market rate) and approximately *20,000 square feet of retail* space.
- ***Prototype F***: Development contains *516 multi-family residential units* (all market rate) and approximately *67,000 square feet of retail* space and *200,000 square feet of office* space.

Three of the prototypes described above were also analyzed under two fee credit scenarios for the provision of affordable housing. The affordable housing fee credit sensitivity analysis was only conducted for the WLA TIMP as the range in fee fluctuations would be similar to the CTCSP area. The following three prototypes were considered:

- ***Prototype B***: Development contains *34 multi-family residential units* (31 market rate units and 3 affordable units).

- ***Prototype D***: Development contains *157 multi-family residential units* (142 market rate units and 15 affordable units) and approximately *44,000 square feet of retail* space.

- ***Prototype E***: Development contains *660 multi-family residential units* (606 market rate units and 54 affordable units) and approximately *20,000 square feet of retail* space.

The development typologies, costs, and revenue inputs applied to the analysis were based on available development-specific information as well as data from the broader market and real estate developers active in the area. However, these financial assumptions reflect an average across a relatively wide range of possible outcomes and will likely vary for individual developments depending on a variety of factors including, without limitation, site conditions, design, locational attributes, density, market orientation, and unique ownership and developer circumstances. Consequently, the results should be considered as broad indicators of the relative financial implications of TIA fee levels and potential credits rather than precise estimates.

Feasibility Measures

On an economic and financial level, development impact fees should be considered from two perspectives:

1. ***Improvements in Public Infrastructure***. Development impact fees, especially in growing areas, can provide an important portion of the funding for development of infrastructure and capital facilities. As such, they support the policy goals of a jurisdiction in terms of providing adequate public facilities and infrastructure such as transportation infrastructure, parks and recreation amenities, and public safety facilities/equipment. These improvements help to mitigate the impacts of new development on public improvements and help maintain the quality of life that both residents and employers seek. The presence of essential public infrastructure and an attractive public realm increases the demand and value of housing and can also support job-generating development.

2. ***Impact on Land Values and Development Costs and Economic Impacts***. Development impact fees directly add to the cost of new residential and commercial buildings (i.e., vertical development costs). In the short term, development impact fees increase overall development costs, reducing the expected return on investment/profit margin on an individual development project at a particular point in time. Over the medium to long term, a portion of these vertical development cost increases are absorbed by reductions in land value.

As a general principle, these competing benefits and costs associated with development impact fees should be considered when assessing their overall economic impacts. In reality, however, the first impact (improvements in public infrastructure) is more difficult to measure in economic terms. This is because market prices are determined by a variety of inter-related factors that are difficult to disaggregate with precision. Consequently, this analysis has focused primarily on the second impact.

Two feasibility measures were evaluated as part of the economic review of the proposed TIA fees:

- ***Residual Land Value***: This is the difference between stabilized value (determined through capitalized revenues or sales prices) and development costs. It is the most direct feasibility measure as positive land value suggests that an upside exists for the land owner from new development. Negative residual land value, on the other hand, suggests that a particular project is likely infeasible under the current market conditions and a land owner would be better off holding their land and/or pursuing an alternative use. The analysis assumes that developers purchase the land at prevailing market rates and do not consider land banking (investor speculation) or land acquisitions that may have occurred years ago at a much lower price.

- ***Percentage of Total Development Cost***: This measure gauges whether the cost increase is significant enough to have an adverse impact on development feasibility. Typically, small increases in costs, such as those resulting from the TIA fee updates, can be offset by other factors, such as rent or value fluctuations or changes in labor or construction material costs and are not likely to significantly reduce development feasibility. TIA fee increases may result in a slight land value reduction for existing property owners or return reduction for developers that have already secured land with the intent of development in the near term. It should be noted that there is a distinction between the TIA fee's impacts on the total development cost in comparison to the land value. This analysis shows the impact of the fee on land value as well as the increase in total development cost (rather than the land value). The impact from the fee increase on land value is more pronounced than the impact on total development cost, since land is only one of the inputs for the total development budget.

Key Assumptions and Methodology

The economic feasibility analysis applied a variety of background assumptions based on development trends in the Specific Plan areas. These assumptions are highlighted below:

- ***Rents and Value***: The analysis assumed a range of rents and values based on existing market comparables for a range of land uses. Coastal development is assumed to support higher rents and values relative to the West LA area and smaller units are largely assumed to result in higher rents and values on a per square foot basis relative to larger units.

- ***Vacancy and Operating Expenses***: The analysis reflected a vacancy rate of 5 percent for rental residential and 8 percent for retail and office uses. This is a typical level of stabilized vacancy in strong residential markets, such as the WLA TIMP and CTCSP areas. Operating expenses ($5,000 per unit annually) reflect a blend of market rate and affordable units and typically include property management, administration, maintenance, utilities, insurance, and taxes. For affordable units,

management and administration expenses also include services required for monitoring, compliance and other costs associated with fulfilling the affordability requirements.

- ***Development Costs***: The cost for new construction has been increasing over the past several years due to improvements in the economy, revival of new development activity, and growth in demand for construction services and materials. The analysis assumed direct construction costs of residential, retail, and office uses on a square footage basis, land costs, and tenant allowances for retail and office uses. Development costs also include indirect expenses, financing, and parking. In addition, development costs include development impact fees for schools, parks, art, sewer, water, and storm drain connection fees, as well as the TIA fee and associated credits where applicable. Parking is assumed to be subterranean across all prototypes with a cost of $50,000 per space.

- ***Financial Returns***: Expected returns on development investment vary based on a range of factors such as risk, capital and real estate market conditions, and building uses. All evaluated prototypes were assumed to result in a 10 percent return on costs. While returns vary depending on location, construction type, market appreciation assessment, cost of equity, and many other factors, 10 percent is a typical return for comparable infill developments, and therefore, is factored in the overall development cost estimate.

Summary of Findings

The development feasibility results and key findings from the analysis are summarized below.

- ***Proposed TIA fees do not significantly affect development feasibility of the tested product types.*** While the updated TIA fee will increase development costs, the magnitude is unlikely to deter any feasible development from taking place. Specifically, the proposed TIA fee would represent between 0.6 to 2.6 percent of the total development cost for a typical project (excluding land). This level of impact will likely be overwhelmed by other factors that are significantly more important to project feasibility, such as fluctuations in rent or sale prices or changes in labor or construction material costs.

  By way of example, both West LA and Coastal Corridor areas have experienced increases in rents and market sale prices in recent years that far exceed an increase in development costs that would result from the proposed TIA fee. Rents have increased by an average of 4 percent per year since 2011, while sale prices have increased by an annual average of 15 percent (attributed to the post-recessionary recovery). Not surprisingly, these price escalations have corresponded to a significant amount of new development activity in both the West LA and Coastal Corridor market areas.

  Furthermore, because the Westside is mostly built out, many new developments could be eligible for existing use credit to offset a portion of the TIA fee obligation and lower the TIA fee as a percentage of the total development cost. Any increase in fees has the potential to result in a land value reduction for existing property owners. For example, the proposed TIA fee results in an estimated reduction in average residual land value of between 2 percent and 24 percent for certain product types. Fee increases may also slightly reduce investor return for developers that have already secured land with the intent of development in the near term. Ultimately, given their impact relative to overall

development costs, the TIA fee is unlikely to significantly affect market dynamics and development decisions.

- ***While current market conditions in both West LA and Coastal Corridor are highly favorable with rents and sale prices that support a wide range of new development, the financial performance of the building product types tested in this analysis varies by tenure, location, affordable housing component, and density bonus incentives, among other factors.*** For-sale condominiums would result in a higher residual land value (in comparison to rental units) in the Coastal Corridor whereas rental apartment units result in a higher residual land value in West LA. In all cases, the residual land value is positive with the proposed TIA fees, suggesting the development is economically viable. Development in the Coastal Corridor is stronger due to historically high rents and sales prices across all evaluated building product types, as indicated by the higher residual land value per square foot. Meanwhile the City's density bonus program may improve developer returns in some locations and circumstances (e.g., rental product), but this is not true across the board. Specifically, in many cases the economic benefits of additional development density may not offset the subsidy associated with building on-site affordable units. Nevertheless, developers will determine whether condos, apartments, or participation in the City's voluntary density bonus program makes sense for a particular project and the proposed TIA fee is unlikely to affect this decision. More important are evolving market dynamics which are currently highly favorable in both West LA and Coastal Corridor for most of the product types considered in this analysis.

- ***In cases where developers choose to participate in the City's density bonus program, TIA fee credits for the provision of affordable housing, whether tiered or flat, will not change the broader fundamental economics of new development.*** Both the flat and tiered TIA fee credit structures for affordable housing will result in fee levels that would be supported by the market. Developers of very low income units will experience slightly higher costs under the flat fee credit structure while developers of moderate income units will experience slightly lower costs under the flat fee credit structure. However, the minimal cost differences between the flat and tiered credit structures should be considered in the context of City policies and administration ease more so than economic feasibility.

TIA fee credit opportunities may be offered beyond those tested in this feasibility analysis. Credit against the TIA fee may be offered for development near transit stations (TOD credit) and for reuse of existing properties (existing use credit). Because the Specific Plan areas are mostly built out, it is likely that many developments will receive existing use credit. The feasibility analysis did not incorporate any fee reductions due to TOD or existing use credits, and therefore, is based on the maximum fees that may be assessed.

6. STATUS OF TRANSPORTATION FUNDING

This chapter provides background on the status of transportation funding as it relates to the City of Los Angeles as well as statewide and national funding sources.

While the sources of funding for transportation improvement projects have remained relatively unchanged, there has been a general reduction in the amount of expected revenues than were anticipated during the establishment of the Westside fee programs. While local sources of funding are clearly not sufficient to implement the number of transportation programs needed for the future (on the Westside or Citywide), additional transportation funding may be expected from Federal, State and Regional funding sources on both a formula basis and based upon competitive grants. The local transportation funds are valuable as the requisite local match for the federal, state and regional funding grants to implement targeted transportation improvements. According to the 2011-2012 adopted City of Los Angeles budget (FY 2011/12, page 413) the City received approximately $113.4 million in federal/state or regional grants for transportation projects. A local match of $25.0 million (18%) was required to implement the grant funded projects[6].

Much of the state and regional funds are actually a "pass-through" of federal funds by Caltrans or by Metro. Under the current federal transportation program (MAP-21) approximately $40 billion is available nationally per year. Unlike previous federal transportation programs, MAP-21 is a two-year bill and the allocations and funding programs are likely to change when a new bill is adopted next year. A summary of federal sources of funding allocated to California for FY 2014 is shown in **Table 18** below with an expected allocation of $3,576 million. For local transportation projects, note that the City (in 2011/12) received $113.4 million, or 3% of the federal allocation.

TABLE 18
FEDERAL MAP-21 ALLOCATIONS TO CALIFORNIA FOR FY 2014 BY PROGRAM (MILLIONS OF $'S)

NHPP	STP	HSIP	RAILWAY	CMAQ	PLANNING	TOTAL
$1,949M	$896.5M	$198.9M	$15.3M	$468.1M	$49.0M	$3,576.9M

Note: NHPP - National Highway Performance Program. STP - Surface Transportation Program. HSIP - Highway Safety Improvement Program. Railway - Highway Crossing Program. CMAQ - Congestion Mitigation and Air Quality. Planning - Metropolitan Planning.

Two federal competitive grant programs that are important to note are funded from the above: Transportation Investments Generating Economic Recover (TIGER) and Transportation Alternatives Program (TAP). The TIGER grant program is expected to be highly competitive with over $9,000 million in applications for a $527 million program the last time it was announced. The TAP program is aimed at projects providing alternatives to highway improvements and fits well with the Westside Cities transportation program. California is allocated $72.3 million (of a total $808.8 million program) with $26.7 million reserved for cities over 200,000 in population.

[6] The funding information in this chapter was prepared by Allyn Rifkin and Emerson Associates.

Metro has a competitive process for allocating a significant portion of the state and federal funds that it receives. The bi-annual process, called the Call for Projects, is organized in eight specific modal categories designed to partner with local agencies to implement regionally significant transportation improvements consistent with the Metro program of transportation priorities. **Table 19** summarizes the Call for Project categories by source and the proposed funding levels for the 2013 round of projects.

TABLE 19
CALL FOR PROJECT CATEGORIES BY SOURCE AND PROPOSED FUNDING LEVELS FOR 2013

Modal Category	2013 Budget Level ($ millions)	Local, Proposition C	State Funds, TE	Federal, CMAQ	Federal, RSTP
Regional Surface Transportation	$43.1	X		X	X
Goods Movements	$30.1	X		X	
Signal Synchronization and Bus Speed Improvements	$33.1	X		X	
Transportation Demand Management	$5.7			X	
Bikeway Improvements	$25.8		X	X	X
Pedestrian	$20.5		X	X	X
Transit Capital	$31.5	X		X	
Transportation Enhancement Activities	$5.2		X	X	X

A total of $195.1 million is going to be allocated in this year's Call as compared to approximately $500 million in applications.

To attract some of the above funds, the City needs to share in project costs with "local" funds. **Table 20** is a tabulation from the City's 2011/12 budget of local funding sources with annual revenues and (if applicable) trust fund balances. Following is a brief summary of local sources of transportation funds:

A. Sources allocated to the General Fund

- **Property & Sales Taxes**: A portion of property taxes and sales taxes are allocated to the City's general fund except for specific sales tax set asides related to Proposition A, Proposition C, Measure R, and the Transportation Development Act (SB 325), which are described below. General sales tax revenues are not assumed to be available for transportation improvements.
- **Parking Fines**: Parking Violation Fines are allocated to the City's general fund. There is no history of using these funds for transportation improvements.

- **Parking Tax**: Parking User Tax is a 10 percent surcharge on off-street parking charges collected by private parking operators. These funds are allocated to the General Fund and there is no history of using these for transportation improvements.

TABLE 20
LOCAL FUNDING SOURCES FOR CITY OF LOS ANGELES
ANNUAL REVENUES AND FUND BALANCES
(Source: Adopted Budget FY 2012/13)

FUNDS	ANNUAL REVENUE (FY 2011/12) ($'s in thousands)	FUND BALANCE (FY 2011/12) ($'s in thousands)
GENERAL FUND		
Property Tax	$1,457,022	-
Sales Tax	$332,939	-
Parking Fines	$153,438	-
Parking User Tax	$91,728	-
CITYWIDE SPECIAL PURPOSE FUNDS		
Proposition A	$121,437	$71,547
Proposition C	$92,318	$13,368
Measure R	$66,190	$1,836
Gas Tax – Street Improvement	$111,785	$3,910
Local Transportation Fund	$2,724	$3,910
Special Parking Revenue Fund	$35,078	$15,055
GEOGRAPHIC SPECIFIC FUNDS		
Coastal TIMP	$363	$13.5
Oxford Triangle	-	-
Venice Parking	-	$0.3
WLA TIMP	$128	$1.5

B. Special Purpose Funds

- **Prop A**: Proposition A (Local Transit Assistance) funds are from a ½ cent sales tax measure in Los Angeles County (approved in 1980). Twenty five percent of the funds are passed directly to cities. These funds must be used for public transit capital and operations. The bulk of the City's Proposition A funds are dedicated to operation of the City's local transit services.
- **Prop C**: Proposition C (Anti-gridlock Transit Improvement) funds are from another ½ cents sales tax measure in Los Angeles County (approved in 1990). 25% of the funds are passed directly to cities. These funds are more flexible than Proposition A and can be allocated to roadway or sidewalk improvements that facilitate transit.
- **Measure R**: Measure R (Traffic Relief and Rail Expansion) funds are from a third ½ cents sales tax measure in Los Angeles County (approved in 2008). Fifteen percent of the funds are passed directly to cities. These funds are also flexible and may be used for major street maintenance as well as for signals, bikeways, streetscapes and local transit.
- **TDA**: Transportation Development Act (TDA) funds are the result of California SB 325 (1971), which increased the state gas tax (to go to the State Transit Assistance fund) and increased the sales tax by ¼ cents. The ¼ cent sales tax is allocated directly to cities on a population basis in a program

called Local Transportation Fund. These funds can only be used for transit (capital and operations).

- **Gas Tax**: Part of the gasoline taxes are allocated directly to cities and placed in the City's Gas Tax Street Improvement fund. These funds are used for street maintenance as well as for street capacity and safety improvements.

C. Other Geographic Specific Local Funds

- **Impact Fees**: Developer impact fees as described in this report are one source of local transportation funds. The funds from fees are limited to use to the specific use of projects named in the formulation of the fee.
- **Developer Exactions**: Developer exactions can fund whole transportation improvements when mitigating significant transportation impacts. If these exactions align with the transportation program, a credit is authorized from the impact fee.
- **BIDs**: Residential neighborhoods and business merchants sometimes volunteer to tax themselves as a business improvement district (BID) for a series of projects and programs that may include transportation improvements. There are four BIDs in the WLA study area: Brentwood Village, Century City, Westchester and Westwood Village.
- **Neighborhood Traffic Impacts**: Oxford Triangle/Venice Neighborhood Protection program established a trust fund to mitigate neighborhood traffic impacts of development in the Oxford triangle, south of Washington Boulevard and west of Lincoln Boulevard. These funds would be available for use only in the Coastal TIMP area and must be related to Oxford Triangle impacts.
- **In-Lieu Parking**: An in-lieu fee for parking was established as part of the Venice Coastal Land Use Plan. The fee is for developers who cannot construct the required on-site parking and therefore must pay $18,000 per space. The revenues are deposited in a fund for future public parking in the identified Beach Impact Zone. It may be possible to utilize the fund for alternative transit improvements serving the zone.
- **Parking Districts**: Parking meter districts are authorized when the City elects to install parking meters. Funds from the parking meters are allocated to the Special Parking Revenue Fund (SPRF) and are meant to be allocated to the development of public parking in the district; however the SPRF as a whole is used to cover bond indebtedness associated with parking garage construction. City Council has authorized the use of parking funds for other street improvements (such as sidewalk and streetscape projects) benefitting the parking districts.
- **Airport**: Airport-related fees are collected by the Los Angeles World Airport (LAWA). These fees include: passenger facility charges (PFC), Federal Aviation Authority grants (FAA), parking fees, and car rental fees. As a proprietary Department, the allocation of these fees is budgeted separately from the City budget and governed by the LAWA Board of Directors. The FAA has extensive oversight of these fees with input from the air carriers who utilize the airport. If any of these airport fees would be available for ground transportation improvements, they would likely be confined to the Coastal TIMP area.

Application of Funding Sources to Transportation Improvement Program

The Westside Mobility Plan has identified a transportation program to serve the multi-modal needs of the Westside. It is expected that neither existing trip fees nor City funding sources will fully fund the transportation program and that federal and regional funds will also be required. Therefore, it is helpful to review the general transportation program by Primary Mode and assess which of the funding sources (local and state/regional) could apply. **Table 21** examines the applicability of those funding sources.

TABLE 21
ADDITIONAL FUNDING SOURCES FOR WESTSIDE PROJECTS

Primary Mode	Local Funding Source (Transportation Impact Fee would apply to all modes)	State/Regional Funding Source
Bike/Ped	Prop C; Measure R; General Fund; TDA	CMAQ, Call for Projects
Streetscape	BID; Measure R; SPRF; General Fund	CMAQ, Call for Projects
ITS	Gas Tax	CMAQ, TAP, Call for Projects
Roadway	Measure R; Gas Tax; Airport*	TAP, TIGER, Call for Projects
Transit	Prop A/C; Measure R; SPRF; BID	TAP, TIGER, Call for Projects
Trip Reduction	Prop C; TDA; BID	CMAQ, Call for Projects

*Airport funds are currently only applicable for significant projects in CTCSP area with applicability to mitigating airport impacts

Appendix A:
Trip Fee Comparisons in Los Angeles County and California

Jurisdiction	Residential		Non-Residential		
	Single Family (per DU)	Multi-Family (per DU)	Office (per SF)	Industrial (per SF)	Retail (per SF)
Cities in Los Angeles County					
Agoura Hills	$3,094	$1,516	$6.68	$5.14	$12.81
Burbank	n/a	n/a	$5.67	$3.11	$5.67
Culver City	n/a	n/a	$1.00	$1.00	$1.00
El Segundo Zone 1	n/a	n/a	$3.82	$2.51	$9.62
El Segundo Zone 2	n/a	n/a	$0.16	$0.10	$0.39
El Segundo Zone 3	n/a	n/a	$0.17	$0.11	$0.43
Hawthorne	$1,121	$785	$2.66	$1.00	$3.67
LA - Central City West [a]	n/a	n/a	$11.55	$5.75	$12.71
LA - Coastal Corridor [a]	n/a	n/a	$22.19	$6.89	$46.68
LA - Warner Center [a]	n/a	$2,673	$10.63	$3.11	$23.88
LA - West LA TIMP [a]	n/a	n/a	$6.45	$2.74	$7.09
Lancaster	$1,745	$1,552	$1.62	$0.58	$1.62
Long Beach	$1,125	$1,125	$2.00	$1.10	$3.00
Long Beach - downtown	$1,125	$1,125	$3.00	n/a	$4.50
Palmdale	$4,341	$3,005	$4.98	$3.17	$11.70
Pasadena	$2,616	$2,616	$3.92	$3.27	$9.09
San Gabriel	$2,320	$1,392	commercial $232 per trip		
Santa Clarita	$18,890	$13,223	fees are per acre		
Santa Monica Area 1 (DT & Bergamot)	$7,600	$2,600	$9.70	$1.20	$21.00
Santa Monica Area 2 (rest of city)	$7,800	$3,300	$10.80	$1.30	$30.10
Torrance	exempt	$2,094	$1.63	$1.16	$5.00
West Hollywood	$448	$448	$1.85	n/a	$1.85
Average	*$4,352*	*$2,675*	*$5.52*	*$2.40*	*$10.59*
Other California Cities					
Emeryville	$943.24/pm peak hour trip				
Irvine	$7,175	$7,175	$20.28	$5.85	$20.28
Palo Alto	$2,861/peak hour trip		$4.26	$4.26	$4.26
Redwood City	$1,502	$1,021	$3.45	$0.90	$4.97
San Francisco	not subject to fee		$11.34	$11.34	$11.34
San Joaquin County	$3,001	$1,801	$1.51	$0.90	$1.20
San Luis Obispo	$32,209	$2,858	$6.48	$1.87	$6.78
Santa Barbara County	$1,945/peak hour trip (within urban planning areas)				
Average	*$10,972*	*$3,214*	*$7.89*	*$4.19*	*$8.14*
Average of SoCal & Other CA Cities	*$6,007*	*$2,795*	*$6.07*	*$2.85*	*$10.02*

Appendix B:
Public Notices for 2016 Trip Fee Adjustments for Coastal Transportation Corridor and West LA TIMP Specific Plans

PUBLIC NOTICE

TRIP FEE ADJUSTMENT
COASTAL TRANSPORTATION CORRIDOR
SPECIFIC PLAN ORDINANCE NO. 168,999

Pursuant to Section 6.D of the Coastal Transportation Corridor Specific Plan Ordinance No. 168,999, the City of Los Angeles, Department of Transportation, hereby gives public notice that the Trip Cost Factor (or Trip Fee) has been increased by $194.00 from $8,449.00 per Trip to $8,643.00 per Trip effective January 1, 2016, based upon the Building Cost Indices available to the City of Los Angeles. Additional information is available at the Los Angeles Department of Transportation, 7166 West Manchester Avenue, Los Angeles, CA 90045.

PUBLIC NOTICE

TRIP FEE ADJUSTMENT
WEST LOS ANGELES TRANSPORTATION
IMPROVEMENT AND MITIGATION
SPECIFIC PLAN ORDINANCE NO. 171,492

Pursuant to Section 5.D.2 of the West Los Angeles Transportation Improvement and Mitigation Specific Plan Ordinance No. 171,492, the City of Los Angeles, Department of Transportation, hereby gives public notice that the Trip Cost Factor (or Trip Fee) has been increased by $79.00 from $3,419.00 per Trip to $3,498.00 per Trip effective January 1, 2016, based upon the Building Cost Indices available to the City of Los Angeles. Appendix "B' of the Ordinance showing the alternate "fee per square foot" has been revised accordingly. Additional information is available at the Los Angeles Department of Transportation, 7166 West Manchester Avenue, Los Angeles, CA 90045.

Appendix C:
Project Cost Estimates

Coastal Transportation Corridor Specific Plan Project List

April 2016

Primary Mode	Project Name	Project Description	Fee Contribution	Total (Millions)	% of Project List
Active Modes	Mobility Hubs	Install a full-service Mobility Hub at or adjacent to Major Transit Stations & Satellite Hubs surrounding the station. A hub includes facilities such as bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	$10M	$48	15%
	Enhance Pedestrian Access to Major Transit Stations	Implement pedestrian connectivity improvements at major transit stations by providing enhanced sidewalk amenities, such as landscaping, shading, lighting, directional signage, shelters, curb extensions, enhanced crosswalks, as feasible.	$10M		
	Streetscape Improvements	Implement the following streetscape plans currently being developed through various planning efforts in the Plan area: • **Venice Streetscape Improvements**. Implement streetscape improvements along Venice Blvd between Inglewood Blvd and Lincoln Blvd.	$5M		
		• **Centinela Streetscape Improvements.** Implement streetscape improvements along Centinela Avenue between Washington Blvd & Jefferson Blvd	$5M		
		• **Sepulveda Pedestrian Improvements.** Implement sidewalk and streetscape improvements, bus stop lighting at transit stops, and enhanced crosswalks. Sepulveda Blvd between 76th St and 80th St.	$1.6M		
	Sidewalk Network & Pedestrian Enhancements	Complete gaps in the sidewalk network and provide pedestrian enhancements	$2M		
	Multi-use Paths	• **Sepulveda Channel Multi-use Path.** Sepulveda Channel path from Ballona Creek to Washington Boulevard	$400K		
		• **Centinela Creek Multi-use Path.** Centinela Creek path from Ballona Creek to Centinela Avenue east of the I-405	$1.1M		
	Cycle Tracks & Bike Lanes	• **Venice Boulevard Cycle Track.** Venice Boulevard throughout the Coastal Transportation Corridor Area	$2.5M		
		• **Washington Boulevard Cycle Track.** Washington Boulevard from Admiralty Way to Pacific Avenue	$500K		
		• **Lincoln Boulevard Cycle Track.** Lincoln Boulevard from Jefferson Boulevard to Fiji Way. This project would be a feature of the reconstruction of the Lincoln Boulevard Ballona Creek Bridge project proposed as an element of the Westside Mobility Plan.	$410K		
		• **Culver Boulevard Bike Lane.** Culver Boulevard from McConnell Avenue to Playa del Rey	$155K		
	Other Neighborhood Network Enhancements as described in Mobility Plan 2035 (MP 2035)	Per MP 2035, implement bicycle and neighborhood enhanced design features to provide a system of streets linking to major employment centers, transit stations, and educational, retail, entertainment, and recreational resources. Enhancements such as the following are described in MP 2035:	$5M		
		- **Beethoven Street / McConnell Avenue NEN.** Implement neighborhood enhanced design features as alternate route to major corridors	$600K		
	Bicycle Transit Centers	Bike transit centers that offer bicycle parking, bike rentals, bike repair shops, lockers, showers and transit information and amenities	$1.5M		
	Bikesharing	Provide public bicycle rental in "pods" located throughout the city.	$2.0M		

Coastal Transportation Corridor Specific Plan Project List

April 2016

Primary Mode	Project Name	Project Description	Fee Contribution	Total (Millions)	% of Project List
Roadway & ITS	Congestion Monitoring	Install a CCTV camera and necessary infrastructure to improve DOT's ability to monitor and respond to real-time traffic conditions	$5M	$48	15%
	ITS Corridor & Signal Upgrades	Install ITS improvements along major corridors. Install signal upgrades as part of the next evolution of ATSAC, including detector loops for traffic volume data and monitoring.	$5M		
	Major Intersection Improvements	Funding for spot intersection improvements, such as turn-lane or safety improvements	$5M		
	Culver Boulevard Corridor	Improve traffic flow along Culver Blvd between Centinela Ave and I-405 Freeway including providing left-turn lanes at key signalized intersections (including Inglewood Blvd); Culver Blvd between Centinela Ave and I-405 Freeway.	$3M		
	Lincoln Blvd Bridge Enhancement	Improve Lincoln Boulevard between Jefferson Boulevard and Fiji Way to remove the existing bottleneck by providing an additional southbound lane, transit lanes and on-street bike lanes. Improvements to serve all modes of travel would be implemented as follows: 1) an additional southbound lane for vehicles would be provided (currently, Lincoln narrows from three to two travel lanes in the southbound direction just south of Fiji Way whereas three travel lanes are provided in the northbound direction), 2) bus-only lanes would be provided in the median, 3) cycle tracks would be provided on both sides of the roadway to connect the existing bicycle lanes to the south with the Ballona Creek bicycle path, and 4) sidewalks would be provided on both sides of the street (the existing bridge does not provide sidewalks).	$22M		
	Access Improvements to LAX	On-going coordination with LAWA on airport related improvements, which may include a combination of roadway capacity enhancements, streetscape improvements, and multi-modal improvements.	$5M		
	Neighborhood Protection Program	The objective of this Program is to discourage through-traffic from using local streets and to encourage, instead, use of the arterial street system. The Program will establish measures to make the primary arterial routes more attractive and local routes less attractive for through-traffic, and establish measures designed to facilitate vehicular and pedestrian egress from local streets in the adjacent neighborhoods onto the primary arterial street and highways system.	$3M		
Transit	Lincoln BRT	Center Running BRT on Lincoln Boulevard from the border of the City of Santa Monica to 96th Street Transit Station.	$137M	$215	67%
	Sepulveda BRT	Center Running BRT on Sepulveda Boulevard from Wilshire Boulevard to 96th Street Transit Station (within the City of LA).	$56M		
	Venice Rapid Bus Enhancements	Venice Boulevard – Rebrand existing Rapid Bus service to serve Venice Beach area, increased service frequency, implement stop improvements.	$4.9M		
	Circulator/Shuttle Service	Circulator bus/shuttle to connect activity centers to major transit stations, such as: • Loyola Marymount / Westchester Circulator • Venice / Playa Vista / Fox Hills Circulator • Venice Circulator	$17M		
Auto-Trip Reduction	ExpressPark	Implement an on-street intelligent parking program that includes vehicle sensors, dynamic demand-based pricing and a real-time parking guidance system to reduce VMT, congestion and to improve flow for cars/buses.	$1M	$8	3%
	Strategic Parking Program	Implement a Westside parking program and update parking requirements to reflect mixed-use developments, shared parking opportunities, and parking needs at developments adjacent to major transit stations.	$1M		
	Rideshare Toolkit	The Toolkit would develop an online Transportation Demand Management (TDM) Toolkit with information for transit users, cyclists, and pedestrians as well as ridesharing. It would include incentive programs for employers, schools, and residents. Additionally, it would be specific to City businesses, employees, and visitors and would integrate traveler information. It would also include carpooling/vanpooling and alternative work schedules.	$2M		
	Parking Utilization Improvements & Reduced Congestion	Develop an on-line system for real-time parking information, including GIS database and mapping. Improve parking and wayfinding and guidance throughout commercial areas.	$2M		
	Transportation Demand Management (TDM) Program	The program would provide start-up costs for Transportation Management Organizations/Associations (TMOs/TMAs). It would also provide guidance and implementation of a TDM program.	$2M		
	Administrative Costs	Estimated at 5% of total project costs.	$15,929,226	$318,584,520	
			Total	**$334,513,746**	

West LA TIMP Specific Plan Project List

April 2016

Primary Mode	Project Name	Project Description	Fee Contribution	Total (Millions)	% of Project List
Active Modes	Mobility Hubs	Install a full-service Mobility Hub at or adjacent to Major Transit Stations & Satellite Hubs surrounding the station. A hub includes facilities such as bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	$10M	$58	25%
	Enhance Pedestrian Access to Major Transit Stations through Streetscape Improvements	Implement the following streetscape plans currently being developed through various planning efforts in West LA: • Olympic Blvd. from Centinela to Barrington (Expo Transit Neighborhood Plans) • Bundy from Missouri to Pico Blvd. (Expo Transit Neighborhood Plans) • Sepulveda from Olympic to National Blvd. (Expo Transit Neighborhood Plans) • National Blvd. from Castle Heights to Mentone Ave. (Expo Transit Neighborhood Plans) • Palms Blvd. from Motor to National Blvd. (Expo Transit Neighborhood Plans) • Pico Blvd. from the 405 Fwy to Patricia Ave. (Westside Mobility Plan) • Pico Blvd. from Centinela to the 405 Fwy (Westside Mobility Plan • Motor Ave from I-10 Fwy to Venice Blvd. (Westside Mobility Plan)	$26M		
	Sidewalk Network & Pedestrian Enhancements	Complete gaps in the sidewalk network and provide pedestrian enhancements	$1M		
	Westwood Boulevard	Improvements along Westwood Boulevard between the future Expo LRT station, Westwood Village, and UCLA could include transit, bicycle and pedestrian enhancements (that do not require removal of vehicular travel lanes or on-street parking) or bicycle enhancements on parallel roadways.	$2M		
	Cycle Tracks	• **Santa Monica Boulevard Cycle Track.** Santa Monica Boulevard in the "parkway" section east of Sepulveda Boulevard	$8.3M		
		• **Venice Boulevard Cycle Track.** Venice Boulevard throughout the West Los Angeles Transportation Area	$2.5M		
		• **Motor Avenue Cycle Track.** Motor Avenue between I-10 and Venice Boulevard	$1M		
	Other Neighborhood Network Enhancements as described in Mobility Plan 2035 (MP 2035)	Per MP 2035, implement bicycle and neighborhood enhanced design features to provide a system of streets linking to major employment centers, transit stations, and educational, retail, entertainment, and recreational resources. Enhancements such as the following are described in MP 2035: • **Prosser/Westholme Avenue NEN.** Alternate route to major corridors, such as Westwood Blvd, connecting Expo Bike Path to UCLA.	$630K		
		• **Veteran Avenue NEN.** Alternate route to major corridors, such as Westwood Blvd.	$380K		
		• **Gayley Avenue / Montana Avenue (east of I-405) NEN.** Alternate route to major corridors, such as Westwood Blvd.	$480K		
		• **Montana Avenue (west of I-405) NEN**	$420K		
		• **Barrington Avenue / McLaughlin Avenue NEN**	$460K		
		• **Ohio Avenue NEN** (including Gap Closure at Santa Monica Blvd.)	$250K		
	Bikeway Gap Closures	Gap closures, such as: • **Gateway Blvd to Ocean Park Bike Lane.** Gateway Blvd to Ocean Park Blvd gap closure	$90K		
	Bicycle Transit Centers	Bike transit centers that offer bicycle parking, bike rentals, bike repair shops, lockers, showers and transit information and amenities	$1.5M		
	Bikesharing	Provide public bicycle rental in "pods" located throughout the Westside.	$2M		
	Exposition Light Railway Greenway Improvement Project	The project proposes to transform existing city-owned vacant parcels into a neighborhood greenway that includes construction of a multi-use path with drought tolerant landscaping, simulated stream to treat urban runoff, educational amenities and interpretive signs. Project is located along the Expo Line Railway.	$1M		

West LA TIMP Specific Plan Project List

April 2016

Primary Mode	Project Name	Project Description	Fee Contribution	Total (Millions)	% of Project List
Roadway & ITS	Congestion Monitoring	Install a CCTV camera and necessary infrastructure to improve DOT's ability to monitor and respond to real-time traffic conditions	$4M	$31	13%
	ITS Corridor & Signal Upgrades	Install ITS improvements along major corridors. Install signal upgrades as part of the next evolution of ATSAC, including detector loops for traffic volume data and monitoring.	$4M		
	Major Intersection Improvements	Funding for spot intersection improvements, such as turn-lane or safety improvements	$4.5M		
	Sunset Boulevard Operations	Implement operational improvements along Sunset Boulevard. Improvements could include the following: ITS corridor improvements; signal upgrades as part of the next evolution of ATSAC; intersection improvements, such as turn-lane or safety improvements.	$2.5M		
	Olympic Boulevard Operations	Implement operational improvements along Olympic Boulevard between I-405 and Purdue Avenue (to the west of I-405). Improvements could include the following: Convert one westbound travel lane into an eastbound travel lane just west of I-405 by 1) In the westbound direction, provide two travel lanes (three during peak periods with on-street parking restrictions); 2) In the eastbound direction, provide three travel lanes (four during peak periods with on-street parking restrictions); and 3) Remove eastbound and westbound left-turn lanes at Beloit Avenue and eastbound center turn lane at Cotner Avenue to provide additional through lane capacity.	$2.7M		
	Bundy Drive / I-10 Ramp Improvement	Operational improvements at the I-10 ramp connections to Bundy Drive.	$10M		
	Neighborhood Protection Program	The objective of this Program is to discourage through-traffic from using local streets and to encourage, instead, use of the arterial street system. The Program will establish measures to make the primary arterial routes more attractive and local routes less attractive for through-traffic, and establish measures designed to facilitate vehicular and pedestrian egress from local streets in the adjacent neighborhoods onto the primary arterial street and highways system.	$3M		
Transit	Sepulveda BRT	Center Running BRT on Sepulveda Boulevard from Wilshire Boulevard to 96th Street Transit Station.	$90M	$139	59%
	Santa Monica BRT	Curb-running peak hour bus-only lanes on Santa Monica Boulevard from the border of the City of Santa Monica to the border of the City of Beverly Hills; BRT system includes enhanced bus stop amenities.	$17M		
	Olympic Rapid Bus Enhancements	Olympic Boulevard - Extension of the Rapid Bus service from its current terminus in Century City to the future Metro Exposition Line station at Westwood Boulevard.	$9M		
	Pico Rapid Bus Enhancements	Pico Boulevard – Improve existing Rapid Bus service through increased frequency, stop improvements, and construction of a new rapid stop in Century City.	$8M		
	Venice Rapid Bus Enhancements	Venice Boulevard – Rebrand existing Rapid Bus service to serve Venice Beach area, increased service frequency, implement stop improvements.	$6M		
	Circulator/Shuttle Service	Circulator bus/shuttle to connect activity centers to major transit stations, such as: • Sawtelle service between Wilshire Blvd and the Expo Sepulveda Station • Bundy service between Brentwood, the Expo Bundy Station, and National Blvd • Palms Circulator to connect to Expo Station • Century City Circulator to connect to Expo Station	$9.4M		
Auto-Trip Reduction	ExpressPark	Implement an on-street intelligent parking program that includes vehicle sensors, dynamic demand-based pricing and a real-time parking guidance system to reduce VMT, congestion and to improve flow for cars/buses.	$1M	$8	3%
	Strategic Parking Program	Implement a Westside parking program and update parking requirements to reflect mixed-use developments, shared parking opportunities, and parking needs at developments adjacent to major transit stations.	$1M		
	Rideshare Toolkit	The Toolkit would develop an online Transportation Demand Management (TDM) Toolkit with information for transit users, cyclists, and pedestrians as well as ridesharing. It would include incentive programs for employers, schools, and residents. Additionally, it would be specific to City businesses, employees, and visitors and would integrate traveler information. It would also include carpooling/vanpooling and alternative work schedules.	$2M		
	Parking Utilization Improvements & Reduced Congestion	Develop an on-line system for real-time parking information, including GIS database and mapping. Improve parking and wayfinding and guidance throughout commercial areas.	$2M		
	Transportation Demand Management (TDM) Program	The program would provide start-up costs for Transportation Management Organizations/Associations (TMOs/TMAs). It would also provide guidance and implementation of a TDM program.	$2M		
	Administrative Costs	Estimated at 5% of total project costs.	$11,799,009	$235,980,181	
		Total		$247,779,190	

Funding Assumptions for WLA TIMP & CTCSP Specific Plan Project Lists
WLA TIMP
Fee program can fund up to $10 million for Mobility Hubs
Streetscape Plans: Sample cost estimates provided
Fee program can fund up to $2 million for Westwood Boulevard Complete Street
NEN: Sample cost estimates provided
Cycle Tracks: Sample cycle track cost estimates provided
Fee program can fund up to $1 million for Sidewalk Network & Pedestrian Enhancements
Fee program can fund up to $1.5 million for Bicycle Transit Centers
Fee program can fund up to $2 million for Bikesharing
Fee program can fund up to $1 million for Exposition Light Railway Greenway Improvement Project
Fee program can fund up to $4 million for CMP Monitoring Stations
Fee program can fund up to $4 million for ITS Corridor & Signal Upgrades
Fee program can fund up to $4.5 million for Major Intersection Improvements
Fee program can fund up to $2.5 million for Sunset Boulevard Operations
Fee program can fund up to $2.7 million for Olympic Boulevard Operations
Fee program can fund up to $10 million for Bundy Drive / I-10 Ramp Improvement
Fee program can fund up to $3 million for Neighborhood Protection Program
Transit Improvements: Cost estimates provided
Fee program can fund up to $1 million for ExpressPark
Fee program can fund up to $1 million for Strategic Parking Program
Fee program can fund up to $2 million for Rideshare Toolkit
Fee program can fund up to $2 million for Parking Utilization Improvements & Reduced Congestion
Fee program can fund up to $2 million for Transportation Demand Management (TDM) Program
CTCSP
Fee program can fund up to $10 million for Enhancing Pedestrian Access to Major Transit Stations
Fee program can fund up to $10 million for Mobility Hubs
Streetscape Plans: Sample cost estimates provided
Fee program can fund up to $5 million for other bicycle improvements in MP 2035/City Bike Plan
Fee program can fund up to $2 million for Sidewalk Network & Pedestrian Enhancements
Fee program can fund up to $1.5 million for Bicycle Transit Centers
Fee program can fund up to $2 million for Bikesharing
Fee program can fund up to $5 million for CMP Monitoring Stations
Fee program can fund up to $5 million for ITS Signal Upgrades
Fee program can fund up to $5 million for Major Intersection Improvements
Fee program can fund up to $3 million for Culver Boulevard Corridor
Lincoln Bridge costs based on Initial Feasibility Study, STV, 2013
Fee program can fund up to $5 million for Access Improvements to LAX
Fee program can fund up to $3 million for Neighborhood Protection Program
Transit Improvements: Cost estimates provided
Fee program can fund up to $1 million for ExpressPark
Fee program can fund up to $1 million for Strategic Parking Program
Fee program can fund up to $2 million for Rideshare Toolkit
Fee program can fund up to $2 million for Parking Utilization Improvements & Reduced Congestion
Fee program can fund up to $2 million for Transportation Demand Management (TDM) Program

MAIN WORKSHEET - BUILD ALTERNATIVE

Los Angeles Department of Transportation (LADOT) — Today's Date: 7/17/13

Westside Mobility Plan, Los Angeles, CA — Yr of Base Year $: 2012

Sepulveda Boulevard - Mixed Traffic from Wilshire/Westwood to Wilshire/Veteran (LA and West LA Specific Plan) — Yr of Revenue Ops: -

	Units	Unit Price	Quantity	Base Year Dollars w/o Contingency (X000)	Allocated Contingency	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)			**0.0**	**0**	**#DIV/0!**	**0**	**0**
10.01 Guideway: At-grade exclusive right-of-way							0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	RM	1,000	0.0	0	25%	0	0
10.03 Guideway: At-grade in mixed traffic							0
10.04 Guideway: Aerial structure							0
10.05 Guideway: Built-up fill							0
10.06 Guideway: Underground cut & cover	RM	32,000	0.0	0	30%	0	0
10.07 Guideway: Underground tunnel							0
10.08 Guideway: Retained cut or fill							0
10.09 Track: Direct fixation (Assume SCC 10.04 & 10.07)							0
10.10 Track: Embedded							0
10.11 Track: Ballasted (Assume SCC 10.01 & 10.02)							0
10.12 Track: Special (switches, turnouts)							0
10.13 Track: Vibration and noise dampening							0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	**0**	**0**	**1**	**800**	**25%**	**200**	**1,000**
20.01 At-grade station, stop, shelter, mall, platform	STA	800	1	800	25%	200	1,000
20.02 Aerial station, stop, shelter, mall, terminal, platform							0
20.03 Underground station, stop, shelter, mall, terminal, platform	STA	75,000	0	0	25%	0	0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.							0
20.05 Joint development							0
20.06 Automobile parking multi-story structure	SPC	20	0	0	25%	0	0
20.07 Elevators, escalators (Assume 4 per Aerial STA, 10 per Tunnel STA)							0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	**0**	**0**		**0**		**0**	**0**
30.01 Administration Building: Office, sales, storage, revenue counting							0
30.02 Light Maintenance Facility	EA	5,000	0	0	25%	0	0
30.03 Heavy Maintenance Facility							0
30.04 Storage or Maintenance of Way Building							0
30.05 Yard and Yard Track							0
40 SITEWORK & SPECIAL CONDITIONS	**0**	**0**		**383**	**25%**	**96**	**478**
40.01 Demolition, Clearing, Earthwork	RM	600	0.0	0	25%	0	0
40.02 Site Utilities, Utility Relocation	RM	1,200	0.0	0	30%	0	0
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	RM	760	0.0	0	30%	0	0
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	RM	110	0.0	0	30%	0	0
40.05 Site structures including retaining walls, sound walls							0
40.06 Pedestrian / bike access and accommodation, landscaping	SCC 10-50	0.5%		8	25%	2	9
40.07 Automobile, bus, van accessways including roads, parking lots	SPC	7	0	0	25%	0	0
40.08 Temporary Facilities and other indirect costs during construction	SCC 10-50	25%		375	25%	94	469
50 SYSTEMS	**0**	**0**		**700**	**25%**	**175**	**875**
50.01 Train control and signals							0
50.02 Traffic signals and crossing protection	RM (AG)	2,000	0.0	0	25%	0	0
50.03 Traction power supply: substations							0
50.04 Traction power distribution: catenary and third rail							0
50.05 Communications	RM	1,100	0.0	0	25%	0	0
50.06 Fare collection system and equipment	STA	700	1	700	25%	175	875
50.07 Central Control							0
Construction Subtotal (10 - 50)	**0**	**0**		**1,883**	**25%**	**471**	**2,353**
60 ROW, LAND, EXISTING IMPROVEMENTS	**0**	**0**		**188**	**30%**	**56**	**245**
60.01 Purchase or lease of real estate	SCC 10-50	10%		188	30%	56	245
60.02 Relocation of existing households and businesses							0
70 VEHICLES (number)	**0**	**0**	**0**	**29**	**5%**	**1**	**31**
70.01 Light Rail							0
70.02 Heavy Rail							0
70.03 Commuter Rail							0
70.04 Bus (60' Articulated Bus)	VEH	710	0.0	27	5%	1	28
70.05 Bus (40' Bus)	VEH	470	0	0	5%	0	0
70.06 Non-revenue vehicles							0
70.07 Spare parts	SCC 70	10%		3	5%	0	3
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	**0**	**33%**		**621**	**15%**	**93**	**714**
80.01 Preliminary Engineering	SCC 10-50	3%		56	15%	8	65
80.02 Final Design	SCC 10-50	7%		132	15%	20	152
80.03 Project Management for Design and Construction	SCC 10-50	10%		188	15%	28	216
80.04 Construction Administration & Management	SCC 10-50	5%		94	15%	14	108
80.05 Professional Liability and other Non-Construction Insurance	SCC 10-50	0%		0	15%	0	0
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	SCC 10-50	1%		19	15%	3	22
80.07 Surveys, Testing, Investigation, Inspection	SCC 10-50	2%		38	15%	6	43
80.08 Start up	SCC 10-50	5%		94	15%	14	108
Subtotal (10 - 80)	**0**	**0**		**2,721**	**23%**	**622**	**3,343**
90 UNALLOCATED CONTINGENCY	SCC 10-80	20%					**669**
Subtotal (10 - 90)	**0**	**0**					**4,012**
100 FINANCE CHARGES							**0**
Total Project Cost (10 - 100)	**0**	**0**					**4,012**

MAIN WORKSHEET - BUILD ALTERNATIVE

Los Angeles Department of Transportation (LADOT)

Westside Mobility Plan, Los Angeles, CA

Sepulveda Boulevard - All-Day Center-Running Bus-Only Lanes from Veteran Park to Venice (LA and West LA Specific Plan)

Today's Date 7/17/13

Yr of Base Year $ 2012

Yr of Revenue Ops -

	Units	Unit Price	Quantity	Base Year Dollars w/o Contingency (X000)	Allocated Contingency	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)			**3.4**	**3,400**	**25%**	**850**	**4,250**
10.01 Guideway: At-grade exclusive right-of-way							0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	RM	1,000	3.4	3,400	25%	850	4,250
10.03 Guideway: At-grade in mixed traffic							0
10.04 Guideway: Aerial structure							0
10.05 Guideway: Built-up fill							0
10.06 Guideway: Underground cut & cover	RM	32,000	0.0	0	30%	0	0
10.07 Guideway: Underground tunnel							0
10.08 Guideway: Retained cut or fill							0
10.09 Track: Direct fixation (Assume SCC 10.04 & 10.07)							0
10.10 Track: Embedded							0
10.11 Track: Ballasted (Assume SCC 10.01 & 10.02)							0
10.12 Track: Special (switches, turnouts)							0
10.13 Track: Vibration and noise dampening							0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	**0**	**0**	**6**	**4,800**	**25%**	**1,200**	**6,000**
20.01 At-grade station, stop, shelter, mall, platform	STA	800	6	4,800	25%	1,200	6,000
20.02 Aerial station, stop, shelter, mall, terminal, platform							0
20.03 Underground station, stop, shelter, mall, terminal, platform	STA	75,000	0	0	25%	0	0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.							0
20.05 Joint development							0
20.06 Automobile parking multi-story structure	SPC	20	0	0	25%	0	0
20.07 Elevators, escalators (Assume 4 per Aerial STA, 10 per Tunnel STA)							0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	**0**	**0**		**0**		**0**	**0**
30.01 Administration Building: Office, sales, storage, revenue counting							0
30.02 Light Maintenance Facility	EA	5,000	0	0	25%	0	0
30.03 Heavy Maintenance Facility							0
30.04 Storage or Maintenance of Way Building							0
30.05 Yard and Yard Track							0
40 SITEWORK & SPECIAL CONDITIONS	**0**	**0**		**17,243**	**27%**	**4,663**	**21,905**
40.01 Demolition, Clearing, Earthwork	RM	600	3.4	2,040	25%	510	2,550
40.02 Site Utilities, Utility Relocation	RM	1,200	3.4	4,080	30%	1,224	5,304
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	RM	760	3.4	2,584	30%	775	3,359
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	RM	110	3.4	374	30%	112	486
40.05 Site structures including retaining walls, sound walls							0
40.06 Pedestrian / bike access and accommodation, landscaping	SCC 10-50	0.5%		160	25%	40	200
40.07 Automobile, bus, van accessways including roads, parking lots	SPC	7	0	0	25%	0	0
40.08 Temporary Facilities and other indirect costs during construction	SCC 10-50	25%		8,005	25%	2,001	10,006
50 SYSTEMS	**0**	**0**		**14,740**	**25%**	**3,685**	**18,425**
50.01 Train control and signals							0
50.02 Traffic signals and crossing protection	RM (AG)	2,000	3.4	6,800	25%	1,700	8,500
50.03 Traction power supply: substations							0
50.04 Traction power distribution: catenary and third rail							0
50.05 Communications	RM	1,100	3.4	3,740	25%	935	4,675
50.06 Fare collection system and equipment	STA	700	6	4,200	25%	1,050	5,250
50.07 Central Control							0
Construction Subtotal (10 - 50)	**0**	**0**		**40,183**	**26%**	**10,398**	**50,580**
60 ROW, LAND, EXISTING IMPROVEMENTS	**0**	**0**		**4,018**	**30%**	**1,205**	**5,224**
60.01 Purchase or lease of real estate	SCC 10-50	10%		4,018	30%	1,205	5,224
60.02 Relocation of existing households and businesses							0
70 VEHICLES (number)	**0**	**0**	**1**	**496**	**5%**	**25**	**521**
70.01 Light Rail							0
70.02 Heavy Rail							0
70.03 Commuter Rail							0
70.04 Bus (60' Articulated Bus)	VEH	710	0.6	451	5%	23	474
70.05 Bus (40' Bus)	VEH	470	0	0	5%	0	0
70.06 Non-revenue vehicles							0
70.07 Spare parts	SCC 70	10%		45	5%	2	47
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	**0**	**33%**		**13,260**	**15%**	**1,989**	**15,249**
80.01 Preliminary Engineering	SCC 10-50	3%		1,205	15%	181	1,386
80.02 Final Design	SCC 10-50	7%		2,813	15%	422	3,235
80.03 Project Management for Design and Construction	SCC 10-50	10%		4,018	15%	603	4,621
80.04 Construction Administration & Management	SCC 10-50	5%		2,009	15%	301	2,310
80.05 Professional Liability and other Non-Construction Insurance	SCC 10-50	0%		0	15%	0	0
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	SCC 10-50	1%		402	15%	60	462
80.07 Surveys, Testing, Investigation, Inspection	SCC 10-50	2%		804	15%	121	924
80.08 Start up	SCC 10-50	5%		2,009	15%	301	2,310
Subtotal (10 - 80)	**0**	**0**		**57,958**	**23%**	**13,617**	**71,574**
90 UNALLOCATED CONTINGENCY	SCC 10-80	20%					**14,315**
Subtotal (10 - 90)	**0**	**0**					**85,889**
100 FINANCE CHARGES							**0**
Total Project Cost (10 - 100)	**0**	**0**					**85,889**

MAIN WORKSHEET - BUILD ALTERNATIVE

Los Angeles Department of Transportation (LADOT) | Today's Date: 7/17/13

Westside Mobility Plan, Los Angeles, CA | Yr of Base Year $: 2012

Santa Monica Boulevard - Peak-Hour Bus-Only Lanes (with mixed traffic) from Moreno/Heath to Centinela (LA and West LA Specific Plan) | Yr of Revenue Ops: -

	Units	Unit Price	Quantity	Base Year Dollars w/o Contingency (X000)	Allocated Contingency	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)			**1.7**	**1,700**	**25%**	**425**	**2,125**
10.01 Guideway: At-grade exclusive right-of-way							0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	RM	1,000	1.7	1,700	25%	425	2,125
10.03 Guideway: At-grade in mixed traffic							0
10.04 Guideway: Aerial structure							0
10.05 Guideway: Built-up fill							0
10.06 Guideway: Underground cut & cover							0
10.07 Guideway: Underground tunnel							0
10.08 Guideway: Retained cut or fill							0
10.09 Track: Direct fixation (Assume SCC 10.04 & 10.07)							0
10.10 Track: Embedded							0
10.11 Track: Ballasted (Assume SCC 10.01 & 10.02)							0
10.12 Track: Special (switches, turnouts)							0
10.13 Track: Vibration and noise dampening							0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	**0**	**0**	**4**	**2,000**	**25%**	**500**	**2,500**
20.01 At-grade station, stop, shelter, mall, platform	STA	500	4	2,000	25%	500	2,500
20.02 Aerial station, stop, shelter, mall, terminal, platform							0
20.03 Underground station, stop, shelter, mall, terminal, platform	STA	75,000	0	0	25%	0	0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.							0
20.05 Joint development							0
20.06 Automobile parking multi-story structure	SPC	20	0	0	25%	0	0
20.07 Elevators, escalators (Assume 4 per Aerial STA, 10 per Tunnel STA)							0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	**0**	**0**		**0**		**0**	**0**
30.01 Administration Building: Office, sales, storage, revenue counting							0
30.02 Light Maintenance Facility	EA	5,000	0	0	25%	0	0
30.03 Heavy Maintenance Facility							0
30.04 Storage or Maintenance of Way Building							0
30.05 Yard and Yard Track							0
40 SITEWORK & SPECIAL CONDITIONS	**0**	**0**		**3,732**	**28%**	**1,038**	**4,770**
40.01 Demolition, Clearing, Earthwork	RM	450	1.7	765	25%	191	956
40.02 Site Utilities, Utility Relocation	RM	800	1.7	1,360	30%	408	1,768
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	RM	380	1.7	646	30%	194	840
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	RM	55	1.7	94	30%	28	122
40.05 Site structures including retaining walls, sound walls							0
40.06 Pedestrian / bike access and accommodation, landscaping	SCC 10-50	0.5%		41	25%	10	52
40.07 Automobile, bus, van accessways including roads, parking lots	SPC	7	0	0	25%	0	0
40.08 Temporary Facilities and other indirect costs during construction	SCC 10-50	10%		826	25%	207	1,033
50 SYSTEMS	**0**	**0**		**1,700**	**25%**	**425**	**2,125**
50.01 Train control and signals							0
50.02 Traffic signals and crossing protection	RM (AG)	1,000	1.7	1,700	25%	425	2,125
50.03 Traction power supply: substations							0
50.04 Traction power distribution: catenary and third rail							0
50.05 Communications							0
50.06 Fare collection system and equipment	STA	700	0	0	25%	0	0
50.07 Central Control							0
Construction Subtotal (10 - 50)	**0**	**0**		**9,132**	**26%**	**2,388**	**11,520**
60 ROW, LAND, EXISTING IMPROVEMENTS	**0**	**0**		**0**	**0%**	**0**	**0**
60.01 Purchase or lease of real estate	SCC 10-50	0%		0	30%	0	0
60.02 Relocation of existing households and businesses							0
70 VEHICLES (number)	**0**	**0**	**0**	**0**		**0**	**0**
70.01 Light Rail							0
70.02 Heavy Rail							0
70.03 Commuter Rail							0
70.04 Bus (60' Articulated Bus)	VEH	710	0	0	5%	0	0
70.05 Bus (40' Bus)	VEH	470	0	0	5%	0	0
70.06 Non-revenue vehicles							0
70.07 Spare parts	SCC 70	10%		0	5%	0	0
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	**0**	**33%**		**3,014**	**15%**	**452**	**3,466**
80.01 Preliminary Engineering	SCC 10-50	3%		274	15%	41	315
80.02 Final Design	SCC 10-50	7%		639	15%	96	735
80.03 Project Management for Design and Construction	SCC 10-50	10%		913	15%	137	1,050
80.04 Construction Administration & Management	SCC 10-50	5%		457	15%	68	525
80.05 Professional Liability and other Non-Construction Insurance	SCC 10-50	0%		0	15%	0	0
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	SCC 10-50	1%		91	15%	14	105
80.07 Surveys, Testing, Investigation, Inspection	SCC 10-50	2%		183	15%	27	210
80.08 Start up	SCC 10-50	5%		457	15%	68	525
Subtotal (10 - 80)	**0**	**0**		**12,146**	**23%**	**2,840**	**14,986**
90 UNALLOCATED CONTINGENCY	SCC 10-80	15%					**2,248**
Subtotal (10 - 90)	**0**	**0**					**17,234**
100 FINANCE CHARGES							**0**
Total Project Cost (10 - 100)	**0**	**0**					**17,234**

MAIN WORKSHEET - BUILD ALTERNATIVE

Los Angeles Department of Transportation (LADOT) — Today's Date: 7/17/13

Westside Mobility Plan, Los Angeles, CA — Yr of Base Year $: 2012

Olympic Boulevard - Rapid Extension from Century City to Westwood/Expo (LA and West LA Specific Plan) — Yr of Revenue Ops: -

	Units	Unit Price	Quantity	Base Year Dollars w/o Contingency (X000)	Allocated Contingency	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)			**0.0**	**0**		**0**	**0**
10.01 Guideway: At-grade exclusive right-of-way							0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	RM	1,000	0.0	0	25%	0	0
10.03 Guideway: At-grade in mixed traffic							0
10.04 Guideway: Aerial structure							0
10.05 Guideway: Built-up fill							0
10.06 Guideway: Underground cut & cover	RM	32,000	0.0	0	30%	0	0
10.07 Guideway: Underground tunnel							0
10.08 Guideway: Retained cut or fill							0
10.09 Track: Direct fixation (Assume SCC 10.04 & 10.07)							0
10.10 Track: Embedded							0
10.11 Track: Ballasted (Assume SCC 10.01 & 10.02)							0
10.12 Track: Special (switches, turnouts)							0
10.13 Track: Vibration and noise dampening							0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	**0**	**0**	**4**	**2,000**	**25%**	**500**	**2,500**
20.01 At-grade station, stop, shelter, mall, platform	STA	500	4	2,000	25%	500	2,500
20.02 Aerial station, stop, shelter, mall, terminal, platform							0
20.03 Underground station, stop, shelter, mall, terminal, platform	STA	75,000	0	0	25%	0	0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.							0
20.05 Joint development							0
20.06 Automobile parking multi-story structure	SPC	20	0	0	25%	0	0
20.07 Elevators, escalators (Assume 4 per Aerial STA, 10 per Tunnel STA)							0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	**0**	**0**		**0**		**0**	**0**
30.01 Administration Building: Office, sales, storage, revenue counting							0
30.02 Light Maintenance Facility	EA	5,000	0	0	25%	0	0
30.03 Heavy Maintenance Facility							0
30.04 Storage or Maintenance of Way Building							0
30.05 Yard and Yard Track							0
40 SITEWORK & SPECIAL CONDITIONS	**0**	**0**		**210**	**25%**	**53**	**263**
40.01 Demolition, Clearing, Earthwork	RM	450	0.0	0	25%	0	0
40.02 Site Utilities, Utility Relocation	RM	800	0.0	0	30%	0	0
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	RM	380	0.0	0	30%	0	0
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	RM	55	0.0	0	30%	0	0
40.05 Site structures including retaining walls, sound walls							0
40.06 Pedestrian / bike access and accommodation, landscaping	SCC 10-50	0.5%		10	25%	3	13
40.07 Automobile, bus, van accessways including roads, parking lots	SPC	7	0	0	25%	0	0
40.08 Temporary Facilities and other indirect costs during construction	SCC 10-50	10%		200	25%	50	250
50 SYSTEMS	**0**	**0**		**0**		**0**	**0**
50.01 Train control and signals							0
50.02 Traffic signals and crossing protection	RM (AG)	1,000	0.0	0	25%	0	0
50.03 Traction power supply: substations							0
50.04 Traction power distribution: catenary and third rail							0
50.05 Communications							0
50.06 Fare collection system and equipment	STA	700	0	0	25%	0	0
50.07 Central Control							0
Construction Subtotal (10 - 50)	**0**	**0**		**2,210**	**25%**	**553**	**2,763**
60 ROW, LAND, EXISTING IMPROVEMENTS	**0**	**0**		**66**	**30%**	**20**	**86**
60.01 Purchase or lease of real estate	SCC 10-50	3%		66	30%	20	86
60.02 Relocation of existing households and businesses							0
70 VEHICLES (number)	**0**	**0**	**5**	**3,906**	**5%**	**195**	**4,101**
70.01 Light Rail							0
70.02 Heavy Rail							0
70.03 Commuter Rail							0
70.04 Bus (60' Articulated Bus)	VEH	710	5	3,551	5%	178	3,728
70.05 Bus (40' Bus)	VEH	470	0	0	5%	0	0
70.06 Non-revenue vehicles							0
70.07 Spare parts	SCC 70	10%		355	5%	18	373
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	**0**	**33%**		**729**	**15%**	**109**	**839**
80.01 Preliminary Engineering	SCC 10-50	3%		66	15%	10	76
80.02 Final Design	SCC 10-50	7%		155	15%	23	178
80.03 Project Management for Design and Construction	SCC 10-50	10%		221	15%	33	254
80.04 Construction Administration & Management	SCC 10-50	5%		111	15%	17	127
80.05 Professional Liability and other Non-Construction Insurance	SCC 10-50	0%		0	15%	0	0
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	SCC 10-50	1%		22	15%	3	25
80.07 Surveys, Testing, Investigation, Inspection	SCC 10-50	2%		44	15%	7	51
80.08 Start up	SCC 10-50	5%		111	15%	17	127
Subtotal (10 - 80)	**0**	**0**		**6,911**	**13%**	**877**	**7,788**
90 UNALLOCATED CONTINGENCY	SCC 10-80	15%					**1,168**
Subtotal (10 - 90)	**0**	**0**					**8,956**
100 FINANCE CHARGES							**0**
Total Project Cost (10 - 100)	**0**	**0**					**8,956**

MAIN WORKSHEET - BUILD ALTERNATIVE

Los Angeles Department of Transportation (LADOT) — Today's Date: 7/17/13

Westside Mobility Plan, Los Angeles, CA — Yr of Base Year $: 2012

Pico Boulevard - Rapid Improvements from Beverwil to Centinela (LA and West LA Specific Plan) — Yr of Revenue Ops: -

	Units	Unit Price	Quantity	Base Year Dollars w/o Contingency (X000)	Allocated Contingency	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)			**0.0**	**0**		**0**	**0**
10.01 Guideway: At-grade exclusive right-of-way							0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	RM	1,000	0.0	0	25%	0	0
10.03 Guideway: At-grade in mixed traffic							0
10.04 Guideway: Aerial structure							0
10.05 Guideway: Built-up fill							0
10.06 Guideway: Underground cut & cover	RM	32,000	0.0	0	30%	0	0
10.07 Guideway: Underground tunnel							0
10.08 Guideway: Retained cut or fill							0
10.09 Track: Direct fixation (Assume SCC 10.04 & 10.07)							0
10.10 Track: Embedded							0
10.11 Track: Ballasted (Assume SCC 10.01 & 10.02)							0
10.12 Track: Special (switches, turnouts)							0
10.13 Track: Vibration and noise dampening							0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	**0**	**0**	**5**	**2,500**	**25%**	**625**	**3,125**
20.01 At-grade station, stop, shelter, mall, platform	STA	500	5	2,500	25%	625	3,125
20.02 Aerial station, stop, shelter, mall, terminal, platform							0
20.03 Underground station, stop, shelter, mall, terminal, platform	STA	75,000	0	0	25%	0	0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.							0
20.05 Joint development							0
20.06 Automobile parking multi-story structure	SPC	20	0	0	25%	0	0
20.07 Elevators, escalators (Assume 4 per Aerial STA, 10 per Tunnel STA)							0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	**0**	**0**		**0**		**0**	**0**
30.01 Administration Building: Office, sales, storage, revenue counting							0
30.02 Light Maintenance Facility	EA	5,000	0	0	25%	0	0
30.03 Heavy Maintenance Facility							0
30.04 Storage or Maintenance of Way Building							0
30.05 Yard and Yard Track							0
40 SITEWORK & SPECIAL CONDITIONS	**0**	**0**		**263**	**25%**	**66**	**328**
40.01 Demolition, Clearing, Earthwork	RM	450	0.0	0	25%	0	0
40.02 Site Utilities, Utility Relocation	RM	800	0.0	0	30%	0	0
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	RM	380	0.0	0	30%	0	0
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	RM	55	0.0	0	30%	0	0
40.05 Site structures including retaining walls, sound walls	0	0					0
40.06 Pedestrian / bike access and accommodation, landscaping	SCC 10-50	0.5%		13	25%	3	16
40.07 Automobile, bus, van accessways including roads, parking lots	SPC	7	0	0	25%	0	0
40.08 Temporary Facilities and other indirect costs during construction	SCC 10-50	10%		250	25%	63	313
50 SYSTEMS	**0**	**0**		**0**		**0**	**0**
50.01 Train control and signals							0
50.02 Traffic signals and crossing protection	RM (AG)	1,000	0.0	0	25%	0	0
50.03 Traction power supply: substations							0
50.04 Traction power distribution: catenary and third rail							0
50.05 Communications							0
50.06 Fare collection system and equipment	STA	700	0	0	25%	0	0
50.07 Central Control							0
Construction Subtotal (10 - 50)	**0**	**0**		**2,763**	**25%**	**691**	**3,453**
60 ROW, LAND, EXISTING IMPROVEMENTS	**0**	**0**		**83**	**30%**	**25**	**108**
60.01 Purchase or lease of real estate	SCC 10-50	3%		83	30%	25	108
60.02 Relocation of existing households and businesses							0
70 VEHICLES (number)	**0**	**0**	**3**	**2,343**	**5%**	**117**	**2,460**
70.01 Light Rail							0
70.02 Heavy Rail							0
70.03 Commuter Rail							0
70.04 Bus (60' Articulated Bus)	VEH	710	3	2,130	5%	107	2,237
70.05 Bus (40' Bus)	VEH	470	0	0	5%	0	0
70.06 Non-revenue vehicles							0
70.07 Spare parts	SCC 70	10%		213	5%	11	224
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	**0**	**33%**		**912**	**15%**	**137**	**1,048**
80.01 Preliminary Engineering	SCC 10-50	3%		83	15%	12	95
80.02 Final Design	SCC 10-50	7%		193	15%	29	222
80.03 Project Management for Design and Construction	SCC 10-50	10%		276	15%	41	318
80.04 Construction Administration & Management	SCC 10-50	5%		138	15%	21	159
80.05 Professional Liability and other Non-Construction Insurance	SCC 10-50	0%		0	15%	0	0
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	SCC 10-50	1%		28	15%	4	32
80.07 Surveys, Testing, Investigation, Inspection	SCC 10-50	2%		55	15%	8	64
80.08 Start up	SCC 10-50	5%		138	15%	21	159
Subtotal (10 - 80)	**0**	**0**		**6,100**	**16%**	**969**	**7,070**
90 UNALLOCATED CONTINGENCY	SCC 10-80	15%					**1,060**
Subtotal (10 - 90)	**0**	**0**					**8,130**
100 FINANCE CHARGES							**0**
Total Project Cost (10 - 100)	**0**	**0**					**8,130**

MAIN WORKSHEET - BUILD ALTERNATIVE

Los Angeles Department of Transportation (LADOT)

Westside Mobility Plan, Los Angeles, CA

Venice Boulevard - Rapid Improvements from Clarington to Centinela (LA and West LA Specific Plan)

Today's Date 7/17/13

Yr of Base Year $ 2012

Yr of Revenue Ops -

	Units	Unit Price	Quantity	Base Year Dollars w/o Contingency (X000)	Allocated Contingency	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)			**0.0**	**0**		**0**	**0**
10.01 Guideway: At-grade exclusive right-of-way							0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	RM	1,000	0.0	0	25%	0	0
10.03 Guideway: At-grade in mixed traffic							0
10.04 Guideway: Aerial structure							0
10.05 Guideway: Built-up fill							0
10.06 Guideway: Underground cut & cover	RM	32,000	0.0	0	30%	0	0
10.07 Guideway: Underground tunnel							0
10.08 Guideway: Retained cut or fill							0
10.09 Track: Direct fixation (Assume SCC 10.04 & 10.07)							0
10.10 Track: Embedded							0
10.11 Track: Ballasted (Assume SCC 10.01 & 10.02)							0
10.12 Track: Special (switches, turnouts)							0
10.13 Track: Vibration and noise dampening							0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	**0**	**0**	**5**	**2,500**	**25%**	**625**	**3,125**
20.01 At-grade station, stop, shelter, mall, platform	STA	500	5	2,500	25%	625	3,125
20.02 Aerial station, stop, shelter, mall, terminal, platform							0
20.03 Underground station, stop, shelter, mall, terminal, platform	STA	75,000	0	0	25%	0	0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.							0
20.05 Joint development							0
20.06 Automobile parking multi-story structure	SPC	20	0	0	25%	0	0
20.07 Elevators, escalators (Assume 4 per Aerial STA, 10 per Tunnel STA)							0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	**0**	**0**		**0**		**0**	**0**
30.01 Administration Building: Office, sales, storage, revenue counting							0
30.02 Light Maintenance Facility	EA	5,000	0	0	25%	0	0
30.03 Heavy Maintenance Facility							0
30.04 Storage or Maintenance of Way Building							0
30.05 Yard and Yard Track							0
40 SITEWORK & SPECIAL CONDITIONS	**0**	**0**		**263**	**25%**	**66**	**328**
40.01 Demolition, Clearing, Earthwork	RM	450	0.0	0	25%	0	0
40.02 Site Utilities, Utility Relocation	RM	800	0.0	0	30%	0	0
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	RM	380	0.0	0	30%	0	0
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	RM	55	0.0	0	30%	0	0
40.05 Site structures including retaining walls, sound walls							0
40.06 Pedestrian / bike access and accommodation, landscaping	SCC 10-50	0.5%		13	25%	3	16
40.07 Automobile, bus, van accessways including roads, parking lots	SPC	7	0	0	25%	0	0
40.08 Temporary Facilities and other indirect costs during construction	SCC 10-50	10%		250	25%	63	313
50 SYSTEMS	**0**	**0**		**0**		**0**	**0**
50.01 Train control and signals							0
50.02 Traffic signals and crossing protection	RM (AG)	1,000	0.0	0	25%	0	0
50.03 Traction power supply: substations							0
50.04 Traction power distribution: catenary and third rail							0
50.05 Communications							0
50.06 Fare collection system and equipment	STA	700	0	0	25%	0	0
50.07 Central Control							0
Construction Subtotal (10 - 50)	**0**	**0**		**2,763**	**25%**	**691**	**3,453**
60 ROW, LAND, EXISTING IMPROVEMENTS	**0**	**0**		**83**	**30%**	**25**	**108**
60.01 Purchase or lease of real estate	SCC 10-50	3%		83	30%	25	108
60.02 Relocation of existing households and businesses							0
70 VEHICLES (number)	**0**	**0**	**1**	**517**	**5%**	**26**	**543**
70.01 Light Rail							0
70.02 Heavy Rail							0
70.03 Commuter Rail							0
70.04 Bus (60' Articulated Bus)	VEH	710	0	0	5%	0	0
70.05 Bus (40' Bus)	VEH	470	1	470	5%	24	494
70.06 Non-revenue vehicles							0
70.07 Spare parts	SCC 70	10%		47	5%	2	49
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	**0**	**33%**		**912**	**15%**	**137**	**1,048**
80.01 Preliminary Engineering	SCC 10-50	3%		83	15%	12	95
80.02 Final Design	SCC 10-50	7%		193	15%	29	222
80.03 Project Management for Design and Construction	SCC 10-50	10%		276	15%	41	318
80.04 Construction Administration & Management	SCC 10-50	5%		138	15%	21	159
80.05 Professional Liability and other Non-Construction Insurance	SCC 10-50	0%		0	15%	0	0
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	SCC 10-50	1%		28	15%	4	32
80.07 Surveys, Testing, Investigation, Inspection	SCC 10-50	2%		55	15%	8	64
80.08 Start up	SCC 10-50	5%		138	15%	21	159
Subtotal (10 - 80)	**0**	**0**		**4,274**	**21%**	**878**	**5,152**
90 UNALLOCATED CONTINGENCY	SCC 10-80	15%					**773**
Subtotal (10 - 90)	**0**	**0**					**5,925**
100 FINANCE CHARGES							**0**
Total Project Cost (10 - 100)	**0**	**0**					**5,925**

MAIN WORKSHEET - BUILD ALTERNATIVE

Los Angeles Department of Transportation (LADOT)

Westside Mobility Plan, Los Angeles, CA

Sawtelle Boulevard - Local Improvements from Ohio to Expositition Sepulveda Station (LA and West LA Specific Plan)

Today's Date 7/17/13

Yr of Base Year $ 2012

Yr of Revenue Ops -

	Units	Unit Price	Quantity	Base Year Dollars w/o Contingency (X000)	Allocated Contingency	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)			**0.0**	**0**		**0**	**0**
10.01 Guideway: At-grade exclusive right-of-way							0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	RM	1,000	0.0	0	25%	0	0
10.03 Guideway: At-grade in mixed traffic							0
10.04 Guideway: Aerial structure							0
10.05 Guideway: Built-up fill							0
10.06 Guideway: Underground cut & cover	RM	32,000	0.0	0	30%	0	0
10.07 Guideway: Underground tunnel							0
10.08 Guideway: Retained cut or fill							0
10.09 Track: Direct fixation (Assume SCC 10.04 & 10.07)							0
10.10 Track: Embedded							0
10.11 Track: Ballasted (Assume SCC 10.01 & 10.02)							0
10.12 Track: Special (switches, turnouts)							0
10.13 Track: Vibration and noise dampening							0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	**0**	**0**	**7**	**280**	**25%**	**70**	**350**
20.01 At-grade shelter, bench, platform only	STA	40	7	280	25%	70	350
20.02 Aerial station, stop, shelter, mall, terminal, platform							0
20.03 Underground station, stop, shelter, mall, terminal, platform							0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.							0
20.05 Joint development							0
20.06 Automobile parking multi-story structure	SPC	20	0	0	25%	0	0
20.07 Elevators, escalators (Assume 4 per Aerial STA, 10 per Tunnel STA)							0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	**0**	**0**		**0**		**0**	**0**
30.01 Administration Building: Office, sales, storage, revenue counting							0
30.02 Light Maintenance Facility	EA	5,000	0	0	25%	0	0
30.03 Heavy Maintenance Facility							0
30.04 Storage or Maintenance of Way Building							0
30.05 Yard and Yard Track							0
40 SITEWORK & SPECIAL CONDITIONS	**0**	**0**		**0**		**0**	**0**
40.01 Demolition, Clearing, Earthwork	RM	450	0.0	0	25%	0	0
40.02 Site Utilities, Utility Relocation	RM	800	0.0	0	30%	0	0
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	RM	380	0.0	0	30%	0	0
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	RM	55	0.0	0	30%	0	0
40.05 Site structures including retaining walls, sound walls							0
40.06 Pedestrian / bike access and accommodation, landscaping	SCC 10-50	0.5%		0	25%	0	0
40.07 Automobile, bus, van accessways including roads, parking lots	SPC	7	0	0	25%	0	0
40.08 Temporary Facilities and other indirect costs during construction	SCC 10-50	10%		0	25%	0	0
50 SYSTEMS	**0**	**0**		**0**		**0**	**0**
50.01 Train control and signals							0
50.02 Traffic signals and crossing protection	RM (AG)	1,000	0.0	0	25%	0	0
50.03 Traction power supply: substations							0
50.04 Traction power distribution: catenary and third rail							0
50.05 Communications							0
50.06 Fare collection system and equipment	STA	700	0	0	25%	0	0
50.07 Central Control							0
Construction Subtotal (10 - 50)	**0**	**0**		**280**	**25%**	**70**	**350**
60 ROW, LAND, EXISTING IMPROVEMENTS	**0**	**0**		**0**	**0%**	**0**	**0**
60.01 Purchase or lease of real estate	SCC 10-50	3%		0	30%	0	0
60.02 Relocation of existing households and businesses							0
70 VEHICLES (number)	**0**	**0**	**1**	**517**	**5%**	**26**	**543**
70.01 Light Rail							0
70.02 Heavy Rail							0
70.03 Commuter Rail							0
70.04 Bus (60' Articulated Bus)	VEH	710	0	0	5%	0	0
70.05 Bus (40' Bus)	VEH	470	1	470	5%	24	494
70.06 Non-revenue vehicles							0
70.07 Spare parts	SCC 70	10%		47	5%	2	49
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	**0**	**33%**		**0**	**0%**	**0**	**0**
80.01 Preliminary Engineering	SCC 10-50	3%		0	15%	0	0
80.02 Final Design	SCC 10-50	7%		0	15%	0	0
80.03 Project Management for Design and Construction	SCC 10-50	10%		0	15%	0	0
80.04 Construction Administration & Management	SCC 10-50	5%		0	15%	0	0
80.05 Professional Liability and other Non-Construction Insurance	SCC 10-50	0%		0	15%	0	0
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	SCC 10-50	1%		0	15%	0	0
80.07 Surveys, Testing, Investigation, Inspection	SCC 10-50	2%		0	15%	0	0
80.08 Start up	SCC 10-50	5%		0	15%	0	0
Subtotal (10 - 80)	**0**	**0**		**797**	**12%**	**96**	**893**
90 UNALLOCATED CONTINGENCY	SCC 10-80	15%					**134**
Subtotal (10 - 90)	**0**	**0**					**1,027**
100 FINANCE CHARGES							**0**
Total Project Cost (10 - 100)	**0**	**0**					**1,027**

MAIN WORKSHEET - BUILD ALTERNATIVE

Los Angeles Department of Transportation (LADOT) — Today's Date: 7/17/13

Westside Mobility Plan, Los Angeles, CA — Yr of Base Year $: 2012

Bundy Drive - Local Improvements from Wilshire to Santa Monica Airport (LA and West LA Specific Plan) — Yr of Revenue Ops: -

	Units	Unit Price	Quantity	Base Year Dollars w/o Contingency (X000)	Allocated Contingency	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)			**0.0**	**0**		**0**	**0**
10.01 Guideway: At-grade exclusive right-of-way							0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	RM	1,000	0.0	0	25%	0	0
10.03 Guideway: At-grade in mixed traffic							0
10.04 Guideway: Aerial structure							0
10.05 Guideway: Built-up fill							0
10.06 Guideway: Underground cut & cover	RM	32,000	0.0	0	30%	0	0
10.07 Guideway: Underground tunnel							0
10.08 Guideway: Retained cut or fill							0
10.09 Track: Direct fixation (Assume SCC 10.04 & 10.07)							0
10.10 Track: Embedded							0
10.11 Track: Ballasted (Assume SCC 10.01 & 10.02)							0
10.12 Track: Special (switches, turnouts)							0
10.13 Track: Vibration and noise dampening							0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	**0**	**0**	**12**	**480**	**25%**	**120**	**600**
20.01 At-grade shelter, bench, platform only	STA	40	12	480	25%	120	600
20.02 Aerial station, stop, shelter, mall, terminal, platform							0
20.03 Underground station, stop, shelter, mall, terminal, platform							0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.							0
20.05 Joint development							0
20.06 Automobile parking multi-story structure	SPC	20	0	0	25%	0	0
20.07 Elevators, escalators (Assume 4 per Aerial STA, 10 per Tunnel STA)							0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	**0**	**0**		**0**		**0**	**0**
30.01 Administration Building: Office, sales, storage, revenue counting							0
30.02 Light Maintenance Facility	EA	5,000	0	0	25%	0	0
30.03 Heavy Maintenance Facility							0
30.04 Storage or Maintenance of Way Building							0
30.05 Yard and Yard Track							0
40 SITEWORK & SPECIAL CONDITIONS	**0**	**0**		**0**		**0**	**0**
40.01 Demolition, Clearing, Earthwork	RM	450	0.0	0	25%	0	0
40.02 Site Utilities, Utility Relocation	RM	800	0.0	0	30%	0	0
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	RM	380	0.0	0	30%	0	0
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	RM	55	0.0	0	30%	0	0
40.05 Site structures including retaining walls, sound walls							0
40.06 Pedestrian / bike access and accommodation, landscaping	SCC 10-50	0.5%		0	25%	0	0
40.07 Automobile, bus, van accessways including roads, parking lots	SPC	7	0	0	25%	0	0
40.08 Temporary Facilities and other indirect costs during construction	SCC 10-50	10%		0	25%	0	0
50 SYSTEMS	**0**	**0**		**0**		**0**	**0**
50.01 Train control and signals							0
50.02 Traffic signals and crossing protection	RM (AG)	1,000	0.0	0	25%	0	0
50.03 Traction power supply: substations							0
50.04 Traction power distribution: catenary and third rail							0
50.05 Communications							0
50.06 Fare collection system and equipment	STA	700	0	0	25%	0	0
50.07 Central Control							0
Construction Subtotal (10 - 50)	**0**	**0**		**480**	**25%**	**120**	**600**
60 ROW, LAND, EXISTING IMPROVEMENTS	**0**	**0**		**0**	**0%**	**0**	**0**
60.01 Purchase or lease of real estate	SCC 10-50	3%		0	30%	0	0
60.02 Relocation of existing households and businesses							0
70 VEHICLES (number)	**0**	**0**	**0**	**0**		**0**	**0**
70.01 Light Rail							0
70.02 Heavy Rail							0
70.03 Commuter Rail							0
70.04 Bus (60' Articulated Bus)	VEH	710	0	0	5%	0	0
70.05 Bus (40' Bus)	VEH	470	0	0	5%	0	0
70.06 Non-revenue vehicles							0
70.07 Spare parts	SCC 70	10%		0	5%	0	0
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	**0**	**33%**		**0**	**0%**	**0**	**0**
80.01 Preliminary Engineering	SCC 10-50	3%		0	15%	0	0
80.02 Final Design	SCC 10-50	7%		0	15%	0	0
80.03 Project Management for Design and Construction	SCC 10-50	10%		0	15%	0	0
80.04 Construction Administration & Management	SCC 10-50	5%		0	15%	0	0
80.05 Professional Liability and other Non-Construction Insurance	SCC 10-50	0%		0	15%	0	0
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	SCC 10-50	1%		0	15%	0	0
80.07 Surveys, Testing, Investigation, Inspection	SCC 10-50	2%		0	15%	0	0
80.08 Start up	SCC 10-50	5%		0	15%	0	0
Subtotal (10 - 80)	**0**	**0**		**480**	**25%**	**120**	**600**
90 UNALLOCATED CONTINGENCY	SCC 10-80	15%					**90**
Subtotal (10 - 90)	**0**	**0**					**690**
100 FINANCE CHARGES							**0**
Total Project Cost (10 - 100)	**0**	**0**					**690**

MAIN WORKSHEET - BUILD ALTERNATIVE

Los Angeles Department of Transportation (LADOT)

Westside Mobility Plan, Los Angeles, CA

Palms - Circulator (LA and West LA Specific Plan)

Today's Date: 7/17/13

Yr of Base Year $: 2012

Yr of Revenue Ops: -

	Units	Unit Price	Quantity	Base Year Dollars w/o Contingency (X000)	Allocated Contingency	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)			**0.0**	**0**		**0**	**0**
10.01 Guideway: At-grade exclusive right-of-way							0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	RM	1,000	0.0	0	25%	0	0
10.03 Guideway: At-grade in mixed traffic							0
10.04 Guideway: Aerial structure							0
10.05 Guideway: Built-up fill							0
10.06 Guideway: Underground cut & cover	RM	32,000	0.0	0	30%	0	0
10.07 Guideway: Underground tunnel							0
10.08 Guideway: Retained cut or fill							0
10.09 Track: Direct fixation (Assume SCC 10.04 & 10.07)							0
10.10 Track: Embedded							0
10.11 Track: Ballasted (Assume SCC 10.01 & 10.02)							0
10.12 Track: Special (switches, turnouts)							0
10.13 Track: Vibration and noise dampening							0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	**0**	**0**	**12**	**480**	**25%**	**120**	**600**
20.01 At-grade shelter, bench, platform only	STA	40	12	480	25%	120	600
20.02 Aerial station, stop, shelter, mall, terminal, platform							0
20.03 Underground station, stop, shelter, mall, terminal, platform							0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.							0
20.05 Joint development							0
20.06 Automobile parking multi-story structure	SPC	20	0	0	25%	0	0
20.07 Elevators, escalators (Assume 4 per Aerial STA, 10 per Tunnel STA)							0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	**0**	**0**		**0**		**0**	**0**
30.01 Administration Building: Office, sales, storage, revenue counting							0
30.02 Light Maintenance Facility	EA	5,000	0	0	25%	0	0
30.03 Heavy Maintenance Facility							0
30.04 Storage or Maintenance of Way Building							0
30.05 Yard and Yard Track							0
40 SITEWORK & SPECIAL CONDITIONS	**0**	**0**		**0**		**0**	**0**
40.01 Demolition, Clearing, Earthwork	RM	450	0.0	0	25%	0	0
40.02 Site Utilities, Utility Relocation	RM	800	0.0	0	30%	0	0
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	RM	380	0.0	0	30%	0	0
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	RM	55	0.0	0	30%	0	0
40.05 Site structures including retaining walls, sound walls	0	0					0
40.06 Pedestrian / bike access and accommodation, landscaping	SCC 10-50	0.5%		0	25%	0	0
40.07 Automobile, bus, van accessways including roads, parking lots	SPC	7	0	0	25%	0	0
40.08 Temporary Facilities and other indirect costs during construction	SCC 10-50	10%		0	25%	0	0
50 SYSTEMS	**0**	**0**		**0**		**0**	**0**
50.01 Train control and signals							0
50.02 Traffic signals and crossing protection	RM (AG)	1,000	0.0	0	25%	0	0
50.03 Traction power supply: substations							0
50.04 Traction power distribution: catenary and third rail							0
50.05 Communications							0
50.06 Fare collection system and equipment	STA	700	0	0	25%	0	0
50.07 Central Control							0
Construction Subtotal (10 - 50)	**0**	**0**		**480**	**25%**	**120**	**600**
60 ROW, LAND, EXISTING IMPROVEMENTS	**0**	**0**		**0**	**0%**	**0**	**0**
60.01 Purchase or lease of real estate	SCC 10-50	3%		0	30%	0	0
60.02 Relocation of existing households and businesses							0
70 VEHICLES (number)	**0**	**0**	**5**	**2,585**	**5%**	**129**	**2,714**
70.01 Light Rail							0
70.02 Heavy Rail							0
70.03 Commuter Rail							0
70.04 Bus (60' Articulated Bus)	VEH	710	0	0	5%	0	0
70.05 Bus (40' Bus)	VEH	470	5	2,350	5%	118	2,468
70.06 Non-revenue vehicles							0
70.07 Spare parts	SCC 70	10%		235	5%	12	247
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	**0**	**33%**		**0**	**0%**	**0**	**0**
80.01 Preliminary Engineering	SCC 10-50	3%		0	15%	0	0
80.02 Final Design	SCC 10-50	7%		0	15%	0	0
80.03 Project Management for Design and Construction	SCC 10-50	10%		0	15%	0	0
80.04 Construction Administration & Management	SCC 10-50	5%		0	15%	0	0
80.05 Professional Liability and other Non-Construction Insurance	SCC 10-50	0%		0	15%	0	0
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	SCC 10-50	1%		0	15%	0	0
80.07 Surveys, Testing, Investigation, Inspection	SCC 10-50	2%		0	15%	0	0
80.08 Start up	SCC 10-50	5%		0	15%	0	0
Subtotal (10 - 80)	**0**	**0**		**3,065**	**8%**	**249**	**3,314**
90 UNALLOCATED CONTINGENCY	SCC 10-80	15%					**497**
Subtotal (10 - 90)	**0**	**0**					**3,811**
100 FINANCE CHARGES							**0**
Total Project Cost (10 - 100)	**0**	**0**					**3,811**

MAIN WORKSHEET - BUILD ALTERNATIVE

Los Angeles Department of Transportation (LADOT)

Westside Mobility Plan, Los Angeles, CA

Century City - Circulator (LA and West LA Specific Plan)

Today's Date: 7/17/13

Yr of Base Year $: 2012

Yr of Revenue Ops: -

	Units	Unit Price	Quantity	Base Year Dollars w/o Contingency (X000)	Allocated Contingency	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)			**0.0**	**0**		**0**	**0**
10.01 Guideway: At-grade exclusive right-of-way							0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	RM	1,000	0.0	0	25%	0	0
10.03 Guideway: At-grade in mixed traffic							0
10.04 Guideway: Aerial structure							0
10.05 Guideway: Built-up fill							0
10.06 Guideway: Underground cut & cover	RM	32,000	0.0	0	30%	0	0
10.07 Guideway: Underground tunnel							0
10.08 Guideway: Retained cut or fill							0
10.09 Track: Direct fixation (Assume SCC 10.04 & 10.07)							0
10.10 Track: Embedded							0
10.11 Track: Ballasted (Assume SCC 10.01 & 10.02)							0
10.12 Track: Special (switches, turnouts)							0
10.13 Track: Vibration and noise dampening							0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	**0**	**0**	**13**	**520**	**25%**	**130**	**650**
20.01 At-grade shelter, bench, platform only	STA	40	13	520	25%	130	650
20.02 Aerial station, stop, shelter, mall, terminal, platform							0
20.03 Underground station, stop, shelter, mall, terminal, platform							0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.							0
20.05 Joint development							0
20.06 Automobile parking multi-story structure	SPC	20	0	0	25%	0	0
20.07 Elevators, escalators (Assume 4 per Aerial STA, 10 per Tunnel STA)							0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	**0**	**0**		**0**		**0**	**0**
30.01 Administration Building: Office, sales, storage, revenue counting							0
30.02 Light Maintenance Facility	EA	5,000	0	0	25%	0	0
30.03 Heavy Maintenance Facility							0
30.04 Storage or Maintenance of Way Building							0
30.05 Yard and Yard Track							0
40 SITEWORK & SPECIAL CONDITIONS	**0**	**0**		**0**		**0**	**0**
40.01 Demolition, Clearing, Earthwork	RM	450	0.0	0	25%	0	0
40.02 Site Utilities, Utility Relocation	RM	800	0.0	0	30%	0	0
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	RM	380	0.0	0	30%	0	0
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	RM	55	0.0	0	30%	0	0
40.05 Site structures including retaining walls, sound walls							0
40.06 Pedestrian / bike access and accommodation, landscaping	SCC 10-50	0.5%		0	25%	0	0
40.07 Automobile, bus, van accessways including roads, parking lots	SPC	7	0	0	25%	0	0
40.08 Temporary Facilities and other indirect costs during construction	SCC 10-50	10%		0	25%	0	0
50 SYSTEMS	**0**	**0**		**0**		**0**	**0**
50.01 Train control and signals							0
50.02 Traffic signals and crossing protection	RM (AG)	1,000	0.0	0	25%	0	0
50.03 Traction power supply: substations							0
50.04 Traction power distribution: catenary and third rail							0
50.05 Communications							0
50.06 Fare collection system and equipment	STA	700	0	0	25%	0	0
50.07 Central Control							0
Construction Subtotal (10 - 50)	**0**	**0**		**520**	**25%**	**130**	**650**
60 ROW, LAND, EXISTING IMPROVEMENTS	**0**	**0**		**0**	**0%**	**0**	**0**
60.01 Purchase or lease of real estate	SCC 10-50	3%		0	30%	0	0
60.02 Relocation of existing households and businesses							0
70 VEHICLES (number)	**0**	**0**	**5**	**2,585**	**5%**	**129**	**2,714**
70.01 Light Rail							0
70.02 Heavy Rail							0
70.03 Commuter Rail							0
70.04 Bus (60' Articulated Bus)	VEH	710	0	0	5%	0	0
70.05 Bus (40' Bus)	VEH	470	5	2,350	5%	118	2,468
70.06 Non-revenue vehicles							0
70.07 Spare parts	SCC 70	10%		235	5%	12	247
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	**0**	**33%**		**0**	**0%**	**0**	**0**
80.01 Preliminary Engineering	SCC 10-50	3%		0	15%	0	0
80.02 Final Design	SCC 10-50	7%		0	15%	0	0
80.03 Project Management for Design and Construction	SCC 10-50	10%		0	15%	0	0
80.04 Construction Administration & Management	SCC 10-50	5%		0	15%	0	0
80.05 Professional Liability and other Non-Construction Insurance	SCC 10-50	0%		0	15%	0	0
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	SCC 10-50	1%		0	15%	0	0
80.07 Surveys, Testing, Investigation, Inspection	SCC 10-50	2%		0	15%	0	0
80.08 Start up	SCC 10-50	5%		0	15%	0	0
Subtotal (10 - 80)	**0**	**0**		**3,105**	**8%**	**259**	**3,364**
90 UNALLOCATED CONTINGENCY	SCC 10-80	15%					**505**
Subtotal (10 - 90)	**0**	**0**					**3,869**
100 FINANCE CHARGES							**0**
Total Project Cost (10 - 100)	**0**	**0**					**3,869**

Sample Streetscape Projects: Average Cost is $4.25M per mile

The following Streetscape projects are intended to implement the corresponding Streetscape Plans, including changes to the sidewalks and curbs, new trees, landscaping, and medians, restriping of roadways where relevant, and new street furniture (benches, trash receptacles, and bike racks). Option elements such as freeway underpass improvements, standard or enhanced transit shelters, continental crosswalks, midblock crossings, special sidewalk paving, pedestrian lighting, and public art may be added as additional streetscape elements.

	Length (LF)	Length (Miles)	$/mile	$	Points
Bundy Dr Streetscape Improvements	**2,800**	0.53			**36**
Missouri Ave to Exposition Blvd[a]	**1,700**	0.32		**2,989,015**	**30**
Prepare engineering plans for relocating curbs and restriping roadway	1,700	0.32	$420,000	$135,227	1
Relocate and reconstruct curbs, restripe roadway, install street trees, and install street furniture	1,700	0.32	$7,000,000	$2,253,788	23
Relocate utilty poles[d]	N/A	N/A	N/A	$600,000	6
Exposition Blvd to Pico Blvd	**1,000**	0.19		**584,091**	**6**
Repave sidewalks, install street trees, and install street furniture[c]	1,000	0.19	$1,500,000	$284,091	3
Relocate utilty poles[d]	N/A	N/A	N/A	$300,000	3
Olympic Blvd Streetscape Improvements	**3,000**	0.57			**28**
Centinela Ave to Bundy Dr	**1,100**	0.21		**$1,000,000**	**10**
Prepare engineering drawings for new median	1,100	0.21	$420,000	$87,500	1
Repave sidewalks, install street trees, and install street furniture[c]	1,100	0.21	$1,500,000	$312,500	3
Construct median and install landscaping	600	0.11	$5,280,000	$600,000	6
Bundy Dr to Barrington Ave	**1,900**	0.36		**$1,790,909**	**18**
Prepare engineering drawings for new median	1,900	0.36	$420,000	$151,136	2
Repave sidewalks, install street trees, and install street furniture[c]	1,900	0.36	$1,500,000	$539,773	5
Construct median and install landscaping	1,100	0.21	$5,280,000	$1,100,000	11
Sepulveda Blvd Streetscape Improvements[b]	**5,300**	1.00			**88**
Olympic Blvd to Exposition Blvd[a]	**2,000**	0.38		**$3,410,606**	**34**
Prepare engineering plans for relocating curbs and restriping roadway	2,000	0.38	$420,000	$159,091	2
Relocate and reconstruct curbs, restripe roadway, install street trees, and install street furniture	2,000	0.38	$7,000,000	$2,651,515	27
Relocate utilty poles[d]	N/A	N/A	N/A	$600,000	6
Exposition Blvd to National Blvd[a]	**3,300**	0.63		**$5,437,500**	**54**
Prepare engineering plans for relocating curbs and restriping roadway	3,300	0.63	$420,000	$262,500	3
Relocate and reconstruct curbs, restripe roadway, install street trees, and install street furniture	3,300	0.63	$7,000,000	$4,375,000	44
Relocate utilty poles[d]	N/A	N/A	N/A	$800,000	8
National Blvd Streetscape Improvements	**3,500**	0.66			**11**
Castle Heights Ave to Manning Ave	**1,000**	0.19		**$284,091**	**3**
Repave sidewalks, install street trees, and install street furniture[c]	1,000	0.19	$1,500,000	$284,091	3
Palms Blvd to Mentone Ave	**2,500**	0.47		**$767,500**	**8**
Restripe roadway for bike lanes (Palms Blvd to Motor Ave only)	2,400	0.45	$126,000	$57,273	1
Repave sidewalks, install street trees, and install street furniture[c]	2,500	0.47	$1,500,000	$710,227	7
Palms Blvd Streetscape Improvements	**1,700**	0.32			**8**
Motor Ave to National Blvd	**1,700**	0.32		**804,924**	**8**
Install landscaped curb extensions and install street furniture	1,700	0.32	$2,500,000	$804,924	8
Pico Blvd Streetscape Improvements	**11,700**	2.22			**33**
I-405 to Patricia Ave	**6,600**	1.25		**$1,875,000**	**19**
Repave sidewalks, install street trees, and install street furniture[c]	6,600	1.25	$1,500,000	$1,875,000	19
Centinela Ave to I-405	**5,100**			**$1,448,864**	**14**
Repave sidewalks, install street trees, and install street furniture[c]	5,100	0.97	$1,500,000	$1,448,864	14

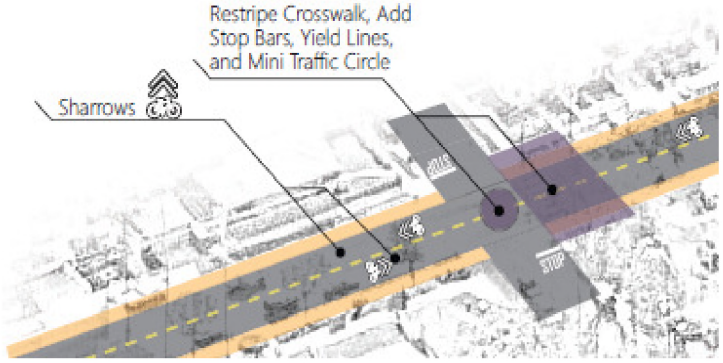
Sources for Cost Information

1. Gruen Associates, 2014
2. LADWP, 2014

Sample NEN Corridors

Assumptions: Average cost per mile developed from LA 2010 Bike Plan Five-Year Implementation Strategy

Location	Distance (mi)	BFS UC	Cost	Contingency	Total
Barrington Ave					
Pearl to Gateway	0.03	$ 300,000	$ 9,000		
Navy to Federal	0.26	$ 300,000	$ 78,000		
		Subtotal	$ 87,000	$ 13,050	$ 100,050
Beethoven					
Palms to City Limits	0.68	$ 300,000	$ 204,000		
City Limits to Panama	0.94	$ 300,000	$ 282,000		
		Subtotal	$ 486,000	$ 72,900	$ 558,900
McLaughlin					
Federal to Woodbine	1.05	$ 300,000	$ 315,000		
			$ 315,000	$ 47,250	$ 362,250
Military Ave					
Pico to Charnock	1.62	$ 300,000	$ 486,000		
Charnock to Venice	0.31	$ 300,000	$ 93,000		
		Subtotal	$ 579,000	$ 86,850	$ 665,850
Veteran Ave					
Massachusetts to Venice	1.12	$ 300,000	$ 336,000		
		Subtotal	$ 336,000	$ 50,400	$ 386,400
TOTAL			$ 1,803,000	$ 270,450	$ 2,073,450



Pedestrian and Bicycle Information Center

Costs for Pedestrian and Bicyclist Infrastructure Improvements

Summary of Study

Improving pedestrian and bicycling facilities is recommended for encouraging more physical activity and to prevent chronic diseases. There are many types of facilities available, and cost is a common concern. Costs for pedestrian and bicycle safety infrastructure vary greatly, which complicates decision making in communities. A recent paper and database provide estimates of infrastructure costs from states and cities across the country. A better understanding of pedestrian and bicycle infrastructure costs will hopefully inspire more funding and enhancement of facilities to encourage more people to walk and bike and do so more safely. The table on the following page is a sample of the larger database that provides cost estimates and cost ranges for a variety of pedestrian and bicycle treatments. **As costs can vary widely from state to state and site to site, depending on many factors, the cost information should be used only for estimating purposes and not necessarily for determining actual bid prices for a specific infrastructure project.**

Source

Bushell, Max; Poole, Bryan; Rodriguez, Daniel; Zegeer, Charles. (July, 2013). *Costs for Pedestrian and Bicyclist Infrastructure Improvements: A Resource for Researchers, Engineers, Planners and the General Public.*
www.walkinginfo.org/download/PedBikeCosts.pdf

Methodology

Bid-letting summaries, price indices and targeted searches were used to acquire 1,747 observations of infrastructure costs from 40 states across the US, mostly from Department of Transportation websites. Costs are updated to 2012 US Dollar equivalents, and include labor, materials, mobilization costs and contractor profits. Extreme outliers were eliminated, as well as costs that did not appear to include complete cost information. Treatments were eliminated if they had less than four observations. In total, costs for 77 facilities were identified. The costs are presented with a median and average price, the minimum/maximum cost, the cost unit, and the number of sources (with the number of observations in parentheses). Costs between $10 and $100 are rounded to the nearest dollar, while costs greater than $100 are rounded to the nearest ten dollar unit. As costs were acquired from various sources, they often varied between states and also depending on the quantity purchased. Generally, the costs per unit (square yard, linear foot, each, etc.) variance depended on the size of the order, with larger quantities usually leading to lower per unit costs.

Why Bicycle and Pedestrian Infrastructure is Needed

Recent socio-economic and cultural trends point to higher demands for walkable and bikeable communities, yet many cities still lack adequate facilities for safe walking and biking. Creating a walkable and bikeable community starts with the built environment: having destinations close to each other; siting schools, parks, and public spaces appropriately; allowing mixed-use developments; having sufficient densities to support transit; creating commercial districts that people can access by bicycle, foot and wheelchair; etc. Most walking trips are less than .5 mi (0.8 km), so having a compact environment is essential. Similarly, while half of all household trips are three miles or less, fewer than 2 percent of those trips are made by bicycle.

The connection between land-use planning and transportation planning is critical to safely and effectively accommodate trips by foot and bicycle. Studies have shown that facilities such as separated paths, bike boxes, sidewalks and benches are associated with enhanced safety and/or more active travel. Through the design or redesign of environments to make walking and biking safer or more pleasant, planners and engineers can help people of all ages get the exercise they need to live longer, healthier lives. Additionally, building a new roadway can cost tens of millions of dollars to construct, with many of the pedestrian and bicycle infrastructure projects extremely low-cost in comparison. The infrastructure costs summarized in this document are intended to aide and encourage improvements to the built environment and better accommodate pedestrians and bicyclists.







Pedestrian and Bicycle Infrastructure Costs in the US: A Sample of Cost Information

Infrastructure Facility	Median	Average	Minimum	Maximum	Cost Unit	Number of Sources (Observations)
Bicycle Locker	$2,140	$2,090	$1,280	$2,680	Each	4 (5)
Bicycle Lane	$89,470	$133,170	$5,360	$536,680	Mile	6 (6)
Bicycle Rack	$540	$660	$64	$3,610	Each	19 (21)
Concrete Sidewalk	$27	$32	$2.09	$410	Linear Foot	46 (164)
Curb and Gutter	$20	$21	$1.05	$120	Linear Foot	16 (108)
Curb Extension/ Choker/ Bulb-Out	$10,150	$13,000	$1,070	$41,170	Each	19(28)
Flashing Beacon	$5,170	$10,010	$360	$59,100	Each	16 (25)
High Visibility Crosswalk	$3,070	$2,540	$600	$5,710	Each	4(4)
Multi-Use Trail - Paved	$261,000	$481,140	$64,710	$4,288,520	Mile	11 (42)
Multi-Use Trail - Unpaved	$83,870	$121,390	$29,520	$412,720	Mile	3 (7)
Pedestrian Crossing	$310	$360	$240	$1,240	Each	4 (6)
Pedestrian Hybrid Beacon	$51,460	$57,680	$21,440	$128,660	Each	9 (9)
Pedestrian Rail	$95	$100	$7.20	$690	Linear Foot	29 (83)
Pedestrian Signal	$980	$1,480	$130	$10,000	Each	22 (33)
Raised Crosswalk	$7,110	$8,170	$1,290	$30,880	Each	14 (14)
Rapid Rectangular Flashing Beacon	$14,160	$22,250	$4,520	$52,310	Each	3 (4)
Shared Lane/Bicycle Marking	$160	$180	$22	$600	Each	15 (39)
Signed Bicycle Route	$27,240	$25,070	$5,360	$64,330	Mile	3 (6)
Speed Bump	$1,670	$1,550	$540	$2,300	Each	4 (4)
Speed Hump	$2,130	$2,640	$690	$6,860	Each	14 (14)
Speed Table	$2,090	$2,400	$2,000	$4,180	Each	5 (5)
Speed Trailer	$9,480	$9,510	$7,000	$12,410	Each	6 (6)
Stop/Yield Signs	$220	$300	$210	$560	Each	4 (4)
Streetlight	$3,600	$4,880	$310	$13,900	Each	12 (17)
Striped Crosswalk	$340	$770	$110	$2,090	Each	8 (8)
Wheelchair Ramp	$740	$810	$89	$3,600	Each	16 (31)

Definitions of infrastructure types and additional costs available in the full version of the paper. Download the full document at: www.walkinginfo.org/download/PedBikeCosts.pdf.

About the Resource

The paper and database were created by the University of North Carolina at Chapel Hill's Highway Safety Research Center (HSRC). The HSRC has been a leading research institute that has helped shape the field of transportation safety. The Center's mission is to improve the safety, security, access, and efficiency of all surface transportation modes through a balanced, interdisciplinary program of research, evaluation and information dissemination.

These resources were prepared for the Federal Highway Administration and supported by the Robert Wood Johnson Foundation through its Active Living Research program. For more information on Active Living Research, visit www.activelivingresearch.org.

Location:	**Lincoln 3 - Jefferson to Fiji**	**Major Intersections:**	**1**
Miles:	**0.56**		

		No.	Item name	Unit	Unit Cost	Quantity	Cost
Removal & Demolition		1	Remove Thermoplastic Stripe	$ 3,696	MILE	3	$ 12,345
		2	Remove Thermoplastic Pavement Marking	$ 2.60	SF	210	$ 546
		3	Remove Median - Small	$ 40	LF	0	$ -
		4	Remove Median - Large	$ 90	LF	0	$ -
		5	Remove - Parking meters (9 per block)	$ 460	EA	0	$ -
		6	Remove - Road Sign	$ 120	EA	20	$ 2,400
Installation	Pavement Markings	7	Cycle Track Paint Infill, per mile at driveways	$ 1,500	MILE	0.56	$ 835
		8	Cycle Track Paint Infill, per intersection	$ 500	EA	1	$ 500
		9	Lane Stripe	$ 5,280	MILE	5	$ 26,454
		10	Bike Lane Stripes: 2 at 4" - 6", per direction	$ 10,560	MILE	1.1	$ 11,757
		11	per direction	$ 5,500	MILE	0	$ -
		12	Class II Thermoplastic Marking, 22 per mile, per direction	$ 5,500	MILE	1.1	$ 6,124
		13	Bus Lane Thermoplastic Marking, 22 per mile	$ 5,500	MILE	1.1	$ 6,124
	Signage	14	Bus Signage (Peak Period or Permanent)	$ 3,000	MILE	0	$ -
		15	Bike Lane Sign (2 per mile, per direction)	$ 300	EA	2	$ 600
		16	Bike Lane Sign (1 per arterial intersection, per direction)	$ 300	EA	2	$ 600
	Streetscape	17	Install Small Buffer Median	$ 264,000	MILE	1	$ 288,930
		18	Install 30' Median	$ 2,112,000	MILE	0	$ -
		19	Streetscape Enhancements & Landscaping			0	$ -
		20	(Placeholder)				$ -

SUBTOTAL		**$ 357,214**
Unallocated Contingency (15%)		**$ 53,582**
TOTAL		**$ 410,796**
	Per Mile check	$ 737,932

Roadway Improvements

2 Qty 2' Median Buffers

Remove Lane Stripes

6

Paint New Lane Stripes

9

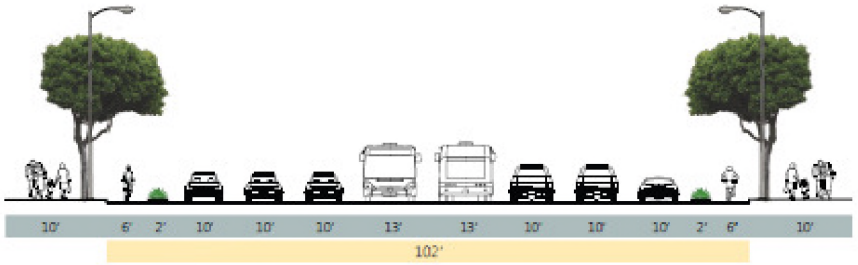
Blocks of parking meters to remove

0 No meters on existing parking; much of corridor has no parking

Parking signs to remove

20 sparse parking signs, many posted on light poles

FUTURE CROSS-SECTION



Assumptions: Admiralty Way to Pacific Ave

Location:	**Washington**	**Major Intersections:**	**2**
Miles:	**0.74**		

		No.	Item name	Unit	Unit Cost	Quantity	Cost
Removal & Demolition		1	Remove Thermoplastic Stripe	$ 3,696	MILE	4	$ 16,468
		2	Remove Thermoplastic Pavement Marking	$ 2.60	SF	0	$ -
		3	Remove Median - Small	$ 40	LF	0	$ -
		4	Remove Median - Large	$ 90	LF	0	$ -
		5	Remove - Parking meters (9 per block)	$ 460	EA	0	$ -
		6	Remove - Road Sign	$ 120	EA	0	$ -
Installation	Pavement Markings	7	Cycle Track Paint Infill, per mile at driveways	$ 1,500	MILE	0.74	$ 1,114
		8	Cycle Track Paint Infill, per intersection	$ 500	EA	2	$ 1,000
		9	Lane Stripe	$ 5,280	MILE	3	$ 15,684
		10	Bike Lane Stripes: 2 at 4" - 6", per direction	$ 10,560	MILE	1.5	$ 15,684
		11	Class III Thermoplastic Marking (Sharrow), 22 per mile min., per direction	$ 5,500	MILE	0	$ -
		12	Class II Thermoplastic Marking, 22 per mile, per direction	$ 5,500	MILE	1.5	$ 8,169
		13	Bus Lane Thermoplastic Marking, 22 per mile	$ 5,500	MILE	0	$ -
	Signage	14	Bus Signage (Peak Period or Permanent)	$ 3,000	MILE	0	$ -
		15	Bike Lane Sign (2 per mile, per direction)	$ 300	EA	2	$ 600
		16	Bike Lane Sign (1 per arterial intersection, per direction)	$ 300	EA	4	$ 1,200
	Streetscape	17	Install Small Buffer Median	$ 264,000	MILE	1	$ 382,100
		18	Install 30' Median	$ 2,112,000	MILE	0	$ -
		19	Streetscape Enhancements & Landscaping			0	$ -
		20	(Placeholder)				$ -

SUBTOTAL	**$**	**442,019**
Unallocated Contingency (15%)	**$**	**66,303**
TOTAL	**$**	**508,322**

Assumptions: Pacific to Centinela

No special provisions made for one-way segments near Pacific

Location:	**Venice - Coastal Corridor Study Area**	**Major Intersections:**	**5**
Miles:	**2.96**		

		No.	Item name	Unit	Unit Cost	Quantity	Cost
Removal & Demolition		1	Remove Thermoplastic Stripe	$ 3,696	MILE	12	$ 43,725
		2	Remove Thermoplastic Pavement Marking	$ 2.60	SF	0	$ -
		3	Remove Median - Small	$ 40	LF	7,220	$ 288,800
		4	Remove Median - Large	$ 90	LF	1,504	$ 135,360
		5	Remove - Parking meters (9 per block)	$ 460	EA	45	$ 20,700
		6	Remove - Road Sign	$ 120	EA	0	$ -
Installation	Pavement Markings	7	Cycle Track Paint Infill, per mile at driveways	$ 1,500	MILE	2.96	$ 4,436
		8	Cycle Track Paint Infill, per intersection	$ 500	EA	5	$ 2,500
		9	Lane Stripe	$ 5,280	MILE	12	$ 62,464
		10	Bike Lane Stripes: 2 at 4" - 6", per direction	$ 10,560	MILE	5.9	$ 62,464
		11	Class III Thermoplastic Marking (Sharrow), 22 per mile min.,	$ 5,500	MILE	0	$ -
		12	Class II Thermoplastic Marking, 22 per mile, per direction	$ 5,500	MILE	5.92	$ 32,533
		13	Bus Lane Thermoplastic Marking, 22 per mile	$ 5,500	MILE	0	$ -
	Signage	14	Bus Signage (Peak Period or Permanent)	$ 3,000	MILE	0	$ -
		15	Bike Lane Sign (2 per mile, per direction	$ 300	EA	12	$ 3,600
		16	Bike Lane Sign (1 per arterial intersection, per direction)	$ 300	EA	10	$ 3,000
	Streetscape	17	Install Small Buffer Median	$ 264,000	MILE	6	$ 1,536,600
		18	Install 30' Median	$ 2,112,000	MILE	0	$ -
		19	Streetscape Enhancements & Landscaping			0	$ -
		20	(Placeholder)				$ -

SUBTOTAL	**$ 2,196,182**
Unallocated Contingency (15%)	**$ 329,427**
TOTAL	**$ 2,525,610**

Assumptions: Between I-405 and Whittier Dr/Merv Griffin Way

Location:	**Santa Monica Blvd, East of I-405**	**Major Intersections:**	**7**
Miles:	**2.27**		

		No.	Item name	Unit Cost	Unit	Quantity	Cost
Removal & Demolition		1	Remove Thermoplastic Stripe	$ 3,696	MILE	9	$ 33,611
		2	Remove Thermoplastic Pavement Marking	$ 2.60	SF	0	$ -
		3	Remove Median - Small	$ 40	LF	15,836	$ 633,440
		4	Remove Median - Large	$ 90	LF	4,714	$ 424,260
		5	Remove - Parking meters (9 per block)	$ 460	EA	0	$ -
		6	Remove - Road Sign	$ 120	EA	0	$ -
Installation	Pavement Markings	7	Cycle Track Paint Infill, per mile at driveways	$ 1,500	MILE	2.27	$ 3,410
		8	Cycle Track Paint Infill, per intersection	$ 500	EA	7	$ 3,500
		9	Lane Stripe	$ 5,280	MILE	5	$ 24,008
		10	Bike Lane Stripes: 2 at 4" - 6", per direction	$ 10,560	MILE	5	$ 48,016
		11	Class III Thermoplastic Marking (Sharrow), 22 per mile min., per direction	$ 5,500	MILE	0	$ -
		12	Class II Thermoplastic Marking, 22 per mile, per direction	$ 5,500	MILE	5	$ 25,008
		13	Bus Lane Thermoplastic Marking, 22 per mile	$ 5,500	MILE	5	$ 25,008
	Signage	14	Bus Signage (Peak Period or Permanent)	$ 3,000	MILE	4.5	$ 13,641
		15	Bike Lane Sign (2 per mile, per direction)	$ 300	EA	10	$ 3,000
		16	Bike Lane Sign (1 per arterial intersection, per direction)	$ 300	EA	14	$ 4,200
	Streetscape	17	Install Small Buffer Median	$ 264,000	MILE	4	$ 1,165,400
		18	Install 30' Median	$ 2,112,000	MILE	2.27	$ 4,801,600
		19	Streetscape Enhancements & Landscaping			0	$ -
		20	(Placeholder)				$ -

SUBTOTAL	**$ 7,208,103**
Unallocated Contingency (15%)	**$ 1,081,215**
TOTAL	**$ 8,289,318**

MAIN WORKSHEET - BUILD ALTERNATIVE

Los Angeles Department of Transportation (LADOT)

Westside Mobility Plan, Los Angeles, CA

Lincoln Boulevard - All-Day Center-Running Bus-Only Lanes from Dewey to Sepulveda (LA and Coastal Corridor Specific Plan)

Today's Date: 7/17/13

Yr of Base Year $: 2012

Yr of Revenue Ops: -

	Units	Unit Price	Quantity	Base Year Dollars w/o Contingency (X000)	Allocated Contingency	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)			**5.8**	**5,800**	**25%**	**1,450**	**7,250**
10.01 Guideway: At-grade exclusive right-of-way							0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	RM	1,000	5.8	5,800	25%	1,450	7,250
10.03 Guideway: At-grade in mixed traffic							0
10.04 Guideway: Aerial structure							0
10.05 Guideway: Built-up fill							0
10.06 Guideway: Underground cut & cover	RM	32,000	0.0	0	30%	0	0
10.07 Guideway: Underground tunnel							0
10.08 Guideway: Retained cut or fill							0
10.09 Track: Direct fixation (Assume SCC 10.04 & 10.07)							0
10.10 Track: Embedded							0
10.11 Track: Ballasted (Assume SCC 10.01 & 10.02)							0
10.12 Track: Special (switches, turnouts)							0
10.13 Track: Vibration and noise dampening							0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	**0**	**0**	**8**	**6,400**	**25%**	**1,600**	**8,000**
20.01 At-grade station, stop, shelter, mall, platform	STA	800	8	6,400	25%	1,600	8,000
20.02 Aerial station, stop, shelter, mall, terminal, platform							0
20.03 Underground station, stop, shelter, mall, terminal, platform	STA	75,000	0	0	25%	0	0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.							0
20.05 Joint development							0
20.06 Automobile parking multi-story structure	SPC	20	0	0	25%	0	0
20.07 Elevators, escalators (Assume 4 per Aerial STA, 10 per Tunnel STA)							0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	**0**	**0**		**0**		**0**	**0**
30.01 Administration Building: Office, sales, storage, revenue counting							0
30.02 Light Maintenance Facility	EA	5,000	0	0	25%	0	0
30.03 Heavy Maintenance Facility							0
30.04 Storage or Maintenance of Way Building							0
30.05 Yard and Yard Track							0
40 SITEWORK & SPECIAL CONDITIONS	**0**	**0**		**28,559**	**27%**	**7,740**	**36,299**
40.01 Demolition, Clearing, Earthwork	RM	600	5.8	3,480	25%	870	4,350
40.02 Site Utilities, Utility Relocation	RM	1,200	5.8	6,960	30%	2,088	9,048
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	RM	760	5.8	4,408	30%	1,322	5,730
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	RM	110	5.8	638	30%	191	829
40.05 Site structures including retaining walls, sound walls							0
40.06 Pedestrian / bike access and accommodation, landscaping	SCC 10-50	0.5%		256	25%	64	320
40.07 Automobile, bus, van accessways including roads, parking lots	SPC	7	0	0	25%	0	0
40.08 Temporary Facilities and other indirect costs during construction	SCC 10-50	25%		12,817	25%	3,204	16,021
50 SYSTEMS	**0**	**0**		**23,580**	**25%**	**5,895**	**29,475**
50.01 Train control and signals							0
50.02 Traffic signals and crossing protection	RM (AG)	2,000	5.8	11,600	25%	2,900	14,500
50.03 Traction power supply: substations							0
50.04 Traction power distribution: catenary and third rail							0
50.05 Communications	RM	1,100	5.8	6,380	25%	1,595	7,975
50.06 Fare collection system and equipment	STA	700	8	5,600	25%	1,400	7,000
50.07 Central Control							0
Construction Subtotal (10 - 50)	**0**	**0**		**64,339**	**26%**	**16,685**	**81,024**
60 ROW, LAND, EXISTING IMPROVEMENTS	**0**	**0**		**6,434**	**30%**	**1,930**	**8,364**
60.01 Purchase or lease of real estate	SCC 10-50	10%		6,434	30%	1,930	8,364
60.02 Relocation of existing households and businesses							0
70 VEHICLES (number)	**0**	**0**	**0**	**0**	**0%**	**0**	**0**
70.01 Light Rail							0
70.02 Heavy Rail							0
70.03 Commuter Rail							0
70.04 Bus (60' Articulated Bus)	VEH	710	0	0	5%	0	0
70.05 Bus (40' Bus)	VEH	470	0	0	5%	0	0
70.06 Non-revenue vehicles							0
70.07 Spare parts	SCC 70	10%		0	5%	0	0
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	**0**	**33%**		**21,232**	**15%**	**3,185**	**24,417**
80.01 Preliminary Engineering	SCC 10-50	3%		1,930	15%	290	2,220
80.02 Final Design	SCC 10-50	7%		4,504	15%	676	5,179
80.03 Project Management for Design and Construction	SCC 10-50	10%		6,434	15%	965	7,399
80.04 Construction Administration & Management	SCC 10-50	5%		3,217	15%	483	3,699
80.05 Professional Liability and other Non-Construction Insurance	SCC 10-50	0%		0	15%	0	0
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	SCC 10-50	1%		643	15%	97	740
80.07 Surveys, Testing, Investigation, Inspection	SCC 10-50	2%		1,287	15%	193	1,480
80.08 Start up	SCC 10-50	5%		3,217	15%	483	3,699
Subtotal (10 - 80)	**0**	**0**		**92,005**	**24%**	**21,800**	**113,804**
90 UNALLOCATED CONTINGENCY	SCC 10-80	20%					**22,761**
Subtotal (10 - 90)	**0**	**0**					**136,565**
100 FINANCE CHARGES							**0**
Total Project Cost (10 - 100)	**0**	**0**					**136,565**

MAIN WORKSHEET - BUILD ALTERNATIVE

Los Angeles Department of Transportation (LADOT)

Westside Mobility Plan, Los Angeles, CA

Sepulveda Boulevard - All-Day Center-Running Bus-Only Lanes from Havelock to Ballona Creek (LA and Coastal Corridor Specific Plan)

Today's Date: 7/17/13

Yr of Base Year $: 2012

Yr of Revenue Ops: -

	Units	Unit Price	Quantity	Base Year Dollars w/o Contingency (X000)	Allocated Contingency	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)			**0.2**	**200**	**25%**	**50**	**250**
10.01 Guideway: At-grade exclusive right-of-way							0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	RM	1,000	0.2	200	25%	50	250
10.03 Guideway: At-grade in mixed traffic							0
10.04 Guideway: Aerial structure							0
10.05 Guideway: Built-up fill							0
10.06 Guideway: Underground cut & cover	RM	32,000	0.0	0	30%	0	0
10.07 Guideway: Underground tunnel							0
10.08 Guideway: Retained cut or fill							0
10.09 Track: Direct fixation (Assume SCC 10.04 & 10.07)							0
10.10 Track: Embedded							0
10.11 Track: Ballasted (Assume SCC 10.01 & 10.02)							0
10.12 Track: Special (switches, turnouts)							0
10.13 Track: Vibration and noise dampening							0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	**0**	**0**	**0**	**0**	**#DIV/0!**	**0**	**0**
20.01 At-grade station, stop, shelter, mall, platform	STA	800	0	0	25%	0	0
20.02 Aerial station, stop, shelter, mall, terminal, platform							0
20.03 Underground station, stop, shelter, mall, terminal, platform	STA	75,000	0	0	25%	0	0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.							0
20.05 Joint development							0
20.06 Automobile parking multi-story structure	SPC	20	0	0	25%	0	0
20.07 Elevators, escalators (Assume 4 per Aerial STA, 10 per Tunnel STA)							0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	**0**	**0**		**0**		**0**	**0**
30.01 Administration Building: Office, sales, storage, revenue counting							0
30.02 Light Maintenance Facility	EA	5,000	0	0	25%	0	0
30.03 Heavy Maintenance Facility							0
30.04 Storage or Maintenance of Way Building							0
30.05 Yard and Yard Track							0
40 SITEWORK & SPECIAL CONDITIONS	**0**	**0**		**879**	**27%**	**241**	**1,120**
40.01 Demolition, Clearing, Earthwork	RM	600	0.2	120	25%	30	150
40.02 Site Utilities, Utility Relocation	RM	1,200	0.2	240	30%	72	312
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	RM	760	0.2	152	30%	46	198
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	RM	110	0.2	22	30%	7	29
40.05 Site structures including retaining walls, sound walls							0
40.06 Pedestrian / bike access and accommodation, landscaping	SCC 10-50	0.5%		7	25%	2	8
40.07 Automobile, bus, van accessways including roads, parking lots	SPC	7	0	0	25%	0	0
40.08 Temporary Facilities and other indirect costs during construction	SCC 10-50	25%		339	25%	85	423
50 SYSTEMS	**0**	**0**		**620**	**25%**	**155**	**775**
50.01 Train control and signals							0
50.02 Traffic signals and crossing protection	RM (AG)	2,000	0.2	400	25%	100	500
50.03 Traction power supply: substations							0
50.04 Traction power distribution: catenary and third rail							0
50.05 Communications	RM	1,100	0.2	220	25%	55	275
50.06 Fare collection system and equipment	STA	700	0	0	25%	0	0
50.07 Central Control							0
Construction Subtotal (10 - 50)	**0**	**0**		**1,699**	**26%**	**446**	**2,145**
60 ROW, LAND, EXISTING IMPROVEMENTS	**0**	**0**		**170**	**30%**	**51**	**221**
60.01 Purchase or lease of real estate	SCC 10-50	10%		170	30%	51	221
60.02 Relocation of existing households and businesses							0
70 VEHICLES (number)	**0**	**0**	**0**	**29**	**5%**	**1**	**31**
70.01 Light Rail							0
70.02 Heavy Rail							0
70.03 Commuter Rail							0
70.04 Bus (60' Articulated Bus)	VEH	710	0.0	27	5%	1	28
70.05 Bus (40' Bus)	VEH	470	0	0	5%	0	0
70.06 Non-revenue vehicles							0
70.07 Spare parts	SCC 70	10%		3	5%	0	3
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	**0**	**33%**		**561**	**15%**	**84**	**645**
80.01 Preliminary Engineering	SCC 10-50	3%		51	15%	8	59
80.02 Final Design	SCC 10-50	7%		119	15%	18	137
80.03 Project Management for Design and Construction	SCC 10-50	10%		170	15%	25	195
80.04 Construction Administration & Management	SCC 10-50	5%		85	15%	13	98
80.05 Professional Liability and other Non-Construction Insurance	SCC 10-50	0%		0	15%	0	0
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	SCC 10-50	1%		17	15%	3	20
80.07 Surveys, Testing, Investigation, Inspection	SCC 10-50	2%		34	15%	5	39
80.08 Start up	SCC 10-50	5%		85	15%	13	98
Subtotal (10 - 80)	**0**	**0**		**2,459**	**24%**	**582**	**3,041**
90 UNALLOCATED CONTINGENCY	SCC 10-80	20%					**608**
Subtotal (10 - 90)	**0**	**0**					**3,649**
100 FINANCE CHARGES							**0**
Total Project Cost (10 - 100)	**0**	**0**					**3,649**

MAIN WORKSHEET - BUILD ALTERNATIVE

Los Angeles Department of Transportation (LADOT)

Westside Mobility Plan, Los Angeles, CA

Sepulveda Boulevard - All-Day Center-Running Bus-Only Lanes from Centinela to Westchester and Mixed Traffic from Westchester to Century/Aviation (LA and Coastal Corridor Specific Plan)

Today's Date: 7/17/13

Yr of Base Year $: 2012

Yr of Revenue Ops: -

	Units	Unit Price	Quantity	Base Year Dollars w/o Contingency (X000)	Allocated Contingency	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)			**2.0**	**2,000**	**25%**	**500**	**2,500**
10.01 Guideway: At-grade exclusive right-of-way							0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	RM	1,000	2.0	2,000	25%	500	2,500
10.03 Guideway: At-grade in mixed traffic							0
10.04 Guideway: Aerial structure							0
10.05 Guideway: Built-up fill							0
10.06 Guideway: Underground cut & cover	RM	32,000	0.0	0	30%	0	0
10.07 Guideway: Underground tunnel							0
10.08 Guideway: Retained cut or fill							0
10.09 Track: Direct fixation (Assume SCC 10.04 & 10.07)							0
10.10 Track: Embedded							0
10.11 Track: Ballasted (Assume SCC 10.01 & 10.02)							0
10.12 Track: Special (switches, turnouts)							0
10.13 Track: Vibration and noise dampening							0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	**0**	**0**	**4**	**3,200**	**25%**	**800**	**4,000**
20.01 At-grade station, stop, shelter, mall, platform	STA	800	4	3,200	25%	800	4,000
20.02 Aerial station, stop, shelter, mall, terminal, platform							0
20.03 Underground station, stop, shelter, mall, terminal, platform	STA	75,000	0	0	25%	0	0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.							0
20.05 Joint development							0
20.06 Automobile parking multi-story structure	SPC	20	0	0	25%	0	0
20.07 Elevators, escalators (Assume 4 per Aerial STA, 10 per Tunnel STA)							0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	**0**	**0**		**0**		**0**	**0**
30.01 Administration Building: Office, sales, storage, revenue counting							0
30.02 Light Maintenance Facility	EA	5,000	0	0	25%	0	0
30.03 Heavy Maintenance Facility							0
30.04 Storage or Maintenance of Way Building							0
30.05 Yard and Yard Track							0
40 SITEWORK & SPECIAL CONDITIONS	**0**	**0**		**10,323**	**27%**	**2,788**	**13,110**
40.01 Demolition, Clearing, Earthwork	RM	600	2.0	1,200	25%	300	1,500
40.02 Site Utilities, Utility Relocation	RM	1,200	2.0	2,400	30%	720	3,120
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	RM	760	2.0	1,520	30%	456	1,976
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	RM	110	2.0	220	30%	66	286
40.05 Site structures including retaining walls, sound walls							0
40.06 Pedestrian / bike access and accommodation, landscaping	SCC 10-50	0.5%		98	25%	24	122
40.07 Automobile, bus, van accessways including roads, parking lots	SPC	7	0	0	25%	0	0
40.08 Temporary Facilities and other indirect costs during construction	SCC 10-50	25%		4,885	25%	1,221	6,106
50 SYSTEMS	**0**	**0**		**9,000**	**25%**	**2,250**	**11,250**
50.01 Train control and signals							0
50.02 Traffic signals and crossing protection	RM (AG)	2,000	2.0	4,000	25%	1,000	5,000
50.03 Traction power supply: substations							0
50.04 Traction power distribution: catenary and third rail							0
50.05 Communications	RM	1,100	2.0	2,200	25%	550	2,750
50.06 Fare collection system and equipment	STA	700	4	2,800	25%	700	3,500
50.07 Central Control							0
Construction Subtotal (10 - 50)	**0**	**0**		**24,523**	**26%**	**6,338**	**30,860**
60 ROW, LAND, EXISTING IMPROVEMENTS	**0**	**0**		**2,452**	**30%**	**736**	**3,188**
60.01 Purchase or lease of real estate	SCC 10-50	10%		2,452	30%	736	3,188
60.02 Relocation of existing households and businesses							0
70 VEHICLES (number)	**0**	**0**	**1**	**555**	**5%**	**28**	**583**
70.01 Light Rail							0
70.02 Heavy Rail							0
70.03 Commuter Rail							0
70.04 Bus (60' Articulated Bus)	VEH	710	0.7	504	5%	25	530
70.05 Bus (40' Bus)	VEH	470	0	0	5%	0	0
70.06 Non-revenue vehicles							0
70.07 Spare parts	SCC 70	10%		50	5%	3	53
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	**0**	**33%**		**8,092**	**15%**	**1,214**	**9,306**
80.01 Preliminary Engineering	SCC 10-50	3%		736	15%	110	846
80.02 Final Design	SCC 10-50	7%		1,717	15%	257	1,974
80.03 Project Management for Design and Construction	SCC 10-50	10%		2,452	15%	368	2,820
80.04 Construction Administration & Management	SCC 10-50	5%		1,226	15%	184	1,410
80.05 Professional Liability and other Non-Construction Insurance	SCC 10-50	0%		0	15%	0	0
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	SCC 10-50	1%		245	15%	37	282
80.07 Surveys, Testing, Investigation, Inspection	SCC 10-50	2%		490	15%	74	564
80.08 Start up	SCC 10-50	5%		1,226	15%	184	1,410
Subtotal (10 - 80)	**0**	**0**		**35,622**	**23%**	**8,315**	**43,937**
90 UNALLOCATED CONTINGENCY	SCC 10-80	20%					**8,787**
Subtotal (10 - 90)	**0**	**0**					**52,725**
100 FINANCE CHARGES							**0**
Total Project Cost (10 - 100)	**0**	**0**					**52,725**

MAIN WORKSHEET - BUILD ALTERNATIVE

Los Angeles Department of Transportation (LADOT) — Today's Date: 7/17/13

Westside Mobility Plan, Los Angeles, CA — Yr of Base Year $: 2012

Venice Boulevard - Rapid Improvements from Centinela to Pacific (LA and Coastal Corridor Specific Plan) — Yr of Revenue Ops: -

	Units	Unit Price	Quantity	Base Year Dollars w/o Contingency (X000)	Allocated Contingency	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)			**0.0**	**0**		**0**	**0**
10.01 Guideway: At-grade exclusive right-of-way							0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	RM	1,000	0.0	0	25%	0	0
10.03 Guideway: At-grade in mixed traffic							0
10.04 Guideway: Aerial structure							0
10.05 Guideway: Built-up fill							0
10.06 Guideway: Underground cut & cover	RM	32,000	0.0	0	30%	0	0
10.07 Guideway: Underground tunnel							0
10.08 Guideway: Retained cut or fill							0
10.09 Track: Direct fixation (Assume SCC 10.04 & 10.07)							0
10.10 Track: Embedded							0
10.11 Track: Ballasted (Assume SCC 10.01 & 10.02)							0
10.12 Track: Special (switches, turnouts)							0
10.13 Track: Vibration and noise dampening							0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	**0**	**0**	**4**	**2,000**	**25%**	**500**	**2,500**
20.01 At-grade station, stop, shelter, mall, platform	STA	500	4	2,000	25%	500	2,500
20.02 Aerial station, stop, shelter, mall, terminal, platform							0
20.03 Underground station, stop, shelter, mall, terminal, platform	STA	75,000	0	0	25%	0	0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.							0
20.05 Joint development							0
20.06 Automobile parking multi-story structure	SPC	20	0	0	25%	0	0
20.07 Elevators, escalators (Assume 4 per Aerial STA, 10 per Tunnel STA)							0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	**0**	**0**		**0**		**0**	**0**
30.01 Administration Building: Office, sales, storage, revenue counting							0
30.02 Light Maintenance Facility	EA	5,000	0	0	25%	0	0
30.03 Heavy Maintenance Facility							0
30.04 Storage or Maintenance of Way Building							0
30.05 Yard and Yard Track							0
40 SITEWORK & SPECIAL CONDITIONS	**0**	**0**		**210**	**25%**	**53**	**263**
40.01 Demolition, Clearing, Earthwork	RM	450	0.0	0	25%	0	0
40.02 Site Utilities, Utility Relocation	RM	800	0.0	0	30%	0	0
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	RM	380	0.0	0	30%	0	0
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	RM	55	0.0	0	30%	0	0
40.05 Site structures including retaining walls, sound walls							0
40.06 Pedestrian / bike access and accommodation, landscaping	SCC 10-50	0.5%		10	25%	3	13
40.07 Automobile, bus, van accessways including roads, parking lots	SPC	7	0	0	25%	0	0
40.08 Temporary Facilities and other indirect costs during construction	SCC 10-50	10%		200	25%	50	250
50 SYSTEMS	**0**	**0**		**0**		**0**	**0**
50.01 Train control and signals							0
50.02 Traffic signals and crossing protection	RM (AG)	1,000	0.0	0	25%	0	0
50.03 Traction power supply: substations							0
50.04 Traction power distribution: catenary and third rail							0
50.05 Communications							0
50.06 Fare collection system and equipment	STA	700	0	0	25%	0	0
50.07 Central Control							0
Construction Subtotal (10 - 50)	**0**	**0**		**2,210**	**25%**	**553**	**2,763**
60 ROW, LAND, EXISTING IMPROVEMENTS	**0**	**0**		**66**	**30%**	**20**	**86**
60.01 Purchase or lease of real estate	SCC 10-50	3%		66	30%	20	86
60.02 Relocation of existing households and businesses							0
70 VEHICLES (number)	**0**	**0**	**1**	**517**	**5%**	**26**	**543**
70.01 Light Rail							0
70.02 Heavy Rail							0
70.03 Commuter Rail							0
70.04 Bus (60' Articulated Bus)	VEH	710	0	0	5%	0	0
70.05 Bus (40' Bus)	VEH	470	1	470	5%	24	494
70.06 Non-revenue vehicles							0
70.07 Spare parts	SCC 70	10%		47	5%	2	49
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	**0**	**33%**		**729**	**15%**	**109**	**839**
80.01 Preliminary Engineering	SCC 10-50	3%		66	15%	10	76
80.02 Final Design	SCC 10-50	7%		155	15%	23	178
80.03 Project Management for Design and Construction	SCC 10-50	10%		221	15%	33	254
80.04 Construction Administration & Management	SCC 10-50	5%		111	15%	17	127
80.05 Professional Liability and other Non-Construction Insurance	SCC 10-50	0%		0	15%	0	0
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	SCC 10-50	1%		22	15%	3	25
80.07 Surveys, Testing, Investigation, Inspection	SCC 10-50	2%		44	15%	7	51
80.08 Start up	SCC 10-50	5%		111	15%	17	127
Subtotal (10 - 80)	**0**	**0**		**3,523**	**20%**	**708**	**4,230**
90 UNALLOCATED CONTINGENCY	SCC 10-80	15%					**635**
Subtotal (10 - 90)	**0**	**0**					**4,865**
100 FINANCE CHARGES							**0**
Total Project Cost (10 - 100)	**0**	**0**					**4,865**

MAIN WORKSHEET - BUILD ALTERNATIVE

Los Angeles Department of Transportation (LADOT) — Today's Date: 7/17/13

Westside Mobility Plan, Los Angeles, CA — Yr of Base Year $: 2012

Loyola Marymount University - Circulator (LA and Coastal Corridor Specific Plan) — Yr of Revenue Ops: -

	Units	Unit Price	Quantity	Base Year Dollars w/o Contingency (X000)	Allocated Contingency	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)			**0.0**	**0**		**0**	**0**
10.01 Guideway: At-grade exclusive right-of-way							0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	RM	1,000	0.0	0	25%	0	0
10.03 Guideway: At-grade in mixed traffic							0
10.04 Guideway: Aerial structure							0
10.05 Guideway: Built-up fill							0
10.06 Guideway: Underground cut & cover	RM	32,000	0.0	0	30%	0	0
10.07 Guideway: Underground tunnel							0
10.08 Guideway: Retained cut or fill							0
10.09 Track: Direct fixation (Assume SCC 10.04 & 10.07)							0
10.10 Track: Embedded							0
10.11 Track: Ballasted (Assume SCC 10.01 & 10.02)							0
10.12 Track: Special (switches, turnouts)							0
10.13 Track: Vibration and noise dampening							0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	**0**	**0**	**13**	**520**	**25%**	**130**	**650**
20.01 At-grade shelter, bench, platform only	STA	40	13	520	25%	130	650
20.02 Aerial station, stop, shelter, mall, terminal, platform							0
20.03 Underground station, stop, shelter, mall, terminal, platform							0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.							0
20.05 Joint development							0
20.06 Automobile parking multi-story structure	SPC	20	0	0	25%	0	0
20.07 Elevators, escalators (Assume 4 per Aerial STA, 10 per Tunnel STA)							0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	**0**	**0**		**0**		**0**	**0**
30.01 Administration Building: Office, sales, storage, revenue counting							0
30.02 Light Maintenance Facility	EA	5,000	0	0	25%	0	0
30.03 Heavy Maintenance Facility							0
30.04 Storage or Maintenance of Way Building							0
30.05 Yard and Yard Track							0
40 SITEWORK & SPECIAL CONDITIONS	**0**	**0**		**0**		**0**	**0**
40.01 Demolition, Clearing, Earthwork	RM	450	0.0	0	25%	0	0
40.02 Site Utilities, Utility Relocation	RM	800	0.0	0	30%	0	0
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	RM	380	0.0	0	30%	0	0
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	RM	55	0.0	0	30%	0	0
40.05 Site structures including retaining walls, sound walls							0
40.06 Pedestrian / bike access and accommodation, landscaping	SCC 10-50	0.5%		0	25%	0	0
40.07 Automobile, bus, van accessways including roads, parking lots	SPC	7	0	0	25%	0	0
40.08 Temporary Facilities and other indirect costs during construction	SCC 10-50	10%		0	25%	0	0
50 SYSTEMS	**0**	**0**		**0**		**0**	**0**
50.01 Train control and signals							0
50.02 Traffic signals and crossing protection	RM (AG)	1,000	0.0	0	25%	0	0
50.03 Traction power supply: substations							0
50.04 Traction power distribution: catenary and third rail							0
50.05 Communications							0
50.06 Fare collection system and equipment	STA	700	0	0	25%	0	0
50.07 Central Control							0
Construction Subtotal (10 - 50)	**0**	**0**		**520**	**25%**	**130**	**650**
60 ROW, LAND, EXISTING IMPROVEMENTS	**0**	**0**		**0**	**0%**	**0**	**0**
60.01 Purchase or lease of real estate	SCC 10-50	3%		0	30%	0	0
60.02 Relocation of existing households and businesses							0
70 VEHICLES (number)	**0**	**0**	**3**	**1,551**	**5%**	**78**	**1,629**
70.01 Light Rail							0
70.02 Heavy Rail							0
70.03 Commuter Rail							0
70.04 Bus (60' Articulated Bus)	VEH	710	0	0	5%	0	0
70.05 Bus (40' Bus)	VEH	470	3	1,410	5%	71	1,481
70.06 Non-revenue vehicles							0
70.07 Spare parts	SCC 70	10%		141	5%	7	148
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	**0**	**33%**		**0**	**0%**	**0**	**0**
80.01 Preliminary Engineering	SCC 10-50	3%		0	15%	0	0
80.02 Final Design	SCC 10-50	7%		0	15%	0	0
80.03 Project Management for Design and Construction	SCC 10-50	10%		0	15%	0	0
80.04 Construction Administration & Management	SCC 10-50	5%		0	15%	0	0
80.05 Professional Liability and other Non-Construction Insurance	SCC 10-50	0%		0	15%	0	0
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	SCC 10-50	1%		0	15%	0	0
80.07 Surveys, Testing, Investigation, Inspection	SCC 10-50	2%		0	15%	0	0
80.08 Start up	SCC 10-50	5%		0	15%	0	0
Subtotal (10 - 80)	**0**	**0**		**2,071**	**10%**	**208**	**2,279**
90 UNALLOCATED CONTINGENCY	SCC 10-80	15%					**342**
Subtotal (10 - 90)	**0**	**0**					**2,620**
100 FINANCE CHARGES							**0**
Total Project Cost (10 - 100)	**0**	**0**					**2,620**

MAIN WORKSHEET - BUILD ALTERNATIVE

Los Angeles Department of Transportation (LADOT) — Today's Date: 7/17/13

Westside Mobility Plan, Los Angeles, CA — Yr of Base Year $: 2012

Fox Hills - Venice - Circulator - Mesmer to Pacific (LA and Coastal Corridor Specific Plan) — Yr of Revenue Ops: -

	Units	Unit Price	Quantity	Base Year Dollars w/o Contingency (X000)	Allocated Contingency	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)			**0.0**	**0**		**0**	**0**
10.01 Guideway: At-grade exclusive right-of-way							0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	RM	1,000	0.0	0	25%	0	0
10.03 Guideway: At-grade in mixed traffic							0
10.04 Guideway: Aerial structure							0
10.05 Guideway: Built-up fill							0
10.06 Guideway: Underground cut & cover	RM	32,000	0.0	0	30%	0	0
10.07 Guideway: Underground tunnel							0
10.08 Guideway: Retained cut or fill							0
10.09 Track: Direct fixation (Assume SCC 10.04 & 10.07)							0
10.10 Track: Embedded							0
10.11 Track: Ballasted (Assume SCC 10.01 & 10.02)							0
10.12 Track: Special (switches, turnouts)							0
10.13 Track: Vibration and noise dampening							0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	**0**	**0**	**18**	**720**	**25%**	**180**	**900**
20.01 At-grade shelter, bench, platform only	STA	40	18	720	25%	180	900
20.02 Aerial station, stop, shelter, mall, terminal, platform							0
20.03 Underground station, stop, shelter, mall, terminal, platform							0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.							0
20.05 Joint development							0
20.06 Automobile parking multi-story structure	SPC	20	0	0	25%	0	0
20.07 Elevators, escalators (Assume 4 per Aerial STA, 10 per Tunnel STA)							0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	**0**	**0**		**5,000**	**25%**	**1,250**	**6,250**
30.01 Administration Building: Office, sales, storage, revenue counting							0
30.02 Light Maintenance Facility	EA	5,000	1	5,000	25%	1,250	6,250
30.03 Heavy Maintenance Facility							0
30.04 Storage or Maintenance of Way Building							0
30.05 Yard and Yard Track							0
40 SITEWORK & SPECIAL CONDITIONS	**0**	**0**		**0**		**0**	**0**
40.01 Demolition, Clearing, Earthwork	RM	450	0.0	0	25%	0	0
40.02 Site Utilities, Utility Relocation	RM	800	0.0	0	30%	0	0
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	RM	380	0.0	0	30%	0	0
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	RM	55	0.0	0	30%	0	0
40.05 Site structures including retaining walls, sound walls							0
40.06 Pedestrian / bike access and accommodation, landscaping	SCC 10-50	0.5%		0	25%	0	0
40.07 Automobile, bus, van accessways including roads, parking lots	SPC	7	0	0	25%	0	0
40.08 Temporary Facilities and other indirect costs during construction	SCC 10-50	10%		0	25%	0	0
50 SYSTEMS	**0**	**0**		**0**		**0**	**0**
50.01 Train control and signals							0
50.02 Traffic signals and crossing protection	RM (AG)	1,000	0.0	0	25%	0	0
50.03 Traction power supply: substations							0
50.04 Traction power distribution: catenary and third rail							0
50.05 Communications							0
50.06 Fare collection system and equipment	STA	700	0	0	25%	0	0
50.07 Central Control							0
Construction Subtotal (10 - 50)	**0**	**0**		**5,720**	**25%**	**1,430**	**7,150**
60 ROW, LAND, EXISTING IMPROVEMENTS	**0**	**0**		**0**	**0%**	**0**	**0**
60.01 Purchase or lease of real estate	SCC 10-50	3%		0	30%	0	0
60.02 Relocation of existing households and businesses							0
70 VEHICLES (number)	**0**	**0**	**10**	**5,170**	**5%**	**259**	**5,429**
70.01 Light Rail							0
70.02 Heavy Rail							0
70.03 Commuter Rail							0
70.04 Bus (60' Articulated Bus)	VEH	710	0	0	5%	0	0
70.05 Bus (40' Bus)	VEH	470	10	4,700	5%	235	4,935
70.06 Non-revenue vehicles							0
70.07 Spare parts	SCC 70	10%		470	5%	24	494
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	**0**	**33%**		**0**	**0%**	**0**	**0**
80.01 Preliminary Engineering	SCC 10-50	3%		0	15%	0	0
80.02 Final Design	SCC 10-50	7%		0	15%	0	0
80.03 Project Management for Design and Construction	SCC 10-50	10%		0	15%	0	0
80.04 Construction Administration & Management	SCC 10-50	5%		0	15%	0	0
80.05 Professional Liability and other Non-Construction Insurance	SCC 10-50	0%		0	15%	0	0
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	SCC 10-50	1%		0	15%	0	0
80.07 Surveys, Testing, Investigation, Inspection	SCC 10-50	2%		0	15%	0	0
80.08 Start up	SCC 10-50	5%		0	15%	0	0
Subtotal (10 - 80)	**0**	**0**		**10,890**	**16%**	**1,689**	**12,579**
90 UNALLOCATED CONTINGENCY	SCC 10-80	15%					**1,887**
Subtotal (10 - 90)	**0**	**0**					**14,465**
100 FINANCE CHARGES							**0**
Total Project Cost (10 - 100)	**0**	**0**					**14,465**

Appendix D:
VMT Data Sources for TIA Fee Updates

The following data sources were used in the TIA fee updates.

California Household Travel Survey (CHTS)

- This is the most current source of travel behavior data for Los Angeles County and the Specific Plan study area (shown as West LA in summary table below)
- Number of Households Surveyed
    - Westside Study Area: ***414***
    - Los Angeles County: ***8,077***
    - California: ***41,027***

California Household Travel Survey
Trip Length By Land Use Type

Trip Type	West LA			LA County			CA		
	Number of Trips	Mean Distance	Distance Standard Error	Number of Trips	Mean Distance	Distance Standard Error	Number of Trips	Mean Distance	Distance Standard Error
Single Family Detached	1,035	**6.3**	0.6	25,857	**7.4**	0.2	160,313	**7.9**	0.1
Apartment/Condo/Townhome	719	**7.9**	1.5	9,335	**6.7**	0.3	30,699	**6.7**	0.2
Industrial	39	**5.6**	2.3	1,079	**10.8**	3.0	6,058	**12.3**	1.0
Medical Office	41	**10.5**	3.8	666	**9.3**	1.2	4,090	**9.7**	0.5
Office	152	**8.0**	1.6	2,672	**9.8**	0.5	15,807	**10.4**	0.3
Restaurant	64	**6.1**	2.0	1,600	**5.7**	0.6	8,211	**6.7**	0.3
Retail	161	**4.6**	1.0	2,889	**5.2**	0.3	15,603	**5.4**	0.2
School*	20	**6.9**	3.7	673	**8.3**	0.8	3,768	**8.8**	0.4
Service	81	**5.5**	2.1	1,468	**6.5**	0.7	7,770	**6.8**	0.4

* School trip length was from CHTS was not used because it includes professional training, college trips, etc.

SANDAG Trip Length, April 2002

- Provides trip length information for 30 land use types.
- Data utilized in this study includes trip length information for retail uses and hotels since data could not be derived from the CHTS.

Streetlight Data

- Uses ***cellphone data*** to report the distance between a specified area and visitors' home location.
- Used daily information which ***samples anyone who visits*** a specified area between 6am and 10pm.
- Used to validate the Westside VMT trip length information

% New Trips

- LADOT Traffic Impact Study guidelines used to determine pass-by trip credits

Appendix E:

Feasibility Review of Updated Transportation Impact Assessment Fee for Coastal Transportation Corridor and West LA TIMP Specific Plans Memorandum, Economic & Planning Systems, Inc., December 2015.

MEMORANDUM

To: Sarah Brandenberg, Fehr & Peers

From: Jason Moody and Michael Nimon

Subject: Feasibility Review of Updated Transportation Impact Assessment Fee for Coastal Transportation Corridor and West LA TIMP Specific Plans; EPS #134015

Date: December 16, 2015

The Economics of Land Use

This memorandum considers the potential economic impact of an update to the Transportation Impact Assessment (TIA) fee programs in the Coastal Transportation Corridor Specific Plan (CTCSP) and West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP). It has been prepared by Economic & Planning Systems (EPS) as a sub-consultant to Fehr & Peers, as part of the proposed amendments to the Specific Plans. The findings presented in this analysis are based on a series of "static" developer pro forma models that simulate the financial performance of a variety of real estate development prototypes under a range of TIA fee levels and credit structures.[1]

The existing TIA program includes fees on commercial and industrial uses. The proposed updates to the TIA fee program also introduce a fee on new residential uses. As such, the focus of this analysis is on the financial impact of the TIA fee in the context of new residential, commercial, and office development. The development prototypes in this analysis focus on infill projects in West LA and the Coastal Corridor areas that were adapted based on a review of recently completed or proposed projects in these markets. The actual projects have been modified in some cases to consider various affordable housing components, fee credit scenarios and other parameters (e.g., tenure). Specifically, the EPS analysis is focused on the following:

Economic & Planning Systems, Inc.
One Kaiser Plaza, Suite 1410
Oakland, CA 94612-3604
510.841.9190 tel
510.740.2080 fax

Oakland
Sacramento
Denver
Los Angeles

www.epsys.com

[1] A static development pro forma analysis considers the financial performance of a real estate project assuming both the development costs and values created occur in a single time period (e.g., one year). It is differentiated from a time-series cash-flow analysis, which accounts for the impact of time on a project's financial performance. While a static pro forma is less robust than a time series analysis, it is preferable when generalizing across a range of project types since details related to development phasing, market absorption, and other factors can vary significantly.

- The financial performance of six (6) residential and mixed-use projects with existing and proposed TIA fee (see **Table 1** for description of each prototype). The feasibility review is conducted in both the West LA and Coastal Corridor areas.
- The financial performance of three (3) residential (including mixed-use) projects under two potential fee credit scenarios for the provision of affordable housing.[2] These three projects are a subset of the six residential prototypes described above. The affordable housing fee credit sensitivity analysis was only conducted for West LA as the range in fee fluctuations is likely to be similar to the Coastal Corridor area. The sensitivity analysis was conducted to quantify the potential economic benefits resulting from various fee credit structures.

Table 1 Development Prototypes Summary*

Category	Prototype A 9 D.U. Residential	Prototype B 34 D.U. Residential	Prototype C 115 D.U. Residential/Retail Mixed Use	Prototype D 157 D.U. Residential/Retail Mixed Use	Prototype E 660 D.U. Residential/Retail Mixed Use	Prototype F 516 D.U. Residential/Retail/ Office Mixed Use Tower
Residential Units (1)	9	34	115	157	660	516
# of Market Rate Units	8	31	105	142	660	516
# of Affordable Units	1	3	10	15	-	-
Development Assumptions						
Average Unit Size	1,700	1,603	489	637	718	838
Retail Gross SF.	-	-	981	44,348	20,000	67,000
Office Gross SF	-	-	-	-	-	200,000
Lot Size	6,001	21,371	31,981	56,477	148,177	207,209
FAR (2)	3.00	3.00	2.1	3.00	3.90	3.90
Parking Ratio	2.00	2.00	1.03	2.00	2.00 / 2.50	1.65 / 2.00
Parking Type	Subterranean	Subterranean	Subterranean	Subterranean	Subterranean	Subterranean

*Note: assumptions apply to both rentals and for-sale tenure.

(1) All affordable units are assumed as very low income with 11% met on site per the density bonus requirement with the exception of prototypes E and F. While these two prototypes are assumed as market-rate in the "No TIA Fee Credit" scenarios for rentals, prototype E assumes 606 market-rate and 54 affordable units in the "TIA Fee Credit" scenarios for rentals. The "TIA Fee Credit" scenarios of for-sale condos assume all affordable units are moderate income with 40% on site per the density bonus requirement.
(2) Where FAR has been derived, computations exclude parking floor area.

The development typologies, costs, and revenue inputs used in this analysis are based on available project-specific information as well as data from the broader market and real estate developers active in the area. However, these financial assumptions reflect an average across a relatively wide range of possible outcomes and will likely vary for individual projects depending on a variety of factors including, without limitation, site conditions, project design, location and neighborhood attributes (e.g., proximity to transit, views, etc.), market orientation, and unique ownership and developer circumstances. Consequently, the results should be considered as broad indicators of the relative financial implications of TIA fee levels and potential credits rather than precise estimates.

Summary of Findings

The impact of the proposed TIA fee update on the development feasibility of the six (6) development prototypes examined in this analysis is summarized in **Table 2**. Meanwhile, **Table 3** shows the underlying development program assumptions for the TIA affordable housing fee

[2] Since the City of Los Angeles does not currently impose affordable housing requirements on projects that comply with existing zoning, developers typically provide affordable housing through the City's Density Bonus program.

credit scenarios and **Table 4** summarizes the results (with the fee credit formula shown in **Table 5**).[3] The key findings are further described below.

1. ***Proposed TIA fees do not significantly affect development feasibility of the tested product types.*** While the updated TIA fee will increase development costs, the magnitude is unlikely to deter any feasible development from taking place. Specifically, as shown in **Tables 2** and **4**, the proposed TIA fee would represent between 0.6 to 2.6 percent of the total development cost for a typical project (excluding land). This level of impact will likely be overwhelmed by other factors that are significantly more important to project feasibility, such as fluctuations in rent or sale prices or changes in labor or construction material costs. Furthermore, because the Westside is mostly built out, many new developments could be eligible for existing use credit to offset a portion of the TIA fee obligation and lower the TIA fee as a percentage of the total development cost. Any increase in fees has the potential to result in a land value reduction for existing property owners. For example, the proposed TIA fee results in an estimated reduction in average *residual land value* (a key measure of project feasibility, as defined below) of between 2 percent and 24 percent for certain product types, as shown in **Tables 2** and **4**. Fee increases may also slightly reduce investor return for developers that have already secured land with the intent of development in the near term.[4] Ultimately, given their impact relative to overall development costs, the TIA fee is unlikely to significantly affect market dynamics and development decisions.

2. ***While current market conditions in both West LA and Coastal Corridor are highly favorable with rents and sale prices that support a wide range of new development, the financial performance of the building product types tested in this analysis varies by tenure, location, affordable housing component, and density bonus incentives, among other factors.*** As shown in **Table 2**, for-sale condominiums result in a higher residual land value (in comparison to rental units) in the Coastal Corridor whereas rental apartment units result in a higher residual land value in West LA. In all cases, the residual land value is positive with the proposed TIA fees, suggesting the development is economically viable. Development in the Coastal Corridor is stronger due to historically high rents and sales prices across all evaluated building product types, as indicated by the higher residual land value per square foot shown in **Tables 2** and **4**. Meanwhile the City's density bonus program may improve developer returns in some locations and circumstances (e.g., rental product), but this is not true across the board. Specifically, in many cases the economic benefits of additional development density may not offset the subsidy associated with building on-site affordable units. Nevertheless, developers will determine whether

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[3] **Tables 2** and **4** reflect the feasibility results of the higher value project between rentals and for-sale condominiums since developers are likely to pursue the product type that generates the highest return.

[4] It is important to note that depending on the mix of land uses included in a given project, residual land value may ***not*** be reduced as a result of the fee update. While the proposed TIA fee update introduces a new fee on residential development, the proposed TIA fee update is not raising fees for all land use types (i.e., fee decreases are occurring for some land use types). Therefore, residential mixed use developments with affordable housing units and large commercial components could potentially experience moderate increases in *residual land value*. For example, prototype D for the Coastal Corridor has the *residual land value* of $424 per square foot under the existing fee and the *residual land value* of $434 per square foot under the proposed fee (see **Table 2**).

condos, apartments, or participation in the City's voluntary density bonus program makes sense for a particular project and the proposed TIA fee is unlikely to affect this decision. More important are evolving market dynamics which are currently highly favorable in both West LA and Coastal Corridor for most of the product types considered in this analysis.

3. ***In cases where developers choose to participate in the City's density bonus program, TIA fee credits for the provision of affordable housing, whether tiered or flat, will not change the broader fundamental economics of new development.*** Both the flat and tiered TIA fee credit structures for affordable housing will result in fee levels that would be supported by the market. Developers of very low income units will experience slightly higher costs under the flat fee credit structure while developers of moderate income units will experience slightly lower costs under the flat fee credit structure (see **Table 4**). However, the minimal cost differences between the flat and tiered credit structures should be considered in the context of City policies and administration ease more so than economic feasibility.

Table 2
Feasibility Results Summary - (no TIA fee credit)*
TIA Feasibility Review

Category	Prototype A 9 D.U. Residential	Prototype B 34 D.U. Residential	Prototype C 115 D.U. Residential/Retail Mixed Use	Prototype D 157 D.U. Residential/Retail Mixed Use	Prototype E 660 D.U. Residential/Retail Mixed Use	Prototype F 516 D.U. Residential/Retail/ Office Mixed Use
Estimated Coastal Areas Land Value for Project	*$180*	*$180*	*$240*	*$240*	*$120*	*$120*
Estimated West LA Land Value for Project [1]	*$160*	*$160*	*$230*	*$230*	*$110*	*$110*
With Existing Fee[2]						
Coastal Zone Fee						
RLV per Sq. Ft. With Current TIA Fees	$670	$705	$395	$424	$861	$380
Transportation Fee as % of Total Development Cost	0.0%	0.0%	0.0%	2.7%	0.3%	2.0%
West LA Fee						
RLV per Sq. Ft. With Current TIA Fees	*$159*	*$178*	$185	*$183*	*$591*	*$199*
Transportation Fee as % of Total Development Cost	*0.0%*	*0.0%*	0.0%	*0.4%*	*0.0%*	*0.3%*
With Proposed Fee						
Coastal Zone Fee						
RLV per Sq. Ft. With Proposed TIA Fees	$661	$695	$372	$434	$834	$374
Transportation Fee as % of Total Development Cost	0.6%	0.7%	2.0%	1.9%	1.5%	2.3%
West LA Fee						
RLV per Sq. Ft. With Proposed TIA Fees	*$149*	*$166*	$159	*$154*	*$554*	*$151*
Transportation Fee as % of Total Development Cost	*0.7%*	*0.8%*	2.2%	*2.1%*	*1.7%*	*2.6%*

*Reflects the higher RLV between the rental and for-sale tenure for each prototype. All affordable units are exempt from the transportation fee. No fee credits are assumed in these results (e.g. credit for existing uses, TOD, or affordable housing). indicates for-sale condos *indicates apartments*

(1) Based on land sale transactions since 2008 in West Los Angeles. Note that Prototypes E & F are located in areas that have a significantly lower land price due to assumed industrial zoning. If land costs reflected commercial uses instead of industrial uses, the estimated land value in the Coastal area could increase from $120 to $240 and the estimated land value in the West LA area could increase from $110 to $230. The land values do not affect the RLVs or Transportation Fee as % of Total Development Cost results shown.

(2) Assessed on retail, office, and industrial components of the project; residential components are not subject to the existing fee.

Table 3
Affordable Housing Sensitivity Analysis with TIA Fee Credit Development Prototypes Summary
TIA Feasibility Review

Category	Prototype B 34 D.U. Residential	Prototype D 157 D.U. Residential/Retail Mixed Use	Prototype D* 157 D.U. Residential/Retail Mixed Use	Prototype E 660 D.U. Residential/Retail Mixed Use
Product Type	*rental*	*rental*	*for sale*	*rental*
Residential Units (1)	34	157	157	660
# of Market Rate Units	31	142	128	606
# of Affordable Units				
Moderate	-	-	29	-
Very Low	3	15	-	54
Development Assumptions				
Average Unit Size	1,603	637	637	718
Retail Gross SF.	-	44,348	44,348	20,000
Lot Size	21,371	56,477	56,477	148,177
FAR (2)	3.00	3.00	3.00	3.90
Parking Ratio	2.00	2.00	2.00	2.00 / 2.50
Parking Type	Subterranean	Subterranean	Subterranean	Subterranean

Reflects the for-sale alternative for Prototype D that results in the lower RLV relative to rentals. These results are intended to quantify the potential economic benefits resulting from various credit structures. In order to achieve this comparison, a non-optimal configuration of Prototype D (i.e., for sale with moderate income units denoted as D) is also shown.

(1) Affordable units are assumed as very low income with 11% met on site per the density bonus requirement for Prototypes B and D. Prototype E is assumed as 606 market-rate and 54 affordable units; Prototype D* assumes all affordable units are moderate income with 40% on site per the density bonus requirement.

(2) Where FAR has been derived, computations exclude parking floor area.

Table 4
Feasibility Results Summary - Affordable Housing Sensitivity Analysis (TIA fee credit)*
TIA Feasibility Review

Category	Prototype B 34 D.U. Residential (w/ Very Low Income Units)	Prototype D 157 D.U. Residential/Retail Mixed Use (w/ Very Low Income Units)	Prototype D** 157 D.U. Residential/Retail Mixed Use (w/ Moderate Income Units)	Prototype E 660 D.U. Residential/Retail Mixed Use (w/ Very Low Income Units)
Estimated West LA Land Value for Project [1]	*$160*	*$230*	*$230*	*$110*
Flat Affordable Housing Fee Credit[2]				
West LA Fee				
RLV per Sq. Ft. With Proposed TIA Fees	*$168*	*$158*	$70	*$381*
Transportation Fee as % of Total Development Cost	*0.6%*	*1.9%*	1.5%	*1.3%*
Tiered Affordable Housing Fee Credit[3]				
West LA Fee				
RLV per Sq. Ft. With Proposed TIA Fees	*$171*	*$164*	$63	*$389*
Transportation Fee as % of Total Development Cost	*0.4%*	*1.6%*	1.9%	*1.0%*

*Reflects the higher RLV between the rental and for-sale tenure for each prototype. All affordable units are exempt from the transportation fee. indicates for-sale condos *indicates apartments*

**Reflects the for-sale alternative for Prototype D that results in the lower RLV relative to rentals. These results are intended to quantify the potential economic benefits resulting from various credit structures. In order to achieve this comparison, a non-optimal configuration of Prototype D (i.e., condo with moderate income units) is also shown.

(1) Based on land sale transactions since 2008 in West Los Angeles. Note that Prototype E is located in area that has a significantly lower land
(2) Reflects a transportation fee credit on market rate units based on double the fee multiplied by the number of affordable units.
(3) Reflects a transportation fee credit on market rate units based on the fee multiplied by the number of affordable units. The credit is multiplied by a tiered factor based on affordability as follows: moderate - 0.5, low - 2, very low - 4.5.

Table 5
TIA Fee Credit Summary for Affordable Housing
TIA Feasibility Review

Item	Flat Fee	Tiered Fee
Description	One credit rate per unit (for any level of affordable housing)	Tiered credit rate per unit depending on affordability
Credit Rate	2.0 x TIA fee for one affordable unit	0.5 x TIA fee per one moderate income unit 2.0 x TIA fee per one low income unit 4.5 x TIA fee per very low income unit

Note 1: the maximum fee credit is assumed to be up to 50% of the fee generated by the Project.
Note 2: affordable units are both exempt from TIA fees and eligible for TIA fee credit.
Note 3: credit for affordable units is awarded on a per-affordable unit basis with credit equivalent to the fee rate for one market rate unit.

Development Feasibility Measures and Framework

On an economic and financial level, development impact fees should be considered from two perspectives:

1. **Improvements in Public Infrastructure**. Development impact fees, especially in growing areas, can provide an important portion of the funding for development of infrastructure and capital facilities. As such, they support the policy goals of a jurisdiction in terms of providing adequate public facilities and infrastructure such as transportation infrastructure, parks and recreation amenities, and public safety facilities/equipment. These improvements mitigate the impacts of new development on public improvements and help maintain the quality of life that both residents and employers seek. The presence of essential public infrastructure and an attractive public realm increases the demand and value of housing and can also support job-generating development.

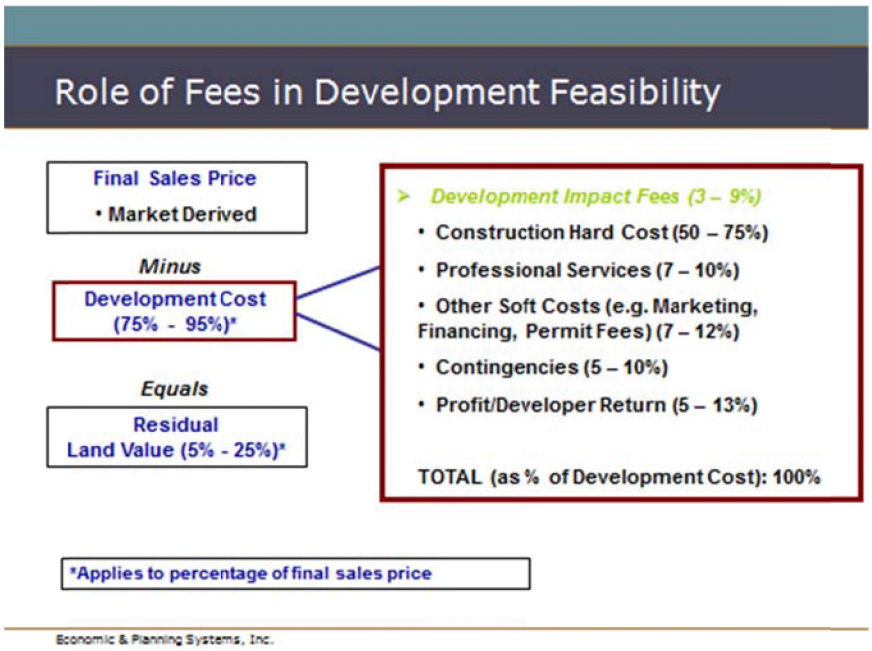
2. **Impact on Land Values and Development Costs and Economic Impacts**. Development impact fees directly add to the cost of new residential and commercial buildings (i.e., vertical development costs). In the short term, development impact fees increase overall development costs, reducing the expected return on investment/profit margin on an individual development project at a particular point in time. Over the medium to long term, a portion of these vertical development cost increases are absorbed by reductions in land value.

As a general principle, these competing benefits and costs associated with development impact fees should be considered when assessing their overall economic impacts. In reality, however, the first impact (improvements in public infrastructure) is more difficult to measure in economic terms. This is because market prices are determined by a variety of inter-related factors that are difficult to disaggregate with precision. Consequently, this analysis has focused primarily on the second impact, as described further below.

Impact on Residual Land Value

This analysis utilizes *residual land value* as the key feasibility measure for each development prototype. Residual land value is the difference between the stabilized value of a finished project (determined through capitalized revenues or sales prices) and the development costs (**Figure 1** illustrates the residual land value calculation for a typical development) for that project. Development costs include both direct construction costs (e.g., "hard costs") as well as "soft costs" such as architecture and engineering, marketing, and other professional services as well as permits and fees. This analysis assumes that development costs also include an average developer profit of 10 percent of total project costs (excluding land).

Figure 1 Residual Land Value Illustration



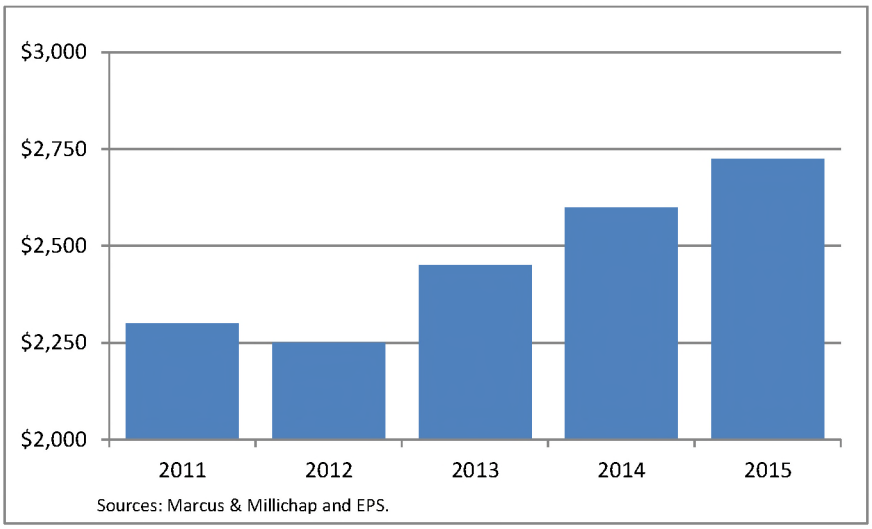
A positive residual land value for a particular product type suggests that new development may be financially feasible, generating revenue to both the property owner and developer. Negative residual land value, on the other hand, suggests that a particular project is likely infeasible under the current market conditions and a land owner would be better off holding their land and/or pursuing an alternative use. This analysis finds that the proposed TIA fee is unlikely to render a product type that currently generates a positive residual land into one that will likely generate a negative residual land value. While such a result is theoretically possible for a particular project that is on the margin of feasibility, other factors are significantly more determinative in such cases.

Impact on Total Development Costs

The percentage of total development cost is another feasibility measure used in this analysis. This measure gauges whether the cost increase is significant enough to have an adverse impact on development feasibility. This analysis finds that the proposed TIA fee may increase developer costs in the range 0.6 to 2.6 percent. Typically, small increases in costs, such as those resulting from the TIA fee updates, are over-shadowed by other factors, such as rent or sale price fluctuations or changes in labor or construction material costs, which are significantly more important to development feasibility.

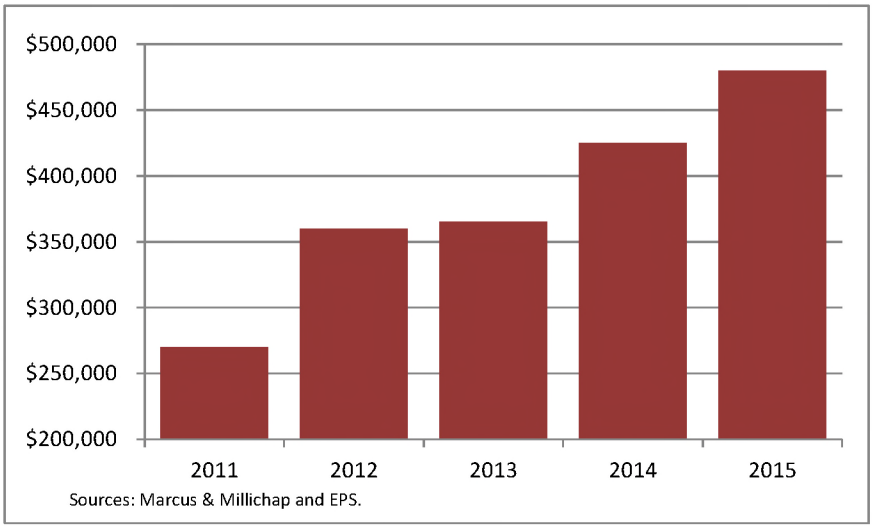
By way of example, both West LA and Coastal Corridor areas have experienced increases in rents and market sale prices in recent years that far exceed an increase in development costs that would result from the proposed TIA fee. As illustrated in **Figures 2** and **3,** rents have increased by an average of 4 percent a year since 2011, while sale prices increased by an annual average of 15 percent (attributed to the post-recessionary recovery). Not surprisingly, these price escalations have corresponded to a significant amount of new development activity in both the West LA and Coastal Corridor sub-markets.

Figure 2 Average per Unit Rents in Westside*



*Note: includes Coastal Corridor and West LA.

Figure 3 Average per Unit Sale Prices in Westside*



*Note: includes Coastal Corridor and West LA.

Currently high residual land values suggest that development impact fees charged in West LA and the Coastal Corridor have additional capacity for an increase. Even after addition of the proposed TIA fee, the overall development impact fee burden (the proposed TIA plus other impact fees including school, Quimby, art, and utility connection fees) comprises 6 percent of the overall development cost, well within the typical feasibility range of 3 to 9 percent.[5]

The foregoing analysis suggests that the proposed TIA fee increases may result in a slight land value reduction for existing property owners, a reduction in the investment return for developers that have already secured land with the intent of building in the near term, or some combination

[5] Development feasibility range is based on EPS's professional experience and review of a wide range of developer pro formas for various infill development projects as well as the industry rule of thumb.

of the two.[6] Over the long term, the proposed TIA fee increases are likely to be primarily absorbed in the price of land. However, given the overall magnitude of development costs and project value, the increase in the TIA fee is unlikely to affect market dynamics and development decisions. In addition, any reductions in land values resulting from increased fees will at least be partially off-set by the benefit to property values from improved regional mobility.

Key Assumptions and Sources of Data

This section provides further documentation on the financial assumptions and data sources used in this analysis. In general, the assumptions are based on a number of sources including a survey of developer and builder pro formas models for projects similar to the prototypes evaluated in this analysis, review of contractor bids for individual projects, assumptions stated in other publicly available consultant studies, and EPS broader experience working for a variety of clients engaged in real estate development. While most of the developer pro forma models used to inform the assumptions in this study are proprietary, EPS's list of recent clients includes Forest City, Lennar, Webcor Builders, Catellus, and Signature Properties.

Rents and Value Assumptions

This analysis assumes a range of rents and values based on existing market comparables for a range of land uses. Coastal development is assumed to support higher rents and values relative to the West LA area and smaller units are largely assumed to result in higher rents and values on a per square foot basis relative to larger units. A new space premium is also assumed relative to existing uses with key revenue assumptions summarized in **Table 6**. Rental estimates are based on RealFacts data for apartment complexes with 50 or more units. Retail rental rates are rates for similar properties are based on CoStar data. The results are consistent with recently built projects in the Coastal Corridor and West LA areas.

For rental and commercial uses, a cap rate is used to translate net operating income (NOI) to potential sales value. Cap rates have historically ranged between 4 and 10 percent, with residential rental uses and institutional space typically generating lower cap rates (perceived as lower risk) relative to other commercial uses. Cap rates are highly influenced by a wide number of factors and should be considered for individual projects based on site-specific factors. EPS assumes a 5 percent cap rate for rental residential and 7 percent for office and retail uses within a mixed-use development. Cap rate estimates are based on the IRR Viewpoint 2015 Investor Survey.

[6] There is a distinction between the TIA fee's impact on the total development cost rather than the land value. This analysis shows the impact of the fee on land value as well as the increase in total development cost (rather than the land value). The impact from the fee increase on land value is more pronounced than the impact on total development cost, since land is one of the inputs for the total development budget.

Table 6 Development Revenue Assumptions (per sq.ft.; rounded)*

Item	Coastal Areas	West LA
Market Rate Rent		
Rental Apartments (1)	$4.30 - $5.25	$3.80 - $5.00
Retail (NNN)	$4.10	$3.10
Office (NNN)	$3.40	$2.60
Affordable Rent		
Very Low Income (1)	$0.50 - $1.70	$0.50 - $1.70
Market Rate Value (condominiums)	$900	$560 - $765
Affordable Value (condominiums)		
Very Low Income (1)	$75 - $205	$75 - $205
Moderate Income (1)	na	$195 - $420

*Assumptions are based on specific projects evaluated for the purpose of this analysis as provided by City staff and EPS's market review of rents and values in the Westside.

(1) Varies by unit size.

Vacancy and Operating Expenses

This analysis reflects a vacancy rate of 5 percent for rental residential and 8 percent for retail and office uses. This is a typical level of stabilized vacancy in strong residential markets, such as the Coastal Corridor and West LA areas. The assumption reflects frictional vacancy associated with the turnover rate from both the residential and commercial development components.[7]

The analysis assumes that annual operating expenses will be $5,000 per unit based on review of 2013 survey of National Apartment Association Operating Income and Expenses report and EPS's review of other apartment pro formas. These expenses reflect a blend of market rate and affordable units and typically include property management, administration, maintenance, utilities, insurance, and taxes. For affordable units, management and administration expenses also include services required for monitoring, compliance and other costs associated with fulfilling the affordability requirements. No operating expenses are assumed for commercial uses due to the triple net rent structure, which shifts all operating expenses to tenants/end users.

Development Costs

The cost for new construction has been increasing over the past several years due to improvements in the economy, revival of new development activity, and growth in demand for

[7] Marcus & Millichap reports average vacancy rate of about 3 percent in the Westside. However, EPS assumes that vacancy may be higher in newly built projects given the rent or sale price premiums assumed over the existing space average.

construction services and materials. The key development cost assumptions used in this analysis are shown in **Table 7**. As shown, the findings assume direct construction cost of $249 per square foot for residential uses, $125 per square foot for retail, and $197 per square foot for office uses excluding parking. Additionally, site cost of $20 per land square foot is assumed as well as tenant allowances of $30 per square foot for retail and $15 per square foot for office uses to be paid by the landlord (tenants typically incur additional tenant improvement costs). These cost estimates are based on RS Means for the nearest zip code as well as EPS's review of other developer pro formas.

Table 7 Development Cost Assumptions*

Item	Total (per sq.ft.)
Site Development (per land sq.ft.) (1)	$20
Direct Construction Cost (1)	
Residential	$249
Retail	$125
Office	$197
Parking (2)	$143
Tenant Allowance	
Retail	$30
Office	$15
Development Impact Fees (3)	vary
Financing Cost (4)	vary
Other Indirect Costs (5)	27%
Profit Margin (6)	10%

*Note: assumed fixed across all prototypes and locations.

(1) Based on EPS experience and pro forma review for comparable projects. Envisions Type V construction over Type I parking/commercial structure.
(2) Assumed at $50,000 per space with an average space size of 350 square feet. This includes a direct construction cost of $35,000 and indirect construction cost of $15,000. These are typical costs for subterranean parking.
(3) Include school, park, art, sewer and water connection, and transportation fees.
(4) Estimated as % of direct costs; assumes a 4.5% interest on half of the loan based on 65% loan to cost ratio with 2% in points for financing fees. These are typical financing terms for development prototypes evaluated in this analysis.
(5) Estimated as % of direct cost; includes predevelopment, A&E, pre-opening, marketing, legal, insurance other professional services, contingency, taxes, permit costs, and developer fee.
(6) Reflects a typical private sector investment return for a development risk of this scale and complexity.

Development costs also include indirect expenses, impact fees, financing, and parking. Indirect costs include predevelopment, architecture and engineering, pre-opening and marketing, legal and other professional services, taxes, development fees, and permit costs. These costs comprise approximately 27 percent of direct cost. In addition, development costs include development impact fees for schools, parks, art, sewer, water, and storm drain connection fees,

as well as the TIA fee and associated credits where applicable. Parking is assumed to be subterranean across all prototypes with the cost of $50,000 per space assumed for all prototypes and locations (direct and indirect costs).[8] With the exception of development impact fees, per unit cost assumptions do not vary by product type.

Financial Returns

Expected returns on development investment vary based on a range of factors such as risk, capital and real estate market conditions, building uses, among others. All evaluated alternatives are assumed to result in a 10 percent return on cost across all prototypes and locations. While returns vary depending on location, construction type, market appreciation assessment, cost of equity, and many other factors, 10 percent is a typical return for comparable infill projects. This return is factored in the overall development cost estimate.

TIA Fee Credit Opportunities

There are TIA fee credit opportunities that may be offered beyond those tested in this feasibility analysis. Credit against the TIA fee may be offered for development near transit stations, for development that incorporates affordable housing units, and for reuse of existing properties (i.e., existing uses). Because the Westside is mostly built out, it is likely that many development projects will receive some level of existing use credit. This feasibility analysis is conservative (i.e., more likely to over-state the true impact of the proposed TIA) because it is based on the maximum fees that can be assessed and does not incorporate any fee reductions due to credits.

[8] Includes a $35,000 direct cost and $15,000 indirect cost per space and is based on the Urban Land Institute article titled "Multi-block Underground Shared Parking" and IBI Group's adjusted assumption from the San Diego Economic Feasibility Analysis of the SR-15 Mid-City Station Area Planning Study.