

CONGESTION MITIGATION FEE STUDY

A SELF-HELP PROPOSAL FOR CONGESTION RELIEF
IN LOS ANGELES COUNTY

PILOT NEXUS STUDY REPORTS



Arroyo Verdugo Sub-region Congestion Mitigation Fee Pilot Nexus Study Report

December 2012



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Arroyo Verdugo Sub-region Congestion Mitigation Fee Pilot Nexus Study Report

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EXECUTIVE SUMMARY

This Pilot Nexus Study has been conducted with the member jurisdictions of the Arroyo Verdugo Council of Governments (COG) to examine the feasibility of implementing a Congestion Mitigation Fee Program to meet the Congestion Management Program (CMP) Countywide Deficiency Plan requirements. The proposed Congestion Mitigation Fee Program would charge a one-time fee on new development across all land uses to fund transportation projects that would reduce congestion generated by new development.

For the last three years, the participating jurisdictions of the Arroyo Verdugo COG (Burbank, County of Los Angeles, and Glendale,) have worked with MTA to develop this Pilot Nexus Study to ensure their issues and concerns were fully vetted prior to any action by the MTA Board. The City of La Cañada Flintridge decided to participate in the San Gabriel Valley Pilot Nexus Study at this stage of the process. MTA requested each jurisdiction to review and modify, if necessary, their growth forecasts and regional arterial network, as well as select transportation improvements that would meet the nexus test. This test requires that transportation projects funded with a congestion mitigation fee mitigate the impacts caused by new development and that the cost born by each land use type bear a reasonable relationship to its impact on future congestion.

This Pilot Nexus Study concludes that the transportation projects analyzed in this study meet the requirements of the Mitigation Fee Act (AB1600) and the CMP Countywide Deficiency Plan. It also shows how a sub-regional fee program might work if it were to be implemented. Under the Congestion Mitigation Fee Program, each jurisdiction would:

- Collect and retain all of the revenue from the fee;
- Select and construct local transportation projects with regional benefits;
- Leverage their other funding sources to implement their list of transportation projects;
- Integrate their existing fee programs with the Congestion Mitigation Fee Program.

In January 2012, a preliminary findings report was distributed to the three participating jurisdictions in the Arroyo Verdugo sub-region for their review and comment. This revised Pilot Nexus Study updates the first draft based on comments received and incorporates transportation project descriptions provided by jurisdictions. This Pilot Nexus Study demonstrates the feasibility of the program.

Growth in the Arroyo Verdugo sub-region over the next 20 years is expected to result in a 239% increase in vehicle-hours-of-delay (VHD) or congestion on a roadway network that is already operating near or at capacity. To address this projected impact, 47 projects and programs with a cost of nearly \$114 million were identified, of which 36 projects with a cost of about \$75 million could be evaluated quantitatively. The analysis yielded the following results:

- **Congestion reduction benefit:** 6% reduction in congestion (vehicle-hours-of-delay) on arterials would result from implementing the transportation projects that could be evaluated quantitatively, meeting the requirements of the Mitigation Fee Act and CMP.
- **Maximum justified congestion mitigation fee:** The maximum justified fee is \$590 per trip based on the total cost of projects divided by total new trips over the next 20 years.

- **Economic benefits:** Building the projects identified could generate a countywide net economic benefit of 600 jobs, \$100 million in economic output, and more than \$30 million in disposable income.¹

Based on the results of the Pilot Nexus Study, each jurisdiction has its own individual fee-per-trip amount that would be needed to fund the unfunded share of its list of transportation projects. Based on the fee-per-trip range, a \$400 fee-per-trip amount could be used as the minimum fee-per-trip amount for these jurisdictions.

There were two additional outcomes that resulted from this work effort. The first is the development of a Greenhouse Gas Emissions Sketch Planning Tool that was made available to jurisdictions so they could generally estimate the greenhouse gas emissions impacts derived from transportation projects they identified. If the Congestion Mitigation Fee Program were implemented, there may be an opportunity for jurisdictions to fund transportation projects identified for SB 375 compliance as well as the CMP. The second outcome was the directive by the MTA Board to develop a model that would quantify the travel related benefits associated with bicycle travel. This directive was adopted to address the need to quantify the impacts of the extensive list of bicycle projects that were identified by jurisdictions during the process of conducting each sub-regional Pilot Nexus Study.

If the MTA Board authorizes staff to work with cities on implementing the congestion mitigation fee program, then it is possible that jurisdictions would modify their list of transportation projects. If so, then the congestion reduction and economic benefit from such a change may be different than the results identified in this Pilot Nexus Study and would be revised accordingly in a report at that time.

Next Steps

Below are the next steps to complete the Congestion Mitigation Fee work plan:

- Present pilot nexus study and economic analysis findings to jurisdictions, sub-regional agencies, and building industry stakeholders.
- Seek MTA Board direction in early 2013 to:
 - Adopt the Congestion Mitigation Fee Program as the new CMP Deficiency Plan;
 - Establish minimum fee amount for CMP compliance
- Work one-on-one with jurisdictions, sub-regional agencies, and the building industry to develop and implement a Congestion Mitigation Fee Program over 24 months.

Contact Information

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¹ Economic Impact Analysis of the Arroyo Verdugo Congestion Mitigation Fee Pilot Nexus Study Results – vi
October 2012

Arroyo Verdugo Sub-region Congestion Mitigation Fee Pilot Nexus Study Report

OVERVIEW

In 2003, the MTA Board authorized staff to examine the feasibility of implementing a Congestion Mitigation Fee Program to replace the existing Deficiency Plan requirements of the Congestion Management Program (CMP). The Congestion Mitigation Fee Program is intended to mitigate the impacts of new development, providing a new resource to jurisdictions while meeting local responsibilities under the state mandated CMP.

To explore the viability of a congestion mitigation fee across all land uses in each jurisdiction in the county, eight sub-regional pilot nexus studies were conducted across the county. The member jurisdictions of the Arroyo Verdugo COG worked with MTA to conduct this Pilot Nexus Study to evaluate the transportation projects, policies and technical requirements such a program would require. The results of this effort are contained in this report.

CONGESTION MANAGEMENT PROGRAM BACKGROUND

As the Congestion Management Agency for the County of Los Angeles, MTA established the CMP to meet the requirements of Section 65089 of the California Government Code, which mandates that jurisdictions link their transportation, land use, and air quality decisions to address congestion on the regional transportation network. Jurisdictions are required to conform to the CMP to continue receiving their portion of state gas tax money allocated by Section 2105 of the California Streets and Highways Code and to preserve their eligibility for state and federal funding for transportation projects funded through MTA's Call-for-Projects.

Since the county experiences a deficient regional transportation system, a Countywide Deficiency Plan has been in place linking deficiencies on the transportation system to new development activity. A uniform point system known as the "Debit/Credit" approach was developed for jurisdictions to demonstrate compliance with the CMP.

A criticism of the "Debit/Credit" methodology was that it generated no revenue but required jurisdictions to spend resources on an administrative exercise that provided no congestion relief. Furthermore, a dramatic decline in state and federal transportation funding coupled with significant growth in new development was making it difficult for some jurisdictions to comply with the CMP.

The proposed Congestion Mitigation Fee Program moves away from the administrative "Debit/Credit" approach to a mitigation fee funded approach. This approach would generate revenue from new development to implement transportation improvements designed to mitigate the impacts of growth on the regional transportation network throughout the County of Los Angeles.

In adopting the Short Range Transportation Plan in 2003, the MTA Board authorized staff to explore the feasibility of implementing a Congestion Mitigation Fee to meet CMP requirements. Since that time, MTA has worked with sub-regional agencies, jurisdictions, and building industry representatives in developing a congestion mitigation fee program in concept.

To provide a significant measure of assurance that MTA is being responsive to local jurisdiction needs and concerns, the MTA Board adopted a set of Guiding Principles on April 25, 2007. The Guiding Principles adopted by the MTA Board may be summarized as follows:

- Fees should be structured to mitigate congestion from new development without discouraging economic development.
- Fees are to augment other regional funds, not replace or redirect them.
- Local jurisdictions identify local projects with regional benefit consistent with agreed upon guidelines.
- Local jurisdictions adopt, collect, and administer congestion mitigation fees.
- Local jurisdictions build projects (or local jurisdictions may choose to participate in multi-jurisdictional or regional projects, if mutually desired).
- Local jurisdictions with existing fee programs receive dollar-for-dollar credit for local projects with a regional benefit consistent with agreed upon guidelines.
- Fees should be structured to support transit-oriented development, and to exempt mixed use and high-density residential development within ¼ mile of passenger rail stations consistent with CMP statute.
- The program will be developed in a manner to encourage certainty and predictability among jurisdictions, business, environmental and development communities.

The eight Congestion Mitigation Fee Pilot Nexus Studies honor the Guiding Principles, and conform to the technical and statutory requirements of the Mitigation Fee Act and the Congestion Management Program. During the outreach process, jurisdictions expressed strong support for MTA Board commitment to abide by the Guiding Principles.

CONGESTION MITIGATION FEE PROGRAM OVERVIEW

The proposed Congestion Mitigation Fee Program was designed to ensure maximum local control over the program's development and implementation. Local jurisdictions would collect and retain all fee revenue. Each jurisdiction would select its local transportation projects that mitigate the impacts of their new development on the regional transportation system, collect the fee revenue, and build the transportation projects. Jurisdictions have been encouraged to develop a sub-regional or multi-city approach to this program and to coordinate with regional and state transportation providers. The congestion mitigation fee revenue should help local jurisdictions leverage additional funding by providing a local match to compete for the MTA's Call-for-Projects and federal and state grants.

The proposed congestion mitigation fee would be a one-time fee applied to all types of new development based on the number of net new trips generated by the development project. For residential land use, the trip generation is based on the number of dwelling units. Thus, adding a bedroom or family room to a single family home would not increase the number of dwelling units and would not be subject to a congestion mitigation fee. The trip generation of non-residential land use is based on the square footage and the type of land use. If a new development project replaces an existing structure, the trip generation from the existing structure would be subtracted from the amount of trip generation from the new development and the Congestion Mitigation Fee would be based on the net difference. Moreover, if a non-residential use is replaced with a different type of non-residential use, the trip generation rate changes and the fee would only apply if there is a net increase in trips resulting from this change. For example, a conversion of a manufacturing facility to a warehouse of the same size would result in fewer trips being generated and, thus, would not be subject to a fee.

The Congestion Mitigation Fee Program would give credit to jurisdictions with their own existing mitigation fee programs. The amount of credit would be based on how many of the transportation projects included in the local fee program provide a regional benefit. Each eligible project would receive dollar-for-dollar credit towards the minimum fee-per-trip that would be set for the Congestion Mitigation Fee Program. If the local fee program's fee-per-trip exceeds the Congestion Mitigation Fee Program minimum, then the jurisdiction would not have to make any change to its existing mitigation fee program.

Eligible transportation projects must improve the capacity of the transportation system and must consist of capital improvement projects. Ongoing operational and maintenance projects are not eligible under this program. Transportation projects identified in this Pilot Nexus Study include the following:

- Bicycle and pedestrian improvements that provide accessibility to bus and rail transit and that were developed in a systemic and multi-modal manner.
- Signal synchronization, bus speed improvements, bottleneck intersection improvements, traffic control and monitoring systems, and Intelligent Transportation Systems.
- Bus and rail transit capital and/or construction of transit stations and centers, park and ride lots, commuter rail stations, transit stop improvements and transit vehicle purchases.
- Regional arterial enhancements such as arterial widening, bottleneck intersection improvements, closure of gaps in the arterial system, grade separations, and interchange improvements.
- Other projects determined on a case-by-case basis.

ARROYO VERDUGO SUB-REGION PILOT NEXUS STUDY BACKGROUND

To ensure a Congestion Mitigation Fee Program would serve the specific preferences of its member jurisdictions, the participating jurisdictions of the Arroyo Verdugo COG (Burbank, Glendale, and the County of Los Angeles) partnered with MTA to develop a Pilot Nexus Study as a way to assess the viability of the Congestion Mitigation Fee Program. The City of La Cañada Flintridge decided to participate in the San Gabriel Valley Pilot Nexus Study at this stage of the process. These jurisdictions took this proactive approach to fully vet the issues and concerns of these jurisdictions prior to any action by the MTA Board. This Pilot Nexus Study also provides an opportunity to explore various policies and understand complexities associated with such a program.

For the last three years, the participating jurisdictions of the Arroyo Verdugo sub-region have been working with MTA and their consultant, Cambridge Systematics, Inc. in a collaborative process. As a result of this work effort, MTA staff and the consultant have met one-on-one with senior management of the participating jurisdictions. In addition, MTA staff has briefed the Arroyo Verdugo COG on a periodic basis to inform the member jurisdictions of the progress of the Pilot Nexus Study.

CONGESTION MITIGATION FEE WORK PLAN

The Pilot Nexus Study for the Arroyo Verdugo sub-region was conducted as part of an overall work plan approved by the MTA Board in September 2008 (See Figure 1 on the following page). The work plan consists of four steps: 1) Feasibility Study and Program Guidelines; 2) Local Project Identification; 3) Nexus Analysis; and 4) Program Development and Local Implementation.

In Step 1 – Feasibility Study and Program Guidelines, MTA worked with jurisdictions and other stakeholders countywide to conduct a Feasibility Study to determine whether a fee program would be feasible. When this step was completed, the results were documented in a report titled *Congestion Mitigation Fee Feasibility Study Report* and approved by the MTA Board in September 2008.

In Step 2 – Local Project Identification, MTA worked with the participating jurisdictions of the Arroyo Verdugo sub-region to identify local projects with a regional benefit, verify their growth forecasts, and confirm their transportation network.

Step 3 – Nexus Analysis, involved a nexus analysis to determine whether the projects identified in Step 2 mitigate the impacts of 20 years of future development on the transportation network. In addition, Step 3 included an economic analysis of how the payment of a congestion mitigation fee and the benefits of congestion relief and construction jobs would change the economic performance of Los Angeles County.

MTA is completing eight pilot nexus studies (Step 3 in Figure 1 on the following page) for all of the sub-regions in the County. Should the MTA Board adopt the Congestion Mitigation Fee Program as the new CMP Countywide Deficiency Plan, then jurisdictions will be required to participate in the fee program to be in conformance with the CMP. In

this case, MTA staff will initiate Step 4 and work with jurisdictions to further develop and implement Step 4 of the Congestion Mitigation Fee Program.

If the MTA Board authorizes conducting Step 4 – Program Development and Local Implementation, then staff will work with jurisdictions, sub-regional agencies, and building industry representatives to implement the Congestion Mitigation Fee Program over a 24 month period. The MTA work plan is summarized below in Figure 1.

Figure 1: Congestion Mitigation Fee Program Work Plan

Work Plan Components	Schedule
Step 1: Feasibility Study & Program Guidelines	Jan. 2007 – Sept. 2008
<ul style="list-style-type: none"> • Review with PAC, jurisdictions, COGs, & Others 	
Step 2: Local Project Identification	Spring 2009 – Summer 2012
<ul style="list-style-type: none"> • Jurisdictions confirm growth forecasts • Jurisdictions identify local projects with regional benefits and confirm transportation network 	
Step 3: Nexus Study	Spring 2011 – Fall 2012
<ul style="list-style-type: none"> • Technical work effort to determine nexus 	
Step 4: Program Development & Implementation	2013 – 2015
<ul style="list-style-type: none"> • Work one-on-one with jurisdictions to develop and implement program at the local level. 	

Nexus Analysis

The Mitigation Fee Act (AB 1600) governs the adoption of mitigation fees in the State of California (California Government Code Sections 66000-66008). This law requires local jurisdictions to complete a nexus analysis before adopting a mitigation fee. This analysis must provide results for a dual nexus test, which would show that the improvements being funded with the fees will: 1) mitigate the impacts caused by new development; and, 2) that the fee amounts bear a reasonable relationship to the impact from new development.

This nexus analysis uses annual vehicle-hours-of-delay (VHD) to measure the impact of new development on the transportation system. Other technical measures commonly used for a nexus analysis at a jurisdiction level include level-of service (LOS) or volume-to-capacity (V/C) ratios. These measures work best when the scale of analysis is on specific roadway segments or an urban street network and the projects are intended to mitigate congestion from increased travel by single occupant vehicles. The proposed Congestion Mitigation Fee, however, is intended to address the requirements specified for Deficiency Plans set forth in the CMP legislation. Furthermore, the Congestion Mitigation Fee Program is intended to reduce VHD (congestion) caused by new development on the arterial network in each sub-region.

This VHD methodology is similar to the approach conducted for the nexus analysis completed for the San Diego Association of Governments (SANDAG) for its Regional Transportation Congestion Improvement Plan (RTCIP) in 2006. The MTA nexus analysis uses the same metric of vehicle-hours-of-delay as SANDAG is using for its mitigation fee program, which essentially measures the nexus between the RTCIP projects and the impacts from new development throughout San Diego county. The Pilot Nexus Studies utilize the same analytical methodology as SANDAG because both mitigation fee programs are focused on mitigating the impacts of new development on the arterial networks. Traffic patterns on the arterial networks of both counties of Los Angeles and San Diego are similar in terms of their function as relievers for freeway intercity travel and access to freeways. In addition, the trip generations rates for the seven land-use types are derived from the SANDAG trip generation rates because their county more closely resembles the traffic patterns and land use trip generation rates of the greater Southern California region. SANDAG calculated these rates from surveys of San Diego County households and businesses.

This nexus analysis compares VHD for the Arroyo Verdugo sub-region under three conditions or scenarios:

- **2010 Base Year – Existing Conditions Scenario:** Estimates VHD for the initial Congestion Mitigation Fee Program base year of 2010.
- **2030 Future Year – No-Build Scenario:** Estimates VHD in 2030 given estimated levels of new development and all currently planned transportation improvements funded with known sources such as MTA’s 2009 Long Range Transportation Plan.
- **2030 Future Year –With New Congestion Mitigation Fee Projects Scenario:** Estimates the reduction in VHD caused by the selected transportation improvements identified in the Congestion Mitigation Fee Program.

To meet the requirements of state law, this nexus analysis must demonstrate that VHD in 2030 does not improve beyond the 2010 Base Year levels. The analysis excludes freeway impacts because much of the freeway traffic is inter-regional and the projects submitted by jurisdictions are focused on the regional arterial system.

All transportation project categories are classified into one of nine project categories and were evaluated using either the MTA travel demand model, the Congestion Mitigation Fee Analysis Tool, or research literature as described below. Figure 2 on Page 8 that follows identifies which one of the following three nexus analysis methods was used for each transportation project category:

- **MTA Travel Demand Model:** In order to analyze the changes in VHD on the arterial network within each of the eight sub-regions, Cambridge Systematics, Inc., MTA’s contractor, made improvements to the MTA travel demand model. These improvements are documented in the *Los Angeles County MTA Travel Model Assessment and Status Report* (June 2011). The enhancements included:
 - **Replicating trip generation and trip distribution within the MTA model.** Allows the MTA travel demand model to yield more internally consistent

estimates of development impacts in the nexus analyses. The process involved converting SCAG model components into MTA's travel demand model and testing and validating model results.

- **Increasing the number of traffic assignment equilibrium iterations from 43 to 300.** Increasing to 300 iterations improves assignment accuracy substantially and provides more accuracy in traffic assignment as well as more accurate results against increased model run time.
- **Using SCAG's screenline dataset to validate sub-regional travel.** SCAG's existing dataset of traffic volumes across multiple key locations (also known as screenlines) was used to validate travel model results for 2010 base year.

With these steps completed, the MTA travel demand model is better prepared to code and run sub-regional nexus analyses.

- **Congestion Mitigation Fee Analysis Tool:** This analytical tool estimates VHD reduction from intersection improvements, system operations (e.g. signal synchronization), railroad grade separations, and highway on/off ramps. The Congestion Mitigation Fee Analysis Tool was developed specifically for conducting sub-regional nexus analysis of projects that require a level of analysis that is too fine-grained for the MTA travel demand model. The analysis tool estimates VHD reduction based on assumptions taken from research literature combined with quantified project descriptions provided by each jurisdiction.
 - **Greenhouse Gas Emissions Sketch Planning Capability:** At the request of jurisdictions, a greenhouse gas emissions sketch planning tool was developed and made available to jurisdictions so they could generally estimate the greenhouse gas emissions impacts derived from transportation projects they identified. This capability was added to assist cities when considering projects that meet both the requirements of the CMP and SB 375. If the Congestion Mitigation Fee Program were implemented, there may be an opportunity to fund transportation projects identified for SB 375 compliance as well as the CMP.
- **Research Literature:** Reliable research provides sufficient evidence that bicycle and pedestrian improvements that link to transit (e.g. bicycle lanes and sidewalks that serve bus stops and passenger rail stations), transit amenities (e.g. bus shelters, better signage, etc.), park-and-ride lots, and other similar projects provide congestion reduction benefits. This research literature, however, does not provide enough information to quantify the impacts. Thus, for purposes of the Pilot Nexus Study analysis these projects are included but their benefits are not quantified.

Furthermore, bicycle or pedestrian improvements that do not link to transit (e.g. recreational biking/hiking trails) have been excluded from the analysis. In January 2012, the MTA Board directed staff to develop the modeling capability to be able to quantify the benefit of bicycle transportation investment (and pedestrian transportation investment, if possible) because many of jurisdictions participating in the Pilot Nexus Study have included bicycle investments as part of their list of projects. Nevertheless, MTA has limited the types of bicycle projects it can accept as

part of the Pilot Nexus Study to those that provide a link or access to transit, which the research literature conclusively documents as having a qualitative relationship to reduced congestion.

Figure 2: Transportation Project Categories and Nexus Analysis Methods

Project Category	Nexus Analysis Method
Roadway Capacity Improvement	MTA Travel Demand Model
Intersection Improvement	Congestion Mitigation Fee Analysis Tool
System Operations (e.g. signal synchronization)	Congestion Mitigation Fee Analysis Tool
Railroad Grade Separations	Congestion Mitigation Fee Analysis Tool
Highway On/Off-Ramps	Congestion Mitigation Fee Analysis Tool
Bicycle/Pedestrian Improvements	Research Literature
Transit Improvements	Research Literature
Park-and-Ride Lots	Research Literature
Other Projects	Research Literature

The nexus analysis for the Arroyo Verdugo sub-region was conducted at the sub-regional level. Sub-regional level analysis captures longer, intercity trips, which are the focus of the CMP. Sub-regions are also small enough to measure significant benefits for a relatively modest investment. This sub-regional nexus analysis serves as an umbrella for each jurisdiction, which would adopt its own congestion mitigation fee program to fund the specific transportation projects that it selects.

ARROYO VERDUGO SUB-REGION PILOT NEXUS STUDY

Study Area

The study area is defined by the boundaries of the Cities of Burbank, Glendale, plus the adjacent unincorporated areas of Los Angeles County. The City of La Cañada Flintridge is not included in the study area because it decided to participate in the San Gabriel Valley Pilot Nexus Study at this stage of the process.

Projected Growth

From 2010 to 2030, the study area population is projected to increase by 29,968 and employment is projected to increase by 26,630. This growth is expected to impact the regional transportation system that is already operating near or at capacity. This growth would essentially cause what is currently a slow moving roadway network to deteriorate further and result in more congestion.

Transportation Projects Submitted

A total of 47 transportation projects and programs were identified as part of this Pilot Nexus Study. A map identifying the submitted projects is shown in Attachment B. Jurisdictions used a web-based software planning tool developed by Cambridge

Systematics, Inc. to create a database of projects located within their jurisdiction. For each transportation project, jurisdictions provided a cost estimate, funding sources, project description, and a geo-coded location (See Attachment C).

Figure 3 below summarizes the number of projects submitted by jurisdictions by project category along with information on total cost, other funding reasonably anticipated during the 20-year planning horizon, and the remaining unfunded amount that could be funded through the Congestion Mitigation Fee Program. Key findings include:

- The single railroad grade separation project represents the largest share of total project costs by category (31 percent).
- Bike/pedestrian and intersection improvements represent the next largest shares based on total project costs (25 percent and 23 percent, respectively).
- Remaining projects are distributed among the roadway capacity, system operations, and transit improvement categories.

Figure 3 divides the different types of transportation projects into two groups. Figure 3 presents the following information:

Figure 3: Arroyo Verdugo Sub-region Transportation Project Category Summary

Project Type	Number of Projects	Total Cost Share	Total Cost	Other Funding	Fee Revenue Funds
Roadway Capacity	10	8%	\$9,400,000	\$3,825,000	\$5,575,000
Intersection Improvements	24	23%	\$25,900,000	\$9,275,000	\$16,625,000
System Operations	1	4%	\$5,000,000	-	\$5,000,000
Grade Separation	1	31%	\$35,000,000	\$1,000,000	\$34,000,000
Sub-total	36	66%	\$75,300,000	\$14,100,000	\$61,200,000
Bike-Pedestrian	10	25%	\$28,229,000	\$8,750,000	\$19,478,711
Transit	1	9%	\$10,000,000	\$5,000,000	\$5,000,000
Sub-total	11	34%	\$38,229,000	\$13,750,000	\$24,478,711
Total	47	100%	\$113,529,000	\$27,850,000	\$85,679,000

- The four transportation categories shown in the upper half of Figure 3 (Roadway Capacity, Intersection Improvements, System Operations, and Grade Separations) are projects that can be evaluated using quantitative methods such as the MTA Travel Demand Model and the Congestion Mitigation Fee Analysis Tool. These projects account for the reduction in VHD derived from the nexus analysis.
- The two transportation categories shown in the lower half of Figure 3 cannot be modeled, thus, their contribution is not included in the VHD reduction estimate. Nevertheless, peer reviewed research affirms their qualitative effectiveness in lowering congestion and thus they are included in the Congestion Mitigation Fee Pilot Study’s total unfunded cost and the fee amounts needed to fund it.

As mentioned earlier, the MTA Board directed staff to develop a model that would quantify the travel related benefits associated with bicycle travel. Thus, the consultant team is developing approaches to estimate the impacts from this project category for inclusion in future nexus analyses.

- The third column of Figure 3 shows the share of the total cost for each of the transportation project categories. Some key information includes the amount of other funding leveraged by the Congestion Mitigation Fee revenue. Overall, about 25 percent of the total project cost is funded via other sources. See Attachment C for a detailed project list by jurisdiction.

Technical Nexus Analysis Results: Vehicle-Hours-of-Delay/Congestion Reduction Benefit

The nexus analysis conducted for this Pilot Nexus Study supports the finding that the transportation projects identified by jurisdictions and funded by the Congestion Mitigation Fee Program would mitigate 6% of the total impact of new development on the arterial network. This result demonstrates that the costs of mitigation will not exceed the proportion attributable to new development, and satisfies the nexus requirements set forth in the Mitigation Fee Act. This finding also meets the measurable improvement in congestion requirement as stipulated by the CMP Countywide Deficiency Plan.

Figure 4 below presents the results of the nexus analysis of the 36 projects that could be modeled. Reading from left to right, this table presents the following results:

Figure 4: Annual Vehicle Hours of Delay (VHD): Arroyo Verdugo Sub-region

1	2	3	4	5	VHD Reduction Benefit	
2010 (Existing)	2030 (No Build)	2030 (With Projects)	2010 – 2030 (No Build)	2010 – 2030 (With Projects)	6 Amount	7 Percent
<i>a</i>	<i>b</i>	<i>c</i>	<i>d = b - a</i>	<i>e = c - a</i>	<i>f = d - e</i>	<i>g = f / d</i>
1,167,000	3,956,000	3,797,000	2,789,000	2,630,000	159,000	6%

Note: The analysis excludes freeway impacts because much of the freeway traffic is inter-regional and the projects submitted by jurisdictions are focused on the regional arterial system.

Note: The Burbank computerized signal control system project, though included as a systems operation project, could not be analyzed quantitatively because the area affected is citywide and specific affected corridors were not identified.

- The nexus analysis starts with the current (2010) estimate of nearly 1.2 million VHD on the arterial network (shown in the first column of Figure 4).
- Next, the analysis forecasts almost 4.0 million VHD in 2030 (second column) or a net increase of about 2.8 million VHD (fourth column) caused by the impacts of new trips generated and attracted by new development over the next 20 years. Under the No-Build scenario, congestion is expected to have a 239% increase in vehicle-hours-of-delay (VHD) from 2010 to 2030 because of growth impacting the current transportation system that is at or near capacity. This result for the No-Build scenario

assumes that transportation improvements included in the 2008 RTP and the current MTA Long Range Transportation Plan (LRTP) are constructed.

- The third column shows what would happen if the 36 transportation projects are constructed holding everything else constant. VHD on the sub-regional arterial network in 2030 would be nearly 3.8 million, which would be a 159,000 VHD reduction (sixth column), or about a 6% reduction in congestion growth (seventh column) than without these projects.
- This analysis deliberately removed the impacts of future through trips (trips that begin and end outside of the sub-region) because new development within the subregion cannot be required to pay for the impacts from trips it does not generate or attract.

As mentioned earlier in the report, the MTA Board directed staff to develop a model that would quantify the travel related benefits associated with bicycle travel. Thus, the consultant team is developing approaches to estimate the impacts from this project category for inclusion in future nexus analyses.

Establishing Minimum and Maximum Fee-Per-Trip Amounts

The congestion mitigation fee-per-trip amount for each jurisdiction is determined by calculating its unique fee-per-trip (See Attachment A). The fee-per-trip amount is the total unfunded cost of all transportation projects selected by each jurisdiction (both those with benefits that can be quantitatively measured and those that are only qualitatively measured) divided by the number of net trips generated by new development within that jurisdiction.

Establishing a minimum fee-per-trip for the Congestion Mitigation Fee Program has been an important policy issue for jurisdictions and stakeholders since MTA convened the countywide Policy Advisory Committee in 2006. A minimum fee-per-trip would facilitate compliance with the CMP by ensuring a minimum level of congestion reduction effort. Furthermore, all jurisdictions would benefit from a level playing field, where a minimum fee-per-trip amount to reduce the advantage that one jurisdiction may have over another in attracting new development.

The minimum fee-per-trip amounts for each sub-region were determined through the pilot nexus study process where each city developed a transportation project list that balances its need to mitigate future congestion with a maximum fee-per-trip amount. As a result, the pilot nexus study process provided a fee-per-trip amount for each jurisdiction (See Attachment A).

The Pilot Study Nexus Analysis resulted in two types of fee-per-trip amounts calculated for the three jurisdictions:

- **Jurisdiction fee-per-trip:** A separate fee-per-trip for each jurisdiction was calculated based on the jurisdiction's unfunded project costs divided by the number of trips from new development within the jurisdiction (See Attachment A). This fee-per-trip is the amount needed to fund the unfunded portion of the transportation projects costs identified by each jurisdiction. Unfunded project costs used in this calculation represents a conservative method of assessing new development for its share of mitigating its impacts. Other funding sources identified by jurisdictions to

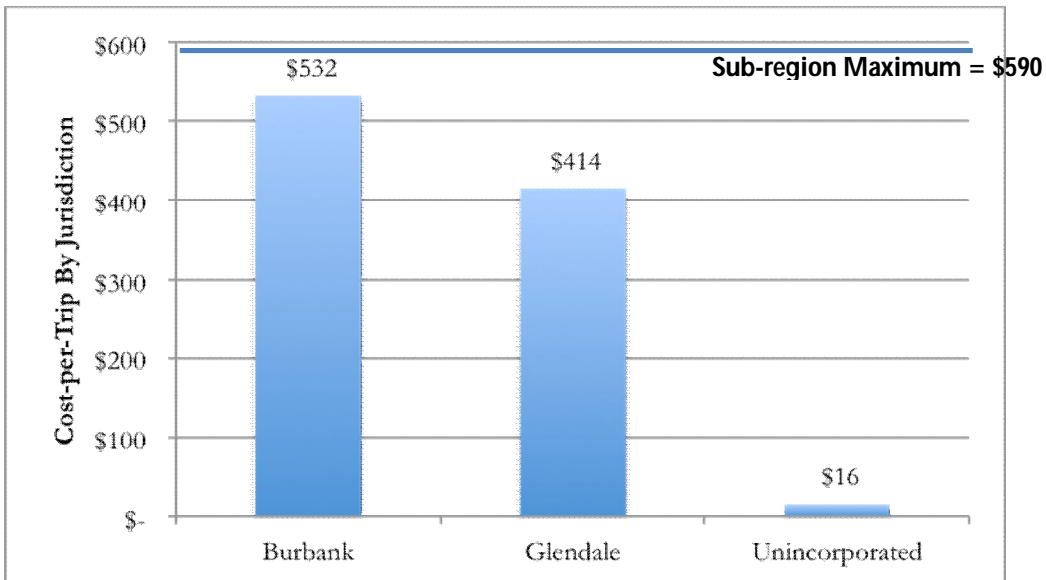
fund their proposed projects come from such funds as Proposition C and Measure R local return, state gas tax subventions, municipal general funds, Call-for-Projects, and Surface Transportation Program local funds.

- **Sub-regional maximum justified fee-per-trip:** A single \$590 fee-per-trip for the sub-region was calculated based on the \$114 million total cost of all transportation projects identified by jurisdictions divided by approximately 192,600 new trip-ends generated and attracted by new development within the sub-region. Since this nexus analysis was conducted at the sub-regional level, the \$590 fee-per-trip amount represents the maximum justified congestion mitigation fee amount the nexus analysis can defend quantitatively. Total project costs, rather than unfunded project costs, were used in this calculation because congestion reduction benefits are associated with the entire project regardless of the level of other anticipated funding.

The congestion mitigation fee-per-trip results from the nexus analysis by jurisdiction are summarized in Figure 5 below. See Attachment A for details regarding total project costs and funding by jurisdiction.

The result of the sub-regional pilot nexus study shows the individual jurisdiction fee-per-trip ranges from a minimum of \$16 up to \$532, which is less than the sub-regional maximum justified fee-per-trip of \$590. This fee-per-trip range should provide jurisdictions with the flexibility to manage the congestion impacts of growth, but also establish a floor, or minimum fee-per-trip. The minimum fee-per-trip amount is intended to create a level playing field by ensuring that each jurisdiction contributes to mitigating its growth impact on the regional transportation network.

Figure 5: Arroyo Verdugo Sub-region Fee-Per-Trip Range by Jurisdiction



Based on the pilot nexus study results, a recommended minimum fee-per-trip amount for the Arroyo Verdugo Sub-region could be a \$400 fee-per-trip amount (see Figure5).

Should the Congestion Mitigation Fee Program be adopted, each jurisdiction within the sub-region would adopt its own congestion mitigation fee ordinance. Their congestion mitigation fee would need to be set between the minimum fee-per-trip set by the MTA Board and its own individual jurisdiction fee-per-trip established by the nexus analysis (See Attachment A). The sub-regional maximum justified fee-per-trip would be the amount that jurisdictions would be limited to adopt as a result of the nexus analysis.

Those jurisdictions that are below the \$400 fee-per-trip amount in this pilot nexus study would need to increase the unfunded cost of their total transportation project list. They can do this by a combination of the following:

- 1) Add new projects to their list of transportation projects;
- 2) Reduce the amount of other anticipated funding and, thus, increase the amount of funding from the fee revenue needed to build the projects; and/or
- 3) Fund projects in an adjacent jurisdiction that will help mitigate the impact of new development travelling into or out of their jurisdiction.

NEXT STEPS

Below are the next steps to complete the Congestion Mitigation Fee work plan:

- Present pilot nexus study and economic analysis findings to jurisdictions, sub-regional agencies, and building industry stakeholders.
- Seek MTA Board direction in early 2013 to:
 - Adopt the Congestion Mitigation Fee Program as the new CMP Countywide Deficiency Plan;
 - Establish minimum fee-per-trip amount for CMP compliance
- Work one-on-one with jurisdictions, sub-regional agencies, and building industry representatives to implement a Congestion Mitigation Fee Program over a 24 month period.

If the MTA Board decides to adopt the Congestion Mitigation Fee Program as the Countywide Deficiency Plan for the CMP, MTA staff will work with each jurisdiction to implement the Congestion Mitigation Fee Program. In carrying out this work effort, it is possible that jurisdictions would modify their list of transportation projects. If so, then the congestion reduction and fee-per-trip from such a change may be different than the results identified in this Pilot Nexus Study and would be revised accordingly in a report at that time.

CONTACT INFORMATION

If you have any questions or comments, please contact:

- Robert Cáliz, MTA Project Manager, at: calixr@metro.net or (213) 922-5644.

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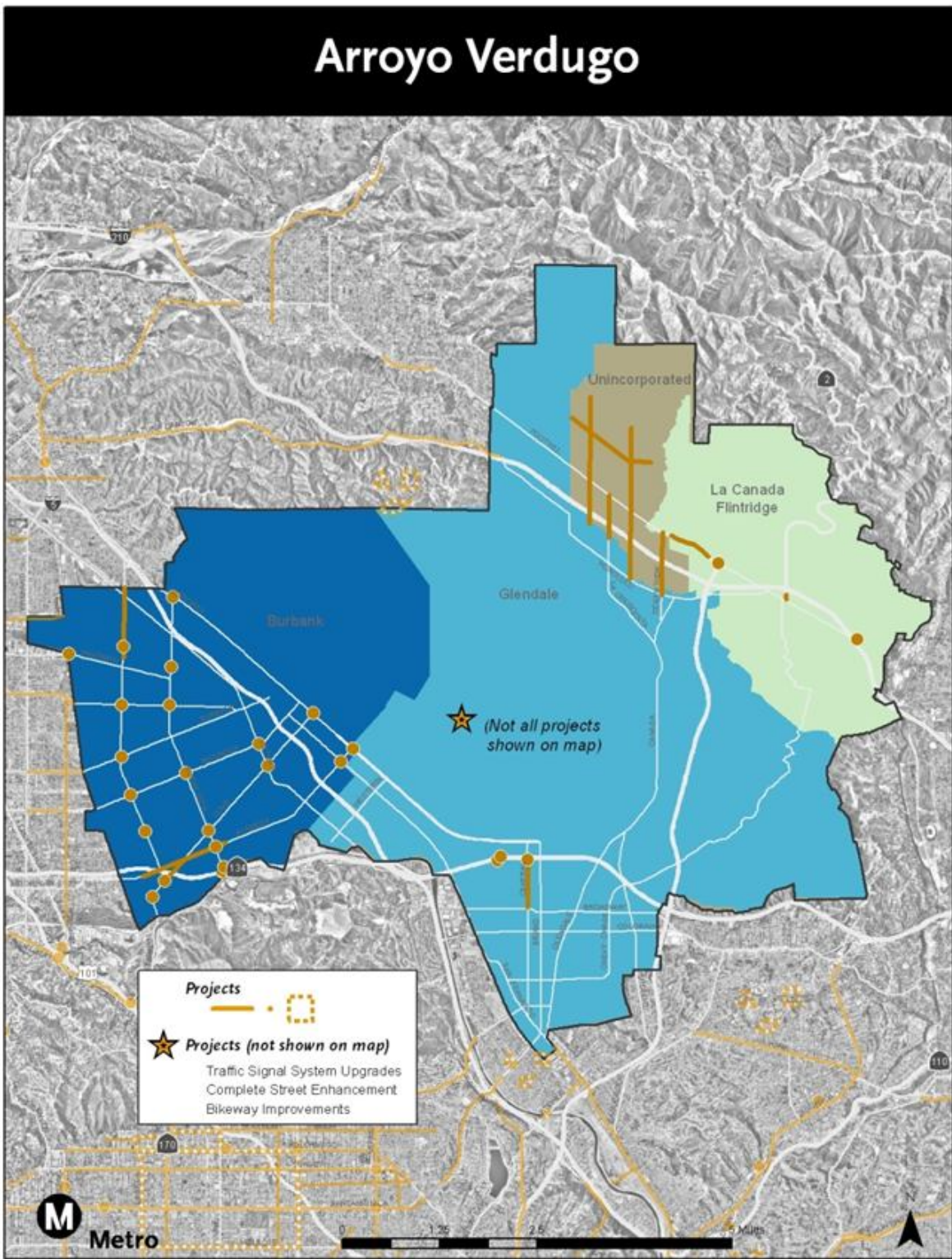
Attachment A: Arroyo Verdugo Sub-region Pilot Nexus Study Fee-per-Trip by Jurisdiction

Jurisdiction	Net New Trip Ends	Total Project Costs	Other Funding	Mitigation Fee Revenue Funds	Fee-Per-Trip
	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e = d / a</i>
Burbank	139,597	\$91,100,000	\$16,850,000	\$74,250,000	\$532
Glendale	26,580	\$22,000,000	\$11,000,000	\$11,000,000	\$414
Unincorporated County Areas - Arroyo Verdugo	26,383	\$429,000	-	\$429,000	\$16
Total	192,560	\$113,529,000	\$27,850,000	\$85,679,000	
		100%	25%	75%	

Sub-regional Maximum Justified Fee-per-Trip (= b / a)	\$590
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Attachment B: Arroyo Verdugo Sub-region Pilot Nexus Study Transportation Projects



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Attachment C: Arroyo Verdugo Sub-region List of Transportation Projects by Jurisdiction (Project Deemed Ineligible Not Listed)

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Burbank	Burbank Bicycle Master Plan Projects	Top Priority Projects identified in the City's Adopted Bicycle Master Plan Includes 35 bicycle lane miles (class I, II, or Bicycle Boulevard) with access to transit (1.8 miles or less to transit facilities)	City of Burbank	Bike-Ped	\$26,000,000	\$7,850,000	\$18,150,000	
Burbank	Alameda Avenue Widening	Widen Alameda Avenue from four to six lanes between Pass Avenue and Lincoln Street.	Alameda Avenue between Pass Avenue and Lincoln Street.	Capacity	\$1,000,000	\$-	\$1,000,000	
Burbank	Hollywood Way Widening	Widen Hollywood Way from four to six lanes between Avon Street and Cohasset Street.	Hollywood Way between Avon St. and Cohasset Street	Capacity	\$500,000	\$-	\$500,000	
Burbank	Olive Avenue Widening	Widen Olive Avenue from four to six lanes between Riverside Drive and Alameda Avenue.	Olive Avenue between Riverside Drive and Alameda Avenue.	Capacity	\$250,000	\$-	\$250,000	
Burbank	Clybourn Avenue Railroad Grade Separation	Grade separate the Clybourn Avenue / Empire Avenue railroad at-grade crossing and provide a direct connection between Vanowen Street in City of Los Angeles and Empire Avenue in City of Burbank.	Clybourn Avenue / Empire Avenue at Vanowen Street	Grade Separation	\$35,000,000	\$1,000,000	\$34,000,000	
Burbank	Buena Vista St. - EB SR 134 Ramps / Riverside Dr.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$250,000	\$-	\$250,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding		Note
						Funding	Unfunded	
Burbank	Buena Vista St. / Alameda Ave. Intersection Improvement	Widen intersection to provide additional through and turn lanes.		Intersection Improvement	\$1,000,000	\$-	\$1,000,000	
Burbank	Buena Vista St. / Empire Ave.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$4,000,000	\$-	\$4,000,000	
Burbank	Buena Vista St. / Magnolia Blvd.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$500,000	\$-	\$500,000	
Burbank	Buena Vista St. / Olive Ave.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$250,000	\$-	\$250,000	
Burbank	Buena Vista St. / Victory Blvd.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$2,000,000	\$-	\$2,000,000	
Burbank	Glenoaks Blvd. / Alameda Ave.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$250,000	\$-	\$250,000	
Burbank	Glenoaks Blvd. / Buena Vista St.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$100,000	\$-	\$100,000	
Burbank	Glenoaks Blvd. / Olive Ave.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$250,000	\$-	\$250,000	
Burbank	Hollywood Way / Burbank Blvd.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$1,000,000	\$-	\$1,000,000	
Burbank	Hollywood Way / Magnolia Blvd.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$1,000,000	\$-	\$1,000,000	
Burbank	Hollywood Way / Olive Ave.	Widen intersection to provide additional through and turn lanes.		Intersection Improvement	\$250,000	\$-	\$250,000	
Burbank	Hollywood Way / Verdugo Ave.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$500,000	\$-	\$500,000	
Burbank	Hollywood Way / Victory Blvd.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$1,000,000	\$-	\$1,000,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding		Note
						Funding	Unfunded	
Burbank	Hollywood Way & Thornton Ave.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$500,000	\$-	\$500,000	
Burbank	Pass Ave. / Olive Ave.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$1,000,000	\$-	\$1,000,000	
Burbank	San Fernando Blvd. / Alameda Ave.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$250,000	\$-	\$250,000	
Burbank	San Fernando Blvd. / Burbank Blvd.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$8,000,000	\$8,000,000	\$-	(1)
Burbank	Victory Blvd. / Magnolia Blvd.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$500,000	\$-	\$500,000	
Burbank	Victory Blvd. / Olive Ave.	Widen intersection to provide additional turn lanes.		Intersection Improvement	\$750,000	\$-	\$750,000	
Burbank	Computerized Signal Control System	Connect, synchronize, and actuate all traffic signals in Burbank. Develop multiple timing plans for time-of-day signal operations. develop adaptive control system for signal network, upgrade master controller and individual signal controllers.	All Signalized Intersections in the City of Burbank	System Operations	\$5,000,000	\$-	\$5,000,000	(4)
Glendale	Construction of Citywide Bikeway Facilities	This project includes construction of class I, II, and Sharrows recommended in the Glendale Bicycle Master Plan and installation of citywide bike racks, and other amenities related to bicycle.	Glendale	Bike-Ped	\$400,000	\$200,000	\$200,000	(2)

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding		Note
						Funding	Unfunded	
Glendale	Glendale Narrows Bikeway Culvert	This project consist of construction of a small bridge over a culvert to connect Glendale Narrows to Flower Street to create a class I bikelanes along Los Angeles River.	Glendale	Bike-Ped	\$400,000	\$200,000	\$200,000	(2)
Glendale	Glendale Narrows Riverwalk Bridge: Project Study and Design	The proposed bridge feasibility study and design will provide an improved access to Griffith Park and a major link to the regional bikeway system by connecting the bikeway east of the Glendale Narrows Section of the Los Angeles River to the west. Pro	Glendale Narrows Riverwalk Bridge	Bike-Ped	\$1,000,000	\$500,000	\$500,000	(2)
Glendale	Central Ave. Widening: Broadway to SR-134 Eastbound Off ramp	This project includes upgrade and modifications of traffic signals, channelization, installation of bike lanes, and street improvements.	Broadway to SR-134 Eastbound Off ramp	Capacity	\$3,200,000	\$1,600,000	\$1,600,000	
Glendale	Frontage Rd. South of SR 134: Between Brand and Geneva St	Evaluate the feasibility of a frontage road to connect SR134 east bond off-ramps at Brand to Maryland Ave.	Frontage Rd/ South of SR 134	Capacity	\$150,000	\$75,000	\$75,000	

Jurisdiction		Project Name		Description	Location	Project Type	Total Cost	Other Funding		Note
								Funding	Unfunded	
Glendale	SR 134 Central Ave. Eastbound Off Ramp Widening	This project would add an additional lane to the SR-134 Eastbound off-ramp at Central Avenue to alleviate traffic back up on Central Avenue off-ramp, SR-134 eastbound auxiliary lane, and freeway main line.	SR 134 Central Avenue	Capacity	\$2,000,000	\$1,000,000	\$1,000,000			
Glendale	SR-134/ Pacific Avenue Eastbound Offramp Widening	This project would add an additional lane to the SR-134 Eastbound off-Ramp at Pacific Avenue to alleviate traffic back up on the Pacific Avenue off-Ramp and freeway main line.	SR-134/ Pacific Avenue Eastbound	Capacity	\$300,000	\$150,000	\$150,000			
Glendale	SR-134/ Pacific Avenue Westbound Offramp Widening	This project would add an additional lane to the SR-134 Westbound off-Ramp at Pacific Avenue to alleviate traffic back up on the Pacific Ave off-Ramp and freeway main line.	SR-134/ Pacific Avenue	Capacity	\$300,000	\$150,000	\$150,000			
Glendale	SR-2/Mountain Ave. Interchange Ramp Widening	This project consists of widening the Northbound and Southbound off-ramps at the Mountain Avenue interchange with SR-2.	SR-2/Mountain Ave.	Capacity	\$200,000	\$100,000	\$100,000			
Glendale	SR134/ Glendale Interchange Modification	This project includes upgrading the traffic signal at the SR-134 Eastbound on and off ramps and Glendale Avenue, upgrading the traffic signal at Glendale Avenue and Monterey Road and adding a left turn lane, and installation of interconnect cable	SR134/ Glendale Interchange Modification	Capacity	\$1,500,000	\$750,000	\$750,000			

Jurisdiction		Project Name		Description	Location	Project Type	Total Cost	Other Funding		Note
								Unfunded		
Glendale	SR-134 Ramps/ Harvey Dr./ Wilson Ave. Signal/Street Widening	This project consists of upgrading the traffic signal at the SR-134 Eastbound and Westbound on and off ramps at Harvey Drive, upgrading the traffic signal at this intersection, and widening the Harvey Drive and Wilson Avenue intersection.		Intersection Improvement	\$650,000	\$325,000	\$325,000			
Glendale	SR-134/ Glendale Ave. Interchange Modification	This project includes upgrading the traffic signal at the SR-134 Eastbound on and off ramps and Glendale Avenue, upgrading the traffic signal at Glendale Avenue and Monterey Road and adding a left turn lane, and installation of interconnect cable		Intersection Improvement	\$1,500,000	\$750,000	\$750,000			
Glendale	Sr-2/ Holly Dr. Interchange Ramp Signalization	This project consists of installation of a traffic signal at the intersection of Holly Drive and the SR-2 Freeway on and off ramps.		Intersection Improvement	\$300,000	\$150,000	\$150,000			
Glendale	SR-2/ Mountain Avenue. Interchange Ramp Signalization	SR-2/ Mountain Avenue. Interchange Ramp Signalization		Intersection Improvement	\$100,000	\$50,000	\$50,000			
Glendale	Transit Revenue Vehicles	Purchase of twenty 40' compressed natural gas replacement buses for fixed route bus service.	Glendale	Transit Expansion	\$10,000,000	\$5,000,000	\$5,000,000		(3)	
Unincorporated Arroyo Verdugo	La Crescenta Ave - Foothill Blvd to Montrose Ave	Bike and pedestrian improvement projects paralleling an existing roadway facility.	La Crescenta Ave	Bike-Ped	\$8,418	\$-	\$8,418		(2)	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding		Note
						Funding	Unfunded	
Unincorporated Arroyo Verdugo	Ocean View - Foothill Blvd to Honolulu Ave	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Ocean View	Bike-Ped	\$148,500	\$-	\$148,500	(2)
Unincorporated Arroyo Verdugo	Orange Ave/Whittier Ave - Pennsylvania Ave to Briggs Ave	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Orange Ave	Bike-Ped	\$18,058	\$-	\$18,058	(2)
Unincorporated Arroyo Verdugo	Ramsdell Ave - Markridge Rd to Montrose Ave	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Ramsdell Ave	Bike-Ped	\$24,626	\$-	\$24,626	(2)
Unincorporated Arroyo Verdugo	Rosemont Ave - Rockdell St to Honolulu Ave	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Rosemont Ave	Bike-Ped	\$29,109	\$-	\$29,109	(2)
Unincorporated Arroyo Verdugo	Verdugo Flood Control Channel - Crescenta Valley Park to Shi	Bike and pedestrian improvement projects paralleling an existing roadway facility.	...rly Jean St. - Verdugo Flood Control	Bike-Ped	\$200,000	\$-	\$200,000	(2)
TOTAL					\$113,529,000	\$27,850,000	\$85,679,000	

Notes:

- (1) If existing funding already covers costs, project would be eliminated from a fee program.
- (2) Must describe link to transit in order to remain eligible for consideration.
- (3) Must upgrade or expand and not just replace existing facilities.
- (4) Project benefits for VHD reduction cannot be analyzed quantitatively without identification of specific affected corridors.

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**Gateway Cities
Congestion Mitigation Fee
Pilot Nexus Study Report**

Prepared for
**Gateway Cities
Council of Governments**

October 2012



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Gateway Cities Congestion Mitigation Fee Pilot Nexus Study Report

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EXECUTIVE SUMMARY

The Pilot Nexus Study prepared for the Gateway Cities Council of Governments (Gateway COG) examines the feasibility of implementing a Congestion Mitigation Fee Program to meet the Congestion Management Program (CMP) Countywide Deficiency Plan requirements. The proposed Congestion Mitigation Fee Program would charge a one-time fee on new development across all land uses to fund transportation projects that would reduce congestion generated by new development.

For the last year the Gateway COG and some of its member cities have worked with MTA to develop the Pilot Nexus Study to ensure their issues and concerns were fully vetted prior to any action by the MTA Board. The Pilot Nexus Study engaged 15 cities and the County of Los Angeles. MTA requested each jurisdiction review and modify, if necessary, their growth forecasts and regional arterial network, as well as select transportation improvements that would meet the nexus test. This test requires that transportation projects funded with a congestion mitigation fee mitigate the impacts caused by new development and that the cost born by each land use type bear a reasonable relationship to its impact on future congestion.

This Pilot Nexus Study concludes that the transportation projects analyzed in this study meet the requirements of the Mitigation Fee Act (AB1600) and the CMP Countywide Deficiency Plan. It also shows how a sub-regional fee program might work if it were to be implemented. Under the Congestion Mitigation Fee Program, each jurisdiction would:

- Collect and retain all of the revenue from the fee;
- Select and construct local transportation projects with regional benefits;
- Leverage their other funding sources to implement their list of transportation projects;
- Integrate their existing fee programs with the Congestion Mitigation Fee Program.

Growth in the Gateway Cities over the next 20 years is expected to result in more than a three-fold increase in vehicle-hours-of-delay (VHD) or congestion on a roadway network that is already operating near or at capacity. To address this projected impact, 121 projects with a cost of \$388 million were identified, of which 78 projects could be evaluated quantitatively. The analysis yielded the following results:

- **Congestion reduction benefit:** 15% reduction in congestion (vehicle-hours-of-delay) on arterials would result from implementing the transportation projects that could be evaluated quantitatively, meeting the requirements of the Mitigation Fee Act and CMP.
- **Maximum justified congestion mitigation fee:** The maximum justified fee is \$1,113 per trip based on the total cost of projects divided by total new trips over the next 20 years.
- **Economic benefits:** Building the projects identified could generate a countywide net economic benefit of 11,400 jobs, \$2.4 billion in economic output, and more than \$700 million in disposable income.¹

Based on the results of the Pilot Nexus Study each jurisdiction has its own individual fee-per-trip amount that would be needed to fund the unfunded share of its list of transportation projects. Since 11 out of 14 jurisdictions have fee-per-trip amounts above \$200, then the \$200 fee-per-trip amount could be used as the minimum fee-per-trip amount for the Gateway Cities sub-region.

¹ Economic Impact Analysis of the Gateway Cities Congestion Mitigation Fee Pilot Nexus Study – Oct. 2012

There were two additional outcomes that resulted from this work effort. The first is the development of a Greenhouse Gas Emissions Sketch Planning Tool that was made available to jurisdictions so they could generally estimate the greenhouse gas emissions impacts derived from transportation projects they identified. This capability has facilitated discussion with jurisdictions regarding the nexus analysis and SB 375 emission reduction strategies they may want to pursue to meet the statutory requirements for both the CMP and SB 375. The second outcome was the directive by the MTA Board to develop a model that would quantify the travel related benefits associated with bicycle travel. This directive was done to address the need to quantify the impacts of the extensive list of bicycle projects that were identified by jurisdictions during the process of conducting each sub-regional Pilot Nexus Study.

If the MTA Board authorizes staff to work with cities on implementing the congestion mitigation fee program, then it is possible that jurisdictions would modify their list of transportation projects. If so, then the congestion reduction and economic benefit from such a change may be different than the results identified in this Pilot Nexus Study and would be revised accordingly in a report at that time.

Next Steps

Below are the next steps to complete the Congestion Mitigation Fee work plan:

- Present pilot nexus study and economic analysis findings to jurisdictions, sub-regional agencies, and building industry stakeholders.
- Seek MTA Board direction in early 2013 to:
 - Adopt the Congestion Mitigation Fee Program as the new CMP Deficiency Plan;
 - Establish minimum fee amount for CMP compliance
- Work one-on-one with jurisdictions, sub-regional agencies, and the building industry to develop and implement a Congestion Mitigation Fee Program over 24 months.

Gateway Cities Congestion Mitigation Fee Pilot Nexus Study Report

OVERVIEW

In 2003, the MTA Board authorized staff to examine the feasibility of implementing a Congestion Mitigation Fee Program to replace the existing Deficiency Plan requirements of the Congestion Management Program (CMP). The Congestion Mitigation Fee Program is intended to mitigate the impacts of new development, providing a new resource to jurisdictions while meeting local responsibilities under the state mandated Congestion Management Program (CMP).

To explore the viability of a congestion mitigation fee across all land uses in each jurisdiction in the county, eight sub-regional pilot nexus studies were conducted across the county. The Gateway Cities Council of Governments (Gateway COG) and fifteen of its member jurisdictions participated in this effort and conducted this Pilot Nexus Study with MTA to evaluate the transportation projects, policies and technical requirements such a program would require. The results of this effort in the Gateway Cities sub-region are contained in this report.

CONGESTION MANAGEMENT PROGRAM BACKGROUND

As the Congestion Management Agency for the County of Los Angeles, MTA established the CMP to meet the requirements of Section 65089 of the California Government Code, which mandates that jurisdictions link their transportation, land use, and air quality decisions to address congestion on the regional transportation network. Jurisdictions are required to conform to the CMP to continue receiving their portion of state gas tax money allocated by Section 2105 of the California Streets and Highways Code and to preserve their eligibility for state and federal funding for transportation projects funded through MTA's Call-for-Projects.

Since the County experiences a deficient regional transportation system, a Countywide Deficiency Plan has been in place linking deficiencies on the transportation system to new development activity. A uniform point system known as the "Debit/Credit" approach was developed for jurisdictions to demonstrate compliance with the CMP.

A criticism of the "Debit/Credit" methodology was that it generated no revenue but required jurisdictions to spend resources on an administrative exercise that provided no congestion relief. Furthermore, a dramatic decline in state and federal transportation funding coupled with significant growth in new development was making it difficult for some jurisdictions to comply with the CMP.

The proposed Congestion Mitigation Fee Program moves away from the administrative "Debit/Credit" approach to a mitigation fee funded approach. This approach would generate revenue from new development to implement transportation improvements designed to mitigate the impacts of growth on the regional transportation network throughout the County of Los Angeles.

In adopting the Short Range Transportation Plan in 2003, the MTA Board authorized staff to explore the feasibility of implementing a Congestion Mitigation Fee to meet CMP requirements. Since that time, MTA has worked with sub-regional agencies, jurisdictions, and building industry representatives in developing a congestion mitigation fee program in concept.

To provide a significant measure of assurance that MTA is being responsive to local jurisdiction needs and concerns, the MTA Board adopted a set of Guiding Principles on April 25, 2007. The Guiding Principles adopted by the MTA Board may be summarized as follows:

- Fees should be structured to mitigate congestion from new development without discouraging economic development.
- Fees are to augment other regional funds, not replace or redirect them.
- Local jurisdictions identify local projects with regional benefit consistent with agreed upon guidelines.
- Local jurisdictions adopt, collect, and administer congestion mitigation fees.
- Local jurisdictions build projects (or local jurisdictions may choose to participate in multi-jurisdictional or regional projects, if mutually desired).
- Local jurisdictions with existing fee programs receive dollar-for-dollar credit for local projects with a regional benefit consistent with agreed upon guidelines.
- Fees should be structured to support transit-oriented development, and to exempt mixed use and high-density residential development within ¼ mile of passenger rail stations consistent with CMP statute.
- The program will be developed in a manner to encourage certainty and predictability among jurisdictions, business, environmental and development communities.

The eight Congestion Mitigation Fee Pilot Nexus Studies honor the Guiding Principles, and conform to the technical and statutory requirements of the Mitigation Fee Act and the Congestion Management Program. During the outreach process, jurisdictions expressed strong support for MTA Board commitment to abide by the Guiding Principles.

CONGESTION MITIGATION FEE PROGRAM OVERVIEW

The proposed Congestion Mitigation Fee Program was designed to ensure maximum local control over the program's development and implementation. Local jurisdictions would collect and retain all fee revenue. Each jurisdiction would select its local transportation projects that mitigate the impacts of their new development on the regional transportation system, collect the fee revenue, and build the transportation projects. Jurisdictions have been encouraged to develop a sub-regional or multi-city approach to this program and to coordinate with regional and state transportation providers. The congestion mitigation fee revenue should help local jurisdictions

leverage additional funding by providing a local match to compete for the MTA's Call-for-Projects and federal and state grants.

The proposed congestion mitigation fee would be a one-time fee applied to all types of new development based on the number of net new trips generated by the development project. For residential land use, the trip generation is based on the number of dwelling units. Thus, adding a bedroom or family room to a single family home would not increase the number of dwelling units and would not be subject to a congestion mitigation fee. The trip generation of non-residential land use is based on the square footage and the type of land use. If a new development project replaces an existing structure, the trip generation from the existing structure would be subtracted from the amount of trip generation from the new development and the Congestion Mitigation Fee would be based on the net difference. Moreover, if a non-residential use is replaced with a different type of non-residential use, the trip generation rate changes and the fee would only apply if there is a net increase in trips resulting from this change. For example, a conversion of a manufacturing facility to a warehouse of the same size would result in fewer trips being generated and, thus, would not be subject to a fee.

The Congestion Mitigation Fee Program would give credit to jurisdictions with their own existing mitigation fee programs. The amount of credit would be based on how many of the transportation projects included in the local fee program provide a regional benefit. Each eligible project would receive dollar-for-dollar credit towards the minimum fee-per-trip that would be set for the Congestion Mitigation Fee Program. If the local fee program's fee-per-trip exceeds the Congestion Mitigation Fee Program minimum, then the jurisdiction would not have to make any change to its existing mitigation fee program.

Eligible transportation projects must improve the capacity of the transportation system and must consist of capital improvement projects. Ongoing operational and maintenance projects are not eligible under this program. Projects identified in this Pilot Nexus Study include the following:

- Regional arterial enhancements such as arterial widening, bottleneck intersection improvements, closure of gaps in the arterial system, grade separations, and interchange improvements.
- Signal synchronization, bus speed improvements, bottleneck intersection improvements, traffic control and monitoring systems, and Intelligent Transportation Systems.
- Bus and rail transit capital and/or construction of transit stations and centers, park and ride lots, commuter rail stations, transit stop improvements and transit vehicle purchases.
- Bicycle and pedestrian improvements that provide accessibility to bus and rail transit and that were developed in a systemic and multi-modal manner.
- Other projects determined on a case-by-case basis.

GATEWAY CITIES PILOT NEXUS STUDY BACKGROUND

To ensure a Congestion Mitigation Fee Program would serve the specific preferences of its member jurisdictions, the Gateway Cities Council of Governments (Gateway COG) offered to partner with MTA to develop a Pilot Nexus Study as a way to assess the viability of the Congestion Mitigation Fee Program. The Gateway COG took this proactive approach to fully vet the issues and concerns of Gateway Cities jurisdictions prior to any action by the MTA Board. This Pilot Nexus Study also provides an opportunity to explore various policies and understand complexities associated with such a program.

For the last year the Gateway COG has been working with MTA and their consultant, Cambridge Systematics, Inc. in a collaborative process that has included the participation of 15 of the 26 jurisdictions in the Gateway COG. As a result of this extensive work effort, MTA staff and the consultant have met one-on-one with senior management of all 15 participating Gateway COG jurisdictions.

CONGESTION MITIGATION FEE WORK PLAN

The Gateway Cities Pilot Nexus Study was conducted as part of an overall work plan approved by the MTA Board in September 2008. The work plan consists of four steps: 1) Feasibility Study and Program Guidelines; 2) Local Project Identification; 3) Nexus Analysis; and 4) Program Development and Local Implementation. In Step 1 – Feasibility Study and Program Guidelines, MTA worked with jurisdictions and other stakeholders countywide to conduct a Feasibility Study to determine whether a fee program would be feasible. When this step was completed, the results were documented in a report titled *Congestion Mitigation Fee Feasibility Study Report* and approved by the MTA Board in September 2008.

In Step 2 – Local Project Identification, MTA worked with the Gateway COG and its participating member jurisdictions to identify local projects with a regional benefit, verify their growth forecasts, and confirm their transportation network. Step 3 – Nexus Analysis, involved a nexus analysis to determine whether the projects identified in Step 2 mitigate the impacts of 20 years of future development on the transportation network. In addition, Step 3 included an economic analysis of how the payment of a congestion mitigation fee and the benefits of congestion relief and construction jobs would change the economic performance of Los Angeles County.

MTA is completing eight pilot nexus studies (Step 3 in Figure 1 below) for all of the sub-regions in the County. Should the MTA Board adopt the Congestion Mitigation Fee Program as the new CMP Countywide Deficiency Plan, then jurisdictions will be required to participate in the fee program to be in conformance with the CMP. In this case, MTA staff will initiate Step 4 and work with jurisdictions to further develop and implement Step 4 of the Congestion Mitigation Fee Program.

If the MTA Board authorizes conducting Step 4 – Program Development and Local Implementation, then staff will work with jurisdictions, sub-regional agencies, and building industry representatives to implement the Congestion Mitigation Fee Program over a 24-month period. The MTA work plan is summarized below in Figure 1.

Figure 1: Congestion Mitigation Fee Program Work Plan

Work Plan Components	Schedule
Step 1: Feasibility Study & Program Guidelines	Jan. 2007 – Sept. 2008
<ul style="list-style-type: none"> • Review with PAC, jurisdictions, COGs, & Others 	
Step 2: Local Project Identification	Spring 2009 – Summer 2012
<ul style="list-style-type: none"> • Jurisdictions confirm growth forecasts • Jurisdictions identify local projects with regional benefits and confirm transportation network 	
Step 3: Nexus Study	Spring 2011 – Fall 2012
<ul style="list-style-type: none"> • Technical work effort to determine nexus 	
Step 4: Program Development & Implementation	2013 – 2015
<ul style="list-style-type: none"> • Work one-on-one with jurisdictions to develop and implement program at the local level. 	

Nexus Analysis

The Mitigation Fee Act (AB 1600) governs the adoption of mitigation fees in the State of California (California Government Code Sections 66000-66008). This law requires local jurisdictions to complete a nexus analysis before adopting a mitigation fee. This analysis must provide results for a dual nexus test, which would show that the improvements being funded with the fees will: 1) mitigate the impacts caused by new development; and, 2) that the fee amounts bear a reasonable relationship to the impact from new development.

This nexus analysis uses annual vehicle-hours-of-delay (VHD) to measure the impact of new development on the transportation system. Other technical measures commonly used for a nexus analysis at a jurisdiction level include level-of service (LOS) or volume-to-capacity (V/C) ratios. These measures work best when the scale of analysis is on specific roadway segments or an urban street network and the projects are intended to mitigate congestion from increased travel by single occupant vehicles. The proposed Congestion Mitigation Fee, however, is intended to address the requirements specified for Deficiency Plans set forth in the CMP legislation. Furthermore, the Congestion Mitigation Fee Program is intended to reduce congestion (VHD) caused by new development on the arterial network in each sub-region.

This VHD methodology is similar to the approach conducted for the nexus analysis completed for the San Diego Association of Governments (SANDAG) for its Regional Transportation Congestion Improvement Plan (RTCIP) in 2006. The MTA nexus analysis uses the same metric of vehicle-hours-of-delay as SANDAG is using for its mitigation fee program, which essentially measures the nexus between the RTCIP projects and the impacts from new development throughout San Diego county. The Pilot Nexus Studies utilize the same analytical methodology as SANDAG because both mitigation fee programs are focused on mitigating the impacts of new development on the arterial networks. Traffic patterns on the arterial networks of both counties of Los

Angeles and San Diego are similar in terms of their function as relievers for freeway intercity travel and access to freeways. In addition, the trip generation rates for the seven land-use types are derived from the SANDAG trip generation rates because their county more closely resembles the traffic patterns and land use trip generation rates of the greater Southern California region. SANDAG calculated these rates from surveys of San Diego County households and businesses.

This nexus analysis compares VHD for the Gateway Cities sub-region under three conditions or scenarios:

- **2010 Base Year – Existing Conditions Scenario:** Estimates VHD for the initial Congestion Mitigation Fee Program base year of 2010.
- **2030 Future Year – No-Build Scenario:** Estimates VHD in 2030 given estimated levels of new development and all currently planned transportation improvements funded with known sources such as MTA’s 2009 Long Range Transportation Plan.
- **2030 Future Year –With New Congestion Mitigation Fee Projects Scenario:** Estimates the reduction in VHD caused by the selected transportation improvements identified in the Congestion Mitigation Fee Program.

To meet the requirements of state law, this nexus analysis must demonstrate that VHD in 2030 does not improve beyond the 2010 Base Year levels. The analysis excludes freeway impacts because much of the freeway traffic is inter-regional and the projects submitted by jurisdictions are focused on the regional arterial system.

All transportation projects are classified into one of nine project categories and were evaluated using either the MTA travel demand model, the Congestion Mitigation Fee Analysis Tool, or research literature as described below. Figure 2 on Page 8 that follows identifies which one of the following three nexus analysis methods was used for each transportation project category:

- **MTA Travel Demand Model:** In order to analyze the changes in VHD on the arterial network within each of the eight sub-regions, Cambridge Systematics, Inc., MTA’s contractor, made improvements to the MTA travel demand model. These improvements are documented in the *Los Angeles County MTA Travel Model Assessment and Status Report* (June 2011). The enhancements included:
 - **Replicating trip generation and trip distribution within the MTA model.** Allows the MTA travel demand model to yield more internally consistent estimates of development impacts in the nexus analyses. The process involved converting SCAG model components into MTA’s travel demand model and testing and validating model results.
 - **Increasing the number of traffic assignment equilibrium iterations from 43 to 300.** Increasing to 300 iterations improves assignment accuracy substantially and provides more accuracy in traffic assignment as well as more accurate results against increased model run time.

- **Using SCAG's screenline dataset to validate sub-regional travel.** SCAG's existing dataset of traffic volumes across multiple key locations (also known as screenlines) was used to validate travel model results for the 2010 base year.

With these steps completed, the MTA travel demand model is better prepared to code and run sub-regional nexus analyses.

- **Congestion Mitigation Fee Analysis Tool:** This analytical tool estimates VHD reduction from intersection improvements, system operations (e.g. signal synchronization), railroad grade separations, and highway on/off ramps. The Congestion Mitigation Fee Analysis Tool was developed specifically for conducting sub-regional nexus analysis of projects that require a level of analysis that is too fine-grained for the MTA travel demand model. The analysis tool estimates VHD reduction based on assumptions taken from research literature combined with quantified project descriptions provided by each jurisdiction.
 - **Greenhouse Gas Emissions Sketch Planning Capability:** At the request of jurisdictions, a greenhouse gas emissions sketch planning tool was developed and made available to jurisdictions so they could generally estimate the greenhouse gas emissions impacts derived from transportation projects they identified. This capability has facilitated discussion with jurisdictions regarding the nexus analysis and SB 375 emission reduction strategies they may want to pursue to meet the statutory requirements for both the CMP and SB 375. Also, if the Congestion Mitigation Fee Program were implemented, there may be an opportunity to fund transportation projects identified for SB 375 compliance as well as the CMP.
- **Research Literature:** Reliable research provides sufficient evidence that bicycle and pedestrian improvements that link to transit (e.g. bicycle lanes and sidewalks that serve bus stops and passenger rail stations), transit amenities (e.g. bus shelters, better signage, etc.), park-and-ride lots, and other similar projects provide congestion reduction benefits. This research literature, however, does not provide enough information to quantify the impacts. Thus, for purposes of the Pilot Study Nexus analysis these projects are included but their benefits are not quantified.

Furthermore, bicycle or pedestrian improvements that do not link to transit (e.g. recreational biking/hiking trails) have been excluded from the analysis. In January 2012 the MTA Board directed staff to develop the modeling capability to be able to quantify the benefit of bicycle transportation investment because many of the jurisdictions participating in the Pilot Nexus Study have included bicycle investments as part of their list of projects. Nevertheless, MTA has limited the types of bicycle projects it can accept as part of the Pilot Nexus Study to those that provide a link or access to transit, which the research literature conclusively documents as having a qualitative relationship to reduced congestion.

Figure 2: Transportation Project Categories and Nexus Analysis Methods

Project Category	Nexus Analysis Method
Roadway Capacity Improvement	MTA Travel Demand Model
Intersection Improvement	Congestion Mitigation Fee Analysis Tool
System Operations (e.g. signal synchronization)	Congestion Mitigation Fee Analysis Tool
Railroad Grade Separations	Congestion Mitigation Fee Analysis Tool
Highway On/Off-Ramps	Congestion Mitigation Fee Analysis Tool
Bicycle/Pedestrian Improvements	Research Literature
Transit Improvements	Research Literature
Park-and-Ride Lots	Research Literature
Other Projects	Research Literature

The nexus analysis for the Gateway COG member cities was conducted at the sub-regional level. Sub-regions capture longer, intercity trips, which are the focus of the CMP. Sub-regions are also small enough to measure significant benefits for a relatively modest investment. This sub-regional nexus analysis serves as an umbrella for each local jurisdiction in the sub-region, which would adopt its own congestion mitigation fee program to fund the specific transportation projects that it selects.

GATEWAY CITIES PILOT NEXUS STUDY

Study Area

The study area includes the following members of the Gateway COG:

<ul style="list-style-type: none"> • City of Bell • City of Bell Gardens • City of Compton • City of Cudahy • City of Downey 	<ul style="list-style-type: none"> • City of Hawaiian Gardens • City of La Mirada • City of Long Beach • City of Paramount • City of Pico Rivera 	<ul style="list-style-type: none"> • City of Santa Fe Springs • City of Signal Hill • Unincorp. LA County • City of Vernon • City of Whittier
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Projected Growth

The Gateway Cities is projected to increase by 178,600 in population and employment is projected to increase by 20,800 from 2010 to 2030. This growth is expected to impact the regional transportation system that is already operating near or at capacity. This growth would essentially cause what is currently a slow moving roadway network to deteriorate further and result in widespread gridlock.

Transportation Projects Submitted

Fifteen of the 26 jurisdictions participated in the Gateway Cities Pilot Nexus Study. One of these, the City of Vernon, anticipates an overall decline in net trip generation due to redevelopment over the next 20 years. In other words, the City anticipates that trip generation growth from residential, retail, office, and warehouse development will be more than offset by trip generation reductions from the loss of industrial uses due to redevelopment. Although Vernon submitted projects for the Pilot Nexus Study their projects were not included in the Congestion Mitigation Fee Program. Consequently, this Pilot Nexus Study includes 14 Gateway jurisdictions. The City of Vernon may review these growth projections and their impact on the nexus analysis as part of the next step should the MTA Board decide to adopt the Congestion Mitigation Fee Program as the new CMP Deficiency Plan.

A total of 121 transportation projects were identified as part of the study. A map identifying the submitted projects is shown in Attachment B. Jurisdictions used a web-based software planning tool developed by Cambridge Systematics, Inc. to create a database of projects located within their jurisdiction. For each transportation project, jurisdictions provided a cost estimate, funding sources, project description, and a geo-coded location (See Attachment C).

Out of the total list of 121 projects, 78 projects could be evaluated quantitatively. The remaining 43 projects that could not be evaluated quantitatively consist of bicycle, pedestrian, and transit projects.

Figure 3 on page 10 summarizes the number of projects submitted by jurisdictions by project category along with information on total cost, other funding reasonably anticipated during the 20-year planning horizon, and the remaining unfunded amount that could be funded through the Congestion Mitigation Fee Program.

Figure 3 divides the eight types of transportation projects into two groups. Figure 3 presents the following information:

- The four transportation categories shown in the upper half of Figure 3 (Roadway Capacity, Intersection Improvements, System Operations, and Grade Separations) are projects that can be evaluated using quantitative methods such as the MTA Travel Demand Model and the Congestion Mitigation Fee Analysis Tool (described above). These projects account for the reduction in VHD derived from the nexus analysis.
- The four transportation categories shown in the lower half of Figure 3 cannot be modeled and thus their contribution is not included in the VHD reduction estimate. Nevertheless, peer reviewed research affirms their qualitative effectiveness in lowering congestion and thus they are included in the Congestion Mitigation Fee Pilot Study. Thus, they are included in the total unfunded cost and the fee amounts needed to fund them.

As mentioned earlier, as a result of such a robust list of bicycle projects, the MTA Board directed staff to develop a model that would quantify the travel related benefits associated with bicycle travel. Thus, the consultant team is developing approaches to estimate the impacts from these other project categories for inclusion in future nexus analyses.

- The third column of Figure 3 shows the share of the total cost for each of the eight transportation categories. Some key information includes the amount of other funding leveraged by the Congestion Mitigation Fee revenue. For example, nearly 74% of the \$115 million total cost for roadway capacity projects would be funded with other funding sources, but only 7% of the \$5 million needed for grade separation improvements will come from other sources. See Attachment C for a detailed project list by jurisdiction.

Figure 3: Gateway Cities Transportation Project Category Summary

Project Type	Number of Projects	Total Cost Share	Total Cost	Other Funding	Fee Revenue Funds
Roadway Capacity	11	30%	115,370,000	84,900,000	30,470,000
Intersection Improvement	40	9%	34,069,000	6,891,000	27,178,000
System Operations	25	16%	61,925,000	14,651,000	47,274,000
Grade Separation	2	1%	5,450,000	360,000	5,090,000
Subtotal	78	56%	216,814,000	106,802,000	110,012,000
	-				
Bike-Pedestrian	17	5%	17,768,000	7,646,000	10,122,000
Bike-Ped-Transit	22	37%	144,677,000	36,829,000	107,848,000
Park-and-Ride	3	2%	8,400,000	3,330,000	5,070,000
Transit Expansion	1	0%	500,000	210,000	290,000
Subtotal	43	44%	171,345,000	48,015,000	123,330,000
Total	121	100%	388,159,000	154,817,000	233,342,000

Technical Nexus Analysis Results: Vehicle-Hours-of-Delay/Congestion Reduction Benefit

The nexus analysis conducted for this Pilot Nexus Study supports the finding that the transportation projects identified by jurisdictions and funded by the Congestion Mitigation Fee Program would mitigate 15% of the total impact of new development on the arterial network. This result demonstrates that the costs of mitigation will not exceed the proportion attributable to new development, and satisfies the nexus requirements set forth in the Mitigation Fee Act. This finding also meets the measurable improvement in congestion requirement as stipulated by the CMP Countywide Deficiency Plan.

Figure 4 below presents the results of the nexus analysis of the 78 projects that could be evaluated quantitatively. Reading from left to right, this table presents the following results:

- The nexus analysis starts with the current (2010) estimate of 14.9 million VHD on the Gateway Cities arterial network (shown in the first column of Figure 4).
- Next, the analysis forecasts 50.8 million VHD in 2030 (second column) or a net increase of 35.9 million VHD (fourth column) caused by the impacts of new trips generated and attracted by new development within the Gateway Cities forecast over the next 20 years. Under the No-Build scenario, congestion in the Gateway Cities is expected to have more than a three-fold increase in vehicle-hours-of-delay (VHD) from 2010 to 2030 because of growth impacting the current transportation system that is at or near capacity. This result for the No-Build scenario assumes that transportation improvements included in the 2008 RTP and the current MTA Long Range Transportation Plan (LRTP) are constructed.
- The third column shows what would happen if the 78 transportation projects are constructed holding everything else constant. VHD on the sub-regional arterial network in 2030 would be 45.5 million, which would be a 5.3 million VHD (sixth column) reduction, or about 15% less (seventh column) congestion than without these projects.
- This analysis deliberately removed the impacts of future through trips (trips that begin and end outside of the sub-region) because new development within the subregion cannot be required to pay for the impacts from trips it does not generate or attract.

Figure 4: Gateway Cities Annual Vehicle Hours of Delay (VHD)

1	2	3	4	5	VHD Reduction Benefit	
2010 (Existing)	2030 (No Build)	2030 (With Projects)	2010 – 2030 (No Build)	2010 – 2030 (With Projects)	6 Amount	7 Percent
<i>A</i>	<i>b</i>	<i>c</i>	$d = b - a$	$e = c - a$	$f = d - e$	$g = f / d$
14,886,000	50,782,000	45,507,000	35,896,000	30,621,000	5,275,000	15%

Note: The analysis excludes freeway impacts because much of the freeway traffic is inter-regional and the projects submitted by jurisdictions are focused on the regional arterial system.

Establishing Minimum and Maximum Fee Amounts for the Gateway Cities

The congestion mitigation fee-per-trip amount for each jurisdiction is determined by calculating its unique cost-per-trip (See Attachment A). The cost-per-trip amount is the total unfunded cost of all transportation projects selected by each jurisdiction (both those with benefits that can be quantitatively measured and those that are only qualitatively measured) divided by the number of net trips generated by new development within that jurisdiction.

Establishing a minimum fee-per-trip for the Congestion Mitigation Fee Program has been an important policy issue for jurisdictions and stakeholders since MTA convened

the countywide Policy Advisory Committee in 2006. A minimum fee-per-trip would facilitate compliance with the CMP by ensuring a minimum level of congestion reduction effort. Furthermore, all jurisdictions would benefit from a level playing field, where a minimum fee-per-trip amount could reduce the advantage that one jurisdiction may have over another in attracting new development.

The minimum fee-per-trip amounts for each sub-region were determined through the pilot nexus study process where each city developed a transportation project list that balances its need to mitigate future congestion with a maximum fee-per-trip amount. As a result, the pilot nexus study process provided a fee-per-trip amount for each jurisdiction (See Attachment A) whereby 11 jurisdictions were above \$200 fee-per-trip. Based on this threshold, one possible option is to set a \$200 fee-per-trip amount as the minimum that all Gateway Cities COG jurisdictions could adopt as their sub-regional minimum fee-per-trip amount. The potential use of this approach is also being evaluated in the other sub-regional pilot nexus studies.

The Pilot Study Nexus Analysis resulted in two types of fee-per-trip amounts calculated for jurisdictions in the Gateway Cities:

- **Jurisdiction fee-per-trip:** A separate fee-per-trip for each jurisdiction was calculated based on the jurisdiction's unfunded project costs divided by the number of trips from new development within the jurisdiction (See Attachment A). This fee-per-trip is the amount needed to fund the unfunded portion of the transportation projects costs identified by each jurisdiction. Unfunded project costs used in this calculation represents a conservative method of assessing new development for its share of mitigating its impacts. Other funding sources identified by jurisdictions to fund their proposed projects come from such funds as Proposition C and Measure R local return, state gas tax subventions, municipal general funds, Call-for-Projects, and Surface Transportation Program local funds.
- **Sub-regional maximum justified fee-per-trip:** A single \$1,113 fee-per-trip for the sub-region was calculated based on the \$388 million total cost of all transportation projects identified by jurisdictions divided by approximately 349,000 new trip-ends generated and attracted by new development within the sub-region. Since this nexus analysis was conducted at the sub-regional level, the \$1,113 fee-per-trip amount represents the maximum congestion mitigation fee amount the nexus analysis can defend quantitatively. Total project costs, rather than unfunded project cost, were used in this calculation because congestion reduction benefits are associated with the entire project regardless of the level of other anticipated funding.

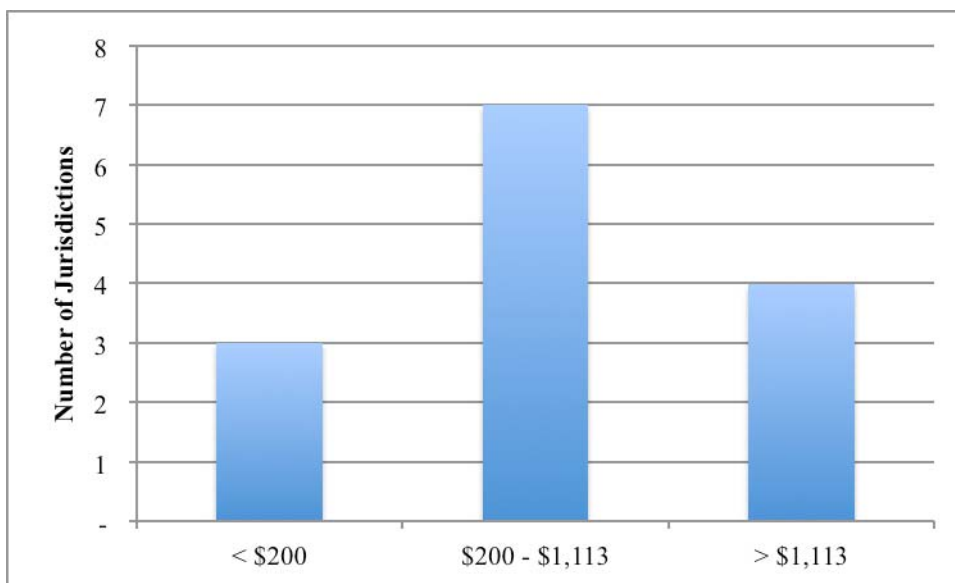
The congestion mitigation fee-per-trip results from the nexus analysis by jurisdiction are summarized in Figure 5 below. See Attachment A for details regarding total project costs and funding by jurisdiction.

- Seven (7) jurisdictions have fee-per-trip amounts that range between a fee-per-trip of \$200 and the sub-regional legal maximum fee-per-trip of \$1,113.

- Four (4) jurisdictions have fee-per-trip amounts greater than the sub-regional legal maximum fee-per-trip of \$1,113.
- Three (3) jurisdictions have fee-per-trip amounts less than \$200.

The data collected from jurisdictions shows there is a concentration of jurisdictions whose fee-per-trip range from a minimum of \$200 up to a sub-regional maximum justified fee-per-trip of \$1,113. This broad range of fee-per-trip amounts should provide each jurisdiction with the flexibility to manage the congestion impacts of growth, but also establish a floor, or minimum fee-per-trip. This minimum fee-per-trip amount is intended to create a level playing field by ensuring that each jurisdiction contributes to mitigating its growth impact on the regional transportation network.

Figure 5: Fee-Per-Trip Range by Jurisdiction



Note: The chart does not include twelve (12) jurisdictions that did not participate in the Gateway COG Pilot Study.

Should the Congestion Mitigation Fee Program be adopted, then each jurisdiction within the sub-region would adopt its own congestion mitigation fee ordinance. Their congestion mitigation fee would need to be set between the minimum fee-per-trip established by the MTA Board and their own individual jurisdiction fee-per-trip established by the nexus analysis (See Attachment A). The sub-regional maximum justified fee-per-trip would be the amount that jurisdictions would be limited to adopt as a result of the nexus analysis.

Those jurisdictions that are below the \$200 fee-per-trip in this pilot nexus study would need to increase the unfunded cost of their total transportation project list. They can do this by a combination of the following:

- 1) Add new projects to their list of transportation projects;
- 2) Reduce the amount of other anticipated funding and, thus, increase the amount of funding from the fee revenue needed to build the projects; and/or

- 3) Fund projects in an adjacent jurisdiction that will help mitigate the impacts of new development traveling into or out of their jurisdiction.

Those jurisdictions with fee-per-trip amounts that are higher than the maximum justified cost-per-trip amount of \$1,113 would have the following options to reduce their cost-per-trip amounts:

- 1) Eliminate transportation projects from their list of projects to reduce their fee-per-trip amount to a level below the maximum justified fee-per trip amount.
- 2) Identify additional funding sources to reduce the amount of funding the fee revenue would have to pay to implement the projects.
- 3) Conduct a local nexus study to justify that the additional costs can be fairly charged to new development consistent with the Mitigation Fee Act.

Based on the nexus results of the Gateway Cities Pilot Nexus Study a recommended minimum fee-per-trip amount for the Gateway Cities sub-region could be a \$200 fee-per-trip amount (see Figure 5).

Next Steps

Below are the next steps to complete the Congestion Mitigation Fee work plan:

- Present pilot nexus study and economic analysis findings to jurisdictions, sub-regional agencies, and building industry stakeholders.
- Seek MTA Board direction in early 2013 to:
 - Adopt the Congestion Mitigation Fee Program as the new CMP Countywide Deficiency Plan;
 - Establish minimum fee amount for CMP compliance
- Work one-on-one with jurisdictions, sub-regional agencies, and building industry representatives to implement a Congestion Mitigation Fee Program over a 24 month period.

If the MTA Board decides to adopt the Congestion Mitigation Fee Program as the Countywide Deficiency Plan for the CMP, MTA staff will work with each jurisdiction to implement the Congestion Mitigation Fee Program. In carrying out this work effort, it is possible that jurisdictions would modify their list of transportation projects. If so, then the congestion reduction and fee-per-trip from such a change may be different than the results identified in this Pilot Nexus Study and would be revised accordingly in a report at that time.

CONTACT INFORMATION

If you have any questions or comments, please contact:

- Stacy Alameida, Project Manager, at alameidas@metro.net or (213) 922-7414.
- Scott Hartwell, at: hartwells@metro.net or (213) 922-2836.

Attachment A:

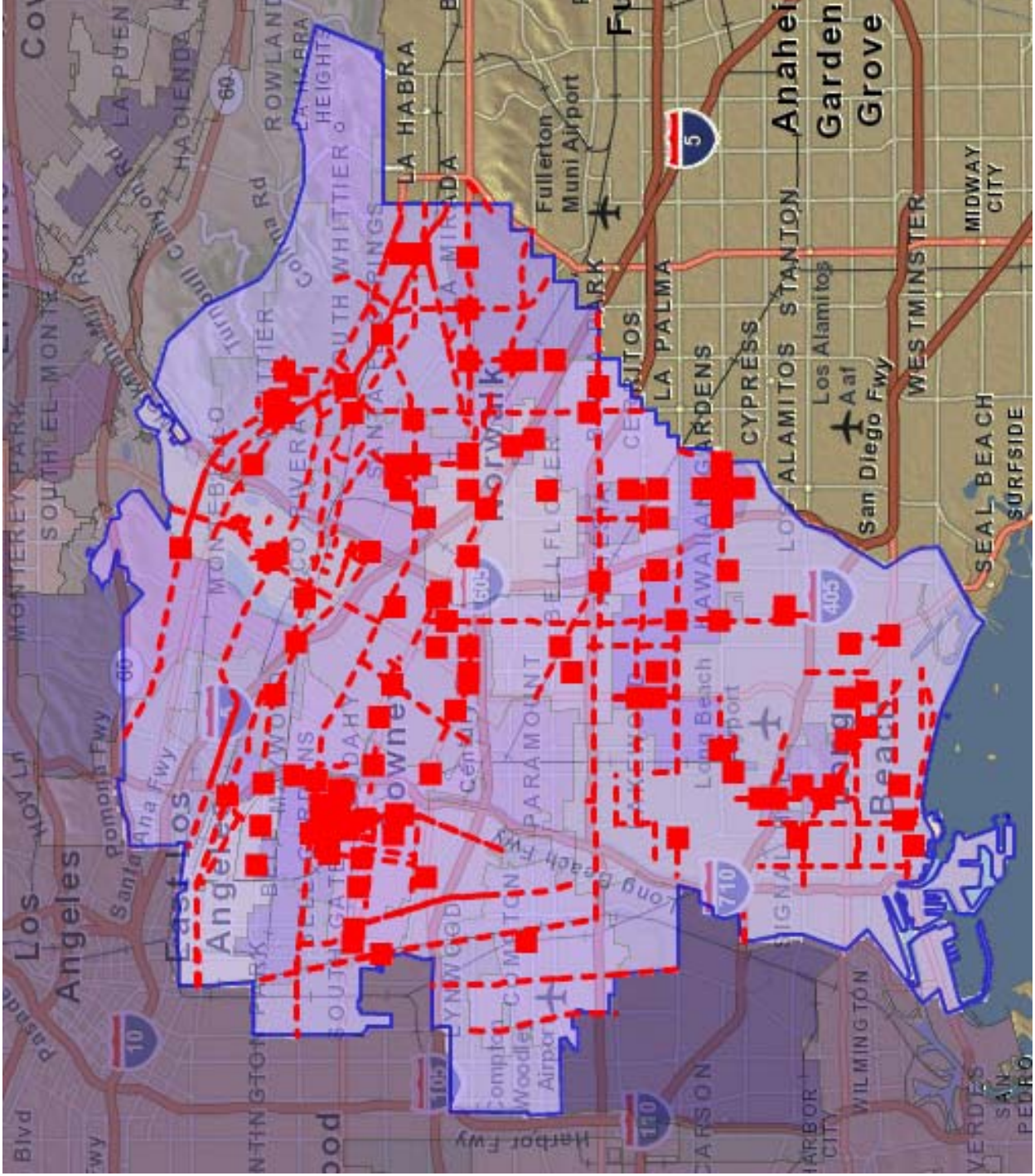
Gateway Cities COG Pilot Nexus Study Fee-per-Trip by Jurisdiction

Jurisdiction	Net New Trip Ends	Total Project Costs	Other Funding	Fee Revenue Funds	Fee Per Trip
	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e = d / a</i>
Bell	3,961	21,000,000	18,900,000	2,100,000	\$530
Bell Gardens	3,776	2,100,000	-	2,100,000	\$556
Compton	12,067	4,000,000	-	4,000,000	\$331
Cudahy	2,220	1,650,000	-	1,650,000	\$743
Downey	15,497	36,247,000	15,193,000	21,054,000	\$1,359
Hawaiian Gardens	3,016	7,200,000	-	7,200,000	\$2,387
La Mirada	9,364	11,270,000	-	11,270,000	\$1,204
Long Beach	78,963	192,063,000	107,314,000	84,749,000	\$1,073
Paramount	5,269	150,000	-	150,000	\$28
Pico Rivera	5,306	24,700,000	-	24,700,000	\$4,655
Santa Fe Springs	8,421	150,000	-	150,000	\$18
Signal Hill	3,505	1,090,000	450,000	640,000	\$183
Unincorporated	153,457	74,132,000	7,777,000	66,355,000	\$432
Whittier	9,969	12,407,000	5,184,000	7,223,000	\$725
Non-Participating Cities	33,920				
Total	348,710	\$388,159,000	\$154,818,000	\$233,341,000	
Funding Share		100%	40%	60%	

Sub-regional Maximum Justified Project Cost per Trip (= b / a)	\$1,113
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Attachment B: Gateway Cities Pilot Nexus Study Transportation Projects



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Attachment C: List of Submitted Transportation Projects by Jurisdiction

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Bell	Florence Avenue Bridge Widening	Widen Florence Av. Bridge over the LA River; the Bridge is currently rated by LA County Bridge Inspection Program as Functionally Obsolete.	Florence Avenue over the LA River	Roadway Capacity	\$7,000,000	\$6,300,000	\$700,000	(4)
Bell	Gage Avenue Bridge Widening	Widen Gage Av. Bridge over the LA River; the Bridge is currently rated by LA County Bridge Inspection Program as Functionally Obsolete.	Gage Avenue over the LA River	Roadway Capacity	\$7,000,000	\$6,300,000	\$700,000	(4)
Bell	Slauson Av Bridge Widening	Widen Slauson Av. Bridge over the LA River; the Bridge is currently rated by LA County Bridge Inspection Program as Functionally Obsolete.	Slauson Av, over the LA River	Roadway Capacity	\$7,000,000	\$6,300,000	\$700,000	(4)
Bell Gardens	Eastern Avenue Widening	Widen the street by 5 feet to create better flow of traffic, one lane added in each direction. Curb parking will be eliminated.	Eastern Avenue from Muller to Florence	Roadway Capacity	\$2,100,000	\$-	\$2,100,000	
Compton	Compton	The structure will be approximately 192 feet x 300 feet in size. 4-level parking structure with 600 spaces.	Adjacent to the MLK Transit Center, 301 N. Willowbrook	Park-and-Ride	\$4,000,000	\$-	\$4,000,000	
Cudahy	Pedestrian Improvements	Flashing Beacon and Crosswalk Upgrades to all areas surrounding Schools and Parks within the City.	Areas surrounding City Parks and Schools	Bike-Pedestrian	\$250,000	\$-	\$250,000	(1)
Cudahy	Intersection Upgrade at Salt Lake and Ardine	Intersection improvements to alleviate traffic and help bring down the number of accidents that have occurred in the past.	Salt Lake Ave and Ardine St	Intersection Improvement	\$60,000	\$-	\$60,000	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Cudahy	Intersection Upgrade at Salt Lake Ave, Otis Ave, and Elizabeth	Upgrades to the intersection to help the flow of traffic.	Intersection of Salt Lake, Otis, and Elizabeth	Intersection Improvement	\$220,000	\$-	\$220,000	
Cudahy	Intersection Upgrade for Salt Lake, Atlantic, Patata	Traffic circulation improvements.	Intersection of Salt Lake Ave, Patata St, Atlantic Ave	Intersection Improvement	\$220,000	\$-	\$220,000	
Cudahy	Signal Synchronization/Timing Upgrade along Atlantic Avenue	Signal timing upgrades and synchronizations along Atlantic Ave. From Pata St to Florence Ave	Atlantic Avenue (Patata St to Florence Ave)	System Operations	\$720,000	\$-	\$720,000	
Cudahy	Signal Timing Upgrade	Traffic signal synchronization for major intersections.	Live Oak, Clara, Elizabeth, Santa Ana	System Operations	\$180,000	\$-	\$180,000	
Downey	Telegraph Rd Traffic Throughput & Safety - Phase II	Construction of raised landscaped median islands and bus priority modifications at six signalized intersections, along the street from west city limit to Lakewood Blvd/Rosemead Blvd and between Parsons Blvd and east city limit. No street widenings.	Telegraph Rd	Bike-Ped-Transit	\$4,120,000	\$2,367,888	\$1,752,112	
Downey	Downtown Area Pedestrian Improvements	Help implement improvements outlined in the Downtown Specific Plan including augmented sidewalks, curb extensions at intersections, raised crosswalks, pedestrian lighting.	Downtown area	Bike-Pedestrian	\$1,500,000	\$-	\$1,500,000	(1)
Downey	Firestone Bl at ORSR Intersection Safety Study	Either an undercrossing or overcrossing of the RR with roadway; yet to be determined.	Firestone Bl at Old River School Rd and Burns Ave	Grade Separation	\$450,000	\$360,000	\$90,000	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Downey	Bellflower Bl at Imperial Hwy Intersection Improvements	Construction of double left-turn pockets in the nb and sb directions and right-turn pockets in the sb, eb and nb directions; modification of the existing traffic signal and incidental utility relocations and lane restriping.	Bellflower Bl, Imperial Hwy	Intersection Improvement	\$2,500,000	\$1,000,000	\$1,500,000	
Downey	Imperial Hwy/Columbia Wy Traffic Signal	Traffic signal upgrades, curb ramps. Includes protected/permissive left-turn phasing on the east-west (Imperial Hwy.) approaches to the intersection.	Imperial Hwy, Columbia Way	Intersection Improvement	\$201,300	\$181,000	\$20,300	
Downey	Lakewood Bl at Imperial Hwy Intersection Improvement Project	Widening at SW corner, providing one thru and one right-turn only lane in east bound direction, installation of pedestrian safety lighting, decorative sw, bollards, curb ramp, asphalt paving, parkway and median trees and LS, irrigation system.	Firestone Bl, Lakewood Bl	Intersection Improvement	\$1,000,000	\$719,175	\$280,825	
Downey	PARAMOUNT BLVD AT FIRESTONE BLVD IMPRVMTS	Construction of a right-turn pocket in the eastbound direction, widening of all four curb returns to provide 50-foot radii, modification of the traffic signal, incidental utility relocations, curb ramps, sw, AC pavement, striping, and signage modification.	Paramount Bl, Firestone Bl	Intersection Improvement	\$3,130,840	\$1,950,000	\$1,180,840	
Downey	WOODRUFF / WASHBURN TRAFFIC SIGNAL	Upgrade of the existing traffic signal, including the installation of accessible audible pedestrian devices to accommodate the disabled.	Woodruff Ave, Washburn Road	Intersection Improvement	\$150,650	\$135,000	\$15,650	(4)

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Downey	WOODRUFF/VIA AMORITA TRAFFIC SIGNAL	Installation of a new vehicle and pedestrian-actuated traffic signal, video detection, countdown pedestrian signals, provide fiber optic communication to the intersection to enable remote traffic management and surveillance.	Woodruff Ave, Via Amorita	Intersection Improvement	\$170,000	\$153,000	\$17,000	(4)
Downey	Lakewood Blvd. Improvements - Phases 3B & 3C	Minor widening to provide three 12-foot travel lanes, minor widening of intersections, traffic signal system upgrades, construction of curb, gutter and sidewalk, install pedestrian and street lighting system.	On Lakewood Bl from Florence Ave to Telegraph Road	Roadway Capacity	\$15,000,000	\$6,000,000	\$9,000,000	
Downey	Bellflower Bl and Stewart & Gray Rd Fiber optic Integration	Installation of fiber-optic cable into existing conduits along both Bellflower Bl and Stewart & Gray Rd to connect to both the City's Water Yard and Public Works Yard with the City's communication network.	Bellflower Bl, Stewart & Gray Rd	System Operations	\$200,000	\$150,000	\$50,000	
Downey	Imperial Highway FO Traffic Signal Comm. System	Installation of fiber-optic conduit/cable along the length of Imperial Hwy, interconnection to existing signal communication network at Paramount Bl, Lakewood Bl, traffic signal upgrades, vehicle video detection, incidental utility relocation, signage.	On Imperial Hwy between Rives Ave and Woodruff Ave	System Operations	\$900,175	\$719,175	\$181,000	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Downey	Paramount BI FO Traffic Signal System/Upgrades Phase II	Installation of fiber-optic conduit/cable along Paramount BI between Lubeck Street and Gardendale Street (south city limit), interconnection to existing signal communication, traffic signal upgrades, vehicle video detection system.	On Paramount BI	System Operations	\$1,310,586	\$719,921	\$590,665	
Downey	Paramount BI Traffic Throughput & Safety: Imperial - Florence	Installation of fiber-optic conduit/cable along Paramount BI, traffic signal upgrades, coordinated timing along corridor, communication network modifications at TMC.	On Paramount BI between Firestone BI and Imperial Hwy	System Operations	\$4,690,000	\$-	\$4,690,000	
Downey	Woodruff Ave. FO Traffic Signal Comm. System	Installation of fiber-optic conduit/cable along the length of Woodruff Ave, interconnection to existing signal communication network, traffic upgrades.	Woodruff Ave	System Operations	\$923,164	\$738,164	\$185,000	
Hawaiian Gardens	Carson Street intersection left turn lanes	Study and implement protective / permissive left turn lanes at all intersections along Carson Street. Project cost based on similar projects in sub-region and need to be confirmed by City.	All intersections along Carson Street	Intersection Improvement	\$2,000,000	\$-	\$2,000,000	
Hawaiian Gardens	Norwalk Boulevard intersection left turn lanes	Study and implement protective / permissive left turn lanes at all intersections along Norwalk Boulevard. Project cost based on similar projects in sub-region and need to be confirmed by City.	All intersections along Norwalk Boulevard	Intersection Improvement	\$2,000,000	\$-	\$2,000,000	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Hawaiian Gardens	Norwalk Boulevard/223rd Street Signal Upgrade	Traffic signal upgrade at the intersection of Norwalk Boulevard and 223rd Street to include signal control, equipment, and signal head. Project cost based on similar projects in sub-region and need to be confirmed by City.	Intersection of Norwalk Boulevard and 223rd Street	Intersection Improvement	\$200,000	\$-	\$200,000	
Hawaiian Gardens	Carson Street Widening	Widen Carson Street from 4 lanes to 6 lanes. Project cost based on similar projects in sub-region and need to be confirmed by City.	Carson Street within City	Roadway Capacity	\$3,000,000	\$-	\$3,000,000	
La Mirada	Bus stop improvements on Imperial Hwy	ROW purchase and installation of bus turn outs at various locations along Imperial highway.	Imperial Highway from east city limit to west city limit	Bike-Ped-Transit	\$2,000,000	\$-	\$2,000,000	
La Mirada	Alondra Blvd and Valley View Ave right turn lane	Purchase of ROW and construction for a right turn lane west bound Alondra to north bound Valley View.	Valley View and Alondra	Intersection Improvement	\$750,000	\$-	\$750,000	
La Mirada	Intersection improvement for Rosecrans Av and Valley View Av	ROW purchase and construction of right turn lane from north bound Valley View to east bound Rosecrans.	Rosecrans Ave and Valley View Ave	Intersection Improvement	\$500,000	\$-	\$500,000	
La Mirada	Intersection Improvements at La Mirada Blvd and Imperial Hwy	ROW purchase and construction of right turn lanes on La Mirada Blvd north bound and South bound to east and west bound Imperial Hwy.	La Mirada Blvd and imperial Hwy	Intersection Improvement	\$1,000,000	\$-	\$1,000,000	
La Mirada	Intersection improvements to Santa Gertrudes and Imperial	ROW purchase and construction of right turn lanes on at all four approaches of the intersection.	Santa Gertrudes Ave and imperial Highway	Intersection Improvement	\$2,000,000	\$-	\$2,000,000	
La Mirada	Intersection improvements Valley View Ave at Imperial Hwy	ROW purchase and construction of a right turn lane from north bound Valley View to east bound Imperial.	Valley View and Imperial	Intersection Improvement	\$500,000	\$-	\$500,000	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
La Mirada	Telegraph Road realignment	ROW acquisition and realignment of Telegraph Road 300 feet westerly from Imperial Highway to Wicker Drive to accommodate improved signal synchronization. Add SB left turn at Telegraph/Imperial and SB right turn.	Telegraph Rd and Imperial Hwy	Intersection Improvement	\$4,000,000	\$-	\$4,000,000	
La Mirada	Valley View and Alondra intersection improvements	Purchase of ROW and construction of a right turn lane from north bound Valley View to east bound Alondra.	Valley View Ave and Alondra Blvd	Intersection Improvement	\$500,000	\$-	\$500,000	
La Mirada	Additional Lane on Artesia	Restriping to add an additional lane.	Artesia from Knott and Valley View	Roadway Capacity	\$20,000	\$-	\$20,000	
Long Beach	15th Street Bike Boulevard	One bicycle boulevard along 15th Street to provide a safer east-west connection throughout the city.	15th Street Between Magnolia and Pacific Coast Highway	Bike-Ped-Transit	\$1,040,000	\$450,000	\$590,000	(1)
Long Beach	9th Street Pedestrian Enhancement Project	Signalize two intersections and provide an all-way stop at a third to provide improved connectivity for pedestrians and cyclists traveling along 9th Street to access schools, medical facilities, park facilities, and shopping.	9th Street between Pacific Avenue and Long Beach Boulevard	Bike-Ped-Transit	\$500,000	\$358,000	\$142,000	(1)
Long Beach	Bellflower/Clark/Del Amo/Broadway Bike Route Gap Closure	The project will complete Class II bicycle linkages between existing and funded projects at the stated locations.	Bellflower (btw Atherton & 6th), Clark (btw Willow & Anaheim), Del Amo (btw Long Beach & LA River), Broadway (btw Redondo & Nieto)	Bike-Ped-Transit	\$510,000	\$433,500	\$76,500	(1)

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Long Beach	Bike Share Phase I	Integrate bicycle and public transit services by installing 16 solar powered bicycle stations, including 160 bikes and hand bikes at transit stops and activity nodes.	Downtown Long Beach and CSULB Area	Bike-Ped-Transit	\$1,316,000	\$908,000	\$408,000	
Long Beach	Bike Share Phase II	Installation of 500 bikes, 50 docking stations and kiosks, and wayfinding/signage at local and Metro transit stations, employment areas, business districts, and major activity nodes.	Downtown Long Beach and CSULB Area	Bike-Ped-Transit	\$2,800,000	\$2,260,000	\$540,000	
Long Beach	Daisy Street - Bike Boulevard	Bike boulevard will provide North-South Class III bicycle facility (running the length of the City- from downtown to 70th).	running the length of the City- from downtown to 70th	Bike-Ped-Transit	\$2,200,000	\$1,980,000	\$220,000	(1)
Long Beach	I-710 Improvements/Shoemaker Bridge-Downtown Exits	Funded by the SAFETEA-LU Demo Project, the project improves bicycle, pedestrian, and streetscape on major thoroughfares.	On Broadway, 3rd Street, 6th Street, and 7th Street from Shoreline Drive to Alamitos.	Bike-Ped-Transit	\$75,000,000	\$25,000,000	\$50,000,000	(1)
Long Beach	Market Street Transportation Enhancement Project	Reconfigure the roadway to provide improved pedestrian facilities (widen sidewalks, enhanced pedestrian crossings) and access to key destinations (post office, transit stops, fire station, schools, shopping) for pedestrians, cyclists, and motorists.	Market Street between Long Beach Boulevard and Atlantic Avenue	Bike-Ped-Transit	\$7,500,000	\$-	\$7,500,000	(1)

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Long Beach	Orange Avenue Transportation Improvement Project	Traffic Calming project to narrow the roadway via striping to reduce vehicle speeds along this residential collector street and to add a traffic signal midway to improve neighborhood connectivity and access to transit stops.	Orange Avenue between Wardlow Road & Bixby Road	Bike-Ped-Transit	\$350,000	\$-	\$350,000	(1)
Long Beach	Pacific Electric Right-of-Way	Funded by the MTA, the project improves bikeway and pedestrian access along a former railroad right-of-way.	The Pacific Electric ROW in Long Beach (South of Willow Street and North of 4th Street)	Bike-Ped-Transit	\$2,000,000	\$1,500,000	\$500,000	(1)
Long Beach	Pacific-San Antonio Corridor LA River Access	Project will construct priority Class I & III bicycle system gap closures in Long Beach and improve connection to the LA River.	Pacific & Broadway to San Antonio to Del Amo to Orange & Harding btw. LA River & Orange	Bike-Ped-Transit	\$1,231,000	\$862,000	\$369,000	(1)
Long Beach	South Water Front Bike Route Gap Closure	The South Waterfront Bike Path connection proposes a main gap-closure to Long Beach's primary bikeway network. It includes a mid-block crossing and wayfinding signs.	Queensway Bridge to Queen Mary	Bike-Ped-Transit	\$890,000	\$710,000	\$180,000	(1)
Long Beach	Walnut Avenue & 4th Street Intersection Improvement	Modernize the traffic signal to provide enhanced pedestrian access to bus stops and relocation of signal and electrical equipment to improve pedestrian access to bus stops.	Walnut Avenue & 4th Street	Bike-Ped-Transit	\$150,000	\$-	\$150,000	
Long Beach	3rd Street & Lime Avenue Intersection Improvement	Construction of a new traffic signal in downtown to improve pedestrian access to a nearby grocery market, schools, and transit stops.	3rd Street & Lime Avenue	Bike-Pedestrian	\$175,000	\$-	\$175,000	(1)

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost		Other Funding		Note
					Cost	Funding	Funding	Unfunded	
Long Beach	Broadway Separated Bikeway	Dedicated bike lanes on Broadway and 3rd in downtown Long Beach. One traffic lane will be lost to preserve parking on both sides of the street.	Broadway from Alamitos and Golden Avenue	Bike-Pedestrian	\$940,000	\$705,000	\$235,000	(1)	
Long Beach	Harding Street Traffic Calming Project	Reconfigure roadway stripping to install bike lanes and new pedestrian crossings.	Harding Street between Atlantic Avenue and Cherry Avenue	Bike-Pedestrian	\$900,000	\$300,000	\$600,000	(1)	
Long Beach	Sixth Street - Bike Boulevard	Bike boulevard will provide East-West Class III bicycle facility (running from Junipero to Park).	6th St from Junipero to Park	Bike-Pedestrian	\$550,000	\$550,000	\$-	(2)	
Long Beach	Willow Street Pedestrian Improvement	This project provides pedestrian-oriented improvements to Willow St including medians, pedestrian lighting, landscaping, signage and crosswalk treatments.	Willow Street from Los Angeles River to Atlantic Avenue.	Bike-Pedestrian	\$3,097,000	\$2,180,000	\$917,000	(1)	
Long Beach	Bellflower Boulevard & Anaheim Road Traffic Signal Upgrade	The signalized intersection was modernized and left-turn phasing was installed to improve traffic operations, reduce congestion, and improve safety.	Bellflower Boulevard & Anaheim	Intersection Improvement	\$150,000	\$-	\$150,000		
Long Beach	Del Amo & Locust Intersection Improvement Project	Signalize intersection to provide improved neighborhood connectivity and access to transit and park facilities.	Del Amo & Locust	Intersection Improvement	\$200,000	\$-	\$200,000		
Long Beach	I-405 & Orange Avenue	Traffic signal installation.	I-405 at Orange Ave.	Intersection Improvement	\$1,250,000	\$250,000	\$1,000,000	(3)	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost		Other Funding		Note
					Cost	Funding	Funding	Unfunded	
Long Beach	LCD Traffic Enhancement Project	Reconfigure the LCD & Studebaker Road/Parkcrest intersection into two separate intersections to improve traffic operations and capacity while improving access to a new high school currently under construction.	LCD between Studebaker & Carson Street	Intersection Improvement	\$2,500,000	\$-	\$-	\$2,500,000	
Long Beach	Los Alamitos Traffic Circle Improvement Project	Cooperative Project with Caltrans to implement changes to the traffic characteristics of the facility to improve capacity and reduce accidents.	PCH, Lakewood Boulevard, LCD	Intersection Improvement	\$2,500,000	\$-	\$-	\$2,500,000	
Long Beach	Millikan High School Transportation Improvement Project	Modernize a traffic signal to address ADA issues, traffic congestion, and an awkward intersection jog, thereby improving traffic operations and safety for residents and students.	Spring Street & Snowden Avenue	Intersection Improvement	\$200,000	\$-	\$-	\$200,000	
Long Beach	Orange Avenue/Alamitos Avenue Traffic Improvement Project	Reconfigured a skewed roadway alignment to eliminate conflicts, concentrate pedestrian movements, and provide traffic signal control.	Alamitos Avenue between 17th Street & 15th Street	Intersection Improvement	\$1,800,000	\$900,000	\$-	\$900,000	
Long Beach	Park Avenue & Anaheim Street	Installation of a new traffic signal to address access and traffic congestion related to Wilson High School and events at Recreation Park.	Park Avenue & Anaheim Street	Intersection Improvement	\$-	\$-	\$-	\$-	(2)
Long Beach	Pine & Ocean Transportation Enhancement Project	Modernization of an existing traffic signal to provide adaptive control and left-turn phasing to address congestion arising from brisk pedestrian and vehicle demand related to special events and other evening activity.	Pine & Ocean	Intersection Improvement	\$250,000	\$-	\$-	\$250,000	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost		Other Funding		Note
					Cost	Funding	Funding	Unfunded	
Long Beach	Redondo & Anaheim Intersection Improvement	Widen Southbound Redondo Avenue to provide for right-turn lane.	Redondo & Anaheim	Intersection Improvement	\$400,000	\$-	\$-	\$400,000	
Long Beach	Spring Street & Woodruff Avenue Intersection Improvement Pro	Modernize traffic signal to provide left-turn phasing in two directions and improved pedestrian crossings to address safety and congestion issues.	Spring Street & Woodruff Avenue	Intersection Improvement	\$175,000	\$-	\$-	\$175,000	
Long Beach	Walnut Avenue Transportation Enhancement Project	Reconfigure two separate intersections into a single intersection and provide new signalized pedestrian crossings at a location that serves four grade schools and adults accessing LBCC.	Walnut Avenue & Alamitos/20th Street	Intersection Improvement	\$1,000,000	\$450,000		\$550,000	
Long Beach	Wardlow Road & Orange Avenue Intersection Improvement Project	Wardlow Road was widened to provide left-turn pockets and the traffic signal was modernized to provide left-turn phasing improving access to and from the freeway and airport industrial areas.	Wardlow Road & Orange	Intersection Improvement	\$300,000	\$-		\$300,000	
Long Beach	Blue Line Park & Ride	LONG BEACH PARK AND RIDE FACILITY AT 4TH AND PACIFIC, SOUTH OF THE MTA BLUE LINE PACIFIC STATION. 100 DEDICATED, TRANSIT ORIENTED SPACES IN MIXED USE DEVELOPMENT.	Metro Blue Line Willow Station	Park-and-Ride	\$3,800,000	\$3,030,000		\$770,000	
Long Beach	Iron Triangle Transportation Improvement Project	Project to provide grade separation of a number of traffic movements at the primary access point between freeways and the southeast area of the City.	7th Street, Bellflower, & PCH triangle of intersections.	Roadway Capacity	\$60,000,000	\$-		\$60,000,000	(3)

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost			Note
					Cost	Funding	Unfunded	
Long Beach	Spring Street Transportation Improvement Project	Roadway geometrics were modified to convert a 4 lane highway into a six lane highway.	Spring Street between Cherry Avenue and Redondo Avenue	Roadway Capacity	\$250,000	\$-	\$250,000	
Long Beach	Artesia Boulevard Traffic Signal Synchronization Project	Operational and timing improvements to traffic signals along the Artesia Boulevard corridor throughout the City.	Artesia Boulevard between Long Beach Boulevard and Downey road	System Operations	\$2,500,000	\$-	\$2,500,000	
Long Beach	Atlantic Avenue Corridor Improvement Project	Modernization of existing traffic signals, construction of a new traffic signal, installation of left-turn phasing, installation of medians to reduce/eliminate vehicle conflicts, along a retail corridor that is being renovated to improve safety.	Atlantic Avenue between 55th Street & 61st Street	System Operations	\$1,200,000	\$-	\$1,200,000	
Long Beach	Atlantic Avenue Transportation Enhancement Project	Interconnect and modernize traffic signals along Atlantic Avenue to improve operations and traffic safety.	Atlantic Avenue between Ocean Boulevard & Wardlow Road	System Operations	\$3,000,000	\$1,200,000	\$1,800,000	
Long Beach	Long Beach Area TLSP	Implement an Adaptive Traffic Signal Control system over a 160 traffic signal area comprising six separate jurisdictions.	8 Square Mile area comprising multiple jurisdictions in the area bounded by I-405, I-605, CA-91, I-710	System Operations	\$9,000,000	\$3,000,000	\$6,000,000	(4)
Long Beach	Ocean Boulevard Transportation Enhancement Project	Interconnect and modernize traffic signals along Ocean Boulevard Corridor and add two new traffic signals to improve safety and traffic operations.	Ocean Boulevard between Alamitos & Livingston/2nd Street	System Operations	\$1,280,000	\$256,000	\$1,024,000	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Long Beach	Wardlow Road Traffic Signal Synchronization Project	Operational and timing improvements to traffic signals along the Wardlow Road corridor in the western part of the City.	Wardlow Road between Santa Fe & the western City limit	System Operations	\$159,000	\$31,000	\$128,000	
Paramount	Sidewalk Improvements	Project to encourage the use of existing transportation systems by improving the quantity, quality, and connectivity of sidewalks to increase pedestrian accessibility and to accommodate special needs, including people using wheelchairs, and walkers.	Citywide	Bike-Pedestrian	\$150,000	\$-	\$150,000	(1)
Pico Rivera	Durfee Road grade separation	Grade separation (underpass) at Union Pacific Railroad corridor.	Durfee Road underpass at Union Pacific Railroad corridor	Grade Separation	\$5,000,000	\$-	\$5,000,000	
Pico Rivera	Rosemead Blvd. and Telegraph Rd.	Intersection widening to incorporate the addition of a 2nd left turn lane in all directions.	Rosemead Blvd. and Telegraph Rd.	Intersection Improvement	\$1,200,000	\$-	\$1,200,000	
Pico Rivera	Durfee Road widening	Widening from a 2-lane roadway to a 4-lane roadway from Whittier Blvd. to Beverly Blvd.	Durfee Road from Whittier Blvd. to Beverly Blvd.	Roadway Capacity	\$8,000,000	\$-	\$8,000,000	
Pico Rivera	Passons Blvd.	Widening from a 2-lane roadway to a 4-lane roadway from Slauson Ave. to Washington Blvd.	From Slauson Ave. to Washington Blvd.	Roadway Capacity	\$6,000,000	\$-	\$6,000,000	
Pico Rivera	Telegraph Rd.	Roadway median improvements from Rosemead Blvd. to West City Limits.	From Rosemead Blvd. to Passons Blvd.	System Operations	\$4,500,000	\$-	\$4,500,000	
Santa Fe Springs	Traffic Signal Installation at Bloomfield at Corral	Installation of new traffic signal at intersection of Bloomfield at Corral.	Bloomfield Ave. & Corral Pl.	Intersection Improvement	\$150,000	\$-	\$150,000	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Signal Hill	Willow St. & Orange Ave. ADA Sidewalk Improvements	Sidewalk improvements.	Willow St. between Orange Ave and Cherry Ave., Orange Ave. between Willow St. and Hill St.	Bike-Pedestrian	\$50,000	\$-	\$50,000	(1)
Signal Hill	Willow & Walnut Traffic Signal	Left-turn phasing traffic signal.	Willow & Walnut intersection	Intersection Improvement	\$240,000	\$180,000	\$60,000	
Signal Hill	Orange Avenue Corridor Traffic Signal Synchronization	Synchronize traffic signals.	Spring Street to Hill Street	System Operations	\$300,000	\$60,000	\$240,000	
Signal Hill	Citywide bus stop improvements	Install newly designed bus stops along Willow Avenue (west City boundary to east city boundary), along Orange Avenue (north to south city boundaries, along Cherry Avenue (north to south city boundaries) (north city boundary to south city boundary).	Citywide	Transit Expansion	\$500,000	\$210,000	\$290,000	(5)
Unincorporated	Avocado Creek - Duck Farm to San Gabriel River Bikeway	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Avocado Creek	Bike-Ped-Transit	\$14,300,000	\$-	\$14,300,000	(1)
Unincorporated	Compton Creek Bikeway - Del Amo Blvd to LA River Bikeway	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Compton Creek Bikeway	Bike-Ped-Transit	\$12,000,000	\$-	\$12,000,000	(1)
Unincorporated	Coyote Creek - Hillsborough Dr to Existing Coyote Creek Bike	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Coyote Creek	Bike-Ped-Transit	\$12,500,000	\$-	\$12,500,000	(1)
Unincorporated	East Coyote Creek - Del Amo Blvd to Crescent	Bike and pedestrian improvement projects paralleling an existing roadway facility.	East Coyote Creek	Bike-Ped-Transit	\$300,000	\$-	\$300,000	(1)

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost		Other Funding		Note
					Cost	Funding	Funding	Unfunded	
Unincorporated	La Mirada Blvd - Colima Rd to Leffingwell Rd	Bike and pedestrian improvement projects paralleling an existing roadway facility.	La Mirada Blvd	Bike-Ped-Transit	\$1,870,000	\$-	\$-	\$1,870,000	(1)
Unincorporated	Milan Creek - Artesia Blvd to Coyote Creek	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Milan Creek	Bike-Ped-Transit	\$1,900,000	\$-	\$-	\$1,900,000	(1)
Unincorporated	Utility Corridor 4 - Santa Gertrudes Ave to Rail N/O Lambert	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Utility Corridor 4	Bike-Ped-Transit	\$200,000	\$-	\$-	\$200,000	(1)
Unincorporated	Alameda St TSSP	Traffic Signal Synchronization improvements, additional vehicle detection, traffic actuated signals, and time-based coordination.	Nadeau St to Auto Dr South	System Operations	\$2,130,000	\$889,007		\$1,240,993	
Unincorporated	Beverly Bl TSSP	Traffic Signal Synchronization improvements, additional vehicle detection, traffic actuated signals, and time-based coordination.	Rio Hondo Bridge to Pickering Av	System Operations	\$2,393,000	\$478,600		\$1,914,400	
Unincorporated	Florence Ave/Mills TSSP - Central Ave to Whittier Blvd	Signal Synchronization	Florence Ave	System Operations	\$5,070,000	\$2,115,774		\$2,954,226	
Unincorporated	ITS Improvements - Expansion of the I-710 and 91 Corridors	ATMS expansion - signal controller upgrades, timing revisions; collect/manage real-time traffic information; exchange data with other jurisdictions; monitor signal equipment status. Includes CCTV camera installation.	I-710 & 91	System Operations	\$5,300,000	\$1,060,000		\$4,240,000	(4)
Unincorporated	Lambert TSSP	Traffic Signal Synchronization improvements, additional vehicle detection, traffic actuated signals, and time-based coordination.	Washington Bl to Grayling Av	System Operations	\$2,248,315	\$449,663		\$1,798,652	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost		Other Funding		Note
					Cost	Funding	Funding	Unfunded	
Unincorporated	Leffingwell Rd TSSP	Traffic Signal Synchronization improvements, additional vehicle detection, traffic actuated signals, and time-based coordination.	Imperial Hwy to Valley Home Av	System Operations	\$929,000	\$185,800	\$743,200		
Unincorporated	Slauson Ave/Mulberry Dr TSSP - Eastern to Garfield	Signal Synchronization.	Slauson Ave	System Operations	\$6,674,200	\$1,334,840	\$5,339,360		
Unincorporated	South St TSSP	Traffic Signal Synchronization improvements, additional vehicle detection, traffic actuated signals, and time-based coordination.	Atlantic Bl to Studebaker Rd	System Operations	\$1,485,000	\$297,000	\$1,188,000		
Unincorporated	Washington Bl TSSP	Traffic Signal Synchronization improvements, additional vehicle detection, traffic actuated signals, and time-based coordination.	Atlantic Av to Whittier Bl	System Operations	\$2,341,000	\$468,200	\$1,872,800		
Unincorporated	Woodruff Av TSSP	Firestone Av to Willow St	Traffic Signal Synchronization improvements, additional vehicle detection, traffic actuated signals, and time-based coordination.	System Operations	\$2,491,350	\$498,270	\$1,993,080		
Vernon	Atlantic Blvd/Bandini Blvd	Add dual left turn pocket in west bound direction.	Atlantic Blvd at Bandini Blvd	Intersection Improvement	\$1,000,000	\$-	\$1,000,000		(6)
Vernon	Atlantic Blvd Bridge over the LA River	Widen lanes, add a shoulder, add a median, add a new right turn lane, slightly widen sidewalk.	Atlantic Blvd north of the LA River to 800 feet south of intersection with District Blvd	Capacity	\$2,000,000	\$-	\$2,000,000		(6)
Vernon	Bike Path	Extend bike path from Atlantic Blvd bridge to Downtown LA.	Downey Road to Atlantic District Blvd to LA River Bike Path	Bike-Pedestrian	\$200,000	\$-	\$200,000		(6)

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Vernon	37 th /Bandini Blvd Traffic Signal Coordination	Synchronization and upgrade of traffic signals along 37 th St/Bandini Blvd corridor. 9 intersections involved.	37 th St/Bandini Blvd corridor	System Operations	\$250,000	\$-	\$250,000	(6)
Vernon	Traffic Control System	Installation of a traffic control system to facilitate the synchronization of traffic signals, integrate ITS systems and exchange real-time data among ITS systems across jurisdictional boundaries.	Across jurisdictional boundaries, approximately 35 intersections.	System Operations	\$480,000	\$-	\$480,000	(6)
Whittier	Beverly Boulevard Class II Bike Lanes	Installation of Class II Bike Lanes, Median Islands, Safety Lighting and Bus Shelters.	Beverly Blvd. from 605 Freeway to Norwalk Blvd./Workman Mill Road.	Bike-Pedestrian	\$1,242,500	\$900,000	\$342,500	(1)
Whittier	Leffingwell Road Class II Bike Lanes	Installation of Class II Bike Lane striping and signing along Leffingwell Road. Project to be done in Coordination with Los Angeles County.	Leffingwell Road from Scott Avenue to Lambert Road	Bike-Pedestrian	\$8,000	\$6,400	\$1,600	(1)
Whittier	Mills Avenue Sidewalks	Installation of Sidewalks and Wheelchair Access Ramps.	Mills Avenue from Whittier Blvd. to Lambert Road	Bike-Pedestrian	\$425,000	\$340,000	\$85,000	(1)
Whittier	Pio Pico Bikeway Connection	Bikeway connection from San Gabriel River Bike Path to the Pio Pico State Historical Park.	Adjacent to Whittier Boulevard from San Gabriel River Bike Path to Pio Pico State Historical Park	Bike-Pedestrian	\$670,000	\$536,000	\$134,000	(1)

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost			Note
					Cost	Funding	Unfunded	
Whittier	Washington Boulevard Class II Bike Lanes	Installation of Class II Bike Lanes and Signing along Washington Boulevard to provide connection between the Whittier Greenway Trail and Presbyterian Intercommunity Hospital.	Washington Blvd. from Whittier Greenway Trail to Presbyterian Hospital	Bike-Pedestrian	\$5,000	\$4,000	\$1,000	(1)
Whittier	Whittier Boulevard Streetscape	Complete Street Improvement project to provide safety improvements for pedestrians and bicyclists to access public transit.	Whittier Blvd. from Santa Gertrudes Ave. to Valley Home Ave.	Bike-Pedestrian	\$5,800,000	\$321,275	\$5,478,725	
Whittier	Whittier Greenway Trail Eastern Extension	Bicycle and Pedestrian Path.	Along Lambert Road from Mills Avenue to the East City Limits.	Bike-Pedestrian	\$2,000,000	\$1,799,800	\$200,200	(1)
Whittier	Workman Mill Road Class II Bike Lanes	Installation of Class II Bike Lane striping and signing.	Workman Mill Road from Beverly Blvd. to North City Limits	Bike-Pedestrian	\$5,000	\$4,000	\$1,000	(1)
Whittier	Hadley Street at Whittier Avenue Traffic Signal	Installation of new traffic signal.	Hadley Street at Whittier Avenue	Intersection Improvement	\$240,000	\$120,000	\$120,000	
Whittier	Lambert Road at Mills Avenue Traffic Signal	Traffic Signal Modification. Joint jurisdictional project with Los Angeles County.	Lambert Road at Mills Avenue	Intersection Improvement	\$131,500	\$65,000	\$66,500	
Whittier	Lambert Road at Santa Gertrudes Ave. Traffic Signal Improve	Traffic Signal Modification. Includes installation of median island to separate traffic on Santa Gertrudes Avenue at adjacent railroad grade crossing.	Lambert Road at Santa Gertrudes Avenue	Intersection Improvement	\$535,000	\$340,000	\$195,000	
Whittier	Mulberry Drive at Greenleaf Ave. Traffic Signal Improvement	Protected left turn phasing for east and westbound Mulberry Drive at Greenleaf Avenue.	Mulberry Drive at Greenleaf Avenue	Intersection Improvement	\$220,000	\$-	\$220,000	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Whittier	Norwalk Blvd. at Whittier Blvd. Intersection Improvements	Minor widening to provide right turn and bus turn out lanes.	Norwalk Blvd. at Whittier Blvd.	Intersection Improvement	\$525,000	\$447,772	\$77,228	
Whittier	Whittier Greenway Trailhead Park and Parking Lot	Construct bicycle pedestrian community park with park and ride lot.	Mills Avenue at Lambert Road/Whittier Greenway Trail	Park-and-Ride	\$600,000	\$300,000	\$300,000	

Notes:

- (A) "Unincorporated" applies to the Los Angeles County unincorporated areas that are within the Gateway Cities COG.
- (1) To justify nexus, focus project on enhancing transit access and avoid lane restrictions that increase congestion.
- (2) Eliminate project from fee program because project requires no additional funding.
- (3) Project cost/funding amounts updated after completion of nexus analysis. Updated costs/funding amounts not reflected in fee-per-trip calculations.
- (4) Project requires further details to fully analyze.
- (5) Ensure project results in upgraded facilities to justify nexus.
- (6) Listed for reference purposes only. Not included in pilot study report nexus analysis or fee-per-trip calculations.

**Las Vírgenes Malibu Sub-region
Congestion Mitigation Fee
Pilot Nexus Study Report**

December 2012



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Las Vírgenes Malibu Sub-region Congestion Mitigation Fee Pilot Nexus Study Report

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EXECUTIVE SUMMARY

The Pilot Nexus Study has been conducted with the member jurisdictions of the Las Vírgenes Malibu Council of Governments (COG) to examine the feasibility of implementing a Congestion Mitigation Fee Program to meet the Congestion Management Program (CMP) Countywide Deficiency Plan requirements. The proposed Congestion Mitigation Fee Program would charge a one-time fee on new development across all land uses to fund transportation projects that would reduce congestion generated by new development.

For the last three years, the participating jurisdictions of the Las Vírgenes Malibu COG have worked with MTA to develop this Pilot Nexus Study to ensure their issues and concerns were fully vetted prior to any action by the MTA Board. The City of Hidden Hills decided not to participate in the Pilot Nexus Study at this stage of the process. MTA requested each jurisdiction to review and modify, if necessary, their growth forecasts and regional arterial network, as well as select transportation improvements that would meet the nexus test. This test requires that transportation projects funded with a congestion mitigation fee mitigate the impacts caused by new development and that the cost born by each land use type bear a reasonable relationship to its impact on future congestion.

This Pilot Nexus Study concludes that the transportation projects analyzed in this study meet the requirements of the Mitigation Fee Act (AB1600) and the CMP Countywide Deficiency Plan. It also shows how a sub-regional fee program might work if it were to be implemented. Under the Congestion Mitigation Fee Program, each jurisdiction would:

- Collect and retain all of the revenue from the fee;
- Select and construct local transportation projects with regional benefits;
- Leverage their other funding sources to implement their list of transportation projects;
- Integrate their existing fee programs with the Congestion Mitigation Fee Program.

The preliminary findings were distributed to the participating jurisdictions in the Las Vírgenes Malibu sub-region for their review and comment. This revised Pilot Nexus Study updates the first draft based on comments received and incorporates transportation project descriptions provided by jurisdictions. This Pilot Nexus Study demonstrates the feasibility of the program.

Growth in the Las Vírgenes Malibu sub-region over the next 20 years is expected to result in a 491% increase in vehicle-hours-of-delay (VHD) or congestion on a roadway network that is already operating near or at capacity. To address this projected impact, 41 projects and programs with a cost of nearly \$84 million were identified, of which 25 projects with a cost of \$52 million could be evaluated quantitatively. The analysis yielded the following results:

- **Congestion reduction benefit:** 17% reduction in congestion (vehicle-hours-of-delay) on arterials would result from implementing the transportation projects that could be evaluated quantitatively, meeting the requirements of the Mitigation Fee Act and CMP.
- **Maximum justified congestion mitigation fee:** The maximum justified fee is \$1,044 per-trip based on the total cost of projects divided by total new trips over the next 20 years.
- **Economic benefits:** Building the projects identified could generate a countywide net economic benefit of 2,400 jobs, \$500 million in economic output, and more than \$200 million in disposable income.¹

Based on the results of the Pilot Nexus Study, each jurisdiction has its own individual fee-per-trip amount that would be needed to fund the unfunded share of its list of transportation projects. Given the fee-per-trip amounts for four of the five jurisdictions are greater than the sub-regional maximum justified fee-per-trip amount, it is not possible to recommend a sub-regional minimum fee-per-trip amount solely based on the nexus results of this Pilot Nexus Study. One possible option for setting a minimum fee-per-trip for the Las Vírgenes Malibu sub-region is to use the minimum fee-per-trip range of the other seven sub-regional pilot nexus studies as a guide. This minimum fee-per-trip range is between \$200 and \$500; thus, the Las Vírgenes Malibu sub-region could consider this range as a guide to identify a minimum fee-per-trip amount. (See Figure 5) The rationale for a minimum fee-per-trip amount is to create a level playing field by ensuring that each jurisdiction contributes its share to mitigating its growth impact on the regional transportation network.

There were two additional outcomes that resulted from this work effort. The first is the development of a Greenhouse Gas Emissions Sketch Planning Tool that was made available to jurisdictions so they could generally estimate the greenhouse gas emissions impacts derived from transportation projects they identified. If the Congestion Mitigation Fee Program were implemented, there may be an opportunity for jurisdictions to fund transportation projects identified for SB 375 compliance as well as the CMP. The second outcome was the directive by the MTA Board to develop a model that would quantify the travel related benefits associated with bicycle travel. This directive was adopted to address the need to quantify the impacts of the extensive list of bicycle projects that were identified by jurisdictions during the process of conducting each sub-regional Pilot Nexus Study.

If the MTA Board authorizes staff to work with cities on implementing the congestion mitigation fee program, then it is possible that jurisdictions would modify their list of transportation projects. If so, then the congestion reduction and economic benefit from such a change may be different than the results identified in this Pilot Nexus Study and would be revised accordingly in a report at that time.

NEXT STEPS

Below are the next steps to complete the Congestion Mitigation Fee work plan:

- Present pilot nexus study and economic analysis findings to jurisdictions, sub-regional agencies, and building industry stakeholders.
- Seek MTA Board direction in early 2013 to:
 - Adopt the Congestion Mitigation Fee Program as the new CMP Deficiency Plan;
 - Establish minimum fee amount for CMP compliance
- Work one-on-one with jurisdictions, sub-regional agencies, and the building industry to develop and implement a Congestion Mitigation Fee Program over 24 months.

CONTACT INFORMATION

If you have any questions or comments, please contact: Robert Cálix, MTA Project Manager, at: calixr@metro.net or (213) 922-5644.

Las Vírgenes Malibu Sub-region Congestion Mitigation Fee Pilot Nexus Study Report

OVERVIEW

In 2003, the MTA Board authorized staff to examine the feasibility of implementing a Congestion Mitigation Fee Program to replace the existing Deficiency Plan requirements of the Congestion Management Program (CMP). The Congestion Mitigation Fee Program is intended to mitigate the impacts of new development, providing a new resource to jurisdictions while meeting local responsibilities under the state mandated CMP.

To explore the viability of a congestion mitigation fee across all land uses in each jurisdiction in the county, eight sub-regional pilot nexus studies were conducted across the county. The member cities of the Las Vírgenes Malibu COG worked with MTA to conduct this Pilot Nexus Study to evaluate the transportation projects, policies and technical requirements such a program would require. The results of this effort are contained in this report.

CONGESTION MANAGEMENT PROGRAM BACKGROUND

As the Congestion Management Agency for the County of Los Angeles, MTA established the CMP to meet the requirements of Section 65089 of the California Government Code, which mandates that jurisdictions link their transportation, land use, and air quality decisions to address congestion on the regional transportation network. Jurisdictions are required to conform to the CMP to continue receiving their portion of state gas tax money allocated by Section 2105 of the California Streets and Highways Code and to preserve their eligibility for state and federal funding for transportation projects funded through MTA's Call-for-Projects.

Since the county experiences a deficient regional transportation system, a Countywide Deficiency Plan has been in place linking deficiencies on the transportation system to new development activity. A uniform point system known as the "Debit/Credit" approach was developed for jurisdictions to demonstrate compliance with the CMP.

A criticism of the "Debit/Credit" methodology was that it generated no revenue but required jurisdictions to spend resources on an administrative exercise that provided no congestion relief. Furthermore, a dramatic decline in state and federal transportation funding coupled with significant growth in new development was making it difficult for some jurisdictions to comply with the CMP.

The proposed Congestion Mitigation Fee Program moves away from the administrative "Debit/Credit" approach to a mitigation fee funded approach. This approach would generate revenue from new development to implement transportation improvements designed to mitigate the impacts of growth on the regional transportation network throughout the County of Los Angeles.

In adopting the Short Range Transportation Plan in 2003, the MTA Board authorized staff to explore the feasibility of implementing a Congestion Mitigation Fee to meet CMP requirements. Since that time, MTA has worked with sub-regional agencies, jurisdictions, and building industry representatives in developing a congestion mitigation fee program in concept.

To provide a significant measure of assurance that MTA is being responsive to local jurisdiction needs and concerns, the MTA Board adopted a set of Guiding Principles on April 25, 2007. The Guiding Principles adopted by the MTA Board are as follows:

- Fees should be structured to mitigate congestion from new development without discouraging economic development.
- Fees are to augment other regional funds, not replace or redirect them.
- Local jurisdictions identify local projects with regional benefit consistent with agreed upon guidelines.
- Local jurisdictions adopt, collect, and administer congestion mitigation fees.
- Local jurisdictions build projects (or local jurisdictions may choose to participate in multi-jurisdictional or regional projects, if mutually desired).
- Local jurisdictions with existing fee programs receive dollar-for-dollar credit for local projects with a regional benefit consistent with agreed upon guidelines.
- Fees should be structured to support transit-oriented development, and to exempt mixed use and high-density residential development within ¼ mile of passenger rail stations consistent with CMP statute.
- The program will be developed in a manner to encourage certainty and predictability among jurisdictions, business, environmental and development communities.

The eight Congestion Mitigation Fee Pilot Nexus Studies honor the Guiding Principles, and conform to the technical and statutory requirements of the Mitigation Fee Act and the Congestion Management Program. During the outreach process, jurisdictions expressed strong support for MTA Board commitment to abide by the Guiding Principles.

CONGESTION MITIGATION FEE PROGRAM OVERVIEW

The proposed Congestion Mitigation Fee Program was designed to ensure maximum local control over the program's development and implementation. Local jurisdictions would collect and retain all fee revenue. Each jurisdiction would select its local transportation projects that mitigate the impacts of their new development on the regional transportation system, collect the fee revenue, and build the transportation projects. Jurisdictions have been encouraged to develop a sub-regional or multi-city approach to this program and to coordinate with regional and state transportation providers. The congestion mitigation fee revenue should help local jurisdictions leverage additional funding by providing a local match to compete for the MTA's Call-for-Projects and federal and state grants.

The proposed congestion mitigation fee would be a one-time fee applied to all types of new development based on the number of net new trips generated by the development project. For residential land use, the trip generation is based on the number of dwelling units. Thus, adding a bedroom or family room to a single family home would not increase the number of dwelling units and would not be subject to a congestion mitigation fee. The trip generation of non-residential land use is based on the square footage and the type of land use. If a new development project replaces an existing structure, the trip generation from the existing structure would be subtracted from the amount of trip generation from the new development and the Congestion Mitigation Fee would be based on the net difference. Moreover, if a non-residential use is replaced with a different type of non-residential use, the trip generation rate changes and the fee would only apply if there is a net increase in trips resulting from this change. For example, a conversion of a manufacturing facility to a warehouse of the same size would result in fewer trips being generated and, thus, would not be subject to a fee.

The Congestion Mitigation Fee Program would give credit to jurisdictions with their own existing mitigation fee programs. The amount of credit would be based on how many of the transportation projects included in the local fee program provide a regional benefit. Each eligible project would receive dollar-for-dollar credit towards the minimum fee-per-trip that would be set for the Congestion Mitigation Fee Program. If the local fee program's fee-per-trip exceeds the Congestion Mitigation Fee Program minimum, then the jurisdiction would not have to make any change to its existing mitigation fee program.

Eligible transportation projects must improve the capacity of the transportation system and must consist of capital improvement projects. Ongoing operational and maintenance projects are not eligible under this program. Transportation projects identified in this Pilot Nexus Study include the following:

- Bicycle and pedestrian improvements that provide accessibility to bus and rail transit and that were developed in a systemic and multi-modal manner.
- Signal synchronization, bus speed improvements, bottleneck intersection improvements, traffic control and monitoring systems, and Intelligent Transportation Systems.
- Bus and rail transit capital and/or construction of transit stations and centers, park and ride lots, commuter rail stations, transit stop improvements and transit vehicle purchases.
- Regional arterial enhancements such as arterial widening, bottleneck intersection improvements, closure of gaps in the arterial system, grade separations, and interchange improvements.
- Other projects determined on a case-by-case basis.

LAS VÍRGENES MALIBU SUB-REGION PILOT NEXUS STUDY BACKGROUND

To ensure a Congestion Mitigation Fee Program would serve the specific preferences of its member jurisdictions, the participating jurisdictions of the Las Vírgenes Malibu COG (Agoura Hills, Calabasas, County of Los Angeles, Malibu, Westlake Village) partnered with MTA to develop a Pilot Nexus Study as a way to assess the viability of the Congestion Mitigation Fee Program. The City of Hidden Hills decided not to participate in the Las Vírgenes Malibu Pilot Nexus Study at this stage of the process. These jurisdictions took this proactive approach to fully vet the issues and concerns of these jurisdictions prior to any action by the MTA Board. This Pilot Nexus Study also provides an opportunity to explore various policies and understand complexities associated with such a program.

For the last three years, the participating cities of the Las Vírgenes Malibu sub-region have been working with MTA and their consultant, Cambridge Systematics, Inc. in a collaborative process. As a result of this work effort, MTA staff and the consultant have met one-on-one with senior management of the participating jurisdictions. In addition, MTA staff has briefed the Las Vírgenes Malibu COG on several occasions to inform the member cities of the progress of the Pilot Nexus Study.

CONGESTION MITIGATION FEE WORK PLAN

The Pilot Nexus Study for the Las Vírgenes Malibu sub-region was conducted as part of an overall work plan approved by the MTA Board in September 2008 (See Figure 1 on the following page). The work plan consists of four steps: 1) Feasibility Study and Program Guidelines; 2) Local Project Identification; 3) Nexus Analysis; and 4) Program Development and Local Implementation.

In Step 1 – Feasibility Study and Program Guidelines, MTA worked with jurisdictions and other stakeholders countywide to conduct a Feasibility Study to determine whether a fee program would be feasible. When this step was completed, the results were documented in a report titled *Congestion Mitigation Fee Feasibility Study Report* and approved by the MTA Board in September 2008.

In Step 2 – Local Project Identification, MTA worked with the participating cities of the Las Vírgenes Malibu sub-region to identify local projects with a regional benefit, verify their growth forecasts, and confirm their transportation network.

Step 3 – Nexus Analysis, involved a nexus analysis to determine whether the projects identified in Step 2 mitigate the impacts of 20 years of future development on the transportation network. In addition, Step 3 included an economic analysis of how the payment of a congestion mitigation fee and the benefits of congestion relief and construction jobs would change the economic performance of Los Angeles County.

MTA is completing eight pilot nexus studies (Step 3 in Figure 1 on the following page) for all of the sub-regions in the County. Should the MTA Board adopt the Congestion Mitigation Fee Program as the new CMP Countywide Deficiency Plan, then jurisdictions will be required to participate in the fee program to be in conformance with the CMP. In this case, MTA staff

will initiate Step 4 and work with jurisdictions to further develop and implement Step 4 of the Congestion Mitigation Fee Program.

If the MTA Board authorizes conducting Step 4 – Program Development and Local Implementation, then staff will work with jurisdictions, sub-regional agencies, and building industry representatives to implement the Congestion Mitigation Fee Program over a 24 month period. The MTA work plan is summarized below in Figure 1.

Figure 1: Congestion Mitigation Fee Program Work Plan

Work Plan Components	Schedule
Step 1: Feasibility Study & Program Guidelines	Jan. 2007 – Sept. 2008
<ul style="list-style-type: none"> • Review with PAC, jurisdictions, COGs, & Others 	
Step 2: Local Project Identification	Spring 2009 – Summer 2012
<ul style="list-style-type: none"> • Jurisdictions confirm growth forecasts • Jurisdictions identify local projects with regional benefits and confirm transportation network 	
Step 3: Nexus Study	Spring 2011 – Fall 2012
<ul style="list-style-type: none"> • Technical work effort to determine nexus 	
Step 4: Program Development & Implementation	2013 – 2015
<ul style="list-style-type: none"> • Work one-on-one with jurisdictions to develop and implement program at the local level. 	

Nexus Analysis

The Mitigation Fee Act (AB 1600) governs the adoption of mitigation fees in the State of California (California Government Code Sections 66000-66008). This law requires local jurisdictions to complete a nexus analysis before adopting a mitigation fee. This analysis must provide results for a dual nexus test, which would show that the improvements being funded with the fees will: 1) mitigate the impacts caused by new development; and, 2) that the fee amounts bear a reasonable relationship to the impact from new development.

This nexus analysis uses annual vehicle-hours-of-delay (VHD) to measure the impact of new development on the transportation system. Other technical measures commonly used for a nexus analysis at a jurisdiction level include level-of service (LOS) or volume-to-capacity (V/C) ratios. These measures work best when the scale of analysis is on specific roadway segments or an urban street network and the projects are intended to mitigate congestion from increased travel by single occupant vehicles. The proposed Congestion Mitigation Fee, however, is intended to address the requirements specified for Deficiency Plans set forth in the CMP legislation. Furthermore, the Congestion Mitigation Fee Program is intended to reduce VHD (congestion) caused by new development on the arterial network in each sub-region.

This VHD methodology is similar to the approach conducted for the nexus analysis completed for the San Diego Association of Governments (SANDAG) for its Regional Transportation Congestion Improvement Plan (RTCIP) in 2006. The MTA nexus analysis uses the same metric of vehicle-hours-of-delay as SANDAG is using for its mitigation fee program, which essentially measures the nexus between the RTCIP projects and the impacts from new development throughout San Diego county. The Pilot Nexus Studies utilize the same analytical methodology as SANDAG because both mitigation fee programs are focused on mitigating the impacts of new development on the arterial networks. Traffic patterns on the arterial networks of both counties of Los Angeles and San Diego are similar in terms of their function as relievers for freeway intercity travel and access to freeways. In addition, the trip generations rates for the seven land-use types are derived from the SANDAG trip generation rates because their county more closely resembles the traffic patterns and land use trip generation rates of the greater Southern California region. SANDAG calculated these rates from surveys of San Diego County households and businesses.

This nexus analysis compares VHD for the Las Virgenes Malibu sub-region under three conditions or scenarios:

- **2010 Base Year – Existing Conditions Scenario:** Estimates VHD for the initial Congestion Mitigation Fee Program base year of 2010.
- **2030 Future Year – No-Build Scenario:** Estimates VHD in 2030 given estimated levels of new development and all currently planned transportation improvements funded with known sources such as MTA’s 2009 Long Range Transportation Plan.
- **2030 Future Year –With New Congestion Mitigation Fee Projects Scenario:** Estimates the reduction in VHD caused by the selected transportation improvements identified in the Congestion Mitigation Fee Program.

To meet the requirements of state law, this nexus analysis must demonstrate that VHD in 2030 does not improve beyond the 2010 Base Year levels. The analysis excludes freeway impacts because much of the freeway traffic is inter-regional and the projects submitted by jurisdictions are focused on the regional arterial system.

All transportation project categories are classified into one of nine project categories and were evaluated using either the MTA travel demand model, the Congestion Mitigation Fee Analysis Tool, or research literature as described below. Figure 2 on Page 8 that follows identifies which one of the following three nexus analysis methods was used for each transportation project category:

- **MTA Travel Demand Model:** In order to analyze the changes in VHD on the arterial network within each of the eight sub-regions, Cambridge Systematics, Inc., MTA’s contractor, made improvements to the MTA travel demand model. These improvements are documented in the *Los Angeles County MTA Travel Model Assessment and Status Report* (June 2011). The enhancements included:
 - **Replicating trip generation and trip distribution within the MTA model.** Allows the MTA travel demand model to yield more internally consistent estimates of development impacts in the nexus analyses. The process involved

converting SCAG model components into MTA's travel demand model and testing and validating model results.

- **Increasing the number of traffic assignment equilibrium iterations from 43 to 300.** Increasing to 300 iterations improves assignment accuracy substantially and provides more accuracy in traffic assignment as well as more accurate results against increased model run time.
- **Using SCAG's screenline dataset to validate sub-regional travel.** SCAG's existing dataset of traffic volumes across multiple key locations (also known as screenlines) was used to validate travel model results for 2010 base year.

With these steps completed, the MTA travel demand model is better prepared to code and run sub-regional nexus analyses.

- **Congestion Mitigation Fee Analysis Tool:** This analytical tool estimates VHD reduction from intersection improvements, system operations (e.g. signal synchronization), railroad grade separations, and highway on/off ramps. The Congestion Mitigation Fee Analysis Tool was developed specifically for conducting sub-regional nexus analysis of projects that require a level of analysis that is too fine-grained for the MTA travel demand model. The analysis tool estimates VHD reduction based on assumptions taken from research literature combined with quantified project descriptions provided by each jurisdiction.
 - **Greenhouse Gas Emissions Sketch Planning Capability:** At the request of jurisdictions, a greenhouse gas emissions sketch planning tool was developed and made available to jurisdictions so they could generally estimate the greenhouse gas emissions impacts derived from transportation projects they identified. This capability was added to assist cities when considering projects that meet both the requirements of the CMP and SB 375. If the Congestion Mitigation Fee Program were implemented, there may be an opportunity to fund transportation projects identified for SB 375 compliance as well as the CMP.
- **Research Literature:** Reliable research provides sufficient evidence that bicycle and pedestrian improvements that link to transit (e.g. bicycle lanes and sidewalks that serve bus stops and passenger rail stations), transit amenities (e.g. bus shelters, better signage, etc.), park-and-ride lots, and other similar projects provide congestion reduction benefits. This research literature, however, does not provide enough information to quantify the impacts. Thus, for purposes of the Pilot Nexus Study analysis these projects are included but their benefits are not quantified.

Furthermore, bicycle or pedestrian improvements that do not link to transit (e.g. recreational biking/hiking trails) have been excluded from the analysis. In January 2012, the MTA Board directed staff to develop the modeling capability to be able to quantify the benefit of bicycle transportation investment (and pedestrian transportation investment, if possible) because many of the jurisdictions participating in the Pilot Nexus Study have included bicycle investments as part of their list of projects. Nevertheless, MTA has limited the types of bicycle projects it can accept as part of the Pilot Nexus Study to those that provide a link or access to transit, which the research

literature conclusively documents as having a qualitative relationship to reduced congestion.

Figure 2: Transportation Project Categories and Nexus Analysis Methods

Project Category	Nexus Analysis Method
Roadway Capacity Improvement	MTA Travel Demand Model
Intersection Improvement	Congestion Mitigation Fee Analysis Tool
System Operations (e.g. signal synchronization)	Congestion Mitigation Fee Analysis Tool
Railroad Grade Separations	Congestion Mitigation Fee Analysis Tool
Highway On/Off-Ramps	Congestion Mitigation Fee Analysis Tool
Bicycle/Pedestrian Improvements	Research Literature
Transit Improvements	Research Literature
Park-and-Ride Lots	Research Literature
Other Projects	Research Literature

The nexus analysis for the Las Vírgenes Malibu sub-region was conducted at the sub-regional level. Sub-regional level analysis captures longer, intercity trips, which are the focus of the CMP. Sub-regions are also small enough to measure significant benefits for a relatively modest investment. This sub-regional nexus analysis serves as an umbrella for each jurisdiction, which would adopt its own congestion mitigation fee program to fund the specific transportation projects that it selects.

LAS VÍRGENES MALIBU SUB-REGION PILOT NEXUS STUDY

Study Area

The study area is defined by the boundaries of the Cities of Agoura Hills, Calabasas, Hidden Hills, Malibu, Westlake Village, plus the adjacent unincorporated areas of Los Angeles County. The City of Hidden Hills is not included in the study area because it decided not to participate in the Pilot Nexus Study at this stage of the process.

Projected Growth

Growth within the Study Area is projected to increase by 13,379 in population and employment is projected to increase by 10,290 from 2010 to 2030. This growth is expected to impact the regional transportation system that is already operating near or at capacity. This growth would essentially cause what is currently a slow moving roadway network to deteriorate further and result in more congestion.

Transportation Projects Submitted

A total of 41 transportation projects and programs were identified as part of this Pilot Nexus Study. A map identifying the submitted projects is shown in Attachment B. Jurisdictions used a web-based software planning tool developed by Cambridge Systematics, Inc. to create a database of projects located within their jurisdiction. For each transportation project,

jurisdictions provided a cost estimate, funding sources, project description, and a geo-coded location (See Attachment C).

Figure 3 below summarizes the number of projects submitted by jurisdictions by project category along with information on total cost, other funding reasonably anticipated during the 20-year planning horizon, and the remaining unfunded amount that could be funded through the Congestion Mitigation Fee Program. Key findings include:

- Roadway capacity improvements represent 44 percent of all projects based on total cost.
- Bike/pedestrian and intersection improvements represent the next largest shares based on total project costs (40 percent and 14 percent, respectively).
- Remaining projects are distributed among the roadway capacity, system operations, and transit improvement categories.

Figure 3 divides the different types of transportation projects into two groups. Figure 3 presents the following information:

Figure 3: Las Virgenes Malibu Sub-region Transportation Project Category Summary

Project Type	Number of Projects	Total Cost Share	Total Cost	Other Funding	Fee Revenue Funds
Roadway Capacity	11	44%	\$38,646,000	\$12,901,000	\$25,745,000
Intersection Improvements	12	14%	\$12,660,000	\$1,487,000	\$11,173,000
System Operations	1	1%	\$750,000	\$0	\$750,000
Grade Separation	0	0%	\$0	\$0	\$0
Subtotal	24	60%	\$52,055,600	\$14,388,000	\$37,668,000
Bike-Pedestrian	16	40%	\$35,150,000	\$11,000	\$35,168,000
Transit	0	0%	\$0	\$0	\$0
Park-and-Ride	0	0%	\$0	\$0	\$0
Other	1	0%	\$500,000	\$0	\$500,000
Sub-total	17	40%	\$35,650,000	\$11,000	\$35,669,000
Total	41	100%	\$87,705,000	\$14,399,000	\$73,307,000

- The four transportation categories shown in the upper half of Figure 3 (Roadway Capacity, Intersection Improvements, System Operations, and Grade Separations) are projects that can be evaluated using quantitative methods such as the MTA Travel Demand Model and the Congestion Mitigation Fee Analysis Tool. These projects account for the reduction in VHD derived from the nexus analysis.
- The four transportation categories shown in the lower half of Figure 3 could not be modeled, thus, their contribution is not included in the VHD reduction estimate. Nevertheless, peer reviewed research affirms their qualitative effectiveness in lowering congestion and thus they are included in the Congestion Mitigation Fee Pilot Study's total unfunded cost and the fee amounts needed to fund it.

As mentioned earlier, the MTA Board directed staff to develop a model that would quantify the travel related benefits associated with bicycle travel. Thus, the consultant team is developing approaches to estimate the impacts from this project category for inclusion in future nexus analyses.

- The third column of Figure 3 shows the share of the total cost for each of the transportation project categories. Some key information includes the amount of other funding leveraged by the Congestion Mitigation Fee revenue. Overall, about 16 percent of the total project costs is funded via other sources. See Attachment C for a detailed project list by jurisdiction.

Technical Nexus Analysis Results: Vehicle-Hours-of-Delay/Congestion Reduction Benefit

The nexus analysis conducted for this Pilot Nexus Study supports the finding that the transportation projects identified by jurisdictions and funded by the Congestion Mitigation Fee Program would mitigate 17% of the total impact of new development on the arterial network. This result demonstrates that the costs of mitigation will not exceed the proportion attributable to new development, and satisfies the nexus requirements set forth in the Mitigation Fee Act. This finding also meets the measurable improvement in congestion requirement as stipulated by the CMP Countywide Deficiency Plan.

Figure 4 below presents the results of the nexus analysis of the 24 projects that could be modeled. Reading from left to right, this table presents the following results:

Figure 4: Annual Vehicle Hours of Delay (VHD): Las Virgenes Malibu Sub-region

1	2	3	4	5	VHD Reduction Benefit	
2010 (Existing)	2030 (No Build)	2030 (With Projects)	2010 – 2030 (No Build)	2010 – 2030 (With Projects)	6 Amount	7 Percent
<i>a</i>	<i>b</i>	<i>c</i>	<i>d = b - a</i>	<i>e = c - a</i>	<i>f = d - e</i>	<i>g = f / d</i>
1,063,000	6,284,000	5,384,145	5,221,000	4,321,145	899,855	17%

Note: The analysis excludes freeway impacts because much of the freeway traffic is inter-regional and the projects submitted by jurisdictions are focused on the regional arterial system.

- The nexus analysis starts with the current (2010) estimate of about 1.06 million VHD on the arterial network (shown in the first column of Figure 4).
- Next, the analysis forecasts nearly 6.3 million VHD in 2030 (second column) or a net increase of about 5.2 million VHD (fourth column) caused by the impacts of new trips generated and attracted by new development over the next 20 years. Under the No-Build scenario, congestion is expected to have a 491% increase in vehicle-hours-of-delay (VHD) from 2010 to 2030 because of growth impacting the current transportation system that is at or near capacity. This result for the No-Build scenario assumes that transportation improvements included in the 2008 RTP and the current MTA Long Range Transportation Plan (LRTP) are constructed.
- The third column shows what would happen if the 25 transportation projects are constructed holding everything else constant. VHD on the sub-regional arterial network

in 2030 would be nearly 5.4 million, which would be a 900,000 VHD reduction (sixth column), or about 17% less congestion (seventh column) than without these projects.

- This analysis deliberately removed the impacts of future through trips (trips that begin and end outside of the sub-region) because new development within the subregion cannot be required to pay for the impacts from trips it does not generate or attract.

As mentioned earlier in the report, the MTA Board directed staff to develop a model that would quantify the travel related benefits associated with bicycle travel. Thus, the consultant team is developing approaches to estimate the impacts from this project category for inclusion in future nexus analyses.

Establishing Minimum and Maximum Fee-Per-Trip Amounts

The congestion mitigation fee-per-trip amount for each jurisdiction is determined by calculating its unique fee-per-trip (See Attachment A). The fee-per-trip amount is the total unfunded cost of all transportation projects selected by each jurisdiction (both those with benefits that can be quantitatively measured and those that are only qualitatively measured) divided by the number of net trips generated by new development within that jurisdiction.

Establishing a minimum fee-per-trip for the Congestion Mitigation Fee Program has been an important policy issue for jurisdictions and stakeholders since MTA convened the countywide Policy Advisory Committee in 2006. A minimum fee-per-trip would facilitate compliance with the CMP by ensuring a minimum level of congestion reduction effort. Furthermore, all jurisdictions would benefit from a level playing field, where a minimum fee-per-trip amount to reduce the advantage that one jurisdiction may have over another in attracting new development.

The minimum fee-per-trip amounts for each sub-region were determined through the pilot nexus study process where each city developed a transportation project list that balances its need to mitigate future congestion with a maximum fee-per-trip amount. As a result, the pilot nexus study process provided a fee-per-trip amount for each jurisdiction (See Attachment A).

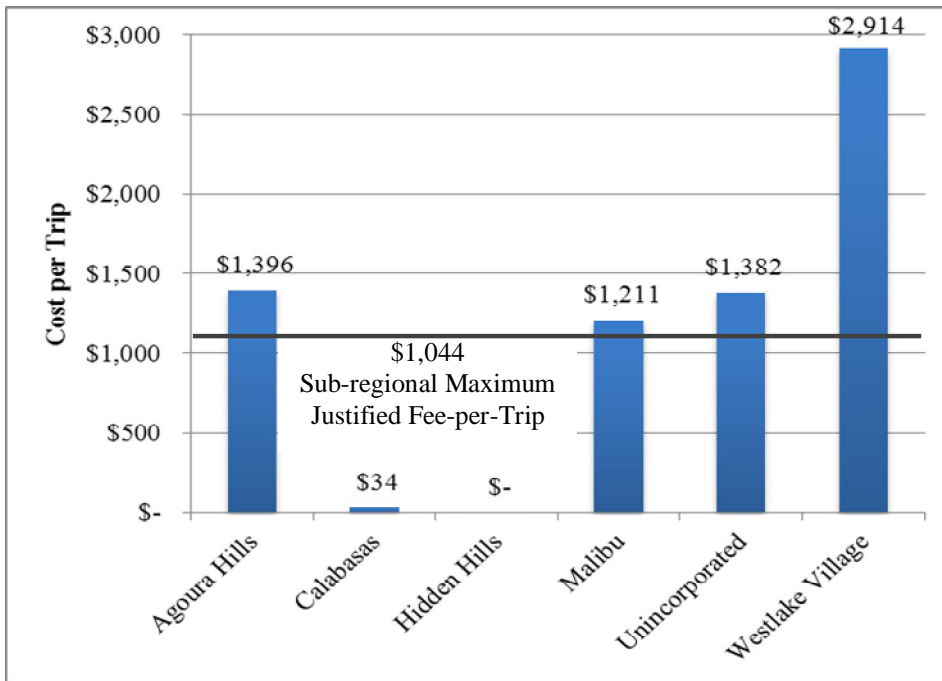
The Pilot Study Nexus Analysis resulted in two types of fee-per-trip amounts calculated for the three jurisdictions:

- **Jurisdiction fee-per-trip:** A separate fee-per-trip for each jurisdiction was calculated based on the jurisdiction's unfunded project costs divided by the number of trips from new development within the jurisdiction (See Attachment A). This fee-per-trip is the amount needed to fund the unfunded portion of the transportation projects costs identified by each jurisdiction. Unfunded project costs used in this calculation represents a conservative method of assessing new development for its share of mitigating its impacts. Other funding sources identified by jurisdictions to fund their proposed projects come from such funds as Proposition C and Measure R local return, state gas tax subventions, municipal general funds, Call-for-Projects, and Surface Transportation Program local funds.
- **Sub-regional maximum justified fee-per-trip:** A single \$1,044 fee-per-trip for the sub-region was calculated based on the nearly \$84 million total cost of all transportation projects identified by jurisdictions divided by approximately 84,017

new trip-ends generated and attracted by new development within the sub-region. Since this nexus analysis was conducted at the sub-regional level, the \$1,044 fee-per-trip amount represents the maximum justified congestion mitigation fee amount the nexus analysis can defend quantitatively. Total project costs, rather than unfunded project costs, were used in this calculation because congestion reduction benefits are associated with the entire project regardless of the level of other anticipated funding.

The congestion mitigation fee-per-trip results from the nexus analysis by jurisdiction are summarized in Figure 5 below. The results show that four of the five jurisdictions have fee-per-trip amounts greater than the sub-regional maximum justified fee-per-trip of \$1,044. See Attachment A for details regarding total project costs and funding by jurisdiction.

Figure 5: Las Virgenes Malibu Sub-region Fee-Per-Trip Range by Jurisdiction



Those jurisdictions with fee-per-trip amounts that are higher than the maximum justified fee-per-trip amount of \$1,044 have the following options to reduce their fee-per-trip amounts:

- 1) Eliminate transportation projects from their list of projects to reduce their cost-per-trip amount to a level below the legal maximum justified cost per trip amount.
- 2) Identify additional funding sources to reduce the amount of funding the fee revenue would have to pay to reduce their cost-per-trip amount to a level below the maximum justified cost-per-trip amount.
- 3) Conduct a local nexus study to justify that the additional costs can be fairly charged to new development consistent with State law (Mitigation Fee Act).

Should the Congestion Mitigation Fee Program be adopted, then each jurisdiction within the sub-region would adopt its own congestion mitigation fee ordinance. Their congestion mitigation fee would need to be set between the minimum fee-per-trip set by the MTA Board and its own individual jurisdiction fee-per-trip established by the nexus analysis (See

Attachment A). The sub-regional maximum justified fee-per-trip would be the amount that jurisdictions would be limited to adopt as a result of the nexus analysis.

Given the fee-per-trip amounts for four of the five jurisdictions the Las Vírgenes Malibu Pilot Nexus Study are greater than the maximum justified fee-per-trip amount, it is not possible to recommend a sub-regional minimum fee-per-trip amount solely based on the nexus results of this Pilot Nexus Study. One possible option to arrive at a minimum fee-per-trip for the Las Vírgenes Malibu sub-region is to use the fee-per-trip ranges of the other seven sub-regional pilot nexus studies. The minimum fee-per-trip amounts from the other sub-regional pilot studies range between \$200 and \$500; thus, the Las Vírgenes Malibu sub-region could consider this as a way to identify a minimum fee-per-trip amount. (see Figure 5). The rationale for a minimum fee-per-trip amount is to create a level playing field by ensuring that each jurisdiction contributes to mitigating its growth impact on the regional transportation network.

NEXT STEPS

Below are the next steps to complete the Congestion Mitigation Fee work plan:

- Present pilot nexus study and economic analysis findings to jurisdictions, sub-regional agencies, and building industry stakeholders.
- Seek MTA Board direction in early 2013 to:
 - Adopt the Congestion Mitigation Fee Program as the new CMP Countywide Deficiency Plan;
 - Establish minimum fee-per-trip amount for CMP compliance
- Work one-on-one with jurisdictions, sub-regional agencies, and building industry representatives to implement a Congestion Mitigation Fee Program over a 24 month period.

If the MTA Board decides to adopt the Congestion Mitigation Fee Program as the Countywide Deficiency Plan for the CMP, MTA staff will work with each jurisdiction to implement the Congestion Mitigation Fee Program. In carrying out this work effort, it is possible that jurisdictions would modify their list of transportation projects. If so, then the congestion reduction and fee-per-trip from such a change may be different than the results identified in this Pilot Nexus Study and would be revised accordingly in a report at that time.

CONTACT INFORMATION

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Attachment A: Las Virgenes Malibu Sub-region Pilot Nexus Study Fee-per-Trip by Jurisdiction

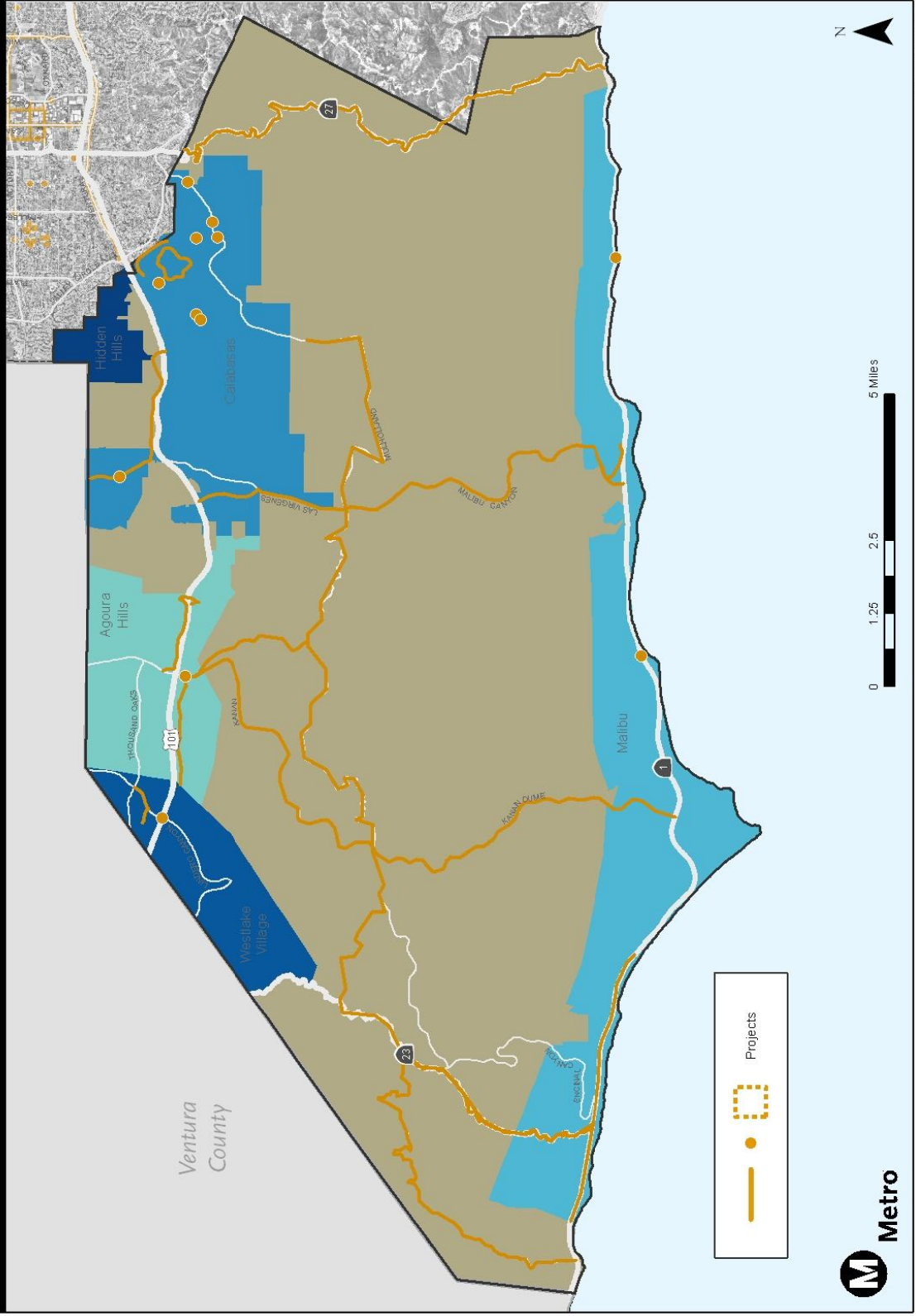
Jurisdiction	Net New Trip Ends	Total Project Costs	Other Funding	Unfunded	Unfunded Fee-Per-Trip
	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e = d / a</i>
Agoura Hills	16,014	\$36,646,000	\$14,283,000	\$22,363,000	\$1,396
Calabasas	34,613	\$1,309,290	\$31,342	\$1,277,948	\$35
Hidden Hills		Did not submit projects at this time.			\$-
Los Angeles County Unincorp.	19,185	\$26,508,026	-0-	\$26,508,026	\$1,382
Malibu	10,656	\$12,900,000	-0-	\$12,900,000	\$1,211
Westlake Village	3,549	\$10,342,800	-0-	\$10,342,800	\$2,914
Total	84,017	\$87,706,116	\$14,314,342	\$73,391,774	
Funding Share		100%	16%	84%	

Sub-regional Maximum Justified Fee-Per-Trip: <i>b/a</i>	\$1,044
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Attachment B: Las Virgenes Malibu Sub-region Pilot Nexus Study Transportation Projects

Las Virgenes/Malibu



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Attachment C: Las Virgenes Malibu List of Transportation Projects by Jurisdiction (Project Deemed Ineligible Not Listed)

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Agoura Hills	Palo Comado Canyon Rd/Chesebro Road Interchange	Improve overpass to four lanes and reconfigure ramp interface; improve Palo Comado Canyon Rd to four lanes from Canwood St to Chesebro Rd	Palo Comado Canyon Rd	Capacity	\$21,300,000	\$5,388,900	\$15,911,100	
Agoura Hills	Agoura Rd Widening	Widen Agoura Rd between Kanan Rd and the westerly City limits to four lanes	Agoura Rd	Capacity	\$9,689,000	\$6,358,800	\$3,330,200	
Agoura Hills	Reyes Adobe Road Interchange	Improve the overpass to six lanes and reconfigure the ramp interface; improve Reyes Adobe Road to six lanes from Canwood St to Agoura Rd	Reyes Adobe Rd	Capacity	\$?	\$?	\$?	(1)
Agoura Hills	Chesebro Rd Widening	Widen Chesebro Rd between Canwood St and Driver Ave to three lanes	Chesebro Rd	Capacity	\$94,000	\$94,000	\$0	(2)
Agoura Hills	Canwood St Widening	Widen Canwood St between Kanan Rd and Chesebro Rd to three lanes	Canwood St	Capacity	\$597,000	\$597,000	\$0	(2)
Agoura Hills	Chesebro Rd Palo Comado Canyon Rd Widening	Widen Chesebro Rd between Palo Comado Canyon Rd and Agoura Rd to four lanes	Chesebro Rd	Capacity	\$360,000	\$360,000	\$0	(2)
Agoura Hills	Chesebro Rd Dorothy Dr Widening	Widen Chesebro Rd between Dorothy Dr and Palo Comado Canyon Rd to three lanes	Chesebro Rd	Capacity	\$102,000	\$37,400	\$64,600	
Agoura Hills	Kanan Rd Widening	Widen Kanan Rd between Agoura Rd and the southerly City limits to four lanes	Kanan Rd	Capacity	\$304,000	\$65,100	\$238,900	
Agoura Hills	Kanan Rd/Agoura Rd Intersection	Construct 2 lane Roundabout	Kanan Rd & Agoura Rd	Intersection Improvement	\$4,200,000	\$1,381,800	\$2,818,200	
Calabasas	Lost Hills Bike Lane	Class II Bicycle facility from US 101 Interchange to Las Virgenes Road.	Lost Hills Road	Bike-Pedestrian	\$16,000	\$2,000	\$14,000	
Calabasas	Park Sorrento Bike Lane	Class II Bicycle facility from Park Granada to Park Ora	Park Sorrento	Bike-Pedestrian	\$25,000	\$5,000	\$20,000	
Calabasas	Park Sierra/Park Helena Loop	Project would create Class III Bicycle facilities on the loop.	Park Sierra to Park Helena, Park Helena to Park Sierra	Bike-Pedestrian	\$6,000	\$1,500	\$4,500	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Calabasas	Park Capri Bike Lane	Class II Bicycle facility from Park Granada to Park Sienna / Park Helena.	Park Capri	Bike-Pedestrian	\$1,000	\$500	\$500	
Calabasas	Las Virgenes Road Bike Lane	Class II Bicycle facility from Mureau Road to City limit.	Las Virgenes Road	Bike-Pedestrian	\$11,000	\$2,000	\$9,000	
Calabasas	Citywide Signal Synchronization	Synchronize traffic signals along major traffic corridors.	Citywide	System Operations	\$500,000	\$0	\$500,000	(3)
Calabasas	ITS Interconnect - Park Capri	Install traffic signal at intersection and connect to City's interconnect system.	Park Granada at Park Capri	Intersection Improvement	\$175,000	\$25,000	\$150,000	
Calabasas	ITS Interconnect - Paul Revere Drive	Connect signal to City's interconnect system.	Mulholland Highway at Paul Revere Drive	Intersection Improvement	\$48,658	\$0	\$48,658	
Calabasas	ITS Interconnect - Park Entrada	Connect intersection to City's interconnect system.	Parkway Calabasas at Park Entrada	Intersection Improvement	\$36,000	\$0	\$36,000	
Calabasas	ITS Interconnect - Bluebird Drive	Connect intersection to City's interconnect system.	Old Topanga Canyon Road at Bluebird Drive	Intersection Improvement	\$48,658	\$0	\$48,658	
Calabasas	ITS Interconnect - Park Ora	Connect intersection to City's interconnect system.	Old Topanga Canyon Road at Park Ora	Intersection Improvement	\$48,658	\$0	\$48,658	
Calabasas	ITS Interconnect - Calabasas High School	Connect signal to City's interconnect system.	Mulholland Highway at Calabasas High School	Intersection Improvement	\$48,658	\$0	\$48,658	
Calabasas	ITS Interconnect - Paseo Pimaino	Connect intersection to City's interconnect system.	Parkway Calabasas at Paseo Pimaino	Intersection Improvement	\$36,000	\$0	\$36,000	
Calabasas	ITS Interconnect - Old Topanga Canyon Road	Connect intersection to City's interconnect system.	Mulholland Highway at Old Topanga Canyon Road	Intersection Improvement	\$48,658	\$0	\$48,658	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Calabasas	Las Virgenes/Thousand Oaks Intersection Improvements	Construct Roundabout or Traffic Signal to improve safety and control flow at intersection.	Las Virgenes Road at Thousand Oaks Boulevard	Intersection Improvement	\$260,000	\$80,000	\$180,000	
Malibu	PCH Bike Lane	Construct PCH Bike Lane from Trañeas Canyon Rd to western City Limits	Pacific Coast Highway	Bike-Pedestrian	\$5,000,000	\$0	\$5,000,000	
Malibu	Malibu Canyon Rd Widening	Add full left turn lanes at the junction of Malibu Canyon Rd and the following roads: Harbor Vista Drive, Malibu Knolls, and Malibu Crest. Currently, there are left turn pockets at some intersections, but traffic is delayed by turning movements.	Malibu Canyon Rd	Capacity	\$3,200,000	\$0	\$3,200,000	
Malibu	Civic Center Way Widening	Widen Civic Center Way and add left turn pockets from Civic Center Way into a residential complex near Webb Way and Malibu Cyn. Road.	Civic Center Way from Webb Way to Malibu Canyon Rd	Capacity	\$3,000,000	\$0	\$3,000,000	
Malibu	Improve Las Flores Canyon Rd	Improve intersection	Las Flores Canyon Rd & PCH	Intersection Improvement	\$500,000	\$0	\$500,000	
Malibu	Signal Install Latigo Canyon & PCH	Install new traffic signal	Latigo Canyon & PCH	Intersection Improvement	\$450,000	\$0	\$450,000	
Malibu	Signal Synchronization along PCH	Signal Synchronization along PCH	Pacific Coast Highway	System Operations	\$750,000	\$0	\$750,000	
Unincorp. LA County	Mureau Rd - Las Virgenes Rd to Calabasas Rd	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Mureau Rd	Bike-Pedestrian	\$73,863	\$0	\$73,863	
Unincorp. LA County	Mulholland Hwy - PCH to Decker Rd	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Mulholland Hwy	Bike-Pedestrian	\$3,000,000	\$0	\$3,000,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Unincorp. LA County	Las Virgenes Rd / Malibu Canyon Rd - Lost Hills Rd to PCH	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Las Virgenes Rd / Malibu Canyon Rd	Bike-Pedestrian	\$3,160,000	\$0	\$3,160,000	
Unincorp. LA County	Old Topanga Cyn Rd - Valdez Rd to PCH	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Old Topanga Cyn Rd	Bike-Pedestrian	\$3,320,000	\$0	\$3,320,000	
Unincorp. LA County	Decker Canyon Rd - Mulholland Hwy to PCH	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Decker Canyon Rd	Bike-Pedestrian	\$2,360,000	\$0	\$2,360,000	
Unincorp. LA County	Cornell Rd - Kanan Rd to Mulholland Hwy	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Cornell Rd	Bike-Pedestrian	\$912,269	\$0	\$912,269	
Unincorp. LA County	Kanan Rd/Kanan Dume Rd - Agoura Rd to PCH	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Kanan Rd	Bike-Pedestrian	\$4,840,947	\$0	\$4,840,947	
Unincorp. LA County	Decker Canyon Rd - PCH to Lyndon Dr	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Decker Canyon Rd	Bike-Pedestrian	\$8,840,000	\$0	\$8,840,000	
Westlake Village	Lindero Canyon Rd Sidewalks	West side of Lindero Canyon Rd from first driveway south of Thousand Oaks Blvd to Via Colinas	Lindero Canyon Rd	Bike-Pedestrian	\$2,988,000	\$0	\$2,988,000	
Westlake Village	Via Colinas Sidewalk	North Side of Via Colinas from Lindero Canyon Road to Via Rocas	Via Colinas	Bike-Pedestrian	\$595,500	\$0	\$595,500	
Westlake Village	ASFP Phase 3A	Interchange improvements	Lindero Canyon Rd	Capacity	\$6,759,300	\$0	\$6,759,300	

- (1) Project requires updated cost information
- (2) Projects as entered in webtool show all funding coming from sources other than the CMF program.
- (3) Project is systemwide system operations project, the VHD benefits of which cannot be modeled.

Congestion Mitigation Fee Pilot Nexus Study Report

Prepared for

Cities of Los Angeles and San Fernando

December 2012



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Congestion Mitigation Fee Pilot Nexus Study Report

For Cities of Los Angeles and San Fernando

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EXECUTIVE SUMMARY

The Pilot Nexus Study has been conducted with the Cities of Los Angeles and San Fernando to examine the feasibility of implementing a Congestion Mitigation Fee Program to meet the Congestion Management Program (CMP) Countywide Deficiency Plan requirements. The proposed Congestion Mitigation Fee Program would charge a one-time fee on new development across all land uses to fund transportation projects that would reduce congestion generated by new development. Given that the City of San Fernando is completely surrounded by the City of Los Angeles, these two cities have been studied together in this Pilot Nexus Study.

For the last three years, the Cities of Los Angeles and San Fernando have worked with MTA to develop this Pilot Nexus Study to ensure their issues and concerns were fully vetted prior to any action by the MTA Board. MTA requested each jurisdiction to review and modify, if necessary, their growth forecasts and regional arterial network, as well as select transportation improvements that would meet the nexus test. This test requires that transportation projects funded with a congestion mitigation fee mitigate the impacts caused by new development and that the cost born by each land use type bear a reasonable relationship to its impact on future congestion.

This Pilot Nexus Study concludes that the transportation projects analyzed in this study meet the requirements of the Mitigation Fee Act (AB1600) and the CMP Countywide Deficiency Plan. It also shows how a sub-regional fee program might work if it were to be implemented. Under the Congestion Mitigation Fee Program, each jurisdiction would:

- Collect and retain all of the revenue from the fee;
- Select and construct local transportation projects with regional benefits;
- Leverage their other funding sources to implement their list of transportation projects;
- Integrate their existing fee programs with the Congestion Mitigation Fee Program.

A preliminary findings report was distributed to the both jurisdictions for their review and comment. This revised Pilot Nexus Study updates the first draft based on comments received and incorporates transportation project descriptions provided by jurisdictions. This Pilot Nexus Study demonstrates the feasibility of the program.

Growth in the Cities of Los Angeles and San Fernando over the next 20 years is expected to result in a 265% increase in vehicle-hours-of-delay (VHD) or congestion on a roadway network that is already operating near or at capacity. To address this projected impact, 506 projects and programs with a cost of \$1.9 billion were identified, of which 132 projects and programs could be evaluated quantitatively. The analysis yielded the following results:

- **Congestion reduction benefit:** 9% reduction in congestion (vehicle-hours-of-delay) on arterials would result from implementing the transportation projects that could be evaluated quantitatively, meeting the requirements of the Mitigation Fee Act and CMP.
- **Maximum justified congestion mitigation fee:** The maximum justified fee is \$1,323 per trip based on the total cost of projects divided by total new trips over the next 20 years.
- **Economic benefits:** Building the projects identified could generate a countywide net economic benefit of 18,500 jobs, \$3.5 billion in economic output, and more than \$1.1 billion in disposable income.¹

¹ Economic Impact Analysis of the Congestion Mitigation Fee Pilot Nexus Study – October 2012

Based on the results of the Pilot Nexus Study, each jurisdiction has its own individual fee-per-trip amount that would be needed to fund the unfunded share of its list of transportation projects. Since both jurisdictions have fee-per-trip amounts above \$400, a \$400 fee-per-trip amount could be used as the minimum fee-per-trip amount for these jurisdictions.

There were two additional outcomes that resulted from this work effort. The first is the development of a Greenhouse Gas Emissions Sketch Planning Tool that was made available to jurisdictions so they could generally estimate the greenhouse gas emissions impacts derived from transportation projects they identified. If the Congestion Mitigation Fee Program were implemented, there may be an opportunity for jurisdictions to fund transportation projects identified for SB 375 compliance as well as the CMP. The second outcome was the directive by the MTA Board to develop a model that would quantify the travel related benefits associated with bicycle travel. This directive was adopted to address the need to quantify the impacts of the extensive list of bicycle projects that were identified by jurisdictions during the process of conducting each sub-regional Pilot Nexus Study.

If the MTA Board authorizes staff to work with cities on implementing the congestion mitigation fee program, then it is possible that jurisdictions would modify their list of transportation projects. If so, then the congestion reduction and economic benefit from such a change may be different than the results identified in this Pilot Nexus Study and would be revised accordingly in a report at that time.

NEXT STEPS

Below are the next steps to complete the Congestion Mitigation Fee work plan:

- Present pilot nexus study and economic analysis findings to jurisdictions, sub-regional agencies, and building industry stakeholders.
- Seek MTA Board direction in early 2013 to:
 - Adopt the Congestion Mitigation Fee Program as the new CMP Deficiency Plan;
 - Establish minimum fee amount for CMP compliance
- Work one-on-one with jurisdictions, sub-regional agencies, and the building industry to develop and implement a Congestion Mitigation Fee Program over 24 months.

CONTACT INFORMATION

If you have any questions or comments, please contact:

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Congestion Mitigation Fee Pilot Nexus Study Report

For the Cities of Los Angeles and San Fernando

OVERVIEW

In 2003, the MTA Board authorized staff to examine the feasibility of implementing a Congestion Mitigation Fee Program to replace the existing Deficiency Plan requirements of the Congestion Management Program (CMP). The Congestion Mitigation Fee Program is intended to mitigate the impacts of new development, providing a new resource to jurisdictions while meeting local responsibilities under the state mandated Congestion Management Program (CMP).

To explore the viability of a congestion mitigation fee across all land uses in each jurisdiction in the county, eight sub-regional pilot nexus studies were conducted across the county. Given that the City of San Fernando is completely surrounded by the City of Los Angeles, these two cities constitute a “sub-region” for the purposes of this Pilot Nexus Study. The Cities of Los Angeles and San Fernando worked with MTA to conduct this Pilot Nexus Study to evaluate the transportation projects, policies and technical requirements such a program would require. The results of this effort are contained in this report.

CONGESTION MANAGEMENT PROGRAM BACKGROUND

As the Congestion Management Agency for the County of Los Angeles, MTA established the CMP to meet the requirements of Section 65089 of the California Government Code, which mandates that jurisdictions link their transportation, land use, and air quality decisions to address congestion on the regional transportation network. Jurisdictions are required to conform to the CMP to continue receiving their portion of state gas tax money allocated by Section 2105 of the California Streets and Highways Code and to preserve their eligibility for state and federal funding for transportation projects funded through MTA’s Call-for-Projects.

Since the county experiences a deficient regional transportation system, a Countywide Deficiency Plan has been in place linking deficiencies on the transportation system to new development activity. A uniform point system known as the “Debit/Credit” approach was developed for jurisdictions to demonstrate compliance with the CMP.

A criticism of the “Debit/Credit” methodology was that it generated no revenue but required jurisdictions to spend resources on an administrative exercise that provided no congestion relief. Furthermore, a dramatic decline in state and federal transportation funding coupled with significant growth in new development was making it difficult for some jurisdictions to comply with the CMP.

The proposed Congestion Mitigation Fee Program moves away from the administrative “Debit/Credit” approach to a mitigation fee funded approach. This approach would generate revenue from new development to implement transportation improvements designed to mitigate the impacts of growth on the regional transportation network throughout the County of Los Angeles.

In adopting the Short Range Transportation Plan in 2003, the MTA Board authorized staff to explore the feasibility of implementing a Congestion Mitigation Fee to meet CMP requirements. Since that time, MTA has worked with sub-regional agencies, jurisdictions, and building industry representatives in developing a congestion mitigation fee program in concept.

To provide a significant measure of assurance that MTA is being responsive to local jurisdiction needs and concerns, the MTA Board adopted a set of Guiding Principles on April 25, 2007. The Guiding Principles adopted by the MTA Board may be summarized as follows:

- Fees should be structured to mitigate congestion from new development without discouraging economic development.
- Fees are to augment other regional funds, not replace or redirect them.
- Local jurisdictions identify local projects with regional benefit consistent with agreed upon guidelines.
- Local jurisdictions adopt, collect, and administer congestion mitigation fees.
- Local jurisdictions build projects (or local jurisdictions may choose to participate in multi-jurisdictional or regional projects, if mutually desired).
- Local jurisdictions with existing fee programs receive dollar-for-dollar credit for local projects with a regional benefit consistent with agreed upon guidelines.
- Fees should be structured to support transit-oriented development, and to exempt mixed use and high-density residential development within ¼ mile of passenger rail stations consistent with CMP statute.
- The program will be developed in a manner to encourage certainty and predictability among jurisdictions, business, environmental and development communities.

The eight Congestion Mitigation Fee Pilot Nexus Studies honor the Guiding Principles, and conform to the technical and statutory requirements of the Mitigation Fee Act and the Congestion Management Program. During the outreach process, jurisdictions expressed strong support for MTA Board commitment to abide by the Guiding Principles.

CONGESTION MITIGATION FEE PROGRAM OVERVIEW

The proposed Congestion Mitigation Fee Program was designed to ensure maximum local control over the program's development and implementation. Local jurisdictions would collect and retain all fee revenue. Each jurisdiction would select its local transportation projects that mitigate the impacts of their new development on the regional transportation system, collect the fee revenue, and build the transportation projects. Jurisdictions have been encouraged to develop a sub-regional or multi-city approach to this program and to coordinate with regional and state transportation providers. The congestion mitigation fee revenue should help local jurisdictions

leverage additional funding by providing a local match to compete for the MTA's Call-for-Projects and federal and state grants.

The proposed congestion mitigation fee would be a one-time fee applied to all types of new development based on the number of net new trips generated by the development project. For residential land use, the trip generation is based on the number of dwelling units. Thus, adding a bedroom or family room to a single family home would not increase the number of dwelling units and would not be subject to a congestion mitigation fee. The trip generation of non-residential land use is based on the square footage and the type of land use. If a new development project replaces an existing structure, the trip generation from the existing structure would be subtracted from the amount of trip generation from the new development and the Congestion Mitigation Fee would be based on the net difference. Moreover, if a non-residential use is replaced with a different type of non-residential use, the trip generation rate changes and the fee would only apply if there is a net increase in trips resulting from this change. For example, a conversion of a manufacturing facility to a warehouse of the same size would result in fewer trips being generated and, thus, would not be subject to a fee.

The Congestion Mitigation Fee Program would give credit to jurisdictions with their own existing mitigation fee programs. The amount of credit would be based on how many of the transportation projects included in the local fee program provide a regional benefit. Each eligible project would receive dollar-for-dollar credit towards the minimum fee-per-trip that would be set for the Congestion Mitigation Fee Program. If the local fee program's fee-per-trip exceeds the Congestion Mitigation Fee Program minimum, then the jurisdiction would not have to make any change to its existing mitigation fee program.

Eligible transportation projects must improve the capacity of the transportation system and must consist of capital improvement projects. Ongoing operational and maintenance projects are not eligible under this program. Transportation projects identified in this Pilot Nexus Study include the following:

- Bicycle and pedestrian improvements that provide accessibility to bus and rail transit and that were developed in a systemic and multi-modal manner.
- Signal synchronization, bus speed improvements, bottleneck intersection improvements, traffic control and monitoring systems, and Intelligent Transportation Systems.
- Bus and rail transit capital and/or construction of transit stations and centers, park and ride lots, commuter rail stations, transit stop improvements and transit vehicle purchases.
- Regional arterial enhancements such as arterial widening, bottleneck intersection improvements, closure of gaps in the arterial system, grade separations, and interchange improvements.
- Other projects determined on a case-by-case basis.

PILOT NEXUS STUDY BACKGROUND: THE CITIES OF LOS ANGELES AND SAN FERNANDO

To ensure a Congestion Mitigation Fee Program would serve the specific preferences of its member jurisdictions, the Cities of Los Angeles and San Fernando partnered with MTA to develop a Pilot Nexus Study as a way to assess the viability of the Congestion Mitigation Fee Program. These cities took this proactive approach to fully vet the issues and concerns of these jurisdictions prior to any action by the MTA Board. This Pilot Nexus Study also provides an opportunity to explore various policies and understand complexities associated with such a program.

For the last three years, the Cities of Los Angeles and San Fernando have been working with MTA and their consultant, Cambridge Systematics, Inc. in a collaborative process. As a result of this work effort, MTA staff and the consultant have met one-on-one with senior management of the two jurisdictions.

CONGESTION MITIGATION FEE WORK PLAN

The Pilot Nexus Study for the Cities of Los Angeles and San Fernando was conducted as part of an overall work plan approved by the MTA Board in September 2008 (See Figure 1 on the following page). The work plan consists of four steps: 1) Feasibility Study and Program Guidelines; 2) Local Project Identification; 3) Nexus Analysis; and 4) Program Development and Local Implementation.

In Step 1 – Feasibility Study and Program Guidelines, MTA worked with jurisdictions and other stakeholders countywide to conduct a Feasibility Study to determine whether a fee program would be feasible. When this step was completed, the results were documented in a report titled *Congestion Mitigation Fee Feasibility Study Report* and approved by the MTA Board in September 2008.

In Step 2 – Local Project Identification, MTA worked with the Cities of Los Angeles and San Fernando to identify local projects with a regional benefit, verify their growth forecasts, and confirm their transportation network.

Step 3 – Nexus Analysis, involved a nexus analysis to determine whether the projects identified in Step 2 mitigate the impacts of 20 years of future development on the transportation network. In addition, Step 3 included an economic analysis of how the payment of a congestion mitigation fee and the benefits of congestion relief and construction jobs would change the economic performance of Los Angeles County.

MTA is completing eight pilot nexus studies (Step 3 in Figure 1 on the following page) for all of the sub-regions in the County. Should the MTA Board adopt the Congestion Mitigation Fee Program as the new CMP Countywide Deficiency Plan, then jurisdictions will be required to participate in the fee program to be in conformance with the CMP. In this case, MTA staff will initiate Step 4 and work with jurisdictions to further develop and implement Step 4 of the Congestion Mitigation Fee Program.

If the MTA Board authorizes conducting Step 4 – Program Development and Local Implementation, then staff will work with jurisdictions, sub-regional agencies, and building industry representatives to implement the Congestion Mitigation Fee Program over a 24 month period. The MTA work plan is summarized below in Figure 1.

Figure 1: Congestion Mitigation Fee Program Work Plan

Work Plan Components	Schedule
Step 1: Feasibility Study & Program Guidelines	Jan. 2007 – Sept. 2008
<ul style="list-style-type: none"> Review with PAC, jurisdictions, COGs, & Others 	
Step 2: Local Project Identification	Spring 2009 – Summer 2012
<ul style="list-style-type: none"> Jurisdictions confirm growth forecasts Jurisdictions identify local projects with regional benefits and confirm transportation network 	
Step 3: Nexus Study	Spring 2011 – Fall 2012
<ul style="list-style-type: none"> Technical work effort to determine nexus 	
Step 4: Program Development & Implementation	2013 – 2015
<ul style="list-style-type: none"> Work one-on-one with jurisdictions to develop and implement program at the local level. 	

Nexus Analysis

The Mitigation Fee Act (AB 1600) governs the adoption of mitigation fees in the State of California (California Government Code Sections 66000-66008). This law requires local jurisdictions to complete a nexus analysis before adopting a mitigation fee. This analysis must provide results for a dual nexus test, which would show that the improvements being funded with the fees will: 1) mitigate the impacts caused by new development; and, 2) that the fee amounts bear a reasonable relationship to the impact from new development.

This nexus analysis uses annual vehicle-hours-of-delay (VHD) to measure the impact of new development on the transportation system. Other technical measures commonly used for a nexus analysis at a jurisdiction level include level-of service (LOS) or volume-to-capacity (V/C) ratios. These measures work best when the scale of analysis is on specific roadway segments or an urban street network and the projects are intended to mitigate congestion from increased travel by single occupant vehicles. The proposed Congestion Mitigation Fee, however, is intended to address the requirements specified for Deficiency Plans set forth in the CMP legislation. Furthermore, the Congestion Mitigation Fee Program is intended to reduce VHD (congestion) caused by new development on the arterial network in each sub-region.

This VHD methodology is similar to the approach conducted for the nexus analysis completed for the San Diego Association of Governments (SANDAG) for its Regional Transportation Congestion Improvement Plan (RTCIP) in 2006. The MTA nexus analysis uses the same metric of vehicle-hours-of-delay as SANDAG is using for its

mitigation fee program, which essentially measures the nexus between the RTCIP projects and the impacts from new development throughout San Diego county. The Pilot Nexus Studies utilize the same analytical methodology as SANDAG because both mitigation fee programs are focused on mitigating the impacts of new development on the arterial networks. Traffic patterns on the arterial networks of both counties of Los Angeles and San Diego are similar in terms of their function as relievers for freeway intercity travel and access to freeways. In addition, the trip generations rates for the seven land-use types are derived from the SANDAG trip generation rates because their county more closely resembles the traffic patterns and land use trip generation rates of the greater Southern California region. SANDAG calculated these rates from surveys of San Diego County households and businesses.

This nexus analysis compares VHD for the Cities of Los Angeles and San Fernando under three conditions or scenarios:

- **2010 Base Year – Existing Conditions Scenario:** Estimates VHD for the initial Congestion Mitigation Fee Program base year of 2010.
- **2030 Future Year – No-Build Scenario:** Estimates VHD in 2030 given estimated levels of new development and all currently planned transportation improvements funded with known sources such as MTA’s 2009 Long Range Transportation Plan.
- **2030 Future Year –With New Congestion Mitigation Fee Projects Scenario:** Estimates the reduction in VHD caused by the selected transportation improvements identified in the Congestion Mitigation Fee Program.

To meet the requirements of state law, this nexus analysis must demonstrate that VHD in 2030 does not improve beyond the 2010 Base Year levels. The analysis excludes freeway impacts because much of the freeway traffic is inter-regional and the projects submitted by jurisdictions are focused on the regional arterial system.

All transportation project categories are classified into one of nine project categories and were evaluated using either the MTA travel demand model, the Congestion Mitigation Fee Analysis Tool, or research literature as described below. Figure 2 on Page 8 that follows identifies which one of the following three nexus analysis methods was used for each transportation project category:

- **MTA Travel Demand Model:** In order to analyze the changes in VHD on the arterial network within each of the eight sub-regions, Cambridge Systematics, Inc., MTA’s contractor, made improvements to the MTA travel demand model. These improvements are documented in the *Los Angeles County MTA Travel Model Assessment and Status Report* (June 2011). The enhancements included:
 - **Replicating trip generation and trip distribution within the MTA model.** Allows the MTA travel demand model to yield more internally consistent estimates of development impacts in the nexus analyses. The process involved converting SCAG model components into MTA’s travel demand model and testing and validating model results.

- **Increasing the number of traffic assignment equilibrium iterations from 43 to 300.** Increasing to 300 iterations improves assignment accuracy substantially and provides more accuracy in traffic assignment as well as more accurate results against increased model run time.
- **Using SCAG's screenline dataset to validate sub-regional travel.** SCAG's existing dataset of traffic volumes across multiple key locations (also known as screenlines) was used to validate travel model results for 2010 base year.

With these steps completed, the MTA travel demand model is better prepared to code and run sub-regional nexus analyses.

- **Congestion Mitigation Fee Analysis Tool:** This analytical tool estimates VHD reduction from intersection improvements, system operations (e.g. signal synchronization), railroad grade separations, and highway on/off ramps. The Congestion Mitigation Fee Analysis Tool was developed specifically for conducting sub-regional nexus analysis of projects that require a level of analysis that is too fine-grained for the MTA travel demand model. The analysis tool estimates VHD reduction based on assumptions taken from research literature combined with quantified project descriptions provided by each jurisdiction.
 - **Greenhouse Gas Emissions Sketch Planning Capability:** At the request of jurisdictions, a greenhouse gas emissions sketch planning tool was developed and made available to jurisdictions so they could generally estimate the greenhouse gas emissions impacts derived from transportation projects they identified. This capability was added to assist cities when considering projects that meet both the requirements of the CMP and SB 375. If the Congestion Mitigation Fee Program were implemented, there may be an opportunity to fund transportation projects identified for SB 375 compliance as well as the CMP.
- **Research Literature:** Reliable research provides sufficient evidence that bicycle and pedestrian improvements that link to transit (e.g. bicycle lanes and sidewalks that serve bus stops and passenger rail stations), transit amenities (e.g. bus shelters, better signage, etc.), park-and-ride lots, and other similar projects provide congestion reduction benefits. This research literature, however, does not provide enough information to quantify the impacts. Thus, for purposes of the Pilot Nexus Study analysis these projects are included but their benefits are not quantified.

Furthermore, bicycle or pedestrian improvements that do not link to transit (e.g. recreational biking/hiking trails) have been excluded from the analysis. In January 2012, the MTA Board directed staff to develop the modeling capability to be able to quantify the benefit of bicycle transportation investment (and pedestrian transportation investment, if possible) because many of jurisdictions participating in the Pilot Nexus Study have included bicycle investments as part of their list of projects. Nevertheless, MTA has limited the types of bicycle projects it can accept as part of the Pilot Nexus Study to those that provide a link or access to transit, which the research literature conclusively documents as having a qualitative relationship to reduced congestion.

Figure 2: Transportation Project Categories and Nexus Analysis Methods

Project Category	Nexus Analysis Method
Roadway Capacity Improvement	MTA Travel Demand Model
Intersection Improvement	Congestion Mitigation Fee Analysis Tool
System Operations (e.g. signal synchronization)	Congestion Mitigation Fee Analysis Tool
Railroad Grade Separations	Congestion Mitigation Fee Analysis Tool
Highway On/Off-Ramps	Congestion Mitigation Fee Analysis Tool
Bicycle/Pedestrian Improvements	Research Literature
Transit Improvements	Research Literature
Park-and-Ride Lots	Research Literature
Other Projects	Research Literature

The nexus analysis for the Cities of Los Angeles and San Fernando was conducted at the sub-regional level. Sub-regional level analysis captures longer, intercity trips, which are the focus of the CMP. Sub-regions are also small enough to measure significant benefits for a relatively modest investment. This sub-regional nexus analysis serves as an umbrella for each jurisdiction, which would adopt its own congestion mitigation fee program to fund the specific transportation projects that it selects.

PILOT NEXUS STUDY: CITIES OF LOS ANGELES AND SAN FERNANDO

Study Area

The study area is defined by the boundaries of the Cities of Los Angeles and San Fernando plus several adjacent unincorporated areas of Los Angeles County.

Projected Growth

Growth within the Study Area is projected to increase by 301,480 in population and employment is projected to increase by 75,840 from 2010 to 2030. This growth is expected to impact the regional transportation system that is already operating near or at capacity. This growth would essentially cause what is currently a slow moving roadway network to deteriorate further and result in more congestion.

Transportation Projects Submitted

A total of 506 transportation projects were identified as part of this Pilot Nexus Study. A map identifying the submitted projects is shown in Attachment B. Jurisdictions used a web-based software planning tool developed by Cambridge Systematics, Inc. to create a database of projects located within their jurisdiction. For each transportation project, jurisdictions provided a cost estimate, funding sources, project description, and a geocoded location (See Attachment C).

Figure 3 on page 10 summarizes the number of projects submitted by jurisdictions by project category along with information on total cost, other funding reasonably anticipated during the 20-year planning horizon, and the remaining unfunded amount that could be funded through the Congestion Mitigation Fee Program.

Figure 3 divides the different types of transportation projects into two groups. Figure 3 presents the following information:

Figure 3: Transportation Project Category Summary

Project Type	Number of Projects	Total Cost Share	Total Cost	Other Funding	Fee Revenue Funds
Roadway Capacity	52	36%	\$679,702,000	\$444,415,000	\$235,287,000
Intersection Improvements	38	7%	\$130,926,000	\$85,102,000	\$45,824,000
System Operations	39	4%	\$76,300,000	\$49,595,000	\$26,705,000
Grade Separation	3	10%	\$180,000,000	\$117,000,000	\$63,000,000
Subtotal	132	57%	\$1,066,928,000	\$696,112,000	\$370,816,000
Bike-Pedestrian	350	37%	\$685,466,000	\$446,314,000	\$239,152,000
Park-and-Ride	7	1%	\$12,810,000	\$8,327,000	\$4,483,000
Transit	16	5%	\$96,964,000	\$40,422,000	\$56,542,000
Managed Lanes	1	1%	\$14,160,000	\$9,204,000	\$4,956,000
Sub-total	374	43%	\$809,400,000	\$504,267,000	\$305,133,000
Total	506	100%	\$1,876,328,000	\$1,200,379,000	\$675,949,000

- The four transportation categories shown in the upper half of Figure 3 (Roadway Capacity, Intersection Improvements, System Operations, and Grade Separations) are projects that can be evaluated using quantitative methods such as the MTA Travel Demand Model and the Congestion Mitigation Fee Analysis Tool. These projects account for the reduction in VHD derived from the nexus analysis.
- The four transportation categories shown in the lower half of Figure 3 cannot be modeled, thus, their contribution is not included in the VHD reduction estimate. Nevertheless, peer reviewed research affirms their qualitative effectiveness in lowering congestion and thus they are included in the Congestion Mitigation Fee Pilot Study’s total unfunded cost and the fee amounts needed to fund it.

As mentioned earlier, the MTA Board directed staff to develop a model that would quantify the travel related benefits associated with bicycle travel. Thus, the consultant team is developing approaches to estimate the impacts from this project category for inclusion in future nexus analyses.

- The third column of Figure 3 shows the share of the total cost for each of the eight transportation project categories. Some key information includes the amount of other funding leveraged by the Congestion Mitigation Fee revenue. Overall, about 64 percent of the total project cost is funded via other sources. See Attachment C for a detailed project list by jurisdiction.

Technical Nexus Analysis Results: Vehicle-Hours-of-Delay/Congestion Reduction Benefit

The nexus analysis conducted for this Pilot Nexus Study supports the finding that the transportation projects identified by jurisdictions and funded by the Congestion Mitigation Fee Program would mitigate 9% of the total impact of new development on the arterial network. This result demonstrates that the costs of mitigation will not exceed the proportion attributable to new development, and satisfies the nexus requirements set forth in the Mitigation Fee Act. This finding also meets the measurable improvement in congestion requirement as stipulated by the CMP Countywide Deficiency Plan.

Figure 4 below presents the results of the nexus analysis of the 132 projects and programs that could be modeled. Reading from left to right, this table presents the following results:

Figure 4: Annual Vehicle Hours of Delay (VHD): Cities of Los Angeles and San Fernando

1	2	3	4	5	VHD Reduction Benefit	
2010 (Existing)	2030 (No Build)	2030 (With Projects)	2010 – 2030 (No Build)	2010 – 2030 (With Projects)	6 Amount	7 Percent
<i>a</i>	<i>B</i>	<i>C</i>	$d = b - a$	$e = c - a$	$f = d - e$	$g = f / d$
20,278,000	73,935,000	68,872,000	53,657,000	48,594,000	5,063,000	9%

Note: The analysis excludes freeway impacts because much of the freeway traffic is inter-regional and the projects submitted by jurisdictions are focused on the regional arterial system.

- The nexus analysis starts with the current (2010) estimate of 20.3 million VHD on the arterial network (shown in the first column of Figure 4).
- Next, the analysis forecasts 73.9 million VHD in 2030 (second column) or a net increase of 53.7 million VHD (fourth column) caused by the impacts of new trips generated and attracted by new development over the next 20 years. Under the No-Build scenario, congestion is expected to have a 265% increase in vehicle-hours-of-delay (VHD) from 2010 to 2030 because of growth impacting the current transportation system that is at or near capacity. This result for the No-Build scenario assumes that transportation improvements included in the 2008 RTP and the current MTA Long Range Transportation Plan (LRTP) are constructed.
- The third column shows what would happen if the 132 transportation projects are constructed holding everything else constant. VHD on the sub-regional arterial network in 2030 would be 68.9 million, which would be a 5.1 million VHD reduction (sixth column), or about 9% less congestion (seventh column) than without these projects.
- This analysis deliberately removed the impacts of future through trips (trips that begin and end outside of the sub-region) because new development within the subregion cannot be required to pay for the impacts from trips it does not generate or attract.

Establishing Minimum and Maximum Fee-Per-Trip Amounts

The congestion mitigation fee-per-trip amount for each jurisdiction is determined by calculating its unique fee-per-trip (See Attachment A). The fee-per-trip amount is the total unfunded cost of all transportation projects selected by each jurisdiction (both those with benefits that can be quantitatively measured and those that are only qualitatively measured) divided by the number of net trips generated by new development within that jurisdiction.

Establishing a minimum fee-per-trip for the Congestion Mitigation Fee Program has been an important policy issue for jurisdictions and stakeholders since MTA convened the countywide Policy Advisory Committee in 2006. A minimum fee-per-trip would facilitate compliance with the CMP by ensuring a minimum level of congestion reduction effort. Furthermore, all jurisdictions would benefit from a level playing field, where a minimum fee-per-trip amount to reduce the advantage that one jurisdiction may have over another in attracting new development.

The minimum fee-per-trip amounts for each sub-region were determined through the pilot nexus study process where each city developed a transportation project list that balances its need to mitigate future congestion with a maximum fee-per-trip amount. As a result, the pilot nexus study process provided a fee-per-trip amount for each jurisdiction (See Attachment A) whereby both jurisdictions were above \$400 fee-per-trip. Based on this threshold, one possible option is to set a \$400 fee-per-trip amount as the minimum that the jurisdictions could adopt as their sub-regional minimum fee-per-trip amount. The potential use of this approach is also being evaluated in the other sub-regional pilot nexus studies.

The Pilot Study Nexus Analysis resulted in two types of fee-per-trip amounts calculated for the two jurisdictions:

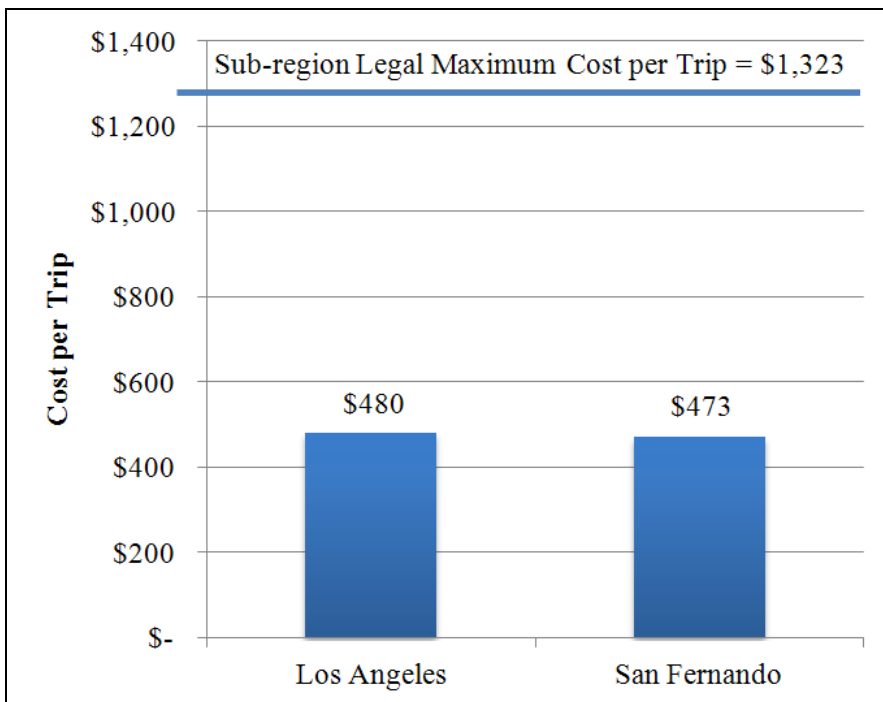
- **Jurisdiction fee-per-trip:** A separate fee-per-trip for each jurisdiction was calculated based on the jurisdiction's unfunded project costs divided by the number of trips from new development within the jurisdiction (See Attachment A). This fee-per-trip is the amount needed to fund the unfunded portion of the transportation projects costs identified by each jurisdiction. Unfunded project costs used in this calculation represents a conservative method of assessing new development for its share of mitigating its impacts. Other funding sources identified by jurisdictions to fund their proposed projects come from such funds as Proposition C and Measure R local return, state gas tax subventions, municipal general funds, Call-for-Projects, and Surface Transportation Program local funds.
- **Sub-regional maximum justified fee-per-trip:** A single \$1,323 fee-per-trip for the sub-region was calculated based on the \$1.9 billion total cost of all transportation projects identified by jurisdictions divided by approximately 1,420,000 new trip-ends generated and attracted by new development within the sub-region. Since this nexus analysis was conducted at the sub-regional level, the \$1,323 fee-per-trip amount represents the maximum justified congestion mitigation fee amount the nexus analysis can defend quantitatively. Total project

costs, rather than unfunded project costs, were used in this calculation because congestion reduction benefits are associated with the entire project regardless of the level of other anticipated funding.

The congestion mitigation fee-per-trip results from the nexus analysis by jurisdiction are summarized in Figure 5 below. See Attachment A for details regarding total project costs and funding by jurisdiction.

The result of the sub-regional pilot study is a fee-per-trip of \$473 for the City of San Fernando and \$480 for the City of Los Angeles, leaving enough flexibility to manage the congestion impacts of growth before exceeding the sub-regional maximum justified fee-per-trip of \$1,323. A minimum fee-per-trip amount is intended to create a level playing field by ensuring that each jurisdiction contributes to mitigating its growth impact on the regional transportation network.

Figure 5: Fee-Per-Trip Range by Jurisdiction



Should the Congestion Mitigation Fee Program be adopted, then each jurisdiction within the sub-region would adopt its own congestion mitigation fee ordinance. Their congestion mitigation fee would need to be set between the minimum fee-per-trip set by the MTA Board and its own individual jurisdiction fee-per-trip established by the nexus analysis (See Attachment A). The sub-regional maximum justified fee-per-trip would be the amount that jurisdictions would be limited to adopt as a result of the nexus analysis.

Based on the nexus results of the Pilot Nexus Study for the Cities of Los Angeles and San Fernando, a recommended sub-regional minimum fee-per-trip amount for these jurisdictions could be a \$400 fee-per-trip amount (see Figure 5).

NEXT STEPS

Below are the next steps to complete the Congestion Mitigation Fee work plan:

- Present pilot nexus study and economic analysis findings to jurisdictions, sub-regional agencies, and building industry stakeholders.
- Seek MTA Board direction in early 2013 to:
 - Adopt the Congestion Mitigation Fee Program as the new CMP Countywide Deficiency Plan;
 - Establish minimum fee-per-trip amount for CMP compliance
- Work one-on-one with jurisdictions, sub-regional agencies, and building industry representatives to implement a Congestion Mitigation Fee Program over a 24 month period.

If the MTA Board decides to adopt the Congestion Mitigation Fee Program as the Countywide Deficiency Plan for the CMP, MTA staff will work with each jurisdiction to implement the Congestion Mitigation Fee Program. In carrying out this work effort, it is possible that jurisdictions would modify their list of transportation projects. If so, then the congestion reduction and fee-per-trip from such a change may be different than the results identified in this Pilot Nexus Study and would be revised accordingly in a report at that time.

CONTACT INFORMATION

If you have any questions or comments, please contact:

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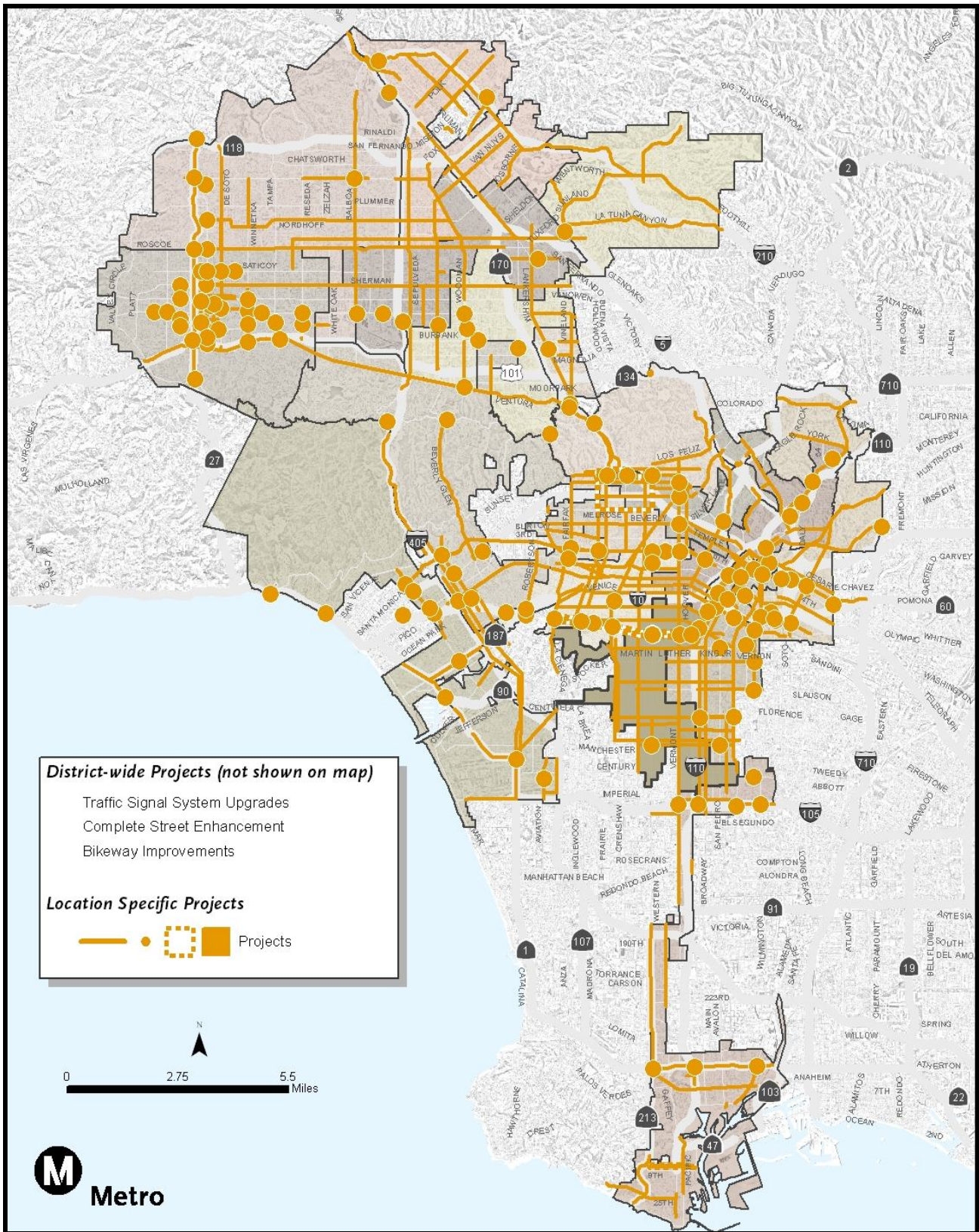
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Attachment A: Cities of Los Angeles and San Fernando Pilot Nexus Study Fee-per-Trip by Jurisdiction

Jurisdiction	Net New Trip Ends	Total Project Costs	Other Funding	Fee Revenue Funds	Fee-Per-Trip
	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e = d / a</i>
Los Angeles	1,402,261	1,867,117,000	1,193,484,000	673,633,000	\$480
San Fernando	4,902	9,211,000	6,894,000	2,317,000	\$473
Unincorporated	12,303	-	-	-	\$-
Total	1,419,466	\$1,876,328,000	\$1,200,378,000	\$675,950,000	
		100%	64%	36%	
Sub-regional Maximum Justified Fee-per-Trip (= b / a)				\$1,323	

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Attachment B: Cities of Los Angeles and San Fernando Pilot Nexus Study Transportation Projects



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**Attachment C: Cities of Los Angeles and San Fernando List of Transportation Projects by Jurisdiction
(Project Deemed Ineligible Not Listed)**

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	103rd Street Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	103rd/Wilmington	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	23rd Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile gap of a transit user's commute.	23rd Street (23rd / Flower)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	6th St Pedestrian Mall	Develop a pedestrian and transit-oriented one-way couplet with 6th and 7th Streets in San Pedro	6th and 7th Streets in San Pedro	Bike-Pedestrian				(10)
Los Angeles	7th St Pedestrian/Transit Enhancement Project	Improve pedestrian access to transit (including the 7th Street Metro Station) and enhance transit flow by installing curb extensions and consolidating bus stops along 7th Street in Downtown between Figueroa and Olive.	7th St between Figueroa St and Olive St	Bike-Pedestrian				(10)
Los Angeles	7th St/Metro Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	7th Street/Metro Center	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Avalon Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Avalon (Avalon and 105 Freeway)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Avenue 26 to Gold Line Cypress Station Pedestrian Connection	Enhance bike and pedestrian access to transit (including Metro Gold Line stations) by installing street trees, bio-retention planters, bike lanes, lighting, access ramps, enhanced crosswalks, and bulb-outs.	Avenue 26 to Gold Line Cypress Station	Bike-Pedestrian	\$2,500,000	\$1,625,000	\$875,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Balboa Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Balboa/Victory	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Ballona Creek Bike Path Mid-City Segment	Design and construction of a Class I Bike Path along Ballona Creek from Fairfax Ave to Venice Blvd. The new bike path would provide enhanced bike access to transit system	Ballona Creek from Fairfax Ave to Venice Blvd	Bike-Pedestrian	\$16,100,000	\$10,465,000	\$5,635,000	
Los Angeles	Canoga Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Canoga/Victory	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Central Ave Streetscape Enhancements	Enhance pedestrian access to transit through new sidewalks, ADA ramps, street trees, crosswalks, street furniture, bollards, other amenities (also enhances efficiency & safety of corridor)	Central Ave between Washington and Slauson	Bike-Pedestrian	\$2,344,000	\$1,523,600	\$820,400	
Los Angeles	Century City Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Wilshire/Avenue of the Stars	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Cesar Chavez Streetscape Improvements	Improve ped connectivity to transit stops along Cesar Chavez including enhanced X-walks, medians, lighting, bus stop amenities, curb cuts, information kiosks, street trees, etc.	Cesar Chavez Ave between Alameda St & Figueroa St.	Bike-Pedestrian	\$2,800,000	\$1,820,000	\$980,000	
Los Angeles	Chatsworth Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Chatsworth/Old Depot Plaza Rd	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Chinatown Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Chinatown (Spring / College)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	1st St from Lucas Ave to City Limits with East Los Angeles	Bike-Pedestrian	\$16,199	\$10,529	\$5,670	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Devonshire Street between Haskell Ave and Woodman Ave	Bike-Pedestrian	\$61,500	\$39,975	\$21,525	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	Arden Blvd from Wilshire Blvd to Arden Pl	Bike-Pedestrian	\$71,500	\$46,475	\$25,025	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Owensmouth Ave between Valerio St and Erwin St	Bike-Pedestrian	\$75,500	\$49,075	\$26,425	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	Aviation Blvd from Arbor Vitae St to Imperial Hwy	Bike-Pedestrian	\$75,600	\$49,140	\$26,460	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	Cahuenga Blvd E from Muholland Dr to Yucca St	Bike-Pedestrian	\$80,000	\$52,000	\$28,000	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Victory Blvd between Lankershim Blvd and Clybourn Ave	Bike-Pedestrian	\$80,500	\$52,325	\$28,175	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Hypertion Ave between Greensward Rd and Fountain Ave	Bike-Pedestrian	\$80,500	\$52,325	\$28,175	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	Alameda St from Pacific Coast Hwy to Harry Bridges Blvd	Bike-Pedestrian	\$83,000	\$53,950	\$29,050	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Osbourne St between San Fernando Rd and Foothill Blvd	Bike-Pedestrian	\$83,500	\$54,275	\$29,225	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Woodman Ave between Burbank Blvd and Ventura Blvd	Bike-Pedestrian	\$84,000	\$54,600	\$29,400	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Westwood Blvd between 350' N/O Santa Monica Blvd and National Blvd	Bike-Pedestrian	\$85,000	\$55,250	\$29,750	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	La Brea Ave between Rodeo Rd and Stocker St	Bike-Pedestrian	\$86,500	\$56,225	\$30,275	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
		resources.						
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Winnetka Ave between Devonshire St and Nordhoff St	Bike-Pedestrian	\$87,500	\$56,875	\$30,625	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Stadium Way between Riversdie Dr and Elysian Park Ave	Bike-Pedestrian	\$92,800	\$60,320	\$32,480	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Broadway N. between Avenue 18 and Mission Rd	Bike-Pedestrian	\$96,500	\$62,725	\$33,775	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Winnetka Ave between Gault St and Ventura Blvd	Bike-Pedestrian	\$98,000	\$63,700	\$34,300	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	3rd St from San Vicente Blvd to La Brea Ave	Bike-Pedestrian	\$98,000	\$63,700	\$34,300	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Sepulveda Blvd between Manchester Blvd and Imperial Hwy	Bike-Pedestrian	\$100,100	\$65,065	\$35,035	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Lincoln Blvd between Commonwealth Ave and 430' N/O Bali Way	Bike-Pedestrian	\$100,500	\$65,325	\$35,175	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	79th St from Vermont Ave to Central Ave	Bike-Pedestrian	\$101,200	\$65,780	\$35,420	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Wilshire Blvd between Beverly Hills City Limits and Alvarado St	Bike-Pedestrian	\$103,500	\$67,275	\$36,225	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Wilshire Blvd between Veteran Ave and Beverly Hills City Limits	Bike-Pedestrian	\$103,500	\$67,275	\$36,225	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Lincoln Blvd between LMU Dr and Sepulveda Blvd	Bike-Pedestrian	\$105,000	\$68,250	\$36,750	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	La Tijera Blvd between Sepulveda Blvd and La Cienega Blvd	Bike-Pedestrian	\$107,000	\$69,550	\$37,450	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Pacific Ave between Channel St and 22nd St	Bike-Pedestrian	\$107,200	\$69,680	\$37,520	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
		resources.						
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Long Beach Ave between Washing Blvd and Slauson Ave	Bike-Pedestrian	\$107,500	\$69,875	\$37,625	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	120th St from Vermont Ave to City Limits	Bike-Pedestrian	\$108,900	\$70,785	\$38,115	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Foothill Boulevard between Balboa Bl and Roxford St	Bike-Pedestrian	\$109,000	\$70,850	\$38,150	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Devonshire Street between Valley Circle Blvd. and Topanga Canyon Rd.	Bike-Pedestrian	\$109,800	\$71,370	\$38,430	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	76th St from Crenshaw Blvd to Vermont Ave	Bike-Pedestrian	\$110,000	\$71,500	\$38,500	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	Adams Blvd from Fairfax Ave to Figueroa St	Bike-Pedestrian	\$110,200	\$71,630	\$38,570	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	25th St from Rancho Palos Verdes to Gaffey St	Bike-Pedestrian	\$111,700	\$72,605	\$39,095	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Whittier Blvd between LA River and City Limits	Bike-Pedestrian	\$114,300	\$74,295	\$40,005	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Temple St between Virgil Ave and Beaudry Ave	Bike-Pedestrian	\$114,500	\$74,425	\$40,075	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Huntington Dr between Monterey Rd and 450' E/O Westmont Dr	Bike-Pedestrian	\$117,000	\$76,050	\$40,950	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Western Ave between Santa Cruz and Pasea Del Mar	Bike-Pedestrian	\$118,000	\$76,700	\$41,300	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Redondo Blvd between Edgewood Pl and Rodeo Rd	Bike-Pedestrian	\$119,000	\$77,350	\$41,650	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Robertson Blvd between Gregory Wat and Robertson Pl	Bike-Pedestrian	\$119,000	\$77,350	\$41,650	

Juris- diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
		resources.						
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Glenoaks Blvd between Foothill Blvd and San Fernando City Limits	Bike-Pedestrian	\$120,000	\$78,000	\$42,000	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Olympic Blvd between Central Ave and Lorena St	Bike-Pedestrian	\$120,900	\$78,585	\$42,315	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	Cahuenga Blvd W from Lankershim Blvd to Highland Ave	Bike-Pedestrian	\$121,000	\$78,650	\$42,350	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Devonshire St between Reseda Blvd and Hayvenhurst Ave	Bike-Pedestrian	\$122,500	\$79,625	\$42,875	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Mission Rd between Cesar E Chavez Ave and Soto St	Bike-Pedestrian	\$127,000	\$82,550	\$44,450	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Virgil Ave between Sunset Blvd and Wilshire Blvd	Bike-Pedestrian	\$127,400	\$82,810	\$44,590	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Central Ave from Gage Ave to Century Blvd	Bike-Pedestrian	\$127,600	\$82,940	\$44,660	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Los Feliz Blvd between Western Ave and LA River	Bike-Pedestrian	\$130,000	\$84,500	\$45,500	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	San Vicente Blvd between Burton Way and Pico Blvd	Bike-Pedestrian	\$138,500	\$90,025	\$48,475	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Santa Monica Blvd between 200' E/O La Brea Ave and Sunset Blvd	Bike-Pedestrian	\$138,500	\$90,025	\$48,475	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Hubbard St between 4th St and Gavina Ave	Bike-Pedestrian	\$139,300	\$90,545	\$48,755	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Polk St between Sunrise Ridge Rd and Egbert St	Bike-Pedestrian	\$139,400	\$90,610	\$48,790	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	San Fernando Rd between .03 mi S/O Rosslyn St and N Broadway	Bike-Pedestrian	\$140,000	\$91,000	\$49,000	

Juris- diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
		resources.						
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Paxton St between Arleta Ave and Foothill Blvd	Bike-Pedestrian	\$140,300	\$91,195	\$49,105	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	San Fernando Rd between Northern City Limits and Roxford St	Bike-Pedestrian	\$142,000	\$92,300	\$49,700	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Sepulveda Blvd between Santa Monica Blvd and Venice Blvd	Bike-Pedestrian	\$142,500	\$92,625	\$49,875	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	7th St from Figueroa St to Soto St	Bike-Pedestrian	\$142,500	\$92,625	\$49,875	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Colorado Blvd between 200' E/O Lincoln Ave and Ave 64	Bike-Pedestrian	\$148,000	\$96,200	\$51,800	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	Cahuenga Blvd from Victory Blvd to LA River	Bike-Pedestrian	\$148,200	\$96,330	\$51,870	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Normandie Ave between 182nd St and 225th St	Bike-Pedestrian	\$150,000	\$97,500	\$52,500	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Foothill Boulevard between Osborne St and Wentworth St	Bike-Pedestrian	\$150,800	\$98,020	\$52,780	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	Alvarado St from Berkeley Ave to Hoover St	Bike-Pedestrian	\$151,500	\$98,475	\$53,025	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Valley Blvd between Mission Rd and City Limits	Bike-Pedestrian	\$155,800	\$101,270	\$54,530	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Flower St between 2nd St and 37th St	Bike-Pedestrian	\$159,500	\$103,675	\$55,825	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	Bundy Dr from San Vicente Blvd to Stanwood Pl	Bike-Pedestrian	\$160,200	\$104,130	\$56,070	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	La Tuna Canyon Rd between 3500' E/O Elben Ave and 140' w/o Lowell Ave	Bike-Pedestrian	\$168,000	\$109,200	\$58,800	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
		resources.						
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Venice Blvd between Crenshaw Blvd and Figueroa St	Bike-Pedestrian	\$174,500	\$113,425	\$61,075	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Cesar E Chavez Ave between Figueroa St and Indiana St	Bike-Pedestrian	\$174,500	\$113,425	\$61,075	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Manchester Ave between Van Ness Ave and Central Ave	Bike-Pedestrian	\$177,000	\$115,050	\$61,950	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Imperial Hwy between Vermont Ave and Mona Blvd	Bike-Pedestrian	\$178,000	\$115,700	\$62,300	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Wilton Pl between Franklin Ave and 10th St	Bike-Pedestrian	\$181,500	\$117,975	\$63,525	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Sunland Blvd between Foothill Blvd and Penrose	Bike-Pedestrian	\$193,500	\$125,775	\$67,725	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	2nd St from Glendale Ave/Beverly Blvd to Alameda St	Bike-Pedestrian	\$195,000	\$126,750	\$68,250	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	Anaheim St from Western Ave to Henry Ford Ave	Bike-Pedestrian	\$198,000	\$128,700	\$69,300	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	La Brea Ave between Romaine St and Adams Blvd	Bike-Pedestrian	\$200,500	\$130,325	\$70,175	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Glendale Blvd between Riverside Dr and 1st St	Bike-Pedestrian	\$205,200	\$133,380	\$71,820	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Pico Blvd between Gateway Blvd and La Cienega Blvd	Bike-Pedestrian	\$210,000	\$136,500	\$73,500	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Fairfax Ave between Sunset Blvd and La Cienega Blvd	Bike-Pedestrian	\$218,500	\$142,025	\$76,475	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Foothill Boulevard between Wentworth St and Lowell Ave	Bike-Pedestrian	\$219,500	\$142,675	\$76,825	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Sunset Blvd between Fairfax Ave and Fountain Ave	Bike-Pedestrian	\$224,500	\$145,925	\$78,575	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Hollywood Blvd between Fairfax Ave and Hillhurst Ave	Bike-Pedestrian	\$225,000	\$146,250	\$78,750	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Florence Ave between West Blvd and Central Ave	Bike-Pedestrian	\$225,500	\$146,575	\$78,925	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Highland Ave between Cabuenga Blvd and Pico Blvd	Bike-Pedestrian	\$226,000	\$146,900	\$79,100	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Soto St between Mission Rd and 840' S/O Washington Blvd	Bike-Pedestrian	\$235,300	\$152,945	\$82,355	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Pacific Coast Highway between 31' W/O Western and 290' E/O LA River	Bike-Pedestrian	\$236,500	\$153,725	\$82,775	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Martin Luther King Jr Blvd between Marlton Ave and Main St	Bike-Pedestrian	\$237,000	\$154,050	\$82,950	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Sepulveda Blvd between Skirball Center Dr and 570' N/O Constitution Ave	Bike-Pedestrian	\$243,500	\$158,275	\$85,225	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Central Ave from 1st St to 63rd St	Bike-Pedestrian	\$244,000	\$158,600	\$85,400	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Figueroa St N between Colorado Blvd and San Fernando Rd	Bike-Pedestrian	\$256,000	\$166,400	\$89,600	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Woodman Ave between Chatsworth St and Vanowen St	Bike-Pedestrian	\$263,000	\$170,950	\$92,050	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Gaffey Street between 22nd St. and 36th St.	Bike-Pedestrian	\$269,100	\$174,915	\$94,185	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Western Ave between 182nd St and 261st St	Bike-Pedestrian	\$269,500	\$175,175	\$94,325	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
		resources.						
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Laurel Canyon Blvd between Peoria St and Crestknoll Dr	Bike-Pedestrian	\$279,500	\$181,675	\$97,825	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	De Soto Ave between Browns Canyon Rd and Victory Blvd	Bike-Pedestrian	\$298,500	\$194,025	\$104,475	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Foothill Boulevard between Roxford St and Osborne St	Bike-Pedestrian	\$311,500	\$202,475	\$109,025	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Pico Blvd from Alvira St to Hope St	Bike-Pedestrian	\$324,000	\$210,600	\$113,400	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Stonehurst Avenue between Wentworth St. and Sunland Blvd.	Bike-Pedestrian	\$335,400	\$218,010	\$117,390	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Oro Vista Avenue between Big Tujunga Canyon Rd. and Apperson St.	Bike-Pedestrian	\$336,000	\$218,400	\$117,600	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Jefferson Blvd between La Cienega Blvd and Central Ave	Bike-Pedestrian	\$342,000	\$222,300	\$119,700	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Crenshaw Blvd between Wilshire Blvd and 79th St	Bike-Pedestrian	\$345,700	\$224,705	\$120,995	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Lankershim Blvd between San Fernando Rd and Cahuenga Blvd	Bike-Pedestrian	\$352,200	\$228,930	\$123,270	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	Beverly Blvd from San Vicente Blvd to Glendale Blvd	Bike-Pedestrian	\$357,500	\$232,375	\$125,125	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Broadway Ave from Broadway Pl/40th St to 120th St	Bike-Pedestrian	\$357,800	\$232,570	\$125,230	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	Arlington/Van Ness Ave from 10th St to Century Blvd	Bike-Pedestrian	\$371,500	\$241,475	\$130,025	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	Beverly Glen Blvd from Ventura Blvd to Santa Monica Blvd	Bike-Pedestrian	\$379,000	\$246,350	\$132,650	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
		resources.						
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Huntington Drive South between Soto St. and Thelma Ave.	Bike-Pedestrian	\$399,000	\$259,350	\$139,650	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	Balboa Blvd from Woodley Ave to Victory Blvd	Bike-Pedestrian	\$405,000	\$263,250	\$141,750	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Topanga Canyon Dr between 118 Fwy and Muholland Dr	Bike-Pedestrian	\$445,500	\$289,575	\$155,925	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Washington Blvd between LA River and Fairfax Ave	Bike-Pedestrian	\$448,300	\$291,395	\$156,905	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Sepulveda Blvd between Rinaldi St and 300' N/O Sherman Oaks Ave	Bike-Pedestrian	\$463,500	\$301,275	\$162,225	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Nordhoff St between Orange Line Extension Nordhoff Station and Woodman Ave	Bike-Pedestrian	\$465,000	\$302,250	\$162,750	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Van Nuys Blvd between 101 Fwy and Foothill Blvd	Bike-Pedestrian	\$490,300	\$318,695	\$171,605	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Roscoe Blvd between 535' W/O Topanga Canyon Blvd and Whittsett Ave/Arlleta Ave	Bike-Pedestrian	\$575,900	\$374,335	\$201,565	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Sherman Way between Canoga Ave and Clybourn Ave	Bike-Pedestrian	\$598,000	\$388,700	\$209,300	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Main St N between Valley Blvd and 120th St	Bike-Pedestrian	\$608,000	\$395,200	\$212,800	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Big Tujunga Canyon Rd between Oro Vista Ave to Angeles National Forest City Limit	Bike-Pedestrian	\$712,800	\$463,320	\$249,480	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Vermont Ave between Los Feliz Blvd and .04 mi S/O Manchester Ave	Bike-Pedestrian	\$800,500	\$520,325	\$280,175	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Ventura Blvd between Leonara Dr and Cahuenga Blvd	Bike-Pedestrian	\$810,000	\$526,500	\$283,500	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
		resources.						
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Mckinley Avenue between Florence Ave. and 111th Pl.	Bike-Pedestrian	\$819,000	\$532,350	\$286,650	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, rec. resources.	54th St from Crenshaw Blvd to Central Ave	Bike-Pedestrian	\$1,164,800	\$757,120	\$407,680	
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Crystal Springs Drive between Griffith Park Blvd. and Los Feliz Blvd.	Bike-Pedestrian				(10)
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Figueroa fSt S between Sunset Blvd/Cesar Chavez Blvd and Martin Luther King Jr Blvd	Bike-Pedestrian				(10)
Los Angeles	Citywide Bicycle Master Plan	Per the City's Bicycle Plan, implement the bicycle lanes (i.e., backbone) on key arterials to provide an I/C system of streets linking to major employment center, transit stations and stops and educational, retail, entertainment, and rec. resources.	Foothill Blvd between Wenworth St and Glendale Blvd	Bike-Pedestrian				(10)
Los Angeles	Civic Center Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Civic Center	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Complete Street Enhancements	Install pedestrian and bicycle amenities including bike racks, lighting, shade, bus shelters, landscaping, etc. to improve walkability and aesthetics of sidewalks on arterials with robust transit service	Council District 14	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	Complete Street Enhancements	Install pedestrian and bicycle amenities including bike racks, lighting, shade, bus shelters, landscaping, etc. to improve walkability and aesthetics of sidewalks on arterials with robust transit service	Council District 13	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	Complete Street Enhancements	Install pedestrian and bicycle amenities including bike racks, lighting, shade, bus shelters, landscaping, etc. to improve walkability and aesthetics of sidewalks on arterials with robust transit service	Council District 12	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	Complete Street Enhancements	Install pedestrian and bicycle amenities including bike racks, lighting, shade, bus shelters, landscaping, etc. to improve walkability and aesthetics of sidewalks on arterials with robust transit service	Council District 11	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	Complete Street Enhancements	Install pedestrian and bicycle amenities including bike racks, lighting, shade, bus shelters, landscaping, etc. to improve walkability and aesthetics of sidewalks on arterials with robust transit service	Council District 10	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	Complete Street Enhancements	Install pedestrian and bicycle amenities including bike racks, lighting, shade, bus shelters, landscaping, etc. to improve walkability and aesthetics of sidewalks on arterials with robust transit service	Council District 9	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	Complete Street Enhancements	Install pedestrian and bicycle amenities including bike racks, lighting, shade, bus shelters, landscaping, etc. to improve walkability and aesthetics of sidewalks on arterials with robust transit service	Council District 8	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	(9)

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Complete Street Enhancements	Install pedestrian and bicycle amenities including bike racks, lighting, shade, bus shelters, landscaping, etc. to improve walkability and aesthetics of sidewalks on arterials with robust transit service	Council District 7	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	Complete Street Enhancements	Install pedestrian and bicycle amenities including bike racks, lighting, shade, bus shelters, landscaping, etc. to improve walkability and aesthetics of sidewalks on arterials with robust transit service	Council District 6	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	Complete Street Enhancements	Install pedestrian and bicycle amenities including bike racks, lighting, shade, bus shelters, landscaping, etc. to improve walkability and aesthetics of sidewalks on arterials with robust transit service	Council District 5	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	Complete Street Enhancements	Install pedestrian and bicycle amenities including bike racks, lighting, shade, bus shelters, landscaping, etc. to improve walkability and aesthetics of sidewalks on arterials with robust transit service	Council District 4	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	Complete Street Enhancements	Install pedestrian and bicycle amenities including bike racks, lighting, shade, bus shelters, landscaping, etc. to improve walkability and aesthetics of sidewalks on arterials with robust transit service	Council District 3	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	Complete Street Enhancements	Install pedestrian and bicycle amenities including bike racks, lighting, shade, bus shelters, landscaping, etc. to improve walkability and aesthetics of sidewalks on arterials with robust transit service	Council District 2	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	Complete Street Enhancements	Install pedestrian and bicycle amenities including bike racks, lighting, shade, bus shelters, landscaping, etc. to improve walkability and aesthetics of sidewalks on arterials with robust transit service	Council District 1	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	Complete Street Enhancements	Install pedestrian and bicycle amenities including bike racks, lighting, shade, bus shelters, landscaping, etc. to improve walkability and aesthetics of sidewalks on arterials with robust transit service	Council District 15	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Compton Ave Pedestrian Enhancements	Enhance pedestrian access to transit through new sidewalks, ADA ramps, street trees, crosswalks, street furniture, bulbouts, other amenities (also enhance access to Nevin Elem School).	Compton Avenue at 32nd Street	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Crenshaw Exposition Light Rail Station TOD Accessibility	Installation of pedestrian/transit connectivity improvements.	Crenshaw/Expo Station, from Coliseum St. to 30th St.	Bike-Pedestrian	\$3,494,000	\$2,271,100	\$1,222,900	
Los Angeles	Culver City Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Venice / Robertson	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	De Soto Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	De Soto/Victory	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Districtwide Bikeway Improvement	Implement Bike Friendly Streets (BFS) with traffic calming measures and shared lane markings to feed neighborhood streets into the regional transportation network. BFS would provide enhanced bike access to arterials and the transit systems	Council District 6	Bike-Pedestrian	\$20,000,000	\$13,000,000	\$7,000,000	
Los Angeles	Districtwide Bikeway Improvement	Implement Bike Friendly Streets (BFS) with traffic calming measures and shared lane markings to feed neighborhood streets into the regional transportation network. BFS would provide enhanced bike access to arterials and the transit systems	Council District 8	Bike-Pedestrian	\$20,000,000	\$13,000,000	\$7,000,000	
Los Angeles	Districtwide Bikeway Improvement	Implement Bike Friendly Streets (BFS) with traffic calming measures and shared lane markings to feed neighborhood streets into the regional transportation network. BFS would provide enhanced bike access to arterials and the transit systems	Council District 12	Bike-Pedestrian	\$20,000,000	\$13,000,000	\$7,000,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Districtwide Bikeway Improvement	Implement Bike Friendly Streets (BFS) with traffic calming measures and shared lane markings to feed neighborhood streets into the regional transportation network. BFS would provide enhanced bike access to arterials and the transit systems	Council District 13	Bike-Pedestrian	\$20,000,000	\$13,000,000	\$7,000,000	
Los Angeles	Districtwide Bikeway Improvement	Implement Bike Friendly Streets (BFS) with traffic calming measures and shared lane markings to feed neighborhood streets into the regional transportation network. BFS would provide enhanced bike access to arterials and the transit systems	Council District 14	Bike-Pedestrian	\$20,000,000	\$13,000,000	\$7,000,000	
Los Angeles	Districtwide Bikeway Improvement	Implement Bike Friendly Streets (BFS) with traffic calming measures and shared lane markings to feed neighborhood streets into the regional transportation network. BFS would provide enhanced bike access to arterials and the transit systems	Council District 4	Bike-Pedestrian	\$20,000,000	\$13,000,000	\$7,000,000	
Los Angeles	Districtwide Bikeway Improvement	Implement Bike Friendly Streets (BFS) with traffic calming measures and shared lane markings to feed neighborhood streets into the regional transportation network. BFS would provide enhanced bike access to arterials and the transit systems	Council District 7	Bike-Pedestrian	\$20,000,000	\$13,000,000	\$7,000,000	
Los Angeles	Districtwide Bikeway Improvement	Implement Bike Friendly Streets (BFS) with traffic calming measures and shared lane markings to feed neighborhood streets into the regional transportation network. BFS would provide enhanced bike access to arterials and the transit systems	Council District 1	Bike-Pedestrian	\$20,000,000	\$13,000,000	\$7,000,000	
Los Angeles	Districtwide Bikeway Improvement	Implement Bike Friendly Streets (BFS) with traffic calming measures and shared lane markings to feed neighborhood streets into the regional transportation network. BFS would provide enhanced bike access to arterials and the transit systems	Council District 15	Bike-Pedestrian	\$20,000,000	\$13,000,000	\$7,000,000	
Los Angeles	Districtwide Bikeway Improvement	Implement Bike Friendly Streets (BFS) with traffic calming measures and shared lane markings to feed neighborhood streets into the regional transportation network. BFS would provide enhanced bike access to arterials and the transit systems	Council District 5	Bike-Pedestrian	\$20,000,000	\$13,000,000	\$7,000,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
		the transit systems						
Los Angeles	Districtwide Bikeway Improvement	Implement Bike Friendly Streets (BFS) with traffic calming measures and shared lane markings to feed neighborhood streets into the regional transportation network. BFS would provide enhanced bike access to arterials and the transit systems	Council District 9	Bike-Pedestrian	\$20,000,000	\$13,000,000	\$7,000,000	
Los Angeles	Districtwide Bikeway Improvement	Implement Bike Friendly Streets (BFS) with traffic calming measures and shared lane markings to feed neighborhood streets into the regional transportation network. BFS would provide enhanced bike access to arterials and the transit systems	Council District 10	Bike-Pedestrian	\$20,000,000	\$13,000,000	\$7,000,000	
Los Angeles	Districtwide Bikeway Improvement	Implement Bike Friendly Streets (BFS) with traffic calming measures and shared lane markings to feed neighborhood streets into the regional transportation network. BFS would provide enhanced bike access to arterials and the transit systems	Council District 3	Bike-Pedestrian	\$20,000,000	\$13,000,000	\$7,000,000	
Los Angeles	Districtwide Bikeway Improvement	Implement Bike Friendly Streets (BFS) with traffic calming measures and shared lane markings to feed neighborhood streets into the regional transportation network. BFS would provide enhanced bike access to arterials and the transit systems	Council District 11	Bike-Pedestrian	\$20,000,000	\$13,000,000	\$7,000,000	
Los Angeles	Districtwide Bikeway Improvement	Implement Bike Friendly Streets (BFS) with traffic calming measures and shared lane markings to feed neighborhood streets into the regional transportation network. BFS would provide enhanced bike access to arterials and the transit systems	Council District 2	Bike-Pedestrian	\$20,000,000	\$13,000,000	\$7,000,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	La Cienega/Jefferson Station - Exposition Phase I	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Valley College Station - Orange Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Chatsworth Station - Orange Line Extension	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Pico/Aliso Station - Gold Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Pierce College Station - Orange Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Sepulveda Station - Orange Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Pico Station - Blue Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	North Hollywood Station - Orange Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
		feasible, mid-block crosswalks where						
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Hollywood/Vine Station - Red Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Woodman Station - Orange Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Van Nuys Station - Orange Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Harbor Freeway Station - Green Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Expo/Crenshaw Station - Exposition Phase I	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Expo/Vermont Station - Exposition Phase I	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Hollywood/Highland Station - Red Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Mariachi Plaza Station - Gold Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Union Station - Gold Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Laurel Canyon Station - Orange Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	SW Museum Station - Gold Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Hollywood/Western Station - Red Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Expo/La Brea Station - Exposition Phase I	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
		feasible, mid-block crosswalks where						
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Wilshire/Vermont Station - Purple/Red Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Tampa Station - Orange Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Vermont/Sunset Station - Red Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Imperial/Wilmington Station - Blue/Green Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Vermont/Santa Monica - Red Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Nordhoff Station - Orange Line Extension	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Washington Station - Blue Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Sherman Way Station- Orange Line Extension	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Indiana Station - Riverside Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Expo/Bundy Station - Exposition Phase II	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Vermont Station - Green Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Olympic/26th Station - Exposition Phase II	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Wilshire/Fairfax Station - Westside Subway Extension	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
		feasible, mid-block crosswalks where						
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Expo/Western Station - Exposition Phase I	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Woodley Station - Orange Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Balboa Station - Orange Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Lincoln/Cypress Station - Gold Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Vermont/Beverly Station - Red Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Civic Center Station - Red/Purple Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Reseda Station - Orange Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	103rd Street Station - Blue Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Century City Station - Westside Subway Extension	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	San Pedro Station - Blue Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Wilshire/Westwood/UCLA Station - Westside Subway Extension	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Culver City Station - Exposition Phase I	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Wilshire/La Brea Station - Westside Subway Extension	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
		feasible, mid-block crosswalks where						
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	National/Palms Station - Exposition Phase II	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Vernon Station - Blue Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Pershing Square Station - Red/Purple Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Soto Station - Gold Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Wilshire/Norman Station - Purple Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Expo/Westwood Station - Exposition Phase II	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Canoga Station - Orange Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Highland Park Station - Gold Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Wilshire/Western Station - Purple Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Grand Station - Blue Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Universal City Station - Red Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Roscoe Station - Orange Line Extension	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Westlake/MacArthur Park Station - Red/Purple Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
		feasible, mid-block crosswalks where						
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Avalon Station - Green Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	De Soto Station - Orange Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Slauson Station - Blue Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	7th St/Metro Station - Blue/Purple Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Jefferson/USC Station - Exposition Phase I	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Warner Center Station - Orange Line	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Expo/Farmdale Station - Exposition Phase I	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Expo Park/USC Station - Exposition Phase II	Bike-Pedestrian				(10)
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Expo/Sepulveda Station - Exposition Phase II	Bike-Pedestrian				(10)
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	Little Tokyo/Art District Station - Gold Line	Bike-Pedestrian				(10)
Los Angeles	Enhance Pedestrian Access to Metro Station	Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities such as landscaping, shading, lighting, directional signage, shelters, curb extensions where feasible, mid-block crosswalks where	23rd Station - Exposition Phase I	Bike-Pedestrian				(10)
Los Angeles	Expo Line Non-Revenue Connector Enhancements	Install bike lanes and other bike/ped amenities to enhance the quality of the corridor for pedestrians, cyclists and transit users.	Exposition Line from San Pedro to Figueroa	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Expo Park/USC Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Expo Park/USC (Exposition / USC Driveway)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Expo/Bundy Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Exposition/Bundy	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Expo/Crenshaw Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Exposition / Crenshaw	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Expo/Farmdale Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Exposition / Farmdale	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Expo/La Brea Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Exposition / La Brea	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Expo/Sepulveda Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Exposition/Sepulveda	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Expo/Vermont Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Exposition / Vermont	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Expo/Western Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Exposition / Western	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Expo/Westwood Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Exposition/Westwood	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Exposition Light Rail Stations Project	Installation of pedestrian & transit connectivity improvements, including ADA ramps, streetscape features, and sidewalk/curb extensions.	Vermont to La Cienega	Bike-Pedestrian	\$3,000,000	\$1,950,000	\$1,050,000	
Los Angeles	Fashion District East Gateway Plaza	Enhance the skewed alignment of this intersection and implement pedestrian enhancements such as plaza/pocket park at triangular median of intersection and sidewalk improvements that facilitate access to transit	8th St and San Pedro St	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	
Los Angeles	Fashion District Freeway Underpass Enhancements	Improve pedestrian access from Blue Line stations on Washington Blvd (San Pedro and Grand) to Fashion District by implementing lighting, public art, and signage on five freeway undercrossing (Main, Los Angeles, Maple, San Pedro, and Griffith)	16th St between San Pedro St and Central Ave	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Fashion District Streetscape Phase III	Pedestrian environment improvements and enhancements to improve pedestrian access to transit systems within the Fashion District Area.	Pico Blvd from San Pedro St to Maple Ave & San Pedro St from Pico Blvd to Washington Blvd	Bike-Pedestrian	\$12,308,000	\$8,000,200	\$4,307,800	
Los Angeles	Fashion District West Gateway Plaza	Enhance the skewed alignment of this intersection and implement pedestrian enhancements such as plaza/pocket park at triangular median of intersection and sidewalk improvements that facilitate access to transit	Pico Blvd at Main St	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	
Los Angeles	Fletcher Drive Transit & Pedestrian Improvement Project	Enhance pedestrian access to transit by installing bus stops, access ramps, lighting and curb extensions.	Fletcher Drive between La Clede and San Fernando Road.	Bike-Pedestrian	\$1,500,000	\$975,000	\$525,000	
Los Angeles	Florence Ave Transit Improvements	Installation of decorative crosswalks, transit shelters with lighting and street trees at intersections	Florence Ave intersection at Broadway Blvd and Central Ave	Bike-Pedestrian	\$8,960,000	\$5,824,000	\$3,136,000	
Los Angeles	Franklin Avenue Bike Lanes	Per the City's Bicycle Plan, install bike lanes on Franklin linking to major employment centers, transit stations and stops and educational, retail, entertainment, recreational resources, etc.	Franklin Ave. between Gardner St. and St. George St	Bike-Pedestrian	\$1,266,600	\$823,290	\$443,310	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Grand Avenue Pedestrian Enhancements	Enhance pedestrian access to transit through new sidewalks, street trees, crosswalks, street furniture, bulbouts and other amenities (also enhances efficiency & safety of corridor)	Grand Ave bet Washington Blvd and Martin Luther King, Jr. Blvd	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	
Los Angeles	Grand Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Grand (Grand / Washington)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Greening the Boulevard - Pedestrian Improvements	Pedestrian streetscapes and enhancements to improve pedestrian access to transit systems in the area.	Venice Blvd between Lincoln and Sawtelle	Bike-Pedestrian	\$2,175,000	\$1,413,750	\$761,250	
Los Angeles	Harbor Freeway Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Harbor Fwy (105 Fwy/110 Fwy)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Heritage Square Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Heritage Square (French/Marmion Way)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Highland Park Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Highland Park (Ave 58/Marmion Way)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Hollywood/Highland Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Hollywood / Highland	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Hollywood/Vine Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Hollywood / Vine	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Hollywood/Western Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Hollywood / Western	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Hubbard St Median Island & Bus Stop & Pedestrian Enhancement	Install median island on Hubbard between Glenoaks and Dronfield, new bus shelters and security lighting; install pedestrian/transit user improvements.	Hubbard St between Glenoaks and Dronfield	Bike-Pedestrian	\$800,000	\$520,000	\$280,000	
Los Angeles	Imperial/Wilmington Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Imperial/Wilmington	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Indiana Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Indiana (3rd/Indiana)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Jefferson/USC Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Jefferson/USC (Flower / Jefferson)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Kester Street Bike Lanes	Implement bike lanes and pedestrian enhancements on Kester between the Orange Line Busway and Sherman Way	Kester St between Orange Line Busway & Sherman Way	Bike-Pedestrian	\$250,000	\$162,500	\$87,500	
Los Angeles	La Cienega Blvd Pedestrian Enhancement	Enhance pedestrian environment and access to transit through street trees, controlled crosswalks, street furniture, bulbouts and other amenities (also enhances efficiency & safety of corridor)	La Cienega Blvd between Melrose Ave & Waring Ave	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	La Cienega/Jefferson Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	La Cienega / Jefferson	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	LA River Bike Path - Headwaters Section	Construction of LA River Bike Path from Owenmouth Avenue to Mason Avenue to provide enhanced bike access to arterials and the transit systems	LA River Bike Path between Owenmouth Avenue and Mason Avenue	Bike-Pedestrian	\$3,125,000	\$2,031,250	\$1,093,750	
Los Angeles	Laurel Canyon Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Laurel Canyon/Chandler	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Lincoln/Cypress Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Lincoln / Cypress	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Little Tokyo/Arts District tation Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Little Tokyo/Arts District (1st / Alameda)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Los Angeles Harbor College Pedestrian & Bicycle Enhancement	Construct sidewalk and bike path along Harbor Fwy right-of-way / connect to existing bike path in the Harbor Regional Park to promote multi-modal access to transit systems	Harbor Freeway right-of-way adjacent to Harbor College	Bike-Pedestrian	\$2,100,000	\$1,365,000	\$735,000	
Los Angeles	Los Angeles Neighborhood Initiative - Green Street Project	Planting drought-tolerant and native plants and trees, rain gradens, swales, the installation of permeable pavement and new curbs and enhance sidewalks to improve pedestrian access to transit systems	along 4th St between Matthews St and Mott St	Bike-Pedestrian	\$3,675,000	\$2,388,750	\$1,286,250	(7)
Los Angeles	Los Angeles Street Park	Implement pedestrian and bike enhancement such as hardscaping, signage, trees, trellis structures, park furniture, secure bike parking, bike share kiosks, lighting, etc. to promote multi-modal access to transit system	Los Angeles St between 7th and 8th Streets	Bike-Pedestrian	\$4,000,000	\$2,600,000	\$1,400,000	
Los Angeles	Los Angeles Trade Technical College Intermodal Linkages	Implement intermodal linkage and pedestrian enhancements.	From Trade Tech to Expo Light Rail at 23rd St and Flower St.	Bike-Pedestrian	\$1,900,000	\$1,235,000	\$665,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Main St Transit/Pedestrian Enhancement - 2nd to 4th Street	Enhance the public right-of-way for pedestrians and transit users with improved lighting, shade, trees, and curb extensions.	Main St between 2nd and 4th St	Bike- Pedestrian	\$900,000	\$585,000	\$315,000	
Los Angeles	Mariachi Plaza Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Mariachi Plaza (1st / Boyle)	Bike- Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	National/Palms Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	National / Palms	Bike- Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Nordhoff Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Canoga/Nordhoff	Bike- Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	North Hollywood Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	North Hollywood (Chandler / Lankershim)	Bike- Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Olympic Blvd Pedestrian Circulation Project	Install bus shelters, benches, trash receptacles, security lighting, decorative crosswalks, and sidewalk improvements.	Olympic Blvd between Crenshaw Blvd and Vermont Ave	Bike- Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Olympic/26th Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Olympic/26th Street	Bike- Pedestrian				(10)
Los Angeles	Orange Line Extension - Sherman Station Ped. Improvements	Connect Canoga Park Orange Line Station to Woodland Hills Neighborhood, and to employment, education, and employment center, through Pedestrian improvements	Sidewalk improvements from north of Oxard Street to Vanowen Street	Bike- Pedestrian	\$2,100,000	\$1,365,000	\$735,000	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Osborne St. Widening - San Fernando Rd. to Foothill Blvd.	Widen Osborne St. to remove jut-outs, install bike lanes, sidewalk, curb and gutter and pedestrian lighting to promote multi-modal access to transit systems	Osborne St. between San Fernando Rd. and Foothill Blvd.	Bike-Pedestrian	\$20,000,000	\$13,000,000	\$7,000,000	
Los Angeles	Pedestrian Activity Corridor Improvements on York Blvd	Implement pedestrian improvements focusing on eco friendly components, including lighting, bus shelters, shade, streetscapes, etc. to enhance pedestrian access to transit systems	York Blvd between Eagle Rock Blvd and Figueroa Blvd	Bike-Pedestrian	\$1,500,000	\$975,000	\$525,000	
Los Angeles	Pershing Square Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	5th Street and Hill Street	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Pico Blvd Transit/Bicycle Enhancements	Installation of pedestrian & bicycle enhancements including street trees and wells, bicycle racks, information kiosks, wayfinding signs, new bikeway striping and bus stop lighting to promote multi-modal access to transit systems	Pico Blvd from Patricia Ave to I-405	Bike-Pedestrian	\$9,528,000	\$6,193,200	\$3,334,800	
Los Angeles	Pico Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Pico (Pico / Flower)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Pico/Aliso Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Pico / Aliso (1st / Anderson)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Pierce College Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Winnetka/Friar	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Reseda Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Reseda/Oxnard	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Roscoe Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Canoga/Roscoe	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	San Pedro Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	San Pedro (San Pedro / Washington)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	San Pedro Street Pedestrian Enhancements	Enhance ped access to transit via sidewalk repair, ADA curbs, crosswalks, bulbouts, stormdrain repair, bioswales, and pedestrian signage at key intersections (enhance access to Ricardo Lizarrage School)	San Pedro Street at Martin Luther King, Jr. Blvd	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Sepulveda Blvd Pedestrian Improvements	Implement sidewalk and streetscape improvements, bus stop lighting at transit stops, and enhanced crosswalks.	Sepulveda Blvd between 76th St and 80th St	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	
Los Angeles	Sepulveda Blvd Tunnel at Mulholland Dr. Phase I	Project includes structural rehabilitation and widening of the tunnel to add an additional northbound lane, improve sidewalk and bike path to promote multi-modal access to transit systems	Sepulveda Blvd. Tunnel at Mulholland Dr.	Bike-Pedestrian	\$5,000,000	\$3,250,000	\$1,750,000	
Los Angeles	Sepulveda Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Sepulveda/Erwin	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Sherman Way Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Canoga/Sherman Way	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Slauson Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Slauson (Long Beach / Slauson)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Soto Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Soto (1st / Soto)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Strathern Street Bike Lanes	Install Class II bike lanes on Strathern Street to provide enhanced bike access to arterials and the transit systems	Strathern Street between Whitsett Ave & Vineland Ave	Bike-Pedestrian	\$375,000	\$243,750	\$131,250	
Los Angeles	Strathern Street Pedestrian Enhancement	Enhance pedestrian access to transit through improved sidewalks, ADA ramps, street trees, controlled crosswalks, street furniture, bulbouts, other amenities (also enhances access to Arminita Elementary School)	Strathern Street at Beck Avenue	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Sunland Blvd Pedestrian/Bicycle Improvements	Installation of pedestrian & bicycle enhancements including street trees and wells, bicycle racks, information kiosks, wayfinding signs, new bikeway striping and bus stop lighting to promote multi-modal access to transit systems.	Sunland Blvd between Tuxford and Glenoaks	Bike-Pedestrian	\$1,500,000	\$975,000	\$525,000	
Los Angeles	SW Museum Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	SW Museum (Museum/Marmi on Way)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Tampa Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Tampa/Topham	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Taylor Yard Bridge Connection	Right-of-way acquisition for 0.4 mile bike path from the east bank of the LA River to Future Street, City's Portion at UP tracks to provide enhanced bike access to transit systems	From East Bank of LA River to Future Street	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Union Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Los Angeles Union Station	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Universal City Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Universal City (Lankershim / Campo De Cahuenga)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Valley College Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Fulton/Burbank	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Van Nuys CBD/Orange Line Pedestrian Improvements	Design and construction of pedestrian improvements to promote multi-modal access to and from the Metro Orange Line from the Van Nuys Central Business District	Van Nuys Boulevard between Aetna Street and Vanowen Street	Bike-Pedestrian	\$1,500,000	\$975,000	\$525,000	
Los Angeles	Van Nuys Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Van Nuys/Aetna	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Vermont Ave Bus Stop Improvements	Installation of bus shelters and pedestrian security lighting	Vermont Ave between Florence Ave and Manchester Ave	Bike-Pedestrian	\$6,000,000	\$3,900,000	\$2,100,000	
Los Angeles	Vermont Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Vermont (Vermont / 105 Freeway)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Vermont/Beverly Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Vermont / Beverly	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Vermont/Santa Monica Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Vermont / Santa Monica	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Vermont/Sunset Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Vermont / Sunset	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Vernon Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Vernon (Long Beach / Vernon)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Warner Center Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Owensmouth/Pro menade Mall	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Washington Blvd Pedestrian Transit Access (Phase 2)	Design and construction of streetscape improvements to the Blue Line LRT stations along Washington Blvd from San Pedro St to Alameda St	Washington Blvd between San Pedro St and Alameda St	Bike-Pedestrian	\$5,247,000	\$3,410,550	\$1,836,450	
Los Angeles	Washington Blvd Streetscape Improvement	Improve ped connectivity to transit stops at key intersections along Washington (@Vermont, Normandie & Hoover) including enhanced X-walks, medians, lighting, bus stop amenities, information kiosks, stree trees, etc.	Washington Blvd between 110 Fwy & Normandie	Bike-Pedestrian	\$2,000,000	\$1,300,000	\$700,000	
Los Angeles	Washington Boulevard Streetscape Enhancements	Enhance pedestrian access to transit through new sidewalks, street trees, crosswalks, street furniture, bulbouts and other amenities (also enhances efficiency & safety of corridor)	Washington Boulevard between 110 Fwy and San Pedro	Bike-Pedestrian	\$1,000,000	\$650,000	\$350,000	
Los Angeles	Washington Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Washington (Long Beach / Washington)	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Western Ave Bus Stop Improvements	Installation of bus shelters and pedestrian security lighting	Western Ave between Florence Ave and Manchester Ave	Bike-Pedestrian	\$8,360,000	\$5,434,000	\$2,926,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Westlake/MacArthur Park Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Westlake/MacArthur Park	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Wilshire/Bundy Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Wilshire/Bundy	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Wilshire/Fairfax Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Wilshire/Fairfax	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Wilshire/La Brea Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Wilshire/La Brea	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Wilshire/Normandie Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking and car/bike sharing.	Wilshire / Normandie	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Wilshire/Vermont Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Wilshire / Vermont	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Wilshire/Western Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Wilshire / Western	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Wilshire/Westwood/UCLA Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Wilshire/Westwood	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Woodley Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Woodley/Victory	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Woodman Station Mobility Hub	Install a full-service mobility hub at or adjacent to Metro Station & 5 satellite hubs surrounding the station. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile of a transit user's commute.	Oxnard/Bufalo	Bike-Pedestrian	\$500,000	\$325,000	\$175,000	
Los Angeles	Vermont Median Park	Remove the service roads and install a 60-foot wide median park; roadway would carry 3 lanes, 1 bike lane and parking in each direction; in addition to providing bike lanes, project environment and enhances access to transit stops and transit systems	Vermont Ave between Gage Ave & Manchester Ave	Bike-Pedestrian	\$15,000,000	\$9,750,000	\$5,250,000	(8)
Los Angeles	11th St from Aviation Blvd to La Cienega Blvd	Widen and restripe to accommodate two through lanes in each direction	11th St from Aviation Blvd to La Cienega Blvd	Capacity	\$5,000,000	\$3,250,000	\$1,750,000	
Los Angeles	Alameda St from US-101 to I-10	Widen to 70 ft and remove embedded rails and ties, install left turn channelization and widen curb returns to reduce congestion and improve truck movement	Alameda St from US-101 to I-10	Capacity	\$15,000,000	\$9,750,000	\$5,250,000	
Los Angeles	Alameda St Goods Movement (Downtown)	Alameda St. from I-10 to Seventh St. - project includes rehabilitation of the roadway, removing embedded rails and ties, installing left turn channelization, spot widening where needed to accommodate truck traffic	Alameda St. from I-10 to Seventh St	Capacity	\$21,122,830	\$13,729,840	\$7,392,991	
Los Angeles	Alhambra Ave Realignment near Lowell Ave	Realign Alhambra Ave. between Lowell Ave. and the City of Alhambra city limits to smooth out an existing sharp s-curve and to enhance traffic and capacity.	Alhambra Ave between Lowell Ave and City of Alhambra city limits	Capacity	\$8,500,000	\$5,525,000	\$2,975,000	(4)
Los Angeles	Anaheim St Widening - Farragut Ave to Dominguez Channel	Widen Anaheim St. from 78' to 84' and restripe to accommodate an additional lane in each direction; this would improve the roadway from 4 lanes to 6 lanes	Anaheim St between Farragut Ave and Dominguez Channel	Capacity	\$29,127,830	\$18,933,090	\$10,194,741	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Aviation Blvd from Arbor Vitae St to Imperial Hwy	Widen and restripe to accommodate three through lanes in each direction	Aviation Blvd from Arbor Vitae St to Imperial Hwy	Capacity	\$12,000,000	\$7,800,000	\$4,200,000	
Los Angeles	Balboa Blvd. Widening at Devonshire St.	Widen east side of Balboa Blvd. south of Devonshire St. for approximately 500 ft., and restripe the intersection to provide dual left-turn lanes for the northbound and southbound approaches.	Balboa Blvd. at Devonshire St.	Capacity	\$15,373,000	\$9,992,450	\$5,380,550	
Los Angeles	Barham Blvd Bridge/US-101 Fwy Bridge Replacement	Replace the existing bridge to increase traffic capacity and widen/restripe southbound US-101 off-ramp at Barham Blvd to provide southbound double left turn lanes	Barham Blvd Bridge/US-101 Fwy Bridge	Capacity	\$30,000,000	\$19,500,000	\$10,500,000	
Los Angeles	Brandford St. Widening - Laurel Canyon Blvd. to Amboy Ave.	Widen north side of Brandford St. to provide an additional westbound lane.	Brandford St. between Laurel Canyon Blvd. and Amboy Ave.	Capacity	\$1,200,000	\$780,000	\$420,000	
Los Angeles	Bundy Dr. Widening - Wilshire Blvd. to Santa Monica Blvd.	Widen Bundy Drive to full secondary standards.	Bundy Dr. between Wilshire Blvd. and Santa Monica Blvd.	Capacity	\$11,000,000	\$7,150,000	\$3,850,000	
Los Angeles	Burbank Blvd. Widening - Clybourne Ave. to Vineland Ave.	Widen Burbank Blvd. to a major highway standard (80-foot roadway width) on both sides of street to improve roadway capacity.	Burbank Blvd. between Clybourne Ave. and Vineland Ave.	Capacity	\$21,737,000	\$16,737,000	\$5,000,000	
Los Angeles	Coldwater Canyon Through Lanes	Remove jut-outs to add one through lane in each direction	Coldwater Canyon between Ventura Blvd and Magnolia Blvd	Capacity	\$10,000,000	\$6,500,000	\$3,500,000	
Los Angeles	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	Capacity	\$2,150,000	\$1,397,500	\$752,500	
Los Angeles	Figueroa St between 146th St and Redondo Beach Blvd	Widen Figueroa St to major highway standard from 62 ft to 80 ft to provide three lanes in each direction	Figueroa St between 146th St and Redondo Beach Blvd	Capacity	\$2,000,000	\$1,300,000	\$700,000	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Fletcher St Bridge/LA River	Widen to increase capacity and improve access to I-5 Fwy; add bike lanes and sidewalks	Fletcher St Bridge/LA River	Capacity	\$6,000,000	\$3,900,000	\$2,100,000	
Los Angeles	Forest Lawn Dr. Bridge over Los Angeles River.	Construct a new bridge with bike path (including equestrian trail) over LA River at LAEC. Re-align the SR-134 freeway on/off ramps at Forest Lawn Dr. to improve flow and capacity.	Forest Lawn Dr. near SR-134 Bridge / Los Angeles River.	Capacity				(10)
Los Angeles	Fountain Ave between Sunset Blvd and Western Ave	Widen Fountain Ave to add a left-turn lane at each intersection-ROW acquisition needed	Fountain Ave between Sunset Blvd and Western Ave	Capacity	\$20,000,000	\$13,000,000	\$7,000,000	
Los Angeles	Grand Ave Bridge from Cesar Chavez Ave to Temple St	Widen bridge over US-101 Fwy to improve access to US-101, SR-110, future school and Grand Ave.	Grand Ave Bridge from Cesar Chavez Ave to Temple St	Capacity				(10)
Los Angeles	Grand Ave. Bridge Widening Over US-101 Freeway.	Widen the Existing bridge to provide dual left-turn lane onto the 101 and 110 freeways on-ramps, includes, and add through lane and right-turn lane, and widen sidewalk.	Grand Ave. Bridge Over US-101 Freeway.	Capacity	\$15,000,000	\$9,750,000	\$5,250,000	(4)
Los Angeles	Imperial Hwy between Sepulveda Blvd and Pershing Dr	Widen to provide continuous three through lanes in each direction	Imperial Hwy between Sepulveda Blvd and Pershing Dr	Capacity	\$10,000,000	\$6,500,000	\$3,500,000	
Los Angeles	La Cienega Blvd from Arbor Vitae St to 111 St	Widen and restripe to accommodate three through lanes in each direction	La Cienega Blvd from Arbor Vitae St to 111 St	Capacity	\$10,000,000	\$6,500,000	\$3,500,000	
Los Angeles	La Tijera Blvd between Airport Blvd and La Cienega Blvd	Widen and restripe to provide continuous three through lanes in each direction	La Tijera Blvd between Airport Blvd and La Cienega Blvd	Capacity	\$10,000,000	\$6,500,000	\$3,500,000	
Los Angeles	Lincoln Blvd Bridge Enhancement	Partnering with Caltrans & LA County, improve Lincoln Blvd between Jefferson Blvd & Fiji Way including removing the existing bottleneck by replacing/widening the existing bridge to provide an add'l lane in each direction & on-street bike lanes	Lincoln Blvd between Jefferson Blvd & Fiji Way	Capacity	\$33,700,000	\$21,905,000	\$11,795,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Magnolia Blvd. Widening - Cahuenga Blvd. to Vineland Ave.	Widen the north side of Magnolia Blvd. to provide an additional lane in the westbound direction.	Magnolia Blvd. between Cahuenga Blvd. and Vineland Ave. (north side)	Capacity	\$16,325,000	\$10,611,250	\$5,713,750	
Los Angeles	Mission Rd. Widening - Griffin Ave. to Marengo St.	Widen Mission Road to provide an additional through lane in each direction, and install new pedestrian signal at Sichel Street	Mission Rd. between Griffin Ave. and Marengo St.	Capacity	\$5,100,000	\$3,315,000	\$1,785,000	
Los Angeles	Moorpark Ave. Widening - Woodman Ave. to Mammoth Ave.	Widen Moorpark Ave. to increase capacity and install street lights, curb, and gutter.	Moorpark Ave. between Woodman Ave. and Mammoth Ave.	Capacity	\$14,255,000	\$9,265,750	\$4,989,250	
Los Angeles	North Spring St. Widening - Roundout St to Baker St.	Widen N. Spring St. between Roundout St. to Baker St. from 44 ft. to an 80' roadway width and install landscaped medians	North Spring St. between Roundout St and Baker St.	Capacity	\$12,045,000	\$7,829,250	\$4,215,750	
Los Angeles	Oxnard Street Widening - White Oak Ave. to Lindley Ave.	Oxnard Street widening from 75 ft. exiting ROW to 100 ft. (Require additional ROW) to allow through lane in each direction	Oxnard Street between White Oak Ave. to Lindley Ave.	Capacity	\$6,045,000	\$3,929,250	\$2,115,750	
Los Angeles	Riverside Dr / SR-134 Fwy	Widen the bridge to improve the capacity and to add the bike lane	Riverside Dr / SR-134 Fwy	Capacity	\$6,000,000	\$3,900,000	\$2,100,000	
Los Angeles	Riverside Drive Widening - Van Nuys Blvd. to Tilden Ave.	Widen north side of Riverside Drive, and restripe between Van Nuys Blvd. and Tilden Ave. to extend the double left-turn lanes and to provide a right-turn lane.	Riverside Drive between Van Nuys Blvd. and Tilden Ave.	Capacity	\$840,000	\$546,000	\$294,000	
Los Angeles	Robertson Ave/National Blvd/I-10 Interchange	Reconfigure existing ramps and construct new ramps to improve capacity	Robertson Ave/National Blvd/I-10 Interchange	Capacity	\$50,000,000	\$32,500,000	\$17,500,000	
Los Angeles	Roxford Street Widening at Sepulveda Blvd.	Realign Roxford St. at Sepulveda Blvd. by widening curb radius to enhance traffic flow.	Roxford St. & Sepulveda Blvd.	Capacity	\$2,300,000	\$1,495,000	\$805,000	
Los Angeles	San Fernando Rd. Reversible Lane - Sierra Hwy to Roxford St.	Install a center-reversible lane on the Old Road to provide extra capacity during peak hours along an approximately 3 mile segment.	San Fernando Rd. between Sierra Hwy and Roxford St.	Capacity	\$25,000,000	\$16,250,000	\$8,750,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Sepulveda Blvd Efficiency/Capacity Improvement	Partnering with Culver City & LA County, identify and implement ways of improving traffic flow, carrying capacity, and efficiency in the utilization of the Sepulveda Corridor from Wilshire to LAX.	Sepulveda Corridor from Wilshire to LAX	Capacity	\$4,300,000	\$2,795,000	\$1,505,000	(5)
Los Angeles	Sepulveda Boulevard Street Widening	Widen to major highway standard and increase number of through lanes from two to three lanes	Sepulveda Blvd between National Blvd and Olympic Blvd	Capacity	\$15,000,000	\$9,750,000	\$5,250,000	
Los Angeles	Sepulveda Tunnel at Mulholland Bridge	Widen existing tunnel to provide additional traffic lanes and bike lanes	Sepulveda Tunnel at Mulholland Bridge	Capacity	\$50,000,000	\$32,500,000	\$17,500,000	
Los Angeles	Slauson Ave Goods Movement Project	Design and construction of street improvements and signage for commercial vehicles	Slauson Ave from 110 Fwy to Alameda St	Capacity	\$24,122,830	\$15,679,840	\$8,442,991	(4)
Los Angeles	Valley Blvd. Rail Corridor Improvements	Improve capacity and enhance traffic flow at railroad crossing by widening to add lanes, to improve curb, and to upgrade signal systems and rail road equipment along Valley Blvd.	Valley Blvd. between San Pablo St. and Boca Ave.	Capacity	\$7,200,000	\$4,680,000	\$2,520,000	
Los Angeles	Van Ness Ave. Widening - US 101 Fwy SB off-ramp to Sunset Bl	Widen both sides of Van Ness Ave. to accommodate one additional southbound lane.	Van Ness Ave. between US 101 Fwy SB off-ramp and Sunset Blvd.	Capacity	\$3,000,000	\$1,950,000	\$1,050,000	
Los Angeles	Ventura Blvd Widening	Widen between Shoup Ave and US-101 freeway southbound ramps to provide double left-turn lanes	Ventura Blvd between Shoup Ave and US-101 SB ramps	Capacity	\$10,000,000	\$6,500,000	\$3,500,000	
Los Angeles	Vermont Ave from Washington Blvd to I-10 WB Off-Ramp	Widen 10 ft. of east-side of Vermont Ave to provide left-turn lane	Vermont Ave from Washington Blvd to I-10 WB Off Ramp	Capacity	\$6,000,000	\$3,900,000	\$2,100,000	(6)
Los Angeles	Warner Center TIMP	Widening to add dedicated eastbound westbound right turn lane and northbound phasing from left-turn permitted to protected.	De Soto Street and Parthenia Street	Capacity	\$2,524,000	\$1,640,600	\$883,400	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Warner Center TIMP	Intersection widening to add through and/or turn lanes, and upgrade traffic signal to include new phasing as needed to improve intersection capacity.	De Soto Avenue between Ventura Blvd. and Clark St.	Capacity	\$2,740,000	\$1,781,000	\$959,000	
Los Angeles	Warner Center TIMP	Intersection widening to add through and/or turn lanes, and upgrade traffic signal to include new phasing as needed to improve intersection capacity.	Reseda Boulevard between Burbank Blvd. and 101 Fwy WB ramps	Capacity	\$3,259,000	\$2,118,350	\$1,140,650	
Los Angeles	Warner Center TIMP	Intersection widening to add through and/or turn lanes, and upgrade traffic signal to include new phasing as needed to improve intersection capacity.	Sherman Way Avenue between Jordan Avenue and De Soto Avenue	Capacity	\$6,591,000	\$4,284,150	\$2,306,850	
Los Angeles	Warner Center TIMP	Intersection widening to add through and/or turn lanes, and upgrade traffic signal to include new phasing as needed to improve intersection capacity.	Irwin Street between Owensmouth Ave. and De Soto St.	Capacity	\$6,697,000	\$4,353,050	\$2,343,950	
Los Angeles	Warner Center TIMP	Intersection widening to add through and/or turn lanes, and upgrade traffic signal to include new phasing as needed to improve intersection capacity.	Oxnard Street between AMC Driveway and De Soto St.	Capacity	\$11,268,000	\$7,324,200	\$3,943,800	
Los Angeles	Warner Center TIMP	Intersection widening to add through and/or turn lanes, and upgrade traffic signal to include new phasing as needed to improve intersection capacity. Install new signal at Topanga Canyon Blvd. and Califa St.	Topanga Canyon Boulevard between Vanowen St. and Ventura Blvd.	Capacity	\$21,413,000	\$13,918,450	\$7,494,550	
Los Angeles	Warner Center TIMP	Intersection widening to add through and/or turn lanes, and upgrade traffic signal to include new phasing as needed to improve intersection capacity.	Victory Boulevard between Owensmouth Ave. and Winnetka Ave.	Capacity	\$22,925,000	\$14,901,250	\$8,023,750	
Los Angeles	Warner Center TIMP	Intersection widening to add through and/or turn lanes, and upgrade traffic signal to include new phasing as needed to improve intersection capacity.	Vanowen Avenue between Owensmouth Ave. and Mason Ave.	Capacity	\$27,842,000	\$18,097,300	\$9,744,700	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Western Ave. Widening - Florence Ave. to 80th St./Manchester	Widen east side of Western Ave. to accommodate left-turn lanes at various intersections within the project limits.	Western Ave. between Florence Ave. and 80th St. and Manchester Blvd.	Capacity	\$2,000,000	\$1,300,000	\$700,000	(6)
Los Angeles	Wilshire Blvd. Widening - San Vicente Blvd. to Centinela Ave	Arterial widening to provide an additional lane in each direction.	Wilshire between San Vicente Blvd. and Centinela Ave.	Capacity	\$26,000,000	\$16,900,000	\$9,100,000	
Los Angeles	Broad Ave from Harry Bridges Blvd to Water St	Build grade-separated access to waterfront area from rail lines, extend Broad Ave to Water Street, and install bike lanes and sidewalks on both side of Broad Ave	Broad Ave from Harry Bridges Blvd to Water St	Grade Separation	\$20,000,000	\$13,000,000	\$7,000,000	
Los Angeles	North Main Street Grade Separation	Grade separate North Main Street over the exiting Metrolink and freight tracks; reduces delays for vehicles and transit riders traveling on Main Street	North Main Street / Albion Street	Grade Separation	\$80,000,000	\$52,000,000	\$28,000,000	
Los Angeles	Saticoy St between Van Nuys and Woodman Ave	Construct grade separation and extend roadway westerly from Woodman Ave to Van Nuys Blvd	Saticoy St between Van Nuys and Woodman Ave	Grade Separation	\$80,000,000	\$52,000,000	\$28,000,000	
Los Angeles	Barham Blvd. Widening at Coral Dr.	Widen west side of Barham Blvd. to provide a southbound right-turn only lane on Barham Blvd. and to improve access to Universal Studios and to the 101 NB on-ramp.	Barham Blvd. at Coral Dr.	Intersection Improvement	\$1,600,000	\$1,040,000	\$560,000	
Los Angeles	Beverly Glen Blvd Widening	Widen south leg of Beverly Glen Blvd to create a right turn only lane; ROW acquisition needed	Beverly Glen Blvd and Mulholland Dr	Intersection Improvement	\$10,000,000	\$6,500,000	\$3,500,000	(3)
Los Angeles	Bundy Drive / I-10 Ramp Improvement	Reduce congestion on Bundy by reconfiguring the I-10 WB ramps (consolidate to one ramp location accommodating both the on and off ramps with new signal)	Bundy Drive / I-10 Ramp	Intersection Improvement	\$10,000,000	\$6,500,000	\$3,500,000	
Los Angeles	Canoga Ave/US-101 WB Off-Ramp	Widen westbound off-ramp to prove a right turn only lane to Canoga Ave	Canoga Ave/US-101 WB Off-Ramp	Intersection Improvement	\$5,000,000	\$3,250,000	\$1,750,000	(3)
Los Angeles	Crenshaw Blvd & I-10 WB On-Ramp	Widen SB Crenshaw Blvd to provide a SB right-turn only lane and redesign the WB off-ramp to reduce congestion and improve intersection operation	Crenshaw Blvd & I-10 WB On-Ramp	Intersection Improvement	\$6,000,000	\$3,900,000	\$2,100,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Enterprise St at Mateo St (near WB I-10 off-ramp)	Widen Enterprise St at Mateo St (near WB-10 off-ramp) to improve truck movement at curb returns	Enterprise St at Mateo St (near WB I-10 off-ramp)	Intersection Improvement	\$1,000,000	\$650,000	\$350,000	
Los Angeles	Fairfax/Olympic/ San Vicente Intersection Enhancement	Enhance the operational efficiency and safety of this chronically congested intersection by increasing the storage for left-turning vehicles, by upgrading the traffic signal equipment, installing left-turn phasing, etc.	Fairfax Ave/Olympic Blvd/San Vicente Blvd	Intersection Improvement	\$1,200,000	\$780,000	\$420,000	
Los Angeles	Foothill Blvd Bridge	Widen north of Balboa Blvd over culvert and widen west leg of Foothill Blvd at Balboa Blvd. Upgrade traffic signal to improve intersection capacity	Foothill Blvd and Balboa Blvd	Intersection Improvement	\$10,000,000	\$6,500,000	\$3,500,000	
Los Angeles	Glenoaks Blvd at Sunland Blvd	Widen Glenoaks Blvd to provide an eastbound right-turn lane	Glenoaks Blvd at Sunland Blvd	Intersection Improvement	\$1,000,000	\$650,000	\$350,000	(3)
Los Angeles	Laurel Canyon Blvd & Mulholland Dr	Widen the west side of Laurel Canyon Blvd south of Mulholland Dr to carry two southbound lanes through the intersection	Laurel Canyon Blvd & Mulholland Dr	Intersection Improvement	\$10,000,000	\$6,500,000	\$3,500,000	
Los Angeles	Maclay Street Freeway Access	Remove jut-outs on Maclay at Gladstone and install a new traffic signal	Maclay St at Gladstone	Intersection Improvement	\$700,000	\$455,000	\$245,000	
Los Angeles	Olympic Blvd and Soto St Intersection Widening	Improvements to the intersection by increasing the curb return radius of all four corners and Olympic Blvd approaches. ROW required	Olympic Blvd and Soto St Intersection	Intersection Improvement	\$26,462,830	\$17,200,840	\$9,261,991	
Los Angeles	Olympic Blvd at Alameda St	Widen to improve truck movement (right-of-way required)	Olympic Blvd at Alameda St	Intersection Improvement	\$3,000,000	\$1,950,000	\$1,050,000	
Los Angeles	Olympic Blvd at Santa Fe Ave	Widening curb return to improve truck movement through the intersection.	Olympic Blvd at Santa Fe Ave	Intersection Improvement	\$3,000,000	\$1,950,000	\$1,050,000	
Los Angeles	Santa Fe Ave/Porter St intersection	Widening curb return to improve truck movement through the intersection.	Santa Fe Ave/Porter St intersection	Intersection Improvement	\$1,000,000	\$650,000	\$350,000	
Los Angeles	Warner Center TIMP	Widening to add eastbound right turn lane and upgrade traffic signal	Shoup Avenue and Vanowen Avenue	Intersection Improvement	\$490,000	\$318,500	\$171,500	(3)
Los Angeles	Warner Center TIMP	Widening to add westbound right turn lane and upgrade traffic signal	Winnetka Avenue and Oxnard Street	Intersection Improvement	\$490,000	\$318,500	\$171,500	(3)

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Warner Center TIMP	Widening to add northbound right turn lane and upgrade traffic signal	Shoup Avenue and Sherman Way	Intersection Improve- nt	\$527,000	\$342,550	\$184,450	
Los Angeles	Warner Center TIMP	Widening to add northbound right turn lane and upgrade traffic signal to include northbound protected left-turn phasing	Shoup Avenue and Irwin Avenue	Intersection Improve- nt	\$527,000	\$342,550	\$184,450	
Los Angeles	Warner Center TIMP	Widening to add a southbound right-turn lane and upgrade traffic signal to include southbound right-turn overlap phase	Topanga Canyon Boulevard and Mullholland Drive	Intersection Improve- nt	\$527,000	\$342,550	\$184,450	
Los Angeles	Warner Center TIMP	Widening to add northbound right turn lane and upgrade traffic signal to include westbound and northbound protected left-turn phasings	Shoup Avenue and Oxnard Street	Intersection Improve- nt	\$527,000	\$342,550	\$184,450	
Los Angeles	Warner Center TIMP	Widening to add northbound left-turn and upgrade traffic signal.	Owensmouth Ave and Saticoy St	Intersection Improve- nt	\$567,000	\$368,550	\$198,450	
Los Angeles	Warner Center TIMP	Widening to add second westbound through lane and upgrade traffic signal	101 Ventura Freeway westbound and Burbank Boulevard	Intersection Improve- nt	\$710,000	\$461,500	\$248,500	(3)
Los Angeles	Warner Center TIMP	Widening to add northbound and southbound right-turn lanes and upgrade traffic signal	Winnetka Avenue and Vanowen Street	Intersection Improve- nt	\$980,000	\$637,000	\$343,000	(3)
Los Angeles	Warner Center TIMP	Widening to add eastbound and westbound right turn lanes and upgrade traffic signal	De Soto Avenue and Saticoy Street	Intersection Improve- nt	\$980,000	\$637,000	\$343,000	
Los Angeles	Warner Center TIMP	Widening to add westbound right turn lane and upgrade traffic signal	Fallbrook Avenue and Victory Boulevard	Intersection Improve- nt	\$1,017,000	\$661,050	\$355,950	(3)
Los Angeles	Warner Center TIMP	Widening to add a second westbound left-turn lane and a dedicated northbound right-turn lane and upgrade traffic signal	Canoga Avenue and Burbank Boulevard	Intersection Improve- nt	\$1,017,000	\$661,050	\$355,950	
Los Angeles	Warner Center TIMP	Widening to add northbound left-turn and southbound right-turn lanes and traffic signal upgrade.	Topanga Canyon Boulevard and Roscoes Boulevard	Intersection Improve- nt	\$1,017,000	\$661,050	\$355,950	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Warner Center TIMP	Widening to add southbound through lane. Change southbound and eastbound phasing from left-turn permitted to protected.	Canoga Ave and Saticoy St	Intersection Improvement	\$1,017,000	\$661,050	\$355,950	
Los Angeles	Warner Center TIMP	Widening to add northbound and westbound right-turn lanes and install new traffic signal	De Soto Street and Califa Street	Intersection Improvement	\$1,287,000	\$836,550	\$450,450	
Los Angeles	Warner Center TIMP	Widening to add southbound and eastbound right-turn lanes, add a northbound left-turn lane, and upgrade traffic signal.	Owensmouth Ave and Canyon Creek Drive	Intersection Improvement	\$1,507,000	\$979,550	\$527,450	
Los Angeles	Warner Center TIMP	Widening to add Exclusive right-turn lanes for all approaches and upgrade traffic signal	Mason Avenue and Saticoy Street	Intersection Improvement	\$1,960,000	\$1,274,000	\$686,000	
Los Angeles	Warner Center TIMP	Change westbound right-turn lane to a shared through-right turn lane, add an eastbound left-turn lane, and upgrade traffic signal	Winnetka Avenue and Ventura Boulevard	Intersection Improvement	\$3,004,000	\$1,952,600	\$1,051,400	(3)
Los Angeles	Warner Center TIMP	Widening to add northbound shared-through right turn lane and upgrade traffic signal	Woodlake Avenue and Victory Boulevard	Intersection Improvement	\$3,004,000	\$1,952,600	\$1,051,400	(3)
Los Angeles	Warner Center TIMP	Widening to add westbound through lane and upgrade traffic signal to improve intersection capacity.	Vanalden Avenue/101 Fwy EB ramps/Ventura Boulevard	Intersection Improvement	\$3,004,000	\$1,952,600	\$1,051,400	
Los Angeles	Warner Center TIMP	Widening to add eastbound and westbound through lanes and upgrade traffic signal	Corbin Avenue and Victory Boulevard	Intersection Improvement	\$6,008,000	\$3,905,200	\$2,102,800	(3)
Los Angeles	Warner Center TIMP	Widening to add eastbound and westbound through lanes and upgrade traffic signal	Vaiel Avenue and Kittridge Street	Intersection Improvement	\$7,296,000	\$4,742,400	\$2,553,600	
Los Angeles	Western Ave. Widening at Exposition Blvd.	Widen Western Blvd. to add northbound and southbound left-turn lanes at Exposition Blvd.	Western Ave. at Exposition Blvd.	Intersection Improvement	\$3,500,000	\$2,275,000	\$1,225,000	
Los Angeles	Slauson Blvd Street Reconstruction	Install concrete bus lanes	Slauson Blvd between 2nd Ave and Normandie	Managed Lanes	\$14,160,000	\$9,204,000	\$4,956,000	
Los Angeles	Harbor Beacon Park-n-Ride Mobility Hub	Install a full-service mobility hub at this park-n-ride lot & 5 satellite hubs surrounding this facility. A hub includes secure bike parking & car/bike sharing to bridge the first/last mile gap	O'Farrell Street & Beacon Street	Park-and-Ride	\$250,000	\$162,500	\$87,500	(9)

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
		of a transit user's commute.						
Los Angeles	Western / Expo Park N Ride Facility	The Park and Ride facility will service the Exposition Light Rail Western Station by providing vehicle and bicycle	Northeast corner of Western Ave and Exposition Blvd	Park-and-Ride	\$7,560,000	\$4,914,000	\$2,646,000	
Los Angeles	Wilshire Park-n-Ride Facilities	Provide parking for transit users at or near existing and planned metro rail Station along Wilshire Boulevard	Wilshire Boulevard Along the Metro Station	Park-and-Ride	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	Wilshire Park-n-Ride Facilities	Provide parking for transit users at or near existing and planned Metro rail stations along Wilshire Blvd	Wilshire Boulevard Along the Metro Station	Park-and-Ride	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	Wilshire Park-n-Ride Facilities	Provide parking for transit users at or near existing and planned metro rail Station along Wilshire Boulevard	Wilshire Boulevard Along the Metro Station	Park-and-Ride	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	Wilshire Park-n-Ride Facilities	Provide parking for transit users at or near existing and planned metro rail Station along Wilshire Boulevard	Wilshire Boulevard Along the Metro Station	Park-and-Ride	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	Wilshire Park-n-Ride Facilities	Provide parking for transit users at or near existing and planned metro rail Station along Wilshire Boulevard	Wilshire Boulevard Along the Metro Station	Park-and-Ride	\$1,000,000	\$650,000	\$350,000	(9)
Los Angeles	CMP Monitoring Station #44	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Alvarado Street and Sunset Boulevard	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	CMP Monitoring Station #49	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Lincoln Boulevard at Marina Expressway (SR90)	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	CMP Monitoring Station #51	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Manchester Avenue at Avalon Boulevard	System Operations	\$300,000	\$195,000	\$105,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	CMP Monitoring Station #54	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Pacific Coast Highway at Alameda Street	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	CMP Monitoring Station #55	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Pacific Coast Highway at Chautauqua Boulevard	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	CMP Monitoring Station #56	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic condition	Pacific Coast Highway at Figueroa Street	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	CMP Monitoring Station #57	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions.	Pacific Coast Highway at Sunset Blvd.	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	CMP Monitoring Station #58	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Pacific Coast Highway at Western Ave.	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	CMP Monitoring Station #59	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Santa Monica Bl at Bundy Dr.	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	CMP Monitoring Station #62	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Santa Monica Bl at Westwood Bl	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	CMP Monitoring Station #63	Install a CCTV camera and necessary infrastructure (including fiber optics & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Sepulveda Bl at Lincoln Bl	System Operations	\$300,000	\$195,000	\$105,000	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	CMP Monitoring Station #64	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time conditions	Topanga Canyon BI at Devonshire St.	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	CMP Monitoring Station #65	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Topanga Cayon BI at Roscoe BI	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	CMP Monitoring Station #66	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Topanga Cayon BI at Route 118 W/B Ramps	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	CMP Monitoring Station #69	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Valley BI at Route 710 N/B Off-Ramp	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	CMP Monitoring Station #70	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Venice BI at Centinela Ave	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	CMP Monitoring Station #73	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Ventura BI at Lankershim BI	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	CMP Monitoring Station #78	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Ventura BI at Woodman Ave	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	CMP Monitoring Station #80	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Victory BI at Reseda BI	System Operations	\$300,000	\$195,000	\$105,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	CMP Monitoring Station #83	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Victory Bl at Woodman Ave	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	CMP Monitoring Station #84	Install a CCTV camera and necessary infrastructure (including fiber optic & interconnect) to improve DOT's ability to monitor and respond to real-time traffic conditions	Western Ave. and 9th St.(San Pedro)	System Operations	\$300,000	\$195,000	\$105,000	
Los Angeles	Hollywood Event Management	To better manage vehicle and bus flow during commonly occurring special events, implement enhanced incident management strategies such as changeable message signs, CCTV cameras, traffic signal upgrades, wayfinding signage, real-time bus information.	Area bounded by La Brea, Sunset, Vine and Franklin	System Operations	\$10,000,000	\$6,500,000	\$3,500,000	
Los Angeles	Hollywood 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.	Area bounded La Brea, Hollywood, Western and Melrose	System Operations	\$12,500,000	\$8,125,000	\$4,375,000	
Los Angeles	Traffic Signal System Upgrades	Implement traffic signal system upgrades at up to 50 intersections within this Council District including signal controller upgrades, left-turn phasing at key intersections, additional CCTV cameras to improve LADOT's ability to monitor and respond, a	Council District 15	System Operations	\$2,500,000	\$1,625,000	\$875,000	
Los Angeles	Traffic Signal System Upgrades	Implement traffic signal system upgrades at up to 50 intersections within this Council District including signal controller upgrades, left-turn phasing at key intersections, additional CCTV cameras to improve LADOT's ability to monitor and respond, a	Council District 10	System Operations	\$2,500,000	\$1,625,000	\$875,000	
Los Angeles	Traffic Signal System Upgrades	Implement traffic signal system upgrades at up to 50 intersections within this Council District including signal controller upgrades, left-turn phasing at key intersections, additional CCTV cameras to improve LADOT's ability to monitor and respond, a	Council District 13	System Operations	\$2,500,000	\$1,625,000	\$875,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Traffic Signal System Upgrades	Implement traffic signal system upgrades at up to 50 intersections within this Council District including signal controller upgrades, left-turn phasing at key intersections, additional CCTV cameras to improve LADOT's ability to monitor and respond, a	Council District 14	System Operations	\$2,500,000	\$1,625,000	\$875,000	
Los Angeles	Traffic Signal System Upgrades	Implement traffic signal system upgrades at up to 50 intersections within this Council District including signal controller upgrades, left-turn phasing at key intersections, additional CCTV cameras to improve LADOT's ability to monitor and respond, a	Council District 4	System Operations	\$2,500,000	\$1,625,000	\$875,000	
Los Angeles	Traffic Signal System Upgrades	Implement traffic signal system upgrades at up to 50 intersections within this Council District including signal controller upgrades, left-turn phasing at key intersections, additional CCTV cameras to improve LADOT's ability to monitor and respond, a	Council District 11	System Operations	\$2,500,000	\$1,625,000	\$875,000	
Los Angeles	Traffic Signal System Upgrades	Implement traffic signal system upgrades at up to 50 intersections within this Council District including signal controller upgrades, left-turn phasing at key intersections, additional CCTV cameras to improve LADOT's ability to monitor and respond, a	Council District 9	System Operations	\$2,500,000	\$1,625,000	\$875,000	
Los Angeles	Traffic Signal System Upgrades	Implement traffic signal system upgrades at up to 50 intersections within this Council District including signal controller upgrades, left-turn phasing at key intersections, additional CCTV cameras to improve LADOT's ability to monitor and respond, a	Council District 1	System Operations	\$2,500,000	\$1,625,000	\$875,000	
Los Angeles	Traffic Signal System Upgrades	Implement traffic signal system upgrades at up to 50 intersections within this Council District including signal controller upgrades, left-turn phasing at key intersections, additional CCTV cameras to improve LADOT's ability to monitor and respond, a	Council District 12	System Operations	\$2,500,000	\$1,625,000	\$875,000	
Los Angeles	Traffic Signal System Upgrades	Implement traffic signal system upgrades at up to 50 intersections within this Council District including signal controller upgrades, left-turn phasing at key intersections, additional CCTV cameras to improve LADOT's ability to monitor and respond, a	Council District 8	System Operations	\$2,500,000	\$1,625,000	\$875,000	

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
		and respond, a						
Los Angeles	Traffic Signal System Upgrades	Implement traffic signal system upgrades at up to 50 intersections within this Council District including signal controller upgrades, left-turn phasing at key intersections, additional CCTV cameras to improve LADOT's ability to monitor and respond, a	Council District 3	System Operations	\$2,500,000	\$1,625,000	\$875,000	
Los Angeles	Traffic Signal System Upgrades	Implement traffic signal system upgrades at up to 50 intersections within this Council District including signal controller upgrades, left-turn phasing at key intersections, additional CCTV cameras to improve LADOT's ability to monitor and respond, a	Council District 7	System Operations	\$2,500,000	\$1,625,000	\$875,000	
Los Angeles	Traffic Signal System Upgrades	Implement traffic signal system upgrades at up to 50 intersections within this Council District including signal controller upgrades, left-turn phasing at key intersections, additional CCTV cameras to improve LADOT's ability to monitor and respond, a	Council District 2	System Operations	\$2,500,000	\$1,625,000	\$875,000	
Los Angeles	Traffic Signal System Upgrades	Implement traffic signal system upgrades at up to 50 intersections within this Council District including signal controller upgrades, left-turn phasing at key intersections, additional CCTV cameras to improve LADOT's ability to monitor and respond, a	Council District 5	System Operations	\$2,500,000	\$1,625,000	\$875,000	
Los Angeles	Traffic Signal System Upgrades	Implement traffic signal system upgrades at up to 50 intersections within this Council District including signal controller upgrades, left-turn phasing at key intersections, additional CCTV cameras to improve LADOT's ability to monitor and respond, a	Council District 6	System Operations	\$2,500,000	\$1,625,000	\$875,000	
Los Angeles	Westwood 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.	Westwood Blvd. between Pico Blvd and UCLA	System Operations	\$10,000,000	\$6,500,000	\$3,500,000	0

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Aviation / Century Transit Center	Provide a bus center and transfer facility for this Green Line station and future LRT station	Aviation / Century Transit Center	Transit Expansion	\$7,000,000	\$4,550,000	\$2,450,000	
Los Angeles	Downtown Streetcar	Restore the historic streetcar in Downtown LA servicing several key destinations; provide 7 to 15 minute headways; includes late evening service; estimated daily ridership is 10,000	Downtown Route: Broadway - 11th - Figueroa - 7th or 9th-Hill-1st	Transit Expansion	\$15,000,000	\$-	\$15,000,000	(9)
Los Angeles	Florence Ave Rapid Transit Enhancements	Install bus shelters and lighting, crosswalk enhancements, relocate bus stops to the far-side stops, add streetscape amenities to enhance ped and transit user environment	Florence Avenue between Broadway & Central Ave	Transit Expansion	\$1,500,000	\$975,000	\$525,000	
Los Angeles	Hollywood-Mid City Major Investment Study	Prepare engineering feasibility and investment study that evaluates commuter rail alternatives, potential rail linkages and enhanced rail services within Hollywood and Mid-City	Hollywood-Mid City	Transit Expansion	\$5,000,000	\$-	\$5,000,000	(9)
Los Angeles	Manchester Ave Rapid Transit Enhancements	Install bus shelters and lighting, crosswalk enhancements, relocate bus stops to the far-side stops, add streetscape amenities to enhance ped and transit user environment	Manchester Avenue between Main St & Central Ave	Transit Expansion	\$750,000	\$487,500	\$262,500	
Los Angeles	San Fernando Valley Major Investment Study	Prepare engineering feasibility and investment study that evaluates commuter rail alternatives, potential rail linkages and enhanced rail services within South Los Angeles	San Fernando Valley	Transit Expansion	\$5,000,000	\$-	\$5,000,000	(9)
Los Angeles	South Los Angeles Major Investment Study	Prepare engineering feasibility and investment study that evaluates commuter rail alternatives, potential rail linkages and enhanced rail services within South Los Angeles	South Los Angeles	Transit Expansion	\$5,000,000	\$-	\$5,000,000	(9)
Los Angeles	Vernon Avenue Rapid Transit Enhancements	Install bus shelters and lighting, crosswalk enhancements, relocate bus stops to the far-side stops, add streetscape amenities to enhance ped and transit user environment	Vernon Avenue between Normandie Ave & Alameda St	Transit Expansion	\$1,000,000	\$650,000	\$350,000	
Los Angeles	Warner Center TIMP	Purchase 20 new buses to add to a Local Circulator bus system to operate from Victory to Oxnard to Variel and back to Victory. Install new bus shelters and/or enhance the existing bus shelters along the route as required	Victory to Oxnard to Variel and back to Victory	Transit Expansion	\$8,000,000	\$5,200,000	\$2,800,000	

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
Los Angeles	Warner Center TIMP	Purchase 20 new buses to add to a Local Circulator bus system between Ventura Boulevard and Canoga Orange Line Station. Install new bus shelters and/or enhance the existing bus shelters along the route as required	Canoga Avenue between Ventura Boulevard and Canoga Orange Line Station	Transit Expansion	\$8,000,000	\$5,200,000	\$2,800,000	
Los Angeles	Warner Center TIMP	Construction of a 4th Orange Line Station in Warner Center Area	Near Variel Avenue and Oxnard Street	Transit Expansion	\$10,000,000	\$6,500,000	\$3,500,000	
Los Angeles	Westside Bus Stop Improvements	Partnering with Culver City & LA County, implement improvements that may include some or all of the following: 1) Replace/add/lengthen bus pads, 2) Improve sidewalk conditions or extend the sidewalk, 3) Next bus arrival information system, 4) Enhance	Culver City	Transit Expansion	\$10,000,000	\$6,500,000	\$3,500,000	
Los Angeles	Westside Major Investment Study	Prepare engineering feasibility and investment study that evaluates commuter rail alternatives, potential rail linkages and enhanced rail services within the Westside	Westside	Transit Expansion	\$5,000,000	\$-	\$5,000,000	(9)
Los Angeles	Wilshire Boulevard BRT - Eastside	Provide Wilshire Bus Rapid Transit upgrades such as queue jumpers, signal upgrades, street striping changes, etc. to improve service reliability, travel time and convenience	Wilshire Boulevard between Centinela Avenue and 500' w/o Whittier Blvd	Transit Expansion	\$9,600,000	\$6,240,000	\$3,360,000	
Los Angeles	Wilshire Boulevard BRT - Westside	Provide Wilshire Bus Rapid Transit upgrades such as queue jumpers, signal upgrades, street striping changes, etc. to improve service reliability, travel time and convenience	Wilshire Boulevard between Centinela Avenue and 500' w/o Whittier Blvd	Transit Expansion	\$5,400,000	\$3,510,000	\$1,890,000	
San Fernando	Downtown Revitalization Project	Enhance streetscapes, paving, landscaping, street crossings	Truman Street	Bike-Pedestrian	\$320,112	\$266,760	\$53,352	
San Fernando	San Fernando Downtown Improvement	Streetscape enhancement	San Fernando/Mission and Celis	Bike-Pedestrian	\$4,389,061	\$3,394,500	\$994,561	
San Fernando	AQMD Tree Partnership Program	Community Action Plan for Neighborhood Protection and Preservation (CAPP) Tree Planting Program. Plant 200 trees in underserved neighborhoods	Underserved Neighborhoods	Bike-Pedestrian	\$152,665	\$84,300	\$68,365	(2), (8)

Juris-diction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded Cost	Notes
San Fernando	Bicycle Transportation Account (BTA) Project	?	?	Bike-Pedestrian	\$182,570	\$164,123	\$18,447	(1), (8)
San Fernando	Safe Routes to School - Cycle 2	Bulbouts, Curb extensions, sidewalks, & curb ramps; install crosswalks, signs, flashing beacons, countdown ped-heads & safety lights: Gridley ES, Glenoaks, Triumph Charter Academy, New Valley ES#5, Morningside Elementary	SF Schools	Bike-Pedestrian	\$957,500	\$861,750	\$95,750	(1), (8)
San Fernando	San Fernando Pacoima Wash Bikeway Path	1.6 mile long class I facility along the Pacoima Wash in San Fernando	City of San Fernando	Bike-Pedestrian	\$2,495,000	\$1,513,000	\$982,000	(1)
San Fernando	CNG Transit Vehicles	Procurement of CNG vehicles to replacement mission city transit vehicles and related infrastructure equipment for bus shelter improvements	?	Transit Expansion	\$713,640	\$609,946	\$103,694	(2), (8)
				TOTAL	\$1,876,327,667	\$1,200,378,456	\$675,949,211	

Notes:

- (1) Edit description linking project impact to transit to justify nexus. Complete project type and project details if not specified (in web tool).
- (2) Project does not appear to reduce VHD. Delete project or alter to meet nexus test.
- (3) Model shows no reduction in VHD. Check web tool inputs.
- (4) Complete project details in web tool to specify increase in capacity.
- (5) Consider changing type to System Operations and adjust project details in web tool accordingly.
- (6) Consider changing type to Intersection Improvement and adjust project details in web tool accordingly.
- (7) State in project description that unfunded costs relate only to project components that improve access to transit.
- (8) Clarify that project would not increase VHD by reducing auto capacity.
- (9) Project added by jurisdiction subsequent to March 2012 preliminary nexus study report.
- (10) Project deleted by jurisdiction subsequent to March 2012 preliminary nexus study report.

**North Los Angeles County
Congestion Mitigation Fee
Pilot Nexus Study Report**

Prepared for

**North Los Angeles County
Transportation Coalition**

December 2012



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North Los Angeles County Congestion Mitigation Fee Pilot Nexus Study Report

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EXECUTIVE SUMMARY

The Pilot Nexus Study has been conducted with the jurisdictions of the North Los Angeles County Transportation Coalition (Cities of Lancaster, Palmdale, Santa Clarita, and County of Los Angeles) to examine the feasibility of implementing a Congestion Mitigation Fee Program to meet the Congestion Management Program (CMP) Countywide Deficiency Plan requirements. The proposed Congestion Mitigation Fee Program would charge a one-time fee on new development across all land uses to fund transportation projects that would reduce congestion generated by new development.

For the last three years, the North Los Angeles County Transportation Coalition (NCTC) and its member jurisdictions have worked with MTA to develop the Pilot Nexus Study to ensure their issues and concerns were fully vetted prior to any action by the MTA Board. The Pilot Nexus Study engaged the cities and the County of Los Angeles in the North Los Angeles County sub-region. MTA requested each jurisdiction to review and modify, if necessary, their growth forecasts and regional arterial network, as well as select transportation improvements that would meet the nexus test. This test requires that transportation projects funded with a congestion mitigation fee mitigate the impacts caused by new development and that the cost born by each land use type bear a reasonable relationship to its impact on future congestion.

During this process the MTA and consultant team studied the extensive network of Santa Clarita Valley Bridge and Thoroughfare (B & T) Districts with its accompanying district formation documents and concluded that these districts substantially comply with the congestion reduction intent of the proposed Congestion Mitigation Fee Program and compliance with the CMP.

The Antelope Valley is the other major sub-area within North Los Angeles County and includes the cities of Palmdale and Lancaster and surrounding unincorporated areas. Since both cities have existing mitigation fee programs, these fee programs will receive dollar-for-dollar credit against the proposed congestion mitigation fee program for local projects with a regional benefit. However, the unincorporated area of the Antelope Valley does not have an area-wide congestion mitigation fee program. Consequently, to establish a nexus consistent with the technical approach used in other sub-regions, this Pilot Nexus Study includes the entire Antelope Valley (Cities of Lancaster and Palmdale and nearby unincorporated areas).

This Pilot Nexus Study concludes that the transportation projects analyzed in this study meet the requirements of the Mitigation Fee Act (AB1600) and the CMP Countywide Deficiency Plan. It also shows how a sub-regional fee program might work if it were to be implemented. Under the Congestion Mitigation Fee Program, each jurisdiction would:

- Collect and retain all of the revenue from the fee;
- Select and construct local transportation projects with regional benefits;
- Leverage their other funding sources to implement their list of transportation projects;
- Integrate their existing fee programs with the Congestion Mitigation Fee Program.

In March 2012, a preliminary findings report was distributed to all the jurisdictions in North Los Angeles County for their review and comment. This revised Pilot Nexus Study updates the first draft based on comments received and incorporates transportation project descriptions provided by jurisdictions. This Pilot Nexus Study demonstrates the feasibility of the program.

Growth in the Study Area over the next 20 years is expected to result in an eight-fold increase in vehicle-hours-of-delay or congestion on a roadway network that is already operating near or at capacity. To address this projected impact, 453 projects and programs with a cost of \$444 million were identified, of which 413 projects and programs could be evaluated quantitatively. The analysis yielded the following results:

- **Congestion reduction benefit:** 19% reduction in vehicle-hours-of-delay (congestion) on arterials would result from implementing the transportation projects that could be evaluated quantitatively, meeting the requirements of the Mitigation Fee Act and CMP.
- **Maximum justified congestion mitigation fee:** The maximum justified fee is \$1,238 per trip based on the total cost of projects divided by total new trips over the next 20 years.
- **Economic benefits:** Building the projects identified could generate a countywide net economic benefit of an estimated 2,100 jobs, \$400 million in economic output, and more than \$100 million in disposable income.¹

Based on the results of the Pilot Nexus Study, each jurisdiction has its own individual fee-per-trip amount that would be needed to fund the unfunded share of its list of transportation projects. Since all jurisdictions have fee-per-trip amounts above \$500, a \$500 fee-per-trip amount could potentially be used as the minimum fee-per-trip amount for the North Los Angeles County sub-region.

There were two additional outcomes that resulted from this work effort. The first is the development of a Greenhouse Gas Emissions Sketch Planning Tool that was made available to jurisdictions so they could generally estimate the greenhouse gas emissions impacts derived from transportation projects they identified. If the Congestion Mitigation Fee Program were implemented, there may be an opportunity for jurisdictions to fund transportation projects identified for SB 375 compliance as well as the CMP. The second outcome was the directive by the MTA Board to develop a model that would quantify the travel related benefits associated with bicycle travel. This directive was adopted to address the need to quantify the impacts of the extensive list of bicycle projects that were identified by jurisdictions during the process of conducting each sub-regional Pilot Nexus Study.

If the MTA Board authorizes staff to work with jurisdictions on implementing the congestion mitigation fee program, then it is possible that jurisdictions would modify their list of transportation projects. If so, then the congestion reduction and economic benefit from such a change may be different than the results identified in this Pilot Nexus Study and would be revised accordingly in a report at that time.

NEXT STEPS

Below are the next steps to complete the Congestion Mitigation Fee work plan:

- Present pilot nexus study and economic analysis findings to jurisdictions, sub-regional agencies, and building industry stakeholders.
- Seek MTA Board direction in early 2013 to:
 - Adopt the Congestion Mitigation Fee Program as the new CMP Deficiency Plan;
 - Establish minimum fee amount for CMP compliance

¹ Economic Impact Analysis of the North Los Angeles County Congestion Mitigation Fee Pilot Nexus Study
– October 2012

- Work one-on-one with jurisdictions, sub-regional agencies, and the building industry to develop and implement a Congestion Mitigation Fee Program over 24 months.

CONTACT INFORMATION

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North Los Angeles County Congestion Mitigation Fee Pilot Nexus Study Report

OVERVIEW

In 2003, the MTA Board authorized staff to examine the feasibility of implementing a Congestion Mitigation Fee Program to replace the existing Deficiency Plan requirements of the Congestion Management Program (CMP). The Congestion Mitigation Fee Program is intended to mitigate the impacts of new development, providing a new resource to jurisdictions while meeting local responsibilities under the state mandated Congestion Management Program (CMP).

To explore the viability of a congestion mitigation fee across all land uses in each jurisdiction in the county, eight sub-regional pilot nexus studies were conducted across the county. The North Los Angeles County Transportation Coalition (NCTC) and its member jurisdictions (Cities of Lancaster, Palmdale, Santa Clarita, and the County of Los Angeles) agreed to conduct this Pilot Nexus Study with MTA to evaluate the transportation projects, policies and technical requirements such a program would require. The results of this effort are contained in this report.

CONGESTION MANAGEMENT PROGRAM BACKGROUND

As the Congestion Management Agency for the County of Los Angeles, MTA established the CMP to meet the requirements of Section 65089 of the California Government Code, which mandates that jurisdictions link their transportation, land use, and air quality decisions to address congestion on the regional transportation network. Jurisdictions are required to conform to the CMP to continue receiving their portion of state gas tax money allocated by Section 2105 of the California Streets and Highways Code and to preserve their eligibility for state and federal funding for transportation projects funded through MTA's Call-for-Projects.

Since the County experiences a deficient regional transportation system, a Countywide Deficiency Plan has been in place linking deficiencies on the transportation system to new development activity. A uniform point system known as the "Debit/Credit" approach was developed for jurisdictions to demonstrate compliance with the CMP.

A criticism of the "Debit/Credit" methodology was that it generated no revenue but required jurisdictions to spend resources on an administrative exercise that provided no congestion relief. Furthermore, a dramatic decline in state and federal transportation funding coupled with significant growth in new development was making it difficult for some jurisdictions to comply with the CMP.

The proposed Congestion Mitigation Fee Program moves away from the administrative "Debit/Credit" approach to a mitigation fee funded approach. This approach would generate revenue from new development to implement transportation improvements designed to mitigate the impacts of growth on the regional transportation network throughout the County of Los Angeles.

In adopting the Short Range Transportation Plan in 2003, the MTA Board authorized staff to explore the feasibility of implementing a Congestion Mitigation Fee to meet CMP requirements. Since that time, MTA has worked with sub-regional agencies, jurisdictions, and building industry representatives in developing a congestion mitigation fee program in concept.

To provide a significant measure of assurance that MTA is being responsive to local jurisdiction needs and concerns, the MTA Board adopted a set of Guiding Principles on April 25, 2007. The Guiding Principles adopted by the MTA Board may be summarized as follows:

- Fees should be structured to mitigate congestion from new development without discouraging economic development.
- Fees are to augment other regional funds, not replace or redirect them.
- Local jurisdictions identify local projects with regional benefit consistent with agreed upon guidelines.
- Local jurisdictions adopt, collect, and administer congestion mitigation fees.
- Local jurisdictions build projects (or local jurisdictions may choose to participate in multi-jurisdictional or regional projects, if mutually desired).
- Local jurisdictions with existing fee programs receive dollar-for-dollar credit for local projects with a regional benefit consistent with agreed upon guidelines.
- Fees should be structured to support transit-oriented development, and to exempt mixed use and high-density residential development within ¼ mile of passenger rail stations consistent with CMP statute.
- The program will be developed in a manner to encourage certainty and predictability among jurisdictions, business, environmental and development communities.

The eight Congestion Mitigation Fee Pilot Nexus Studies honor the Guiding Principles, and conform to the technical and statutory requirements of the Mitigation Fee Act and the Congestion Management Program. During the outreach process, jurisdictions expressed strong support for MTA Board commitment to abide by the Guiding Principles.

CONGESTION MITIGATION FEE PROGRAM OVERVIEW

The proposed Congestion Mitigation Fee Program was designed to ensure maximum local control over the program's development and implementation. Local jurisdictions would collect and retain all fee revenue. Each jurisdiction would select its local transportation projects that mitigate the impacts of their new development on the regional transportation system, collect the fee revenue, and build the transportation projects. Jurisdictions have been encouraged to develop a sub-regional or multi-city approach to this program and to coordinate with regional and state transportation providers. The congestion mitigation fee revenue should help local jurisdictions leverage additional funding by providing a local match to compete for the MTA's Call-for-Projects and federal and state grants.

The proposed congestion mitigation fee would be a one-time fee applied to all types of new development based on the number of net new trips generated by the development project. For residential land use, the trip generation is based on the number of dwelling units. Thus, adding a bedroom or family room to a single family home would not increase the number of dwelling units and would not be subject to a congestion mitigation fee. The trip generation of non-residential land use is based on the square footage and the type of land use. If a new development project replaces an existing structure, the trip generation from the existing structure would be subtracted from the amount of trip generation from the new development and the Congestion Mitigation Fee would be based on the net difference. Moreover, if a non-residential use is replaced with a different type of non-residential use, the trip generation rate changes and the fee would only apply if there is a net increase in trips resulting from this change. For example, a conversion of a manufacturing facility to a warehouse of the same size would result in fewer trips being generated and, thus, would not be subject to a fee.

The Congestion Mitigation Fee Program would give credit to jurisdictions with their own existing mitigation fee programs. The amount of credit would be based on how many of the transportation projects included in the local fee program provide a regional benefit. Each eligible project would receive dollar-for-dollar credit towards the minimum fee-per-trip that would be set for the Congestion Mitigation Fee Program. If the local fee program's fee-per-trip exceeds the Congestion Mitigation Fee Program minimum, then the jurisdiction would not have to make any change to its existing mitigation fee program.

Eligible transportation projects must improve the capacity of the transportation system and must consist of capital improvement projects. Ongoing operational and maintenance projects are not eligible under this program. Projects identified in this Pilot Nexus Study include the following:

- Regional arterial enhancements such as arterial widening, bottleneck intersection improvements, closure of gaps in the arterial system, grade separations, and interchange improvements.
- Signal synchronization, bus speed improvements, bottleneck intersection improvements, traffic control and monitoring systems, and Intelligent Transportation Systems.
- Bus and rail transit capital and/or construction of transit stations and centers, park and ride lots, commuter rail stations, transit stop improvements and transit vehicle purchases.
- Bicycle and pedestrian improvements that provide accessibility to bus and rail transit and that were developed in a systemic and multi-modal manner.
- Other projects determined on a case-by-case basis.

NORTH LOS ANGELES COUNTY PILOT NEXUS STUDY BACKGROUND

To ensure a Congestion Mitigation Fee Program would serve the specific preferences of its member jurisdictions, the North Los Angeles County Transportation Coalition (NCTC) agreed to partner with MTA to develop a Pilot Nexus Study as a way to assess the viability of the Congestion Mitigation Fee Program. The NCTC took this approach to fully vet the issues and concerns of North Los Angeles County jurisdictions prior to any action by the MTA Board. This Pilot Nexus Study also provides an opportunity to explore various policies and understand complexities associated with such a program.

For the last three years, the North Los Angeles County sub-region has been working with MTA and their consultant, Cambridge Systematics, Inc. in a collaborative process that has included the participation of every member agency in NCTC. NCTC member jurisdictions' staff provided support to coordinate meetings with its member agencies. As a result of this extensive work effort, MTA staff and the consultant have met one-on-one with senior management of all NCTC jurisdictions. In addition, MTA staff has briefed the North County Transportation Coalition on a periodic basis to inform the members of the progress of the Pilot Nexus Study.

During this process, the MTA and consultant team have studied the extensive network of Bridge and Thoroughfare (B & T) districts in the Santa Clarita Valley. B & T districts impose a fee on new development for transportation infrastructure in a manner similar to the proposed Congestion Mitigation Fee. These districts cover substantially all growth areas in the City of Santa Clarita and surrounding unincorporated areas of the Santa Clarita Valley. The County and the City of Santa Clarita anticipate that they would either create a new B & T district, an impact fee program, or require equivalent exactions from new development to mitigate transportation impacts for any new growth areas not included in an existing district. The consultant team studied the district formation documents for all Santa Clarita Valley B & T districts and concluded that these districts substantially comply with the requirements of the Mitigation Fee Act (AB1600) and the CMP.

The Antelope Valley is the other major sub-area within North Los Angeles County and includes the cities of Palmdale and Lancaster and surrounding unincorporated areas. Both cities have existing citywide traffic impact fee programs. Similar to the B & T districts in the Santa Clarita Valley, these fee programs will receive dollar-for-dollar credit against the congestion mitigation fee for local projects with a regional benefit consistent with the Guiding Principles adopted by the MTA Board and listed above on page 3. However, the unincorporated area of the Antelope Valley does not have an area-wide traffic impact fee program. Consequently, to establish a nexus consistent with the technical approach used in other sub-regions the Pilot Nexus Study includes the entire Antelope Valley (Cities of Lancaster and Palmdale and surrounding unincorporated areas).

CONGESTION MITIGATION FEE WORK PLAN

The North Los Angeles County Pilot Nexus Study was conducted as part of an overall work plan approved by the MTA Board in September 2008. The work plan consists of four steps: 1) Feasibility Study and Program Guidelines; 2) Local Project Identification; 3) Nexus Analysis; and 4) Program Development and Local Implementation.

In Step 1 – Feasibility Study and Program Guidelines, MTA worked with jurisdictions and other stakeholders countywide to conduct a Feasibility Study to determine whether a fee program would be feasible. When this step was completed, the results were documented in a report titled *Congestion Mitigation Fee Feasibility Study Report* and approved by the MTA Board in September 2008.

In Step 2 – Local Project Identification, MTA worked with the member jurisdictions of the NCTC to identify local projects with a regional benefit, verify their growth forecasts, and confirm their transportation network.

Step 3 – Nexus Analysis, involved a nexus analysis to determine whether the projects identified in Step 2 mitigate the impacts of 20 years of future development on the transportation network. In addition, Step 3 included an economic analysis of how the payment of a congestion mitigation fee and the benefits of congestion relief and construction jobs would change the economic performance of Los Angeles County.

MTA is completing eight pilot nexus studies (Step 3 in Figure 1 below) for all of the sub-regions in the County. Should the MTA Board adopt the Congestion Mitigation Fee Program as the new CMP Countywide Deficiency Plan, then jurisdictions will be required to participate in the fee program to be in conformance with the CMP. In this case, MTA staff will initiate Step 4 and work with jurisdictions to further develop and implement Step 4 of the Congestion Mitigation Fee Program.

If the MTA Board authorizes conducting Step 4 – Program Development and Local Implementation, then staff will work with jurisdictions, sub-regional agencies, and building industry representatives to implement the Congestion Mitigation Fee Program over a 24 month period. The MTA work plan is summarized below in Figure 1.

Figure 1: Congestion Mitigation Fee Program Work Plan

Work Plan Components	Schedule
Step 1: Feasibility Study & Program Guidelines	Jan. 2007 – Sept. 2008
<ul style="list-style-type: none"> Review with PAC, jurisdictions, COGs, & Others 	
Step 2: Local Project Identification	Spring 2009 – Summer 2012
<ul style="list-style-type: none"> Jurisdictions confirm growth forecasts Jurisdictions identify local projects with regional benefits and confirm transportation network 	
Step 3: Nexus Study	Spring 2011 – Fall 2012
<ul style="list-style-type: none"> Technical work effort to determine nexus 	
Step 4: Program Development & Implementation	2013 – 2015
<ul style="list-style-type: none"> Work one-on-one with jurisdictions to develop and implement program at the local level. 	

Nexus Analysis

The Mitigation Fee Act (AB 1600) governs the adoption of mitigation fees in the State of California (California Government Code Sections 66000-66008). This law requires local jurisdictions to complete a nexus analysis before adopting a mitigation fee. This analysis must provide results for a dual nexus test, which would show that the improvements being funded with the fees will: 1) mitigate the impacts caused by new development; and, 2) that the fee amounts bear a reasonable relationship to the impact from new development.

This nexus analysis uses annual vehicle-hours-of-delay (VHD), or congestion, to measure the impact of new development on the transportation system. Other technical measures commonly used for a nexus analysis at a jurisdiction level include level-of-service (LOS) or volume-to-capacity (V/C) ratios. These measures work best when the scale of analysis is on specific roadway segments or an urban street network and the projects are intended to mitigate congestion from increased travel by single occupant vehicles. The proposed Congestion Mitigation Fee, however, is intended to address the requirements specified for Deficiency Plans set forth in the CMP legislation. Furthermore, the Congestion Mitigation Fee Program is intended to reduce VHD (congestion) caused by new development on the arterial network in each sub-region.

This VHD methodology is similar to the approach conducted for the nexus analysis completed for the San Diego Association of Governments (SANDAG) for its Regional Transportation Congestion Improvement Plan (RTCIP) in 2006. The MTA nexus analysis uses the same metric of vehicle-hours-of-delay as SANDAG is using for its mitigation fee program, which essentially measures the nexus between the RTCIP projects and the impacts from new development throughout San Diego county. The Pilot Nexus Studies utilize the same analytical methodology as SANDAG because both mitigation fee programs are focused on mitigating the impacts of new development on the arterial networks. Traffic patterns on the arterial networks of both counties of Los Angeles and San Diego are similar in terms of their function as relievers for freeway intercity travel and access to freeways. In addition, the trip generations rates for the seven land-use types are derived from the SANDAG trip generation rates because their county more closely resembles the traffic patterns and land use trip generation rates of the greater Southern California region. SANDAG calculated these rates from surveys of San Diego County households and businesses.

This nexus analysis compares VHD for the North Los Angeles County (Antelope Valley) sub-region under three conditions or scenarios:

- **2010 Base Year – Existing Conditions Scenario:** Estimates VHD for the initial Congestion Mitigation Fee Program base year of 2010.
- **2030 Future Year – No-Build Scenario:** Estimates VHD in 2030 given estimated levels of new development and all planned transportation improvements funded with known sources such as MTA’s 2009 Long Range Transportation Plan.
- **2030 Future Year –With New Congestion Mitigation Fee Projects Scenario:** Estimates the reduction in VHD caused by the selected transportation improvements identified in the Congestion Mitigation Fee Program.

To meet the requirements of state law, this nexus analysis must demonstrate that VHD in 2030 does not improve beyond the 2010 Base Year levels. The analysis excludes freeway impacts because much of the freeway traffic is inter-regional and the projects submitted by jurisdictions are focused on the regional arterial system.

All transportation project categories are classified into one of nine project categories and were evaluated using either the MTA travel demand model, the Congestion Mitigation Fee Analysis Tool, or research literature as described below. Figure 2 on Page 8 that follows identifies which one of the following three nexus analysis methods was used for each transportation project category:

- **MTA Travel Demand Model:** In order to analyze the changes in VHD on the arterial network within each of the eight sub-regions, Cambridge Systematics, Inc., MTA's contractor, made improvements to the MTA travel demand model. These improvements are documented in the *Los Angeles County MTA Travel Model Assessment and Status Report* (June 2011). The enhancements included:
 - **Replicating trip generation and trip distribution within the MTA model.** Allows the MTA travel demand model to yield more internally consistent estimates of development impacts in the nexus analyses. The process involved converting SCAG model components into MTA's travel demand model and testing and validating model results.
 - **Increasing the number of traffic assignment equilibrium iterations from 43 to 300.** Increasing to 300 iterations improves assignment accuracy substantially and provides more accuracy in traffic assignment as well as more accurate results against increased model run time.
 - **Using SCAG's screenline dataset to validate sub-regional travel.** SCAG's existing dataset of traffic volumes across multiple key locations (also known as screenlines) was used to validate travel model results for 2010 base year.

With these steps completed, the MTA travel demand model is better prepared to code and run sub-regional nexus analyses.

- **Congestion Mitigation Fee Analysis Tool:** This analytical tool estimates VHD reduction from intersection improvements, system operations (e.g. signal synchronization), railroad grade separations, and highway on/off ramps. The Congestion Mitigation Fee Analysis Tool was developed specifically for conducting sub-regional nexus analysis of projects that require a level of analysis that is too fine-grained for the MTA travel demand model. The analysis tool estimates VHD reduction based on assumptions taken from research literature combined with quantified project descriptions provided by each jurisdiction.
 - **Greenhouse Gas Emissions Sketch Planning Capability:** At the request of jurisdictions, a greenhouse gas emissions sketch planning tool was also developed and made available to jurisdictions so they could generally estimate the greenhouse gas emissions impacts derived from transportation

projects they identified. This capability was added to assist cities when considering projects that meet both the requirements of the CMP and SB 375. If the Congestion Mitigation Fee Program were implemented, there may be an opportunity to fund transportation projects identified for SB 375 compliance as well as the CMP.

- **Research Literature:** Reliable research provides sufficient evidence that bicycle and pedestrian improvements that link to transit (e.g. bicycle lanes and sidewalks that serve bus stops and passenger rail stations), transit amenities (e.g. bus shelters, better signage, etc.), park-and-ride lots, and other similar projects provide congestion reduction benefits. This research literature, however, does not provide enough information to quantify the impacts. Thus, for purposes of the Pilot Study Nexus analysis these projects are included but their benefits are not quantified.

Furthermore, bicycle or pedestrian improvements that do not link to transit (e.g. recreational biking/hiking trails) have been excluded from the analysis. In January 2012 the MTA Board directed staff to develop the modeling capability to be able to quantify the benefit of bicycle transportation investment because many of jurisdictions participating in the Pilot Nexus Study have included bicycle investments as part of their list of projects. Nevertheless, MTA has limited the types of bicycle projects it can accept as part of the Pilot Nexus Study to those that provide a link or access to transit, which the research literature conclusively documents as having a qualitative relationship to reduced congestion.

Figure 2: Transportation Project Categories and Nexus Analysis Methods

Project Category	Nexus Analysis Method
Roadway Capacity Improvement	MTA Travel Demand Model
Intersection Improvement	Congestion Mitigation Fee Analysis Tool
System Operations (e.g. signal synchronization)	Congestion Mitigation Fee Analysis Tool
Railroad Grade Separations	Congestion Mitigation Fee Analysis Tool
Highway On/Off-Ramps	Congestion Mitigation Fee Analysis Tool
Bicycle/Pedestrian Improvements	Research Literature
Transit Improvements	Research Literature
Park-and-Ride Lots	Research Literature
Other Projects	Research Literature

The nexus analysis for the member jurisdictions of North Los Angeles County was conducted at the sub-regional level. Sub-regions capture longer, intercity trips, which are the focus of the CMP. Sub-regions are also small enough to measure significant benefits for a relatively modest investment. This sub-regional nexus analysis serves as an umbrella for each jurisdiction, which would adopt its own congestion mitigation fee program to fund the specific transportation projects that it selects.

NORTH LOS ANGELES COUNTY PILOT NEXUS STUDY

Study Area

The study area includes the following members of the North Los Angeles County Transportation Coalition: the Cities of Lancaster, Palmdale, Santa Clarita, and the County of Los Angeles. Since Santa Clarita Valley's B&T Districts Fee Program substantially complies with the requirements of the Mitigation Fee Act (AB1600) and the CMP, it was not included in the nexus analysis and the nexus analysis results were derived from the Antelope Valley area of the North Los Angeles County sub-region.

Projected Growth

Growth within the Study Area is projected to increase by 460,500 in population and employment is projected to increase by 47,800 from 2010 to 2030. This growth is expected to impact the regional transportation system that is already operating near or at capacity. This growth would essentially cause what is currently a slow moving roadway network to deteriorate further and result in more congestion.

Transportation Projects Submitted

A total of 453 transportation projects were identified as part of the Pilot Nexus Study. A map identifying the submitted projects is shown in Attachment B. Jurisdictions used a web-based software planning tool developed by Cambridge Systematics, Inc. to create a database of projects located within their jurisdiction. For each transportation project, jurisdictions provided a cost estimate, funding sources, project description, and a geo-coded location (See Attachment C).

Figure 3 on page 10 summarizes the number of projects submitted by jurisdictions by project category along with information on total cost, other funding reasonably anticipated during the 20-year planning horizon, and the remaining unfunded amount that could be funded through the Congestion Mitigation Fee Program.

Figure 3 divides the different types of transportation projects into two groups. Figure 3 presents the following information:

- The three transportation categories shown in the upper half of Figure 3 (Roadway Capacity, Intersection Improvements, and System Operations) are projects that can be evaluated using quantitative methods such as the MTA Travel Demand Model and the Congestion Mitigation Fee Analysis Tool (described above). These projects account for the reduction in VHD derived from the nexus analysis.

- The bicycle-pedestrian projects shown in the lower half of Figure 3 cannot be modeled and thus their contribution is not included in the VHD reduction estimate. Nevertheless, peer reviewed research affirms their qualitative effectiveness in lowering congestion to the extent that they provide a link or access to transit, and thus they are included in this Pilot Nexus Study. Thus, they are included in the total unfunded cost and the fee amounts needed to fund them.

As mentioned earlier, the MTA Board directed staff to develop a model that would quantify the travel related benefits associated with bicycle travel. Thus, the consultant team is developing approaches to estimate the impacts from this project category for inclusion in future nexus analyses.

- The third column of Figure 3 shows the share of the total cost for each of the transportation categories. Some key information includes the amount of other funding leveraged by the Congestion Mitigation Fee revenue. For example, 21% of the \$73 million total cost for intersection improvements would be funded with other funding sources, but only 3% of the \$49 million needed for bicycle-pedestrian improvements would come from other sources. See Attachment C for a detailed project list by jurisdiction.

Figure 3: North Los Angeles County Transportation Project Category Summary

Project Type	Number of Projects	Total Cost Share	Total Cost	Other Funding	Fee Revenue Funds
Capacity	99	67%	\$297,102,000	\$39,191,000	\$257,911,000
Intersection Improvement	254	16%	\$72,667,000	\$15,118,000	\$57,549,000
System Operations	60	6%	\$25,039,000	\$1,213,000	\$23,826,000
Subtotal	413	89%	\$394,808,000	\$55,522,000	\$339,286,000
Bike-Pedestrian	40	11%	\$49,444,000	\$1,461,000	\$47,983,000
Total	453	100%	\$444,252,000	\$56,983,000	\$387,269,000

Technical Nexus Analysis Results: Vehicle-Hours-of-Delay/Congestion Reduction Benefit

The nexus analysis conducted for this Pilot Nexus Study supports the finding that the transportation projects identified by jurisdictions and funded by the Congestion Mitigation Fee Program would mitigate 19% of the total impact of new development on the arterial network. This result demonstrates that the costs of mitigation will not exceed the proportion attributable to new development, and satisfies the nexus requirements set forth in the Mitigation Fee Act. This finding also meets the measurable improvement in congestion requirement as stipulated by the CMP Countywide Deficiency Plan.

Figure 4 below presents the results of the nexus analysis of the 413 projects that could be modeled. Reading from left to right, this table presents the following results:

- The nexus analysis starts with the current (2010) estimate of 671,000 VHD on the arterial network in the Antelope Valley (shown in the first column of Figure 4).
- Next, the analysis forecasts 6.5 million VHD in 2030 (second column) or a net increase of 5.8 million VHD (fourth column) caused by the impacts of new trips generated and attracted by new development over the next 20 years. Under the No-Build scenario, congestion in the North Los Angeles County (Antelope Valley) is expected to experience an 866% increase in vehicle-hours-of-delay (VHD) from 2010 to 2030 because of growth impacting the current transportation system that is at or near capacity. This result for the No-Build scenario assumes that transportation improvements included in the current MTA Long Range Transportation Plan (LRTP) are constructed.
- The third column shows what would happen if the 413 transportation projects are constructed holding everything else constant. VHD on the sub-regional arterial network in 2030 would be 5.8 million, which constitutes a 1.1 million VHD (sixth column) reduction, or about 19% less congestion than without these projects (seventh column).
- This analysis deliberately removed the impacts of future through trips (trips that begin and end outside of the sub-region) because new development within the subregion cannot be required to pay for the impacts from trips it does not generate or attract.

Figure 4: North Los Angeles County Annual Vehicle Hours of Delay (VHD)

1	2	3	4	5	VHD Reduction Benefit	
2010 (Existing)	2030 (No Build)	2030 (With Projects)	2010 – 2030 (No Build)	2010 – 2030 (With Projects)	6 Amount	7 Percent
<i>A</i>	<i>b</i>	<i>c</i>	$d = b - a$	$e = c - a$	$f = d - e$	$g = f / d$
671,000	6,481,000	5,348,000	5,810,000	4,678,000	1,132,000	19%

Note: The analysis excludes freeway impacts because much of the freeway traffic is inter-regional and the projects submitted by jurisdictions are focused on the regional arterial system.

As mentioned earlier in the report, the MTA Board directed staff to develop a model that would quantify the travel related benefits associated with bicycle travel. Thus, the consultant team is developing approaches to estimate the impacts from this project category for inclusion in future nexus analyses.

Establishing Minimum and Maximum Fee-Per-Trip Amounts

The congestion mitigation fee-per-trip amount for each jurisdiction is determined by calculating its unique fee-per-trip (See Attachment A). The fee-per-trip amount is the total unfunded cost of all transportation projects selected by each jurisdiction (both those with benefits that can be quantitatively measured and those that are only

qualitatively measured) divided by the number of net trips generated by new development within that jurisdiction.

Establishing a minimum fee-per-trip for the Congestion Mitigation Fee Program has been an important policy issue for jurisdictions and stakeholders since MTA convened the countywide Policy Advisory Committee in 2006. A minimum fee-per-trip would facilitate compliance with the CMP by ensuring a minimum level of congestion reduction effort. Furthermore, all jurisdictions would benefit from a level playing field, where a minimum fee-per-trip amount to reduce the advantage that one jurisdiction may have over another in attracting new development.

The minimum fee-per-trip amounts for each sub-region were determined through the pilot nexus study process where each city developed a transportation project list that balances its need to mitigate future congestion with a maximum fee-per-trip amount. As a result, the pilot nexus study process provided a fee-per-trip amount for each jurisdiction (See Attachment A) whereby each jurisdiction is above \$500 fee-per-trip. Based on this threshold, one possible option is to set a \$500 fee-per-trip amount as the minimum that all North Los Angeles County jurisdictions could adopt as their sub-regional minimum fee-per-trip amount. The potential use of this approach is also being evaluated in the other sub-regional pilot nexus studies.

The Pilot Study Nexus Analysis resulted in two types of fee-per-trip amounts calculated for jurisdictions in the North Los Angeles County sub-region:

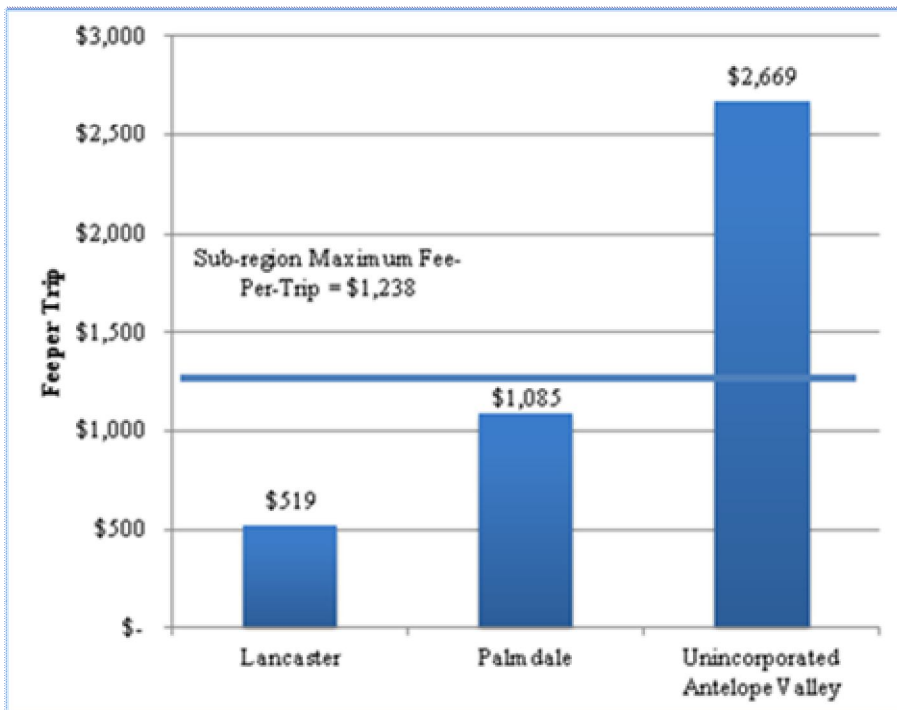
- **Jurisdiction fee-per-trip:** A separate fee-per-trip for each jurisdiction was calculated based on the jurisdiction's unfunded project costs divided by the number of trips from new development within the jurisdiction (See Attachment A). This fee-per-trip is the amount needed to fund the unfunded portion of the transportation projects costs identified by each jurisdiction. Unfunded project costs used in this calculation represents a conservative method of assessing new development for its share of mitigating its impacts. Other funding sources identified by jurisdictions to fund their proposed projects come from such funds as Proposition C and Measure R local return, state gas tax subventions, municipal general funds, Call-for-Projects, and Surface Transportation Program local funds.
- **Sub-regional maximum justified fee-per-trip:** A single maximum justified fee-per-trip for the sub-region of \$1,238 was calculated based on the \$444 million total cost of all transportation projects identified by jurisdictions divided by approximately 359,000 new trip-ends generated and attracted by new development within the sub-region. Since this nexus analysis was conducted at the sub-regional level, the \$1,238 fee-per-trip amount represents the maximum justified congestion mitigation fee amount the nexus analysis can defend quantitatively. Total project costs, rather than unfunded project costs, were used in this calculation because congestion reduction benefits are associated with the entire project regardless of the level of other anticipated funding.

The congestion mitigation fee-per-trip results from the nexus analysis by jurisdiction are summarized in Figure 5 below. See Attachment A for details regarding total project costs and funding by jurisdiction.

- City of Lancaster has a fee-per-trip amount of \$519 and is less than the sub-regional maximum justified fee-per-trip amount of \$1,238. Senior staff of the City of Palmdale has expressed an interest on adding projects to the list of transportation projects to be evaluated in the next step of the Work Plan, which is Program Development and Local Implementation.
- City of Palmdale has a fee-per-trip amount of \$1,085 which is less than the sub-regional maximum justified fee-per-trip amount of \$1,238.
- The County of Los Angeles has a fee-per-trip amount of \$2,669 which is greater than the sub-regional maximum justified fee-per-trip amount of \$1,238 because of the cost of unincorporated area projects exceeds the level of unincorporated trip generation from projected growth. If the congestion mitigation fee program is adopted, the list of projects and/or the other funding sources would need to be adjusted so it would not exceed the sub-regional maximum justified fee-per-trip.

The data collected from jurisdictions shows the fee-per-trip range from a minimum of \$500 up to the sub-regional maximum justified fee-per-trip of \$1,238. This fee-per-trip range should provide jurisdictions with the flexibility to manage the congestion impacts of growth, but also establish a floor, or minimum fee-per-trip. This minimum fee-per-trip amount is intended to create a level playing field by ensuring that each jurisdiction contributes to mitigating its growth impact on the regional transportation network.

Figure 5: North Los Angeles County Fee-Per-Trip Range by Jurisdiction



Note: The chart does not include City of Santa Clarita.

Should the Congestion Mitigation Fee Program be adopted, then each jurisdiction would adopt its own congestion mitigation fee ordinance. Its congestion mitigation fee would need to be set between the minimum fee-per-trip established by the MTA Board and its own individual jurisdiction fee-per-trip established by the nexus analysis (See Attachment A). The sub-regional maximum justified fee-per-trip would be the amount that jurisdictions would be limited to adopt as a result of the nexus analysis.

For a jurisdiction with a fee-per-trip amount that is higher than the sub-regional maximum justified fee-per-trip amount of \$1,238, it would have the following options to reduce its fee-per-trip amount:

- 1) Eliminate transportation projects from its list of projects to reduce its fee-per-trip amount to a level below the maximum justified fee-per trip amount.
- 2) Identify additional funding sources to reduce the amount of funding the fee revenue would have to pay to implement the projects.
- 3) Conduct a local nexus study to justify that the additional costs can be fairly charged to new development consistent with the Mitigation Fee Act.

Based on the nexus results of the North Los Angeles County Pilot Nexus Study a recommended sub-regional minimum fee-per-trip amount for the North Los Angeles County sub-region could be a \$500 fee-per-trip amount (see Figure 5).

NEXT STEPS

Below are the next steps to complete the Congestion Mitigation Fee work plan:

- Present pilot nexus study and economic analysis findings to jurisdictions, sub-regional agencies, and building industry stakeholders.
- Seek MTA Board direction in early 2013 to:
 - Adopt the Congestion Mitigation Fee Program as the new CMP Countywide Deficiency Plan;
 - Establish minimum fee amount for CMP compliance
- Work one-on-one with jurisdictions, sub-regional agencies, and building industry representatives to implement a Congestion Mitigation Fee Program over a 24 month period.

If the MTA Board decides to adopt the Congestion Mitigation Fee Program as the conformity requirement for the CMP, MTA staff will work with each jurisdiction to implement the Congestion Mitigation Fee Program. In carrying out this work effort, it is possible that jurisdictions would modify their list of transportation projects. If so, then the congestion reduction and fee-per-trip from such a change may be different than the results identified in this Pilot Nexus Study and would be revised accordingly in a report at that time.

CONTACT INFORMATION

If you have any questions or comments, please contact:

Robert Cálix, MTA Project Manager, at: calixr@metro.net or (213) 922-5644.

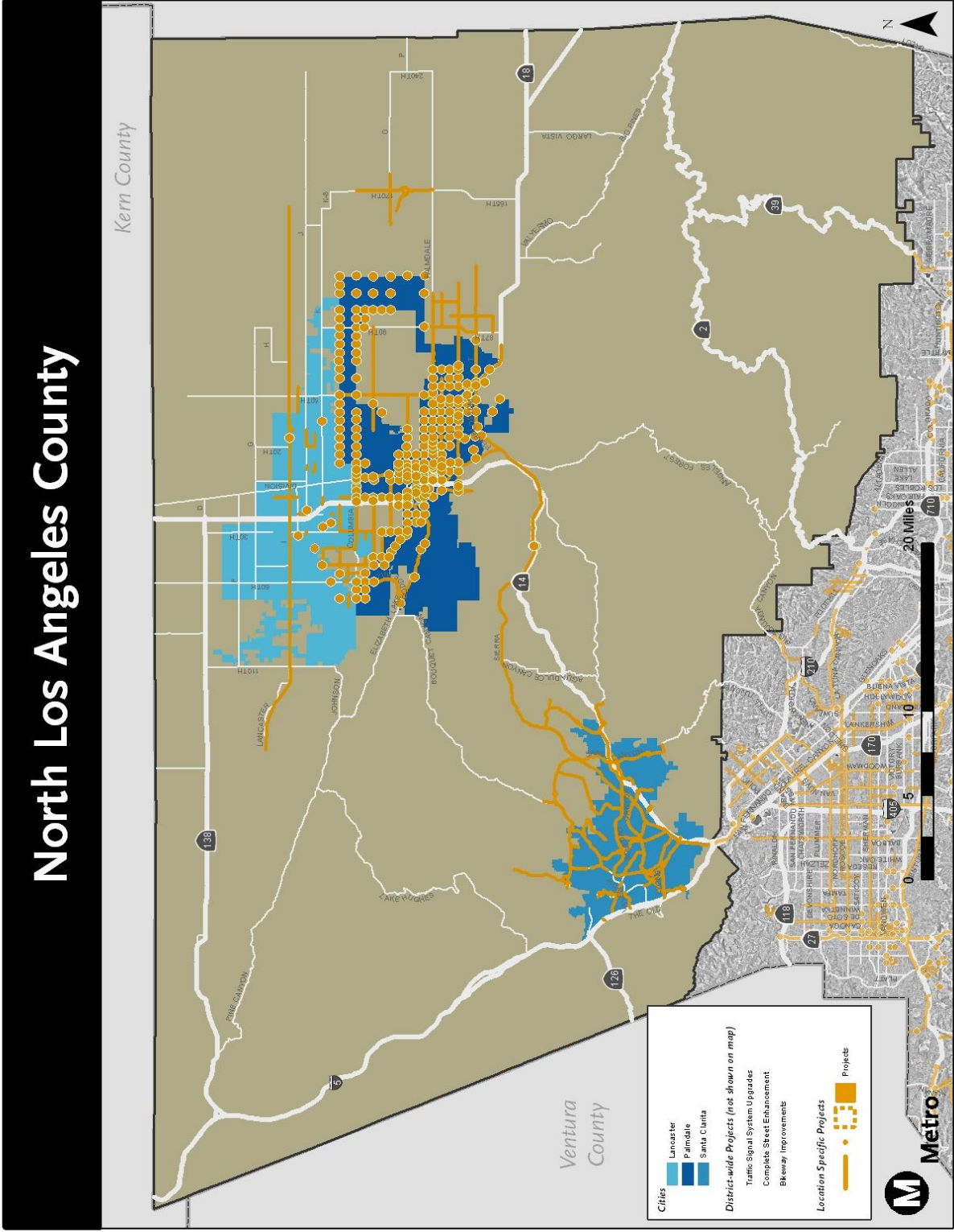
Attachment A: North Los Angeles County Pilot Nexus Study Fee-per-Trip by Jurisdiction

Jurisdiction	Net New Trip Ends	Total Project Costs	Other Funding Sources	Fee Revenue Funds	Fee-Per-Trip
<i>Formula</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e = d / a</i>
Lancaster	103,881	\$60,946,000	\$7,036,000	\$53,910,000	\$519
Palmdale	218,897	\$280,053,000	\$42,635,000	\$237,418,000	\$1,085
Unincorporated County Areas	35,953	\$103,254,000	\$7,312,000	\$95,942,000	\$2,669
Total	358,731	\$444,253,000	\$56,983,000	\$387,270,000	
		100%	13%	87%	

Sub-regional Maximum Justified Fee-per-Trip (= b / a): \$1,238

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Attachment B: North Los Angeles County Pilot Nexus Study Transportation Projects



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Attachment C: North Los Angeles County List of Transportation Projects by Jurisdiction (Project Deemed Ineligible Not Listed)

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding		Notes
						Funding	Unfunded	
Lancaster	1/2 Traffic Signal, Columbia and 4th Street East	Install signal and communications	Columbia and 4th Street East	Intersection Improvement	\$385,000	\$-	\$385,000	
Lancaster	1/4 Traffic Signal, Columbia and 60th Street West	Install signal and communications	Columbia and 60th St W	System Operations	\$190,000	\$-	\$190,000	
Lancaster	1/4 Traffic Signal, Columbia and 65th Street West	Install signal and communications or restrict left turn movements with median	Columbia and 65th St W	System Operations	\$630,000	\$-	\$630,000	
Lancaster	1/4 Traffic Signal, Columbia and Challenger Way	Install signal and communications	Columbia and Challenger Way	System Operations	\$220,000	\$-	\$220,000	
Lancaster	10th St W Gap Closure, Avenue L to Avenue M	Widening of 10th Street West to 3 lanes in each direction; projection is funded in part through MTA Call for Projects	10th St W - Avenue L to Avenue M	Capacity	\$5,496,650	\$1,996,650	\$3,500,000	
Lancaster	10th Street West Road Diet and Bikeway Improvements	Construct Class II bike lanes, Hoguin to Lancaster Blvd, by reducing the number of travel lanes. Avenue H to Holguin, roadway reduced to 2 lanes with separated landscaped median between bike lanes and travel lanes. 2011 Call for Projects	10th St W, Avenue H to Lancaster Blvd.	Bike-Pedestrian	\$2,036,776	\$1,048,234	\$988,542	(2)
Lancaster	20th Street East Widening, Avenue J to Avenue J-8	Add additional NB lane, and paved shoulder for improved traffic flow and pedestrian safety.	20th Street East, Avenue J to Avenue J-8	Capacity	\$585,000	\$-	\$585,000	
Lancaster	20th Street West, Avenue J to Lancaster Blvd	Street and pedestrian improvements. Requires ROW	20th Street West, Avenue J to Lancaster Blvd	Bike-Pedestrian	\$1,120,000	\$-	\$1,120,000	(1)
Lancaster	20th Street West, Avenue K-10 to Avenue K-8	Street widening along half of 20th Street West, construction of drainage improvements.	20th Street West, Avenue K-10 to Avenue K-8	Capacity	\$1,100,000	\$-	\$1,100,000	
Lancaster	3/4 Traffic Signal, Avenue K and 50th Street West	Intersection improvement to be either signal or roundabout street impv. Joint w/ County	Avenue K and 50th Street West	Intersection Improvement	\$930,000	\$-	\$930,000	

Jurisdiction	Project Name		Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Project Type					Funding	Unfunded	
Lancaster	30th Street West Widening, Avenue L to Avenue M	Capacity	Widen to two lanes each direction with bike lanes and install median	30th Street West Widening, Avenue L to Avenue M	Capacity	\$4,485,000	\$205,000	\$4,280,000	
Lancaster	5th St East and Ave J-8 Street Improvements	Capacity	Const. new roadway along J-8 to connect 5th Street and Challenger. Widen J-8 to include bikepath.	5th St E and Ave J-8	Capacity	\$1,115,000	\$-	\$1,115,000	
Lancaster	Ave M-8 Street Improvements at 35th St W	Capacity	Construct 30' of paved roadway from 35th St W to ~ 1700' east to improve access to neighborhood	Ave M-8, 35th St W	Capacity	\$675,000	\$-	\$675,000	
Lancaster	Avenue I Corridor Improvements, 20th St W to 10th St W	Bike-Pedestrian	Improve roadway by adding landscape planters, bike lanes and medians. Improve sidewalks, bus stops and ADA accessibility. Project was recommended to receive TEA funds through Metro's 2011 Call for Projects	Avenue I, 20th St W to 10th St W	Bike-Pedestrian	\$1,380,500	\$372,458	\$1,008,042	(3)
Lancaster	Avenue I Gap Closure, 7th St East to Challenger Way	Capacity	Gap Closure	Ave I, 7th St E to Challenger Way	Capacity	\$350,000	\$-	\$350,000	
Lancaster	Avenue I Widening, 27th Street East to 30th Street East	Bike-Pedestrian	Provide for pedestrian and bike improvements . Close gap in pedestrian improvements.	Avenue I, 27th St E to 30th St E	Bike-Pedestrian	\$770,000	\$-	\$770,000	(1)
Lancaster	Avenue J Widening, 20th to 30th Streets East	Capacity	Add one lane each direction, median, and shoulder paving.	20th to 30th St E	Capacity	\$1,396,000	\$-	\$1,396,000	
Lancaster	Avenue J-8 Street Improvements	Capacity	Construct new roadway from 25th St E to 27th St E. Construct sidewalk on north side from 20th St E to 27th St E	Avenue J-8, 20th St E to 27th St E	Capacity	\$720,000	\$-	\$720,000	
Lancaster	Avenue K Gap Closures, 10th to 12th Streets West	Capacity	Widening of Ave K between 10th Street West and 12th St West, north side.	Ave K, 10th to 12th St W	Capacity	\$1,450,000	\$-	\$1,450,000	
Lancaster	Avenue K Widening Projects	Capacity	Ave K 52nd W to 40th W on two lanes in each direction	Ave K 52nd W to 40th W	Capacity	\$2,700,000	\$-	\$2,700,000	
Lancaster	Avenue K/ 15th Street West Pedestrian Improvements	Bike-Pedestrian	Pedestrian Improvements along the north side of Ave K and east side of 15th St W submitted in 2011 MTA Call for Projects	Ave K/ 15th St W	Bike-Pedestrian	\$478,000	\$-	\$478,000	(1)

Jurisdiction	Project Name		Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Project Name					Funding	Unfunded	
Lancaster	Avenue L Widening - 15th W to 30th W		Widen roadway to eliminate flow lane gaps. Provide continuous pedestrian access and bike lanes.	15th W to 30th W	Capacity	\$3,497,211	\$1,860,778	\$1,636,433	
Lancaster	Avenue L Widening Projects - Phase I		Widen Avenue L (57th W to 47th W) to two lanes each direction. Joint w/ County (Costs include City's share).	Avenue L (57th W to 47th W)	Capacity	\$1,200,000	\$-	\$1,200,000	
Lancaster	Avenue L Widening Projects - Phase II		Widen Avenue L (47th W to 40th W) to two lanes each direction. Joint with LA County (Cost reflects City's share only).	Ave L - 47th W to 40th W	Capacity	\$500,000	\$-	\$500,000	
Lancaster	Avenue L-8 Gap Closure, 67th St W to 75th St W		Construct 60-foot roadway improvements . The project includes curb, gutter, and sidewalk on north side.	Avenue L-8, 67th St W to 75th St W	Capacity	\$760,000	\$-	\$760,000	
Lancaster	Avenue M at State Route 14		Widen overpass, improve ramps and install traffic signals (City's 50% share only)	Avenue M at State Route 14	Capacity	\$6,750,000	\$300,000	\$6,450,000	
Lancaster	Avenue M Street Improvements, 30th St W to 40th St W		Widen Avenue M to accommodate 4 lanes of traffic, center median, bikelanes and sidewalk	Avenue M, 30th St W to 40th St W	Capacity	\$6,000,000	\$-	\$6,000,000	
Lancaster	Citywide Bus Stop Improvements Phase II		Construct improvements at bus stops including benches, shelters, sidewalk, curb ramps, bus pads, street lighting and/or street improvements as needed.	Citywide	Bike-Ped-Transit	\$1,500,000	\$-	\$1,500,000	
Lancaster	Citywide Bus Stop Improvements Phase III		Construct improvements at bus stops including benches, shelters, sidewalk, curb ramps, bus pads, street lighting and/or street improvements as needed.	Citywide	Bike-Ped-Transit	\$980,000	\$-	\$980,000	
Lancaster	Cole Middle School & Tierra Bonita Pedestrian Improvements		Street Improvements and sidewalk, asphalt pedestrian pathway for pedestrian safety along high speed roadway.	Lancaster	Bike-Pedestrian	\$765,000	\$40,000	\$725,000	(1)
Lancaster	East Avenue J Improvements, between 8th St East and Rodin Av		Construct pedestrian improvements on south side of Ave J to close gap in pedestrian travel	E Ave J, between 8th St E and Rodin Ave	Bike-Pedestrian	\$770,000	\$-	\$770,000	(1)

Jurisdiction	Project Name			Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Project Name	Project Name					Funding	Unfunded	
Lancaster	Lancaster High School Pedestrian Access Improvements			Widen street to add bike lanes and sidewalk, Avenue J, 30th to 32nd	Avenue J, 30th to 32nd	Bike-Pedestrian	\$1,396,000	\$-	\$1,396,000	(4)
Lancaster	Roundabout Lancaster Blvd and 32nd Street West			Install roundabout in lieu of a signal	Lancaster Blvd and 32nd St West	Capacity	\$800,000	\$-	\$800,000	
Lancaster	Traffic Signal - Avenue J and 17th Street West			Install signal and communications & street improvements.	Avenue J and 17th Street West	System Operations	\$1,000,000	\$300,000	\$700,000	
Lancaster	Traffic Signal System Modernization			Convert existing communications to ethernet, install wireless communications to outlying systems	Systemwide	System Operations	\$1,766,000	\$883,000	\$883,000	(4)
Lancaster	Traffic Signal, Ave L and 70th Street West			Install signal and communications	Ave L/ 70th St W	System Operations	\$433,000	\$-	\$433,000	
Lancaster	Traffic Signal, Avenue I and 25th Street East			Traffic Signal and drainage improvements	Avenue I and 25th Street East	System Operations	\$1,230,000	\$30,000	\$1,200,000	
Lancaster	Traffic Signal, Avenue J-8 and 40th Street West			Construction of Signal and communication or roundabout	Ave J-8 and 40th St West	System Operations	\$600,000	\$-	\$600,000	
Lancaster	Traffic Signal, Avenue K and 27th Street West			Install signal and communication	Ave K/ 27th St W	System Operations	\$630,000	\$-	\$630,000	
Lancaster	Traffic Signal, Avenue K and 35th Street East			Install signal and communications	Ave K and 35th St E	System Operations	\$500,000	\$-	\$500,000	
Lancaster	Traffic Signal, Avenue K-8 & 25th St W			Install signal and communication	Avenue K-8 & 25th St W	System Operations	\$400,000	\$-	\$400,000	
Lancaster	Traffic Signal, Avenue K-8 and 60th Street West			Install signal and communication system	Ave K-8/60th St W	System Operations	\$630,000	\$-	\$630,000	
Lancaster	Traffic Signal, Avenue L and 55th Street West			Install signal and communications	Ave L and 55th St W	System Operations	\$626,000	\$-	\$626,000	
Palmdale	10th St West - Ave M/ Ave N			Roadway Segment Improvement	10th St West	Capacity	\$2,002,176	\$2,002,176	\$-	
Palmdale	10th St West - Ave N/ Ave O			Roadway Segment Improvement	Ave N/ Ave O	Capacity	\$2,002,200	\$-	\$2,002,200	
Palmdale	10th St West - Ave N/ Ave O			Signal Synchronization	Ave N/ Ave O	System Operations	\$316,800	\$-	\$316,800	
Palmdale	10th St West - Ave O/ Ave P			Roadway Segment Improvement	Ave O/ Ave P	Capacity	\$600,660	\$-	\$600,660	
Palmdale	10th St West - Ave O/ Ave P			Signal Synchronization	Ave O/ Ave P	System Operations	\$316,000	\$-	\$316,000	
Palmdale	10th St West - Ave P/ Ave P-8			Roadway Segment Improvement	Ave P/ Ave P-8	Capacity	\$500,500	\$-	\$500,500	

Jurisdiction	Project Name		Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Project Name					Funding	Funding	
Palmdale	10th St West - Ave P-8/ Palmdale Blvd		Roadway Segment Improvement	10th St West	Capacity	\$500,544	\$250,300	\$250,244	
Palmdale	20th St West - Ave P/ Ave P-8		Signal Synchronization	Ave P/ Ave P-8	System Operations	\$316,800	\$-	\$316,800	
Palmdale	20th St West - Ave P/ ELR		Roadway Segment Improvement	Ave P/ ELR	Capacity	\$951,033	\$-	\$951,033	
Palmdale	25th St East - 4200 S of Ave S/ Pearl Blossom Hwy		Signal Synchronization	4200 S of Ave S/ Pearl Blossom Hwy	System Operations	\$253,440	\$-	\$253,440	
Palmdale	25th St East - Ave Q/ Palmdale Blvd		Signal Synchronization	Ave Q/ Palmdale Blvd	System Operations	\$158,400	\$-	\$158,400	
Palmdale	25th St East - Ave S/ 4200 S of Ave S		Signal Synchronization	Ave S/ 4200 S of Ave S	System Operations	\$253,440	\$-	\$253,440	
Palmdale	25th St East - Ave R-8/ Ave S		Signal Synchronization	Ave R-8/ Ave S	System Operations	\$158,400	\$-	\$158,400	
Palmdale	25th St W (Highland) - Ave P/ Elizabeth Lake Rd		Signal Synchronization	Ave P/ Elizabeth Lake Rd	System Operations	\$253,440	\$-	\$253,440	
Palmdale	25th Street East - Palmdale Blvd/ Ave R-8		Signal Synchronization	Palmdale Blvd/ Ave R-8	System Operations	\$316,800	\$-	\$316,800	
Palmdale	30th St East - Ave R/ Ave R-8		Signal Synchronization	Ave R/ Ave R-8	System Operations	\$158,400	\$-	\$158,400	
Palmdale	30th St West - Ave M/ Ave N-8		Roadway Segment Improvement	Ave M/ Ave N-8	Capacity	\$3,880,800	\$-	\$3,880,800	
Palmdale	30th St West - Ave N-8/ Ave P		Signal Synchronization	Ave N-8/ Ave P	System Operations	\$237,600	\$-	\$237,600	
Palmdale	40th St East - Ave S/ Pear Blossom Hwy		Signal Synchronization	Ave S/ Pear Blossom Hwy	System Operations	\$316,800	\$-	\$316,800	
Palmdale	40th St East - Ave S/ Pear Blossom Hwy		Roadway Segment Improvement	Ave S/ Pear Blossom Hwy	Capacity	\$1,368,000	\$-	\$1,368,000	
Palmdale	40th St East - Palmdale Blvd/ Ave S		Signal Synchronization	Palmdale Blvd/ Ave S	System Operations	\$475,200	\$-	\$475,200	
Palmdale	47th St East - Ave S/ Fort Tejon Rd		Roadway Segment Improvement	Ave S/Fort Tejon Rd	Capacity	\$710,700	\$-	\$710,700	
Palmdale	47th St East - Palmdale Blvd/ Ave S		Roadway Segment Improvement	Palmdale Blvd/ Ave S	Capacity	\$3,553,700	\$-	\$3,553,700	
Palmdale	50th St East - Ave L/ Ave M		Roadway Segment Improvement	Ave L/Ave M	Capacity	\$3,558,300	\$-	\$3,558,300	
Palmdale	50th St East - Ave M/ Ave Q		Roadway Segment Improvement	Ave M/ Ave Q	Capacity	\$2,587,200	\$-	\$2,587,200	
Palmdale	50th St East - Ave Q/ Palmdale Blvd		Roadway Segment Improvement	Ave Q/ Palmdale Blvd	Capacity	\$1,293,600	\$-	\$1,293,600	
Palmdale	60th St West - Ave M/ Ave N		Roadway Segment Improvement	Ave M/Ave N	Capacity	\$2,220,240	\$555,060	\$1,665,180	

Jurisdiction	Project Name			Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Project Name	Project Name					Funding	Unfunded	
Palmdale	70th St East - Palmdale Blvd/ Ave R		Roadway Segment Improvement		Palmdale Blvd/ Ave R	Capacity	\$609,600	\$-	\$609,600	
Palmdale	Arnold Drive - 25th St East		New Signal, and intersection improvements		25th St East	Intersection Improvement	\$340,000	\$-	\$340,000	
Palmdale	Auto Center Dr - 10th St West		New Signal		10th St West	Intersection Improvement	\$90,000	\$-	\$90,000	
Palmdale	Auto Center Dr - Trade Center Dr		New Signal		Trade Center Dr	Intersection Improvement	\$180,000	\$-	\$180,000	
Palmdale	Auto Center Dr. - 5th St. West		New Signal		5th St. West	Intersection Improvement	\$180,000	\$-	\$180,000	
Palmdale	Avenue L - 100th St East		Intersection Improvement		100th St East	Intersection Improvement	\$330,000	\$165,000	\$165,000	
Palmdale	Avenue L - 10th St East		Intersection Improvement		10th St East	Intersection Improvement	\$330,000	\$247,500	\$82,500	
Palmdale	Avenue L - 10th St/ 20th St E		Roadway Segment Improvement		10th St/ 20th St E	Capacity	\$2,587,200	\$1,293,600	\$1,293,600	
Palmdale	Avenue L - 110th St East		Intersection Improvement		110th St East	Intersection Improvement	\$330,000	\$165,000	\$165,000	
Palmdale	Avenue L - 115th St East		Intersection Improvement		115th St East	Intersection Improvement	\$247,500	\$123,800	\$123,700	(4)
Palmdale	Avenue L - 120th St East		Intersection Improvement		120th St East	Intersection Improvement	\$330,000	\$165,000	\$165,000	
Palmdale	Avenue L - 15th St East		Intersection Improvement		15th St East	Intersection Improvement	\$330,000	\$82,500	\$247,500	
Palmdale	Avenue L - 20th S E/ 40th St E		Roadway Segment Improvement		20th St E- 40th St E	Capacity	\$5,174,400	\$2,587,200	\$2,587,200	
Palmdale	Avenue L - 20th St East		Intersection Improvement		20th St East	Intersection Improvement	\$330,000	\$165,000	\$165,000	
Palmdale	Avenue L - 25th St East		Intersection Improvement		25th St East	Intersection Improvement	\$330,000	\$165,000	\$165,000	
Palmdale	Avenue L - 30th St East		Intersection Improvement		30th St East	Intersection Improvement	\$330,000	\$165,000	\$165,000	
Palmdale	Avenue L - 35th St. East		Intersection Improvement		35th St. East	Intersection Improvement	\$330,000	\$165,000	\$165,000	
Palmdale	Avenue L - 40th St E/50th St E		Roadway Segment Improvement		Ave L	Capacity	\$3,537,600	\$1,768,800	\$1,768,800	
Palmdale	Avenue L - 40th St East		Intersection Improvement		40th St East	Intersection Improvement	\$330,000	\$16,500	\$313,500	
Palmdale	Avenue L - 45th St East		Intersection Improvement		45th St East	Intersection Improvement	\$330,000	\$165,000	\$165,000	

Jurisdiction	Project Name		Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Location					Funding	Unfunded	
Palmdale	Avenue L - 50th St East	50th St East	Intersection Improvement		Intersection Improvement	\$348,000	\$174,000	\$174,000	
Palmdale	Avenue L - 60th St East	60th St East	Intersection Improvement		Intersection Improvement	\$330,000	\$165,000	\$165,000	
Palmdale	Avenue L - 65th St East	65th St East	Intersection Improvement		Intersection Improvement	\$247,500	\$123,800	\$123,700	
Palmdale	Avenue L - 70th St East	70th St East	Intersection Improvement		Intersection Improvement	\$330,000	\$165,000	\$165,000	
Palmdale	Avenue L - 75th St East	75th St East	Intersection Improvement		Intersection Improvement	\$247,500	\$123,800	\$123,700	
Palmdale	Avenue L - 80th St East	80th St East	Intersection Improvement		Intersection Improvement	\$330,000	\$165,000	\$165,000	
Palmdale	Avenue L - 85th St East	85th St East	Intersection Improvement		Intersection Improvement	\$247,500	\$123,800	\$123,700	
Palmdale	Avenue L - 90th St East	90th St East	Intersection Improvement		Intersection Improvement	\$330,000	\$165,000	\$165,000	
Palmdale	Avenue L - 95th St East	95th St East	Intersection Improvement		Intersection Improvement	\$330,000	\$165,000	\$165,000	
Palmdale	Avenue M - 100th St East	100th St East	Intersection Improvements		Intersection Improvement	\$312,000	\$-	\$312,000	
Palmdale	Avenue M - 10th St E/ 15th St E	10th St E/ 15th St E	Signal Synchronization		System Operations	\$158,400	\$-	\$158,400	
Palmdale	Avenue M - 10th St East	10th St East	Intersection Improvements		Intersection Improvement	\$427,500	\$188,900	\$238,600	
Palmdale	Avenue M - 10th St W/ Sierra Hwy	10th St W/ Sierra Hwy	Signal Synchronization		System Operations	\$15,840	\$-	\$15,840	
Palmdale	Avenue M - 10th St West	10th St West	Intersection Improvement		Intersection Improvement	\$348,000	174000	\$174,000	
Palmdale	Avenue M - 110 St East	110 St East	Intersection Improvements		Intersection Improvement	\$312,000	\$-	\$312,000	
Palmdale	Avenue M - 120th St East	120 St East	Intersection Improvements		Intersection Improvement	\$165,000	\$-	\$165,000	
Palmdale	Avenue M - 15th S East (Site 1)	15th S East (Site 1)	Intersection Improvements		Intersection Improvement	\$165,800	\$-	\$165,800	(4)
Palmdale	Avenue M - 15th St E/ 40th St E	15th St E/ 40th St E	Signal Synchronization		System Operations	\$792,000	\$-	\$792,000	
Palmdale	Avenue M - 20th St East	20th St East	Intersection Improvements		Intersection Improvement	\$247,000	\$-	\$247,000	(4)
Palmdale	Avenue M - 25th St East	25th St East	Intersection Improvement		Intersection Improvement	\$247,500	\$-	\$247,500	

Jurisdiction	Project Name			Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Description	Location					Funding	Unfunded	
Palmdale	Avenue M - 30th St East (Site 3)	Signal Upgrade	30th St East (Site 3)	Intersection Improvement	\$247,000	\$-	\$247,000		(4)	
Palmdale	Avenue M - 30th St W/ SR-14	Roadway Segment Improvement	30th St W/ SR-14	Capacity	\$4,656,960	\$4,656,960	\$-			
Palmdale	Avenue M - 35th St. East (Site 4)	Signal Upgrade	35th St. East (Site 4)	Intersection Improvement	\$247,000	\$-	\$247,000			
Palmdale	Avenue M - 40th St East	Signal Upgrade	40th St East	Intersection Improvement	\$160,000	\$-	\$160,000			
Palmdale	Avenue M - 4th St East	Intersection Improvement	4th St East	Intersection Improvement	\$124,800	\$93,600	\$31,200			
Palmdale	Avenue M - 4th St West	Signal Upgrade	4th St West	Intersection Improvement	\$247,500	\$163,300	\$84,200		(4)	
Palmdale	Avenue M - 50th St East	New Signal	50th St East	Intersection Improvement	\$90,000	\$-	\$90,000			
Palmdale	Avenue M - 60th St East	Intersection Improvements	60th St East	Intersection Improvement	\$330,000	\$165,000	\$165,000			
Palmdale	Avenue M - 60th St West	Signal Upgrade	60th St West	Intersection Improvement	\$45,000	\$-	\$45,000			
Palmdale	Avenue M - 65th St West	Intersection Improvements	65th St West	Intersection Improvement	\$156,000	\$-	\$156,000		(4)	
Palmdale	Avenue M - 6th St East	Intersection Improvement	6th St East	Intersection Improvement	\$124,800	93600	\$31,200			
Palmdale	Avenue M - 6th St West	Intersection Improvement	6th St West	Intersection Improvement	\$247,500	\$84,200	\$163,300		(4)	
Palmdale	Avenue M - 70th St East	Intersection Improvements	70th St East	Intersection Improvement	\$330,000	\$165,000	\$165,000			
Palmdale	Avenue M - 70th St West	Intersection Improvements	70th St West	Intersection Improvement	\$312,000	\$-	\$312,000			
Palmdale	Avenue M - 75th St East	Intersection Improvements	75th St East	Intersection Improvement	\$247,500	\$123,800	\$123,700			
Palmdale	Avenue M - 80th St East	Intersection Improvements	80th St East	Intersection Improvement	\$330,000	\$165,000	\$165,000			
Palmdale	Avenue M - 85th St East	Intersection Improvement	85th St East	Intersection Improvement	\$247,500	\$123,800	\$123,700			
Palmdale	Avenue M - 90th St E/ 100th St E	Roadway Segment Improvement	90th St E/ 100th St E	Capacity	\$2,561,856	\$1,280,900	\$1,280,956			
Palmdale	Avenue M - 90th St East	Intersection Improvement	90th St E	Intersection Improvement	\$312,000	\$156,000	\$156,000			
Palmdale	Avenue M - 95th St East	Intersection Improvements	95th St East	Intersection Improvement	\$312,000	\$-	\$312,000			

Jurisdiction	Project Name		Description	Location		Project Type	Total Cost	Other Funding		Notes
	Project Name	Description		Location	Location			Funding	Unfunded	
Palmdale	Avenue M - Division St	Intersection Improvement	Division St	Division St	Intersection Improvement	\$312,000	\$156,000	\$156,000		
Palmdale	Avenue M - Sierra Hwy	Intersection Improvement	Sierra Hwy	Sierra Hwy	Intersection Improvement	\$87,000	\$43,000	\$44,000	(4)	
Palmdale	Avenue M - Sierra Hwy/ 10th St E	Roadway Segment Improvement	Sierra Hwy/ 10th St E	Sierra Hwy/ 10th St E	Capacity	\$2,220,240	\$1,110,100	\$1,110,140		
Palmdale	Avenue M - SR 14 NB Ramps	Intersection Improvement	SR 14 NB Ramps	SR 14 NB Ramps	Intersection Improvement	\$247,500	\$165,800	\$81,700		
Palmdale	Avenue M - SR-14/ 10th St W	Add additional lanes	SR-14/ 10th St W	SR-14/ 10th St W	Capacity	\$2,842,963	\$1,421,500	\$1,421,463		
Palmdale	Avenue M-8 - 100th St East	Intersection Improvements	100th St East	100th St East	Intersection Improvement	\$312,000	\$78,000	\$234,000		
Palmdale	Avenue M-8 - 10th St East	Intersection Improvements	10th St East	10th St East	Intersection Improvement	\$187,200	\$-	\$187,200		
Palmdale	Avenue M-8 - 10th St West	Signal Upgrade	10th St West	10th St West	Intersection Improvement	\$180,000	\$-	\$180,000		
Palmdale	Avenue M-8 - 55th St West	Intersection Improvement	55th St West	55th St West	Intersection Improvement	\$312,000	\$156,000	\$156,000	(4)	
Palmdale	Avenue M-8 - 60th St West	Signal Upgrade	60th St West	60th St West	Intersection Improvement	\$312,000	\$156,000	\$156,000		
Palmdale	Avenue M-8 - 65th St West	Intersection Improvements	65th St West	65th St West	Intersection Improvement	\$312,000	\$160,000	\$152,000		
Palmdale	Avenue M-8 - 70th St West	Signal Upgrade	70th St West	70th St West	Intersection Improvement	\$234,000	\$58,500	\$175,500		
Palmdale	Avenue M-8 - 90th St East	Intersection Improvement	90th St East	90th St East	Intersection Improvement	\$234,000	\$175,500	\$58,500		
Palmdale	Avenue M-8 - 95th St East	Intersection Improvements	95th St East	95th St East	Intersection Improvement	\$312,000	\$156,000	\$156,000		
Palmdale	Avenue M-8 - Sierra Highway	New Signal	Sierra Highway	Sierra Highway	Intersection Improvement	\$187,000	\$-	\$187,000		
Palmdale	Avenue N - 100th St East	Intersection Improvements	100th St East	100th St East	Intersection Improvement	\$312,000	\$156,000	\$156,000		
Palmdale	Avenue N - 10th St West	Signal Upgrade	10th St West	10th St West	Intersection Improvement	\$330,000	\$-	\$330,000		
Palmdale	Avenue N - 110th St East	Intersection Improvement	110th St East	110th St East	Intersection Improvement	\$312,000	\$-	\$312,000		
Palmdale	Avenue N - 120th St East	Intersection Improvements	120th St East	120th St East	Intersection Improvement	\$330,000	\$165,000	\$165,000		
Palmdale	Avenue N - 2000 W of 40th St E/ 90th St E	Roadway Segment Improvement	2000 W of 40th St E/ 90th St E	2000 W of 40th St E/ 90th St E	Capacity	#####	\$-	#####		

Jurisdiction	Project Name			Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Description	Location					Funding	Unfunded	
Palmdale	Avenue N - 45th St East	Intersection Improvements	45th St East	Intersection Improvements	Improvement	\$312,000	\$117,000	\$195,000		
Palmdale	Avenue N - 45th St West	New Signal	45th St West	New Signal	Improvement	\$312,000	\$234,000	\$78,000		
Palmdale	Avenue N - 50th St West	New Signal	50th St West	New Signal	Improvement	\$90,000	\$-	\$90,000		
Palmdale	Avenue N - 60th St West	Signal Upgrade	60th St West	Signal Upgrade	Improvement	\$312,000	\$-	\$312,000		
Palmdale	Avenue N - Division St	Intersection Improvements	Division St	Intersection Improvements	Improvement	\$312,000	\$-	\$312,000		
Palmdale	Avenue N - Sierra Highway	Intersection Improvements	Sierra Highway	Intersection Improvements	Improvement	\$247,000	\$-	\$247,000	(4)	
Palmdale	Avenue N - SR 14 NB Ramps	Intersection Improvements	SR 14 NB Ramps	Intersection Improvements	Improvement	\$234,000	\$77,200	\$156,800		
Palmdale	Avenue N - SR 14/ 10th St W	Roadway Segment Improvement	SR 14/ 10th St W	Roadway Segment Improvement	Capacity	\$473,827	\$-	\$473,827		
Palmdale	Avenue N-12 - 30th St West	Signal Upgrade	30th St West	Signal Upgrade	Intersection Improvement	\$160,000	\$120,000	\$40,000		
Palmdale	Avenue N-8 - 100th St East	Intersection Improvement	100th St East	Intersection Improvement	Improvement	\$312,000	\$156,000	\$156,000		
Palmdale	Avenue N-8 - 10th St West	New Signal	10th St West	New Signal	Intersection Improvement	\$160,000	\$-	\$160,000		
Palmdale	Avenue N-8 - 30th St West	New Signal	30th St West	New Signal	Intersection Improvement	\$124,800	\$93,600	\$31,200		
Palmdale	Avenue N-8 - 40th St East	Intersection Improvement	40th St East	Intersection Improvement	Improvement	\$234,000	\$175,500	\$58,500		
Palmdale	Avenue N-8 - 45th St West	New Signal	45th St West	New Signal	Intersection Improvement	\$180,000	\$75,000	\$105,000		
Palmdale	Avenue O - 100th St East	Intersection Improvements	100th St East	Intersection Improvements	Improvement	\$234,000	\$117,000	\$117,000		
Palmdale	Avenue O - 10th St West	Intersection Improvements	10th St West	Intersection Improvements	Improvement	\$330,000	\$82,500	\$247,500		
Palmdale	Avenue O - 110th St East	Intersection Improvements	110th St East	Intersection Improvements	Improvement	\$312,000	\$-	\$312,000		
Palmdale	Avenue O - 120th St East	Intersection Improvements	120th St East	Intersection Improvements	Improvement	\$330,000	\$165,000	\$165,000		
Palmdale	Avenue O - 30th St West	Signal Upgrade	30th St West	Signal Upgrade	Intersection Improvement	\$90,000	\$-	\$90,000		
Palmdale	Avenue O - Division St	New Signal & Intersection Improvements	Division St	New Signal & Intersection Improvements	Intersection Improvement	\$249,600	\$187,200	\$62,400		

Jurisdiction	Project Name			Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Project Name	Project Name					Funding	Unfunded	
Palmdale	Avenue O - Sierra Hwy		Signal Upgrade & Intersection Improvements	Sierra Hwy	Intersection Improvement	\$247,500	\$-	\$247,500		
Palmdale	Avenue O-8 - 10th St East		Intersection Improvements	10th St East	Intersection Improvement	\$234,000	\$-	\$234,000		
Palmdale	Avenue O-8 - 10th St West		Signal Upgrade	10th St West	Intersection Improvement	\$160,000	\$-	\$160,000		
Palmdale	Avenue O-8 - 15th St East		Intersection Improvement	15th St East	Intersection Improvement	\$156,000	\$-	\$156,000		
Palmdale	Avenue O-8 - 15th St West		Intersection Improvement	15th St West	Intersection Improvement	\$312,000	\$234,000	\$78,000		
Palmdale	Avenue O-8 - 30th St West		Intersection Improvement	30th St West	Intersection Improvement	\$312,000	\$156,000	\$156,000		
Palmdale	Avenue O-8 - 8th St E/ 15th St E		Roadway Segment Improvement	8th St E/ 15th St E	Capacity	\$1,776,192	\$-	\$1,776,192		
Palmdale	Avenue O-8 - 8th St East		Intersection Improvement	8th St East	Intersection Improvement	\$234,000	\$-	\$234,000		
Palmdale	Avenue O-8 - Division St		New Signal	Division St	Intersection Improvement	\$234,000	\$-	\$234,000		
Palmdale	Avenue O-8 - Rancho Vista Boulevard		New Signal and Intersection Improvements	Rancho Vista Boulevard	Intersection Improvement	\$234,000	\$175,500	\$58,500		
Palmdale	Avenue O-8 - Sierra Hwy		Signal Upgrade	Sierra Hwy	Intersection Improvement	\$510,000	\$-	\$510,000		
Palmdale	Avenue P - 10th St E		Intersection Improvement	10th St E	Intersection Improvement	\$312,000	\$-	\$312,000	(4)	
Palmdale	Avenue P - 10th St East		New Signal	10th St East	Intersection Improvement	\$180,000	\$-	\$180,000		
Palmdale	Avenue P - 10th St W/ Sierra Hwy		Roadway Segment Improvement	10th St W/ Sierra Hwy	Capacity	\$900,979	\$-	\$900,979		
Palmdale	Avenue P - 10th St West		Intersection Improvement	10th St West	Intersection Improvement	\$187,200	\$187,200	\$-	(5)	
Palmdale	Avenue P - 11th St West		New Signal	11th St West	Intersection Improvement	\$160,000	\$-	\$160,000		
Palmdale	Avenue P - 120th St East		Intersection Improvement	120th St East	Intersection Improvement	\$330,000	165000	\$165,000		
Palmdale	Avenue P - 15th St E		Intersection Improvement	15th St E	Intersection Improvement	\$312,000	\$78,000	\$234,000	(4)	
Palmdale	Avenue P - 15th St East		New Signal	15th St East	Intersection Improvement	\$135,000	\$-	\$135,000		
Palmdale	Avenue P - 15th St West		Signal Upgrade	15th St West	Intersection Improvement	\$70,000	\$-	\$70,000		

Jurisdiction	Project Name			Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Description	Location					Funding	Unfunded	
Palmdale	Avenue P - 20th St East	Signal Upgrade	20th St East	Intersection Improvement	\$143,000	\$-	\$143,000			
Palmdale	Avenue P - 20th St West	Signal Upgrade	20th St West	Intersection Improvement	\$70,000	\$-	\$70,000			
Palmdale	Avenue P - 25th St East	Intersection Improvement	25th St East	Intersection Improvement	\$234,000	\$117,000	\$117,000			
Palmdale	Avenue P - 25th St West	Intersection Improvement	25th St West	Intersection Improvement	\$234,000	\$-	\$234,000			
Palmdale	Avenue P - 30th St East	Intersection Improvement	30th St East	Intersection Improvement	\$249,600	\$187,200	\$62,400			
Palmdale	Avenue P - 3rd St. East	Signal Upgrade	3rd St. East	Intersection Improvement	\$52,500	\$-	\$52,500			
Palmdale	Avenue P - 8th St E	Intersection Improvements	8th St E	Intersection Improvement	\$234,000	\$-	\$234,000		(4)	
Palmdale	Avenue P - Ave Mall West	Signal Upgrade	Ave Mall West	Intersection Improvement	\$52,500	\$-	\$52,500			
Palmdale	Avenue P - Division St	Intersection Improvement	Division St	Intersection Improvement	\$312,000	\$-	\$312,000			
Palmdale	Avenue P - Division St	New Signal	Division St	Intersection Improvement	\$180,000	\$-	\$180,000			
Palmdale	Avenue P - Sierra Hwy	Intersection Improvement	Sierra Hwy	Intersection Improvement	\$394,000	\$78,000	\$316,000		(4)	
Palmdale	Avenue P - SR-14 NB Ramp	Intersection Improvement	SR-14 NB Ramp	Intersection Improvement	\$124,800	\$41,184	\$83,616			
Palmdale	Avenue P-12 - 25th St West	Intersection Improvement	25th St West	Intersection Improvement	\$156,000	\$-	\$156,000			
Palmdale	Avenue P-8 - 25th St W/ 15 St W	Roadway Segment Improvement	25th St W/ 15 St W	Capacity	\$548,724	\$-	\$548,724			
Palmdale	Avenue P-8 - 3rd St E/ Sierra Hwy	Roadway Segment Improvement	3rd St E/ Sierra Hwy	Capacity	\$377,400	\$-	\$377,400			
Palmdale	Avenue P-8 - 8th St E	Intersection Improvement	8th St E	Intersection Improvement	\$156,000	\$-	\$156,000			
Palmdale	Avenue P-8 (Bulldog) - 25th St West	Signal Upgrade	25th St West	Intersection Improvement	\$510,000	\$-	\$510,000			
Palmdale	Avenue P-8 (Tech Drive) - 10th St East	New Signal	10th St East	Intersection Improvement	\$369,000	\$-	\$369,000			
Palmdale	Avenue P-8 (Tech Drive) - 15th St East	Intersection Improvement	15th St East	Intersection Improvement	\$312,000	156000	\$156,000			
Palmdale	Avenue P-8 (Tech Drive) - 3rd St East	Intersection Improvement	3rd St East	Intersection Improvement	\$429,600	\$-	\$429,600			

Jurisdiction	Project Name		Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Location					Funding	Unfunded	
Palmdale	Avenue P-8 (Tech Drive) - 5th St West	5th St West	Signal Upgrade	5th St West	Intersection Improvement	\$226,000	\$-	\$226,000	
Palmdale	Avenue P-8 (Tech Drive) - 5th St West/ Sierra Hwy	5th St West	Signal Synchronization	5th St West	System Operations	\$316,000	\$-	\$316,000	
Palmdale	Avenue P-8 (Tech Drive) - Carriage Way	Carriage Way	New Signal	Carriage Way	Intersection Improvement	\$160,000	\$-	\$160,000	
Palmdale	Avenue P-8 (Tech Drive) - Divison Street	Division Street	New Signal	Division Street	Intersection Improvement	\$180,000	\$-	\$180,000	
Palmdale	Avenue P-8 (Tech Drive) - Trade Center Dr	Trade Center Dr	New Signal	Trade Center Dr	Intersection Improvement	\$180,000	\$-	\$180,000	
Palmdale	Avenue P-8 (Tech Drvie) - Sierra Hwy	Sierra Hwy	Intersection Improvements	Sierra Hwy	Intersection Improvement	\$234,000	\$-	\$234,000	
Palmdale	Avenue P-8 -20th St West	20th St West	New Signal	20th St West	Intersection Improvement	\$180,000	\$-	\$180,000	
Palmdale	Avenue Q - 10th St East	10th St East	Signal Upgrade	10th St East	Intersection Improvement	\$500,000	\$-	\$500,000	
Palmdale	Avenue Q - 110th St E	110th St E	Intersection Improvement	110th St E	Intersection Improvement	\$156,000	\$-	\$156,000	
Palmdale	Avenue Q - 120th St E	120 St E	Intersection Improvement	120 St E	Intersection Improvement	\$165,000	\$-	\$165,000	
Palmdale	Avenue Q - 15th St East	15th St East	New Signal	15th St East	Intersection Improvement	\$500,000	\$-	\$500,000	
Palmdale	Avenue Q - 20th St E/ 40th St E	20th St E/ 40th St E	Signal Synchronization	20th St E/ 40th St E	System Operations	\$633,000	\$-	\$633,000	
Palmdale	Avenue Q - 20th St East	20th St East	New Signal	20th St East	Intersection Improvement	\$500,000	\$-	\$500,000	
Palmdale	Avenue Q - 25th St East	25th St East	New Signal	25th St East	Intersection Improvement	\$500,000	\$-	\$500,000	
Palmdale	Avenue Q - 30th St East	30th St East	New Signal	30th St East	Intersection Improvement	\$500,000	\$-	\$500,000	
Palmdale	Avenue Q - 35th St East	35th St East	New Signal	35th St East	Intersection Improvement	\$500,000	\$-	\$500,000	
Palmdale	Avenue Q - 3rd St East	3rd St East	New Signal	3rd St East	Intersection Improvement	\$180,000	\$-	\$180,000	
Palmdale	Avenue Q - 40th St East	40th St East	New Signal	40th St East	Intersection Improvement	\$500,000	\$-	\$500,000	
Palmdale	Avenue Q - 50th St E	50th St E	Intersection Improvement	50th St E	Intersection Improvement	\$247,000	\$-	\$247,000	
Palmdale	Avenue Q - 5th West	5th West	Signal Upgrade	5th West	Intersection Improvement	\$70,000	\$-	\$70,000	

Jurisdiction	Project Name			Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Description	Location					Funding	Unfunded	
Palmdale	Avenue Q - 90th St E	Intersection Improvement	90th St E	Intersection Improvement		\$156,000	\$-	\$156,000		
Palmdale	Avenue Q - Division St	New Signal	Division St	Intersection Improvement		\$492,000	\$-	\$492,000		
Palmdale	Avenue Q - Sierra Hwy	Signal Upgrade	Sierra Hwy	Intersection Improvement		\$130,000	\$-	\$130,000		
Palmdale	Avenue Q - Sierra Hwy/ 20th St E	Signal Synchronization	Sierra Hwy/ 20th St E	System Operations		\$475,200	\$-	\$475,200		
Palmdale	Avenue Q - Sierra Hwy/ 20th St E	Roadway Segment Improvement	Sierra Hwy/ 20th St E	Capacity		\$2,910,600	\$436,590	\$2,474,010		
Palmdale	Avenue Q - Trade Center Dr	New Signal	Trade Center Dr	Intersection Improvement		\$180,000	\$-	\$180,000		
Palmdale	Avenue Q-8 - Tierra Subida	New Signal	Tierra Subida	Intersection Improvement		\$160,000	\$-	\$160,000		
Palmdale	Avenue R - 10th St East	Signal Upgrade	10th St East	Intersection Improvement		\$380,000	\$-	\$380,000		
Palmdale	Avenue R - 11th St East	Signal Upgrade	11th St East	Intersection Improvement		\$180,000	\$-	\$180,000	(4)	
Palmdale	Avenue R - 15th St East	New Signal	15th St East	Intersection Improvement		\$394,000	\$-	\$394,000		
Palmdale	Avenue R - 20th St East	Signal Upgrade	20th St East	Intersection Improvement		\$70,000	\$-	\$70,000		
Palmdale	Avenue R - 30th St East	Signal Upgrade	30th St East	Intersection Improvement		\$226,000	\$-	\$226,000		
Palmdale	Avenue R - 35th St East	Signal Upgrade	35th St East	Intersection Improvement		\$336,000	\$-	\$336,000		
Palmdale	Avenue R - 40th St East	Signal Upgrade	40th St East	Intersection Improvement		\$312,000	\$-	\$312,000	(4)	
Palmdale	Avenue R - 45th St East	Signal Upgrade	45th St East	Intersection Improvement		\$350,000	\$-	\$350,000		
Palmdale	Avenue R - 47th St E/ 60th St E	Roadway Segment Improvement	47th St E/ 60th St E	Capacity		\$780,848	\$-	\$780,848		
Palmdale	Avenue R - 47th St East	Signal Upgrade	47th St East	Intersection Improvement		\$206,000	\$-	\$206,000		
Palmdale	Avenue R - 55th St East	New Signal	55th St East	Intersection Improvement		\$739,000	\$-	\$739,000		
Palmdale	Avenue R - 5th St East	Signal Upgrade	5th St East	Intersection Improvement		\$500,000	\$-	\$500,000		
Palmdale	Avenue R - 65th St East	Intersection Improvement	65th St East	Intersection Improvement		\$234,000	\$-	\$234,000	(4)	

Jurisdiction	Project Name			Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Description	Location					Funding	Unfunded	
Palmdale	Avenue R - Division St/ 6th St E	Roadway Segment Improvement	Division St/ 6th St E	Capacity	\$450,450	\$-	\$450,450			
Palmdale	Avenue R - Division St/ 5th St E	Signal Synchronization	Division St/ 5th St E	System Operations	\$158,400	\$-	\$158,400			
Palmdale	Avenue R - Sierra Hwy	Intersection Improvement	Sierra Hwy	Intersection Improvement	\$312,000	\$-	\$312,000			
Palmdale	Avenue R - Tierra Subida Ave/ Division St	Roadway Segment Improvement	Tierra Subida Ave/ Division St	Capacity	\$1,862,820	\$-	\$1,862,820			
Palmdale	Avenue R (Rayburn Avenue) - 25th St E/ 30th St E	Signal Synchronization	25th St E/ 30th St E	System Operations	\$158,400	\$-	\$158,400			
Palmdale	Avenue R (Rayburn Avenue) - 30th St E/ 40th St E	Signal Synchronization	30th St E/ 40th St E	System Operations	\$316,800	\$-	\$316,800			
Palmdale	Avenue R (Rayburn Avenue) - 40th St E/ 47th St E	Signal Synchronization	40th St E/ 47th St E	System Operations	\$538,560	\$-	\$538,560			
Palmdale	Avenue R (Rayburn Avenue) - 5th St E/ 25th St E	Signal Synchronization	5th St E/ 25th St E	System Operations	\$633,600	\$-	\$633,600			
Palmdale	Avenue R (Rayburn Avenue)- Division St	New Signal	Division St	Intersection Improvement	\$500,000	\$-	\$500,000			
Palmdale	Avenue R (Rayburn Ave)- Tierra Subida Ave/ Division St	Signal Interconnect	Tierra Subida Ave/ Division St	System Operations	\$253,440	\$-	\$253,440			
Palmdale	Avenue R-8 - 10th St East	New Signal	10th St East	Intersection Improvement	\$492,000	\$-	\$492,000			
Palmdale	Avenue R-8 - 20th St East	New Signal	20th St East	Intersection Improvement	\$500,000	\$-	\$500,000			
Palmdale	Avenue R-8 - 25th St East	New Signal	25th St East	Intersection Improvement	\$414,000	\$-	\$414,000			
Palmdale	Avenue R-8 - 30th St East	Signal Upgrade	30th St East	Intersection Improvement	\$156,000	\$-	\$156,000		(4)	
Palmdale	Avenue R-8 - 35th St East	New Signal	35th St East	Intersection Improvement	\$336,000	\$-	\$336,000			
Palmdale	Avenue R-8 - 40th St East	New Signal	40th St East	Intersection Improvement	\$336,000	\$-	\$336,000			
Palmdale	Avenue R-8 - 45th St East	New Signal	45th St East	Intersection Improvement	\$304,000	\$-	\$304,000		(4)	

Jurisdiction	Project Name		Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Project Name					Funding	Unfunded	
Palmdale	Avenue R-8 - 47th St East		Signal Upgrade	47th St East	Intersection Improvement	\$200,000	\$-	\$200,000	
Palmdale	Avenue R-8 - 55th St East		New Signal	55th St East	Intersection Improvement	\$311,000	\$-	\$311,000	
Palmdale	Avenue R-8 - 5th St East		New Signal	5th St East	Intersection Improvement	\$400,000	\$-	\$400,000	
Palmdale	Avenue R-8 - 60th St East		New Signal	60th St East	Intersection Improvement	\$336,000	\$-	\$336,000	
Palmdale	Avenue R-8 - 65th St East		New Signal	65th St East	Intersection Improvement	\$492,000	\$-	\$492,000	
Palmdale	Avenue S - 10th St East		Intersection Improvement	10th St East	Intersection Improvement	\$414,000	\$-	\$414,000	(4)
Palmdale	Avenue S - 26th St East		New Signal	26th St East	Intersection Improvement	\$304,800	\$-	\$304,800	
Palmdale	Avenue S - 30th St East		Signal Upgrade	30th St East	Intersection Improvement	\$70,000	\$-	\$70,000	
Palmdale	Avenue S - 35th St East		Signal Upgrade	Avenue S / 35th St East	Intersection Improvement	\$148,000	\$-	\$148,000	
Palmdale	Avenue S - 37th St East		Signal Upgrade	37th St East	Intersection Improvement	\$211,000	\$-	\$211,000	(4)
Palmdale	Avenue S - 40th St East		Intersection Improvement	40th St East	Intersection Improvement	\$312,000	\$234,000	\$78,000	(4)
Palmdale	Avenue S - 45th St East		Signal Upgrade	45th St East	Intersection Improvement	\$242,400	\$-	\$242,400	
Palmdale	Avenue S - 47th St East		Intersection Improvement	47th St East	Intersection Improvement	\$165,000	\$82,500	\$82,500	(4)
Palmdale	Avenue S - 55th St East		New Signal	55th St East	Intersection Improvement	\$160,000	\$-	\$160,000	
Palmdale	Avenue S - 5th St East		New Signal	5th St East	Intersection Improvement	\$341,200	\$77,200	\$264,000	
Palmdale	Avenue S - 60th St East		New Signal	60th St East	Intersection Improvement	\$492,000	\$234,000	\$258,000	
Palmdale	Avenue S - 65th St East		Intersection Improvement	65th St East	Intersection Improvement	\$414,000	\$175,500	\$238,500	
Palmdale	Avenue S - 67th St East		Signal Upgrade	67th St East	Intersection Improvement	\$492,000	\$-	\$492,000	
Palmdale	Avenue S - 70th St East		Intersection Improvement	70th St East	Intersection Improvement	\$234,000	\$-	\$234,000	
Palmdale	Avenue S - Bridge Rd/ Tierra Subida Rd		Roadway Segment Improvement	Bridge Rd/ Tierra Subida Rd	Capacity	\$4,245,120	\$3,183,840	\$7,428,960	

Jurisdiction	Project Name			Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Description	Location					Funding	Unfunded	
Palmdale	Avenue S - City Ranch Rd/ Ranch Center Dr	Roadway Segment Improvement	City Ranch Rd/ Ranch Center Dr	Capacity	\$3,842,800	\$-	\$3,842,800			
Palmdale	Avenue S - Elizabeth Lake Rd/ City Ranch Rd	Roadway Segment Improvement	Elizabeth Lake Rd/ City Ranch Rd	Capacity	\$6,917,000	\$-	\$6,917,000			
Palmdale	Avenue S - Park & Ride	Intersection Improvement	Park & Ride	Intersection Improvement	\$234,000	\$77,200	\$156,800			
Palmdale	Avenue S - Ranch Center Dr/ Bridge Rd	Roadway Segment Improvement	Ranch Center Dr/ Bridge Rd	Capacity	\$3,537,600	\$-	\$3,537,600			
Palmdale	Avenue S - SR-14 SB Ramps	Intersection Improvement	SR-14 SB Ramps	Intersection Improvement	\$187,200	\$123,600	\$63,600			
Palmdale	Avenue S - SR-14/ Sierra Hwy	Signal Synchronization	SR-14/ Sierra Hwy	System Operations	\$316,000	\$-	\$316,000			
Palmdale	Avenue S - Tierra Subida Ave/ SR-14	Signal Synchronization	Tierra Subida Ave/ SR-14	System Operations	\$158,000	\$-	\$158,000			
Palmdale	Avenue S - Tierra Subida Rd	New Signal	Tierra Subida Rd	Intersection Improvement	\$500,000	\$-	\$500,000			
Palmdale	Avenue S (Ritter Ranch Rd) - 10th St E/ 15th St E	Signal Upgrade	10th St E/ 15th St E	System Operations	\$158,400	\$-	\$158,400			
Palmdale	Avenue S (Ritter Ranch Rd) - 25th St E/ 35th St E	Signal synchronization	25th St E/ 35th St E	System Operations	\$316,800	\$-	\$316,800			
Palmdale	Avenue S (Ritter Ranch Rd) - 35th St E/ 40th St E	Signal Synchronization	35th St E/ 40th St E	System Operations	\$475,000	\$-	\$475,000			
Palmdale	Avenue S (Ritter Ranch Rd) - 40th St E/ 47th St E	Signal Synchronization	40th St E/ 47th St E	System Operations	\$221,760	\$-	\$221,760			
Palmdale	Avenue S (Ritter Ranch Rd) - 70th St E/ 90th St E	Roadway Segment Improvement	70th St E/ 90th St E	Capacity	\$5,123,712	\$-	\$5,123,712			
Palmdale	Avenue S (Ritter Ranch Rd) - Sierra Hwy/ 10th St E	Roadway Segment Improvement	Sierra Hwy/ 10th St E	Capacity	\$444,048	\$-	\$444,048			
Palmdale	Avenue S (Ritter Ranch Rd) - SR-14/ Sierra Hwy	Roadway Segment Improvement	SR-14/ Sierra Hwy	Capacity	\$316,800	\$-	\$316,800			
Palmdale	Avenue S (Ritter Ranch Rd) - Tierra Subida Ave/ SR-14	Roadway Segment Improvement	Tierra Subida Ave/ SR-14	Capacity	\$1,001,088	\$-	\$1,001,088			
Palmdale	Avenue S (Ritter Ranch Rd) - 15th St E/ 25th St E	System synchronization	15th St E/ 25th St E	System Operations	\$316,800	\$-	\$316,800			
Palmdale	Avenue S-8 - 40th St East	New Signal	40th St East	Intersection Improvement	\$394,000	\$-	\$394,000			
Palmdale	Avenue S-8 - 45th St East	New Signal	45th St East	Intersection Improvement	\$394,000	\$-	\$394,000		(4)	
Palmdale	Avenue S-8 - 62nd St East	Intersection Improvement	62nd St East	Intersection Improvement	\$234,000	\$-	\$234,000		(4)	

Jurisdiction	Project Name			Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Description	Location					Funding	Unfunded	
Palmdale	Avenue S-8 - 67th St East	Intersection Improvement	67th St East	Intersection Improvement		Improvement	\$156,000	\$-	\$156,000	(4)
Palmdale	Avenue S-8 - Fort Tejon Rd	Intersection Improvement	Fort Tejon Rd	Intersection Improvement		Improvement	\$247,000	\$162,800	\$84,200	
Palmdale	Avenue T - 57th St East	Intersection Improvement	57th St East	Intersection Improvement		Improvement	\$234,000	\$-	\$234,000	(4)
Palmdale	Avenue T - 62nd St East	Signal Upgrade	62nd St East	Signal Upgrade		Improvement	\$492,000	\$-	\$492,000	
Palmdale	Avenue T - 82nd St East	Intersection Improvement	82nd St East	Intersection Improvement		Improvement	\$234,000	\$-	\$234,000	
Palmdale	Avenue T - Pearl Blossom Hwy/ 80th St E	Roadway Segment Improvement	Pearl Blossom Hwy/ 80th St E	Roadway Segment Improvement		Capacity	\$3,965,300	\$-	\$3,965,300	
Palmdale	Avenue T-8 - Cheeseboro Rd	Intersection Improvement	Cheeseboro Rd	Intersection Improvement		Improvement	\$234,000	\$175,500	\$58,500	(4)
Palmdale	Barrel Spring Rd - Sierra Hwy	Signal Upgrade	Sierra Hwy	Signal Upgrade		Improvement	\$107,200	\$-	\$107,200	
Palmdale	Barrel Springs Rd - 40th St East	New Signal	40th St East	New Signal		Improvement	\$234,000	\$154,400	\$79,600	
Palmdale	Barrel Springs Rd - 47th St East	New Signal	47th St East	New Signal		Improvement	\$492,000	\$-	\$492,000	
Palmdale	Barrel Springs Rd - Old Harold Rd	New Signal	Old Harold Rd	New Signal		Improvement	\$160,000	\$-	\$160,000	
Palmdale	Bridge Road - City Ranch Rd/ Ritter Ranch Rd	Roadway Segment Improvement	City Ranch Rd/ Ritter Ranch Rd	Roadway Segment Improvement		Capacity	\$2,561,900	\$-	\$2,561,900	
Palmdale	Bridge Road - Elizabeth Lake Rd/ City Ranch Road	Roadway Segment Improvement	Elizabeth Lake Rd/ City Ranch Road	Roadway Segment Improvement		Capacity	\$3,537,600	\$-	\$3,537,600	
Palmdale	City Ranch Road - Bridge Rd/ 25th St W	Roadway Segment Improvement	Bridge Rd/ 25th St W	Roadway Segment Improvement		Capacity	\$5,487,200	\$-	\$5,487,200	
Palmdale	City Ranch Road - Ranch Center Dr / Bridge Rd	Roadway Segment Improvement	City Ranch Road	Roadway Segment Improvement		Capacity	\$3,292,300	\$-	\$3,292,300	
Palmdale	City ranch Road - Ritter Ranch Road/ Ranch Center Dr	Roadway Segment Improvement	Ritter Ranch Road/ Ranch Center Dr	Roadway Segment Improvement		Capacity	\$2,414,400	\$-	\$2,414,400	
Palmdale	Division St - Ave O/ Ave Q	Roadway Segment Improvement	Ave O/ Ave Q	Roadway Segment Improvement		Capacity	\$5,174,400	\$-	\$5,174,400	
Palmdale	Division St - Ave O/ Ave Q	Signal Synchronization	Ave O/ Ave Q	Signal Synchronization		System Operations	\$633,600	\$-	\$633,600	
Palmdale	Division St - Ave Q/ Ave R	Signal Synchronization	Ave Q/ Ave R	Signal Synchronization		System Operations	\$316,000	\$-	\$316,000	
Palmdale	Division St - Ave R/ Ave R-8	Roadway Segment Improvement	Ave R/ Ave R-8	Roadway Segment Improvement		Capacity	\$793,100	\$-	\$793,100	

Jurisdiction	Project Name		Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Location					Funding	Unfunded	
Palmdale	Elizabeth Lake Rd - 10th St to Dianron Rd	Elizabeth Lake Rd	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Elizabeth Lake Rd	Bike-Ped-Transit	\$33,247	\$-	\$33,247	(1)
Palmdale	Elizabeth Lake Rd - 10th St West	10th St West	Intersection Improvements	10th St West	Intersection Improvement	\$165,000	\$-	\$165,000	
Palmdale	Elizabeth Lake Rd - 15th St West	15th St West	Signal Upgrade	15th St West	Intersection Improvement	\$40,000	\$-	\$40,000	
Palmdale	Elizabeth Lake Rd - 20th St West	20th St West	New Signal	20th St West	Intersection Improvement	\$242,500	\$-	\$242,500	
Palmdale	Elizabeth Lake Rd - Cherry Tree Ln/ 25th W	Cherry Tree Ln/ 25th W	Roadway Segment Improvement	Cherry Tree Ln/ 25th W	Capacity	\$4,967,424	\$1,490,227	\$3,477,197	
Palmdale	Elizabeth Lake Rd - Foxholm Dr. / 10th St West	Foxholm Dr. / 10th St West	Signal Synchronization	Foxholm Dr. / 10th St West	System Operations	\$285,000	\$-	\$285,000	
Palmdale	Elizabeth Lake Rd - Foxholm Dr./ 10th St W	Foxholm Dr./ 10th St W	Roadway Segment Improvement	Foxholm Dr./ 10th St W	Capacity	\$1,351,500	\$-	\$1,351,500	
Palmdale	Elizabeth Lake Rd - Fut St (W/o Cherry Tree Ln)	Fut St (W/o Cherry Tree Ln)	New Signal	Fut St (W/o Cherry Tree Ln)	Intersection Improvement	\$40,000	\$-	\$40,000	
Palmdale	Elizabeth Lake Rd - Godde Hill Rd	Godde Hill Rd	New Signal	Godde Hill Rd	Intersection Improvement	\$357,000	\$234,000	\$123,000	
Palmdale	Elizabeth Lake Rd - Godde Hill Rd/ Cherry Tree Ln	Godde Hill Rd/ Cherry Tree Ln	Roadway Segment Improvement	Godde Hill Rd/ Cherry Tree Ln	Capacity	\$5,174,400	\$3,622,080	\$1,552,320	
Palmdale	Elizabeth Lake Rd - Ranch Center Dr	Ranch Center Dr	Intersection Improvement	Ranch Center Dr	Intersection Improvement	\$234,000	\$-	\$234,000	
Palmdale	Elizabeth Lake Rd - Ranch Center Dr	Ranch Center Dr	New Signal	Ranch Center Dr	Intersection Improvement	\$160,000	\$-	\$160,000	
Palmdale	Elizabeth Lake Rd - Ranch Center Dr/ 25th W	Ranch Center Dr/ 25th W	Signal Synchronization	Ranch Center Dr/ 25th W	System Operations	\$633,600	\$-	\$633,600	
Palmdale	Elizabeth Lake Road - Bridge Road	Bridge Road	Signal Upgrade	Bridge Road	Intersection Improvement	\$394,000	\$-	\$394,000	(4)
Palmdale	Fort Tejon - Essex Dr	Essex Dr	Signal Upgrade	Essex Dr	Intersection Improvement	\$54,400	\$-	\$54,400	
Palmdale	Fort Tejon Rd - 47th St E/Pearlblossom Hwy	47th St E/Pearlblossom Hwy	Roadway Segment Improvement	47th St E/Pearlblossom Hwy	Capacity	\$3,974,100	\$-	\$3,974,100	
Palmdale	Fort Tejon Rd - 47th St East	47th St East	Intersection Improvement	47th St East	Intersection Improvement	\$62,400	\$41,200	\$21,200	(4)
Palmdale	Fort Tejon Rd - 62nd St East	62nd St East	Intersection Improvement	62nd St East	Intersection Improvement	\$330,000	\$82,500	\$247,500	(4)
Palmdale	Fort Tejon Rd - Pearlblossom Hwy/80th St E	Pearlblossom Hwy/80th St E	Roadway Segment Improvement	Pearlblossom Hwy/80th St E	Capacity	\$4,664,800	\$-	\$4,664,800	

Jurisdiction	Project Name			Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Description	Location					Funding	Unfunded	
Palmdale	Godde Hill Rd - Ave S/4200 S of Ave S	Roadway Segment Improvement	Ave S/4200 S of Ave S	Capacity	\$1,094,400	\$-	\$1,094,400			
Palmdale	Old Harold Road - 25th St East	New Signal	25th St East	Intersection Improvement	\$160,000	\$-	\$160,000			
Palmdale	Palmdale Blvd - 10th St East	Signal Upgrade	10th St East	Intersection Improvement	\$347,000	\$156,000	\$191,000			
Palmdale	Palmdale Blvd - 10th St W/ SR-14	Signal Synchronization	10th St W/ SR-14	System Operations	\$253,440	\$-	\$253,440			
Palmdale	Palmdale Blvd - 15th St East	New Signal	15th St East	Intersection Improvement	\$402,000	\$156,000	\$246,000			
Palmdale	Palmdale Blvd - 17th St East	Intersection Improvement	17th St East	Intersection Improvement	\$249,600	\$124,800	\$124,800		(4)	
Palmdale	Palmdale Blvd - 20th St East	Signal Upgrade	20th St East	Intersection Improvement	\$347,000	\$156,000	\$191,000			
Palmdale	Palmdale Blvd - 22nd St East	Intersection Improvement	22nd St East	Intersection Improvement	\$312,000	\$156,000	\$156,000		(4)	
Palmdale	Palmdale Blvd - 25th St East	Intersection Improvement	25th St East	Intersection Improvement	\$312,000	\$156,000	\$156,000		(4)	
Palmdale	Palmdale Blvd - 2nd St East	Signal Upgrade	2nd St East	Intersection Improvement	\$267,200	\$93,600	\$173,600			
Palmdale	Palmdale Blvd - 30th St East	Signal Upgrade	30th St East	Intersection Improvement	\$113,000	\$39,000	\$74,000			
Palmdale	Palmdale Blvd - 35th St East	Signal Upgrade	35th St East	Intersection Improvement	\$347,000	\$156,000	\$191,000			
Palmdale	Palmdale Blvd - 3rd St East	Intersection Improvement	3rd St East	Intersection Improvement	\$249,600	\$124,800	\$124,800			
Palmdale	Palmdale Blvd - 40th St E/ 47th St E	Signal Interconnect	40th St E/ 47th St E	System Operations	\$221,760	\$-	\$221,760			
Palmdale	Palmdale Blvd - 40th St East	Signal Upgrade	40th St East	Intersection Improvement	\$347,000	\$-	\$347,000			
Palmdale	Palmdale Blvd - 45th St East	New Signal	45th St East	Intersection Improvement	\$214,800	\$62,400	\$152,400			
Palmdale	Palmdale Blvd - 47th St E/ 60th St E	Roadway Segment Improvement	47th St E/ 60th St E	Capacity	\$2,453,365	\$-	\$2,453,365			
Palmdale	Palmdale Blvd - 47th St E/ 75th St E	Signal Interconnect	47th st East - 75th St E	System Operations	\$221,760	\$-	\$221,760		(4)	
Palmdale	Palmdale Blvd - 47th St E/ 75th St E	Signal Upgrade	47th St E/ 5th St E	System Operations	\$443,520	\$-	\$443,520		(4)	
Palmdale	Palmdale Blvd - 51st St East	New Signal	51st St East	Intersection Improvement	\$347,200	\$187,200	\$160,000			

Jurisdiction	Project Name		Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Project Name					Funding	Unfunded	
Palmdale	Palmdale Blvd - 55th St East		New Signal	55th St East	Intersection Improvement	\$394,000	\$234,000	\$160,000	
Palmdale	Palmdale Blvd - 5th St East		Signal Upgrade	5th St East	Intersection Improvement	\$347,000	\$156,000	\$191,000	
Palmdale	Palmdale Blvd - 5th St West		Signal Upgrade	5th St West	Intersection Improvement	\$235,000	\$-	\$235,000	
Palmdale	Palmdale Blvd - 60th St East		New Signal	60th St East	Intersection Improvement	\$354,000	\$131,625	\$222,375	
Palmdale	Palmdale Blvd - 60th St. E/ 75th St E		Roadway Segment Improvement	60th St. E/ 75th St E	Capacity	\$3,492,720	\$1,746,360	\$1,746,360	
Palmdale	Palmdale Blvd - 65th St East		New Signal	65th St East	Intersection Improvement	\$314,000	\$131,225	\$182,775	
Palmdale	Palmdale Blvd - 6th St East		Signal Upgrade	6th St East	Intersection Improvement	\$284,600	\$124,800	\$159,800	
Palmdale	Palmdale Blvd - 9th St East		Signal Upgrade	9th St East	Intersection Improvement	\$284,600	\$124,800	\$159,800	
Palmdale	Palmdale Blvd - Division St		Signal Upgrade	Division St	Intersection Improvement	\$113,000	\$39,000	\$74,000	
Palmdale	Palmdale Blvd - Sierra Hwy		Intersection Improvement	Sierra Hwy	Intersection Improvement	\$312,000	\$156,000	\$156,000	(4)
Palmdale	Palmdale Blvd - SR-14/Division St		Roadway Segment Improvement	SR-14/Division St	Capacity	\$200,218	\$-	\$200,218	
Palmdale	Palmdale Blvd - Trade Center Dr		Signal Upgrade	Trade Center Dr	Intersection Improvement	\$304,800	\$-	\$304,800	
Palmdale	Pearlblossom Hwy - 25th St E/ 45th St E		Roadway Segment Improvement	25th St E/ 45th St E	Capacity	\$7,176,600	\$-	\$7,176,600	
Palmdale	Pearlblossom Hwy - 25th St E/ 45th St E		Signal Synchronization	25th St E/ 45th St E	System Operations	\$633,600	\$-	\$633,600	
Palmdale	Pearlblossom Hwy - 25th St East/Barrel Springs Rd		Intersection Improvement	25th St East	Intersection Improvement	\$330,000	\$-	\$330,000	
Palmdale	Pearlblossom Hwy - 30th St East		Signal Upgrade	30th St East	Intersection Improvement	\$52,500	\$-	\$52,500	
Palmdale	Pearlblossom Hwy - 40th St East		Signal Upgrade	40th St East	Intersection Improvement	\$400,000	\$-	\$400,000	
Palmdale	Pearlblossom Hwy - 45th St E/ 47th St E		Roadway Segment Improvement	45th St E/ 47th St E	Capacity	\$322,100	\$-	\$322,100	
Palmdale	Pearlblossom Hwy - 45th St E/ 47th St E		Signal Synchronization	45th St E/ 47th St E	System Operations	\$31,680	\$-	\$31,680	
Palmdale	Pearlblossom Hwy - 47th St E/ Ave T		Roadway Segment Improvement	47th St E/ Ave T	Capacity	\$1,610,664	\$-	\$1,610,664	

Jurisdiction	Project Name		Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Location					Funding	Unfunded	
Palmdale	Pearlblossom Hwy - 47th St East	47th St East	Signal Upgrade		Intersection Improvement	\$420,000	\$123,000	\$297,000	
Palmdale	Pearlblossom Hwy - Fort Tejon	Fort Tejon	Intersection Improvement		Intersection Improvement	\$348,000	\$174,000	\$174,000	(4)
Palmdale	Pearlblossom Hwy - Sierra Hwy/ 25th St E	Sierra Hwy/ 25th St E	Roadway Segment Improvement		Capacity	\$3,104,640	\$-	\$3,104,640	
Palmdale	Ranch Center Drive - Elizabeth Lake Rd/ City Ranch Rd	Elizabeth Lake Rd/ City Ranch Rd	Roadway Segment Improvement		Capacity	\$2,194,900	\$-	\$2,194,900	
Palmdale	Ranch Center Drive -City Ranch Rd/ Ritter Ranch Rd.	City Ranch Rd/ Ritter Ranch Rd.	Roadway Segment Improvement		Capacity	\$2,194,900	\$-	\$2,194,900	
Palmdale	Rancho Vista Bl - Peonza Lane	Peonza Lane	Signal Upgrade		Intersection Improvement	\$114,900	\$-	\$114,900	
Palmdale	Rancho Vista Bl - Town Center Dr	Town Center Dr	New Signal		Intersection Improvement	\$394,000	\$-	\$394,000	
Palmdale	Rancho Vista Blvd - 50th St W/ Peonza	50th St W/ Peonza	Signal Synchronization		System Operations	\$158,400	\$-	\$158,400	
Palmdale	Rancho Vista Blvd - 50th St W/ Peonza	50th St W/ Peonza	Roadway Segment Improvement		Capacity	\$684,000	\$-	\$684,000	
Palmdale	Rancho Vista Blvd - Cricket Lane	Cricket Lane	New Signal		Intersection Improvement	\$160,000	\$-	\$160,000	
Palmdale	Rancho Vista Blvd - Peonza/ 30th St W	Peonza/ 30th St W	Signal Synchronization		System Operations	\$792,000	\$-	\$792,000	
Palmdale	Rancho Vista Blvd - Peonza/ 30th St W	Peonza/ 30th St W	Roadway Segment Improvement		Capacity	\$250,270	\$-	\$250,270	
Palmdale	Rancho Vista Blvd - Rancho Vista Center	Rancho Vista Center	New Signal		Intersection Improvement	\$160,000	\$-	\$160,000	
Palmdale	Rancho Vosta Bl - Avenida Vista Verde	Avenida Vista Verde	Signal Upgrade		Intersection Improvement	\$195,000	\$-	\$195,000	
Palmdale	S.R. 138 - Ave T/80th St E	Ave T/80th St E	Roadway Segment Improvement		Capacity	\$7,086,922	\$-	\$7,086,922	
Palmdale	Sierra Highway - Ave M/ Ave P	Ave M/ Ave P	Roadway Segment Improvement		Capacity	\$4,104,100	\$-	\$4,104,100	
Palmdale	Sierra Highway - Ave M/ Ave P	Ave M/ Ave P	Signal Signal Synchronization		System Operations	\$950,400	\$-	\$950,400	
Palmdale	Tierra Subida Ave - Ave S/ Barrel Springs Rd	Tierra Subida Ave	Roadway Segment Improvement		Capacity	\$1,895,309	\$189,309	\$1,706,000	
Palmdale	Tierra Subida Avenue - 5th St West	5th St West	New Signal		Intersection Improvement	\$394,000	\$-	\$394,000	
Palmdale	Tierra Subida Avenue - Ave R/ Ave S	Ave R/ Ave S	Roadway Segment Improvement		Capacity	\$2,132,200	\$-	\$2,132,200	

Jurisdiction	Project Name		Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name						Funding	Unfunded	
Palmdale	Tierra Subida Avenue - Ave R/ Ave S		Signal Synchronization	Ave R/ Ave S	System Operations	\$285,120	\$-	\$285,120	
Palmdale	Tierra Subida Avenue - Palmdale Blvd/ Ave R		Signal Synchronization	Palmdale Blvd/ Ave R	System Operations	\$380,160	\$-	\$380,160	
Unincorporated	105th - Palmdale Blvd to Ave S		Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	105th	Bike-Pedestrian	\$60,517	\$-	\$60,517	
Unincorporated	10th St - Elizabeth Lake Rd to Auto Center Dr		Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	10th St	Bike-Pedestrian	\$11,929	\$-	\$11,929	
Unincorporated	170th St E - Ave M to Palmdale Blvd		Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	170th St E	Bike-Pedestrian	\$36,000	\$-	\$36,000	
Unincorporated	50th St W - Ave M-2 to Ave N		Bike and pedestrian improvement projects paralleling an existing roadway facility.	50th St W	Bike-Pedestrian	\$13,500	\$-	\$13,500	(1)
Unincorporated	55th St W - Ave L to Ave M-8		Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	55th St W	Bike-Pedestrian	\$60,736	\$-	\$60,736	
Unincorporated	90th St - Ave Q to Pearl Blossom		Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	90th & 87th	Bike-Pedestrian	\$1,840,000	\$-	\$1,840,000	
Unincorporated	96th St E - Ave R8 to Ave U		Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	96th St E	Bike-Pedestrian	\$1,011,924	\$-	\$1,011,924	

Jurisdiction		Project Name		Description		Location		Project Type		Total Cost		Other Funding		Unfunded		Notes	
Unincorporated	Ave M-8 - 60th St to 45th St	Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Ave M-8	Bike-Pedestrian	\$60,000	\$-	\$60,000										
Unincorporated	Ave N - 50th St to SR-14	Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Ave N	Bike-Pedestrian	\$1,440,000	\$-	\$1,440,000										
Unincorporated	Ave N-8 - Bolz Ranch Rd to 30th St	Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Ave N-8	Bike-Pedestrian	\$22,500	\$-	\$22,500										
Unincorporated	Ave O - 150th St E to 180th St E	Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Ave O	Bike-Pedestrian	\$1,000,000	\$-	\$1,000,000										
Unincorporated	Ave P - 160th St to 170th St	Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Ave P	Bike-Pedestrian	\$625,572	\$-	\$625,572										
Unincorporated	Ave R - 90th to 110th St	Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Ave R	Bike-Pedestrian	\$811,960	\$-	\$811,960										
Unincorporated	Ave S - 90th St to 116th St E	Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Ave S	Bike-Pedestrian	\$1,277,691	\$-	\$1,277,691										
Unincorporated	Ave T - 80th St to 126th St	Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Ave T	Bike-Pedestrian	\$188,000	\$-	\$188,000										

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding		Notes
						Funding	Unfunded	
Unincorporated	Ave U - 87th St to 96th St	Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Ave U	Bike-Pedestrian	\$400,000	\$-	\$400,000	
Unincorporated	E Ave P - 15th St to 50th St	Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	E Ave P	Bike-Pedestrian	\$1,420,674	\$-	\$1,420,674	
Unincorporated	Elizabeth Lake Rd - 10th St to Dianron Rd	Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Elizabeth Lake Rd	Bike-Pedestrian	\$33,247	\$-	\$33,247	
Unincorporated	Godde Hill - Ave M-8 to Elizabeth Lake Rd	Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Godde Hill	Bike-Pedestrian	\$560,000	\$-	\$560,000	
Unincorporated	Lake Hughes Rd - Sloan Canyon Rd to Northern limit	Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Lake Hughes Rd	Bike-Pedestrian	\$9,200,000	\$-	\$9,200,000	
Unincorporated	Lancaster Blvd - 40th St to 55th St	Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Lancaster Blvd	Bike-Pedestrian	\$61,069	\$-	\$61,069	
Unincorporated	Lancaster/ Fairmont / 120th / Ave I - 160th to 70th	Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Lancaster Ave	Bike-Pedestrian	\$3,920,000	\$-	\$3,920,000	
Unincorporated	Mackennas Gold Ave - 170th St to Ave P	Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Mackennas Gold Ave	Bike-Pedestrian	\$14,141	\$-	\$14,141	

Jurisdiction	Project Name		Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name						Funding	Unfunded	
Unincorporated	Palmdale Blvd - 60th St to 170th St		Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.		Bike-Pedestrian	\$2,660,000	\$-	\$2,660,000	
Unincorporated	Parallel SR-14 - Ave M to CA Aqueduct		Bike and pedestrian improvement projects paralleling an existing roadway facility.	Parallel SR-14	Bike-Pedestrian	\$7,600,000	\$-	\$7,600,000	(1)
Unincorporated	Pearlblossom Hwy - 62nd St E 87th St E		Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Pearlblossom Hwy	Bike-Pedestrian	\$1,200,000	\$-	\$1,200,000	
Unincorporated	Sierra Hwy - 915' s/o Ave S to Pearlblossom Hwy		Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Sierra Hwy	Bike-Pedestrian	\$1,085,542	\$-	\$1,085,542	
Unincorporated	Sierra Hwy - Ryan Lane to Pearlblossom Hwy		Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	Sierra Hwy	Bike-Pedestrian	\$9,720,000	\$-	\$9,720,000	
Unincorporated	W Ave L-8 - 60th St to 50th St		Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	W Ave L-8	Bike-Pedestrian	\$280,000	\$-	\$280,000	
Unincorporated	W Ave O - 30th St W to 10th St W (Sierra Hwy)		Bike and pedestrian improvement projects paralleling an existing roadway facility. Project connects with existing transit.	W Ave O	Bike-Pedestrian	\$800,000	\$-	\$800,000	
Unincorporated	30th St W - M to Ave M to Ave O-12		Widening Project	30th St W	Capacity	\$8,900,000	\$-	\$8,900,000	
Unincorporated	40th St W - Ave K-4 to Ave K-12		Adding Additional Capacity	40th St W	Capacity	\$1,700,000	\$-	\$1,700,000	
Unincorporated	40th St W - Ave L to Ave M		Roadway Segment Improvement	40th St W	Capacity	\$3,300,000	\$-	\$3,300,000	
Unincorporated	50th St W - Ave K to Ave N		Roadway Segment Improvement	50th St W	Capacity	\$9,700,000	\$-	\$9,700,000	

Jurisdiction	Project Name		Description	Location	Project Type	Total Cost	Other Funding		Notes
	Project Name	Project Name					Funding	Unfunded	
Unincorporated	60th St W - Ave L-4 to Ave L-8		Roadway Segment Improvement	60th St W	Capacity	\$900,000	\$-	\$900,000	
Unincorporated	60th St W - Ave M to Ave M-8		Roadway Segment Improvement	60th St W	Capacity	\$1,700,000	\$-	\$1,700,000	
Unincorporated	Ave K - 40th St W to 52nd St W		Roadway Segment Improvement	Ave K	Capacity	\$5,959,190	\$2,979,595	\$2,979,595	
Unincorporated	Ave L - 40th St W to 55th St W		Roadway Segment Improvement	Ave L	Capacity	\$9,779,451	\$4,253,942	\$5,525,509	
Unincorporated	Ave M - 30th St W to Antelope Valley Freeway		Roadway Segment Improvement	Ave M	Capacity	\$6,500,000	\$-	\$6,500,000	
Unincorporated	Ave N - 40th St W to SR-14		Roadway Segment Improvement	Ave N	Capacity	\$9,000,000	\$-	\$9,000,000	
Unincorporated	Ave O - 30th St W to 10th St W		Roadway Segment Improvement	Ave O	Capacity	\$6,000,000	\$-	\$6,000,000	
Unincorporated	Elizabeth Lake Rd - Foxholm Dr to Ocotillo Dr		Roadway Segment Improvement	Elizabeth Lake Rd	Capacity	\$700,000	\$-	\$700,000	
Unincorporated	Crown Valley Rd & Sierra Hwy		Intersection Improvements	Crown Valley Rd	Intersection Improvement	\$300,000	\$23,890	\$276,110	
Unincorporated	Crown Valley Rd & SR-14 NB Ramps		New Signal	Crown Valley Rd	Intersection Improvement	\$300,000	\$27,645	\$272,355	
Unincorporated	Crown Valley Rd & SR-14 SB Ramps		New Signal	Crown Valley Rd	Intersection Improvement	\$300,000	\$26,715	\$273,285	

TOTAL \$444,253,000 \$56,983,000 \$387,270,000

Notes:

- (1) Describe link to transit to justify nexus.
- (2) Describe link to transit to justify nexus and verify that roadway capacity reduction will not increase congestion.
- (3) Limit unfunded costs to project components that improve link to transit.
- (4) Project requires additional analysis to determine VHD impacts.
- (5) Project currently shows all project costs as funded. Revisit funding levels.

**San Gabriel Valley
Congestion Mitigation Fee
Pilot Nexus Study Report**

Prepared for

**San Gabriel Valley
Council of Governments**

Revised September 2012



**San Gabriel Valley
Council of Governments**



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San Gabriel Valley Congestion Mitigation Fee Pilot Nexus Study Report

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EXECUTIVE SUMMARY

The Pilot Nexus Study prepared for the San Gabriel Valley Council of Governments examines the feasibility of implementing a Congestion Mitigation Fee Program to meet the Congestion Management Program (CMP) Countywide Deficiency Plan requirements. The proposed Congestion Mitigation Fee Program would charge a one-time fee on new development across all land uses to fund transportation projects that would reduce congestion generated by new development.

For the last three years the San Gabriel Valley Council of Governments (SGVCOG) and its member cities have worked with MTA to develop the Pilot Nexus Study to ensure their issues and concerns were fully vetted prior to any action by the MTA Board. The Pilot Nexus Study engaged 31 cities and the County of Los Angeles in the San Gabriel Valley. MTA requested each jurisdiction to review and modify, if necessary, their growth forecasts and regional arterial network, as well as select transportation improvements that would meet the nexus test. This test requires that transportation projects funded with a congestion mitigation fee mitigate the impacts caused by new development and that the cost born by each land use type bear a reasonable relationship to its impact on future congestion.

This Pilot Nexus Study concludes that the transportation projects analyzed in this study meet the requirements of the Mitigation Fee Act (AB1600) and the CMP Countywide Deficiency Plan. It also shows how a sub-regional fee program might work if it were to be implemented. Under the Congestion Mitigation Fee Program, each jurisdiction would:

- Collect and retain all of the revenue from the fee;
- Select and construct local transportation projects with regional benefits;
- Leverage their other funding sources to implement their list of transportation projects;
- Integrate their existing fee programs with the Congestion Mitigation Fee Program.

In May 2011, a preliminary findings report was distributed to all the jurisdictions in the San Gabriel Valley for their review and comment. This revised Pilot Nexus Study updates the first draft based on comments received and incorporates transportation project descriptions provided by jurisdictions. This Pilot Nexus Study demonstrates the feasibility of the program.

Growth in the San Gabriel Valley over the next 20 years is expected to result in a four-fold increase in vehicle-hours-of-delay (VHD) or congestion on a roadway network that is already operating near or at capacity. To address this projected impact, 295 projects with a cost of \$724 million were identified, of which 244 projects could be evaluated quantitatively. The analysis yielded the following results:

- **Congestion reduction benefit:** 16% reduction in congestion (vehicle-hours-of-delay) on arterials would result from implementing the transportation projects that could be evaluated quantitatively, meeting the requirements of the Mitigation Fee Act and CMP.
- **Maximum justified congestion mitigation fee:** The maximum justified fee is \$1,048 per trip based on the total cost of projects divided by total new trips over the next 20 years.
- **Economic benefits:** Building the projects identified could generate a countywide net economic benefit of 9,900 jobs, \$2.2 billion in economic output, and more than \$700 million in disposable income.¹

¹ Economic Impact Analysis of the San Gabriel Valley Congestion Mitigation Fee Pilot Nexus Study – September 2012 iv

Based on the results of the Pilot Nexus Study each jurisdiction has its own individual fee-per-trip amount that would be needed to fund the unfunded share of its list of transportation projects. Since 26 out of 30 jurisdictions have fee-per-trip amounts above \$200, then the \$200 fee-per-trip amount could be used as the minimum fee-per-trip amount for the San Gabriel Valley sub-region.

If the MTA Board authorizes staff to work with cities on implementing the congestion mitigation fee program, then it is possible that jurisdictions would modify their list of transportation projects. If so, then the congestion reduction and economic benefit from such a change may be different than the results identified in this Pilot Nexus Study and would be revised accordingly in a report at that time.

Next Steps

Below are the next steps to complete the Congestion Mitigation Fee work plan:

- Present pilot nexus study and economic analysis findings to jurisdictions, sub-regional agencies, and building industry stakeholders.
- Seek MTA Board direction in early 2013 to:
 - Adopt the Congestion Mitigation Fee Program as the new CMP Deficiency Plan;
 - Establish minimum fee amount for CMP compliance
- Work one-on-one with jurisdictions, sub-regional agencies, and the building industry to develop and implement a Congestion Mitigation Fee Program over 24 months.

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San Gabriel Valley Congestion Mitigation Fee Pilot Nexus Study Report

OVERVIEW

In 2003, the MTA Board authorized staff to examine the feasibility of implementing a Congestion Mitigation Fee Program to replace the existing Deficiency Plan requirements of the Congestion Management Program (CMP). The Congestion Mitigation Fee Program is intended to mitigate the impacts of new development, providing a new resource to jurisdictions while meeting local responsibilities under the state mandated Congestion Management program (CMP).

To explore the viability of a congestion mitigation fee across all land uses in each jurisdiction in the county, eight sub-regional pilot nexus studies were conducted across the county. The San Gabriel Valley Council of Governments (SGVCOG) and its member jurisdictions were the first sub-region to initiate this effort and conducted this Pilot Nexus Study with MTA to evaluate the transportation projects, policies and technical requirements such a program would require. The results of this effort in the San Gabriel Valley sub-region are contained in this report.

CONGESTION MANAGEMENT PROGRAM BACKGROUND

As the Congestion Management Agency for the County of Los Angeles, MTA established the CMP to meet the requirements of Section 65089 of the California Government Code, which mandates that jurisdictions link their transportation, land use, and air quality decisions to address congestion on the regional transportation network. Jurisdictions are required to conform to the CMP to continue receiving their portion of state gas tax money allocated by Section 2105 of the California Streets and Highways Code and to preserve their eligibility for state and federal funding for transportation projects funded through MTA's Call-for-Projects.

Since the County experiences a deficient regional transportation system, a Countywide Deficiency Plan has been in place linking deficiencies on the transportation system to new development activity. A uniform point system known as the "Debit/Credit" approach was developed for jurisdictions to demonstrate compliance with the CMP.

A criticism of the "Debit/Credit" methodology was that it generated no revenue but required jurisdictions to spend resources on an administrative exercise that provided no congestion relief. Furthermore, a dramatic decline in state and federal transportation funding coupled with significant growth in new development was making it difficult for some jurisdictions to comply with the CMP.

The proposed Congestion Mitigation Fee Program moves away from the administrative "Debit/Credit" approach to a mitigation fee funded approach. This approach would generate revenue from new development to implement transportation improvements designed to mitigate the impacts of growth on the regional transportation network throughout the County of Los Angeles.

In adopting the Short Range Transportation Plan in 2003, the MTA Board authorized staff to explore the feasibility of implementing a Congestion Mitigation Fee to meet CMP requirements. Since that time, MTA has worked with sub-regional agencies, jurisdictions, and building industry representatives in developing a congestion mitigation fee program in concept.

To provide a significant measure of assurance that MTA is being responsive to local jurisdiction needs and concerns, the MTA Board adopted a set of Guiding Principles on April 25, 2007. The Guiding Principles adopted by the MTA Board may be summarized as follows:

- Fees should be structured to mitigate congestion from new development without discouraging economic development.
- Fees are to augment other regional funds, not replace or redirect them.
- Local jurisdictions identify local projects with regional benefit consistent with agreed upon guidelines.
- Local jurisdictions adopt, collect, and administer congestion mitigation fees.
- Local jurisdictions build projects (or local jurisdictions may choose to participate in multi-jurisdictional or regional projects, if mutually desired).
- Local jurisdictions with existing fee programs receive dollar-for-dollar credit for local projects with a regional benefit consistent with agreed upon guidelines.
- Fees should be structured to support transit-oriented development, and to exempt mixed use and high-density residential development within ¼ mile of passenger rail stations consistent with CMP statute.
- The program will be developed in a manner to encourage certainty and predictability among jurisdictions, business, environmental and development communities.

The eight Congestion Mitigation Fee Pilot Nexus Studies honor the Guiding Principles, and conform to the technical and statutory requirements of the Mitigation Fee Act and the Congestion Management Program. During the outreach process, jurisdictions expressed strong support for MTA Board commitment to abide by the Guiding Principles.

CONGESTION MITIGATION FEE PROGRAM OVERVIEW

The proposed Congestion Mitigation Fee Program was designed to ensure maximum local control over the program's development and implementation. Local jurisdictions would collect and retain all fee revenue. Each jurisdiction would select its local transportation projects that mitigate the impacts of their new development on the regional transportation system, collect the fee revenue, and build the transportation projects. Jurisdictions have been encouraged to develop a sub-regional or multi-city approach to this program and to coordinate with regional and state transportation providers. The congestion mitigation fee revenue should help local jurisdictions

leverage additional funding by providing a local match to compete for the MTA's Call-for-Projects and federal and state grants.

The proposed congestion mitigation fee would be a one-time fee applied to all types of new development based on the number of net new trips generated by the development project. For residential land use, the trip generation is based on the number of dwelling units. Thus, adding a bedroom or family room to a single family home would not increase the number of dwelling units and would not be subject to a congestion mitigation fee. The trip generation of non-residential land use is based on the square footage and the type of land use. If a new development project replaces an existing structure, the trip generation from the existing structure would be subtracted from the amount of trip generation from the new development and the Congestion Mitigation Fee would be based on the net difference. Moreover, if a non-residential use is replaced with a different type of non-residential use, the trip generation rate changes and the fee would only apply if there is a net increase in trips resulting from this change. For example, a conversion of a manufacturing facility to a warehouse of the same size would result in fewer trips being generated and, thus, would not be subject to a fee.

The Congestion Mitigation Fee Program would give credit to jurisdictions with their own existing mitigation fee programs. The amount of credit would be based on how many of the transportation projects included in the local fee program provide a regional benefit. Each eligible project would receive dollar-for-dollar credit towards the minimum fee-per-trip that would be set for the Congestion Mitigation Fee Program. If the local fee program's fee-per-trip exceeds the Congestion Mitigation Fee Program minimum, then the jurisdiction would not have to make any change to its existing mitigation fee program.

Eligible transportation projects must improve the capacity of the transportation system and must consist of capital improvement projects. Ongoing operational and maintenance projects are not eligible under this program. Projects identified in this Pilot Nexus Study include the following:

- Regional arterial enhancements such as arterial widening, bottleneck intersection improvements, closure of gaps in the arterial system, grade separations, and interchange improvements.
- Signal synchronization, bus speed improvements, bottleneck intersection improvements, traffic control and monitoring systems, and Intelligent Transportation Systems.
- Bus and rail transit capital and/or construction of transit stations and centers, park and ride lots, commuter rail stations, transit stop improvements and transit vehicle purchases.
- Bicycle and pedestrian improvements that provide accessibility to bus and rail transit and that were developed in a systemic and multi-modal manner.
- Other projects determined on a case-by-case basis.

SAN GABRIEL VALLEY PILOT NEXUS STUDY BACKGROUND

To ensure a Congestion Mitigation Fee Program would serve the specific preferences of its member jurisdictions, the San Gabriel Valley Council of Governments (SGVCOG) offered to partner with MTA to develop a Pilot Nexus Study as a way to assess the viability of the Congestion Mitigation Fee Program. The SGVCOG took this proactive approach to fully vet the issues and concerns of San Gabriel Valley jurisdictions prior to any action by the MTA Board. This Pilot Nexus Study also provides an opportunity to explore various policies and understand complexities associated with such a program.

For the last three years the SGVCOG has been working with MTA and their consultant, Cambridge Systematics, Inc. in a collaborative process that has included the participation of every member agency in the SGVCOG. The SGVCOG established a Steering Committee consisting of city managers, public works directors, planning directors, SGVCOG staff, and MTA staff to guide the SGVCOG Pilot Nexus Study. The Steering Committee met with MTA staff and their consultant on a periodic basis to provide guidance and input on the work activities and deliverables. SGVCOG staff provided support to coordinate meetings with its member agencies. As a result of this extensive work effort, MTA staff and the consultant have met one-on-one with senior management of all 32 SGVCOG jurisdictions.

CONGESTION MITIGATION FEE WORK PLAN

The SGVCOG Pilot Nexus Study was conducted as part of an overall work plan approved by the MTA Board in September 2008. The work plan consists of four steps: 1) Feasibility Study and Program Guidelines; 2) Local Project Identification; 3) Nexus Analysis; and 4) Program Development and Local Implementation. In Step 1 – Feasibility Study and Program Guidelines, MTA worked with jurisdictions and other stakeholders countywide to conduct a Feasibility Study to determine whether a fee program would be feasible. When this step was completed, the results were documented in a report titled *Congestion Mitigation Fee Feasibility Study Report* and approved by the MTA Board in September 2008.

In Step 2 – Local Project Identification, MTA worked with the SGVCOG and its member jurisdictions to identify local projects with a regional benefit, verify their growth forecasts, and confirm their transportation network. Step 3 – Nexus Analysis, involved a nexus analysis to determine whether the projects identified in Step 2 mitigate the impacts of 20 years of future development on the transportation network. In addition, Step 3 included an economic analysis of how the payment of a congestion mitigation fee and the benefits of congestion relief and construction jobs would change the economic performance of Los Angeles County.

MTA is completing eight pilot nexus studies (Step 3 in Figure 1 below) for all of the sub-regions in the County. Should the MTA Board adopt the Congestion Mitigation Fee Program as the new CMP Countywide Deficiency Plan, then jurisdictions will be required to participate in the fee program to be in conformance with the CMP. In this case, MTA staff will initiate Step 4 and work with jurisdictions to further develop and implement Step 4 of the Congestion Mitigation Fee Program.

If the MTA Board authorizes conducting Step 4 – Program Development and Local Implementation, then staff will work with jurisdictions, sub-regional agencies, and building industry representatives to implement the Congestion Mitigation Fee Program over a 24 month period. The MTA work plan is summarized below in Figure 1.

Figure 1: Congestion Mitigation Fee Program Work Plan

Work Plan Components	Schedule
Step 1: Feasibility Study & Program Guidelines	Jan. 2007 – Sept. 2008
<ul style="list-style-type: none"> Review with PAC, jurisdictions, COGs, & Others 	
Step 2: Local Project Identification	Spring 2009 – Summer 2012
<ul style="list-style-type: none"> Jurisdictions confirm growth forecasts Jurisdictions identify local projects with regional benefits and confirm transportation network 	
Step 3: Nexus Study	Spring 2011 – Fall 2012
<ul style="list-style-type: none"> Technical work effort to determine nexus 	
Step 4: Program Development & Implementation	2013 – 2015
<ul style="list-style-type: none"> Work one-on-one with jurisdictions to develop and implement program at the local level. 	

Nexus Analysis

The Mitigation Fee Act (AB 1600) governs the adoption of mitigation fees in the State of California (California Government Code Sections 66000-66008). This law requires local jurisdictions to complete a nexus analysis before adopting a mitigation fee. This analysis must provide results for a dual nexus test, which would show that the improvements being funded with the fees will: 1) mitigate the impacts caused by new development; and, 2) that the fee amounts bear a reasonable relationship to the impact from new development.

This nexus analysis uses annual vehicle-hours-of-delay (VHD) to measure the impact of new development on the transportation system. Other technical measures commonly used for a nexus analysis at a jurisdiction level include level-of service (LOS) or volume-to-capacity (V/C) ratios. These measures work best when the scale of analysis is on specific roadway segments or an urban street network and the projects are intended to mitigate congestion from increased travel by single occupant vehicles. The proposed Congestion Mitigation Fee, however, is intended to address the requirements specified for Deficiency Plans set forth in the CMP legislation. Furthermore, the Congestion Mitigation Fee Program is intended to reduce congestion (VHD) caused by new development on the arterial network in each sub-region.

This VHD methodology is similar to the approach conducted for the nexus analysis completed for the San Diego Association of Governments (SANDAG) for its Regional Transportation Congestion Improvement Plan (RTCIP) in 2006. The MTA nexus analysis uses the same metric of vehicle-hours-of-delay as SANDAG is using for its

mitigation fee program, which essentially measures the nexus between the RTCIP projects and the impacts from new development throughout San Diego county. The Pilot Nexus Studies utilize the same analytical methodology as SANDAG because both mitigation fee programs are focused on mitigating the impacts of new development on the arterial networks. Traffic patterns on the arterial networks of both counties of Los Angeles and San Diego are similar in terms of their function as relievers for freeway intercity travel and access to freeways. In addition, the trip generations rates for the seven land-use types are derived from the SANDAG trip generation rates because their county more closely resembles the traffic patterns and land use trip generation rates of the greater Southern California region. SANDAG calculated these rates from surveys of San Diego County households and businesses.

This nexus analysis compares VHD for the San Gabriel Valley sub-region under three conditions or scenarios:

- **2010 Base Year – Existing Conditions Scenario:** Estimates VHD for the initial Congestion Mitigation Fee Program base year of 2010.
- **2030 Future Year – No-Build Scenario:** Estimates VHD in 2030 given estimated levels of new development and all currently planned transportation improvements funded with known sources such as MTA’s 2009 Long Range Transportation Plan.
- **2030 Future Year –With New Congestion Mitigation Fee Projects Scenario:** Estimates the reduction in VHD caused by the selected transportation improvements identified in the Congestion Mitigation Fee Program.

To meet the requirements of state law, this nexus analysis must demonstrate that VHD in 2030 does not improve beyond the 2010 Base Year levels. The analysis excludes freeway impacts because much of the freeway traffic is inter-regional and the projects submitted by jurisdictions are focused on the regional arterial system.

All transportation project categories are classified into one of nine project categories and were evaluated using either the MTA travel demand model, the Congestion Mitigation Fee Analysis Tool, or research literature as described below. Figure 2 on Page 8 that follows identifies which one of the following three nexus analysis methods was used for each transportation project category:

- **MTA Travel Demand Model:** In order to analyze the changes in VHD on the arterial network within each of the eight sub-regions, Cambridge Systematics, Inc., MTA’s contractor, made improvements to the MTA travel demand model. These improvements are documented in the *Los Angeles County MTA Travel Model Assessment and Status Report* (June 2011). The enhancements included:
 - **Replicating trip generation and trip distribution within the MTA model.** Allows the MTA travel demand model to yield more internally consistent estimates of development impacts in the nexus analyses. The process involved converting SCAG model components into MTA’s travel demand model and testing and validating model results.

- **Increasing the number of traffic assignment equilibrium iterations from 43 to 300.** Increasing to 300 iterations improves assignment accuracy substantially and provides more accuracy in traffic assignment as well as more accurate results against increased model run time.
- **Using SCAG's screenline dataset to validate sub-regional travel.** SCAG's existing dataset of traffic volumes across multiple key locations (also known as screenlines) was used to validate travel model results for 2010 base year.

With these steps completed, the MTA travel demand model is better prepared to code and run sub-regional nexus analyses.

- **Congestion Mitigation Fee Analysis Tool:** This analytical tool estimates VHD reduction from intersection improvements, system operations (e.g. signal synchronization), railroad grade separations, and highway on/off ramps. The Congestion Mitigation Fee Analysis Tool was developed specifically for conducting sub-regional nexus analysis of projects that require a level of analysis that is too fine-grained for the MTA travel demand model. The analysis tool estimates VHD reduction based on assumptions taken from research literature combined with quantified project descriptions provided by each jurisdiction.
- **Research Literature:** Reliable research provides sufficient evidence that bicycle and pedestrian improvements that link to transit (e.g. bicycle lanes and sidewalks that serve bus stops and passenger rail stations), transit amenities (e.g. bus shelters, better signage, etc.), park-and-ride lots, and other similar projects provide congestion reduction benefits. This research literature, however, does not provide enough information to quantify the impacts. Thus, for purposes of the Pilot Study Nexus analysis these projects are included but their benefits are not quantified.

Furthermore, bicycle or pedestrian improvements that do not link to transit (e.g. recreational biking/hiking trails) have been excluded from the analysis. In January 2012 the MTA Board directed staff to develop the modeling capability to be able to quantify the benefit of bicycle transportation investment (and pedestrian transportation investment, if possible) because many of jurisdictions participating in the Pilot Nexus Study have included bicycle investments as part of their list of projects. Nevertheless, MTA has limited the types of bicycle projects it can accept as part of the Pilot Nexus Study to those that provide a link or access to transit, which the research literature conclusively documents as having a qualitative relationship to reduced congestion.

Figure 2: Transportation Project Categories and Nexus Analysis Methods

Project Category	Nexus Analysis Method
Roadway Capacity Improvement	MTA Travel Demand Model
Intersection Improvement	Congestion Mitigation Fee Analysis Tool
System Operations (e.g. signal synchronization)	Congestion Mitigation Fee Analysis Tool
Railroad Grade Separations	Congestion Mitigation Fee Analysis Tool
Highway On/Off-Ramps	Congestion Mitigation Fee Analysis Tool
Bicycle/Pedestrian Improvements	Research Literature
Transit Improvements	Research Literature
Park-and-Ride Lots	Research Literature
Other Projects	Research Literature

The nexus analysis for the San Gabriel Valley COG member cities was conducted at the sub-regional level. Sub-regions capture longer, intercity trips, which are the focus of the CMP. Sub-regions are also small enough to measure significant benefits for a relatively modest investment. This sub-regional nexus analysis serves as an umbrella for each local jurisdiction in the sub-region, which would adopt its own congestion mitigation fee program to fund the specific transportation projects that it selects.

SAN GABRIEL VALLEY PILOT NEXUS STUDY

Study Area

The study area includes the following members of the San Gabriel Valley COG:

<ul style="list-style-type: none"> • City of Alhambra • City of Arcadia • City of Azusa • City of Baldwin Park • City of Bradbury • City of Claremont • City of Covina • City of Diamond Bar • City of Duarte • City of El Monte • City of Glendora 	<ul style="list-style-type: none"> • City of Industry • City of Irwindale • City of La Cañada Flintridge • City of La Puente • City of La Verne • City of Monrovia • City of Montebello • City of Monterey Park • City of Pasadena • City of Pomona 	<ul style="list-style-type: none"> • City of Rosemead • City of San Dimas • City of San Gabriel • City of San Marino • City of Sierra Madre • City of So. El Monte • City of So. Pasadena • City of Temple City • Unincorp. L.A. County • City of Walnut • City of West Covina
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Projected Growth

The San Gabriel Valley is projected to increase by 309,885 in population and employment is projected to increase by 44,080 from 2010 to 2030. This growth is expected to impact the regional transportation system that is already operating near or at capacity. This growth would essentially cause what is currently a slow moving roadway network to deteriorate further and result in widespread gridlock.

Transportation Projects Submitted

Nearly every jurisdiction (30 out of 32) participated in the SGV Pilot Nexus Study. A total of 295 transportation projects were identified as part of the study. A map identifying the submitted projects is shown in Attachment B. Jurisdictions used a web-based software planning tool developed by Cambridge Systematics, Inc. to create a database of projects located within their jurisdiction. For each transportation project, jurisdictions provided a cost estimate, funding sources, project description, and a geocoded location (See Attachment C).

Figure 3 on page 10 summarizes the number of projects submitted by jurisdictions by project category along with information on total cost, other funding reasonably anticipated during the 20-year planning horizon, and the remaining unfunded amount that could be funded through the Congestion Mitigation Fee Program.

Figure 3 divides the eight types of transportation projects into two groups. Figure 3 presents the following information:

- The four transportation categories shown in the upper half of Figure 3 (Roadway Capacity, Intersection Improvements, System Operations, and Grade Separations) are projects that can be evaluated using quantitative methods such as the MTA Travel Demand Model and the Congestion Mitigation Fee Analysis Tool (described above). These projects account for the reduction in VHD derived from the nexus analysis.
- The four transportation categories shown in the lower half of Figure 3 cannot be modeled and thus their contribution is not included in the VHD reduction estimate. Nevertheless, peer reviewed research affirms their qualitative effectiveness in lowering congestion and thus they are included in the Congestion Mitigation Fee Pilot Study. Thus, they are included in the total unfunded cost and the fee amounts needed to fund them.
- The third column of Figure 3 shows the share of the total cost for each of the eight transportation categories. Some key information includes the amount of other funding leveraged by the Congestion Mitigation Fee revenue. For example, nearly 44% of the \$46 million total cost for bicycle projects would be funded with other funding sources, but only 4% of the \$133 million needed for intersection improvements will come from other sources. See Attachment C for a detailed project list by jurisdiction.

Figure 3: San Gabriel Valley Transportation Project Category Summary

Project Type	Number of Projects	Total Cost Share	Total Cost	Other Funding	Unfunded
Roadway Capacity	26	16%	\$118,633,000	\$17,918,000	\$100,715,000
Intersection Improvement	157	18%	\$132,543,000	\$6,823,000	\$125,720,000
System Operations	54	16%	\$119,184,000	\$52,019,000	\$67,165,000
Grade Separation	9	31%	\$225,000,000	\$65,000,000	\$160,000,000
Subtotal	244	82%	\$595,360,000	\$141,760,000	\$453,600,000
Bike-Pedestrian	26	6%	\$45,810,000	\$20,150,000	\$25,660,000
Park-and-Ride	7	5%	\$36,750,000	\$4,775,000	\$31,975,000
Transit	6	2%	\$17,088,000	\$-	\$17,088,000
Other	12	4%	\$29,265,000	\$4,160,000	\$25,105,000
Subtotal	51	18%	\$128,913,000	\$29,085,000	\$99,828,000
Total	295	100%	\$724,273,000	\$170,845,000	\$553,428,000

Note: Intersection improvement projects include highway on/off-ramp projects that were listed separately in the May 2011 draft preliminary findings report.

Technical Nexus Analysis Results: Vehicle-Hours-of-Delay/Congestion Reduction Benefit

The nexus analysis conducted for this Pilot Nexus Study supports the finding that the transportation projects identified by jurisdictions and funded by the Congestion Mitigation Fee Program would mitigate 16% of the total impact of new development on the arterial network. This result demonstrates that the costs of mitigation will not exceed the proportion attributable to new development, and satisfies the nexus requirements set forth in the Mitigation Fee Act. This finding also meets the measurable improvement in congestion requirement as stipulated by the CMP Countywide Deficiency Plan.

Figure 4 below presents the results of the nexus analysis of the 244 projects that could be modeled. Reading from left to right, this table presents the following results:

- The nexus analysis starts with the current (2010) estimate of 8.5 million VHD on the SGV arterial network (shown in the first column of Figure 4).
- Next, the analysis forecasts 51.4 million VHD in 2030 (second column) or a net increase of 43 million VHD (fourth column) caused by the impacts of new trips generated and attracted by new development within the SGV forecast over the next 20 years. Under the No-Build scenario, congestion in the San Gabriel Valley is expected to have a four-fold increase in vehicle-hours-of-delay (VHD) from 2010 to 2030 because of growth impacting the current transportation system that is at or near capacity. This result for the No-Build scenario assumes that transportation improvements included in the 2008 RTP and the current MTA Long Range Transportation Plan (LRTP) are constructed.

- The third column shows what would happen if the 244 transportation projects are constructed holding everything else constant. VHD on the sub-regional arterial network in 2030 would be 36 million, which would be a 7 million VHD (sixth column) reduction, or about 16% less (seventh column) congestion than without these projects.
- This analysis deliberately removed the impacts of future through trips (trips that begin and end outside of the sub-region) because new development within the subregion cannot be required to pay for the impacts from trips it does not generate or attract.

Figure 4: San Gabriel Valley Annual Vehicle Hours of Delay (VHD)

1	2	3	4	5	VHD Reduction Benefit	
2010 (Existing)	2030 (No Build)	2030 (With Projects)	2010 – 2030 (No Build)	2010 – 2030 (With Projects)	6 Amount	7 Percent
<i>A</i>	<i>b</i>	<i>c</i>	$d = b - a$	$e = c - a$	$f = d - e$	$g = f / d$
8,532,000	51,398,000	44,442,000	42,866,000	35,910,000	6,956,000	16%

Note: The analysis excludes freeway impacts because much of the freeway traffic is inter-regional and the projects submitted by jurisdictions are focused on the regional arterial system.

Establishing Minimum and Maximum Fee Amounts for the San Gabriel Valley

The congestion mitigation fee-per-trip amount for each jurisdiction is determined by calculating its unique cost-per-trip (See Attachment A). The cost-per-trip amount is the total unfunded cost of all transportation projects selected by each jurisdiction (both those with benefits that can be quantitatively measured and those that are only qualitatively measured) divided by the number of net trips generated by new development within that jurisdiction.

Establishing a minimum fee-per-trip for the Congestion Mitigation Fee Program has been an important policy issue for jurisdictions and stakeholders since MTA convened the countywide Policy Advisory Committee in 2006. A minimum fee-per-trip would facilitate compliance with the CMP by ensuring a minimum level of congestion reduction effort. Furthermore, all jurisdictions would benefit from a level playing field, where a minimum fee-per-trip amount to reduce the advantage that one jurisdiction may have over another in attracting new development.

The minimum fee-per-trip amounts for each sub-region were determined through the pilot nexus study process where each city developed a transportation project list that balances its need to mitigate future congestion with a maximum fee-per-trip amount. As a result, the pilot nexus study process provided a fee-per-trip amount for each jurisdiction (See Attachment A) whereby 26 jurisdictions were above \$200 fee-per-trip. Based on this threshold, one possible option is to set a \$200 fee-per-trip amount as the minimum that all San Gabriel Valley COG jurisdictions could adopt as their sub-regional minimum fee-per-trip amount. The potential use of this approach is also being evaluated in the other sub-regional pilot nexus studies.

The Pilot Study Nexus Analysis resulted in two types of fee-per-trip amounts calculated for jurisdictions in the San Gabriel Valley:

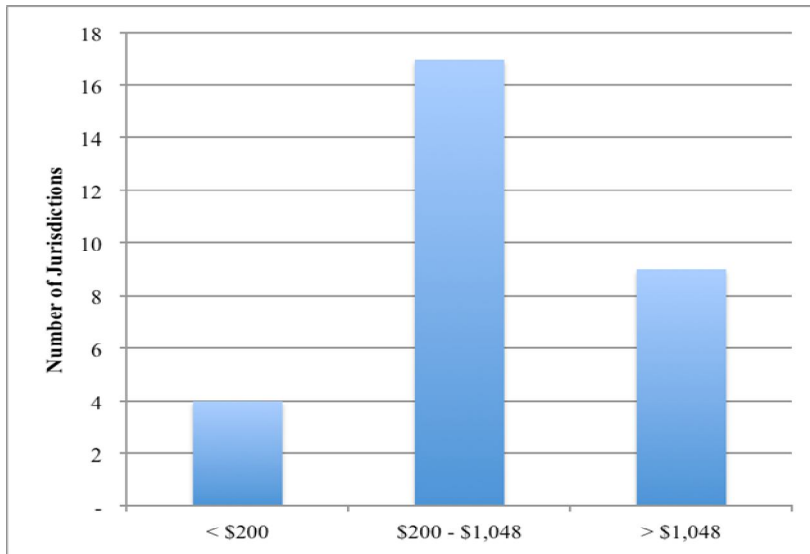
- **Jurisdiction fee-per-trip:** A separate fee-per-trip for each jurisdiction was calculated based on the jurisdiction's unfunded project costs divided by the number of trips from new development within the jurisdiction (See Attachment A). This fee-per-trip is the amount needed to fund the unfunded portion of the transportation projects costs identified by each jurisdiction. Unfunded project costs used in this calculation represents a conservative method of assessing new development for its share of mitigating its impacts. Other funding sources identified by jurisdictions to fund their proposed projects come from such funds as Proposition C and Measure R local return, state gas tax subventions, municipal general funds, Call-for-Projects, and Surface Transportation Program local funds.
- **Sub-regional maximum justified fee-per-trip:** A single \$1,048 fee-per-trip for the sub-region was calculated based on the \$724 million total cost of all transportation projects identified by jurisdictions divided by approximately 691,000 new trip-ends generated and attracted by new development within the sub-region. Since this nexus analysis was conducted at the sub-regional level, the \$1,048 fee-per-trip amount represents the maximum congestion mitigation fee amount the nexus analysis can defend quantitatively. Total project costs, rather than unfunded project cost, were used in this calculation because congestion reduction benefits are associated with the entire project regardless of the level of other anticipated funding.

The congestion mitigation fee-per-trip results from the nexus analysis by jurisdiction are summarized in Figure 5 below. See Attachment A for details regarding total project costs and funding by jurisdiction.

- Seventeen (17) jurisdictions have fee-per-trip amounts that range between a fee-per-trip of \$200 and the sub-regional legal maximum fee-per-trip of \$1,048.
- Nine (9) jurisdictions have fee-per-trip amounts greater than the sub-regional legal maximum fee-per-trip of \$1,048.
- Four (4) jurisdictions have fee-per-trip amounts less than \$200 while two (2) other jurisdictions did not participate in the SGVCOG Pilot Nexus Study.

The data collected from jurisdictions shows there is a concentration of jurisdictions whose fee-per-trip range from a minimum of \$200 up to a sub-regional maximum justified fee-per-trip of \$1,048. This broad range of fee-per-trip amounts should provide each jurisdiction with the flexibility to manage the congestion impacts of growth, but also establish a floor, or minimum fee-per-trip. This minimum fee-per-trip amount is intended to create a level playing field by ensuring that each jurisdiction contributes to mitigating its growth impact on the regional transportation network.

Figure 5: Fee-Per-Trip Range by Jurisdiction



Note: The chart does not include two (2) jurisdictions that did not participate in the SGVCOG Pilot Study.

Should the Congestion Mitigation Fee Program be adopted, then each jurisdiction within the sub-region would adopt its own congestion mitigation fee ordinance. Their congestion mitigation fee would need to be set between the minimum fee-per-trip established by the MTA Board and their own individual jurisdiction fee-per-trip established by the nexus analysis (See Attachment A). The sub-regional maximum justified fee-per-trip would be the amount that jurisdictions would be limited to adopt as a result of the nexus analysis.

Those jurisdictions that are below the \$200 fee-per-trip in this pilot nexus study would need to increase the unfunded cost of their total transportation project list. They can do this by a combination of the following:

- 1) Add new projects to their list of transportation projects;
- 2) Reduce the amount of other anticipated funding and, thus, increase the amount of funding from the fee revenue needed to build the projects; and/or
- 3) Fund projects in an adjacent jurisdiction that will help mitigate the impacts of new development traveling into or out of their jurisdiction.

Those jurisdictions with fee-per-trip amounts that are higher than the maximum justified cost-per-trip amount of \$1,048 would have the following options to reduce their cost-per-trip amounts:

- 1) Eliminate transportation projects from their list of projects to reduce their fee-per-trip amount to a level below the maximum justified fee-per trip amount.
- 2) Identify additional funding sources to reduce the amount of funding the fee revenue would have to pay to implement the projects.
- 3) Conduct a local nexus study to justify that the additional costs can be fairly charged to new development consistent with the Mitigation Fee Act.

Based on the nexus results of the SGVCOG Pilot Nexus Study a recommended minimum fee-per-trip amount for the San Gabriel Valley sub-region could be a \$200 fee-per-trip amount (see Figure 5).

Next Steps

Below are the next steps to complete the Congestion Mitigation Fee work plan:

- Present pilot nexus study and economic analysis findings to jurisdictions, sub-regional agencies, and building industry stakeholders.
- Seek MTA Board direction in early 2013 to:
 - Adopt the Congestion Mitigation Fee Program as the new CMP Countywide Deficiency Plan;
 - Establish minimum fee amount for CMP compliance
- Work one-on-one with jurisdictions, sub-regional agencies, and building industry representatives to implement a Congestion Mitigation Fee Program over a 24 month period.

If the MTA Board decides to adopt the Congestion Mitigation Fee Program as the conformity requirement for the CMP, MTA staff will work with each jurisdiction to implement the Congestion Mitigation Fee Program.

CONTACT INFORMATION

If you have any questions or comments, please contact:

- Robert Cálix, MTA Project Manager, at: calixr@metro.net or (213) 922-5644.
- Marisa Creter, San Gabriel Valley COG, at: mcreter@sgvcog.org or (626) 457-1800.

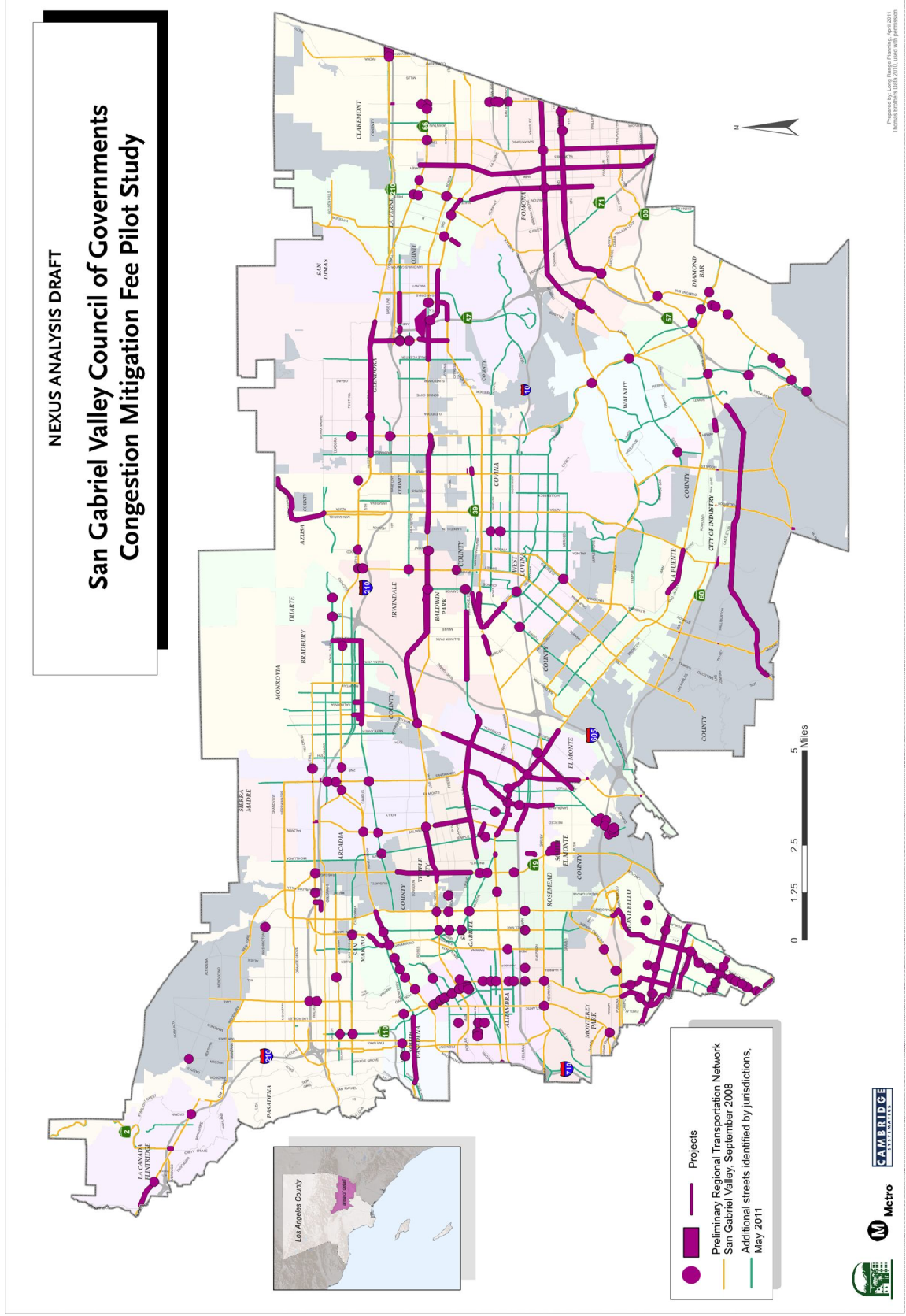
Attachment A: San Gabriel Valley COG Pilot Nexus Study Fee-per-Trip by Jurisdiction

Jurisdiction	Net New Trip Ends	Total Project Costs	Other Funding	Unfunded	Unfunded Fee-Per-Trip
	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e = d / a</i>
Alhambra	11,842	1,085,000	317,000	768,000	\$65
Arcadia	14,157	13,453,000	-	13,453,000	\$950
Azusa	15,563	10,200,000	2,680,000	7,520,000	\$483
Baldwin Park	13,913	82,780,000	60,600,000	22,180,000	\$1,594
Bradbury	609	Did not submit projects at this time.			\$-
Claremont	18,575	5,750,000	800,000	4,950,000	\$266
Covina	9,952	6,600,000	3,000,000	3,600,000	\$362
Diamond Bar	13,147	12,945,000	-	12,945,000	\$985
Duarte	5,062	1,475,000	-	1,475,000	\$291
El Monte	33,549	117,000,000	10,700,000	106,300,000	\$3,168
Glendora	5,332	12,500,000	-	12,500,000	\$2,344
Industry	4,607	10,040,000	-	10,040,000	\$2,179
Irwindale	16,635	5,444,000	1,265,000	4,179,000	\$251
La Canada Flintridge	4,392	3,400,000	-	3,400,000	\$774
La Puente	3,633	400,000	-	400,000	\$110
La Verne	5,175	9,800,000	6,450,000	3,350,000	\$647
Monrovia	17,479	16,024,000	7,893,000	8,131,000	\$465
Montebello	8,101	15,131,000	-	15,131,000	\$1,868
Monterey Park	18,851	15,000,000	750,000	14,250,000	\$756
Pasadena	102,664	44,516,000	-	44,516,000	\$434
Pomona	100,685	100,340,000	66,325,000	34,015,000	\$338
Rosemead	10,078	2,700,000	-	2,700,000	\$268
San Dimas	7,486	10,600,000	-	10,600,000	\$1,416
San Gabriel	11,086	3,257,000	-	3,257,000	\$294
San Marino	1,245	2,800,000	-	2,800,000	\$2,249
Sierra Madre	2,131	Did not submit projects at this time.			\$-
South El Monte	53,921	1,050,000	-	1,050,000	\$19
South Pasadena	5,518	5,195,000	65,000	5,130,000	\$930
Temple City	8,557	37,000,000	10,000,000	27,000,000	\$3,155
Unincorporated SGV	136,414	166,550,000	-	166,550,000	\$1,221
Walnut	7,567	6,740,000	-	6,740,000	\$891
West Covina	22,897	4,498,000	-	4,498,000	\$196
Total	690,823	\$724,273,000	\$170,845,000	\$553,428,000	
Funding Share		100%	24%	76%	

Sub-regional Maximum Justified Fee-per-Trip (= b / a)	\$1,048
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Attachment B: San Gabriel Valley Pilot Nexus Study Transportation Projects



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Attachment C: List of Transportation Projects by Jurisdiction (Project Deemed Ineligible Not Listed)

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Alhambra	Alhambra Road Integrated Signal Sync at Granada Avenue	Alhambra Road at Granada Avenue	Signal Synchronization and communications upgrade for integration into Alhambra Traffic Control System	System Operations	40,000	12,000	28,000
Alhambra	Almansor Integrated Signal Sync at Hellman Avenue	Almansor Street at Hellman Avenue	Signal synchronization and communications upgrade for integration into Alhambra Traffic Control System	System Operations	40,000	-	40,000
Alhambra	Chapel Avenue Integrated Signal Sync at Bay State Street	Chapel Avenue at Bay State Street	Signal synchronization and communications upgrade for integration into Alhambra Traffic Control System	System Operations	45,000	15,000	30,000
Alhambra	Commonwealth Integrated Signal Sync Phase 1-First to Second	Commonwealth Avenue - First to Second Street	Signal synchronization and communications upgrade at 2 locations for integration into Alhambra Traffic Control System	System Operations	90,000	30,000	60,000
Alhambra	Commonwealth Integrated Signal Sync Phase 2-Marengo to Date	Commonwealth Avenue from Marengo to Date	Signal Synchronization and communications upgrade at 3 locations for integration into Alhambra Traffic Control System	System Operations	140,000	40,000	100,000
Alhambra	Garfield Integrated Signal Sync Phase 1 - Pine to Woodward	Garfield - Pine to Woodward	Signal Synchronization and communications upgrade at 4 locations for traffic signal synchronization and integration into Alhambra Traffic Control System	System Operations	180,000	60,000	120,000
Alhambra	Garfield Integrated Signal Sync Phase 2 - Alh P1 to Commwith	Garfield Avenue - Alhambra Place to Commonwealth	Signal Synchronization and communication upgrade at 3 locations for traffic signal synchronization and integration into Alhambra Traffic Control System	System Operations	140,000	40,000	100,000
Alhambra	Garfield Integrated Signal Sync Phase 3 - Los Higos to Shorb	Garfield Avenue - Los Higos to Shorb	Signal synchronization and communications upgrade at three locations for traffic signal synchronization and integration into Alhambra Traffic Control System	System Operations	140,000	40,000	100,000
Alhambra	Garfield Integrated Signal Sync Phase 4 - Norwood to Hellman	Garfield from Norwood Place to Hellman Avenue	Signal synchronization and communications upgrade at 3 locations for integration into Alhambra Traffic Control System	System Operations	150,000	50,000	100,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Alhambra	Marengo Integrated Signal Sync at Larch	Marengo Avenue at Larch Street	Signal synchronization and communications upgrade for integration into Alhambra Traffic Control System	System Operations	40,000	15,000	25,000
Alhambra	Marengo Integrated Signal Sync at SCE Way	Marengo Avenue at SCE Way (between Commonwealth Ave and Mission Rd)	Signal synchronization and communications upgrade for integration into Alhambra Traffic Control System	System Operations	45,000	-	45,000
Alhambra	New Avenue Integrated Signal Sync at Norwood Place	New Avenue at Norwood Place	Signal Synchronization and communications upgrade for integration into Alhambra Traffic Control System	System Operations	35,000	15,000	20,000
Arcadia	2nd Ave. at Foothill Blvd. Intersection Improvements	2nd Ave. at Foothill Blvd.	Widen Foothill Blvd to provide 3 through lanes in each direction. Restripe Second Ave to provide dedicated left turn lanes on both approaches. Modify signal phasing to provide protected phasing for the northbound and southbound left turn movements.	Intersection Improvement	620,000	-	620,000
Arcadia	Baldwin Ave. at Las Tunas Dr. Intersection Improvements	Baldwin Ave. at Las Tunas Dr.	Widen Baldwin Avenue to provide three through lanes in each direction and dual southbound left turn lanes.	Intersection Improvement	966,000	-	966,000
Arcadia	Colorado Pl. at Colorado Blvd. Intersection Improvements	Colorado Pl. at Colorado Blvd.	Restripe westbound Colorado Boulevard to provide one shared left/right turn lane and one exclusive right-turn-only lane. Relocate pedestrian crossing. Prohibit westbound right turn on red.	Intersection Improvement	230,000	-	230,000
Arcadia	Colorado Pl. at Huntington Dr. Intersection Improvements	Colorado Pl. at Huntington Dr.	Add a 3rd SB lane beginning at Gate 5 of the Santa Anita Race Track, which will become a third left turn lane at Huntington Drive. The 3rd lane must continue as an eastbound lane on Huntington Drive to Santa Anita Avenue. Reconfigure median island on	Intersection Improvement	1,056,000	-	1,056,000
Arcadia	Huntington Dr. at Santa Clara St. Intersection Improvements	Huntington Dr. at Santa Clara St.	Widen the westbound approach to provide a third through lane. On the northbound approach, convert the shared through-right turn lane to a dedicated through lane and widen the approach to provide two right-turn-only lanes, resulting in one left turn	Intersection Improvement	966,000	-	966,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Arcadia	Michillinda Ave. at Colorado Blvd. Intersection Improvements	Michillinda Ave. at Colorado Blvd.	Restripe the southbound, eastbound, and northbound exclusive right-turn lanes as shared through/right-turn lanes. Widen the east leg of Colorado Boulevard to receive the third through lane. Narrow the median island in the northeast corner of the inte	Intersection Improvement	180,000	-	180,000
Arcadia	Michillinda Ave. at Foothill Blvd Intersection Improvements	Michillinda Ave. at Foothill Blvd.	Widen the southbound approach to provide a second left-turn lane.	Intersection Improvement	219,000	-	219,000
Arcadia	N. Baldwin Ave. at Foothill Blvd./I-210 WB on-off ramps	N. Baldwin Ave. at Foothill Blvd.	Widen Foothill Boulevard to provide three through lanes in each direction.	Intersection Improvement	668,000	-	668,000
Arcadia	Santa Anita Ave. at Colorado Blvd. Intersection Improvements	Santa Anita Ave. at Colorado Blvd.	Widen the northbound and southbound approaches of Santa Anita Avenue to provide dual left turn lanes. Modify signal phasing to provide protected phasing for the eastbound left turn movement.	Intersection Improvement	1,000,000	-	1,000,000
Arcadia	Santa Anita Ave. at Duarte Rd. Intersection Improvements	Santa Anita Ave. at Duarte Rd.	Intersection Improvement and Signal system upgrade	Intersection Improvement	1,049,000	-	1,049,000
Arcadia	Santa Anita Ave. at Foothill Blvd. Intersection Improvements	Santa Anita Ave. at Foothill Blvd.	Add southbound to westbound right turn lane and westbound to northbound right turn lane.	Intersection Improvement	767,000	-	767,000
Arcadia	Santa Anita ave. at I-210 EB Ramps Intersection Improvements	Santa Anita ave. at I-210 EB Ramps	Restripe the eastbound shared left-turn/through/right-turn lane as a shared left-turn/through lane, so that right turns are made only from the curb lane. Provide an overlap phase for the eastbound right turn movement that runs concurrently with a por	Intersection Improvement	250,000	-	250,000
Arcadia	Santa Anita Ave. at Live Oak Ave. Intersection Improvements	Santa Anita Ave. at Live Oak Ave.	Add third westbound through lane.	Intersection Improvement	1,293,000	-	1,293,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Arcadia	Santa Anita Avenue at Santa Clara Street Intersection improv	Santa Anita Avenue at Santa Clara Street	Add eastbound to northbound left turn lane on Santa Clara and convert the signal from split phase to a full eight phase. A rough cost for everything would be \$300,000.	Intersection Improvement	300,000	-	300,000
Arcadia	Sunset Blvd. at Duarte Rd. Intersections Improvements	Sunset Blvd. at Duarte Rd.	Widen the Sunset Boulevard approaches to accommodate three southbound through lanes. Widen Duarte Road to provide a dedicated right-turn only lane on the eastbound approach.	Intersection Improvement	1,074,000	-	1,074,000
Arcadia	ITS Master Plan Implementation	Citywide	Implementation of citywide Intelligent Transportation Systems master plan to mitigate the impacts of new development.	Other	2,815,000	-	2,815,000
Azusa	Azusa North - Bike Lanes	Along Sierra Madre Ave and San Gabriel Canyon Rd	Construct Bike Lanes Along Sierra Madre Avenue and San Gabriel Canyon Rd.	Bike-Pedestrian	150,000	60,000	90,000
Azusa	Palm/Foothill Signal Project	Palm Drive and Foothill Blvd intersection	New Traffic Signal at Palm Drive and Foothill Boulevard	Intersection Improvement	225,000	90,000	135,000
Azusa	Todd/Foothill Intersection Improvement	Todd Ave and Foothill Blvd intersection	Improve The Intersection of Todd Avenue and Foothill Boulevard To Provide Extended Left Turn Pocket For Eastbound Traffic On Foothill Boulevard to Northbound Traffic on Todd Avenue.	Intersection Improvement	75,000	30,000	45,000
Azusa	Azusa Central Traffic Control System	citywide	Develop and construct a central traffic control system that will efficiently move traffic through town and create an intelligent synchronization of signals with the region and local users. This is tied to signal synchronization (see 8 signal sync pr	Other	5,400,000	2,160,000	3,240,000
Azusa	Arrow Highway Traffic Synchronization	Arrow Highway	Interconnect Synchronization With Adjacent Cities Along Arrow Highway.	System Operations	850,000	340,000	510,000
Azusa	Azusa Ave. Synchronization	Arrow Highway to 11th Street	Update Traffic Signals, Pedestrian Heads/Buttons and Controllers along corridor, synchronization. Assume 5 intersections, \$100,000 per intersection.	System Operations	500,000	-	500,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Azusa	Cerritos Avenue Synchronization	Arrow Highway to Foothill Blvd.	Update Traffic Signals, Pedestrian Heads/Buttons and Controllers along corridor, synchronization. Assume 5 intersections, \$100,000 per intersection.	System Operations	500,000	-	500,000
Azusa	Citrus Avenue Synchronization	Arrow Hwy to Foothill Blvd	Update Traffic Signals, Pedestrian Heads/Buttons and Controllers along corridor, synchronization. Assume 5 intersections, \$100,000 per intersection.	System Operations	500,000	-	500,000
Azusa	First Street/Baseline Road Synchronization	1st Street/Baseline Road from Vernon Avenue to Citrus Avenue	Update Traffic Signals, Pedestrian Heads/Buttons and Controllers along corridor, synchronization. Assume 5 intersections, \$100,000 per intersection.	System Operations	500,000	-	500,000
Azusa	Foothill Boulevard Synchronization	Foothill Boulevard from Todd Avenue to Citrus Avenue	Update Traffic Signals, Pedestrian Heads/Buttons and Controllers along corridor, synchronization. Assume 5 intersections, \$100,000 per intersection.	System Operations	500,000	-	500,000
Azusa	Gladstone Street Synchronization	Gladstone St. from Vincent Ave. to Citrus Ave.	Update Traffic Signals, Pedestrian Heads/Buttons and Controllers along corridor, synchronization. Assume 5 intersections, \$100,000 per intersection.	System Operations	500,000	-	500,000
Azusa	San Gabriel Valley Avenue Synchronization	San Gabriel Ave between 3rd St. and Sierra Madre Ave.	Update Traffic Signals, Pedestrian Heads/Buttons and Controllers along corridor, synchronization. Assume 5 intersections, \$100,000 per intersection.	System Operations	500,000	-	500,000
Baldwin Park	Baldwin Park Metrolink Transit Center/ Parking Structure	Cruz Baca Transcentre - Metrolink Station/City Hall	Transit Center/ Parking Structure for regional commuters and transit bus depot	Bike-Pedestrian	11,500,000	10,100,000	1,400,000
Baldwin Park	Bikeway Master Plan	citywide	Expand bike lane network. Assume \$100,000 for plan excluding implementation.	Bike-Pedestrian	100,000	-	100,000
Baldwin Park	Bogart Ave/Metrolink Pedestrian Bridge	Metrolink Station at Bogart Avenue	Pedestrian Overcrossing to connect regional parking to train mass transit	Bike-Pedestrian	1,800,000	1,100,000	700,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Baldwin Park	Ramona Blvd. Bicycle Improvements	Ramona Blvd. - Merced to BaldwinPark Blvd and Maine to east city limit	Improve connectivity of bike network to Ramona Blvd. Encourage use of bicycle lanes.	Bike-Pedestrian	1,600,000	1,000,000	600,000
Baldwin Park	Grade Separation-- Pacific Avenue	Pacific Avenue & MTA Railroad Tracks	Grade separation to improve traffic flow and eliminate waits. CHECK COST - based on average for grade separation projects in database.	Grade Separation	30,000,000	24,000,000	6,000,000
Baldwin Park	Grade Separation-- Ramona	Ramona Blvd. & MTA Railroad Tracks	Grade separation to improve traffic flow and eliminate waits. CHECK COST - based on average for grade separation projects in database.	Grade Separation	30,000,000	24,000,000	6,000,000
Baldwin Park	Badillo St Corridor and Intersection Improvements	Badillo St. from Ramona Blvd. Intersection to Eastern City Limits	Arterial Improvements - includes traffic signal installation at Willow Ave. plus, turning pocket modifications and bikeway upgrades to connect to the Metrolink Park & Ride and transit center/parking structure	Intersection Improvement	1,000,000	200,000	800,000
Baldwin Park	Pacific/Ramona/Maine Intersection Improvements	Pacific/Ramona/Maine	Traffic capacity enhancement and traffic flow improvement - add right turn lanes and widen road at intersection. Assume same cost as Puente/Merced intersection improvement project.	Intersection Improvement	2,500,000	-	2,500,000
Baldwin Park	Puente/Merced Intersection Improvements	Puente Avenue and Merced Ave.	Traffic capacity enhancement and traffic flow improvement - add right turn lanes and widen road at intersection.	Intersection Improvement	2,500,000	-	2,500,000
Baldwin Park	Los Angeles Street Traffic Signal Installation and Sync	West city limit to east city limit	Install two traffic signals at Hornbrook Ave and at Phelan Ave. then synchronize the entire route. Include safety enhancements for pedestrians and the Baldwin Park Fire Station.	System Operations	280,000	200,000	80,000
Baldwin Park	Pacific Avenue Arterial Improvement	Pacific Avenue	Arterial Improvements along Pacific Avenue to Southern City Limits. Includes traffic signal upgrades and synchronization.	System Operations	1,500,000	-	1,500,000
Claremont	Indian Hill Blvd. Traffic Flow	Indian Hill Blvd. & Foothill Blvd.	Construct 2nd S/B left turn lane, traffic signal improvement, install N/B right-turn overlap phase.	Intersection Improvement	300,000	-	300,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Claremont	Indian Hill/Foothill Boulevard Traffic Signal Improvements	Indian Hill and Foothill	Provide overlap phasing on all approaches	Intersection Improvement	200,000	-	200,000
Claremont	Indian Hill and Arrow Highway Signal Improvements	Indian Hill and Arrow	Provide overlap phasing on the northbound and eastbound approaches.	Intersection Improvement	250,000	50,000	200,000
Claremont	Mountain Traffic Flow - at Foothill Blvd.	Mountain Ave. and Foothill Blvd.	Lengthen W/B and E/B left-hand turn pockets	Intersection Improvement	200,000	50,000	150,000
Claremont	Towne Avenue/Foothill Blvd. Traffic Improvement	Towne Ave./Foothill Blvd.	Towne Ave Traffic Flow - Construct 2nd S/B left-turn lane and traffic signal improvement	Intersection Improvement	300,000	50,000	250,000
Claremont	Traffic Signal Improvement - Foothill Blvd. & Berkeley	Foothill Blvd. & Berkeley	Install traffic signal to improve congestion traffic flow.	Intersection Improvement	300,000	-	300,000
Claremont	Traffic Signal Improvement - Indian Hill and Colby	Indian Hill and Colby	Install traffic signal to improve traffic flow.	Intersection Improvement	300,000	-	300,000
Claremont	Traffic Signal Improvement & Off-ramp Improvement	Base Line and I-210 Freeway	Install improved traffic signal for all four directions. Construct E/B left-turn lane and add 2nd S/B right-turn lane on I-210 W/B off ramp.	Intersection Improvement	500,000	-	500,000
Claremont	Bridge Widening - Monte Vista & Base Line	Monte Vista & Base Line	Bridge Widening -Construct N/B right-turn lane, construct 2nd W/B left-turn lane, improve traffic signal, and install N/B right turn overlap phase.	Roadway Capacity	1,200,000	450,000	750,000
Claremont	I-10/Indian Hill Bridge Widening design	I-10 and Indian Hill	Prepare plans for bridge widening	Roadway Capacity	1,500,000	200,000	1,300,000
Claremont	PSR for I-10/Indian Hill Bridge Widening	Indian Hill/I-10	Project study report preparation for Caltrans submittal to allow the bridge widening to put on long range transportation plan and to seek funding.	Roadway Capacity	300,000	-	300,000
Claremont	Traffic Signal Improvement - IH from American to San Jose	Indian Hill from American to San Jose	Traffic Signal improvements and other arterial related improvements.	System Operations	400,000	-	400,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Covina	Covina Metrolink Station Passenger Amenity Improvements	600 N. Citrus Avenue, Covina, CA 91723	Construct Transit Enhancements, parking enhancements and Bicycle Amenities including passenger depot, restrooms, lockers and showers to support Covina Bikestation and Metrolink Commuters.	Other	3,600,000	1,500,000	2,100,000
Covina	San Bernardino Road - Street Widening	San Bernardino Road from Citrus Avenue to Second Street, south side of street	Two lane to four lane, curb, gutter, and sidewalk. Relocation of utilities.	Roadway Capacity	3,000,000	1,500,000	1,500,000
Diamond Bar	Brea Canyon Rd (West of SR 57) & Pathfinder Rd Improvement	Brea Canyon Road (West of SR 57) & Pathfinder Road	Add the second left-turn lane on eastbound Pathfinder Rd; Add the second right-turn lane on westbound Pathfinder Rd	Intersection Improvement	1,100,000	-	1,100,000
Diamond Bar	Brea Canyon Rd & Golden Springs Dr Intersection Improvement	Brea Canyon Road & Golden Springs Drive	Add the second left-turn lane and an exclusive right-turn lane on northbound Brea Canyon Rd Add the second right-turn lane on southbound Brea Canyon Rd; Add the third left-turn lane on eastbound Golden Springs Dr; Add the third through lane on westbound	Intersection Improvement	2,480,000	-	2,480,000
Diamond Bar	Brea Canyon Rd & Silver Bullet Dr Intersection Improvement	Brea Canyon Road & Silver Bullet Drive	Add an exclusive right-turn lane on northbound Brea Canyon Rd and westbound Silver Bullet Dr	Intersection Improvement	80,000	-	80,000
Diamond Bar	Diamond Bar Blvd & Brea Canyon Rd Intersection Improvement	Diamond Bar Blvd & Brea Canyon Road	Convert the shared through/right lane to through lane and the permitted right-turn lane to free right-turn lane on northbound Brea Canyon Rd	Intersection Improvement	625,000	-	625,000
Diamond Bar	Diamond Bar Blvd & Cold Spring Lane Intersection Improvement	Diamond Bar Blvd & Cold Spring Lane	Add an exclusive right-turn lane on eastbound and westbound Cold Spring Ln	Intersection Improvement	1,270,000	-	1,270,000
Diamond Bar	Diamond Bar Blvd & Golden Spring Dr Intersection Improvement	Diamond Bar Blvd & Golden Springs Drive	Add the second left-turn lane and an exclusive right-turn lane on eastbound Golden Springs Dr	Intersection Improvement	845,000	-	845,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Diamond Bar	Diamond Bar Blvd & Montefino Ave Intersection Improvement	Diamond Bar Blvd & Montefino Ave	Add an exclusive right-turn lane on eastbound Montefino Ave	Intersection Improvement	85,000	-	85,000
Diamond Bar	Diamond Bar Blvd & Mountain Laurel Way Improvement	Diamond Bar Blvd & Mountain Laurel Way	Add the second left-turn lane on eastbound Mountain Crest Dr	Intersection Improvement	1,600,000	-	1,600,000
Diamond Bar	Diamond Bar Blvd & Quail Summit Dr Intersection Improvement	Diamond Bar Blvd & Quail Summit Dr	Convert the right-turn lane to shared through/right lane on northbound Diamond Bar Blvd; Add the third through lane on southbound Diamond Bar Blvd	Intersection Improvement	310,000	-	310,000
Diamond Bar	Diamond Bar Blvd & Sugarpine Place Intersection Improvement	Diamond Bar Blvd & Sugarpine Place	Add an exclusive right-turn lane on northbound Diamond Bar Blvd; Widen eastbound Sugarpine Pl to include two left-turn lanes and a shared through/right lane	Intersection Improvement	490,000	-	490,000
Diamond Bar	Diamond Bar Blvd & Temple Ave Intersection Improvement	Diamond Bar Blvd & Temple Ave	Add a third left-turn lane and an exclusive right-turn lane on eastbound Temple Ave	Intersection Improvement	2,018,000	-	2,018,000
Diamond Bar	Grand Ave & Lavendar Intersection Improvement	Grand Ave & Lavendar	Convert the right-turn lane to shared through/right lane on northbound Grand Ave; Add the second left-turn lane on eastbound Diamond Bar Villas	Intersection Improvement	672,000	-	672,000
Diamond Bar	Grand Ave & Montefino Ave Intersection Improvement	Grand Ave & Montefino Ave	Add the second left-turn lane on northbound Montefino Ave	Intersection Improvement	180,000	-	180,000
Diamond Bar	Grand Ave & Rolling Knoll Road Intersection Improvement	Grand Ave & Rolling Knoll Road	Add an exclusive right-turn lane on northbound Rolling Knoll Rd; Convert the right-turn lane to shared through/right lane on eastbound Grand Ave; Add the third through lane on westbound Grand Ave	Intersection Improvement	920,000	-	920,000
Diamond Bar	Diamond Bar Blvd Median Improvements	Diamond Bar Blvd Corridor	Median realignments to improve turning line of sight	System Operations	270,000	-	270,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Duarte	Bike Trail - Duarte Rd	both sides of Duarte Rd from Mountain Ave to Highland Ave	Class 2 on-street bike trail on both sides of Duarte Rd from Mountain Ave to Highland Ave	Bike-Pedestrian	10,000	-	10,000
Duarte	Bike Trail - Highland Ave	both sides of Highland Ave between Royal Oaks Drive and Duarte Rd	Class 2 on-street bike trail on Highland Ave between Royal Oaks Dr and Duarte Rd	Bike-Pedestrian	15,000	-	15,000
Duarte	Sidewalk - Duarte Rd	north side of Duarte Rd between Mountain Rd and Highland Ave	pedestrian sidewalk alongside Gold Line extension	Bike-Pedestrian	750,000	-	750,000
Duarte	Sidewalk - Highland Ave	west side of Highland Ave from Metro Gold Line tracks to Evergreen	sidewalk from Gold Line station; requires retaining wall	Bike-Pedestrian	150,000	-	150,000
Duarte	Traffic Signal Improvement - Huntington Drive/Pops Rd	Huntington Drive/Pops Rd	traffic signal	Intersection Improvement	250,000	-	250,000
Duarte	Traffic Signal Improvement - Royal Oaks/Las Lomas Road	Royal Oaks/Las Lomas	traffic signal	Intersection Improvement	150,000	-	150,000
Duarte	Traffic Signal Improvement - Royal Oaks/Mt. Olive Drive	Royal Oaks/Mt. Olive	traffic signal	Intersection Improvement	150,000	-	150,000
El Monte	Arden Drive RR Crossing	Arden Drive at UPRR	RR intersection improvement	Grade Separation	500,000	-	500,000
El Monte	Cogswell Grade Separation	Cogswell Road at Fire Station/UPRR	Grade Separation	Grade Separation	15,000,000	-	15,000,000
El Monte	Ramona Grade Separation	Santa Anita/Ramona Blvd	Grade Separation	Grade Separation	14,000,000	7,000,000	7,000,000
El Monte	Tyler Ave RR Crossing	Tyler Ave at UPRR	RR intersection improvement	Grade Separation	500,000	-	500,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
El Monte	Santa Anita/Valley Intersection	Santa Anita/Valley Blvd.	Roadway Widening/Intersection Improvement	Intersection Improvement	6,000,000	2,200,000	3,800,000
El Monte	Valley/Garvey/Mountain View Intersection	Valley/Garvey/Mountain View Road	Roadway Widening/Intersection Improvement	Intersection Improvement	300,000	-	300,000
El Monte	Valley/Peck Intersection	Valley Blvd at Peck Road	Roadway Widening/Intersection Improvement	Intersection Improvement	3,000,000	-	3,000,000
El Monte	Valley/Ramona Intersection	Valley Blvd at Ramona Blvd	Roadway Widening/Intersection Improvement	Intersection Improvement	3,000,000	1,500,000	1,500,000
El Monte	Arden Drive	Arden Drive to Esto	Roadway Completion	Roadway Capacity	6,000,000	-	6,000,000
El Monte	Flair Park Connector	Flair Park/El Monte Bus Station	Connect Baldwin Place to Ramona Blvd. near El Monte Transit Center going under I-10 freeway and over Rio Honda wash. Transit Center has bus and BRT service but not light rail.	Roadway Capacity	3,200,000	-	3,200,000
El Monte	Gidley Extension	Gidley west of Balwin to Temple City Blvd	Roadway Completion	Roadway Capacity	15,000,000	-	15,000,000
El Monte	Rio Hondo Roadway Completion	Rio Hondo between Telstar and Whitmore to connect to Rosemead Blvd	Roadway Completion	Roadway Capacity	2,500,000	-	2,500,000
El Monte	Santa Anita/Baldwin Frontage	Frontage road connection Santa Anita and Baldwin Ave	Roadway Completion	Roadway Capacity	15,000,000	-	15,000,000
El Monte	Durfee Ave Corridor	Durfee Ave between I-10 and southern border	Corridor Improvement (median, landscape, bus shelter, traffic calming, signal synch, etc...)	System Operations	3,000,000	-	3,000,000
El Monte	Garvey Corridor	Garvey Avenue between eastern border and Durfee Ave	Corridor Improvement (median, landscape, bus shelter, traffic calming, etc...)	System Operations	4,000,000	-	4,000,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
El Monte	Lower Azusa Corridor	Lower Azusa Road between western and eastern city limits	Corridor Improvement (median, landscape, bus shelter, traffic calming, signal synch, etc...)	System Operations	2,000,000	-	2,000,000
El Monte	Mountain View Rd	Mountain View Road between Valley and South El Monte	Corridor Improvement (median, landscape, bus shelter, traffic calming, signal synch, etc...)	System Operations	3,000,000	-	3,000,000
El Monte	Peck Rd	Peck Road between northern and southern city limits	Corridor Improvement (median, landscape, bus shelter, traffic calming, signal synch, etc...)	System Operations	3,000,000	-	3,000,000
El Monte	Santa Anita Corridor	Santa Anita Between northern and southern city limits	Corridor Improvement (median, landscape, bus shelter, traffic calming, signal synch, etc...)	System Operations	3,000,000	-	3,000,000
El Monte	Valley Blvd (El Monte)	Valley Blvd between western and eastern city limits	Corridor Improvement (median, landscape, bus shelter, traffic calming, signal synch, etc...)	System Operations	5,000,000	-	5,000,000
El Monte	Ramona/Badillo Express Bus Lane	Ramona/Badillo Corridor (El Monte Bus Station to Cal Poly Pomona)	Express Bus Lane	Transit	10,000,000	-	10,000,000
Glendora	Route 66 Transit Improvements	N Barranca Ave to Amelia Ave	Improve access to light rail station on Glendora Ave by upgrading transit and pedestrian environment including but not limited to new bus shelters and related amenities, sidewalk improvements including landscaping, and new signage and striping.	Bike-Pedestrian	5,000,000	-	5,000,000
Glendora	Auto Centre/ Lone Hill West Bound Right-Turn Lane	Auto Centre/ Lone Hill	Add one left turn lane from Auto Centre Drive to Lone Hill Ave. to two existing left turn lanes (three left turn lanes total after improvement).	Intersection Improvement	200,000	-	200,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Glendora	Base Line/ Grand Striping	Base Line Rd./ Grand Avenue	Convert a dedicated right turn lane to a shared through-right turn lane.	Intersection Improvement	200,000	-	200,000
Glendora	Foothill/ Grand	Foothill/ Grand	Add second westbound left-turn lane	Intersection Improvement	200,000	-	200,000
Glendora	Gladstone/ Lone Hill Through-Lanes	Gladstone/ Lone Hill	Additional north and south through lanes.	Intersection Improvement	200,000	-	200,000
Glendora	Grand Ave/Baseline Rd Intersection Upgrade	Grand Avenue - 210 freeway to Base Line Road & Base Line Road from Grand Avenue to freeway off-ramp	This intersection is currently operating on a split phase. Traffic in the east-west direction has to sit through two phases for left turns. West bound Baseline traffic has to lanes turning left to go south on Grand. East bound Baseline traffic has a	Intersection Improvement	1,500,000	-	1,500,000
Glendora	Highway 57 / Auto Centre Drive Interchange Improvement	Hwy 57 & Auto Centre Dr	Widen NB exit by adding one additional LT lane to two existing lanes, one L and one R (3 turn lanes total after improvement). CHECK PROJECT COST ESTIMATE.	Intersection Improvement	250,000	-	250,000
Glendora	Route 66 & Glendora Ave Signalization	Route 66 & Glendora Avenue	Add one eastbound LT lane to existing LT lane (two LT lanes total after improvement).	Intersection Improvement	850,000	-	850,000
Glendora	Route 66/ Lone Hill Shared/Through Right Turn Lane	Route 66/ Lone Hill	Convert the dedicated south bound right lane to a shared/ through lane. Additional ROW required.	Intersection Improvement	2,000,000	-	2,000,000
Glendora	Transportation Master Plan	Citywide	Conduct study of impacts of growth and transportation facility needs.	Other	100,000	-	100,000
Glendora	Lone Hill - Widening	Gladstone Ave to 210 Freeway	Add one NB lane to the two existing lanes (3 NB lanes total after improvement). No change to existing SB lanes. COST ESTIMATE BASED ON 1/2 MILE @ \$4 MIL./MILE - CHECK	Roadway Capacity	2,000,000	-	2,000,000
Industry	605 Freeway at Valley Boulevard	605 Freeway at Valley Boulevard	Modify on- and off-ramps to the 605 Freeway at Valley Boulevard	Intersection Improvement	9,000,000	-	9,000,000
Industry	Valley Boulevard widening at Brea Canyon Road	Valley Boulevard widening at Brea Canyon Road	Widen Valley Boulevard to add a third land of travel	Roadway Capacity	147,000	-	147,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Industry	Valley Boulevard widening at from Hambleton Avenue to Fairwa	Valley Boulevard widening at from Hambleton Avenue to Fairway Drive	Add third lane of travel on eastbound side of Valley Boulevard	Roadway Capacity	893,000	-	893,000
Irwindale	Arrow Highway Pedestrian Improvements	Arrow Highway	This area has a lot of foot traffic and the goal of the project is to support/increase that by extending the sidewalk. CHECK COST ESTIMATE.	Bike-Pedestrian	500,000	-	500,000
Irwindale	Arrow Highway at Azusa Canyon Road Intersection Improvements	Arrow Highway I/s Azusa Canyon Road (Santa Fe Dam Recreation Park Entrance)	Intersection Widening and Traffic Signal modification	Intersection Improvement	1,750,000	-	1,750,000
Irwindale	Intersection Improvements - Irwindale Ave. & Foothill Blvd.	Irwindale Ave. & Foothill Blvd.	Add new right turn phasing for the east approach. Implement overlap phasing - when the left turn lanes move, have phasing for right turn (for EB approach) as well.	Intersection Improvement	330,000	-	330,000
Irwindale	Intersection Widening - Arrow Hwy. & Irwindale Ave.	Arrow Hwy. & Irwindale Ave.	Add exclusive right turn lane NB with signalized phasing	Intersection Improvement	2,250,000	1,000,000	1,250,000
Irwindale	Signalization at Irwindale Avenue and Camino De La Cantera	Irwindale Avenue at Camino De La Cantera	Traffic Signal Improvement - New Signal	Intersection Improvement	175,000	100,000	75,000
Irwindale	Traffic Light Improv. - L/T Phasing - Cypress & Irwindale	Cypress & Irwindale	Improve phasing for left turns in east and west directions.	Intersection Improvement	75,000	25,000	50,000
Irwindale	Traffic Signal Improvement - Azusa Cyn. & Los Angeles St.	Azusa Cyn. & Los Angeles St.	Traffic Signal Improvement - New Signal	Intersection Improvement	180,000	90,000	90,000
Irwindale	Traffic Signal Improvement - Peck Road & Live Oak Ave.	Peck Road & Live Oak Ave.	Add left turn phasing for the east-west directions (Live Oak Ave.) to speed up traffic at intersection. (Currently there is left turn phasing for N-S directions.)	Intersection Improvement	109,000	50,000	59,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Irwindale	Arrow Highway Street Lighting Retrofit	Arrow Highway between Maine Avenue and Azusa Canyon Road	Install street lights on the north side of Arrow Highway	Other	75,000	-	75,000
La Canada Flintridge	Foothill Blvd. Traffic Calming and Bike Improvements	Foothill Blvd. between Palm Drive to Castle Road	Construct traffic calming and bike lanes.	Bike-Pedestrian	2,500,000	-	2,500,000
La Canada Flintridge	Angeles Crest Highway	Angeles Crest Highway at Foothill Blvd.	Construct second southbound right turn lane.	Intersection Improvement	500,000	-	500,000
La Canada Flintridge	Foothill Blvd. Signal Improvement	Foothill Blvd. at Hillard Ave.	Modify traffic signal to provide protected-permissive left turn phasing.	Intersection Improvement	200,000	-	200,000
La Canada Flintridge	Foothill Blvd. Traffic Signal Improvement - Crown Avenue	Foothill Blvd. at Crown Avenue	Modify traffic signal to provide protected-permissive left turn phasing.	Intersection Improvement	200,000	-	200,000
La Puente	Valley Blvd. Improvements	Valley Blvd. between Old Valley Blvd. and Azusa Way	Synchronize signals of 4 intersections as part of reconstruction project. Cost estimated at \$100,000 per intersection.	System Operations	400,000	-	400,000
La Verne	Arrow Ped/Bike Bridge	Arrow Highway Bridge Extends from parking structure and platform north of Arrow to mixed use development at Fairplex	Pedestrian/Bicycle Bridge w/elevators, wide enough for bikes	Bike-Pedestrian	1,500,000	500,000	1,000,000
La Verne	Arrow Ped/Bike Improvements	E to White including crosswalks @ E and White and midblock crossing at future "Fairplex Plaza"	Arrow Highway Pedestrian & Bicycle Street Improvements including signalized crossing at Fairplex Plaza	Bike-Pedestrian	500,000	300,000	200,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
La Verne	Old Town Ped/Bike Improvements	TOD/Old Town Street Improvements linking the Gold Line station and TOD areas with Old Town and the University	Improvements for Pedestrians, Bicycles, and Tram	Bike-Pedestrian	100,000	50,000	50,000
La Verne	Arrow Hwy/D St Signalization	Arrow Hwy at D Street	Addition to signal of protected left turn	Intersection Improvement	250,000	-	250,000
La Verne	Arrow Hwy/Wheeler Signalization	Arrow Hwy at Wheeler	Addition to signal of protected left turn	Intersection Improvement	175,000	-	175,000
La Verne	Foothill/Bradford Signalization	Foothill Blvd. at Bradford	New signal	Intersection Improvement	275,000	-	275,000
La Verne	Foothill/White Signalization	Foothill and White Avenue	Eastbound dual left turn lanes added to intersection	Intersection Improvement	200,000	-	200,000
La Verne	White Ave/Bonita Signalization	White Ave. at Bonita	Addition to signal of protected left turn	Intersection Improvement	150,000	-	150,000
La Verne	White Ave/Durward Signalization	Signal on White Ave. at Durward	New signal	Intersection Improvement	250,000	50,000	200,000
La Verne	1st Street Parking Phase II	P-2, 1st Street Parking Structure, s.side of 1st, east of Gold Line Station	Parking Structure 4 levels above ground w/ 320 spaces; related to future Gold Line station.	Park-and-Ride	4,500,000	4,000,000	500,000
La Verne	Arrow Gold Line Parking	Gold Line Parking Lot immediately south of the future station and fronting Arrow, now part of Paper Pak	Acquisition and improvement of triangular area south of station for HC and bike parking/drop-off area	Park-and-Ride	900,000	750,000	150,000
La Verne	Wheeler Ave Extension	Wheeler Avenue extension from current terminus to Puddingstone Drive	Major street construction to extend an arterial	Roadway Capacity	1,000,000	800,000	200,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Monrovia	California Avenue Bike/Ped Project	California Avenue, South of the 210 Freeway to Gold Line Tracks	Street Overlay, sidewalks, street lights, landscaping, Median Island, bike lane, Intersection Improvements, underpass enhancements.	Bike-Pedestrian	2,700,000	2,000,000	700,000
Monrovia	Duarte Road Improvements	Duarte Road from Myrtle Avenue to Mountain Avenue	Widen Duarte Road to Arterial Roadway Standards	Roadway Capacity	10,500,000	5,225,000	5,275,000
Monrovia	Railroad Avenue Extension	West of Duarte Road	New Steet to serve Bus Facility, sidewalks, street lights, landscaping, bike lane, Intersection Improvements.	Roadway Capacity	770,150	543,075	227,075
Monrovia	Myrtle Avenue Street Improvements	Myrtle Avenue from 210 Freeway, south to Duarte Road	Street Overlay, sidewalks, street lights, landscaping, Median Island, bike lane, Intersection Improvements, underpass enhancements.	System Operations	2,053,420	125,000	1,928,420
Montebello	New traffic signal Avenida de la Merced/Lincoln	Avenida de la Merced/Lincoln	New traffic signal	Intersection Improvement	250,000	-	250,000
Montebello	New traffic signal Avenida de la Merced/Poplar	Avenida de la Merced/Poplar	New traffic signal	Intersection Improvement	250,000	-	250,000
Montebello	New traffic signal Beverly/20th	Beverly/20th	New traffic signal	Intersection Improvement	250,000	-	250,000
Montebello	New traffic signal Beverly/Concourse	Beverly/Concourse	New traffic signal	Intersection Improvement	250,000	-	250,000
Montebello	New traffic signal Garfield/Via San Delarro	Garfield/Via San Delarro	New traffic signal	Intersection Improvement	250,000	-	250,000
Montebello	New traffic signal Lincoln/Vail	Lincoln/Vail	New traffic signal	Intersection Improvement	250,000	-	250,000
Montebello	New traffic signal Telegraph/Gage	Telegraph/Gage	New traffic signal	Intersection Improvement	250,000	-	250,000
Montebello	New traffic signal Telegraph/I-5 off ramp	Telegraph/I-5 off-ramp	New traffic signal	Intersection Improvement	250,000	-	250,000
Montebello	New traffic signal Wilcox/Via Paseo	Wilcox/Via Paseo	Install a new traffic signal	Intersection Improvement	250,000	-	250,000
Montebello	Upgrade Garfield/Whittier	Garfield/Whittier	Modify traffic signals and add left turn phasing and upgrade equipment	Intersection Improvement	150,000	-	150,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Montebello	Upgrade traffic signal Greenwood/Beach	Greenwood/Beach	Modify traffic signals and add left turn phasing and upgrade equipment	Intersection Improvement	150,000	-	150,000
Montebello	Upgrade traffic signal Greenwood/Date	Greenwood/Date	Modify traffic signals and add left turn phasing and upgrade equipment	Intersection Improvement	150,000	-	150,000
Montebello	Upgrade traffic signal Greenwood/Elm	Greenwood/Elm	Modify traffic signals and add left turn phasing and upgrade equipment	Intersection Improvement	150,000	-	150,000
Montebello	Upgrade traffic signal Greenwood/Mines	Greenwood/Mines	Modify traffic signals and add left turn phasing and upgrade equipment	Intersection Improvement	150,000	-	150,000
Montebello	Upgrade traffic signal Greenwood/Oakwood	Greenwood/Oakwood	Modify traffic signals and add left turn phasing and upgrade equipment	Intersection Improvement	150,000	-	150,000
Montebello	Upgrade traffic signal Greenwood/Sycamore	Greenwood/Sycamore	Modify traffic signals and add left turn phasing and upgrade equipment	Intersection Improvement	150,000	-	150,000
Montebello	Upgrade traffic signal Greenwood/Telegraph	Greenwood/Telegraph	Modify traffic signals and add left turn phasing and upgrade equipment	Intersection Improvement	150,000	-	150,000
Montebello	Upgrade traffic signal Greenwood/Union	Greenwood/Union	Modify traffic signals and add left turn phasing and upgrade equipment	Intersection Improvement	150,000	-	150,000
Montebello	Upgrade traffic signal Olympic/Montebello	Olympic/Montebello	Modify traffic signals and add left turn phasing and upgrade equipment	Intersection Improvement	150,000	-	150,000
Montebello	Upgrade traffic signal Washington/Greenwood	Washington/Greenwood	Modify traffic signals and add left turn phasing and upgrade equipment	Intersection Improvement	150,000	-	150,000
Montebello	Upgrade traffic signal Washington/Maple	Washington/Maple	Modify traffic signals and add left turn phasing and upgrade equipment	Intersection Improvement	150,000	-	150,000
Montebello	Upgrade traffic signal Washington/Montebello	Washington/Montebello	Modify traffic signals and add left turn phasing and upgrade equipment	Intersection Improvement	150,000	-	150,000
Montebello	Upgrade traffic signal Washington/Vail	Washington/Vail	Modify traffic signals and add left turn phasing and upgrade equipment	Intersection Improvement	150,000	-	150,000
Montebello	Traffic Management Center	City Hall	Develop a Traffic Management Center	Other	150,000	-	150,000
Montebello	Park and Ride Parking Structure	Montebello Blvd. and Taylor Ranch	Construct Park n Ride Parking Structure	Park-and-Ride	1,000,000	-	1,000,000
Montebello	Beverly Blvd. widening	Beverly Blvd. Montebello Blvd to easterly City limit	widen Beverly Blvd.	Roadway Capacity	5,000,000	-	5,000,000
Montebello	Traffic signal system Beverly Blvd	Beverly Blvd	Interconnect, timing study, and equipment modifications	System Operations	940,000	-	940,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Montebello	Traffic Signal System Garfield Ave	Garfield Ave	Interconnect, timing study, and equipment modifications	System Operations	490,000	-	490,000
Montebello	Traffic signal system Olympic	Olympic Blvd	Interconnect, timing study, and equipment modifications	System Operations	360,000	-	360,000
Montebello	Traffic signal system Washington Blvd	Washington Blvd	Interconnect, timing study, and equipment modifications	System Operations	314,000	-	314,000
Montebello	Traffic Signal System Whittier Blvd	Whittier Blvd	Interconnect, timing study, and equipment modifications	System Operations	625,000	-	625,000
Montebello	Traffic Signal System Wilcox Ave	Wilcox Ave	Interconnect, timing study, and equipment modifications	System Operations	435,000	-	435,000
Montebello	Traffic signal systems Greenwood to SR60	Greenwood/Montebello/Paramount from Telegraph to SR60	Interconnect, timing study, and equipment modifications	System Operations	1,467,000	-	1,467,000
Monterey Park	Intersection Improvements at Atlantic Blvd and Garvey Ave	Intersection of Atlantic Blvd and Garvey Ave	Widen each leg of the intersection as needed to allow for designated right-turn lanes. The work would include new PCC pavement, curb returns, sidewalk, ADA ramps, traffic signal modifications, utility relocations, and right-of-way acquisition.	Intersection Improvement	5,000,000	250,000	4,750,000
Monterey Park	Intersection Improvements at Cesar Chavez Av and Atlantic Blvd	Intersection of Cesar Chavez Ave and Atlantic Blvd	Widen intersection and Cesar Chavez as needed for designated right-turn lanes. Includes new PCC pavement, curb returns, sidewalk, ADA ramps, traffic signal equipment, bus pads, utility relocations, and right-of-way acquisition.	Intersection Improvement	5,000,000	250,000	4,750,000
Monterey Park	Intersection Improvements at Garfield Ave and Garvey Ave	Intersection of Garfield Ave and Garvey Ave	Widen each leg of intersection to allow for double left-turn and/or designated right-turn lanes. The work includes new PCC pavement, curb returns, sidewalk, ADA ramps, traffic signal mods, striping, utility relocations, and right-of-way acquisition.	Intersection Improvement	5,000,000	250,000	4,750,000
Pasadena	Intersection Improvements - Arroyo Parkway & California Blvd	Arroyo Parkway and California Blvd.	This project provides for a second left-turn lane to the westbound approach of California Boulevard to accommodate traffic destined for the Pasadena Freeway and an additional northbound right-turn lane to Arroyo Parkway. Adding these lanes will require	Intersection Improvement	4,105,000	-	4,105,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Pasadena	Intersection Improvements - Arroyo Parkway & Del Mar Ave	Arroyo Parkway & Del Mar Ave	This project provides for a second left-turn lane to the eastbound approach on Del Mar Boulevard to the 210 Freeway. This improvement would require additional right-of-way on the eastbound approach. Adding this additional lane will involve the follow	Intersection Improvement	3,145,000	-	3,145,000
Pasadena	Intersection improvements - Del Mar Blvd. & Hill Ave.	Del Mar Blvd. & Hill Ave.	This project provides for a second left-turn lane on the eastbound approach of the Del Mar Boulevard and Hill Avenue intersection to accommodate traffic headed for the I-210 freeway. This project would require additional right-of-way acquisition and	Intersection Improvement	3,331,000	-	3,331,000
Pasadena	Intersection Improvements - Foothill Blv. @ Sierra Madre Villa	Foothill Blvd. @ Sierra Madre Villa Ave.	This project provides for a second left-turn lane on the eastbound approach and the northbound approach of the intersection at Sierra Madre Villa and Foothill Boulevard. This project would require additional right-of-way acquisition and involve the f	Intersection Improvement	1,230,000	-	1,230,000
Pasadena	Intersection Improvements - Foothill Blvd. & Rosemead Blvd.	Foothill Blvd. & Rosemead Blvd.	This project provides for a second left-turn lane to be added on all four approaches of the intersection at Rosemead and Foothill Boulevard. This improvement will involve the following: 1. Widen nine feet on the west side of Rosemead, north side of	Intersection Improvement	2,360,000	-	2,360,000
Pasadena	Intersection Improvements - Lake Ave. @ Maple St.	Lake Ave. @ Maple St.	This project provides for the restriping of Maple Street to create three throughlanes from Lake Avenue to Los Robles Avenue. Maple Street will be widened within the existing right-of-way to provide the additional traffic lane and to retain the bike l	Intersection Improvement	1,125,000	-	1,125,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Pasadena	Intersection Improvements - Lake Avenue & Walnut Street	Lake Avenue & Walnut Street	This project provides for three primary improvements at the intersection of Lake Avenue and Walnut Street. The improvements consist of: 1. An additional northbound travel lane on Lake Avenue between Walnut Street and Locust Street; 2. A northbound lo	Intersection Improvement	9,385,000	-	9,385,000
Pasadena	Corridor Safety/Mobility Enhancements	Corridors	Corridor Safety/Mobility Enhancements	Other	3,125,000	-	3,125,000
Pasadena	Intelligent Transportation System(ITS) Master Plan Phase III	Citywide	Implement Intelligent Transportation System(ITS) Master Plan Phase III throughout city.	Other	8,500,000	-	8,500,000
Pasadena	Street Extension - Kinneloa Street	Kinneloa Street between Colorado Blvd. and Foothill Blvd.	Street Extension including	Roadway Capacity	672,350	-	672,350
Pasadena	Street Extension - Walnut Street	Walnut Street from Sunnyslope to Kinneloa Street	Extend Walnut Street from Sunnyslope to Kinneloa Street.	Roadway Capacity	2,050,000	-	2,050,000
Pasadena	Bus Stop Improvement Expansion	Citywide installation of bus stops for service expansion.	Install bus stops at 150 new locations to provide service for the new expansion of the bus shuttles.	Transit	937,500	-	937,500
Pasadena	Bus Vehicle Acquisition	Good locations.	Acquire 10 new 25 ft. shuttle buses to provide service expansion.	Transit	3,250,000	-	3,250,000
Pasadena	Dial-A-Ride Vans (CNG) Expansion Acquisition	Good Location	Expand Dia-A-Ride service by acquiring 5 new service vans.	Transit	300,000	-	300,000
Pasadena	Transit Intelligent Transportation System	Citywide	Vehicle arrival notification system at intersections throughout the city and on transit vehicles.	Transit	1,000,000	-	1,000,000
Pomona	Bicycle Path	Citywide	Install bike lanes or sharrows identifying bike paths on Corridors	Bike-Pedestrian	7,500,000	4,500,000	3,000,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Pomona	Free Bike Program	Downtown/Transit Station/CalPoly/Commerical Area	Provision of Free bikes in secured parking area for residents to utilize on short trips within the city including work, school, shopping and transit centers	Bike-Pedestrian	2,000,000	500,000	1,500,000
Pomona	Improve pedestrian connectivity	San Bernardino Ave & Indian Hill	Install crosswalk treatments to improve visibility of pedestrian crossings and improve existing bus stops.	Intersection Improvement	130,000	50,000	80,000
Pomona	New Traffic Signal - Foothill & Sumner	Foothill and Sumner	New Signal	Intersection Improvement	200,000	-	200,000
Pomona	Traffic Signal Modifications - Holt & Towne	Holt Ave & Towne Ave	Provide WB right turn lane. Install crosswalk treatments. Study feasibility of transit signal prioritization and/or queue jumping.	Intersection Improvement	50,000	31,000	19,000
Pomona	Traffic Signal Modifications - Holt & White	Holt Ave & White Ave	Provide separate right turn lane on all four approaches, and provide 2nd NB left turn lane on NB White. Install crosswalk treatments. Study feasibility of transit signal prioritization and/or queue jumping.	Intersection Improvement	180,000	111,600	68,400
Pomona	Traffic Signal Modifications - Mission & East End	Mission Blvd & East End Ave	Provide separate right-turn lanes on all four approaches and 2nd NB through lane on East End Avenue	Intersection Improvement	1,200,000	-	1,200,000
Pomona	Traffic Signal Modifications - Temple & Valley	Temple Ave & Valley Blvd	Provide two SB right turn lanes and two SB left turn lanes from Valley to Temple. Provide WB right-turn lane from Tempe to Valley. Install high-visibility crosswalk treatments and pedestrian refuge(s).	Intersection Improvement	430,000	395,600	34,400
Pomona	Bike and Ped Social Marketing Programs incentives	Citywide	Completion of social marketing studies and implementation of programs and incentives to utilize biking and walking for trips of 1-3 miles.	Other	3,000,000	500,000	2,500,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Pomona	Holt Ave Corridor Improvements	SR71 to White, White to Towne, Towne to ECL	Widen four to six lanes, landscaped center median, left-turn pockets at key locations. Enhance sidewalks and pedestrian crossings. Provide 14-foot right-hand lane in each direction. [SR71 to White, Towne to ECL] Enhanced crosswalks and center median.	Roadway Capacity	20,900,000	8,000,000	12,900,000
Pomona	Mission Blvd Corridor Improvements	Dudley to White, White to Towne, Towne to ECL	Additional turn lanes at congested intersections. Install landscape median, bicycle lanes and enhanced pedestrian crossings. [Dudley to White, Towne to ECL] Enhanced crosswalks and center median. Restripe travel lanes. Install transit queue-jumping	Roadway Capacity	2,800,000	1,200,000	1,600,000
Pomona	Garey Ave Signal Synchronization and Monitoring System	Garey Ave	Signal synchronization, traffic monitoring systems - 30 Signals on Garey Ave. Improve existing bus stop along corridor.	System Operations	16,500,000	14,784,000	1,716,000
Pomona	Holt Ave Signal Synchronization and Monitoring System	Valley Blvd/Holt Avenue	Signal synchronization, traffic monitoring systems - 25 Signals on Valley/Holt. Improve existing bus stop along corridor	System Operations	13,750,000	12,320,000	1,430,000
Pomona	Mission Blvd Signal Synchronization and Monitoring System	Mission Blvd	Signal synchronization, traffic monitoring systems - 19 Signals on Mission Blvd. Improve existing bus stop along corridor.	System Operations	10,450,000	9,363,200	1,086,800
Pomona	Regional ITS masterplan	Citywide	Install ITS equipment for all inter-cities corridors for real time adjustments	System Operations	7,500,000	2,250,000	5,250,000
Pomona	Towne Ave Signal Synchronization and Monitoring System	Towne Ave	Signal synchronization, traffic monitoring systems - 11 Signals on Towne Ave. Improve existing bus stop along corridor.	System Operations	6,050,000	5,420,800	629,200
Pomona	White Ave Signal Synchronization and Monitoring System	White Ave	Signal synchronization, traffic monitoring systems - 14 Signals on White Ave. Improve existing bus stop along corridor.	System Operations	7,700,000	6,899,200	800,800
Rosemead	Hellman Ave Intersection Improvements	San Gabriel Blvd at Hellman Ave	This intersection is located at a busy arterial in the City of Rosemead, adjacent to the Interstate 10 freeway. The project will include lengthening of left turn pockets to reduce vehicle stacking in through traffic lanes and traffic signal improvem	Intersection Improvement	600,000	-	600,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Rosemead	Valley Blvd/Mission Rd Intersection & Traffic Signal Improv.	Valley Blvd/Mission Rd.	This intersection is located at two busy arterials in the City of Rosemead. The project will include lengthening of left turn pockets to reduce vehicle stacking in through traffic lanes and traffic signal improvements including video detection techn	Intersection Improvement	500,000	-	500,000
Rosemead	Walnut Grove /Valley Intersection Improvements	Walnut Grove Ave at Valley Blvd.	This intersection is located at two busy arterials in the City of Rosemead. The project will include lengthening of left turn pockets to reduce vehicle stacking in through traffic lanes and traffic signal improvements including video detection techn	Intersection Improvement	600,000	-	600,000
Rosemead	Traffic Signal Synchronization Improvements	Lower Azusa, Mission Dr., Valley Blvd., Glendon Way at Rosemead	This primary urban arterial is susceptible to frequent delays and traffic congestion. Project to include traffic signal modification including video detection technology and conversion to an advanced traffic management system – traffic signal synchr	System Operations	1,000,000	-	1,000,000
San Dimas	Arrow Highway at Bonita/SR 57 Ramp Intersection	Arrow Highway at Bonita Avenue/SR 57 Ramp	North Bound Off Ramp/ Street Intersection Improvements	Intersection Improvement	1,700,000	-	1,700,000
San Dimas	Arrow Highway Signals	Eastern to Western City Limit	Enhancement of existing Traffic Signal and Synchronisation Improvements	Intersection Improvement	1,000,000	-	1,000,000
San Dimas	Bonita Avenue Intersection Improvements	Bonita Avenue/Cataract Avenue Intersection	Intersection Improvement	Intersection Improvement	1,700,000	-	1,700,000
San Dimas	Bonita Avenue Signals	All signals on Bonita Avenue	Signal synchronisation, addition of detection cameras	Intersection Improvement	600,000	-	600,000
San Dimas	Foothill Blvd/Walnut Avenue Traffic Signal Improvements	Foothill Blvd/Walnut Avenue	Signal installation to improve congestion	Intersection Improvement	300,000	-	300,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
San Dimas	Park and Ride at Grade Improvements	Monte Vista Avenue and Railway Street (Surplus Metro ROW)	Park and Ride Lot of approx. 31,046 sq. ft.	Park-and-Ride	1,200,000	-	1,200,000
San Dimas	Allen Avenue	Amelia Avenue to San Dimas Avenue	Arterial Improvement of approx. 3,961 feet in length.	Roadway Capacity	1,500,000	-	1,500,000
San Dimas	Lone Hill Avenue	Covina Blvd. to Overland Court	Arterial construction of approx. 3,854 ft.	Roadway Capacity	2,600,000	-	2,600,000
San Gabriel	Del Mar & Broadway Intersection Improvement	Intersection of Del Mar & Broadway	Intersection improvements to address safety and traffic flow issues.	Intersection Improvement	920,000	-	920,000
San Gabriel	Del Mar & Las Tunas Intersection Improvement	Intersection of Del Mar Avenue & Las Tunas Drive	Intersection improvements to address safety and traffic flow issues.	Intersection Improvement	1,200,000	-	1,200,000
San Gabriel	Del Mar & Mission Intersection Improvement	Intersection of Del Mar & Mission	Intersection improvements to address safety and traffic flow issues.	Intersection Improvement	972,000	-	972,000
San Gabriel	South Mission Dr. Traffic Signal Upgrade	Mission Rd at Ramona to Las Tunas Drive	3 signaled intersections. Upgrade traffic signal controllers to a new state of the art controllers. Request LA County Dept of Public Works to review timing, look into coordinating signals on S. Mission Dr.	System Operations	165,000	-	165,000
San Marino	California Blvd and Sierra Madre Blvd.	Intersection of California Blvd. and Sierra Madre Blvd.	Intersection and signal system upgrades	Intersection Improvement	300,000	-	300,000
San Marino	Cambridge Road and Huntington Drive	Intersection of Cambridge Road and Huntington Drive	Intersection improvements and signal system upgrade	Intersection Improvement	300,000	-	300,000
San Marino	Del Mar Avenue and Huntington Drive	Intersection of Huntington Drive and Del Mar Avenue	Intersection and signal system upgrade, including pedestrian signals	Intersection Improvement	300,000	-	300,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
San Marino	Huntington Drive and San Marino Avenue	Intersection of Huntington Drive and San Marino Avenue	Intersection Improvements and signal system upgrade	Intersection Improvement	300,000	-	300,000
San Marino	Los Robles Avenue and Mission Street	Intersection of Los Robles Avenue and Mission Street	Intersection improvement and signal system upgrade	Intersection Improvement	300,000	-	300,000
San Marino	Oak Knoll Avenue and Huntington Drive	Intersection of Oak Knoll Avenue and Huntington Drive	Intersection and signal system upgrade	Intersection Improvement	300,000	-	300,000
San Marino	Saint Albans Road and Huntington Drive	Intersection of Saint Albans Road and Huntington Drive	Intersection Improvements and signal system upgrade	Intersection Improvement	300,000	-	300,000
San Marino	Virginia Road and Huntington Drive	Intersection of Virginia Road and Huntington Drive	Intersection and signal system upgrades	Intersection Improvement	300,000	-	300,000
San Marino	Huntington Drive Traffic Mitigation	Huntington Middle School	The project involves the creation of a circular driveway used as a "drop-off" and "pick-up" point for the students. The row of vehicles in front of Huntington Middle school occupies one lane of Huntington Drive resulting in traffic congestion.	Other	400,000	-	400,000
South El Monte	Pedestrian Improvements - Central and Santa Anita	Central and Santa Anita	Crosswalk Improvement - Colored crosswalks with concrete stamp; major corridor, not sure if can do raised crossing; improvements to loops in there; bulbouts, shelter in middle of crossing, 2 additional mid-block crossings with blinking lights, small	Bike-Pedestrian	100,000	-	100,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
South El Monte	Pedestrian Improvements - Tyler and Santa Anita	Tyler and Santa Anita	Crosswalk Improvement - Colored crosswalks with concrete stamp; major corridor, not sure if can do raised crossing; improvements to loops in there; bulbouts, shelter in middle of crossing, 2 additional mid-block crossings with blinking lights, small	Bike-Pedestrian	50,000	-	50,000
South El Monte	Santa Anita Avenue Bicycle, Pedestrian, and Transit Improvement	Santa Anita	TOD Improvements; upgraded and new; issue is location of bus stops; want to feel safer; example, bus on Santa Anita and central in nw corner, want to move to sw corner, improving access to transit; extend sidewalk two feet; bike lanes; add tree wells	Bike-Pedestrian	500,000	-	500,000
South El Monte	TOD Station Improvement	on-ramp improvement	Fawcett and Santa Anita. EXPAND DESCRIPTION AND CHECK COST ESTIMATE.	Bike-Pedestrian	250,000	-	250,000
South El Monte	Bicycle Hub/Parking	Santa Anita	TOD Station Enhancement. EXPAND DESCRIPTION AND CHECK COST ESTIMATE.	Park-and-Ride	50,000	-	50,000
South El Monte	Signal Synchronization	Santa Anita and Tyler	TOD Station Enhancement. CHECK COST ESTIMATE AND EXPAND DESCRIPTION.	System Operations	100,000	-	100,000
South Pasadena	Bike Lane Striping	Minor Arterials and Above	Striping of Bike Lanes according to City Bike Lane Plan approved by Council in 2009.	Bike-Pedestrian	85,000	40,000	45,000
South Pasadena	Gold Line Station Bike Lockers	Mission Station (Mission St & Meridian Ave) on the Gold Line	Bike Lockers at Mission Station Park & Ride Lot (adjacent to Gold Line Stop)	Bike-Pedestrian	10,000	-	10,000
South Pasadena	Downtown South Pasadena Park and Ride Project	Mound Ave and Hope St	Creation of a 200 space parking structure with bike racks, pedestrian lighting, and transit signage. The structure will be across the street from future mixed use residential & commercial development.	Park-and-Ride	4,100,000	25,000	4,075,000
South Pasadena	Monterey Road Signal Synchronization	Monterey Road	Synchronization of traffic signals along Monterey Road.	System Operations	1,000,000	-	1,000,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Temple City	Temple City Boulevard Grade Separation	Temple City Boulevard at El Monte City Limits, the railroad crossing is our common boundary.	Railroad grade separation. Share cost with City of El Monte? \$10 MIL. ADDED TO OTHER FUNDING BY METRO CONSULTANT TO REDUCE TOTAL FEE. CITY TO VERIFY.	Grade Separation	20,000,000	10,000,000	10,000,000
Temple City	Baldwin Avenue Traffic Flow Improvements	The entire length of Baldwin Avenue within Temple City	Traffic flow improvements including reconfigured lanes, medians, curb locations, intersection improvements at every intersection.	System Operations	3,000,000	-	3,000,000
Temple City	Las Tunas Drive Traffic Flow Improvements	The entire length of Las Tunas Drive within Temple City	Traffic flow improvements including reconfigured lanes, medians, curb locations, intersection improvements at every intersection.	System Operations	4,000,000	-	4,000,000
Temple City	Lower Azusa Road Traffic Flow Improvement and Median Project	The entire length of Lower Azusa Road within Temple City	Traffic flow improvements including reconfigured lanes, curb locations, intersection improvements at every intersection. The addition of medians will improve circulation and will provide turn pockets.	System Operations	5,000,000	-	5,000,000
Temple City	Rosemead Boulevard Traffic Flow Improvements	The entire length of Rosemead Boulevard within Temple City	Traffic flow improvements including reconfigured lanes, medians, curb locations, intersection improvements at every intersection.	System Operations	5,000,000	-	5,000,000
Unincorporated SGV	San Jose Creek - Class 1 bike trail	7th Avenue in City of Industry to White Avenue in City of Pomona	Class 1 bike trail from San Gabriel River junction to White Avenue. CHECK COST ESTIMATE.	Bike-Pedestrian	250,000	-	250,000
Unincorporated SGV	Colima @ Fullerton	Colima @ Fullerton	grade separation/fly over	Grade Separation	35,000,000	-	35,000,000
Unincorporated SGV	Fullerton Road/Railroad	Fullerton Road/Railroad	Grade Separation	Grade Separation	80,000,000	-	80,000,000
Unincorporated SGV	Altadena Drive @ Lincoln Avenue	Altadena Drive @ Lincoln Avenue	Signal improvements to optimize traffic flows, exact signal design to be determined.	Intersection Improvement	400,000	-	400,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Unincorporated SGV	Azusa Avenue/Colima Road	Azusa Avenue/Colima Road	SB approach: Add 2nd through lane	Intersection Improvement	400,000	-	400,000
Unincorporated SGV	Azusa Avenue/Pepper Brook Way	Azusa Avenue/Pepper Brook Way	EB Approach: Add 2nd left turn lane	Intersection Improvement	200,000	-	200,000
Unincorporated SGV	Azusa Avenue/SB60 EB	Azusa Avenue/SB60 EB	EB Approach: Add 2nd left turn lane and restrip for dedicated through lane	Intersection Improvement	400,000	-	400,000
Unincorporated SGV	Brea Canyon Cutoff /Pathfinder Road	Brea Canyon Cutoff /Pathfinder Road	NB Approach: Restrip for 2nd left turn lane	Intersection Improvement	100,000	-	100,000
Unincorporated SGV	Fairway Drive/Route 60 WB	Fairway Drive/Route 60 WB offramp	WB approach: widen off ramp for 2nd left turn lane	Intersection Improvement	200,000	-	200,000
Unincorporated SGV	Fairway Drive/Valley Boulevard	Fairway Drive/Valley Boulevard	EB Approach: Add 3rd through lane	Intersection Improvement	300,000	-	300,000
Unincorporated SGV	Fullerton Road/Colima	Fullerton Road/Colima	NB and SB approaches: Add 3rd through lanes NB approach: Add right turn lane WB approach: Add right turn lane	Intersection Improvement	600,000	-	600,000
Unincorporated SGV	Fullerton Road/Gale Avenue	Fullerton Road/Gale Avenue	EB Approach: Add 2nd left turn lane and 3rd through lane	Intersection Improvement	900,000	-	900,000
Unincorporated SGV	Fullerton Road/Pathfinder Road	Fullerton Road/Pathfinder Road	SB Approach: Add 3rd through lane and 2nd left turn lane	Intersection Improvement	500,000	-	500,000
Unincorporated SGV	Fullerton Road/Route 60 EB/Diamond Bar Plaza	Fullerton Road/Route 60 EB/Diamond Bar Plaza	NB approach: Add 3rd through lanes	Intersection Improvement	700,000	-	700,000
Unincorporated SGV	Hacienda Boulevard/Gale Avenue	Hacienda Boulevard/Gale Avenue	EB and WB approach: add 2nd left turn lane NB Approach: add right turn lane	Intersection Improvement	200,000	-	200,000
Unincorporated SGV	Hacienda Boulevard/Newton	Hacienda Boulevard/Newton	SB Approach: Reconstruct/restrip for 2nd left turn lane NB Approach: Reconstruct/restrip for 2nd left turn lane	Intersection Improvement	200,000	-	200,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
Unincorporated SGV	Nogales Street /Colima Road	Nogales Street /Colima Road	NB Approach: Add right turn lane WB approach: Add 2nd left turn lane and right turn lane	Intersection Improvement	200,000	-	200,000
Unincorporated SGV	Nogales Street/Gale Avenue	Nogales Street/Gale Avenue	SB Approach: Add auxiliary lane to SR-60 WB on ramp EB Approach: Add 2nd left turn lane	Intersection Improvement	300,000	-	300,000
Unincorporated SGV	Peck Road/Durfee Avenue	Peck Road/Durfee Avenue	NB approach: Add 2nd left turn lane EB Approach : Add 2nd left turn lane and through lane WB Approach: Add left turn lane	Intersection Improvement	100,000	-	100,000
Unincorporated SGV	Peck Road/Pellissier Place	Peck Road/Pellissier Place	WB Approach: Add free right turn lane	Intersection Improvement	500,000	-	500,000
Unincorporated SGV	Via Verde Park & Ride Parking Lot	Via Verde/San Dimas	Construct and Park and Ride structure	Park-and-Ride	25,000,000	-	25,000,000
Unincorporated SGV	Colima from Whittier Boundary to Diamond Bar Boundary	Colima from Whittier Boundary to Diamond Bar Boundary	Add additional EB and WB lanes	Roadway Capacity	12,000,000	-	12,000,000
Unincorporated SGV	Peck Road @ I-605 Overpass	Peck Road over San Gabriel River	This is an overpass, connecting Pallessier Place on the south to Rooks Road on the north. The existing lane configuration at both ends of the overpass consists of 1-left and 2-thru lanes, tapering down to one lane on each direction at the overpass.	Roadway Capacity	8,100,000	-	8,100,000
Walnut	Grand Avenue Lane Improvements & Ped Bridge - Mt. SAC area	Grand Avenue North of Amar/Temple Mt. SAC area	Pedestrian overcrossing spanning 90-foot curb to curb across Grand Avenue, addition of through lanes and dedicated turn lanes on Grand.	Bike-Pedestrian	6,190,000	-	6,190,000
Walnut	Grand Avenue/La Puente Road Improvements	Grand Avenue/La Puente Road	Add one southbound through lane & replace exclusive right turn lane with shared through right turn lane. Replace northbound exclusive right turn lane with shared through right turn lane & provide for additional northbound exclusive left turn lane.	Intersection Improvement	550,000	-	550,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
West Covina	Glendora at Merced	Glendora Ave. and Merced	Add left-turn phasing for east and westbound approaches of Merced Avenue, upgrade vehicle head to 12-inch diameter and pedestrian heads to countdown type heads. COST ESETIMATE = 1/7 OF ORIGINAL SINGLE PROJECT COST (\$800,000) DIVIDED INTO 7 PROJECTS.	Intersection Improvement	114,000	-	114,000
West Covina	Lark Ellen Ave. at Puente Ave.	Lark Ellen Ave. and Puente Ave.	Add left-turn phasing for the east and westbound approaches of Puente Avenue, upgrade vehicle head to 12-inch diameter and pedestrian heads to countdown type heads. COST ESETIMATE=1/7 OF ORIGINAL SINGLE PROJECT COST (\$800,000) DIVIDED INTO 7 PROJECTS	Intersection Improvement	114,000	-	114,000
West Covina	Lark Ellen Avenue at Rowland Avenue	Lark Ellen Ave. and Rowland Ave.	Add left-turn phasing for east and westbound approaches of Rowland Avenue, upgrade vehicle head to 12-inch diameter and pedestrian heads to countdown type heads. COST ESETIMATE=1/7 OF ORIGINAL SINGLE PROJECT COST (\$800,000) DIVIDED INTO 7 PROJECTS	Intersection Improvement	114,000	-	114,000
West Covina	Pacific Avenue at I-10 WB on/off ramps	Pacific Avenue and I-10	Add left-turn phasing for eastbound approach of I-10 westbound off-ramp and westbound approach of Garvey Avenue North, upgrade vehicle head to 12-inch diameter and pedestrian heads to countdown type. COST ESETIMATE=1/7 OF ORIGINAL SINGLE PROJECT COST	Intersection Improvement	114,000	-	114,000
West Covina	Pacific Avenue at I-10 WB on/off ramps - Part A: W. Pacific	W. Garvey Ave and West Pacific Ave.	Add left-turn phasing for eastbound approach of I-10 westbound off-ramp and westbound approach of Garvey Avenue North, upgrade vehicle head to 12-inch diameter and pedestrian heads to countdown type head. COST ESETIMATE=1/7 OF ORIGINAL SINGLE PROJECT	Intersection Improvement	114,000	-	114,000

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded
West Covina	Pacific Avenue at I-10 WB on/off ramps - Part B: W. Pacific	I-10 off-ramp and W. Pacific Ave.	Add left-turn phasing eastbound approach of I-10 westbound off-ramp & westbound approach Garvey Avenue North, upgrade vehicle head to 12-inch diameter & pedestrian heads to countdown type head. COST ESTIMATE=1/7 OF ORIGINAL SINGLE PROJECT COST	Intersection Improvement	114,000	-	114,000
West Covina	Sentous Avenue at La Puente Road	Sentous Ave. and La Puente Road	Add left-turn phasing for east and westbound approaches of Rowland Avenue, upgrade vehicle head to 12-inches diameter and pedestrian heads to countdown type heads. COST ESTIMATE=1/7 OF ORIGINAL SINGLE PROJECT COST (\$800,000) DIVIDED INTO 7 PROJECTS	Intersection Improvement	114,000	-	114,000
West Covina	Local Transit Bus Stop Enhancements - Part 1	West Covina	Install 100-Benches, 100-Trash Cans, 25-Concrete Pedestrian Pads to accommodate bus service expansion.	Other	650,000	-	650,000
West Covina	Local Transit Bus Stop Enhancements - Part 2	West Covina	Install 30-Pre-Fab Shelter Benches, 10 - Bus Concrete Pads to accommodate bus service expansion.	Other	1,450,000	-	1,450,000
West Covina	Bus Transit Vehicle Purchase	West Covina	Enhance bus service by purchasing four-45' Shuttle Buses.	Transit	1,600,000	-	1,600,000
Total					\$724,272,420	\$170,845,475	\$553,426,945

**South Bay Cities
Congestion Mitigation Fee
Pilot Nexus Study Report**

December 2012



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South Bay Cities

Congestion Mitigation Fee Pilot Nexus Study Report

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EXECUTIVE SUMMARY

This Pilot Nexus Study has been conducted with the member jurisdictions of the South Bay Cities Council of Governments (COG) to examine the feasibility of implementing a Congestion Mitigation Fee Program to meet the Congestion Management Program (CMP) Countywide Deficiency Plan requirements. The proposed Congestion Mitigation Fee Program would charge a one-time fee on new development across all land uses to fund transportation projects that would reduce congestion generated by new development.

For the last three years, the member jurisdictions of the South Bay Cities COG have worked with MTA to develop this Pilot Nexus Study to ensure their issues and concerns were fully vetted prior to any action by the MTA Board. The City of Los Angeles is not included in the Pilot Nexus Study findings because a Pilot Nexus Study is being conducted separately. MTA requested each jurisdiction to review and modify, if necessary, their growth forecasts and regional arterial network, as well as select transportation improvements that would meet the nexus test. This test requires that transportation projects funded with a congestion mitigation fee mitigate the impacts caused by new development and that the cost born by each land use type bear a reasonable relationship to its impact on future congestion.

This Pilot Nexus Study concludes that the transportation projects analyzed in this study meet the requirements of the Mitigation Fee Act (AB1600) and the CMP Countywide Deficiency Plan. It also shows how a sub-regional fee program might work if it were to be implemented. Under the Congestion Mitigation Fee Program, each jurisdiction would:

- Collect and retain all of the revenue from the fee;
- Select and construct local transportation projects with regional benefits;
- Leverage their other funding sources to implement their list of transportation projects;
- Integrate their existing fee programs with the Congestion Mitigation Fee Program.

In January 2011, a preliminary findings report was distributed to all the jurisdictions in the South Bay Cities sub-region for their review and comment. This revised Pilot Nexus Study updates the first draft based on comments received and incorporates transportation project descriptions provided by jurisdictions. This Pilot Nexus Study demonstrates the feasibility of the program.

Growth in the South Bay Cities over the next 20 years is expected to result in a 215% increase in vehicle-hours-of-delay (VHD) or congestion on a roadway network that is already operating near or at capacity. To address this projected impact, 169 projects and programs with a cost of \$444 million were identified, of which 136 projects and programs with a cost of nearly \$409 million could be evaluated quantitatively. The analysis yielded the following results:

- **Congestion reduction benefit:** 38% reduction in congestion (vehicle-hours-of-delay) on arterials would result from implementing the transportation projects that could be evaluated quantitatively, meeting the requirements of the Mitigation Fee Act and CMP.
- **Maximum justified congestion mitigation fee:** The maximum justified fee-per-trip is \$1,649 based on the total cost of projects divided by total new trips over the next 20 years.
- **Economic benefits:** Building the projects identified could generate a countywide net economic benefit of an estimated 14,200 jobs, \$2.4 billion in economic output, and \$760 million in disposable income.¹

¹ Economic Impact Analysis of the Congestion Mitigation Fee Pilot Nexus Study – October 2012

Based on the results of the Pilot Nexus Study, each jurisdiction has its own individual fee-per-trip amount that would be needed to fund the unfunded share of its list of transportation projects. Since most jurisdictions have fee-per-trip amounts above \$300, a \$300 fee-per-trip amount could be used as the minimum fee-per-trip amount for these jurisdictions.

There were two additional outcomes that resulted from this work effort. The first is the development of a Greenhouse Gas Emissions Sketch Planning Tool that was made available to jurisdictions so they could generally estimate the greenhouse gas emissions impacts derived from transportation projects they identified. If the Congestion Mitigation Fee Program were implemented, there may be an opportunity for jurisdictions to fund transportation projects identified for SB 375 compliance as well as the CMP. The second outcome was the directive by the MTA Board to develop a model that would quantify the travel related benefits associated with bicycle travel. This directive was adopted to address the need to quantify the impacts of the extensive list of bicycle projects that were identified by jurisdictions during the process of conducting each sub-regional Pilot Nexus Study.

If the MTA Board authorizes staff to work with cities on implementing the congestion mitigation fee program, then it is possible that jurisdictions would modify their list of transportation projects. If so, then the congestion reduction and economic benefit from such a change may be different than the results identified in this Pilot Nexus Study and would be revised accordingly in a report at that time.

NEXT STEPS

Below are the next steps to complete the Congestion Mitigation Fee work plan:

- Present pilot nexus study and economic analysis findings to jurisdictions, sub-regional agencies, and building industry stakeholders.
- Seek MTA Board direction in early 2013 to:
 - Adopt the Congestion Mitigation Fee Program as the new CMP Deficiency Plan;
 - Establish minimum fee amount for CMP compliance
- Work one-on-one with jurisdictions, sub-regional agencies, and the building industry to develop and implement a Congestion Mitigation Fee Program over 24 months.

CONTACT INFORMATION

If you have any questions or comments, please contact:

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South Bay Cities Congestion Mitigation Fee Pilot Nexus Study Report

OVERVIEW

In 2003, the MTA Board authorized staff to examine the feasibility of implementing a Congestion Mitigation Fee Program to replace the existing Deficiency Plan requirements of the Congestion Management Program (CMP). The Congestion Mitigation Fee Program is intended to mitigate the impacts of new development, providing a new resource to jurisdictions while meeting local responsibilities under the state mandated CMP.

To explore the viability of a congestion mitigation fee across all land uses in each jurisdiction in the county, eight sub-regional pilot nexus studies were conducted across the county. The member cities of the South Bay Cities COG worked with MTA to conduct this Pilot Nexus Study to evaluate the transportation projects, policies and technical requirements such a program would require. The results of this effort are contained in this report.

CONGESTION MANAGEMENT PROGRAM BACKGROUND

As the Congestion Management Agency for the County of Los Angeles, MTA established the CMP to meet the requirements of Section 65089 of the California Government Code, which mandates that jurisdictions link their transportation, land use, and air quality decisions to address congestion on the regional transportation network. Jurisdictions are required to conform to the CMP to continue receiving their portion of state gas tax money allocated by Section 2105 of the California Streets and Highways Code and to preserve their eligibility for state and federal funding for transportation projects funded through MTA's Call-for-Projects.

Since the county experiences a deficient regional transportation system, a Countywide Deficiency Plan has been in place linking deficiencies on the transportation system to new development activity. A uniform point system known as the "Debit/Credit" approach was developed for jurisdictions to demonstrate compliance with the CMP.

A criticism of the "Debit/Credit" methodology was that it generated no revenue but required jurisdictions to spend resources on an administrative exercise that provided no congestion relief. Furthermore, a dramatic decline in state and federal transportation funding coupled with significant growth in new development was making it difficult for some jurisdictions to comply with the CMP.

The proposed Congestion Mitigation Fee Program moves away from the administrative "Debit/Credit" approach to a mitigation fee funded approach. This approach would generate revenue from new development to implement transportation improvements designed to mitigate the impacts of growth on the regional transportation network throughout the County of Los Angeles.

In adopting the Short Range Transportation Plan in 2003, the MTA Board authorized staff to explore the feasibility of implementing a Congestion Mitigation Fee to meet CMP requirements. Since that time, MTA has worked with sub-regional agencies, jurisdictions, and building industry representatives in developing a congestion mitigation fee program in concept.

To provide a significant measure of assurance that MTA is being responsive to local jurisdiction needs and concerns, the MTA Board adopted a set of Guiding Principles on April 25, 2007. The Guiding Principles adopted by the MTA Board may be summarized as follows:

- Fees should be structured to mitigate congestion from new development without discouraging economic development.
- Fees are to augment other regional funds, not replace or redirect them.
- Local jurisdictions identify local projects with regional benefit consistent with agreed upon guidelines.
- Local jurisdictions adopt, collect, and administer congestion mitigation fees.
- Local jurisdictions build projects (or local jurisdictions may choose to participate in multi-jurisdictional or regional projects, if mutually desired).
- Local jurisdictions with existing fee programs receive dollar-for-dollar credit for local projects with a regional benefit consistent with agreed upon guidelines.
- Fees should be structured to support transit-oriented development, and to exempt mixed use and high-density residential development within ¼ mile of passenger rail stations consistent with CMP statute.
- The program will be developed in a manner to encourage certainty and predictability among jurisdictions, business, environmental and development communities.

The eight Congestion Mitigation Fee Pilot Nexus Studies honor the Guiding Principles, and conform to the technical and statutory requirements of the Mitigation Fee Act and the Congestion Management Program. During the outreach process, jurisdictions expressed strong support for MTA Board commitment to abide by the Guiding Principles.

CONGESTION MITIGATION FEE PROGRAM OVERVIEW

The proposed Congestion Mitigation Fee Program was designed to ensure maximum local control over the program's development and implementation. Local jurisdictions would collect and retain all fee revenue. Each jurisdiction would select its local transportation projects that mitigate the impacts of their new development on the regional transportation system, collect the fee revenue, and build the transportation projects. Jurisdictions have been encouraged to develop a sub-regional or multi-city approach to this program and to coordinate with regional and state transportation providers. The congestion mitigation fee revenue should help local jurisdictions leverage additional funding by providing a local match to compete for the MTA's Call-for-Projects and federal and state grants.

The proposed congestion mitigation fee would be a one-time fee applied to all types of new development based on the number of net new trips generated by the development project. For residential land use, the trip generation is based on the number of dwelling units. Thus, adding a bedroom or family room to a single family home would not increase the number of dwelling units and would not be subject to a congestion mitigation fee. The trip generation of non-residential land use is based on the square footage and the type of land use. If a new development project replaces an existing structure, the trip generation from the existing structure would be subtracted from the amount of trip generation from the new development and the Congestion Mitigation Fee would be based on the net difference. Moreover, if a non-residential use is replaced with a different type of non-residential use, the trip generation rate changes and the fee would only apply if there is a net increase in trips resulting from this change. For example, a conversion of a manufacturing facility to a warehouse of the same size would result in fewer trips being generated and, thus, would not be subject to a fee.

The Congestion Mitigation Fee Program would give credit to jurisdictions with their own existing mitigation fee programs. The amount of credit would be based on how many of the transportation projects included in the local fee program provide a regional benefit. Each eligible project would receive dollar-for-dollar credit towards the minimum fee-per-trip that would be set for the Congestion Mitigation Fee Program. If the local fee program's fee-per-trip exceeds the Congestion Mitigation Fee Program minimum, then the jurisdiction would not have to make any change to its existing mitigation fee program.

Eligible transportation projects must improve the capacity of the transportation system and must consist of capital improvement projects. Ongoing operational and maintenance projects are not eligible under this program. Transportation projects identified in this Pilot Nexus Study include the following:

- Bicycle and pedestrian improvements that provide accessibility to bus and rail transit and that were developed in a systemic and multi-modal manner.
- Signal synchronization, bus speed improvements, bottleneck intersection improvements, traffic control and monitoring systems, and Intelligent Transportation Systems.
- Bus and rail transit capital and/or construction of transit stations and centers, park and ride lots, commuter rail stations, transit stop improvements and transit vehicle purchases.
- Regional arterial enhancements such as arterial widening, bottleneck intersection improvements, closure of gaps in the arterial system, grade separations, and interchange improvements.
- Other projects determined on a case-by-case basis.

SOUTH BAY CITIES PILOT NEXUS STUDY BACKGROUND

To ensure a Congestion Mitigation Fee Program would serve the specific preferences of its member jurisdictions, the member jurisdictions of the South Bay Cities COG worked with MTA to develop a Pilot Nexus Study as a way to assess the viability of the Congestion Mitigation Fee Program. These cities took this proactive approach to fully vet the issues and concerns of these jurisdictions prior to any action by the MTA Board. This Pilot Nexus Study also provides an opportunity to explore various policies and understand complexities associated with such a program.

For the last three years, the member jurisdictions of the South Bay Cities have been working with MTA and their consultant, Cambridge Systematics, Inc. in a collaborative process. As a result of this work effort, MTA staff and the consultant have met one-on-one with senior management of the South Bay Cities jurisdictions. In addition, MTA staff has briefed the South Bay Cities COG on a periodic basis to inform the members of the progress of the Pilot Nexus Study.

CONGESTION MITIGATION FEE WORK PLAN

The Pilot Nexus Study for the South Bay Cities was conducted as part of an overall work plan approved by the MTA Board in September 2008 (See Figure 1 on the following page). The work plan consists of four steps: 1) Feasibility Study and Program Guidelines; 2) Local Project Identification; 3) Nexus Analysis; and 4) Program Development and Local Implementation.

In Step 1 – Feasibility Study and Program Guidelines, MTA worked with jurisdictions and other stakeholders countywide to conduct a Feasibility Study to determine whether a fee program would be feasible. When this step was completed, the results were documented in a report titled *Congestion Mitigation Fee Feasibility Study Report* and approved by the MTA Board in September 2008.

In Step 2 – Local Project Identification, MTA worked with the jurisdictions of the South Bay sub-region to identify local projects with a regional benefit, verify their growth forecasts, and confirm their transportation network.

Step 3 – Nexus Analysis, involved a nexus analysis to determine whether the projects identified in Step 2 mitigate the impacts of 20 years of future development on the transportation network. In addition, Step 3 included an economic analysis of how the payment of a congestion mitigation fee and the benefits of congestion relief and construction jobs would change the economic performance of Los Angeles County.

MTA is completing eight pilot nexus studies (Step 3 in Figure 1 on the following page) for all of the sub-regions in the County. Should the MTA Board adopt the Congestion Mitigation Fee Program as the new CMP Countywide Deficiency Plan, then jurisdictions will be required to participate in the fee program to be in conformance with the CMP. In this case, MTA staff will initiate Step 4 and work with jurisdictions to further develop and implement Step 4 of the Congestion Mitigation Fee Program.

If the MTA Board authorizes conducting Step 4 – Program Development and Local Implementation, then staff will work with jurisdictions, sub-regional agencies, and building industry representatives to implement the Congestion Mitigation Fee Program over a 24 month period. The MTA work plan is summarized below in Figure 1.

Figure 1: Congestion Mitigation Fee Program Work Plan

Work Plan Components	Schedule
Step 1: Feasibility Study & Program Guidelines	Jan. 2007 – Sept. 2008
<ul style="list-style-type: none"> Review with PAC, jurisdictions, COGs, & Others 	
Step 2: Local Project Identification	Spring 2009 – Summer 2012
<ul style="list-style-type: none"> Jurisdictions confirm growth forecasts Jurisdictions identify local projects with regional benefits and confirm transportation network 	
Step 3: Nexus Study	Spring 2011 – Fall 2012
<ul style="list-style-type: none"> Technical work effort to determine nexus 	
Step 4: Program Development & Implementation	2013 – 2015
<ul style="list-style-type: none"> Work one-on-one with jurisdictions to develop and implement program at the local level. 	

Nexus Analysis

The Mitigation Fee Act (AB 1600) governs the adoption of mitigation fees in the State of California (California Government Code Sections 66000-66008). This law requires local jurisdictions to complete a nexus analysis before adopting a mitigation fee. This analysis must provide results for a dual nexus test, which would show that the improvements being funded with the fees will: 1) mitigate the impacts caused by new development; and, 2) that the fee amounts bear a reasonable relationship to the impact from new development.

This nexus analysis uses annual vehicle-hours-of-delay (VHD) to measure the impact of new development on the transportation system. Other technical measures commonly used for a nexus analysis at a jurisdiction level include level-of service (LOS) or volume-to-capacity (V/C) ratios. These measures work best when the scale of analysis is on specific roadway segments or an urban street network and the projects are intended to mitigate congestion from increased travel by single occupant vehicles. The proposed Congestion Mitigation Fee, however, is intended to address the requirements specified for Deficiency Plans set forth in the CMP legislation. Furthermore, the Congestion Mitigation Fee Program is intended to reduce VHD (congestion) caused by new development on the arterial network in each sub-region.

This VHD methodology is similar to the approach conducted for the nexus analysis completed for the San Diego Association of Governments (SANDAG) for its Regional Transportation Congestion Improvement Plan (RTCIP) in 2006. The MTA nexus analysis uses the same metric of vehicle-hours-of-delay as SANDAG is using for its

mitigation fee program, which essentially measures the nexus between the RTCIP projects and the impacts from new development throughout San Diego county. The Pilot Nexus Studies utilize the same analytical methodology as SANDAG because both mitigation fee programs are focused on mitigating the impacts of new development on the arterial networks. Traffic patterns on the arterial networks of both counties of Los Angeles and San Diego are similar in terms of their function as relievers for freeway intercity travel and access to freeways. In addition, the trip generations rates for the seven land-use types are derived from the SANDAG trip generation rates because their county more closely resembles the traffic patterns and land use trip generation rates of the greater Southern California region. SANDAG calculated these rates from surveys of San Diego County households and businesses.

This nexus analysis compares VHD for the South Bay Cities sub-region (excluding the City of Los Angeles) under three conditions or scenarios:

- **2010 Base Year – Existing Conditions Scenario:** Estimates VHD for the initial Congestion Mitigation Fee Program base year of 2010.
- **2030 Future Year – No-Build Scenario:** Estimates VHD in 2030 given estimated levels of new development and all currently planned transportation improvements funded with known sources such as MTA’s 2009 Long Range Transportation Plan.
- **2030 Future Year –With New Congestion Mitigation Fee Projects Scenario:** Estimates the reduction in VHD caused by the selected transportation improvements identified in the Congestion Mitigation Fee Program.

To meet the requirements of state law, this nexus analysis must demonstrate that VHD in 2030 does not improve beyond the 2010 Base Year levels. The analysis excludes freeway impacts because much of the freeway traffic is inter-regional and the projects submitted by jurisdictions are focused on the regional arterial system.

All transportation project categories are classified into one of nine project categories and were evaluated using either the MTA travel demand model, the Congestion Mitigation Fee Analysis Tool, or research literature as described below. Figure 2 on Page 8 that follows identifies which one of the following three nexus analysis methods was used for each transportation project category:

- **MTA Travel Demand Model:** In order to analyze the changes in VHD on the arterial network within each of the eight sub-regions, Cambridge Systematics, Inc., MTA’s contractor, made improvements to the MTA travel demand model. These improvements are documented in the *Los Angeles County MTA Travel Model Assessment and Status Report* (June 2011). The enhancements included:
 - **Replicating trip generation and trip distribution within the MTA model.** Allows the MTA travel demand model to yield more internally consistent estimates of development impacts in the nexus analyses. The process involved converting SCAG model components into MTA’s travel demand model and testing and validating model results.

- **Increasing the number of traffic assignment equilibrium iterations from 43 to 300.** Increasing to 300 iterations improves assignment accuracy substantially and provides more accuracy in traffic assignment as well as more accurate results against increased model run time.
- **Using SCAG's screenline dataset to validate sub-regional travel.** SCAG's existing dataset of traffic volumes across multiple key locations (also known as screenlines) was used to validate travel model results for 2010 base year.

With these steps completed, the MTA travel demand model is better prepared to code and run sub-regional nexus analyses.

- **Congestion Mitigation Fee Analysis Tool:** This analytical tool estimates VHD reduction from intersection improvements, system operations (e.g. signal synchronization), railroad grade separations, and highway on/off ramps. The Congestion Mitigation Fee Analysis Tool was developed specifically for conducting sub-regional nexus analysis of projects that require a level of analysis that is too fine-grained for the MTA travel demand model. The analysis tool estimates VHD reduction based on assumptions taken from research literature combined with quantified project descriptions provided by each jurisdiction.
 - **Greenhouse Gas Emissions Sketch Planning Capability:** At the request of jurisdictions, a greenhouse gas emissions sketch planning tool was developed and made available to jurisdictions so they could generally estimate the greenhouse gas emissions impacts derived from transportation projects they identified. This capability was added to assist cities when considering projects that meet both the requirements of the CMP and SB 375. If the Congestion Mitigation Fee Program were implemented, there may be an opportunity to fund transportation projects identified for SB 375 compliance as well as the CMP.
- **Research Literature:** Reliable research provides sufficient evidence that bicycle and pedestrian improvements that link to transit (e.g. bicycle lanes and sidewalks that serve bus stops and passenger rail stations), transit amenities (e.g. bus shelters, better signage, etc.), park-and-ride lots, and other similar projects provide congestion reduction benefits. This research literature, however, does not provide enough information to quantify the impacts. Thus, for purposes of the Pilot Nexus Study analysis these projects are included but their benefits are not quantified.

Furthermore, bicycle or pedestrian improvements that do not link to transit (e.g. recreational biking/hiking trails) have been excluded from the analysis. In January 2012, the MTA Board directed staff to develop the modeling capability to be able to quantify the benefit of bicycle transportation investment (and pedestrian transportation investment, if possible) because many of jurisdictions participating in the Pilot Nexus Study have included bicycle investments as part of their list of projects. Nevertheless, MTA has limited the types of bicycle projects it can accept as part of the Pilot Nexus Study to those that provide a link or access to transit, which the research literature conclusively documents as having a qualitative relationship to reduced congestion.

Figure 2: Transportation Project Categories and Nexus Analysis Methods

Project Category	Nexus Analysis Method
Roadway Capacity Improvement	MTA Travel Demand Model
Intersection Improvement	Congestion Mitigation Fee Analysis Tool
System Operations (e.g. signal synchronization)	Congestion Mitigation Fee Analysis Tool
Railroad Grade Separations	Congestion Mitigation Fee Analysis Tool
Highway On/Off-Ramps	Congestion Mitigation Fee Analysis Tool
Bicycle/Pedestrian Improvements	Research Literature
Transit Improvements	Research Literature
Park-and-Ride Lots	Research Literature
Other Projects	Research Literature

The nexus analysis for the South Bay Cities was conducted at the sub-regional level. Sub-regional level analysis captures longer, intercity trips, which are the focus of the CMP. Sub-regions are also small enough to measure significant benefits for a relatively modest investment. This sub-regional nexus analysis serves as an umbrella for each jurisdiction, which would adopt its own congestion mitigation fee program to fund the specific transportation projects that it selects.

SOUTH BAY CITIES PILOT NEXUS STUDY

Study Area

The study area is defined by the boundaries of the 16 member jurisdictions of the South Bay Cities COG (15 cities plus portions of the unincorporated Los Angeles County).

Projected Growth

Growth within the Study Area is projected to increase by 64,300 in population and employment is projected to increase by 17,800 from 2010 to 2030. This growth is expected to impact the regional transportation system that is already operating near or at capacity. This growth would essentially cause what is currently a slow moving roadway network to deteriorate further and result in more congestion.

Transportation Projects Submitted

A total of 169 transportation projects and programs were identified as part of this Pilot Nexus Study. A map identifying the submitted projects is shown in Attachment B. Jurisdictions used a web-based software planning tool developed by Cambridge Systematics, Inc. to create a database of projects located within their jurisdiction. For each transportation project, jurisdictions provided a cost estimate, funding sources, project description, and a geo-coded location (See Attachment C).

The City of Palos Verdes Estates expressed an interest in submitting a project list for the nexus study once specific transportation projects are identified in adjacent jurisdictions that would be funded through the adjacent jurisdiction’s Congestion Mitigation Fee. The City of Gardena submitted projects but these projects did not meet the nexus threshold as a capacity-expanding project; however, the City of Gardena stated they would revise the project list if the MTA Board authorizes moving forward to the next step of local implementation. Two jurisdictions did not submit projects at this time: City of Lomita and City of Rolling Hills.

Several projects that were submitted need additional information to ensure that they meet the requirements of the nexus analysis. The most common clarification needed is for bike and pedestrian projects to identify how the project will reduce congestion by improving links or providing access to transit facilities.

Figure 3 below summarizes the number of projects submitted by jurisdictions by project category along with information on total cost, other funding reasonably anticipated during the 20-year planning horizon, and the remaining unfunded amount that could be funded through the Congestion Mitigation Fee Program. See Attachment A for a detailed list of projects by jurisdiction and notes regarding the additional information needed for certain projects. Key findings include:

- Roadway capacity improvements represent nearly three-quarters (73 percent) of all projects based on total cost.
- All but one of the remaining projects are spread among intersection improvements, system operations, and bike/pedestrian improvements.
- There is one transit improvements project.

Figure 3 divides the different types of transportation projects into two groups with the following information:

Figure 3: South Bay Cities Transportation Project Category Summary

Project Type	Number of Projects	Total Cost Share	Total Cost	Other Funding	Fee Revenue Funds
Roadway Capacity	72	73%	\$324,885,000	\$105,325,000	\$219,560,000
Intersection Improvement	46	8%	\$36,745,000	\$6,101,000	\$30,644,000
System Operations	18	11%	\$47,051,000	\$12,899,000	\$34,152,000
Grade Separation	-	0%	\$-	\$-	\$-
Subtotal	136	92%	\$408,681,000	\$124,325,000	\$284,356,000
Bike-Pedestrian	32	8%	\$34,200,000	\$3,197,000	\$31,003,000
Transit Enhancements	1	0%	\$1,500,000	\$750,000	\$750,000
Park-and-Ride		0%	\$-	\$-	\$-
Other		0%	\$-	\$-	\$-
Subtotal	33	8%	\$35,700,000	\$3,947,000	\$31,753,000
Total	169	100%	\$444,381,000	\$128,272,000	\$316,109,000

- The four transportation categories shown in the upper half of Figure 3 (Roadway Capacity, Intersection Improvements, System Operations, and Grade Separations) are projects that can be evaluated using quantitative methods such as the MTA Travel Demand Model and the Congestion Mitigation Fee Analysis Tool. These projects account for the reduction in VHD derived from the nexus analysis.
- The four transportation categories shown in the lower half of Figure 3 cannot be modeled, thus, their contribution is not included in the VHD reduction estimate. Nevertheless, peer reviewed research affirms their qualitative effectiveness in lowering congestion and thus they are included in the Congestion Mitigation Fee Pilot Study’s total unfunded cost and the fee amounts needed to fund it.

As mentioned earlier, the MTA Board directed staff to develop a model that would quantify the travel related benefits associated with bicycle travel. Thus, the consultant team is developing approaches to estimate the impacts from this project category for inclusion in future nexus analyses.

- The third column of Figure 3 shows the share of the total cost for each of the transportation project categories. Some key information includes the amount of other funding leveraged by the Congestion Mitigation Fee revenue. Overall, about 29 percent (29%) of the total project cost is funded via other sources. See Attachment C for a detailed project list by jurisdiction.

Technical Nexus Analysis Results: Vehicle-Hours-of-Delay/Congestion Reduction Benefit

The nexus analysis conducted for this Pilot Nexus Study supports the finding that the transportation projects identified by jurisdictions and funded by the Congestion Mitigation Fee Program would mitigate 38% of the total impact of new development on the arterial network. This result demonstrates that the costs of mitigation will not exceed the proportion attributable to new development, and satisfies the nexus requirements set forth in the Mitigation Fee Act. This finding also meets the measurable improvement in congestion requirement as stipulated by the CMP Countywide Deficiency Plan.

Figure 4 below presents the results of the nexus analysis of the 136 projects that could be modeled. Reading from left to right, this table presents the following results:

Figure 4: Annual Vehicle Hours of Delay (VHD): South Bay Cities

1	2	3	4	5	VHD Reduction Benefit	
2010 (Existing)	2030 (No Build)	2030 (With Projects)	2010 – 2030 (No Build)	2010 – 2030 (With Projects)	6 Amount	7 Percent
<i>a</i>	<i>b</i>	<i>c</i>	$d = b - a$	$e = c - a$	$f = d - e$	$g = f / d$
3,400,000	10,700,000	7,900,000	7,300,000	4,600,000	2,800,000	38%

Note: The analysis excludes freeway impacts because much of the freeway traffic is inter-regional and the projects submitted by jurisdictions are focused on the regional arterial system.

- The nexus analysis starts with the current (2010) estimate of 3.4 million VHD on the arterial network (shown in the first column of Figure 4).
- Next, the analysis forecasts 10.7 million VHD in 2030 (second column) or a net increase of 7.3 million VHD (fourth column) caused by the impacts of new trips generated and attracted by new development over the next 20 years. Under the No-Build scenario, congestion is expected to have a 215% increase in vehicle-hours-of-delay (VHD) from 2010 to 2030 because of growth impacting the current transportation system that is at or near capacity. This result for the No-Build scenario assumes that transportation improvements included in the 2008 RTP and the current MTA Long Range Transportation Plan (LRTP) are constructed.
- The third column shows what would happen if the 136 transportation projects are constructed holding everything else constant. VHD on the sub-regional arterial network in 2030 would be 7.9 million, which would be a 2.8 million VHD reduction (sixth column), or about 38% less congestion (seventh column) than without these projects.
- This analysis deliberately removed the impacts of future through trips (trips that begin and end outside of the sub-region) because new development within the subregion cannot be required to pay for the impacts from trips it does not generate or attract.

As mentioned earlier in the report, the MTA Board directed staff to develop a model that would quantify the travel related benefits associated with bicycle travel. Thus, the consultant team is developing approaches to estimate the impacts from this project category for inclusion in future nexus analyses.

Establishing Minimum and Maximum Fee-Per-Trip Amounts

The congestion mitigation fee-per-trip amount for each jurisdiction is determined by calculating its unique fee-per-trip (See Attachment A). The fee-per-trip amount is the total unfunded cost of all transportation projects selected by each jurisdiction (both those with benefits that can be quantitatively measured and those that are only qualitatively measured) divided by the number of net trips generated by new development within that jurisdiction.

Establishing a minimum fee-per-trip for the Congestion Mitigation Fee Program has been an important policy issue for jurisdictions and stakeholders since MTA convened the countywide Policy Advisory Committee in 2006. A minimum fee-per-trip would facilitate compliance with the CMP by ensuring a minimum level of congestion reduction effort. Furthermore, all jurisdictions would benefit from a level playing field where a minimum fee-per-trip amount to reduce the advantage that one jurisdiction may have over another in attracting new development.

The minimum fee-per-trip amounts for each sub-region were determined through the pilot nexus study process where each city developed a transportation project list that balances its need to mitigate future congestion with a maximum fee-per-trip amount. As a result, the pilot nexus study process provided a fee-per-trip amount for each jurisdiction (See Attachment A) whereby most jurisdictions were above \$300 fee-per-

trip. Based on this threshold, one possible option is to set a \$300 fee-per-trip amount as the minimum that the jurisdictions could adopt as their sub-regional minimum fee-per-trip amount. The potential use of this approach is also being evaluated in the other sub-regional pilot nexus studies.

The Pilot Study Nexus Analysis resulted in two types of fee-per-trip amounts calculated for all the jurisdictions:

- **Jurisdiction fee-per-trip:** A separate fee-per-trip for each jurisdiction was calculated based on the jurisdiction's unfunded project costs divided by the number of trips from new development within the jurisdiction (See Attachment A). This fee-per-trip is the amount needed to fund the unfunded portion of the transportation projects costs identified by each jurisdiction. Unfunded project costs used in this calculation represents a conservative method of assessing new development for its share of mitigating its impacts. Other funding sources identified by jurisdictions to fund their proposed projects come from such funds as Proposition C and Measure R local return, state gas tax subventions, municipal general funds, Call-for-Projects, and Surface Transportation Program local funds.
- **Sub-regional maximum justified fee-per-trip:** A single \$1,649 fee-per-trip for the sub-region was calculated based on the \$444 million total cost of all transportation projects identified by jurisdictions divided by approximately 269,000 new trip-ends generated and attracted by new development within the sub-region. Since this nexus analysis was conducted at the sub-regional level, the \$1,649 fee-per-trip amount represents the maximum justified congestion mitigation fee amount the nexus analysis can defend quantitatively. Total project costs, rather than unfunded project costs, were used in this calculation because congestion reduction benefits are associated with the entire project regardless of the level of other anticipated funding.

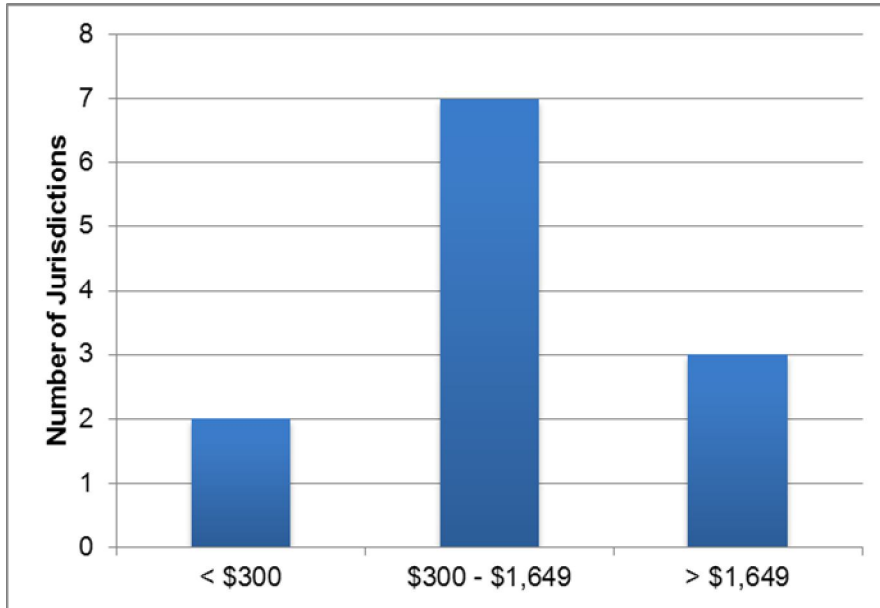
The congestion mitigation fee-per-trip results from the nexus analysis by jurisdiction are summarized in Figure 5 below. See Attachment A for details regarding total project costs and funding by jurisdiction.

- Seven (7) jurisdictions have fee-per-trip amounts that range between a fee-per-trip of \$300 and the sub-regional maximum fee-per-trip of \$1,649.
- Three (3) jurisdictions have fee-per-trip amounts greater than the sub-regional legal maximum fee-per-trip of \$1,649.
- Two (2) jurisdictions have fee-per-trip amounts less than \$300 while two (2) other jurisdictions did not participate in the Pilot Nexus Study.

The data collected from jurisdictions shows there is a concentration of jurisdictions whose fee-per-trip range from a minimum of \$300 up to a sub-regional maximum justified fee-per-trip of \$1,649. This fee-per-trip range should provide jurisdictions with the flexibility to manage the congestion impacts of growth, but also establish a floor, or minimum fee-per-trip. This minimum fee-per-trip amount is intended to create

a level playing field by ensuring that each jurisdiction contributes to mitigating its growth impact on the regional transportation network.

Figure 5: South Bay Cities Fee-Per-Trip Range



Should the Congestion Mitigation Fee Program be adopted, then each jurisdiction within the sub-region would adopt its own congestion mitigation fee ordinance. Their congestion mitigation fee would need to be set between the minimum fee-per-trip set by the MTA Board and its own individual jurisdiction fee-per-trip established by the nexus analysis (See Attachment A). The sub-regional maximum justified fee-per-trip would be the amount that jurisdictions would be limited to adopt as a result of the nexus analysis.

For a jurisdiction with a fee-per-trip amount that is higher than the maximum justified fee-per-trip amount of \$1,649, it would have the following options to reduce its fee-per-trip amount:

- 1) Eliminate transportation projects from its list of projects to reduce its fee-per-trip amount to a level below the maximum justified fee-per trip amount.
- 2) Identify additional funding sources to reduce the amount of funding the fee revenue would have to pay to implement the projects.
- 3) Conduct a local nexus study to justify that the additional costs can be fairly charged to new development consistent with the Mitigation Fee Act.

Based on the nexus results of the Pilot Nexus Study for the South Bay Cities sub-region, a recommended sub-regional minimum fee-per-trip amount for these jurisdictions could be a \$300 fee-per-trip amount (see Figure 5).

NEXT STEPS

Below are the next steps to complete the Congestion Mitigation Fee work plan:

- Present pilot nexus study and economic analysis findings to jurisdictions, sub-regional agencies, and building industry stakeholders.
- Seek MTA Board direction in early 2013 to:
 - Adopt the Congestion Mitigation Fee Program as the new CMP Countywide Deficiency Plan;
 - Establish minimum fee-per-trip amount for CMP compliance
- Work one-on-one with jurisdictions, sub-regional agencies, and building industry representatives to implement a Congestion Mitigation Fee Program over a 24 month period.

If the MTA Board decides to adopt the Congestion Mitigation Fee Program as the Countywide Deficiency Plan for the CMP, MTA staff will work with each jurisdiction to implement the Congestion Mitigation Fee Program. In carrying out this work effort, it is possible that jurisdictions would modify their list of transportation projects. If so, then the congestion reduction and fee-per-trip from such a change may be different than the results identified in this Pilot Nexus Study and would be revised accordingly in a report at that time.

CONTACT INFORMATION

If you have any questions or comments, please contact:

Robert Cálix, MTA Project Manager, at: calixr@metro.net or (213) 922-5644.

Attachment A: South Bay Cities Pilot Nexus Study Fee-per-Trip by Jurisdiction

Jurisdiction	Net New Trip Ends	Total Project Costs	Other Funding	Mitigation Fee Revenue Funds	Fee-Per-Trip
	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e = d / a</i>
Carson	30,864	\$52,125,000	\$5,535,000	\$46,590,000	\$1,510
El Segundo	57,330	\$47,279,289	\$32,200,000	\$15,079,289	\$263
Gardena*	12,794	\$-	\$-	\$-	\$-
Hawthorne	11,272	\$15,220,000	\$6,088,000	\$9,132,000	\$810
Hermosa Beach	3,171	\$1,750,000	\$-	\$1,750,000	\$552
Inglewood	36,101	\$105,412,000	471,000,000	\$34,412,000	\$953
Lawndale	3,289	\$9,515,000	\$7,675,000	\$1,840,000	\$559
Lomita**	1,869	\$-	\$-	\$-	\$-
Manhattan Beach	4,502	\$3,250,000	\$-	\$3,250,000	\$722
Palo Verdes Estates***	191	\$-	\$-	\$-	\$-
Rancho Palos Verdes	2,725	\$3,117,532	\$2,454,000	\$663,532	\$243
Redondo Beach	14,090	\$56,154,000	\$-	\$56,154,000	\$3,985
Rolling Hills**	467	\$-	4-	\$-	\$-
Rolling Hills Estate	2,178	\$4,276,018	\$-	\$4,276,018	\$1,963
Torrance	47,070	\$126,049,000	\$-	\$126,049,000	\$2,678
Unincorporated County	41,411	\$19,996,500	\$3,083,900	\$16,912,600	\$408
Total	269,324	\$444,144,339	\$128,035,900	\$316,108,439	
Funding Share		100%	29%	71%	

Sub-regional Maximum Justified Fee-per-Trip (= b / a)	\$1,649
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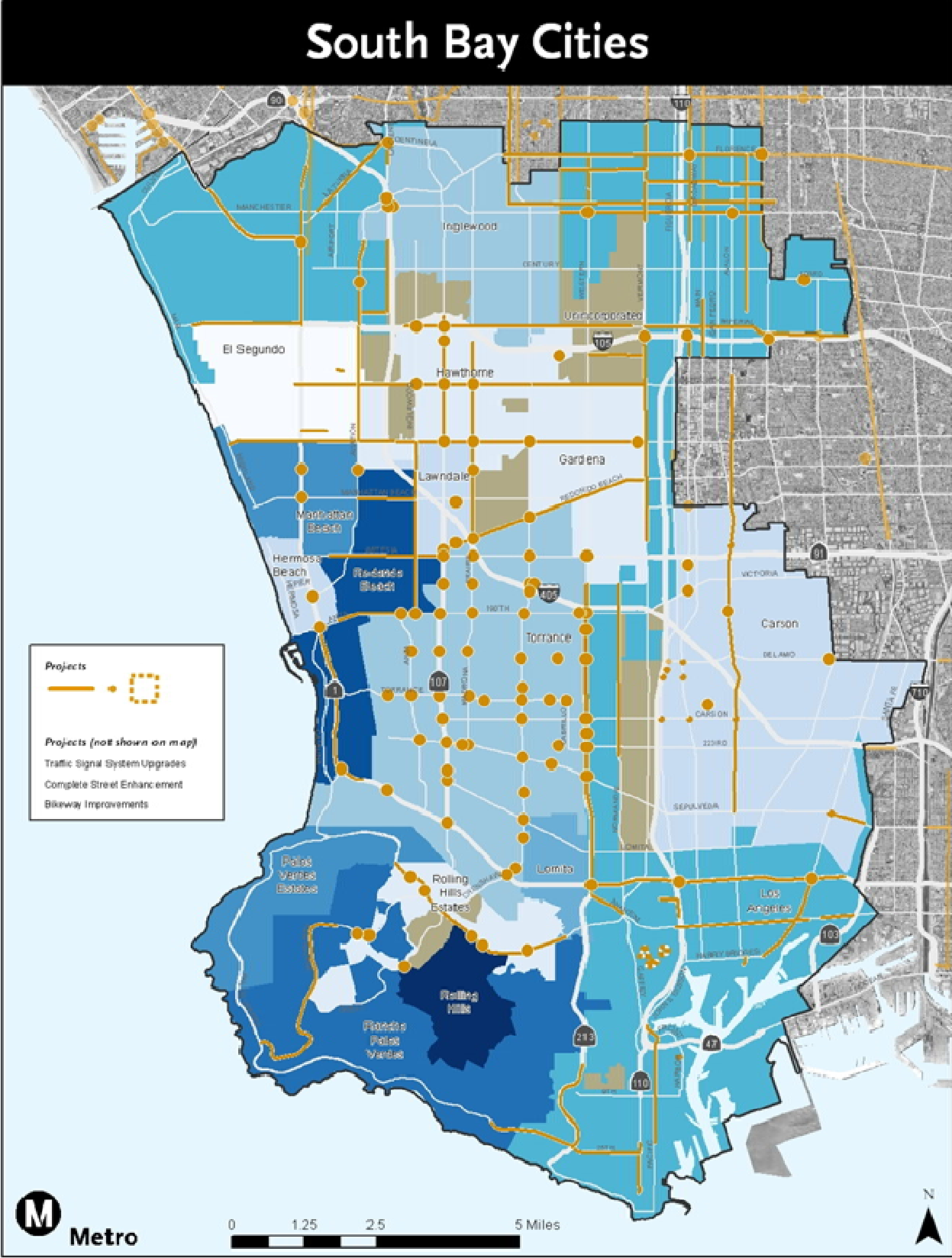
* The City of Gardena submitted projects but they did not meet the nexus threshold as a capacity-expanding project; however, the City of Gardena stated they would revise the project list if the MTA Board authorizes implementing the congestion Mitigation Fee Program.

** City did not submit projects at this time.

*** The City of Palos Verdes Estates expressed an interest in submitting a project list for the nexus study once specific transportation projects are identified in adjacent jurisdictions that would be funded through the adjacent jurisdiction's Congestion Mitigation Fee Program.

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Attachment B: South Bay Cities Pilot Nexus Study Transportation Projects



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Attachment C: South Bay Cities List of Transportation Projects by Jurisdiction (Project Deemed Ineligible Not Listed)

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Carson	Broadway Ped Xing s/o Albertoni - Pedestrian Signal Upgrade	Project to modernize pedestrian signal to improve signal and pedestrian indications cabinet and controller equipment, and to improve lighting and overall traffic safety and operation.	Broadway south of Albertoni Street	Bike-Ped	\$75,000	\$-	\$75,000	(1)
Carson	Citywide Bike Network	Create a citywide coordinated bicycle network that will improve the mobility, accessibility, remove barriers to bicycling, and promote safety. The network will include way-finding signage and improve bicycle access to transit options.	Citywide	Bike-Ped	\$8,000,000	\$-	\$8,000,000	
Carson	Sidewalk Improvements	Project to encourage the use of existing transportation systems by improve the quantity, quality and connectivity of sidewalks to increase pedestrian accessibility and to accommodate special needs, including people using wheelchairs, walkers, strolle	Citywide	Bike-Ped	\$1,000,000	\$500,000	\$500,000	(1)(2)
Carson	Upgrade Pedestrian Access Ramps	Improve and increase pedestrian travel, accessibility, and safety by designing and reconstructing facilities that provide efficient and safe route choices and that are readily accessible to and usable by people with disabilities	Citywide	Bike-Ped	\$5,000,000	\$-	\$5,000,000	(1)(2)

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Carson	General Plan Intersection Widening	Widen the intersection approaches of all General Plan Major Highways to have 2 left-turn lanes, 3 through lanes, and 1 right-turn lane (\$800,000.00 each).	Intersections of streets classified as Major Highways on all four legs. Citywide - 25 locations.	Capacity	\$20,000,000	\$-	\$20,000,000	
Carson	Sepulveda Blvd Improvement	Street widening, bridge widening over Dominguez Channel, install street lights.	Alameda Street to east City Limit	Capacity	\$5,900,000	\$4,900,000	\$1,000,000	
Carson	213th Street/Dolores Street Traffic Signal Upgrade	Project to modernize traffic signals to improve vehicle and bus operations, traffic, lighting, and pedestrian safety and to modify curb ramps to meet current ADA requirements.		Intersection Improvement	\$150,000	\$-	\$150,000	(1)(2)
Carson	Avalon Blvd/Carson St Intersection Improvements	Construct/Add a southbound right-turn lane, a westbound right-turn lane, and a northbound right-turn lane.	Avalon Blvd at Carson Street	Intersection Improvement	\$600,000	\$100,000	\$500,000	
Carson	Avalon Blvd/University Drive Traffic Signal Upgrade	Project to modernize traffic signals to improve operations and traffic safety. Relocate signal and electrical equipment and to modify curb ramps to meet current ADA requirements.		Intersection Improvement	\$350,000	\$35,000	\$315,000	(2)
Carson	Avalon Blvd/Walnut St Traffic Signal Upgrade	Project to modernize traffic signals to improve operations and traffic safety. Relocate signal and electrical equipment and to modify curb ramps to meet current ADA requirements.		Intersection Improvement	\$200,000	\$-	\$200,000	(2)

Jurisdiction ^A	Project Name		Description	Location	Project Type	Total Cost	Other Funding		Unfunded	Note
Carson	Broadway/Albertoni Street Traffic Signal Upgrade		Project to modernize traffic signals to improve operations and traffic safety and to modify curb ramps to meet current ADA requirements.		Intersection Improvement	\$250,000	\$-	\$250,000	(2)	
Carson	Broadway/Alondra Blvd Traffic Signal Upgrade		Project to modernize traffic signals to improve operations and traffic safety and to modify curb ramps to meet current ADA requirements.		Intersection Improvement	\$250,000	\$-	\$250,000	(2)	
Carson	Broadway/Victoria Street Traffic Signal Upgrade		Project to modernize traffic signals to improve operations and traffic safety. Relocate signal and electrical equipment and to modify curb ramps to meet current ADA requirements.		Intersection Improvement	\$250,000	\$-	\$250,000	(2)	
Carson	Del Amo Blvd at Fire Station #10		Design and install a new traffic signal.		Intersection Improvement	\$300,000	\$-	\$300,000		
Carson	Figueroa St/Carson St Intersection Improvements		Construct/add a southbound right-turn lane.		Intersection Improvement	\$200,000	\$-	\$200,000		
Carson	Figueroa/Del Amo Intersection Improvements		Add a southbound right-turn lane, a westbound left-turn lane, and an eastbound through and right-turn lane.		Intersection Improvement	\$800,000	\$-	\$800,000		
Carson	Figueroa/I-110 Northbound Ramps Intersection Improvements		Add a southbound right-turn lane and an eastbound right-turn lane.		Intersection Improvement	\$400,000	\$-	\$400,000		
Carson	Figueroa/Torrance Intersection Improvements		Add a southbound left-turn lane.		Intersection Improvement	\$200,000	\$-	\$200,000		
Carson	Main St/Torrance Blvd Intersection Improvements		Restripe eastbound approach to provide a left-turn lane and a shared through/right-turn lane.		Intersection Improvement	\$50,000	\$-	\$50,000		

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Carson	Main St/Carson St Intersection Improvements	Add a westbound left-turn lane and an eastbound left-turn lane. Relocate signal and electrical equipment and to modify curb ramps to meet current ADA requirements.		Intersection Improvement	\$450,000	\$-	\$450,000	(2)
Carson	Main St/Del Amo Blvd Intersection Improvements	Add a southbound left-turn and right-turn lane, a westbound left-turn lane, a northbound left-turn and right-turn lane, and an eastbound left-turn lane.		Intersection Improvement	\$1,200,000	\$-	\$1,200,000	
Carson	Sepulveda Blvd/Alameda St Intersection Improvements	Reconfigure eastbound and westbound approaches to improve lane alignment. Project to improve delay, operations and traffic safety.		Intersection Improvement	\$500,000	\$-	\$500,000	
Carson	Traffic Signal Upgrades	Project to adjust traffic signal timing plans and to update signal equipment, and cabinet and controller equipment. Optimizing timing and equipment can reduce congestion, shorten commute times, improve air quality, lead to better fuel efficiency.		Intersection Improvement	\$6,000,000	\$-	\$6,000,000	
El Segundo	Grand Extension	Street Extension to improve E-W connection in City.	Duley to Douglas	Capacity	\$3,500,000	\$500,000	\$3,000,000	
El Segundo	Park Place Extension	Roadway connection to improve traffic circulation in southern portion of City.	South East quadrant of City near the intersection of Rosecrans and Sepulveda	Capacity	\$36,000,000	\$27,000,000	\$9,000,000	
El Segundo	Widening of Aviation Boulevard	Add one lane in each direction	Rosecrans to Imperial Highway	Capacity	\$5,735,799	\$4,700,000	\$1,035,799	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
El Segundo	Misc. Signalization Widening and Intersection Improvements	Intersection improvements at various locations within City	Various	Intersection Improvement	\$2,043,490	\$-	\$2,043,490	
Hawthorne	Hawthorne Blvd. at El Segundo Blvd. Intersection Improvement	Right turn east & west bounds.	Hawthorne Blvd. at El Segundo Blvd.	Capacity	\$1,000,000	\$400,000	\$600,000	
Hawthorne	Crenshaw Blvd. at Rosecrans Ave. Intersection Improvements	Upgrade old signal, S/B right turn to W/B.		Intersection Improvement	\$500,000	\$200,000	\$300,000	
Hawthorne	Hawthorne Blvd. at 118th Street Intersection Improvements	Modify 4 corners & signal.		Intersection Improvement	\$750,000	\$300,000	\$450,000	
Hawthorne	Hawthorne Blvd. at 120th Street Intersection Improvements	Modify 3 corners & Signal.		Intersection Improvement	\$750,000	\$300,000	\$450,000	
Hawthorne	Hawthorne Blvd. at Imperial Hwy. Intersection Improvements	Double L.T. East & West bounds.		Intersection Improvement	\$450,000	\$180,000	\$270,000	
Hawthorne	Hawthorne Blvd. at Rosecrans Ave. Intersection Improvements	Modify signal, W/B right turn to N/B & S/B		Intersection Improvement	\$550,000	\$220,000	\$330,000	
Hawthorne	Inglewood Ave. at El Segundo Blvd. Intersection Improvements	Add Right Turn E/B to S/B.		Intersection Improvement	\$650,000	\$260,000	\$390,000	
Hawthorne	Inglewood Ave. at Imperial Hwy. Intersection Improvements	Signal upgrade L arrow, widen S/B at NW corner.		Intersection Improvement	\$550,000	\$220,000	\$330,000	
Hawthorne	Prairie Ave. at El Segundo Blvd. Intersection Improvements	Upgrade signal W/B right turn.		Intersection Improvement	\$450,000	\$180,000	\$270,000	
Hawthorne	Prairie Ave. at Marine Ave. Intersection Improvements	Signal upgrade NE, W/B to north right turn, S/B to W/B		Intersection Improvement	\$650,000	\$260,000	\$390,000	
Hawthorne	Prairie Ave. at Rosecrans Ave. Intersection Improvements	Upgrade signal W/B corner right turn.		Intersection Improvement	\$500,000	\$200,000	\$300,000	

Jurisdiction ^A	Project Name		Description	Location	Project Type	Total Cost	Other Funding		Unfunded	Note
	Project Name	Project Name					Funding	Funding		
Hawthorne	Van Ness Ave./120th St. Intersection Improvements		Dual left turns on N/B & E/B & signal upgrade.		Intersection Improvement	\$650,000	\$260,000		\$390,000	
Hawthorne	11 Intersection Synchronization		Synchronize signals at 11 intersections. Assumes a cost of \$30,000 for each intersection. Project includes signalized intersection along Hawthorne Blvd. from City limit to City limit.	Hawthorne Blvd	System Operations	\$330,000	\$132,000		\$198,000	
Hawthorne	60 T.S. Surveillance & Synchronization		Traffic signal surveillance & synchronizations at 60 locations. Assumes a cost of \$120,000 per location. Project includes signalized intersections on Rosecrans, Prairie, Hawthorne Bl, Inglewood, Crenshaw, 120thSt & El Segundo Blvd.	60 locations citywide	System Operations	\$7,200,000	\$2,880,000		\$4,320,000	
Hawthorne	8 Intersection Synchronization		Synchronize signals at 8 intersections. Assumes a cost of \$30,000 for each intersection. Project includes signalized intersections along El Segundo Blvd. from Crenshaw Blvd. to Inglewood Ave.	El Segundo Blvd	System Operations	\$240,000	\$96,000		\$144,000	
Hermosa Beach	Sustainable Systemic Bicycle & Pedestrian		Bicycle improvements at selected locations to accommodate increase in bicycle use and connection to transit	Citywide along selected arterials and transit corridors.	Bike-Ped	\$250,000	\$-		\$250,000	
Hermosa Beach	PCH & Aviation Intersection Realignment		Add double left turn lanes sb PCH to EB Aviation.		Intersection Improvement	\$1,500,000	\$-		\$1,500,000	
Inglewood	Bus Stop Pad and Related Improvements		Transit stop improvements to include: Concrete inroad bus landings, bus turn out, transit/bus stations (BRT style)	Citywide	Bike-Ped	\$1,912,000	\$950,000		\$962,000	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding		Note
						Funding	Unfunded	
Inglewood	La Cienega Arterial Improvement	Arterial improvement	La Cienega and Fairview	Capacity	\$1,000,000	\$900,000	\$100,000	
Inglewood	La Cienega Boulevard Grade Separation	A grade separation (depression) of four travel lanes of La Cienega Boulevard beneath Centinela Avenue and Fairview Avenue with one-way frontage roads along each side of the depressed section.	La Cienega Boulevard between Centinela Avenue and Fairview Avenue	Capacity	\$81,200,000	\$60,000,000	\$21,200,000	
Inglewood	Century Boulevard Intersection Capacity Improvements	Intersection widening for auxiliary right turn lanes on the north, south, east, west approaches to the four intersections of Century Boulevard with Crenshaw Boulevard, Inglewood Avenue, La Brea Avenue, and Prairie Avenue.		Intersection Improvement	\$4,800,000	\$2,400,000	\$2,400,000	
Inglewood	ITS Phase IV - XII	Intelligent Transportation Systems (ITS) Phase IV. Traffic Management Center Upgrades, Fiber optic communication line installations, CCTV's, Advanced Traveler Information Systems, Controller upgrades, Synchronization of timing of multiple corridors.	Citywide	System Operations	\$15,000,000	\$6,000,000	\$9,000,000	
Inglewood	Inglewood South Bay Goods Movement Project	Improvements to I-405 ramp at Manchester; Centerline Improvements on Manchester from Ash to La Cienega, Turning Radius improvements on La Cienega at Manchester and at Florence	La Cienega at Manchester; La Cienega at Florence	Transit Expansion	\$1,500,000	\$750,000	\$750,000	

Juris-diction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Lawndale	Freeman Avenue	Street improvements on Freeman Avenue including street resurfacing, curb and gutter and concrete improvements in both directions between Manhattan Beach Blvd and 160th St.	Freeman Avenue from Manhattan Beach Blvd to 160th Street	Capacity	\$400,000	\$225,000	\$175,000	
Lawndale	Inglewood Ave - 405 Freeway Ramp Project	Widen and improve existing southbound 405 freeway on-ramp at Inglewood Blvd on the east side to coincide with Inglewood corridor widening project to ease Inglewood Blvd congestion.	Southbound 405 on-ramp, Inglewood Blvd eastside	Capacity	\$600,000	\$500,000	\$100,000	
Lawndale	Inglewood Avenue Corridor Project	Inglewood Ave/Marine Ave intersection improvement. Purchase ROW for widening; add 1 thru NB lane Inglewood Ave (2 lane existing) & 1 thru WB lane Marine Ave (1 lane existing); Add lighting, signals, sidewalk.	Lawndale - Inglewood Avenue from Marine Avenue to Manhattan Beach Boulevard	Capacity	\$4,300,000	\$4,300,000	\$-	
Lawndale	Inglewood Avenue, Phase 3	The project will include widening of Inglewood Avenue to accommodate a third southbound lane and a raised center median at the intersection. The project includes street widening; installation of a raised median; street resurfacing, signal improvemnt.	Lawndale - Inglewood Avenue from North City Limit to Marine Ave.	Capacity	\$3,200,000	\$1,900,000	\$1,300,000	

Jurisdiction ^A	Project Name		Description	Location	Project Type	Total Cost	Other Funding		Unfunded	Note
	Project Name	Project Name					Funding	Funding		
Lawndale	Redondo Beach Blvd		Street improvements on Redondo Beach Blvd in both directions from Prairie Ave to Artesia Blvd including resurfacing, curb and gutter, concrete work and signal improvements.		Intersection Improvement	\$1,015,000	\$750,000	\$265,000		
Manhattan Beach	Aviation Blvd. Dual Left Turn Lanes		Add dual southbound left turn lanes from Marine Ave. to southbound Aviation Blvd.		Intersection Improvement	\$2,000,000	\$-	\$2,000,000		
Manhattan Beach	Marine Avenue Left Turn Lanes		Add dual westbound left turn lanes.		Intersection Improvement	\$450,000	\$-	\$450,000		
Manhattan Beach	Sepulveda Blvd. Dual Left turn Lanes		Add dual left turn lanes in the northbound and eastbound directions.		Intersection Improvement	\$800,000	\$-	\$800,000		
Rancho Palos Verdes	Hawthorne Blvd Pedestrian Bus Stop Linkage Project		Construct sidewalk and parkway ADA compliant improvements along Hawthorne Blvd from Crest Road to PVDW. Includes bus shelter improvements and curb ramps	Hawthorne Blvd from Crest Road to Palos Verdes Drive West	Bike-Ped	\$1,544,000	\$1,117,000	\$427,000	(1)(2)	
Rancho Palos Verdes	Palos Verdes Drive South Bike Compatible Lane		Widen PVDS through the landslide area to provide bike lane compatible shoulders for multi use including bike lanes and emergency pull off. This would improve access to transit.	PVDS from Narcissa Drive to Conqueror Drive	Bike-Ped	\$788,000	\$630,000	\$158,000		
Rancho Palos Verdes	Crenshaw Blvd @ Crestridge Road TS upgrade		Upgrade TS to provide protective left turn arrows on primary phases, upgrade crosswalks and access ramps to be ADA compliant		Intersection Improvement	\$236,000	\$236,000	\$-	(3)	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Rancho Palos Verdes	Hawthorne Blvd Signal Synchronization	Synchronize 7 signalized intersection	Hawthorne Blvd between Highridge Rd/Grayslake Blvd and Palos Verdes Drive West	System Operations	\$785,532	\$707,000	\$78,532	
Redondo Beach	Citywide Bus Stop Enhancements	Install/replace bus shelters, trash and recycling containers and improve ADA access where necessary.	Citywide	Bike-Ped	\$500,000	\$-	\$500,000	(2)/(4)
Redondo Beach	Redondo Beach Bicycle Transportation Plan Improvements	Construct, restripe streets or add additional signage to add Class I, Class II and Class III bikeways as per the City's Bicycle Transportation Plan. Implementation of additional bikeways is consistent with the City's Transportation Demand Management	Citywide	Bike-Ped	\$10,554,000	\$-	\$10,554,000	(1)
Redondo Beach	Pacific Cost Highway ROW Improvements	Improve traffic flow by obtaining/improving right of way and intersections and the enhancement of signal and traffic operations along the congested corridor of Pacific Coast Highway in an attempt to reduce vehicular delays, reduce greenhouse gases, a	entire length	Capacity	\$36,000,000	\$-	\$36,000,000	
Redondo Beach	Anita Street Right Turn Lane Improvement	Install Westbound right turn lane to N/B PCH. Existing right turn lane will become bike lane and/or thru lane.		Intersection Improvement	\$600,000	\$-	\$600,000	
Redondo Beach	PCH Torrance Right Turn Lane	Install right turn lane on PCh. ROW purchase necessary. Relocate signals, new sidewalks, ADA ramps, etc.		Intersection Improvement	\$850,000	\$-	\$850,000	

Jurisdiction ^A	Project Name		Description	Location	Project Type	Total Cost	Other Funding		Note
	190th Street Traffic Signal and ITS Upgrades	ITS Upgrades					Funding	Unfunded	
Redondo Beach	190th Street Traffic Signal and ITS Upgrades		Traffic signal upgrades, bike detection, synchronization and integration with County and City ITS systems.	190th Street from Prospect Avenue to Inglewood Avenue	System Operations	\$1,350,000	\$-	\$1,350,000	
Redondo Beach	Artesia Boulevard Traffic Signal Improvements		Traffic signal upgrades, bike detections, synchronization and integration with County and City ITS systems.	Ford Avenue to Hawthorne Boulevard	System Operations	\$2,700,000	\$-	\$2,700,000	
Redondo Beach	Inglewood Avenue Traffic Signal and ITS Improvements		Traffic signal upgrades, bike detection, synchronization and integration with County and City ITS systems.	Inglewood Avenue from 190th Street to Marine Avenue	System Operations	\$2,475,000	\$-	\$2,475,000	
Redondo Beach	Manhattan Beach Blvd. Traffic Signals Improvements		Traffic signal upgrades, bike detection, synchronization and intergration with County and City ITS system	entire length of Manhattan Beach Blvd.	System Operations	\$1,125,000	\$-	\$1,125,000	
Rolling Hills Estate	Crenshaw/Silver Spur Dual SB Right Turn		Add through-right turn lane with RT overlap signalization	Crenshaw Bl. at Silver Spur Rd.	Intersection Improvement	\$57,510	\$-	\$57,510	
Rolling Hills Estate	Hawthorne Bl. at Indian Peak Rd. Add Third NB Lane		Add third northbound merge lane through intersection.		Intersection Improvement	\$12,960	\$-	\$12,960	
Rolling Hills Estate	Hawthorne Bl. at PV Drive N Add Dual SB Left Turns		Add second southbound left turn lane.		Intersection Improvement	\$295,723	\$-	\$295,723	
Rolling Hills Estate	Hawthorne Bl. at Silver Spur Add Dual SB & WB Left lanes		Add Dual southbound and westbound left turn lanes. Add third northbound lane. Add westbound right turn pocket.		Intersection Improvement	\$665,204	\$-	\$665,204	
Rolling Hills Estate	PV Drive N at Dapplegray School merge lanes		Add eastbound and westbound merge lanes		Intersection Improvement	\$1,771,494	\$-	\$1,771,494	
Rolling Hills Estate	PV Drive N at PV Drive E- Add SB Right Turn Overlap		Add southbound right turn overlap with signalization.	Palos Verdes Drive North at Palos Verdes Drive East	Intersection Improvement	\$62,167	\$-	\$62,167	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Rolling Hills Estate	PV Drive N at Rolling Hills Rd. Add EB and WB merge lanes	Add eastbound and westbound merge lanes and protected left turn phases		Intersection Improvement	\$217,080	\$-	\$217,080	
Rolling Hills Estate	PV Drive N at Silver Spur Rd.-Intersection improvements	Add Dual Northbound left turn lane, modify northbound and eastbound free right turn lanes, add eastbound left turn lane.		Intersection Improvement	\$767,880	\$-	\$767,880	
Rolling Hills Estate	Palos Verdes Drive North Signal Interconnect System	Install hard wire signal interconnect system	Palos Verdes Drive North	System Operations	\$426,000	\$-	\$426,000	
Torrance	Anza Ave @ Del Amo Blvd	add one WB thru lane add one EB thru lane	Anza Ave @ Del Amo Blvd	Capacity	\$1,776,000	\$-	\$1,776,000	
Torrance	Anza Avenue @ 190th Street	add one EB thru lane	Anza Avenue @ 190th Street	Capacity	\$888,000	\$-	\$888,000	
Torrance	Anza Avenue @ Sepulveda Blvd	widen EB sepulveda to add an EB thru lane and 1 WB thru lane, one NB thru lane and one SB thru lane. widen NB anza to add a NB left turn lane; widen SB anza to add left turn lane; need 12 ft of ROW;	Anza Avenue @ Sepulveda Blvd	Capacity	\$1,271,000	\$-	\$1,271,000	
Torrance	Anza Avenue @ Torrance Blvd	add one WB thru lane	Anza Avenue @ Torrance Blvd	Capacity	\$896,000	\$-	\$896,000	
Torrance	Arlington Avenue @ Plaza Del Amo-Washington Avenue	Modify the SB geometry to consist of one left turn lane, one thru lane, and one shared thru/right turn lane	Arlington Avenue @ Plaza Del Amo-Washington Avenue	Capacity	\$496,000	\$-	\$496,000	
Torrance	Arlington Avenue @ Sepulveda Blvd	Add one WB thru lane	Arlington Avenue @ Sepulveda Blvd	Capacity	\$896,000	\$-	\$896,000	
Torrance	Arlington Avenue @ Torrance Blvd	Add one EB Thru lane	Arlington Avenue @ Torrance Blvd	Capacity	\$416,000	\$-	\$416,000	
Torrance	Cabrillo Avenue-Van Ness @ Torrance Blvd	Add one EB Thru lane on Torrance Blvd	Cabrillo Avenue-Van Ness @ Torrance Blvd	Capacity	\$896,000	\$-	\$896,000	

Jurisdiction ^A	Project Name			Description	Location	Project Type	Total Cost	Other Funding		Note
	Project Name	Project Name	Project Name					Funding	Unfunded	
Torrance	Calle Mayor @ Pacific Coast Highway			Add one westbound left-turn lane on PCH	Calle Mayor @ Pacific Coast Highway	Capacity	\$400,000	\$-	\$400,000	
Torrance	Crenshaw Blvd @ 182nd Street			add 2 NB thru lanes, add 2 SB thru lanes, and add 1 WB right turn lane (*near term)	Crenshaw Blvd @ 182nd Street	Capacity	\$2,944,000	\$-	\$2,944,000	
Torrance	Crenshaw Blvd @ 190th Street			add one northbound left turn lane; add two northbound thru lanes; add one southbound thru lane; add two westbound thru lanes; (*near term)	Crenshaw Blvd @ 190th Street	Capacity	\$3,424,000	\$-	\$3,424,000	
Torrance	Crenshaw Blvd @ 235th Street			add one NB thru lane and one SB thru lane; install left turn phasing for the east bound/westbound Maple Avenue	Crenshaw Blvd @ 235th Street	Capacity	\$1,792,000	\$-	\$1,792,000	
Torrance	Crenshaw Blvd @ Airport Drive			add 1 NB thru lane	Crenshaw Blvd @ Airport Drive	Capacity	\$896,000	\$-	\$896,000	
Torrance	Crenshaw Blvd @ Artesia Blvd			add one NB thru lane	Crenshaw Blvd @ Artesia Blvd	Capacity	\$896,000	\$-	\$896,000	
Torrance	Crenshaw Blvd @ Carson Street			add one NB Thru lane; widen SB approach to consist of 2 left-turn lanes, 3 thru lanes, and 1 RT lane; add one WB thru lane (long term)	Crenshaw Blvd @ Carson Street	Capacity	\$1,984,000	\$-	\$1,984,000	
Torrance	Crenshaw Blvd @ Del Amo Blvd			2 NB right, 2 NB thru, 1 SB left, 2 SB thru, 1 EB thru, 2 WB thru;	Crenshaw Blvd @ Del Amo Blvd	Capacity	\$4,768,000	\$-	\$4,768,000	
Torrance	Crenshaw Blvd @ Lomita Blvd			add 1 NB thru, 1 NB free right, SB left, SB thru, EB thru and WB thru	Crenshaw Blvd @ Lomita Blvd	Capacity	\$7,077,000	\$-	\$7,077,000	
Torrance	Crenshaw Blvd @ Maricopa Street			add one SB thru lane	Crenshaw Blvd @ Maricopa Street	Capacity	\$896,000	\$-	\$896,000	

Juris-diction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Torrance	Crenshaw Blvd @ Pacific Coast Highway (PCH)	add 1 NB Thru and 1 NB Right turn lane and the overlap signal; add 1 SB left and 1 SB thru; add 1 EB thru and 1 EB left turn lane; add 1 WB thru;	Crenshaw Blvd @ Pacific Coast Highway (PCH)	Capacity	\$5,255,000	\$-	\$5,255,000	
Torrance	Crenshaw Blvd @ Redondo Beach Blvd	add one NB thru lane	Crenshaw Blvd @ Redondo Beach Blvd	Capacity	\$896,000	\$-	\$896,000	
Torrance	Crenshaw Blvd @ Sepulveda Blvd	add one SB thru lane,	Crenshaw Blvd @ Sepulveda Blvd	Capacity	\$896,000	\$-	\$896,000	
Torrance	Crenshaw Blvd @ Skypark Drive-Amsler Street	add SB right turn-overlap signal phasing; 1 SB thru lane; 1 EB right turn lane	Crenshaw Blvd @ Skypark Drive-Amsler Street	Capacity	\$1,088,000	\$-	\$1,088,000	
Torrance	Crenshaw Blvd @ Torrance Blvd	add one NB thru lane, add one SB thru lane; add one EB thru lane	Crenshaw Blvd @ Torrance Blvd	Capacity	\$2,272,000	\$-	\$2,272,000	
Torrance	Del Amo Circle East @ Sepulveda Blvd	add one EB thru lane	Del Amo Circle East @ Sepulveda Blvd	Capacity	\$896,000	\$-	\$896,000	
Torrance	Hawthorne Blvd @ 182nd Street	add one SB Thru lane; add one NB thru lane	Hawthorne Blvd @ 182nd Street	Capacity	\$1,376,000	\$-	\$1,376,000	
Torrance	Hawthorne Blvd @ 190th Street	add one NB thru, add one SB thru, add EB right turn overlap signal phasing	Hawthorne Blvd @ 190th Street	Capacity	\$1,792,000	\$-	\$1,792,000	
Torrance	Hawthorne Blvd @ 230th Street	add one SB left turn lane	Hawthorne Blvd @ 230th Street	Capacity	\$608,000	\$-	\$608,000	
Torrance	Hawthorne Blvd @ Artesia Blvd	widen NB approach to consist of 2 left turn lanes, 4 thru lanes, and one shared thru/right turn lane	Hawthorne Blvd @ Artesia Blvd	Capacity	\$688,000	\$-	\$688,000	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Torrance	Hawthorne Blvd @ Carson Street	add 1 SB left turn lane; widen EB carson st to 1 left, 2 thru and 1 shared thru/right; modify WB Carson traffic signal phasing to include a RT overlap, preclude U-turns from SB to NB Hawthorne, add 2 NB thru lanes	Hawthorne Blvd @ Carson Street	Capacity	\$3,744,000	\$-	\$3,744,000	
Torrance	Hawthorne Blvd @ Del Amo Blvd	add 1 NB thru, 1 SB thru lane, 1 EB thru lane, 1 WB thru lane; acquire 12 feet of ROW on the EB Del Amo approach and departure to provide adequate alignment of EB Del Amo Thru lanes	Hawthorne Blvd @ Del Amo Blvd	Capacity	\$1,153,000	\$-	\$1,153,000	
Torrance	Hawthorne Blvd @ Emerald St	add 2 SB thru lanes	Hawthorne Blvd @ Emerald St	Capacity	\$1,168,000	\$-	\$1,168,000	
Torrance	Hawthorne Blvd @ Lomita Blvd	add one NB left turn lane; add one NB thru lane; add one SB thru lane; add one WB left turn lane; add 1 WB right turn overlap	Hawthorne Blvd @ Lomita Blvd	Capacity	\$2,176,000	\$-	\$2,176,000	
Torrance	Hawthorne Blvd @ Pacific Coast Highway	add 1 EB left, add 1 WB left, add 2 NB thru lanes, 1 SB thru lane, add 1 EB thru lane; need 24 feet of ROW (EB/WB PCH)	Hawthorne Blvd @ Pacific Coast Highway	Capacity	\$18,000,000	\$-	\$18,000,000	
Torrance	Hawthorne Blvd @ Redondo Beach Blvd	widen WB RBB to add 1 WB left turn lane; need 12 ft of ROW on the WB RBB approach and departure to provide adequate alignment of WB RBB thru lanes; add 1 EB thru lane	Hawthorne Blvd @ Redondo Beach Blvd	Capacity	\$1,434,000	\$-	\$1,434,000	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Torrance	Hawthorne Blvd @ Sepulveda Blvd	add 1 NB right turn lane with overlap, modify NB Hawthorne traffic signal to include a RT overlap; add 3 NB thru lanes, 1 SB thru lane; widen WB Sepulveda to add 1 left turn lane and WB thru lane	Hawthorne Blvd @ Sepulveda Blvd	Capacity	\$3,616,000	\$-	\$3,616,000	
Torrance	Hawthorne Blvd @ Torrance Blvd	add 1 EB thru lane, 1 EB right turn with overlap, 1 EB left turn lanes; add 1 WB thru; 1 SB left turn lane, 2 SB thru lanes, implement 24 ft of ROW; will be 25.5 lanes in 2020, couldnt fit 25.5 in spreadsheet	Hawthorne Blvd @ Torrance Blvd	Capacity	\$4,395,000	\$-	\$4,395,000	
Torrance	I-405 Northbound Ramps @ 182nd Street	widen EB approach to consist of 2 EB thru lanes, and 2 EB right turn lanes	I-405 Northbound Ramps @ 182nd St	Capacity	\$1,760,000	\$-	\$1,760,000	
Torrance	I-405 Southbound Ramps @ 190th Street	add one EB thru lane; add one WB thru lane	I-405 Southbound Ramps @ 190th St	Capacity	\$1,792,000	\$-	\$1,792,000	
Torrance	I-405 Southbound Ramps @ Crenshaw Blvd	add one NB left turn lane; add two SB thru lanes	I-405 Southbound Ramps @ Crenshaw Blvd	Capacity	\$1,584,000	\$-	\$1,584,000	
Torrance	Inglewood Avenue @ 190th Street	modify the NB & SB traffic signal phasing from split-phase to permitted left turn phasing; widen EB 190th approach to 2 lefts, 2 thru's, and 1 RT lane; acquire 12 feet of ROW on the EB 190th approach & departure for EB 190th thru lane; 1 WB thru add one EB thru lane	Inglewood Avenue @ 190th Street	Capacity	\$1,504,000	\$-	\$1,504,000	
Torrance	Madrona Avenue @ Sepulveda Blvd	add one EB thru lane	Madrona Avenue @ Sepulveda Blvd	Capacity	\$896,000	\$-	\$896,000	
Torrance	Madrona Avenue @ Torrance Blvd	add 1 NB thru and 1 EB thru lanes	Madrona Avenue @ Torrance Blvd	Capacity	\$1,392,000	\$-	\$1,392,000	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Torrance	Maple Avenue @ Torrance Blvd	add one EB thru and one WB thru	Maple Avenue @ Torrance Blvd	Capacity	\$1,792,000	\$-	\$1,792,000	
Torrance	Palos Verdes Blvd @ Pacific Coast Highway (PCH)	add one NB left turn lane	Palos Verdes Blvd @ Pacific Coast Highway (PCH)	Capacity	\$600,000	\$-	\$600,000	
Torrance	Palos Verdes Blvd @ Torrance Blvd	add one NB left turn lane	Palos Verdes Blvd @ Torrance Blvd	Capacity	\$408,000	\$-	\$408,000	
Torrance	Prairie Avenue @ 182nd Street	add one NB thru lane; and add one SB thru lane	Prairie Avenue @ 182nd Street	Capacity	\$1,792,000	\$-	\$1,792,000	
Torrance	Prairie Avenue @ 190th Street	1 NB thru, 1 NB right turn overlap, 1 SB thru, 1 WB thru lane, 1 EB left turn lane	Prairie Avenue @ 190th Street	Capacity	\$2,464,000	\$-	\$2,464,000	
Torrance	Prairie Avenue @ Artesia Blvd	add one WB thru lane	Prairie Avenue @ Artesia Blvd	Capacity	\$896,000	\$-	\$896,000	
Torrance	Prairie Avenue @ Del Amo Blvd	add SB Right turn overlap; add 2 WB thru lanes;	Prairie Avenue @ Del Amo Blvd	Capacity	\$1,376,000	\$-	\$1,376,000	
Torrance	Prairie Avenue @ Redondo Beach Blvd	widen NB prairie to add 1 NB left turn lane, widen SB prairie to add 1 SB left turn lane and SB thru lane, need ROW; widen EB RBB to add 1 EB left turn lane; add 1 NB thru lane; add	Prairie Avenue @ Redondo Beach Blvd	Capacity	\$2,368,000	\$-	\$2,368,000	
Torrance	Van Ness Avenue @ Del Amo Blvd	widen EB Del Amo to add 1 thru lane; need 12 feet of ROW on EB Del Amo approach and departure to provide adequate alignment of EB Del Amo Thru lanes; add 1 NB thru, and 1 WB thru lane	Van Ness Avenue @ Del Amo Blvd	Capacity	\$2,272,000	\$-	\$2,272,000	
Torrance	Western Avenue (SR 213) @ 190th Street	widen SB approach to add 1 SB thru lane and add SB right-turn overlap signal phasing	Western Avenue (SR 213) @ 190th Street	Capacity	\$896,000	\$-	\$896,000	
Torrance	Western Avenue (SR-213) @ 195th Street	add one SB thru lane, and add EB right turn overlap signal phasing	Western Avenue (SR-213) @ 195th Street	Capacity	\$896,000	\$-	\$896,000	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Torrance	Western Avenue (SR-213) @ 220th Street	widen EB 220th to 1 shared left-thru lane & 1 Right turn lane; widen WB 220th to 1 shared left-thru & 1 right turn lane; need 12 feet of ROW on EB 220th 12 ft of ROW on WB 220th approach and departure to; 1 NB thru, 2 SB thru lanes	Western Avenue (SR-213) @ 220th Street	Capacity	\$2,656,000	\$-	\$2,656,000	
Torrance	Western Avenue (SR-213) @ 223rd Street	add one NB thru lane and add 2 SB thru lanes	Western Avenue @ 223rd Street	Capacity	\$2,272,000	\$-	\$2,272,000	
Torrance	Western Avenue (SR-213) @ Artesia Blvd	add one NB thru lane; add one EB Thru lane; add one WB thru lane	Western Avenue (SR-213) @ Artesia Blvd	Capacity	\$2,272,000	\$-	\$2,272,000	
Torrance	Western Avenue (SR-213) @ Carson Street	add one NB thru lane, add one SB thru lane and add one EB thru lane and add 1 WB thru lanes	Western Avenue (SR-213) @ Carson Street	Capacity	\$2,752,000	\$-	\$2,752,000	
Torrance	Western Avenue (SR-213) @ Del Amo Blvd	add 2 NB thru lanes; add 1 SB thru lane; add SB right turn lane with overlap; add 3 EB thru lanes;	Western Avenue (SR-213) @ Del Amo Blvd	Capacity	\$3,232,000	\$-	\$3,232,000	
Torrance	Western Avenue (SR-213) @ Sepulveda Blvd.	1 NB Thru, 2 SB thru, 1 EB left, 2 EB thru, 1 WB left, 1 WB thru,	Western Avenue (SR-213) @ Sepulveda Blvd.	Capacity	\$4,112,000	\$-	\$4,112,000	
Unincorporated	111th St from Buford Ave to Prairie Ave	111th St from Buford Ave to Prairie Ave	111th St from Buford Ave to Prairie Ave	Bike-Ped	\$17,000	\$-	\$17,000	(1)
Unincorporated	120th Street from Aviation Boulevard to Inglewood Avenue	120th Street from Aviation Boulevard to Inglewood Avenue	120th Street form Aviation Boulevard to Inglewood Avenue	Bike-Ped	\$18,000	\$-	\$18,000	(1)
Unincorporated	220th St from Normandie Av to Vermont Av	220th Street from Normandie Avenue to Vermont Avenue	220th St from Normandie Av to Vermont Av	Bike-Ped	\$13,000	\$-	\$13,000	(1)

Jurisdiction ^A	Project Name		Description	Location	Project Type	Total Cost	Other Funding		Note
	223rd Street from Normandie Avenue to I-110	Aviation Boulevard from Imperial Highway to 154th St					Funding	Unfunded	
Unincorporated	223rd Street from Normandie Avenue to I-110	223rd Street from Normandie Avenue to I-110	223rd Street from Normandie Avenue to I-110	223rd Street from Normandie Av to I-110	Bike-Ped	\$116,000	\$-	\$116,000	(1)
Unincorporated	Aviation Boulevard from Imperial Highway to 154th St	Aviation Boulevard from Imperial Highway to 154th St	Aviation Boulevard from Imperial Highway to 154th St	Aviation Boulevard from Imperial Highway to 154th St	Bike-Ped	\$30,000	\$-	\$30,000	(1)
Unincorporated	Buford Avenue from 104th street to 111th street	Buford Avenue from 104th street to 111th street	Buford Avenue from 104th street to 111th street	Buford Avenue from 104th street to 111th street	Bike-Ped	\$8,000	\$-	\$8,000	(1)
Unincorporated	Crenshaw Bl. Bike Lane	Add dedicated bike lane	Add dedicated bike lane	Crenshaw Bl from Palos Verdes Area to Indian Peak Rd	Bike-Ped	\$48,000	\$-	\$48,000	(1)
Unincorporated	Del Amo Blvd from Normandie Avenue to I110	Del Amo Blvd from Normandie Avenue to I110	Del Amo Blvd from Normandie Avenue to I110	Del Amo Blvd from Normandie Avenue to I110	Bike-Ped	\$32,000	\$-	\$32,000	(1)
Unincorporated	Dominguez Channel from Redondo Beach Boulevard to PHC	Dominguez Channel from Redondo Beach Boulevard to PHC	Dominguez Channel from Redondo Beach Boulevard to PHC	Dominguez Channel from Redondo Beach Boulevard to PHC	Bike-Ped	\$2,700,000	\$-	\$2,700,000	(1)
Unincorporated	El Segundo Blvd from Isis Ave to Inglewood Ave	El Segundo Blvd from Isis Ave to Inglewood Ave	El Segundo Blvd from Isis Ave to Inglewood Ave	El Segundo Blvd from Isis Ave to Inglewood Ave	Bike-Ped	\$125,000	\$-	\$125,000	(1)
Unincorporated	Freeman Avenue from 104th Street to 11th Street	Freeman Avenue from 104th Street to 11th Street	Freeman Avenue from 104th Street to 11th Street	Freeman Avenue from 104th Street to 11th Street	Bike-Ped	\$8,000	\$-	\$8,000	(1)
Unincorporated	Hawthorne Blvd Bike Lane	Add dedicated bike lane to provide access to transit facilities and destinations.	Add dedicated bike lane to provide access to transit facilities and destinations.	104th Street to 111th Street	Bike-Ped	\$20,000	\$-	\$20,000	(1)
Unincorporated	Imperial Highway from La Cienega Blvd to Inglewood Ave	Imperial Highway from La Cienega Blvd to Inglewood Ave	Imperial Highway from La Cienega Blvd to Inglewood Ave	Imperial Hwy from La Cienega Bl to Inglewood Ave	Bike-Ped	\$21,000	\$-	\$21,000	(1)
Unincorporated	Inglewood Avenue from Century Boulevard to Imperial Highway	Inglewood Avenue from Century Boulevard to Imperial Highway	Inglewood Avenue from Century Boulevard to Imperial Highway	Inglewood Avenue from Century Blvd to Imperial Hwy	Bike-Ped	\$26,000	\$-	\$26,000	(1)

Jurisdiction ^A	Project Name			Description	Location	Project Type	Total Cost	Other Funding		Note
	Project Name	Description	Location					Project Type	Total Cost	
Unincorporated	Inglewood Avenue from 120th St to Rosecrans Av	Inglewood Avenue from 120th Street to Rosecrans Av	Inglewood Avenue from 120th Street to Rosecrans Av	Inglewood Avenue from 120th Street to Rosecrans Av	Inglewood Avenue from 120th Street to Rosecrans Av	Bike-Ped	\$166,000	\$-	\$166,000	(1)
Unincorporated	Isis Avenue from 116th Street to Elsegundo Boulevard	Isis Avenue from 116th Street to Elsegundo Boulevard	Isis Avenue from 116th Street to Elsegundo Boulevard	Isis Avenue from 116th Street to Elsegundo Boulevard	Isis Avenue from 116th Street to Elsegundo Blvd	Bike-Ped	\$14,000	\$-	\$14,000	(1)
Unincorporated	La Cienega Boulevard from Imperial Highway to El Segundo Blv	La Cienega Boulevard from Imperial Highway to El Segundo Blv	La Cienega Boulevard from Imperial Highway to El Segundo Blv	La Cienega Boulevard from Imperial Highway to El Segundo Blv	La Cienega Boulevard from Imperial Highway to El Segundo Blv	Bike-Ped	\$165,000	\$-	\$165,000	(1)
Unincorporated	Lennox Boulevard from Felton Avenue to Osage Avenue	Lennox Boulevard from Felton Avenue to Osage Avenue	Lennox Boulevard from Felton Avenue to Osage Avenue	Lennox Boulevard from Felton Avenue to Osage Avenue	Lennox Boulevard from Felton Ave to Osage Avenue	Bike-Ped	\$28,000	\$-	\$28,000	(1)
Unincorporated	Lomita Boulevard from Frampton Avenue to Vermont Ave	Lomita Boulevard from Frampton Avenue to Vermont Ave	Lomita Boulevard from Frampton Avenue to Vermont Ave	Lomita Boulevard from Frampton Avenue to Vermont Ave	Lomita Boulevard from Frampton Avenue to Vermont Ave	Bike-Ped	\$817,000	\$-	\$817,000	(1)
Unincorporated	Marine Avenue from Prairie Avenue to Crenshaw Boulevard	Marine Avenue from Prairie Avenue to Crenshaw Boulevard	Marine Avenue from Prairie Avenue to Crenshaw Boulevard	Marine Avenue from Prairie Avenue to Crenshaw Boulevard	Marine Avenue from Prairie Avenue to Crenshaw Blvd	Bike-Ped	\$14,000	\$-	\$14,000	(1)
Unincorporated	Redondo Beach Soulevar from Praire Avenue to Crenshaw Blvd	Redondo Beach Soulevar from Praire Avenue to Crenshaw Blvd	Redondo Beach Soulevar from Praire Avenue to Crenshaw Blvd	Redondo Beach Soulevar from Praire Avenue to Crenshaw Blvd	Redondo Beach Soulevar from Praire Avenue to Crenshaw Blvd	Bike-Ped	\$43,000	\$-	\$43,000	(1)
Unincorporated	Vermont Avenue from 190th Street to Lomita Boulevard	Vermont Avenue from 190th Street to Lomita Boulevard	Vermont Avenue from 190th Street to Lomita Boulevard	Vermont Avenue from 190th Street to Lomita Boulevard	Vermont Avenue from 190th Street to Lomita Blvd	Bike-Ped	\$148,000	\$-	\$148,000	(1)
Unincorporated	Avalon Boulevard TSSP	Multijurisdictional Traffic Signal Synchronization Project along Avalon Blvd.	Multijurisdictional Traffic Signal Synchronization Project along Avalon Blvd.	Multijurisdictional Traffic Signal Synchronization Project along Avalon Blvd.	Avalon Boulevard - 126th Street to Sepulveda Blvd	System Operations	\$3,710,000	\$742,000	\$2,968,000	
Unincorporated	El Segundo Boulevard TSSP	Multijurisdictional Traffic Signal Synchronization project along El Segundo Blvd	Multijurisdictional Traffic Signal Synchronization project along El Segundo Blvd	Multijurisdictional Traffic Signal Synchronization project along El Segundo Blvd	El Segundo Boulevard - Illinois Street to Vermont Avenue	System Operations	\$2,470,000	\$494,000	\$1,976,000	

Jurisdiction ^A	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Unincorporated	Imperial Highway TSSP	Multijurisdictional Traffic Signal Synchronization project along Imperial Hwy	Imperial Highway - Sundale Avenue to Budlong Ave	System Operations	\$2,110,000	\$422,000	\$1,688,000	
Unincorporated	Prairie Avenue TSSP	Multijurisdictional Traffic Signal Synchronization project along Prairie Avenue	Prairie Avenue - 118th Street to Redondo Beach Blvd	System Operations	\$1,662,000	\$332,400	\$1,329,600	
Unincorporated	Redondo Beach Boulevard	Multijurisdictional Traffic Signal Synchronization project along Redondo Beach Blvd	Redondo Beach Boulevard - Artesia Boulevard to Vermont Ave	System Operations	\$1,458,500	\$291,700	\$1,166,800	
Unincorporated	Rosecrans Avenue ('09) TSSP	Multijurisdictional Traffic Signal Synchronization project along Rosecrans Ave	Rosecrans Avenue - Ocean Gate Ave to Vermont Ave	System Operations	\$2,070,000	\$414,000	\$1,656,000	
Unincorporated	Rosecrans Avenue ('11) TSSP	Multijurisdictional Traffic Signal Synchronization project along Rosecrans Ave	Rosecrans Avenue - Highland Avenue to Ocean Gate Ave	System Operations	\$919,000	\$183,800	\$735,200	
Unincorporated	South Bay ITS Improvements	Various Intelligent Transportation System Improvements (e.g., advanced technologies for communications and information processing, CCTV cameras, fiber construction, IEN expansion). Locations and specific projects have not yet been defined.	South Bay Forum Regionwide	System Operations	\$1,020,000	\$204,000	\$816,000	
TOTAL					\$444,380,339	\$128,271,900	\$316,108,439	

Notes:

“Unincorporated” applies to the Los Angeles County unincorporated areas that are within the South Bay Cities COG.

- (1) Describe link to transit to justify nexus.
- (2) Eliminate all ADA compliance costs from project because these are related to correcting existing deficiencies.
- (3) Project should be eliminated from nexus analysis because other funding fully funds project costs leaving no unfunded amount.
- (4) Must upgrade or expand and not just replace existing facilities.

**Westside Cities
Congestion Mitigation Fee
Pilot Nexus Study Report**

December 2012



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Westside Cities

Congestion Mitigation Fee Pilot Nexus Study Report

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EXECUTIVE SUMMARY

The Pilot Nexus Study has been conducted with the member jurisdictions of the Westside Cities Council of Governments (COG) to examine the feasibility of implementing a Congestion Mitigation Fee Program to meet the Congestion Management Program (CMP) Countywide Deficiency Plan requirements. The proposed Congestion Mitigation Fee Program would charge a one-time fee on new development across all land uses to fund transportation projects that would reduce congestion generated by new development.

For the last three years, the jurisdictions of the Westside Cities COG have worked with MTA to develop this Pilot Nexus Study to ensure their issues and concerns were fully vetted prior to any action by the MTA Board. The City of Los Angeles is not included in the Pilot Nexus Study findings because a Pilot Nexus Study is being conducted separately. MTA requested each jurisdiction to review and modify, if necessary, their growth forecasts and regional arterial network, as well as select transportation improvements that would meet the nexus test. This test requires that transportation projects funded with a congestion mitigation fee mitigate the impacts caused by new development and that the cost born by each land use type bear a reasonable relationship to its impact on future congestion.

This Pilot Nexus Study concludes that the transportation projects analyzed in this study meet the requirements of the Mitigation Fee Act (AB1600) and the CMP Countywide Deficiency Plan. It also shows how a sub-regional fee program might work if it were to be implemented. Under the Congestion Mitigation Fee Program, each jurisdiction would:

- Collect and retain all of the revenue from the fee;
- Select and construct local transportation projects with regional benefits;
- Leverage their other funding sources to implement their list of transportation projects;
- Integrate their existing fee programs with the Congestion Mitigation Fee Program.

In October 2011, a preliminary findings report was distributed to all the jurisdictions in the Westside Cities for their review and comment. This revised Pilot Nexus Study updates the first draft based on comments received and incorporates transportation project descriptions provided by jurisdictions. This Pilot Nexus Study demonstrates the feasibility of the program.

Growth in the Westside Cities sub-region over the next 20 years is expected to result in a 181% increase in vehicle-hours-of-delay (VHD) or congestion on a roadway network that is already operating near or at capacity. To address this projected impact, 87 projects and programs with a cost of \$352 million were identified, of which 21 projects with a cost of \$34 million could be evaluated quantitatively. The analysis yielded the following results:

- **Congestion reduction benefit:** 7% reduction in congestion (vehicle-hours-of-delay) on arterials would result from implementing the transportation projects that could be evaluated quantitatively, meeting the requirements of the Mitigation Fee Act and CMP.
- **Maximum justified congestion mitigation fee:** The maximum justified fee is \$2,243 per trip based on the total cost of projects divided by total new trips over the next 20 years.
- **Economic benefits:** Building the projects that could be quantitatively evaluated (21 projects with a cost of \$34 million) could generate a countywide net economic benefit of 1,700 jobs, \$300 million in economic output, and more than \$100 million in disposable income.¹

Based on the results of the Pilot Nexus Study, each jurisdiction has its own individual fee-per-trip amount that would be needed to fund the unfunded share of its list of transportation projects. Since all jurisdictions have fee-per-trip amounts above \$400, a \$400 fee-per-trip amount could be used as the minimum fee-per-trip amount for these jurisdictions.

There were two additional outcomes that resulted from this work effort. The first is the development of a Greenhouse Gas Emissions Sketch Planning Tool that was made available to jurisdictions so they could generally estimate the greenhouse gas emissions impacts derived from transportation projects they identified. If the Congestion Mitigation Fee Program were implemented, there may be an opportunity for jurisdictions to fund transportation projects identified for SB 375 compliance as well as the CMP. The second outcome was the directive by the MTA Board to develop a model that would quantify the travel related benefits associated with bicycle travel. This directive was adopted to address the need to quantify the impacts of the extensive list of bicycle projects that were identified by jurisdictions during the process of conducting each sub-regional Pilot Nexus Study.

If the MTA Board authorizes staff to work with cities on implementing the congestion mitigation fee program, then it is possible that jurisdictions would modify their list of transportation projects. If so, then the congestion reduction and economic benefit from such a change may be different than the results identified in this Pilot Nexus Study and would be revised accordingly in a report at that time.

NEXT STEPS

Below are the next steps to complete the Congestion Mitigation Fee work plan:

- Present pilot nexus study and economic analysis findings to jurisdictions, sub-regional agencies, and building industry stakeholders.
- Seek MTA Board direction in early 2013 to:
 - Adopt the Congestion Mitigation Fee Program as the new CMP Deficiency Plan;
 - Establish minimum fee amount for CMP compliance
- Work one-on-one with jurisdictions, sub-regional agencies, and the building industry to develop and implement a Congestion Mitigation Fee Program over 24 months.

CONTACT INFORMATION

If you have any questions or comments, please contact:

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¹ Economic Impact Analysis of the Congestion Mitigation Fee Pilot Nexus Study – October 2012

Westside Cities

Congestion Mitigation Fee Pilot Nexus Study Report

OVERVIEW

In 2003, the MTA Board authorized staff to examine the feasibility of implementing a Congestion Mitigation Fee Program to replace the existing Deficiency Plan requirements of the Congestion Management Program (CMP). The Congestion Mitigation Fee Program is intended to mitigate the impacts of new development, providing a new resource to jurisdictions while meeting local responsibilities under the state mandated CMP.

To explore the viability of a congestion mitigation fee across all land uses in each jurisdiction in the county, eight sub-regional pilot nexus studies were conducted across the county. The member jurisdictions of the Westside Cities COG worked with MTA to conduct this Pilot Nexus Study to evaluate the transportation projects, policies and technical requirements such a program would require. The City of Los Angeles is not included in the Pilot Nexus Study findings because a Pilot Nexus Study is being conducted separately. The results of this effort are contained in this report.

CONGESTION MANAGEMENT PROGRAM BACKGROUND

As the Congestion Management Agency for the County of Los Angeles, MTA established the CMP to meet the requirements of Section 65089 of the California Government Code, which mandates that jurisdictions link their transportation, land use, and air quality decisions to address congestion on the regional transportation network. Jurisdictions are required to conform to the CMP to continue receiving their portion of state gas tax money allocated by Section 2105 of the California Streets and Highways Code and to preserve their eligibility for state and federal funding for transportation projects funded through MTA's Call-for-Projects.

Since the county experiences a deficient regional transportation system, a Countywide Deficiency Plan has been in place linking deficiencies on the transportation system to new development activity. A uniform point system known as the "Debit/Credit" approach was developed for jurisdictions to demonstrate compliance with the CMP.

A criticism of the "Debit/Credit" methodology was that it generated no revenue but required jurisdictions to spend resources on an administrative exercise that provided no congestion relief. Furthermore, a dramatic decline in state and federal transportation funding coupled with significant growth in new development was making it difficult for some jurisdictions to comply with the CMP.

The proposed Congestion Mitigation Fee Program moves away from the administrative "Debit/Credit" approach to a mitigation fee funded approach. This approach would generate revenue from new development to implement transportation improvements designed to mitigate the impacts of growth on the regional transportation network throughout the County of Los Angeles.

In adopting the Short Range Transportation Plan in 2003, the MTA Board authorized staff to explore the feasibility of implementing a Congestion Mitigation Fee to meet CMP requirements. Since that time, MTA has worked with sub-regional agencies, jurisdictions, and building industry representatives in developing a congestion mitigation fee program in concept.

To provide a significant measure of assurance that MTA is being responsive to local jurisdiction needs and concerns, the MTA Board adopted a set of Guiding Principles on April 25, 2007. The Guiding Principles adopted by the MTA Board may be summarized as follows:

- Fees should be structured to mitigate congestion from new development without discouraging economic development.
- Fees are to augment other regional funds, not replace or redirect them.
- Local jurisdictions identify local projects with regional benefit consistent with agreed upon guidelines.
- Local jurisdictions adopt, collect, and administer congestion mitigation fees.
- Local jurisdictions build projects (or local jurisdictions may choose to participate in multi-jurisdictional or regional projects, if mutually desired).
- Local jurisdictions with existing fee programs receive dollar-for-dollar credit for local projects with a regional benefit consistent with agreed upon guidelines.
- Fees should be structured to support transit-oriented development, and to exempt mixed use and high-density residential development within ¼ mile of passenger rail stations consistent with CMP statute.
- The program will be developed in a manner to encourage certainty and predictability among jurisdictions, business, environmental and development communities.

The eight Congestion Mitigation Fee Pilot Nexus Studies honor the Guiding Principles, and conform to the technical and statutory requirements of the Mitigation Fee Act and the Congestion Management Program. During the outreach process, jurisdictions expressed strong support for MTA Board commitment to abide by the Guiding Principles.

CONGESTION MITIGATION FEE PROGRAM OVERVIEW

The proposed Congestion Mitigation Fee Program was designed to ensure maximum local control over the program's development and implementation. Local jurisdictions would collect and retain all fee revenue. Each jurisdiction would select its local transportation projects that mitigate the impacts of their new development on the regional transportation system, collect the fee revenue, and build the transportation projects. Jurisdictions have been encouraged to develop a sub-regional or multi-city approach to this program and to coordinate with regional and state transportation providers. The congestion mitigation fee revenue should help local jurisdictions leverage additional funding by providing a local match to compete for the MTA's Call-for-Projects and federal and state grants.

The proposed congestion mitigation fee would be a one-time fee applied to all types of new development based on the number of net new trips generated by the development project. For residential land use, the trip generation is based on the number of dwelling units. Thus, adding a bedroom or family room to a single family home would not increase the number of dwelling units and would not be subject to a congestion mitigation fee. The trip generation of non-residential land use is based on the square footage and the type of land use. If a new development project replaces an existing structure, the trip generation from the existing structure would be subtracted from the amount of trip generation from the new development and the Congestion Mitigation Fee would be based on the net difference. Moreover, if a non-residential use is replaced with a different type of non-residential use, the trip generation rate changes and the fee would only apply if there is a net increase in trips resulting from this change. For example, a conversion of a manufacturing facility to a warehouse of the same size would result in fewer trips being generated and, thus, would not be subject to a fee.

The Congestion Mitigation Fee Program would give credit to jurisdictions with their own existing mitigation fee programs. The amount of credit would be based on how many of the transportation projects included in the local fee program provide a regional benefit. Each eligible project would receive dollar-for-dollar credit towards the minimum fee-per-trip that would be set for the Congestion Mitigation Fee Program. If the local fee program's fee-per-trip exceeds the Congestion Mitigation Fee Program minimum, then the jurisdiction would not have to make any change to its existing mitigation fee program.

Eligible transportation projects must improve the capacity of the transportation system and must consist of capital improvement projects. Ongoing operational and maintenance projects are not eligible under this program. Transportation projects identified in this Pilot Nexus Study include the following:

- Bicycle and pedestrian improvements that provide accessibility to bus and rail transit and that were developed in a systemic and multi-modal manner.
- Signal synchronization, bus speed improvements, bottleneck intersection improvements, traffic control and monitoring systems, and Intelligent Transportation Systems.
- Bus and rail transit capital and/or construction of transit stations and centers, park and ride lots, commuter rail stations, transit stop improvements and transit vehicle purchases.
- Regional arterial enhancements such as arterial widening, bottleneck intersection improvements, closure of gaps in the arterial system, grade separations, and interchange improvements.
- Other projects determined on a case-by-case basis.

WESTSIDE CITIES PILOT NEXUS STUDY BACKGROUND

To ensure a Congestion Mitigation Fee Program would serve the specific preferences of its member jurisdictions, the participating jurisdictions of the Westside Cities COG partnered with MTA to develop a Pilot Nexus Study as a way to assess the viability of the Congestion Mitigation Fee Program. These jurisdictions took this proactive approach to fully vet the issues and concerns of these jurisdictions prior to any action by the MTA Board. The City of Los Angeles is not included in the Pilot Nexus Study findings because a Pilot Nexus Study is being conducted separately. This Pilot Nexus Study also provides an opportunity to explore various policies and understand complexities associated with such a program.

For the last three years, the participating jurisdictions of the Westside Cities have been working with MTA and their consultant, Cambridge Systematics, Inc. in a collaborative process. As a result of this work effort, MTA staff and the consultant have met one-on-one with senior management of the Westside Cities jurisdictions. In addition, MTA staff has briefed the Westside Cities COG on a periodic basis to inform the members of the progress of the Pilot Nexus Study.

CONGESTION MITIGATION FEE WORK PLAN

The Pilot Nexus Study for the Westside Cities sub-region was conducted as part of an overall work plan approved by the MTA Board in September 2008 (See Figure 1 on the following page). The work plan consists of four steps: 1) Feasibility Study and Program Guidelines; 2) Local Project Identification; 3) Nexus Analysis; and 4) Program Development and Local Implementation.

In Step 1 – Feasibility Study and Program Guidelines, MTA worked with jurisdictions and other stakeholders countywide to conduct a Feasibility Study to determine whether a fee program would be feasible. When this step was completed, the results were documented in a report titled *Congestion Mitigation Fee Feasibility Study Report* and approved by the MTA Board in September 2008.

In Step 2 – Local Project Identification, MTA worked with the member jurisdictions of the Westside Cities to identify local projects with a regional benefit, verify their growth forecasts, and confirm their transportation network.

Step 3 – Nexus Analysis, involved a nexus analysis to determine whether the projects identified in Step 2 mitigate the impacts of 20 years of future development on the transportation network. In addition, Step 3 included an economic analysis of how the payment of a congestion mitigation fee and the benefits of congestion relief and construction jobs would change the economic performance of Los Angeles County.

MTA is completing eight pilot nexus studies (Step 3 in Figure 1 on the following page) for all of the sub-regions in the County. Should the MTA Board adopt the Congestion Mitigation Fee Program as the new CMP Countywide Deficiency Plan, then jurisdictions will be required to participate in the fee program to be in conformance with the CMP. In

this case, MTA staff will initiate Step 4 and work with jurisdictions to further develop and implement Step 4 of the Congestion Mitigation Fee Program.

If the MTA Board authorizes conducting Step 4 – Program Development and Local Implementation, then staff will work with jurisdictions, sub-regional agencies, and building industry representatives to implement the Congestion Mitigation Fee Program over a 24 month period. The MTA work plan is summarized below in Figure 1.

Figure 1: Congestion Mitigation Fee Program Work Plan

Work Plan Components	Schedule
Step 1: Feasibility Study & Program Guidelines	Jan. 2007 – Sept. 2008
<ul style="list-style-type: none"> • Review with PAC, jurisdictions, COGs, & Others 	
Step 2: Local Project Identification	Spring 2009 – Summer 2012
<ul style="list-style-type: none"> • Jurisdictions confirm growth forecasts • Jurisdictions identify local projects with regional benefits and confirm transportation network 	
Step 3: Nexus Study	Spring 2011 – Fall 2012
<ul style="list-style-type: none"> • Technical work effort to determine nexus 	
Step 4: Program Development & Implementation	2013 – 2015
<ul style="list-style-type: none"> • Work one-on-one with jurisdictions to develop and implement program at the local level. 	

Nexus Analysis

The Mitigation Fee Act (AB 1600) governs the adoption of mitigation fees in the State of California (California Government Code Sections 66000-66008). This law requires local jurisdictions to complete a nexus analysis before adopting a mitigation fee. This analysis must provide results for a dual nexus test, which would show that the improvements being funded with the fees will: 1) mitigate the impacts caused by new development; and, 2) that the fee amounts bear a reasonable relationship to the impact from new development.

This nexus analysis uses annual vehicle-hours-of-delay (VHD) to measure the impact of new development on the transportation system. Other technical measures commonly used for a nexus analysis at a jurisdiction level include level-of service (LOS) or volume-to-capacity (V/C) ratios. These measures work best when the scale of analysis is on specific roadway segments or an urban street network and the projects are intended to mitigate congestion from increased travel by single occupant vehicles. The proposed Congestion Mitigation Fee, however, is intended to address the requirements specified for Deficiency Plans set forth in the CMP legislation. Furthermore, the Congestion Mitigation Fee Program is intended to reduce VHD (congestion) caused by new development on the arterial network in each sub-region.

This VHD methodology is similar to the approach conducted for the nexus analysis completed for the San Diego Association of Governments (SANDAG) for its Regional Transportation Congestion Improvement Plan (RTCIP) in 2006. The MTA nexus analysis uses the same metric of vehicle-hours-of-delay as SANDAG is using for its mitigation fee program, which essentially measures the nexus between the RTCIP projects and the impacts from new development throughout San Diego county. The Pilot Nexus Studies utilize the same analytical methodology as SANDAG because both mitigation fee programs are focused on mitigating the impacts of new development on the arterial networks. Traffic patterns on the arterial networks of both counties of Los Angeles and San Diego are similar in terms of their function as relievers for freeway intercity travel and access to freeways. In addition, the trip generations rates for the seven land-use types are derived from the SANDAG trip generation rates because their county more closely resembles the traffic patterns and land use trip generation rates of the greater Southern California region. SANDAG calculated these rates from surveys of San Diego County households and businesses.

This nexus analysis compares VHD for the Westside Cities sub-region (excluding the City of Los Angeles) under three conditions or scenarios:

- **2010 Base Year – Existing Conditions Scenario:** Estimates VHD for the initial Congestion Mitigation Fee Program base year of 2010.
- **2030 Future Year – No-Build Scenario:** Estimates VHD in 2030 given estimated levels of new development and all currently planned transportation improvements funded with known sources such as MTA’s 2009 Long Range Transportation Plan.
- **2030 Future Year –With New Congestion Mitigation Fee Projects Scenario:** Estimates the reduction in VHD caused by the selected transportation improvements identified in the Congestion Mitigation Fee Program.

To meet the requirements of state law, this nexus analysis must demonstrate that VHD in 2030 does not improve beyond the 2010 Base Year levels. The analysis excludes freeway impacts because much of the freeway traffic is inter-regional and the projects submitted by jurisdictions are focused on the regional arterial system.

All transportation project categories are classified into one of nine project categories and were evaluated using either the MTA travel demand model, the Congestion Mitigation Fee Analysis Tool, or research literature as described below. Figure 2 on Page 8 that follows identifies which one of the following three nexus analysis methods was used for each transportation project category:

- **MTA Travel Demand Model:** In order to analyze the changes in VHD on the arterial network within each of the eight sub-regions, Cambridge Systematics, Inc., MTA’s contractor, made improvements to the MTA travel demand model. These improvements are documented in the *Los Angeles County MTA Travel Model Assessment and Status Report* (June 2011). The enhancements included:
 - **Replicating trip generation and trip distribution within the MTA model.** Allows the MTA travel demand model to yield more internally consistent estimates of development impacts in the nexus analyses. The process involved

converting SCAG model components into MTA's travel demand model and testing and validating model results.

- **Increasing the number of traffic assignment equilibrium iterations from 43 to 300.** Increasing to 300 iterations improves assignment accuracy substantially and provides more accuracy in traffic assignment as well as more accurate results against increased model run time.
- **Using SCAG's screenline dataset to validate sub-regional travel.** SCAG's existing dataset of traffic volumes across multiple key locations (also known as screenlines) was used to validate travel model results for 2010 base year.

With these steps completed, the MTA travel demand model is better prepared to code and run sub-regional nexus analyses.

- **Congestion Mitigation Fee Analysis Tool:** This analytical tool estimates VHD reduction from intersection improvements, system operations (e.g. signal synchronization), railroad grade separations, and highway on/off ramps. The Congestion Mitigation Fee Analysis Tool was developed specifically for conducting sub-regional nexus analysis of projects that require a level of analysis that is too fine-grained for the MTA travel demand model. The analysis tool estimates VHD reduction based on assumptions taken from research literature combined with quantified project descriptions provided by each jurisdiction.
 - **Greenhouse Gas Emissions Sketch Planning Capability:** At the request of jurisdictions, a greenhouse gas emissions sketch planning tool was developed and made available to jurisdictions so they could generally estimate the greenhouse gas emissions impacts derived from transportation projects they identified. This capability was added to assist cities when considering projects that meet both the requirements of the CMP and SB 375. If the Congestion Mitigation Fee Program were implemented, there may be an opportunity to fund transportation projects identified for SB 375 compliance as well as the CMP.
- **Research Literature:** Reliable research provides sufficient evidence that bicycle and pedestrian improvements that link to transit (e.g. bicycle lanes and sidewalks that serve bus stops and passenger rail stations), transit amenities (e.g. bus shelters, better signage, etc.), park-and-ride lots, and other similar projects provide congestion reduction benefits. This research literature, however, does not provide enough information to quantify the impacts. Thus, for purposes of the Pilot Nexus Study analysis these projects are included but their benefits are not quantified.

Furthermore, bicycle or pedestrian improvements that do not link to transit (e.g. recreational biking/hiking trails) have been excluded from the analysis. In January 2012, the MTA Board directed staff to develop the modeling capability to be able to quantify the benefit of bicycle transportation investment (and pedestrian transportation investment, if possible) because many of jurisdictions participating in the Pilot Nexus Study have included bicycle investments as part of their list of projects. Nevertheless, MTA has limited the types of bicycle projects it can accept as part of the Pilot Nexus Study to those that provide a link or access to transit, which

the research literature conclusively documents as having a qualitative relationship to reduced congestion.

Figure 2: Transportation Project Categories and Nexus Analysis Methods

Project Category	Nexus Analysis Method
Roadway Capacity Improvement	MTA Travel Demand Model
Intersection Improvement	Congestion Mitigation Fee Analysis Tool
System Operations (e.g. signal synchronization)	Congestion Mitigation Fee Analysis Tool
Railroad Grade Separations	Congestion Mitigation Fee Analysis Tool
Highway On/Off-Ramps	Congestion Mitigation Fee Analysis Tool
Bicycle/Pedestrian Improvements	Research Literature
Transit Improvements	Research Literature
Park-and-Ride Lots	Research Literature
Other Projects	Research Literature

The nexus analysis for the Westside Cities sub-region was conducted at the sub-regional level. Sub-regional level analysis captures longer, intercity trips, which are the focus of the CMP. Sub-regions are also small enough to measure significant benefits for a relatively modest investment. This sub-regional nexus analysis serves as an umbrella for each jurisdiction, which would adopt its own congestion mitigation fee program to fund the specific transportation projects that it selects.

WESTSIDE CITIES PILOT NEXUS STUDY

Study Area

The study area is defined by the boundaries of the Cities of Beverly Hills, Culver City, Santa Monica, and West Hollywood plus adjacent unincorporated areas of Los Angeles County. The City of Los Angeles is not included in this Study Area at this time because a Pilot Nexus Study is being conducted separately.

Projected Growth

Growth within the Study Area is projected to increase by 16,081 in population and employment is projected to increase by 12,020 from 2010 to 2030. This growth is expected to impact the regional transportation system that is already operating near or at capacity. This growth would essentially cause what is currently a slow moving roadway network to deteriorate further and result in more congestion.

Transportation Projects Submitted

A total of 87 transportation projects and programs were identified as part of this Pilot Nexus Study. A map identifying the submitted projects is shown in Attachment B. Jurisdictions used a web-based software planning tool developed by Cambridge Systematics, Inc. to create a database of projects located within their jurisdiction. For each

transportation project, jurisdictions provided a cost estimate, funding sources, project description, and a geo-coded location (See Attachment C).

Figure 3 below summarizes the number of projects submitted by jurisdictions by project category along with information on total cost, other funding reasonably anticipated during the 20-year planning horizon, and the remaining unfunded amount that could be funded through the Congestion Mitigation Fee Program.

Figure 3 divides the various types of transportation projects into two groups. Figure 3 presents the following information:

Figure 3: Westside Cities Transportation Project Category Summary

Project Type	Number of Projects	Total Cost Share	Total Project Cost	Other Funding	Fee Revenue Funds
Capacity	8	8%	\$ 29,715,000	\$ 20,848,000	\$ 8,867,000
Intersection Improvement	11	1%	\$ 2,970,000	\$ -	\$ 2,970,000
System Operations	2	0%	\$ 1,410,000	\$ 1,098,000	\$ 312,000
Grade Separation	-	0%	\$ -	\$ -	\$ -
Subtotal	21	10%	\$ 34,095,000	\$ 21,946,000	\$ 12,149,000
Bike-Ped	57	87%	\$ 305,655,000	\$ 215,957,000	\$ 89,698,000
Transit Expansion	6	3%	\$ 11,014,000	\$ 8,531,000	\$ 2,483,000
Park-and-Ride	3	0%	\$ 1,330,000	\$ 150,000	\$ 1,180,000
Subtotal	66	90%	\$317,999,000	\$224,638,000	\$ 93,361,000
Total	87	100%	\$ 352,094,000	\$ 246,584,000	\$ 105,510,000
Share			100%	70%	30%

- The four transportation categories shown in the upper half of Figure 3 (Roadway Capacity, Intersection Improvements, System Operations, and Grade Separations) are projects that can be evaluated using quantitative methods such as the MTA Travel Demand Model and the Congestion Mitigation Fee Analysis Tool. These projects account for the reduction in VHD derived from the nexus analysis.
- The three transportation categories shown in the lower half of Figure 3 cannot be modeled, thus, their contribution is not included in the VHD reduction estimate. Nevertheless, peer reviewed research affirms their qualitative effectiveness in lowering congestion and thus they are included in the Congestion Mitigation Fee Pilot Study’s total unfunded cost and the fee amounts needed to fund it.

As mentioned earlier, the MTA Board directed staff to develop a model that would quantify the travel related benefits associated with bicycle travel. Thus, the consultant team is developing approaches to estimate the impacts from this project category for inclusion in future nexus analyses.

- The third column of Figure 3 shows the share of the total cost for each of the transportation project categories. Some key information includes the amount of other funding leveraged by the Congestion Mitigation Fee revenue. Overall, about 69

percent of the total project cost is funded via other sources. See Attachment C for a detailed project list by jurisdiction.

Technical Nexus Analysis Results: Vehicle-Hours-of-Delay/Congestion Reduction Benefit

The nexus analysis conducted for this Pilot Nexus Study supports the finding that the transportation projects identified by jurisdictions and funded by the Congestion Mitigation Fee Program would mitigate 7% of the total impact of new development on the arterial network. This result demonstrates that the costs of mitigation will not exceed the proportion attributable to new development, and satisfies the nexus requirements set forth in the Mitigation Fee Act. This finding also meets the measurable improvement in congestion requirement as stipulated by the CMP Countywide Deficiency Plan.

Figure 4 below presents the results of the nexus analysis of the 21 projects that could be modeled. Reading from left to right, this table presents the following results:

Figure 4: Westside Cities Annual Vehicle Hours of Delay (VHD)

1	2	3	4	5	VHD Reduction Benefit	
2010 (Existing)	2030 (No Build)	2030 (With Projects)	2010 – 2030 (No Build)	2010 – 2030 (With Projects)	6 Amount	7 Percent
<i>a</i>	<i>b</i>	<i>c</i>	$d = b - a$	$e = c - a$	$f = d - e$	$g = f / d$
2,360,000	6,650,000	6,350,000	4,290,000	3,981,000	309,000	7%

Note: The analysis excludes freeway impacts because much of the freeway traffic is inter-regional and the projects submitted by jurisdictions are focused on the regional arterial system.

- The nexus analysis starts with the current (2010) estimate of 2.36 million VHD on the arterial network (shown in the first column of Figure 4).
- Next, the analysis forecasts 6.65 million VHD in 2030 (second column) or a net increase of 4.29 million VHD (fourth column) caused by the impacts of new trips generated and attracted by new development over the next 20 years. Under the No-Build scenario, congestion is expected to have a 181% increase in vehicle-hours-of-delay (VHD) from 2010 to 2030 because of growth impacting the current transportation system that is at or near capacity. This result for the No-Build scenario assumes that transportation improvements included in the 2008 RTP and the current MTA Long Range Transportation Plan (LRTP) are constructed.
- The third column shows what would happen if the 21 transportation projects are constructed holding everything else constant. VHD on the sub-regional arterial network in 2030 would be 6.35 million, which would be a 309,000 VHD reduction (sixth column), or about 7% less congestion (seventh column) than without these projects.
- This analysis deliberately removed the impacts of future through trips (trips that begin and end outside of the sub-region) because new development within the sub-region cannot be required to pay for the impacts from trips it does not generate or attract.

As mentioned earlier in the report, the MTA Board directed staff to develop a model that would quantify the travel related benefits associated with bicycle travel. Thus, the consultant team is developing approaches to estimate the impacts from this project category for inclusion in future nexus analyses.

Establishing Minimum and Maximum Fee-Per-Trip Amounts

The congestion mitigation fee-per-trip amount for each jurisdiction is determined by calculating its unique fee-per-trip (See Attachment A). The fee-per-trip amount is the total unfunded cost of all transportation projects selected by each jurisdiction (both those with benefits that can be quantitatively measured and those that are only qualitatively measured) divided by the number of net trips generated by new development within that jurisdiction.

Establishing a minimum fee-per-trip for the Congestion Mitigation Fee Program has been an important policy issue for jurisdictions and stakeholders since MTA convened the countywide Policy Advisory Committee in 2006. A minimum fee-per-trip would facilitate compliance with the CMP by ensuring a minimum level of congestion reduction effort. Furthermore, all jurisdictions would benefit from a level playing field, where a minimum fee-per-trip amount to reduce the advantage that one jurisdiction may have over another in attracting new development.

The minimum fee-per-trip amounts for each sub-region were determined through the pilot nexus study process where each city developed a transportation project list that balances its need to mitigate future congestion with a maximum fee-per-trip amount. As a result, the pilot nexus study process provided a fee-per-trip amount for each jurisdiction (See Attachment A) whereby four of the five jurisdictions were above \$400 fee-per-trip. Based on this threshold, one possible option is to set a \$400 fee-per-trip amount as the minimum that the jurisdictions could adopt as their sub-regional minimum fee-per-trip amount. The potential use of this approach is also being evaluated in the other sub-regional pilot nexus studies.

The Westside Cities Pilot Nexus Study analysis resulted in two types of fee-per-trip amounts calculated for the two jurisdictions:

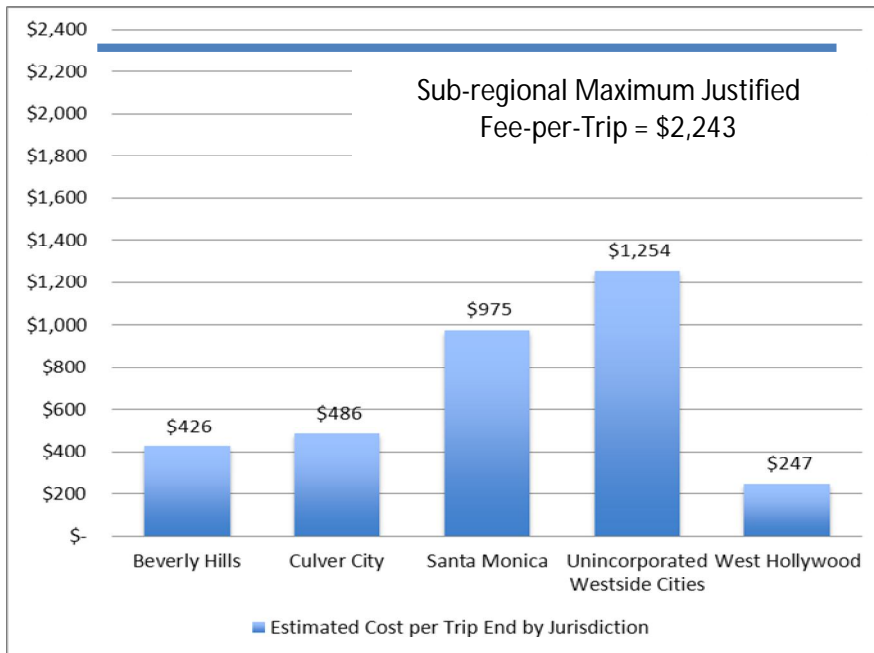
- **Jurisdiction fee-per-trip:** A separate fee-per-trip for each jurisdiction was calculated based on the jurisdiction's unfunded project costs divided by the number of trips from new development within the jurisdiction (See Attachment A). This fee-per-trip is the amount needed to fund the unfunded portion of the transportation projects costs identified by each jurisdiction. Unfunded project costs used in this calculation represents a conservative method of assessing new development for its share of mitigating its impacts. Other funding sources identified by jurisdictions to fund their proposed projects come from such funds as Proposition C and Measure R local return, state gas tax subventions, municipal general funds, Call-for-Projects, and Surface Transportation Program local funds.
- **Sub-regional maximum justified fee-per-trip:** A single \$2,243 fee-per-trip for the sub-region was calculated based on the \$310 million total cost of all transportation projects identified by jurisdictions divided by approximately 138,219 new trip-ends generated and attracted by new development within the sub-region.

Since this nexus analysis was conducted at the sub-regional level, the \$2,243 fee-per-trip amount represents the maximum justified congestion mitigation fee amount the nexus analysis can defend quantitatively. Total project costs, rather than unfunded project costs, were used in this calculation because congestion reduction benefits are associated with the entire project regardless of the level of other anticipated funding.

The congestion mitigation fee-per-trip results from the nexus analysis by jurisdiction are summarized in Figure 5 below. See Attachment A for details regarding total project costs and funding by jurisdiction.

The result of the sub-regional pilot nexus study shows the individual jurisdiction fee-per-trip range between \$247 and \$1,254, which is less than the sub-regional maximum justified fee-per-trip of \$2,243. This fee-per-trip range should provide jurisdictions with the flexibility to manage the congestion impacts of growth, but also establish a floor, or minimum fee-per-trip amount. This minimum fee-per-trip amount is intended to create a level playing field by ensuring that each jurisdiction contributes to mitigating its growth impact on the regional transportation network.

Figure 5: Westside Cities Fee-Per-Trip Range by Jurisdiction



Should the Congestion Mitigation Fee Program be adopted, then each jurisdiction within the sub-region would adopt its own congestion mitigation fee ordinance. Their congestion mitigation fee would need to be set between the minimum fee-per-trip set by the MTA Board and its own individual jurisdiction fee-per-trip established by the nexus analysis (See Attachment A). The sub-regional maximum justified fee-per-trip would be the amount that jurisdictions would be limited to adopt as a result of the nexus analysis.

Those jurisdictions that are below the \$400 fee-per-trip in this pilot nexus study would need to increase the unfunded cost of their total transportation project list. They can do this by a combination of the following:

- Add new projects to their list of transportation projects;
- Reduce the amount of other anticipated funding and, thus, increase the amount of funding from the fee revenue needed to build the projects; and/or
- Fund projects in an adjacent jurisdiction that will help mitigate the impacts of new development traveling into or out of their jurisdiction.

Based on the nexus results of the Pilot Nexus Study for the Westside Cities sub-region, a recommended sub-regional minimum fee-per-trip amount for these jurisdictions could be a \$400 fee-per-trip amount (see Figure 5).

NEXT STEPS

Below are the next steps to complete the Congestion Mitigation Fee work plan:

- Present pilot nexus study and economic analysis findings to jurisdictions, sub-regional agencies, and building industry stakeholders.
- Seek MTA Board direction in early 2013 to:
 - Adopt the Congestion Mitigation Fee Program as the new CMP Countywide Deficiency Plan;
 - Establish minimum fee-per-trip amount for CMP compliance
- Work one-on-one with jurisdictions, sub-regional agencies, and building industry representatives to implement a Congestion Mitigation Fee Program over a 24 month period.

If the MTA Board decides to adopt the Congestion Mitigation Fee Program as the Countywide Deficiency Plan for the CMP, MTA staff will work with each jurisdiction to implement the Congestion Mitigation Fee Program. In carrying out this work effort, it is possible that jurisdictions would modify their list of transportation projects. If so, then the congestion reduction and fee-per-trip from such a change may be different than the results identified in this Pilot Nexus Study and would be revised accordingly in a report at that time.

CONTACT INFORMATION

If you have any questions or comments, please contact:

Robert Cáliz, MTA Project Manager, at: calixr@metro.net or (213) 922-5644.

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Attachment A: Westside Cities Pilot Nexus Study Fee-per-Trip by Jurisdiction

Jurisdiction	Net New Trip Ends	Total Project Costs	Other Funding	Mitigation Fee Revenue Funds	Fee-Per-Trip
	<i>a</i>	<i>B</i>	<i>c</i>	<i>d</i>	<i>e = d / a</i>
Beverly Hills	14,695	\$6,260,000	-	\$6,260,000	\$426
Culver City	10,667	\$12,604,000	\$7,419,000	\$5,185,000	\$486
Santa Monica	59,098	\$260,000,000	\$202,400,000	\$57,600,000	\$975
Unincorporated Westside Cities	12,000	\$15,043,000	-	\$15,043,000	\$1,254
West Hollywood	41,758	\$16,077,000	\$5,757,000	\$10,320,000	\$247
Total	138,219	\$309,984,000	\$215,576,000	\$94,408,000	
		100%	69%	31%	

Sub-regional Maximum Justified Fee-per-Trip (= b / a)	\$2,243
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Attachment C: Westside Cities List of Transportation Projects by Jurisdiction (Project Deemed Ineligible Not Listed)

Jurisdiction	Project Name	Description	Location	Project Type	Total Cost	Other Funding	Unfunded	Note
Beverly Hills	City Bicycle Route Program	To encourage bicycle and transit use, construct 13 miles of bicycle routes/lanes upon refinement of the City's bicycle plan (use x cost per mile based on comparable city)	Citywide - Beverly Hills	Bike-Ped	\$ 10	\$ -	\$ 10	(1)
Beverly Hills	Olympic/Beverly/Beverly Intersections	Intersection Improvement		Intersection Improvement	\$ 1,000,000	\$ -	\$ 1,000,000	(3)
Beverly Hills	Park Wayfinding System	Project will reduce circling of vehicles to find a parking space.	Citywide Beverly Hills	Park-and-Ride	\$ 1,000,000	\$ -	\$ 1,000,000	
Beverly Hills	Rideshare Program	Project used to encourage ridesharing.	Citywide Beverly Hills	Park-and-Ride	\$ 30,000	\$ -	\$ 30,000	(4)
Beverly Hills	Santa Monica Boulevard Reconstruction Project	To encourage bicycle and transit use, include improvements for bicycles and transit stop amenities.	CityWide	Bike-Ped	\$ 2,000,000	\$ -	\$ 2,000,000	
Beverly Hills	Sunset Boulevard	Intersection Improvement		Intersection Improvement	\$ 730,000	\$ -	\$ 730,000	(3)
Beverly Hills	Transit Stop Improvement	Improve Access to transit	Citywide Beverly Hills	Transit Expansion	\$ 10	\$ -	\$ 10	(1)
Beverly Hills	Wilshire & La Cienega Station Mobility Hub		Wilshire & La Cienega Station	Bike-Ped	\$ 500,000	\$ -	\$ 500,000	(2)
Beverly Hills	Wilshire Blvd/ Palm	Construct Controlled	Wilshire Blvd/	Bike-Ped	\$ 500,000	\$ -	\$ 500,000	(2)

Hills	Drive	mid-block crossings.	Palm Drive					
Beverly Hills	Wilshire Rodeo Station Mobility Hub		Wilshire Rodeo Station	Bike-Ped	\$ 500,000	\$ -	\$ 500,000	(2)
Culver City	Articulated Rapid Bus Maintenance Facility Enhancements	Plan, design, and construct required maintenance facility enhancements to accommodate the maintenance and parking of CNG articulated buses on the Rapid 6 (Sepulveda South) bus line.	Culver City Bus Facility (4343 Duquesne Ave., Culver City, CA 90232)	Transit Expansion	\$ 463,763	\$ 371,010	\$ 92,753	
Culver City	Ballona Creek Bike Path Extension	The Ballona Creek Bike Path is one of the most regionally important bike facilities. This project would study and create plans to extend the bike path further east along Ballona Creek.	Ballona Creek between Syd Kronenthal Park and Fairfax	Bike-Ped	\$ 400,000	\$ -	\$ 400,000	(2)
Culver City	Culver Boulevard Bike Facility	Create a bicycle facility between Elenda and Overland (the Culver Boulevard bike path currently ends at Elenda).	Culver Boulevard Between Elenda and Overland	Bike-Ped	\$ 500,000	\$ -	\$ 500,000	(2)
Culver City	Culver Boulevard Realignment	The project widens Culver Blvd and narrows the frontage road. This will add capacity to Culver Bl and allow for the construction of wider through lanes, left turn lanes, traffic signal and pedestrian crosswalk	Culver Boulevard between Sepulveda and Elenda	Capacity	\$ 6,965,306	\$ 5,047,776	\$ 1,917,530	

Culver City	Higuera Ramp	Construct a bike ramp from the Ballona Creek bike path to the Higuera Bridge.	Higuera and Ballona Creek	Bike-Ped	\$ 500,000	\$	-	\$	500,000	(2)
Culver City	Left-Turn Phase at Duquesne/Hughes and Washington Blvd.	Add a left-turn phase at Duquesne/Hughes and Washington Blvd.	Duquesne/Hughes and Washington Blvd.	Intersection Improvement	\$ 150,000	\$	-	\$	150,000	
Culver City	Left-Turn Phase at Sepulveda and Washington Blvd	Add a left turn phase at Sepulveda and Washington Blvd	Sepulveda and Washington Blvd	Intersection Improvement	\$ 200,000	\$	-	\$	200,000	
Culver City	Left-Turn Phase at Sepulveda and Washington Place	Add a left-turn phase at Sepulveda and Washington Place	Sepulveda and Washington Place	Intersection Improvement	\$ 200,000	\$	-	\$	200,000	
Culver City	Left-Turn Phase at Washington Blvd. and Centinela	Add a left-turn phase at Washington Blvd. and Centinela	Washington Blvd. and Centinela	Intersection Improvement	\$ 250,000	\$	-	\$	250,000	
Culver City	Overland Bike Facilities	This project will add bike facilities on Overland between Venice and Playa.	Overland Ave between Venice and Playa	Bike-Ped	\$ 115,000	\$	-	\$	115,000	(2)
Culver City	Overland/Washington Blvd Intersection Improvements	Add dual left turns for eastbound and westbound traffic on Washington and add a right turn only lane for westbound to northbound traffic.	Intersection of Overland and Washington	Intersection Improvement	\$ 360,000	\$	-	\$	360,000	

Culver City	Washington Boulevard Median Re-Configuration	The proposed project is the redesign and rehabilitation of Washington Bl. between National Bl. and Fairfax Ave. in order to improve the roadway pavement, provide left-turn pockets, and increase roadway width in order to accommodate bike facilities.	Washington Boulevard between National and Fairfax	Capacity	\$ 2,500,000	\$ 2,000,000	\$ 500,000	
RDTM	Admiralty Way - Fiji Way to Via Marina	Improve intersections along Admiralty from Fiji Wy. to Via Marina to reduce traffic congestion along Lincoln Bl. and at its intersections from Mindanao Wy. to Washington Bl. County to provide details.	Intersections along Admiralty Wy. from Fiji Wy. to Via Marina	Capacity	\$ 10,300,000	\$ 8,240,000	\$ 2,060,000	(5)
RDTM	Enhance Transit Service Feeding into Exposition Light Rail	Fund Culver City Bus feeder service to the Exposition Light Rail Station to enhance sub-regional connectivity to/from the Expo Station.	Area surrounding the Exposition Light Rail Station near Venice/Roberson	Transit Expansion	\$ 6,000,000	\$ 4,800,000	\$ 1,200,000	(5)
RDTM	Improve Bus Stops in the Area (Culver City & City & County LA)	The improvements include some or all of the following: 1) Replace/add/lengthen bus pads, 2) Improve sidewalk conditions or extend the sidewalk, 3) Next bus arrival information system, 4) Enhanced lighting, and	Various	Bike-Ped	\$ 10,000,000	\$ 8,000,000	\$ 2,000,000	(5)

		5) Bus stop furniture.										
RDTM	Improve Traffic Flow Along Centinela Avenue	Improve the Centinela Ave. corridor from Sepulveda Bl. to La Cienega Bl. (e.g. add a travel lane during peak periods) to relieve traffic congestion along Slauson Ave.	Centinela Avenue from Sepulveda Blvd. to La Cienega Blvd.	Capacity	\$ 500,000	\$ 400,000	\$ 100,000	(5)				
RDTM	Improve Traffic Flow Along Culver Bl	Improve traffic flow along the Culver Bl. corridor between Centinela Ave. and the I-405 lanes by providing turn lanes at intersections (e.g. at Inglewood Ave.). City of LA to provide details.	Culver Bl. corridor between Centinela Ave. and the I-405	Capacity	\$ 2,150,000	\$ 1,720,000	\$ 430,000	(5)				
RDTM	La Cienega/Stocker Grade Separation	Conduct a study of a grade separation of La Cienega Bl. intersection with Stocker St. This is an RDTM project, outside of Culver City. County to provide details.	La Cienega Bl. and Stocker St.	Capacity	\$ 1,000,000	-	\$ 1,000,000	(5), (11)				
RDTM	Lincoln Blvd. Widening	Conduct a study re: widening Lincoln Bl., between Jefferson Bl. and Fiji Way (widening would increase capacity, allow for bike lanes, and potentially future light rail).	Lincoln Bl., between Jefferson Bl. and Fiji Way.	Capacity	\$ 2,000,000	-	\$ 2,000,000	(5), (11)				

RDTM	Regional Traffic Model	Create a regional traffic model for the RDTM Working Group area.	Covering RDTM Working Group area (Culver City and part of City and Co. of LA)	Transit Expansion	\$ 100,000	\$ -	\$ 100,000	(5), (6)
RDTM	Sepulveda Boulevard Efficiency/Capacity Improvement Project	Identify and implement ways of improving traffic flow, carrying capacity, and efficiency in the utilization of the Sepulveda Corridor from Wilshire to LAX.	Sepulveda Boulevard from Wilshire to LAX	Capacity	\$ 4,300,000	\$ 3,440,000	\$ 860,000	(5)
RDTM	Sepulveda Bus Line Expansion Project	Purchase of 6 buses to enhance the capacity of Line 6/Rapid 6 on Sepulveda from UCLA to LAX and Green Line Aviation Station.	Rapid 6 Bus Route (from UCLA to LAX and Green Line Station)	Transit Expansion	\$ 4,200,000	\$ 3,360,000	\$ 840,000	(5)
RDTM	Upgrade Traffic Signal Synchronization in Culver City	Upgrade traffic signal synchronization in Culver City equivalent to the City of Los Angeles' ATCS. This project covers all traffic signals in the City, so project detail information represents a rough average for the City.	Various locations throughout Culver City	System Operations	\$ 1,310,000	\$ 1,048,000	\$ 262,000	(5)

RDTM	Westside Transit Center	Conduct a feasibility study and prepare environmental documents re: the creation of a multi-modal transit center to replace the existing Fox Hills Mall Transit Center (located on private property). This transit center will serve as a major transit hub on the Westside for riders transferring bus lines.	Specific site not yet acquired, but will likely be near the current site, which is at the Westfield Mall property (6000 Sepulveda Blvd, Culver City)	Transit Expansion	\$ 250,000	\$ -	\$ 250,000	(5), (11)
Santa Monica	Bicycle Wayfinding	Create a wayfinding system so that bicyclists can navigate bikeways to popular destinations and supporting bicycle services, as well as regional destinations and regional bikeway connections. The entire City is bicycling distance from transit.	Citywide	Bike-Ped	\$ 600,000	\$ 200,000	\$ 400,000	(7)
Santa Monica	Bike Centers	Provides Bike Centers at transit stations and activity centers. These centers help multimodal trips and active transportation to transit stations. All of the City is biking distance from these centers collocated with transit stations.	Transit Stations and Activity Centers	Bike-Ped	\$ 9,000,000	\$ -	\$ 9,000,000	(7)

Santa Monica	Bikeway Improvements	Provides for sign and marking improvements pursuant to Bike Action Plan recommendations on City Streets	Citywide Bicycle Network	Bike-Ped	\$ 1,000,000	\$ -	\$ 1,000,000	(7)
Santa Monica	Exposition Light Rail Station Area Improvements	Create pedestrian, bicycle and bus linkages to downtown Expo Station street improvements and linkages to accommodate bike, ped and transit access to downtown Expo Line station	Downtown Station Area	Bike-Ped	\$ 7,000,000	\$ -	\$ 7,000,000	
Santa Monica	Land Use and Circulation Element CIP	Multi-modal CIP designed to rebalance transportation demand and reduce peak hour auto travel to and from Santa Monica by at least 1% by 2030.	Citywide	Bike-Ped	\$ 231,900,000	\$ 200,200,000	\$ 31,700,000	(8)
Santa Monica	Michigan Avenue Bicycle Facility	Connects beach, civic center, high school, Santa Monica College, Expo Line Stations and Bergamot Center with a high-quality bikewayparallel to I-10 and provides an I-10 crossing at 20th Street	Michigan Avenue	Bike-Ped	\$ 7,000,000	\$ -	\$ 7,000,000	(7)
Santa Monica	Public Bikeshare System	Create public bikeshare system so that bicycles are available to everyone and can be used for the first and last mile of any transit trip, and for any	Citywide--25 Stations	Bike-Ped	\$ 2,500,000	\$ 1,400,000	\$ 1,100,000	(7)

Santa Monica	Wayfinding	local trip and to support park once	Citywide	Bike-Ped	\$ 1,000,000	\$ 600,000	\$ 400,000	(9)
		Create a comprehensive multimodal wayfinding system that includes realtime trip planning, parking reservations and dynamic signage						
Unincorporated	60th St/62nd St - Fairfax Ave to Overhill Dr	Bike and pedestrian improvement projects paralleling an existing roadway facility.	60th St/62nd St	Bike-Ped	\$ 11,000	\$ -	\$ 11,000	(2)
Unincorporated	Angeles Vista Rd - Slauson Ave to Vernon Ave	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Angeles Vista Rd	Bike-Ped	\$ 281,000	\$ -	\$ 281,000	(2)
Unincorporated	Bali Way - Marvin Braude	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Bali Way	Bike-Ped	\$ 4,000	\$ -	\$ 4,000	(2)
Unincorporated	Centinela Ave - Green Valley Cir to La Tijera Blvd	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Centinela Ave	Bike-Ped	\$ 36,000	\$ -	\$ 36,000	(2)
Unincorporated	Fairfax Ave - 57th St to 62nd St	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Fairfax Ave	Bike-Ped	\$ 10,000	\$ -	\$ 10,000	(2)
Unincorporated	Fairfax Ave - Stocker St to 57th St	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Fairfax Ave	Bike-Ped	\$ 240,000	\$ -	\$ 240,000	(2)

Unincorporated	Fiji Way - 0.7 Miles West of Admiralty Way to Admiralty Way	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Fiji Way	Bike-Ped	\$ 28,000	\$ -	\$ 28,000	(2)
Unincorporated	Fiji Way - Admiralty Way to Ballona Creek	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Fiji Way	Bike-Ped	\$ 200,000	\$ -	\$ 200,000	(2)
Unincorporated	Fiji Way - Admiralty Way to Lincoln Blvd	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Fiji Way	Bike-Ped	\$ 2,000	\$ -	\$ 2,000	(2)
Unincorporated	Marina Del Rey - Class I - Marina Limit-N to Marina Limit-S	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Marina Del Rey - Class I	Bike-Ped	\$ 9,900,000	\$ -	\$ 9,900,000	(2)
Unincorporated	Mindano Way - Marvin Braude Bike Path	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Mindano Way	Bike-Ped	\$ 8,000	\$ -	\$ 8,000	(2)
Unincorporated	Overhill Dr - Slauson Ave to 60th St	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Overhill Dr	Bike-Ped	\$ 3,000	\$ -	\$ 3,000	(2)
Unincorporated	Overhill Dr - Stocker St to Slauson Ave	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Overhill Dr	Bike-Ped	\$ 116,000	\$ -	\$ 116,000	(2)
Unincorporated	Palawan Way - Washington Blvd to .1 miles south of Admiralty	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Palawan Way	Bike-Ped	\$ 8,000	\$ -	\$ 8,000	(2)

Unincorporated	Sepulveda Channel - Palms Blvd to Venice Blvd	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Sepulveda Channel	Bike-Ped	\$ 300,000	\$ -	\$ 300,000	(2)
Unincorporated	Sepulveda Channel - Washington Blvd to Ballona Creek	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Sepulveda Channel	Bike-Ped	\$ 400,000	\$ -	\$ 400,000	(2)
Unincorporated	Slauson Ave - Buckingham Pkwy to Angeles Vista Rd	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Slauson Ave	Bike-Ped	\$ 40,000	\$ -	\$ 40,000	(2)
Unincorporated	Stocker St - Fairfax Ave to Santa Rosalia Dr	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Stocker St	Bike-Ped	\$ 3,400,000	\$ -	\$ 3,400,000	(2)
Unincorporated	Valley Ridge/54th - Stocker St to Hillcrest Dr	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Valley Ridge	Bike-Ped	\$ 21,000	\$ -	\$ 21,000	(2)
Unincorporated	Via Dolce - Washington Blvd to Via Marina	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Via Dolce	Bike-Ped	\$ 12,000	\$ -	\$ 12,000	(2)
Unincorporated	Via Marina - Marquesas Way to Channel Walk	Bike and pedestrian improvement projects paralleling an existing roadway facility.	Via Marina	Bike-Ped	\$ 23,000	\$ -	\$ 23,000	(2)
West Hollywood	bike and ped planning and programming	conduct bike and ped surveys, develop ratings and update master plans	citywide	Bike-Ped	\$ 250,000	\$ 125,000	\$ 125,000	(6)
West Hollywood	bike facilities	install 5 miles of class II bike lanes and 10	citywide	Bike-Ped	\$ 320,000	\$ 160,000	\$ 160,000	(2)

West Hollywood	bike lockers	miles of class III bike routes	citywide	Bike-Ped	\$ 25,000	\$ 12,500	\$ 12,500	(2)
West Hollywood	bike racks	install up to 25 lockers at key public locations	citywide	Bike-Ped	\$ 96,000	\$ 48,000	\$ 48,000	(2)
West Hollywood	bike share	install 400 bike racks throughout the city	citywide	Bike-Ped	\$ 150,000	\$ 75,000	\$ 75,000	(2)
West Hollywood	bus pads and benches	initial costs and ongoing costs for program implementation for 50 bicycles	citywide	Park-and-Ride	\$ 300,000	\$ 150,000	\$ 150,000	(10)
West Hollywood	Bus Shelters	improve and replace up to 50 bus benches citywide	Citywide	Bike-Ped	\$ 375,000	\$ 187,500	\$ 187,500	(10)
West Hollywood	CityLine Expansion	improve or replace up to 25 bus shelters	citywide	Bike-Ped	\$ 4,800,000	\$ 3,360,000	\$ 1,440,000	
West Hollywood	dual curb ramps	expand local transit service to include up to 4 new buses	at 12 locations citywide	Bike-Ped	\$ 192,000	\$ 96,000	\$ 96,000	(2)
West Hollywood	Fairfax & Fountain	provide dual curb ramps at up to 12 intersections		Intersection Improvement	\$ 30,000	\$ -	\$ 30,000	
West Hollywood	fairfax & Santa Monica	add a SB exclusive right turn lane and add a protective/permissive phase		Intersectn Improvement	\$ 10,000	\$ -	\$ 10,000	
West Hollywood	Gardner & Santa Monica	Provide SB exclusive right-turn lane		Intersection Improvement	\$ 15,000	\$ -	\$ 15,000	

West Hollywood	parking shuttles	implement parking shuttles along Santa Monica Boulevard and Sunset Boulevard	Santa Monica BI and Sunset BI	Bike-Ped	\$ 1,460,000	\$ 730,000	\$ 730,000	(6)
West Hollywood	parking utilization improvements	TDM - develop an on-line system for real-time parking information including GIS database and mapping. Improve parking and wayfinding and guidance throughout commercial areas	citywide	Bike-Ped	\$ 250,000	\$ 125,000	\$ 125,000	(6)
West Hollywood	Ped Signal Head	install LED ped signal heads at 24 signalized intersections	citywide	Bike-Ped	\$ 192,000	\$ 96,000	\$ 96,000	(2)
West Hollywood	Real time signage at bus stops	provide real time information on bus schedule at bus stops citywide	citywide	Bike-Ped	\$ 518,750	\$ 259,375	\$ 259,375	
West Hollywood	rideshare toolit	develop an online TDM toolkit with information for transit users, cyclists and peds. Includes rolling carts and incentive programs for employers, schools and residents.	citywide	Bike-Ped	\$ 263,054	\$ 130,000	\$ 133,054	
West Hollywood	San Vicente & Beverly	provide protected/permissive phasing for NB and SB movements		Intersectn Improve	\$ 25,000	-	\$ 25,000	
West Hollywood	sidewalk completion program	provide, repair and replace up to 12,000 sq-ft of sidewalk in	citywide	Bike-Ped	\$ 180,000	\$ 90,000	\$ 90,000	(2)

		heavily-travelled locations											
West Hollywood	Signal timing upgrade - citywide	improve timing at up to 50 traffic signals	citywide	System Operations	\$ 100,000	\$ 50,000	\$ 50,000	\$ 50,000					
West Hollywood	subsidize transit fares	program designed to cover up to 1000 employees per year at \$450 per year per employ	citywide	Bike-Ped	\$ 4,400,000	\$ -	\$ 4,400,000	\$ 4,400,000					
West Hollywood	TDM Program Manager	one full time position provides overall guidance and outreach of citywide trip reduction efforts.	Citywide	Bike-Ped	\$ 2,000,000	\$ -	\$ 2,000,000	\$ 2,000,000					
West Hollywood	Transit signal timing enhancement	include transit signal priority on major boulevards	citywide	Bike-Ped	\$ 75,000	\$ 37,500	\$ 37,500	\$ 37,500					
West Hollywood	wayfinding program for peds and bikes	directional signage with destination, direction and distance for key corridors	citywide	Bike-Ped	\$ 50,500	\$ 25,250	\$ 25,250	\$ 25,250					(3)
TOTAL					\$ 352,094,393	\$ 246,583,911	\$ 105,510,482						

(1) Provide cost estimate.

(2) Describe link to transit.

(3) Provide location.

(4) The use of CMF funds is limited to capital expenditures only. Clarify project description or exclude project.

(5) Multi-jurisdictional project identified by the Regional Development and Traffic Mitigation (RDTM) Working Group (City of Culver City, City of Los Angeles, and County of Los Angeles). The RDTM Working Group is no longer active. Accordingly, projects identified by the RDTM Working Group may be

- dropped or moved to individual city project lists prior to the implementation of the CMIF program.
- Benefits existing and new development. Keep unfunded cost at or below 63% (vehicles hours of delay caused by 2010-2030 development as a percent of total 2030 vehicle hours of delay).
- (6) The entire city is bicycling distance to transit so all bike improvement projects improve transit access (except projects focused on recreation only).
- (7) Provide more detailed description or reference an existing document. Clarify that this project does not duplicate of other Santa Monica bike/ped. projects
- (8) Distinguish from "Bicycle Wayfinding" project.
- (9) Must upgrade or expand and not just replace existing facilities.
- (10) Scope reduced or project eliminated in April 2, 2012 revised RDTM list following completion of the travel demand analysis. Three projects also eliminated (two SR90 connection projects and one left turn land project).
- (11)

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