



## CITY OF BEVERLY HILLS STAFF REPORT

**Meeting Date:** April 1, 2014

**To:** Honorable Mayor & City Council

**From:** Susan Healy Keene, AICP, Director of Community Development  
David Lightner, Director of Capital Assets

**Subject:** North Santa Monica Boulevard Reconstruction Project

**Attachments:**

1. Cost Estimates
2. Response to Questions from March 4, 2014 meeting
3. Letter to FHWA
4. Potential Conceptual Alternatives

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### INTRODUCTION

At the March 4, 2014 formal meeting, the City Council reviewed the Santa Monica Boulevard Blue Ribbon Committee recommendations for "conceptual design" for the Santa Monica Boulevard Reconstruction project that included widening the existing curb-to-curb width to 66 feet, striping the roadway for bicycle lanes and adding landscaped medians. Staff also informed the City Council that the Psomas team and City staff had concluded that the existing Capital Improvement Program budget of \$17.2 million is inadequate to reconstruct the entire boulevard and current cost estimates range between \$31 and \$34 million. Staff proposed returning to the April 1, 2014 Study Session with funding options, and/or delivery strategies. Attachment 1 provides updated cost estimates and a comparison to staff's original estimate.

The City Council received public comment regarding the Blue Ribbon Committee's recommendations at the March 4, 2014 meeting. In addition to several questions regarding revised project costs and revenue alternatives which is the topic of this report, the City Council requested additional information regarding project impacts and project design. As requested by the City Council, the Police and Fire Chief will attend the April 1, 2014 meeting to address public safety impacts related to bicycle lanes and landscaped medians. Attachment 2 responds to questions relating to project impacts and project design.

## **DISCUSSION**

Currently, the planning process is in "Phase 1 - pre-design" that includes a public outreach process to inform the City Council decision on a 'conceptual design' of the boulevard. City Council action on the two major components of conceptual design, the width of the roadway and whether or not to include landscaped medians, is required in order for the Psomas team to proceed with project design and will be a determining factor in recommendations for construction mitigation, scheduling plan, and determining the level of environmental review for the project.

The Scope of Work for phase 1 also includes the development of pre-design level cost estimates. As presented at the March 4, 2014 meeting, the current cost estimates for reconstructing the entire length of North Santa Monica Boulevard (escalated to mid-point of construction) range between \$31 and \$34 million, depending on the design elements selected. With the current Capital Improvement Program budget of \$17.2 million, City Council direction with respect to modifying the budget and/or the scope of the project is also needed to proceed with the project and therefore a primary focus of this report.

### ***Development of Budgeted Cost Estimates***

The initial project budget estimate prepared by City staff in 2006 was \$12.0 million. During the FY2013/14 Capital Improvement Program budget process, staff reviewed construction costs and updated the estimate to \$16.2 million, noting the need for a comprehensive cost analysis early in the design process. As part of the City Council review of the FY 2012/13 year-end budget surplus discussed in December 2013, an additional \$1.0 million was allocated recognizing continuing escalation of construction costs for a total revised budget of \$17.2 million. Staff included in the Psomas Scope of Work the requirement that a cost analysis be provided during the conceptual design phase based on testing and examination of the roadway condition and sub-base beneath the road.

Psomas has completed a comprehensive evaluation of the roadway condition and has developed project budget estimates for two scenarios ranging between \$31 and \$34 million (Attachment 1). Both scenarios assume that four travel lanes will be maintained during construction and construction will be required north of the existing curb for street lighting, drainage, and replacement of the sidewalk between Crescent and Roxbury Drives with or without widening of the Boulevard. Scenario 1, the higher cost option, assumes a completed project with existing curb-to-curb width, with a temporary widening to the north side of the Boulevard to accommodate the two lanes in each direction. Scenario 2 assumes a completed project widened to between 64 feet or 66 feet.

The revised FY 2013/14 construction cost estimate included only major components (street improvements, utility relocation/replacement and street lighting) based on past construction project costs. It was developed without the testing of sub-surface conditions that have revealed significant degradation of the roadway and sub-surface, requiring significant excavation and reconstruction of the entire Boulevard. The estimate did not include or underestimated several necessary components of construction costs, including temporary traffic control, landscaping, and traffic signal modification. General conditions, a significant item in the current estimate, includes contractor overhead, including the supervisory costs, providing temporary construction and staging facilities, bonds and insurance. This item does not have a direct comparison in the original staff estimate as it was included in the individual components.

At this time, the current cost estimate includes a construction contingency of 25%. Contingency is intended to account for unknown items such as underground

obstructions, unsuitable or contaminated soils and unforeseen mitigation measures. This level of contingency is the industry standard for cost estimating during this very preliminary stage of design. As project scope certainty is developed and more information becomes available during the design phase, a revised construction cost estimate will be prepared, and the contingency may be reduced. Also, as the construction plans are refined, staff will look for value engineering opportunities to reduce the cost of construction. One item that will have a considerable impact on construction cost and schedule/duration is the implementation of traffic mitigation and traffic control plan requirements.

Staff anticipates the use of a consultant to provide construction management, specialty inspection and testing during construction. The cost of construction management is based on the estimated duration of construction and is included in the current cost estimate. The longer the project takes to construct, the more expensive the project budget becomes.

### ***Recommended Change in Project Scope***

In order to bring the overall project budget to a manageable magnitude, staff recommends deferring the reconstruction of the section from Wilshire Boulevard to the western City limits (inclusive of the Wilshire/Santa Monica intersection) for three to four years. As part of the Beverly Hilton and the 9900 Wilshire projects, the north curb of Santa Monica Boulevard from Wilshire Boulevard to the western City limits will be reconstructed as part of the private development at the applicant's expense. Further, the Wilshire/Santa Monica Boulevard intersection will be modified to provide two westbound left-turns onto Santa Monica. This will reduce the budget costs for the initial project by \$5.2 million for a total preliminary budget amount of \$29 million. It will also reduce the estimated construction duration by 6 months under both construction scenarios for an estimated project duration of 18 to 24 months. Although deferring this portion ultimately risks an escalation of construction costs, the escalation amount could be offset with the private development project's required street improvements. It would also provide the City additional time to accumulate funding sources (e.g., gas tax, Measure R) to contribute towards the projects. Further, there is potential for roadway damage with construction of the two large projects and deferral of this section avoids the possibility of sunk costs.

### ***Potential Street Closures During Construction to Achieve Cost Savings***

A City Council question from March 4 asked if closing all or a section of the Boulevard during construction would result in cost savings. The cost estimates developed by the Psomas team to date assume that two traffic lanes be maintained in each direction at all times.

Completely closing the Boulevard during construction could expedite the construction but the extent has not been determined. The benefits would be offset by the diversion of 35,000 to 55,000 vehicle trips per day (depending on boulevard segment) to adjacent streets, including Sunset, South Santa Monica, Wilshire and Beverly Boulevards, Doheny Drive and Burton Way, creating significant impacts that likely could not be mitigated. For example, a preliminary analysis shows traffic on South Santa Monica Boulevard to increase between 24% and 71% (variance based on segment of the Boulevard closed). Closures would likely also increase traffic on residential streets and would require a much more significant environmental assessment, likely an Environmental Impact Report (EIR), than alternatives being considered for the reconstruction project with traffic lanes maintained during construction. With the cost of preparing an EIR and the traffic mitigation required for street closures, it is unlikely significant cost savings would result from street closures. Further, street closures would

impact access to the City's business center and likely have an economic impact to the City.

Rather than complete closures, staff agrees that limited street closures and lane closures during non-peak hours should be evaluated going forward with the Psomas team and with the selected contractor.

### **Questions posed by the City Council at the March 4, 2014 meeting**

In addition to providing additional cost information, the City Council asked for additional information and/or actions by staff on several other items. Attachment 2 provides responses to these questions. Additionally, the Federal Highway Administration (FHWA) has agreed to respond to a series of questions regarding project design (Attachment 3 is a letter to FHWA with a series of questions regarding project design) FHWA's response.

### **Next Steps**

Staff has identified the following steps to proceed with the Santa Monica Boulevard Reconstruction project.

- City Council direction to proceed with the project from Doheny to Wilshire Boulevard with a revised project budget reflective of revised cost estimates.
- Direction on how to proceed with consideration of conceptual design(s). Staff proposes that City Council schedule action at a formal meeting to select a conceptual design. If the City Council concurs that action should be scheduled at a formal meeting, staff requests direction on which of the following alternatives should be concentrated on during the follow up formal meeting. Attachment 4 provides diagrams of street width alternatives.
  - Whether or not to include landscaped median islands
  - Maintain existing 60-63' curb-to-curb width
  - Widen the section of the Boulevard between Canon and Walden Drives on the north side of the street to 63 feet, consistent with the width from Doheny Drive to Canon Drive
  - Widen the Boulevard to 64 feet. Psomas developed this option as the minimum width to maintain four lanes in each direction during construction without temporary widening and would carry the cost estimate of Scenario 1.
  - Blue Ribbon Committee's recommendations to widen boulevard to 66 feet.
  - Whether or not to stripe the Boulevard for bicycle lanes (if the roadway is constructed with a 63' or wider).
- Upon City Council approval of a conceptual design
  - Proceed with detailed project design (9-12 months)
  - Develop a traffic mitigation/control plan with Traffic & Parking Commission during design phase.
  - Return to City Council in approximately 4 months with "thirty percent" drawings and results of TPC review for traffic mitigation/control plan

**FISCAL IMPACT**

The revised cost estimate to reconstruct the entire length of North Santa Monica Boulevard within the City of Beverly Hills ranges from \$31 to \$34 million and the current project budget is \$17.2 million. With a revised cost estimate of \$29 million to reconstruct the section between Doheny Drive and Wilshire Boulevard, an additional \$11.8 million would be needed for the 2014-15 Capital Improvement Program budget. Unfortunately, very limited opportunities exist for federal, state or regional funding for this type of project. Grant opportunities rarely are available for street maintenance or reconstruction projects without an expanded use. Grants are typically made available for projects with capacity enhancements, such as added lanes, bus lanes or bike lanes (typically Class 1 grade separated lanes). For example, the City was awarded a grant through Metro's Call for Projects in 2001 to widen North Santa Monica Boulevard and add an additional travel lane. With limited to no interest in widening for an additional travel lane, the City returned the grant to Metro.

A budget for the section from the Wilshire/Santa Monica Boulevard intersection to the western City limits, currently estimated at \$5.2 million will be developed in coordination with the project schedules of Beverly Hilton and 9900 Wilshire projects. The budget will incorporate cost escalation, private development project contribution and available gas tax and Measure R funding.

Additional funding within the Capital Improvement Program budget for FY 2014/15 totals an additional \$4 million for a total budget available of \$21.2 million, leaving a balance of \$7.8 million to reconstruct the section between Doheny Drive and Wilshire Boulevard. There are a variety of options to fund the shortfall, including:

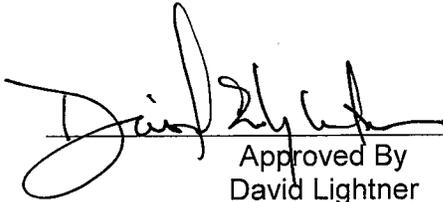
- 1) Lease Revenue Bond (issued by the Beverly Hills Public Financing Authority).
- 2) Reallocate some or all of the approximately \$12 million that is anticipated to be unspent from the 450 Crescent Garage project budget.
- 3) Use some portion of the Projected General Fund ending balance (currently projected to be approximately \$6 million for FY 2013/14).
- 4) Borrow internally utilizing current reserves, paid back over time with interest.

This is not an exhaustive list of potential funding sources and mechanisms and it is possible that some combination of the above approaches could work as well. Should Council decide to move forward with the Santa Monica Boulevard reconstruction project at this time, staff will return with a more detailed analysis of funding options as well as pros and cons of each approach.

**RECOMMENDATION**

Staff seeks City Council direction on how to proceed with the Santa Monica Boulevard reconstruction project.

  
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Approved By  
Susan Healy Keene, AICP

  
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Approved By  
David Lightner

# **ATTACHMENT 1**

<b>Project</b>	<b>North Santa Monica Blvd Reconstruction - Doheny to Moreno (Entire Blvd.)</b>	
Description	Full asphalt concrete section removal and replacement. New concrete curb, gutter, curb ramps, and replace existing sidewalk along North Santa Monica Blvd. Storm drain improvements identified in the Storm Drain Master Plan and videography study. New street lighting.	
Scenario	1. Maintain existing curb to curb width. Project utilities constructed via trench/plate method followed by paving constructed in 3 major longitudinal segments. 4- 10' Lanes (2 in each direction) shall be maintained during construction. Temporary widening 3' to 6' to allow for temporary relocation of traffic lanes. Temporary widening area shall be restored to original condition at end of construction.	2. Widen Roadway to 66' - Relocate north curb 3' north of existing location. Project utilities constructed via trench/plate method followed by paving constructed in 3 major longitudinal segments. 4- 10' Lanes (2 in each direction) shall be maintained during construction. Temporary relocation of traffic lanes shall occur within the new 66' roadway width.
Duration	30 Months	24 Months
Project Cost	\$33,880,000	\$31,600,000
Additive Alternate 1 (recommended) Cost	Median Islands \$310,000	Median Islands \$310,000
Deductive Alternate 1 (recommended) Cost	Wilshire to Moreno (deferred) -\$5,200,000	Wilshire to Moreno (deferred) -\$5,200,000
<b>Recommended Project Cost</b>	<b>\$28,990,000</b>	<b>\$26,710,000</b>
Additive Alternate 2 (optional) Cost	Widen Roadway between Canon and Wilshire to 63' \$350,000	-- --
Deductive Alternate 2 (optional) Cost	-- --	Widen Roadway to 64' (in lieu of 66') -\$365,000

ITEMS		REVISED (PSOMAS)		ORIGINAL (STAFF)	
		Scenario #1	Scenario #2		
CONSTRUCTION ITEM COSTS	1	General Conditions	\$3,597,500	\$3,075,500	included in items
	2	Utility Relocations	\$426,900	\$426,900	\$3,500,000
	3	Storm Drain	\$2,163,750	\$2,163,750	
	4	Removals	\$3,011,038	\$3,019,410	\$8,000,000
	5	Adjustments	\$331,475	\$331,475	
	6	Grading and Site Prep	\$1,034,335	\$1,154,949	
	7	Street Improvements	\$5,995,192	\$5,799,040	
	8	Signing and Striping	\$269,800	\$269,800	
	9	Temporary Traffic Control	\$875,000	\$710,000	\$0
	10	Landscaping	\$953,710	\$1,005,910	\$0
	11	Traffic Signal Modification	\$2,080,000	\$1,240,000	\$0
	12	Street Lighting	\$870,000	\$870,000	\$1,140,000
	Construction Sub-Total:		\$21,608,699	\$20,066,733	\$12,640,000
CONTIN- GENCY	Escalation - 3% annually to 8/19/2016 (7.5%)		\$1,620,652	\$1,505,005	\$1,000,000
	Construction Contingency (25%)		\$5,807,338	\$5,392,934	\$1,360,000
CONSTRUCTION TOTAL:		\$29,036,689	\$26,964,672	\$15,000,000	
PROJECT/CONSTRUCTION MANAGEMENT (10%):		\$2,903,669	\$2,696,467	\$200,000	
PLANNING & DESIGN:		\$1,940,730	\$1,940,730	\$2,000,000	
TOTAL PROJECT ESTIMATE:		\$33,881,088	\$31,601,869	\$17,200,000	

# **ATTACHMENT 2**

Attachment 2  
Response to Questions from March 4, 2014 meeting

1. Request for Police and Fire Chief to address the City Council

**Answer:** Police Chief Snowden and Fire Chief Mundell will be present at the April 1, 2014 meeting to address Council regarding the Blue Ribbon Committee recommendations regarding median islands and bicycle lanes.

2. Request for further evaluation of widening to the South side of the Boulevard:

**Answer:** Psomas provided the following evaluation of widening the Boulevard to the south side:

Psomas reviewed widening the south side of North Santa Monica Blvd. in the areas fronting private properties and reported the following to the Blue Ribbon Committee:

*"On the eastern side of the project, private undeveloped (former railroad, Alpine to Sierra) property currently has a chain link fence on the property line which is 2' behind the existing curb, eucalyptus trees along the street, some overgrown and encroaching onto the right-of-way. Widening within existing right-of-way would yield an additional 12" to 18" at best and would worsen an existing condition (i.e. no parkway, street lights or roadway signs) and is not recommended.*

*On the western side of the project, are five blocks of city parking structures buffered from the boulevard by London Plane trees and other landscaping in a very tight space. Gruen Associates designed the five parking structures along Santa Monica Boulevard and, at that time, had discussions with the City Council and surrounding neighborhoods about not only the importance of the structures' location but it's seamless integration into the fabric of the City. As the structures are opposite the Beverly Garden Park and extend five blocks of Santa Monica Boulevard along a prominent gateway into the center of Beverly Hills, the London Plane trees, the Floss Silk trees, and landscaping were considered essential to the design of the structures and their significant location in the City. Any widening of the south side would remove these trees and would not leave space for tree replacement. This would remove landscape buffer from the parking structures and severely impact the aesthetic character of the boulevard*

*Widening to the south also presents engineering challenges including regrading to join the elevations and design of longitudinal transitions in the roadway geometry. Further, all existing surface infrastructure including storm drain inlets, fire hydrants, signal equipment, etc. would require relocation.*

*In reviewing the impact associated with widening to the south, additional cost of approximately \$1,680,000 would be incurred. A major component of this cost includes structural retrofit of the parking structure retaining walls which is required to resist surcharge loading from vehicles. This cost also includes work to remove and/or relocate landscaping, lighting, signage, sidewalk, and miscellaneous structures*

3. Outreach to Beverly Gardens Park donors.

**Answer:** Steve Zoet, Director of Community Services, sent a letter to 159 corporate, and individual/family donors advising of the City Council's review of the Blue Ribbon Committee recommendations (Exhibit A). To date, no responses have been received.

4. Request for Input from Churches:

**Answer:** On January 21, 2014, staff met with representatives of all three churches, including Glynis Horton, Parish Administrator of All Saints Church, Andrew Eagles, Pastor, Beverly Hills Presbyterian Church, Kristin Lehere, Pre-school Director of Beverly Hills Presbyterian Church, and Michael Caraway, Director of Administration at Church of Good Shepherd. Staff provided information on the Blue Ribbon Committee's recommendations and provided notice of the March 4, 2014 City Council review of the Blue Ribbon Committee's recommendations. Staff also met with Glynis Horton and Kristin Lehere on March 27, 2014.

The Church representatives did not express opposition to the Blue Ribbon Committee's recommendation. They raised several issues related to construction including maintaining pedestrian access from parking facilities south of Santa Monica Boulevard and the Metro transit stop on the south side of the boulevard; the need to limit construction activities during services and special events, and ensuring construction vehicles do not stage on residential side streets. Staff agrees these issues should be addressed in the construction mitigation plan.

5. How does the schedule for this project coordinate with Metro Construction of the La Cienega Station?

**Answer:** Metro's current schedule is for "Advance Utility Relocations" to begin shortly and continue through the later part of 2016. Advanced utility relocations can occur at nighttime, and or non-peak hours with the intent to avoid major traffic impacts. Actual station construction is currently scheduled to begin at the end of 2016. The most impactful part of construction, decking and station excavation is scheduled to begin in mid-2017.

Metro's construction schedule is dependent on many factors, including award of a full funding grant agreement from the federal government which sets the terms for federal funding of the project. A full funding grant agreement is required prior to awarding the design/build contract. Proceeding with the reconstruction project as currently planned, beginning in 2015, will have the least amount of conflicts with Metro's construction.

6. What is the '3-foot rule' and how does it apply to bicycles and operation of the roadway?

**Answer:** Current California law requires the driver of a vehicle overtaking another vehicle or a bicycle proceeding in the same direction to pass to the left at a *safe distance* without interfering with the safe operation of the overtaken vehicle or bicycle, subject to certain limitations and exceptions. "*Safe distance*" is not defined in the existing law.

California Assembly Bill AB-1371 enacts the *Three Feet for Safety Act*, which prohibits, with specified exceptions, the driver of the motor vehicle that is overtaking or passing a bicycle proceeding in the same direction on a highway from passing at a distance of *less than 3 feet* between any part of the motor vehicle and any part of the bicycle or its operator. .

AB-1371, Chapter 331 as adopted by the Governor on September 23, 2013 and goes into effect September 16, 2014, amends California Vehicle Code Section 21760(c) to identify the 3-ft distance required between any part of a motor vehicle and any part of a bicycle or its operator when overtaking or passing a bicycle (Exhibit B).

7. How would a bicycle lane connect to West Hollywood and Los Angeles?

**Answer:** If widening is considered to accommodate bicycle facilities, 5-ft striped bike lanes would be installed on the north and south sides of North Santa Monica Boulevard at approximately Doheny Drive (east city limit) and Moreno Drive (west city limit). The striping would follow the same design standards as the Burton Way pilot bicycle lane, with a dashed line approximately 100-ft ahead of an intersection approach to allow right-turn movement onto cross streets.

With existing road conditions (i.e., no widening), only one bicycle lane can be accommodated on the westbound (north side) travel lane from Doheny Drive to Moreno Drive. Eastbound bicycle traffic would continue to travel/share the existing eastbound travel lane (closest to curb) on North Santa Monica Boulevard, or cyclists may self-divert onto eastbound South Santa Monica Boulevard and Civic Center Drive.

City staff and Psomas met with staff from the cities of West Hollywood and Los Angeles to discuss regional bicycle networks. Melissa Antol of the West Hollywood Community Development Department and Tim Fremaux of the City of Los Angeles Department of Transportation (LADOT) Bicycle Division submitted correspondence committing to a bikeway connectivity with Beverly Hills at the east (Doheny Drive) and west (Moreno Avenue) city limits (Exhibit C).

8. What are alternatives for bicycle lanes?

**Answer:** Alternate bicycle routes suggested by the Blue Ribbon Committee included the residential street of Carmelita Avenue for westbound travel and South Santa Monica Boulevard connecting to Civic Center Drive for eastbound travel.

In July-August 2012, City Council reviewed proposals for five pilot bikeways in the City, which included a Class III Bike Route with Sharrows on Carmelita Avenue as a possible connector between West Hollywood and Los Angeles. Residents adjacent to the proposed bike route expressed concern with cyclists failing to completely stop at the 21 controlled intersections and following traffic laws; dips in the intersections would create a hazard for cyclists; and the potential increase in bicycle travel/traffic activity would intrude on the existing high quality of life in the neighborhood. Additionally, transitioning back onto Santa Monica Boulevard at the west end of Carmelita Avenue presented a challenge at Wilshire Boulevard and/or would require cyclists to cut-through adjacent residential streets.

City Council directed staff to proceed with pilot bicycle facilities on Burton Way and North Crescent Drive only, and eliminated Carmelita Avenue, Beverly Drive and Charleville Boulevard from further consideration.

Sunset Boulevard north of the 500, 600, 700 and 800 residential blocks was not included/evaluated during the 2012 bikeway studies. Sunset Boulevard west of Whittier Drive and east of Cinthia/Phyllis Drive in West Hollywood does not connect to an existing regional bicycle network.

9. What are the studies regarding bicycle safety? Do studies show they make them safer?

**Answer:** The following is a list of studies reviewed during the pre-design phase of this project:

- *Implications of Modifying State Aid Standards: Urban Construction or Reconstruction to Accommodate Various Roadway Users* – Minnesota DOT; December 2013.
- *Route Infrastructure and the Risk of Injuries to Bicyclists: A Case-Crossover Study* – Kay Teschke et al.; American Journal of Public Health; 2012.
- *Power to the Pedalers* – Adam Arvidson; Planning; May/June 2012.
- *Evidence on why Bike-Friendly Cities are Safer for all Road Users* – Marshall, Wesley E., N. W. Garrick; Environmental Practice 13 (1); March 2011.
- *In Publication No. FHWA-RD-99-035* – The Federal Highway Administration (FHWA); October 1999.

Studies related to bicycle lanes were reviewed (see list) and most focus on the effect of the lanes on safety for both bicyclists and motorists and conclude that bicycle lanes improve safety. There were no studies identified that explicitly quantified the impact of bicycle lanes on traffic flow in the adjacent vehicular travel lanes. In the consultant team's opinion, bicycle lanes should not impede the flow of traffic in adjacent lanes. On the contrary, by removing bicycles from the travel lanes and providing them with a designated lane, vehicles are able to pass bicyclists with little delay and they are more likely to stay in their lane rather than straying into the adjacent lane and negatively impacting traffic flow in that adjacent lane. One study has noted that drivers tend to drive a bit slower when bicycle lanes are present (Arvidson 2012). This does not mean that their flow is impeded, but rather the drivers are being more cautious.

**Recommended Bicycle Accommodation configuration (if widening is elected).** Psomas recommends a Shared Roadway (No Bikeway Designation) as described in the Caltrans Highway Design Manual, Chapter 1000 Bicycle Transportation Design. This is consistent with California Vehicle Code (CVC) Section 21202 which requires that any person operating a bicycle upon a roadway at a speed less than the normal speed of traffic moving in the same direction at that time shall ride as close as practicle to the right-hand curb or edge of the roadway. This is also consistent with CVC Section 21760, *Three Feet for Safety Act*. (see Exhibit B attached).

With a 16' wide curb lane and most bicyclists located 3-ft from the curb, there will be 10 feet in which a vehicle can pass a bicyclist leaving 3-ft of clearance. There would be few vehicles that could not move to the inside 10-ft of the lane and leave 3-ft of clearance when passing a bicyclist in the 16-ft lane. This is in contrast to the current lane widths where many vehicles have to move into the Number 1 lane (i.e. the lane closest to the center) to safely pass a bicyclist, respecting the 3-ft clearance requirement.

10. What about using concrete vs. asphalt?

**Answer:** Pavement Materials (Asphalt vs Concrete). Committee members inquired regarding the potential of constructing the roadway of concrete instead of asphalt. A brief comparison of the two materials is described below.

**Portland Cement Concrete (PCC).** PCC, known as “rigid” pavement, is a strong and durable pavement material. It typically requires a thinner section than asphalt concrete (AC) to achieve similar strength. For example, a 6-inch PCC section may be equivalent to a 10-inch of AC section. The section thickness and composition is determined by the soils engineer based on assumed traffic loads and existing soil characters.

PCC is generally maintenance free for its 30 to 40 year lifespan, however, it is more expensive to construct than asphalt paving. PCC may be poured in one lift, and has a longer curing (“drying”) time. Due to its rigidity, expansion joints are required for proper construction. The joints can contribute to bumpy road conditions. The color is light and has a lower heat gain, but the light color makes it difficult to see paint markings/stripping. White and yellow paint colors, typically require an additional black paint outline to be legible, increasing construction cost and maintenance of markings. If roadway maintenance or subsurface repairs are required, entire sections (areas within expansion joints) of PCC may need to be removed and re-poured.

**Asphaltic Concrete (AC).** AC pavement is considered “flexible” pavement. It is less rigid than PCC and requires a thicker section to achieve a similar strength to PCC. With regular maintenance, including resurfacing mill and overlay approximately every ten years, AC pavement can last 30 to 40 years. It may be placed in multiple lifts, allowing flexibility for various construction phasing options. The first lift, called the “base course” may be driven on temporarily until the final lift (the wearing surface) is placed. AC pavement also has a shorter curing time, reducing construction duration. Proper placement with an even finish, free of cracks, bumps and dips, create smooth driving conditions.

Due to the black color, various pavement markings and traffic indicators are easily visible to motorists. If roadway maintenance or repairs are required, smaller sections of AC paving can be removed and patched. The entire pavement section does not always need to be removed and re-placed.

**Pavement Acoustics:** There is abundant ongoing research (Caltrans and the University of California Pavement Research Center; Davis and Berkeley) regarding noise due to the tire/pavement interaction. The results of these studies are highly technical, but it is generally accepted that this noise emission from road traffic normally increases over time as the road pavements age and are exposed to traffic and weather. Much of this research is targeted toward development of quieter AC (asphalt) pavement. PCC (cement) does not deteriorate in the same way as AC, so the increase in noise emission over time is less of a concern.

**Relative Cost:** PSOMAS performed an evaluation of the cost difference between AC (asphalt) and PCC (cement) pavement based on similar recent projects and cost data available from Caltrans and Los Angeles County. It is anticipated that the cost for PCC would be approximately 35% to 50% greater than AC (paving option cost only).

11. Will there be overlap with the Beverly Hilton and 9900 Wilshire Projects?

**Answer:** Both the Beverly Hilton and the 9900 Wilshire projects plan to begin demolition this coming summer. Construction start dates for the two projects have not yet been determined. It can be assumed that one or both projects will be under construction at the same time as the Santa Monica Boulevard Reconstruction project.

12. What is the impact to the Affaire in the Gardens?

**Answer:** With construction award, conditions would be placed to minimize disruptions during the Affaire in the Gardens. With removal of the bus cut-out between Crescent and Canon, additional space will be provided. Should the City Council consider any widening west of Canon Drive, staff will provide an analysis of the impact to the Affaire and the Gardens and any loss of showing booths.

13. Can we hire an out of state contractor to reduce project costs?

**Answer:** Typically local contractors are hired for construction projects because they are familiar with the rules and regulations specific to construction in Los Angeles County and the State of California and have experience working on projects with the level of traffic mitigation required on projects with the high volumes of traffic. Out of state contractors would also have higher costs for project set up and payment for employee housing.

14. What is the cost associated with drainage?

**Answer:** The estimated cost of replacing the storm drains is \$2.2 million.

15. What is the potential impact on art in the Beverly Gardens Park

**Answer:** The existing art in the Beverly Gardens Park is sufficiently set back from the boulevard and will not be impacted with any of the alternatives under review.

16. What is the duration of construction between widening or not widening the boulevard

**Answer:** The estimated duration for constructing the entire boulevard with widening is 24 months. If no widening occurs, the estimated duration is 30 months due to the need to temporarily widen the boulevard during construction. The estimated duration would be six months less for either scenario for constructing the segment from Doheny Drive to Wilshire Boulevard.

17. Are there advantages to using green paint for the bicycle lane?

**Answer:** The Blue Ribbon Committee discussed using green paint for a bicycle lane, similar to lanes painted in downtown Los Angeles and Long Beach. After discussion of maintenance (green paint tends to fade) and general aesthetics, the Committee did not continue the discussion. Staff can further evaluate the use of green paint if the City Council is interested.



March 17, 2014

Dear

On behalf of the City of Beverly Hills and the Friends of Beverly Gardens Park I would like to thank you for your past financial gift that supported recent improvements made to Beverly Gardens Park or for those still planned to occur. As you know, the first phase of this long-term effort has been completed with the reconstruction and rededication of the historic lily pond. We are pleased with its outcome and hope that you are as well. Thank you again for helping to make that vision a reality. Efforts are now being made to restore the Electric Fountain, at the intersection of Wilshire and Santa Monica Boulevards, to its historical splendor and for other subsequent improvements as well.

Because of your demonstrated interest in this park, we want to take this opportunity to inform you that City Council is in the process of evaluating possible improvements associated with the planned reconstruction of Santa Monica Boulevard which borders and parallels Beverly Gardens Park on its southern edge. As part of City Council's efforts to engage the community in this planning effort and to elicit public input, a committee comprised of residents was appointed and multiple public meetings were held where input was collected. Items discussed included the resurfacing and possible widening of the roadway, inclusion of a bike lane (that would also necessitate the possible widening requirement), "greening" of selected existing median areas through the addition of landscaping, underground drainage improvements that channel water runoff from the northern alleys and traverse the park, improved street lighting and other project related improvements. Any encroachment into the parkway's green space, if it were to occur, would be within the roadway's designated right-of-way portion.

City Council will review and discuss these topics prior to making any decisions. You are encouraged to attend the City Council's public meetings when these topics are scheduled for discussion should you wish to do so. The Santa Monica Boulevard Reconstruction Project is agendaized for City Council discussion at

their next regularly scheduled Study Session which will occur on Tuesday, April 1<sup>st</sup>. The item will be heard within the meeting's normally scheduled hours which will commence at 2:30pm and conclude no later than 6pm.

Please feel free to contact me for additional information on this issue or matters that involve the planned improvements to Beverly Gardens Park. Again, thank you for your past generosity and support of the Beverly Gardens restoration project. We hope that you enjoy the improvements that have been made and are planned to still occur within this historical park.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven Zoet", with a long horizontal flourish extending to the right.

Steven Zoet, Director

Beverly Hills Community Services Department

(310) 285-2536

[szoet@beverlyhills.org](mailto:szoet@beverlyhills.org)



*California*  
LEGISLATIVE INFORMATION

**AB-1371 Vehicles: bicycles: passing distance.** (2013-2014)

**Assembly Bill No. 1371**

CHAPTER 331

An act to amend, repeal, and add Section 21750 of, and to add Section 21760 to, the Vehicle Code, relating to vehicles.

[ Approved by Governor September 23, 2013. Filed with Secretary of State September 23, 2013. ]

LEGISLATIVE COUNSEL'S DIGEST

AB 1371, Bradford. Vehicles: bicycles: passing distance.

Under existing law, a driver of a vehicle overtaking another vehicle or a bicycle proceeding in the same direction is required to pass to the left at a safe distance without interfering with the safe operation of the overtaken vehicle or bicycle, subject to certain limitations and exceptions. A violation of this provision is an infraction punishable by a fine not exceeding \$100 for a first conviction, and up to a \$250 fine for a 3rd and subsequent conviction occurring within one year of 2 or more prior infractions.

This bill would enact the Three Feet for Safety Act, which would require the driver of a motor vehicle overtaking and passing a bicycle that is proceeding in the same direction on a highway to pass in compliance with specified requirements applicable to overtaking and passing a vehicle, and to do so at a safe distance that does not interfere with the safe operation of the overtaken bicycle, having due regard for the size and speed of the motor vehicle and the bicycle, traffic conditions, weather, and the surface and width of the highway. The bill would prohibit, with specified exceptions, the driver of the motor vehicle that is overtaking or passing a bicycle proceeding in the same direction on a highway from passing at a distance of less than 3 feet between any part of the motor vehicle and any part of the bicycle or its operator. The bill would make a violation of these provisions an infraction punishable by a \$35 fine. The bill would also require the imposition of a \$220 fine on a driver if a collision occurs between a motor vehicle and a bicyclist causing bodily harm to the bicyclist, and the driver is found to be in violation of the above provisions. This bill would make these provisions operative on September 16, 2014.

Because this bill would create a new crime, this bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: yes

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

**SECTION 1.** Section 21750 of the Vehicle Code is amended to read:

**21750.** (a) The driver of a vehicle overtaking another vehicle or a bicycle proceeding in the same direction shall pass to the left at a safe distance without interfering with the safe operation of the overtaken vehicle or bicycle, subject to the limitations and exceptions set forth in this article.

(b) This section shall become inoperative on September 16, 2014, and, as of January 1, 2015, is repealed, unless a later enacted statute, that becomes operative on or before January 1, 2015, deletes or extends the dates on which it becomes inoperative and is repealed.

**SEC. 2.** Section 21750 is added to the Vehicle Code, to read:

**21750.** (a) The driver of a vehicle overtaking another vehicle proceeding in the same direction shall pass to the left at a safe distance without interfering with the safe operation of the overtaken vehicle, subject to the limitations and exceptions set forth in this article.

(b) This section shall become operative on September 16, 2014.

**SEC. 3.** Section 21760 is added to the Vehicle Code, to read:

**21760.** (a) This section shall be known and may be cited as the Three Feet for Safety Act.

(b) The driver of a motor vehicle overtaking and passing a bicycle that is proceeding in the same direction on a highway shall pass in compliance with the requirements of this article applicable to overtaking and passing a vehicle, and shall do so at a safe distance that does not interfere with the safe operation of the overtaken bicycle, having due regard for the size and speed of the motor vehicle and the bicycle, traffic conditions, weather, visibility, and the surface and width of the highway.

(c) A driver of a motor vehicle shall not overtake or pass a bicycle proceeding in the same direction on a highway at a distance of less than three feet between any part of the motor vehicle and any part of the bicycle or its operator.

(d) If the driver of a motor vehicle is unable to comply with subdivision (c), due to traffic or roadway conditions, the driver shall slow to a speed that is reasonable and prudent, and may pass only when doing so would not endanger the safety of the operator of the bicycle, taking into account the size and speed of the motor vehicle and bicycle, traffic conditions, weather, visibility, and surface and width of the highway.

(e) (1) A violation of subdivision (b), (c), or (d) is an infraction punishable by a fine of thirty-five dollars (\$35).

(2) If a collision occurs between a motor vehicle and a bicycle causing bodily injury to the operator of the bicycle, and the driver of the motor vehicle is found to be in violation of subdivision (b), (c), or (d), a two-hundred-twenty-dollar (\$220) fine shall be imposed on that driver.

(f) This section shall become operative on September 16, 2014.

**SEC. 4.** No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

---

**Subject:** FW: Bike Lanes on Santa Monica

**From:** Tim Fremaux <\_\_\_\_\_  
**Date:** January 14, 2014 at 4:08:45 PM MST  
**To:** <\_\_\_\_\_  
**Cc:** Michael Meyer <\_\_\_\_\_, Claire Bowin <\_\_\_\_\_, Nathan Baird  
>, Michelle Mowery <\_\_\_\_\_  
**Subject:** Bike Lanes on Santa Monica

Hi Aaron,

I understand that the City of Beverly Hills is considering bike lanes (or at least widening for future bike lanes) on Santa Monica Blvd. within the Beverly Hills City Limits. I also understand via Michael Meyer that there is a desire to interface with the neighboring cities of West Hollywood and Los Angeles to ensure optimal regional bikeway connectivity as it pertains to the Santa Monica Blvd. corridor. On behalf of the City of Los Angeles, I would like to confirm that we are committed to working with the City of Beverly Hills to design and implement a seamless connection between our respective existing and planned bike lanes at the western Beverly Hills/Los Angeles City Limit.

Presently, the bike lanes on Santa Monica Blvd. within the City of Los Angeles terminate at Avenue of the Stars. The section from Avenue of the Stars to the Beverly Hills City Limit is identified on our adopted 2010 Bicycle Plan for future bike lanes. We are currently working on an easterly extension to Century Park East that is achievable without removing the existing number of vehicular lanes.

Extending the lanes up to the City Limit is contingent upon a more developed understanding of the configuration proposed in Beverly Hills, and then analyzing and determining what if any changes to the lane configurations would be required. We are committed to working with you as these facilities are being developed in an effort to come up with an optimal solution. If you have any questions or would like to discuss further, please don't hesitate to contact me.

Sincerely,

--  
Tim Fremaux, P.E.  
Transportation Engineering Associate III  
City of Los Angeles Department of Transportation  
Project Delivery Division - Bikeways Section  
100 S. Main St., 9th Floor  
Los Angeles, CA 90012  
Tel.: (213) 972-4957  
Fax: (213) 972-8610



# CITY OF WEST HOLLYWOOD

CITY HALL  
810 SANTA MONICA BLVD.  
WEST HOLLYWOOD, CA  
90069-6216  
TEL: (323) 848-6475  
FAX: (323) 848-6575

TTY: For hearing impaired  
(323) 848-6496

**COMMUNITY  
DEVELOPMENT  
DEPARTMENT**

January 21, 2014

Dr. Barry Pressman  
Chair, Santa Monica Boulevard  
Blue Ribbon Committee  
City of Beverly Hills  
446 North Rexford Drive  
Beverly, Hills, CA 90210

Dear Dr. Pressman:

The City of West Hollywood wishes to voice its strong support for including bike lanes on Santa Monica Boulevard in Beverly Hills as part of the Santa Monica Boulevard Reconstruction Project.

West Hollywood supports safety improvements to transportation facilities that accommodate all roadway users which include vehicles, transit, pedestrians and bicyclists. Studies have shown bike lanes increase bicyclist visibility, bicycle usage and reduce accident rates by as much as 30%.

West Hollywood presently has bike lanes on most sections of Santa Monica Boulevard, and is evaluating options to provide a seamless connection as public right of way becomes available. The addition of bike lanes on Santa Monica Boulevard in Beverly Hills would provide an important east-west connection to bike lanes in West Hollywood.

West Hollywood recently adopted the "General Plan", the "West Hollywood Design District Streetscape Master Plan", and will consider adoption of the "Pedestrian and Bicycle Mobility Master Plan Update" in the next couple of months. All of these documents encourage complete streets and identify opportunities to improve mobility and safety in our own city limits, and to provide linkages with our neighbors in Beverly Hills and in Los Angeles.

West Hollywood, like Beverly Hills, is a corridor city that is part of a larger regional transportation network which means our transportation decisions seek to balance our local needs within a regional context for connectivity.

We have been great partners with Beverly Hills in supporting the subway extension, mobility studies, and other regional planning efforts as part of our participation in the Westside Cities Council of Governments (WSCCOG). In March of 2012, the WSCCOG unanimously voted to close bike gaps on five



priority corridors, among which was Santa Monica Boulevard; with the goal being to provide a continuous facility to Ocean Avenue.

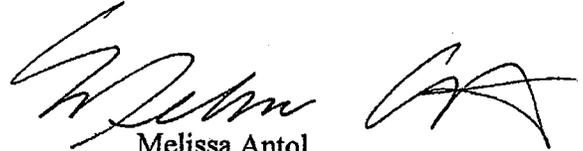
West Hollywood is excited to have Beverly Hills consider the addition of a bike lane on Santa Monica Boulevard so that we can continue to build on this important east-west regional connection.

Thank you for your consideration.

Sincerely,



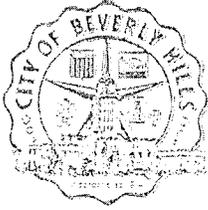
Stephanie DeWolfe  
Community Development Director



Melissa Antol  
Long Range and Mobility  
Planning Manager

Cc: Mayor John A. Mirisch, Vice Mayor Lili Bosse, Councilmembers William Brien, Julian Gold, and Nancy Krasne

# **ATTACHMENT 3**



## CITY OF BEVERLY HILLS

455 NORTH REXFORD DRIVE • BEVERLY HILLS, CALIFORNIA 90210

John A. Mirisch, Mayor

March 19, 2014

David S. Kim  
Associate Administrator for Policy and Governmental Affairs  
Federal Highway Administration  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
8th Floor, Routing Code: HPL  
Washington, DC 20590

Dear Mr. Kim:

Thank you for inviting City of Beverly Hills to submit our questions to the FHWA with regard to the design of North Santa Monica Boulevard in our City.

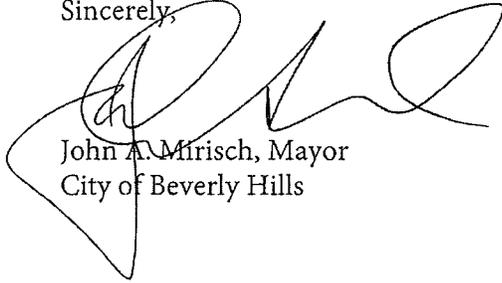
As mentioned in our conversation, the City of Beverly Hills is currently involved in planning efforts for reconstruction of North Santa Monica Blvd. North Santa Monica Boulevard is a Major Arterial extending approximately two miles through Beverly Hills. The street has two through lanes in each direction with a center turn lane. It carries between 35,000 and 55,000 vehicles per day. It is currently 60-63 feet in width, with an 11 foot center lane, two 11 foot number one lanes and 13.5-15 foot outside lanes, no street parking. The roadway needs to be completely reconstructed due to failed pavement, inadequate drainage, broken and missing curb and gutter, and other maintenance issues.

The City Council is considering alternate configurations of the roadway, including bicycle lane options, and would like FHWA input on the following questions:

1. Do striped bicycle lanes improve safety?
2. Do striped bicycle lanes impede the flow of traffic?
3. Do striped bicycle lanes impact turns to/from side streets?
4. Are striped bicycle lanes preferable to wide curb lanes?
5. Are 11 foot vehicle travel lanes as safe as 12 foot lanes?
6. Do 11 foot vehicle travel lanes reduce the capacity of the roadway in comparison to 12 foot lanes?
7. Is there a minimum number of daily or peak period bicycle riders necessary to justify bike lanes?

Thank you in advance for helping the City of Beverly Hills in making important decisions related to this project. We would very much appreciate your input prior to the April 1, 2014 City Council meeting on this subject.

Sincerely,

A handwritten signature in black ink, appearing to read 'John A. Mirisch', written over the word 'Sincerely,'.

John A. Mirisch, Mayor  
City of Beverly Hills



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**California Division**

March 27, 2014

650 Capitol Mall, Suite 4-100  
Sacramento, CA 95814  
(916) 498-5001  
916 498-5008 (FAX)

In Reply Refer To:  
HDA-CA

The Honorable John A. Mirisch  
Mayor of Beverly Hills  
455 North Rexford Drive  
Beverly Hills, CA 90210

**Subject:** Bicycle Safety Considerations along the North Santa Monica Boulevard  
Corridor in Beverly Hills, California

Dear Mayor Mirisch:

Thank you for your letter to the Federal Highway Administration (FHWA) Associate Administrator David Kim dated March 19, 2014 regarding the potential reconstruction of North Santa Monica Boulevard to include bicycle lanes. I have been asked to respond on Mr. Kim's behalf.

The FHWA applauds your efforts to find ways to accommodate all road users during the proposed roadway reconstruction. In your letter, you raised a number of good questions about how adding bike lanes and changing lane widths may affect roadway safety and mobility. The answers to these questions depend on the roadway context and are difficult to answer with blanket statements. Because of the variation in roadway characteristics and the lack of "one size fits all" answers, you may want to consider using these three resources to examine different options:

- **BIKESAFE:** About ten years ago, FHWA developed a tool called BIKESAFE ([www.pedbikesafe.org/BIKESAFE](http://www.pedbikesafe.org/BIKESAFE)). BIKESAFE is a decision-making tool that allows users to enter roadway and crash characteristics (e.g., number of lanes, functional class, vehicle volume, bicycle crash types) and it will recommend different ways to improve bicyclist safety and mobility. This FHWA publication includes case studies from Phoenix, Arizona; Chicago, Illinois; Eugene, Oregon; Cambridge, Massachusetts; San Francisco, California and Fort Lauderdale, Florida that expand on multiple strategies.
- **Bicycle Road Safety Audit Guidelines and Prompt Lists:** ([safety.fhwa.dot.gov/ped\\_bike/tools\\_solve/fhwasal2018/](http://safety.fhwa.dot.gov/ped_bike/tools_solve/fhwasal2018/)). Road Safety Audits (RSAs) are a formal safety examination and can be conducted at all stages of a project's life. FHWA developed materials to conduct RSAs specific to bicycle issues so that RSA

teams can assess bicyclist safety and develop recommendations to make the roadway safer for them.

In California, UC Berkeley Institute of Transportation Studies, the Technical Assistance Program (ITS Berkeley) has recently started conducting Bicycle Safety Assessments in addition to their existing Traffic Safety Evaluation and Pedestrian Safety Assessment programs. These programs are funded by the National Highway Traffic Safety Administration (NHTSA) Region 9 and the California Office of Traffic Safety and they are provided free of charge for local public agencies in California. You may want to contact Ms. Afsaneh Yavari at ITS Berkeley at (510) 643-3163 or [afsaneh.yavari@berkeley.edu](mailto:afsaneh.yavari@berkeley.edu) to explore these programs further.

- **Highway Safety Manual (HSM):** ([www.highwaysafetymanual.org](http://www.highwaysafetymanual.org)) HSM can be used to evaluate the safety performance of different reconstruction alternatives for all road users on North Santa Monica Boulevard. Chapter 12 of this manual provides a structured methodology for estimating the expected average crash frequency, crash severity, and collision types for urban and suburban arterial facilities. Crashes involving all vehicle types, bicyclists, and pedestrians are included.

FHWA would be happy to assist you with using these resources. We also recommend that you work with the California Department of Transportation (Caltrans) and ITS Berkeley to help find the most appropriate solutions for Santa Monica Boulevard. As you probably know, Caltrans has embraced a statewide Complete Streets policy and they have revised their Highway Design Manual and other policy documents to better address the needs of all road users. The FHWA California Division Office can help set up discussions with Caltrans and ITS Berkeley on these matters if needed.

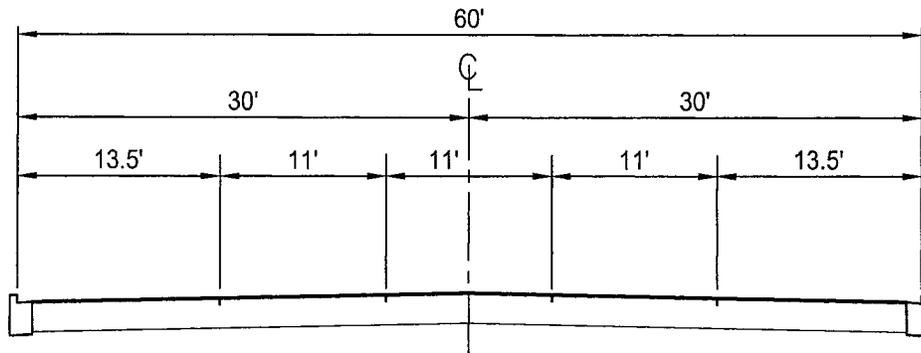
I hope this information is helpful. If you would like to discuss bicyclist safety further, please contact Mr. David Cohen of my staff at (916) 498-5868 or by email at [david.cohen@dot.gov](mailto:david.cohen@dot.gov).

Sincerely,

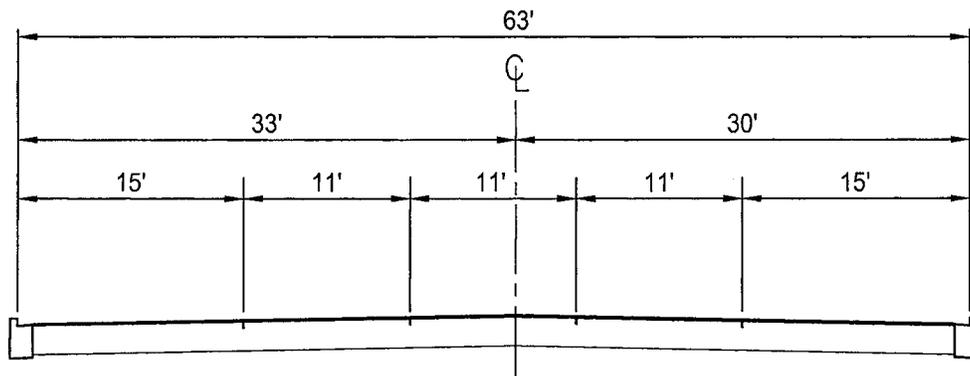


Vincent P. Mammano  
Division Administrator

# **ATTACHMENT 4**



EXISTING 60' ROADWAY SECTION

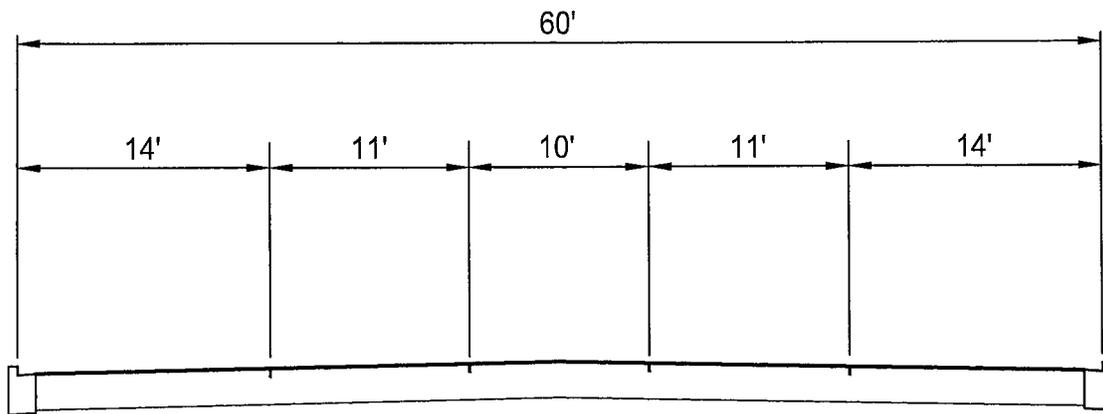


EXISTING 63' ROADWAY SECTION



**NORTH SANTA MONICA BLVD.  
RECONSTRUCTION  
EXISTING ROADWAY SECTIONS**





## IMPROVED 60' ROADWAY SECTION

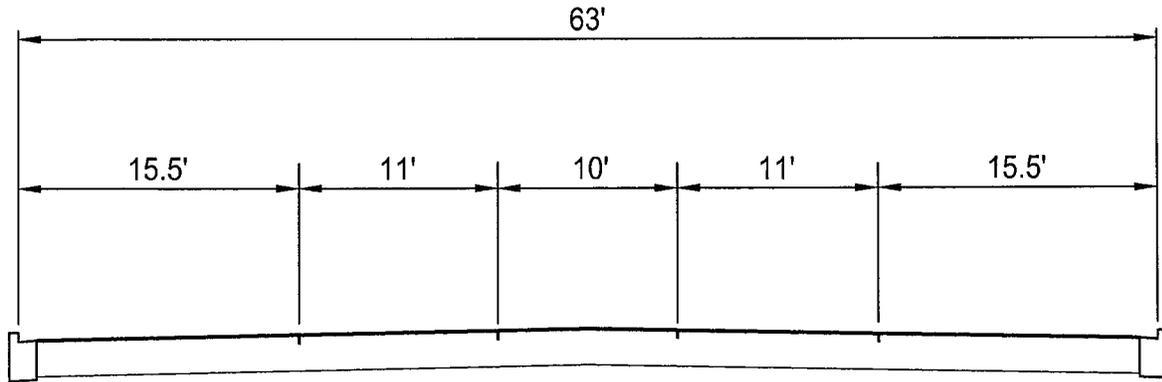
### FEATURES:

- 11' WIDE NUMBER 1 LANES (12' IS STANDARD)
- INADEQUATE WIDTH FOR STRIPED BIKE LANES
- MEDIAN ISLANDS MAY NOT BE FEASIBLE
- CONSTRUCTION REQUIRES TEMPORARY WIDENING
- MAINTAINS EXISTING CURB TO CURB WIDTH



**NORTH SANTA MONICA BLVD.  
RECONSTRUCTION  
IMPROVED ROADWAY SECTIONS**





## IMPROVED 63' ROADWAY SECTION

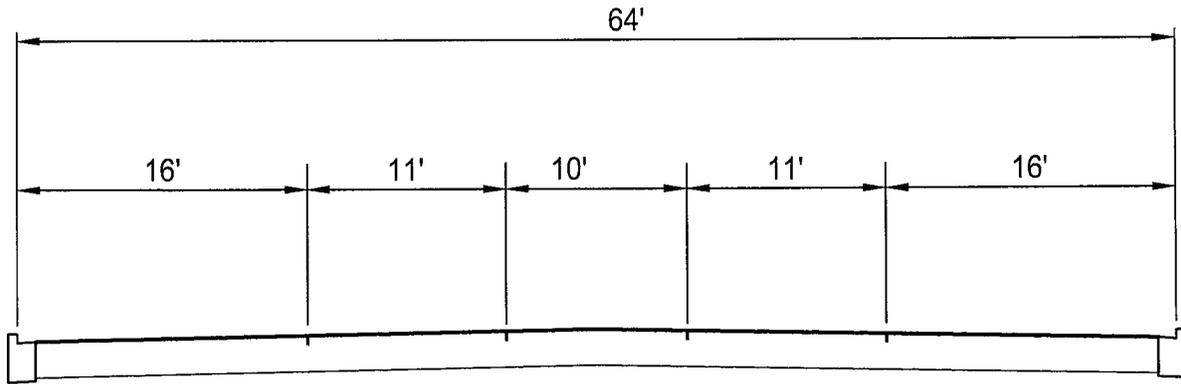
### FEATURES:

- 11' WIDE NUMBER 1 LANES (12' IS STANDARD)
- DOES NOT ALLOW FOR 5' STRIPED BIKE LANES
- MEDIAN ISLANDS MAY NOT BE FEASIBLE IN SOME SECTIONS OF THE ROADWAY
- CONSTRUCTION REQUIRES TEMPORARY WIDENING
- MAINTAINS EXISTING CURB TO CURB WIDTH AT EXISTING 63' SECTIONS



**NORTH SANTA MONICA BLVD.  
RECONSTRUCTION  
IMPROVED ROADWAY SECTIONS**





## IMPROVED 64' ROADWAY SECTION

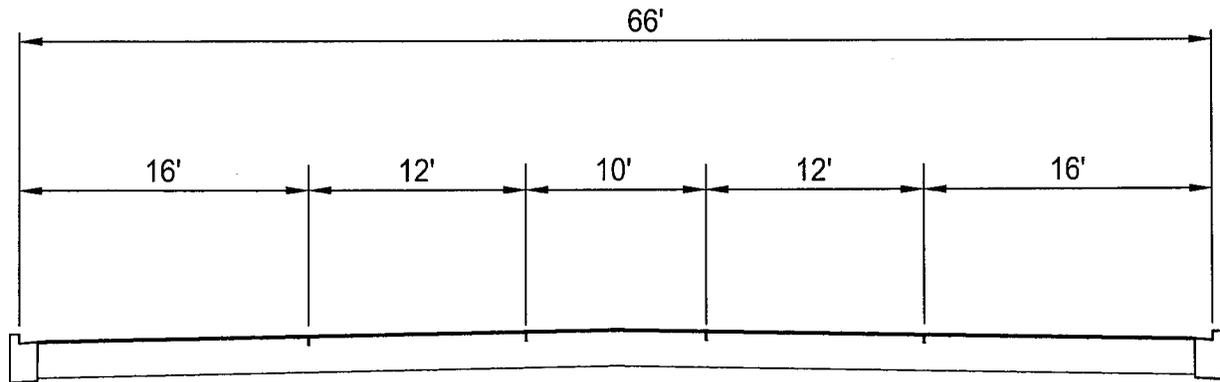
### FEATURES:

- 11' WIDE NUMBER 1 LANES (12' IS STANDARD)
- ALLOWS FOR 5' STRIPED BIKE LANES
- MEDIAN ISLANDS ARE LIKELY FEASIBLE IN MOST SECTIONS OF THE ROADWAY
- CONSTRUCTED IN 3 LONGITUDINAL SEGMENTS, TEMPORARY WIDENING IS NOT REQUIRED



**NORTH SANTA MONICA BLVD.  
RECONSTRUCTION  
IMPROVED ROADWAY SECTIONS**





## IMPROVED 66' ROADWAY SECTION

### FEATURES:

- 12' WIDE NUMBER 1 LANES (STANDARD LANE WIDTH)
- ALLOWS FOR 5' STRIPED BIKE LANES
- MEDIAN ISLANDS ARE LIKELY FEASIBLE IN MOST SECTIONS OF THE ROADWAY
- CONSTRUCTED IN 3 LONGITUDINAL SEGMENTS, TEMPORARY WIDENING IS NOT REQUIRED



**NORTH SANTA MONICA BLVD.  
RECONSTRUCTION  
 IMPROVED ROADWAY SECTIONS**

