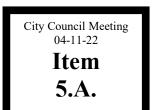


Council Agenda Report



To: Mayor Grisanti and the Honorable Members of the City Council

Prepared by: Rob DuBoux, Public Works Director

Approved by: Steve McClary, Interim City Manager

Date prepared: March 29, 2022 Meeting date: April 11, 2022

Subject: Los Angeles County Measure R and M Transportation Funding and

Federal Infrastructure Grants Update

<u>RECOMMENDED ACTION:</u> 1) Receive an update on Los Angeles County Measure R and Measure M Transportation Funding, and Federal Infrastructure Investment and Jobs Act grants; 2) Review the Safety Project List developed by the Public Safety and Public Works Commission and amend as appropriate; and 3) Provide direction to staff on future projects using these funds.

<u>FISCAL IMPACT</u>: No additional appropriation is required. The City currently has \$4.3 million in Los Angeles County Measure R funds remaining to be obligated to eligible transportation capital improvements project. In addition, the City has approximately \$5.2 in Los Angeles County Measure M funds to be obligated and anticipates additional Measure M funds will available for eligible City transportation projects in future years.

There is no impact to the General Fund associated with the expenditure of Los Angeles County Measure R and Measure M funding. Measure R and Measure M do not require a local funding contribution from the City. In addition, Measure R and Measure M funds can be used to reimburse the City for staff time associated with the delivery of approved projects.

In November 2021, President Biden signed the Federal Infrastructure Investment and Jobs Act (IIJA) which is intended to provide billions of dollars in competitive funding to rebuild the nation's infrastructure. The City could apply for these competitive grant opportunities to fund future City projects that meet the Federal IIJA grant requirements. It is likely that these federal grants would require a local funding contribution match from the City.

<u>WORK PLAN:</u> This item was included as Items #8.b, 8.j, 8.l, 8.p, 8.u, 8.v, 8.x, and 8.y in the Adopted Work Plan for Fiscal Year 2021-2022. At Council's direction, new capital projects maybe added to the Work Plan for Fiscal Year 2022-2023.

<u>DISCUSSION:</u> Los Angeles County Measure R and Measure M are administered by the Los Angeles County Metropolitan Transportation Authority (Metro) and provide the City with a funding source for transportation related projects, programs, and improvements. The City utilizes these funds for capital improvement projects and other street maintenance activities.

#### Measure R

Los Angeles County Measure R was approved by voters in 2008. This measure added a half-cent sales tax for a period of 30 years to fund transportation projects and improvements. Measure R is estimated to generate approximately \$40 billion dollars countywide.

Measure R funds a wide variety of transportation-related projects, programs, and improvements throughout Los Angeles County. Los Angeles County Metropolitan Transportation Authority (Metro) administers the funding and approves projects that meet the funding requirements of Measure R's. Capital project funds are distributed throughout the County of Los Angeles through the various subregions. The City's subregion, Las Virgenes-Malibu Subregional Planning Area, received a total of \$175 million to be used over a period of 30 years. The Las Virgenes-Malibu Council of Governments (LVMCOG) helps administer the Measure R funds that are allocated to the subregion. Each jurisdiction within the Las Virgenes-Malibu Subregional Planning Area, which includes Malibu, Westlake Village, Agoura Hills, Calabasas, Hidden Hills, and adjacent unincorporated Los Angeles County, receives its share of \$175 million based on per capita. The City's portion is \$26.3 million.

Proposed projects are submitted to the LVMCOG for review and approval. Approved projects are then forwarded to Metro for final review and approval. Once a project is approved by the Metro Board, a funding agreement is developed between Metro and the City for that specific project. Since the implementation of the Measure R Program, the City has been utilizing Measure R funds for a variety of transportation related projects.

The following is a ·list of approved projects funded by Los Angeles County Measure R:

Project	Total Budget	City Measure R Allocation	Status
Kanan Dume Rd Arrester Bed Improvements	\$900,000	\$900,000	Completed

PCH & Big Rock Intersection Improvements	\$450,000	\$450,000	Completed
PCH Bike Route Improvements	\$1,318,254	\$500,000	Completed
PCH at La Costa Pedestrian Improvements	\$500,000	\$500,000	Completed
Park and Ride (Land Acquisition)	\$7,356,225	\$3,500,000	Completed
Civic Center Way Improvements	\$5,676,872*	\$4,400,000	Completed
PCH Signal System Improvements Topanga Canyon to John Tyler Dr	\$14,600,000**	\$3,800,000	In Design
PCH Intersection Improvements at Trancas Canyon Rd	\$1,000,000	\$1,000,000	Not started
PCH Median Improvements Webb Way to Puerco Canyon Rd	\$6,950,000	\$6,950,000	In Design
Total Allocated City Mo	\$22,000,000		
Balance of Mo	\$4,300,000		

<sup>\*</sup> Los Angeles County contributed \$1,200,000 of Measure R funds towards this project

The City has \$4.3 million remaining of Los Angeles County Measure R funds that can be programmed into new transportation-related projects.

#### **Measure M**

Los Angeles County Measure M was approved by voters in 2016. This measure added an additional half-cent sales tax beginning in 2017, which then increases to one percent on July 1, 2039, immediately upon the expiration of the half-cent sales tax of Measure R. Measure M does not have a sunset date.

Similar to Measure R, Measure M funding is administered by Metro and distributed throughout the County to the various subregions. The City's Measure M funds are allocated to Las Virgenes-Malibu Subregional Planning Area. It is estimated that the City will receive approximately \$45 million over the next 27 years. Currently, the City has the ability to program \$14,451,470 in Measure M funds. The City has already allocated \$9,283,219 and has \$5,168,251 remaining. It is anticipated that the City will continue to receive additional funding after the initial 27 year period.

All of the City's Measure M capital improvement projects must meet specific funding guidelines. Specifically, projects must meet the requirements for either Highway Efficiency or Active Transportation. In general, Highway Efficiency projects are intended to improve

<sup>\*\*</sup> Los Angeles County contributed \$10,800,000 of Measure R funds towards this project

congestion, and Active Transportation projects include improvements for bicycles, pedestrians, and improvements to comply with Complete Streets requirements. Projects meeting these two requirements are submitted to the COG for review. Recommended projects are then forwarded to Metro for the final review and approval. Once approved by the Metro Board, a funding agreement is developed between Metro and the City for that specific project.

The City currently has four (4) Measure M projects. The following is a list of approved projects funded with Los Angeles County Measure M:

Project	Total Budget	City Measure M Allocation	Status
Park and Ride Lots (Land Acquisition)	\$7,356,225	\$3,100,000	Completed
Westward Beach Parking and Walkway Improvements	\$3,500,000	\$3,500,000	In Design
PCH Crosswalk Improvements at Big Rock Drive and 20326 PCH	\$683,000	\$683,000	Not started
PCH Median Improvements – Paradise Cove and Zuma Beach	\$2,000,000	\$2,000,000	Not started
Total Allocated City Meas	\$9,283,000		
Balance of Mea (F	\$35,717,000		

#### Remaining Measure R and M Funds

In July 2015, the City finalized the PCH Safety Study. This study identified and prioritized a series of projects that would improve safety on PCH. The PCH Safety Study Prioritized Project List is provided as Attachment 1. The PCH Safety Study's recommendations were used to identify projects for Measure R and Measure M funding.

At this time, the City has remaining Measure R and Measure M funds. Projects need to be identified and programed with Metro to utilize the funds. On November 8, 2021, City Council directed staff to work with the Public Safety Commission and Public Works Commission to identify projects to improve safety on PCH and canyon roads using Measure R and Measure M Transportation Funds.

At the Public Safety Commission meeting on December 1, 2021, and at the Public Works Commission meeting on December 14, 2021, staff presented the Commissions with an update on transportation funding and discussed potential projects that could use this funding. The following is a list of some of the potential projects the Commission discussed:

- Change the pedestrian flashing beacon crossing at 22523 PCH to a full pedestrian crosswalk signal
- Add inground pedestrian crosswalk lights on PCH, including replacing the proposed flashing beacons near 20326 PCH with inground pedestrian crosswalk lights
- Extend the right turn lane from westbound PCH at Webb Way
- Add a new, dedicated eastbound right turn lane at the intersection of PCH and Paradise Cove
- Provide additional safety improvements at El Matador Beach
- Add intersection improvements at the intersections of PCH at Las Flores Canyon Road and Rambla Vista
- Install rock netting on the existing slopes on Malibu Canyon Road
- Install bicycle safety improvements, specifically those improvements that separate vehicles from cyclists
- Conduct a traffic study on Malibu Canyon Road near Harbor Vista Drive to improve safety at this location

#### **Federal Infrastructure Grants**

In November 2021, President Biden signed the Infrastructure Investment and Jobs Act (IIAJ). IIAJ includes billions of dollars in competitive funding available to cities, towns and municipalities to rebuild the nation's infrastructure. The act provides several funding opportunities for local governments, including transportation projects that create safe streets and roads for all, electrical vehicle charging stations, and projects that undertake hazardous mitigation projects to reduce the risk from disasters and other natural hazards. This new funding source can be used for newly identified projects.

At the January 20, 2022 Public Works and Public Safety Commission Joint Special meeting, staff presented a series of potential projects that could utilize funding from Measure R, Measure M, and federal IIAJ grant funds. The Commissions continued the item to further discuss priority projects.

At the February 23, 2022 Joint Special Meeting of the Public Works Commission and Public Safety Commission, the Commissions approved a motion to recommend that the City Council use the City's Measure R and Measure M transportation funds as well as any Federal grant funds on prioritized safety projects provided in Attachment 2 and detailed below:

#### 1. PCH Utility Undergrounding

<u>Project Description</u>: This project includes undergrounding the existing utilities on PCH within the city limits. This project would likely significantly reduce the risk of

power outages along the corridor, particularly during Power Safety Power Shutoffs (PSPS).

Funding: Federal Infrastructure Bill

#### 2. PCH at Las Flores and Rambla Pacifico Intersection Improvements

<u>Project Description</u>: This intersection has routinely seen increased accidents and has been identified in the 2015 PCH Safety Study project recommendations. The proposed project would reconfigure the intersections of PCH at Las Flores Canyon Road and PCH at Rambla Pacifico, provide protected left turn arrows, widen the existing bridge to provide additional space for bicycle lanes, and relocate the crosswalk to avoid conflicts.

Funding: Federal Infrastructure Bill, Measure R and M

#### 3. PCH Improvements from the Eastern City Limits to Cross Creek Road

<u>Project Description</u>: This project consists of reconfiguring the travel lanes and center median, reduce the travel lane and center median widths, and install new bike lanes with buffer lanes. The project is intended to provide safety improvements for all modes of transportation.

Funding: Federal Infrastructure Bill

#### 4. Malibu Canyon Road Traffic Study

<u>Project Description</u>: Conduct a traffic study on Malibu Canyon Road near Harbor Vista Drive and Potter Lane to determine if any feasible traffic safety improvements can be constructed at this location.

Funding: Local Surface Transportation Program funding

#### 5. Pedestrian Signal at 22523 PCH

<u>Project Description</u>: Replace the existing flashing beacon to a full signalized pedestrian signal. The proposed signal would be connected to the synchronized traffic system currently underway. Inground crosswalk lighting will be included in this project. This project is intended to increase pedestrian safety at this location.

Funding: Measure R and M

# 6. PCH Signal Synchronization Project - Paradise Cove to Trancas Canyon Road

<u>Project Description</u>: This project was identified in the 2015 PCH Safety Study project recommendations. The project would provide an interconnected traffic signal system and synchronize the timing of the signals. The project would also include upgraded battery backup power.

Funding: Measure R and M

#### 7. Pedestrian Undercrossing near Malibu Seafood

<u>Project Description</u>: This project was identified in the 2015 PCH Safety Study project recommendations. The project includes the construction of a new pedestrian undercrossing near the Malibu Seafood Restaurant.

Funding: Measure R and M

#### 8. Right Turn Extension at PCH and Morning View Drive

<u>Project Description</u>: This project was identified in the 2015 PCH Safety Study project recommendations. The project consists of extending the existing right turn lane on westbound PCH at Morning View Drive. This project would allow for additional vehicles to enter the turn lane during peak times including school hours. Funding: Measure R and M

#### 9. PCH and Paradise Cove Improvements

<u>Project Description</u>: This project was identified in the 2015 PCH Safety Study project recommendations. The project includes installing a new right turn lane onto Paradise Cove Road, widening the shoulder on the inland side to 12 feet, constructing a five-foot wide sidewalk behind a seven-foot shoulder, and modifying signal phasing to eliminate pedestrian-vehicle conflicts for westbound vehicles turning left onto PCH.

Funding: Measure R and M

#### 10. Malibu Canyon Road Rock Netting

<u>Project Description</u>: This project would install rock netting on the existing slopes that routinely drop rocks onto Malibu Canyon Road. This project is intended to increase safety on Malibu Canyon Road, especially during storm events.

Funding: Measure R and M

#### 11. PCH Improvements at Heathercliff Road

<u>Project Description</u>: This project was identified in the 2015 PCH Safety Study project recommendations. The project consists of increasing the storage length of the westbound left turn lane from 230 feet to 330 feet and installing a new center median from Portshead Road to Heathercliff Road.

Funding: Measure R and M

#### 12. PCH Median Improvements – Trancas Canyon Road to Broad Beach Road

<u>Project Description</u>: This project was identified in the 2015 PCH Safety Study project recommendations. The project would install a new concrete median on PCH between Trancas Canyon Road to Broad Beach Road.

Funding: Measure R and M

#### 13. El Matador and El Pescador Beach PCH Improvements

<u>Project Description</u>: This project was identified in the 2015 PCH Safety Study project recommendations. The project would restripe the travel lanes to widen the shoulders. The project would increase the buffer area between the travel lane and parked vehicles.

Funding: Measure R and M

#### 14. PCH Improvements at Escondido Beach Road

<u>Project Description</u>: This project was identified in the 2015 PCH Safety Study project recommendations. The project would consist of increasing the storage length of westbound turns from PCH onto Malibu Cove Colony Drive (total length = 210 feet), installing a new raised median in the double-yellow area before and after 27400 PCH (total of 1800 feet).

Funding: Measure R and M

#### 15. PCH Median Improvements at Pena Road

<u>Project Description</u>: This project was identified in the 2015 PCH Safety Study project recommendations. This project would construct a new raised median for PCH with a turn pocket into the north end of the turnout area adjacent to Pena Road. The proposed median would prevent left turns into or from the south end of the turnout area, so that traffic must turn right and make u-turns around the median area.

Funding: Measure R and M

#### 16. PCH Improvements at La Piedra Beach Road

<u>Project Description</u>: This project was identified in the 2015 PCH Safety Study project recommendations. The project would restripe the travel lanes to widen the shoulders. The project would increase the buffer area between the travel lane and parked vehicles.

Funding: Measure R and M

#### 17. PCH Median Improvements - Kanan Dume Road to Latigo Canyon Road

<u>Project Description</u>: This project was identified in the 2015 PCH Safety Study project recommendations. The project consists of installing new concrete raised medians on PCH from Kanan Dume Road to Latigo Canyon Road where double-yellow striping currently exists.

Funding: Measure R and M

#### 18. PCH and Malibu Road West Emergency Access

<u>Project Description</u>: The western end of Malibu Road is one-way exit only. This project would include the construction of an emergency access point at the western end of Malibu Road to allow emergency vehicles to access Malibu Road.

Funding: Measure R and M

#### 19. Right Turn Lane Extension at PCH and Webb Way

<u>Project Description</u>: This project would include the extension of the existing right turn lane on westbound PCH at Webb Way. Several vehicles merge over into shoulder area prior to the existing right turn pocket causing a potential traffic conflict. The extended right turn lane would assist in eliminating this conflict.

Funding: Measure R and M

#### 20. PCH Improvements at Cross Creek Road

<u>Project Description</u>: This project was identified in the 2015 PCH Safety Study project recommendations. The project would increase the storage length of the eastbound left turn lane from PCH onto Cross Creek Road. This improvement is intended to assist in reducing vehicle conflicts turning left onto Cross Creek Road. <u>Funding</u>: Measure R and M

#### 21. PCH Median Improvements - Serra Road to Malibu Pier

<u>Project Description</u>: This project was identified in the 2015 PCH Safety Study project recommendations. The project consists of constructing a continuous raised median on PCH from Serra Road to the Malibu Pier. The width of the existing median would be reduced to allow additional shoulder width.

Funding: Measure R and M

#### 22. PCH Improvements at Latigo Canyon Road

<u>Project Description</u>: This project was identified in the 2015 PCH Safety Study project recommendations. The project would widen the existing shoulder to provide striping for a dashed bike lane and a right turn lane from PCH onto Latigo Canyon Drive.

Funding: Measure R and M

#### 23. PCH Improvements at Bonsall Drive

<u>Project Description</u>: This project was identified in the 2015 PCH Safety Study project recommendations. The project would shift the roadway alignment to convert the intersection approach to a right-in, right-out, and would include trimming back vegetation to improve motorists' sight distance towards the south. The project would also restripe PCH to restore the inland shoulder.

Funding: Measure R and M

Staff is seeking direction from the Council regarding the safety improvements projects identified and prioritized by the Public Safety and Public Works Commissions. If Council approves this list as presented or amended it can be used to guide long-term planning for future capital improvement projects using Measure R, Measure M and Federal Instructure grant funds. In addition, staff will incorporate the projects into the Fiscal Year 2022-2023 Work Plan as feasible and will begin the process of submitting the applications and documents to secure the associated funding and or Federal grants.

#### **ATTACHMENTS:**

- 1) PCH Safety Study Prioritized Project List
- 2) Safety Priority Projects List Recommended by the Public Safety and Public Works Commissions

# PACIFIC COAST HIGHWAY SAFETY STUDY: ALTERNATIVES ANALYSIS REPORT

APPENDICES May 15, 2015

## **APPENDIX H**

# FINAL RECOMMENDED PROJECT PRIORITIZATION LIST



Priority ID	Location	Milepost	Project Description
1	John Tyler Dr. to Topanga Canyon Rd.	48.491 - 40.769	Install communication between signals and connect signals back to Caltrans TMC. Develop and implement timing plans. Outdated signal coordination plans need to be optimized with appropriate cycle lengths and time-based schedule for proper traveling speeds and to generate reasonable gaps for cross streets and driveways. Review and update timing settings including Max2 and Max3. Consider deployment of state-of-the-art adaptive timing system to develop optimized timing plans based upon real time traffic conditions. Insure that the adaptive system is compatible with a high volume arterial.
2	Trancas Canyon Rd. to Paradise Cove Rd.	55.650 - 52.162	Provide interconnected signal system. Develop timing plans for weekday and weekend periods. Implement timing plans based on time of day or in response to frequently occurring traffic patterns.
3	Corridorwide	n/a	Upgrade stripe width to 6-inch standard bike lane stripe. Provide bike lane markings where parking is prohibited. An 8-inch stripe, as used for turn lane striping, may also be considered. Do not designate as bike lane unless parking prohibited or width allows room for bikes and parking
4	Paradise Cove Rd.	52.162	Construct raised median within 500 feet of intersection in both directions wherever a double-double yellow line exists and extend left-turn lane by 100 feet
5	Corridorwide	n/a	In general, modify striping of right turn lanes on PCH and replace with a wider edge line and skip striping approaching intersections
6	Webb Way	47.441	Modify signal phasing so vehicles turning through crosswalk do not conflict with pedestrians
7	Moonshadow's Restaurant	43.096	Install overhead warning signs per Caltrans Standard ES7J 200 feet on each side prior to parking area and building with pedestrian crossing signs, consider experimental action-style pedestrian signs via Federal request to experiment
8	Corridorwide	n/a	Increase law enforcement efforts for vehicles traveling over speed limit
9	Corridorwide	n/a	Detailed evaluation of beach parking areas to determine if additional off-street parking can be achieved
10	Zuma Beach area	55.612	Construct raised medians in areas where double-yellow lines exist in the vicinity of Zuma Beach, especially where yellow posts are currently installed
11	Kanan Dume Rd. to Latigo Canyon Rd.	54.020 - 51.061	Install permanent raised median in the double-yellow areas, and where enough width exists, consider landscaped medians
12	Cross Creek Rd.	47.091	Restripe intersection to provide northbound right turn lane and move shoulder line over north of the intersection
13	Serra Rd. to Carbon Canyon Rd.	46.811 - 44.961	Narrow travel lanes and center turn lane slightly through central Malibu to provide wider shoulder.

Priority ID	Location	Milepost	Project Description
14	Crosswalk between McDonald's and Busch Realty	45.841	Change the uncontrolled crosswalk with warning lights to a HAWK pedestrian signal with median refuge and potential curb extensions.
15	Big Rock Dr.	42.491	Install additional overhead warning sign per Caltrans Standard Plan ES7J northbound at approximately 400' prior to intersection, sign should read "Signal Ahead"
16	Corridorwide	n/a	Increase distance to advance detection to meet spacing requirements for prevailing speeds to reduce acceleration needed to stop
17	Corridorwide	n/a	Install post delineators on outside of curves north of John Tyler Drive where feasible, per Caltrans standard spacing guidelines, especially where adjacent land is undeveloped or installation of delineators is well suited.
18	El Pescador Beach Rd.	58.856	Consider restriping to widen shoulders by narrowing lanes to permit parking and provide buffer area.
19	El Matador Beach Rd.	58.848	Consider restriping to widen shoulders surrounding El Matador Beach area by narrowing lanes to permit parking and provide buffer area
20	Broad Beach Rd. North to Trancas Canyon Rd.	58.461 - 56.851	Consider extruded concrete median where median is less than 10 feet wide
21	Trancas Canyon Rd.	56.851	Modify signal phasing to allow left turns onto Trancas from PCH when crosswalk is active
22	Trancas Canyon Rd.	56.851	Construct northbound right-turn lane and bike channel onto Trancas Canyon Rd., consider installation of right turn arrow for heavy movement
23	Heathercliff Rd.	54.341	Increase the storage length of NBL turns from PCH onto Heathercliff Road by 100' from 230' to 330'
24	Paradise Cove Rd.	52.162	Widen shoulder on inland side to 12 feet within 500 feet of intersection in both directions, construct 5 foot wide sidewalk behind seven foot shoulder at intersection
25	Escondido Beach Road / Malibu Cove Colony Drive	51.801	Increase the storage length of NBL turns from PCH onto Malibu Cove Colony Drive by 100' from 110' to 210'
26	Webb Way	47.441	Increase the storage length of NBL turns from PCH into Webb Way by eight cars
27	Webb Way	47.441	Increase the storage length of SBL turns from PCH into Webb Way by six cars
28	Webb Way	47.441	Restripe to change acceleration lane to a standard shoulder to discourage merging
29	Malibu Pier	46.535	Establish signal control for southbound left turn
30	La Costa Beach Club (21440 PCH)	44.461	Study feasibility of narrowing the striping in the vicinity of La Costa beach club to widen the shoulders. Consider a raised median area with refuge for the crosswalk and curb extensions in conjuction with potential signalization of the La Costa crosswalk that is planned by the City of Malibu.

Priority ID	Location	Milepost	Project Description
31	Las Flores Canyon Rd.	44.151	Provide protected left turn arrows from PCH
32	Moonshadow's Restaurant	43.096	Construct a median in front of Moonshadow's. Provide left- turn lane at north end of parking area for entry to restaurant. Construct raised median refuge cut out in front of front door so that pedestrians can wait in median.
33	Pena Rd. Beach Turnout	41.805	Construct raised median for PCH with turn pocket into the north end of the turnout area. Median will prevent left turns into or from south end of the turnout area, so that traffic must turn right and make U-turns around the median area. Study area closely in upcoming parking study to maximize parking yield.
34	Corridorwide	n/a	Create bicycle hotline to report roadway deficiencies
35	Webb Way to Las Flores Canyon Rd.	47-441 - 44.151	Evaluate vehicle speeds to determine if lower speed limit is warranted
36	La Piedra Beach Rd.	58.901	Consider restriping to widen shoulders by narrowing lanes to permit parking and provide buffer area.
37	Morning View Dr.	55.650	Extend right turn lane from PCH onto Morning View Dr., consider installing a right turn arrow for this heavy movement
38	Bonsall Dr.	54.911	If shifting alignment is not possible, convert intersection approach to a right-in, right-out only and trim back vegetation to improve motorists sight distance towards the south.  Restripe PCH to restore inland shoulder
39	Heathercliff Rd.	54.341	Relocate crosswalk to other side of intersection and rephase signal for pedestrian movements
40	Heathercliff Rd.	54.341	Widen right turn lane to allow dashed bike stripe
41	Kanan Dume Rd.	54.020	Modify signal phasing at intersection to allow more time for the left-turn onto Kanan Dume Rd.
42	Zumirez Dr.	53.671	Restripe Zumirez signal to restore shoulder to inland side by narrowing travel lanes, removing the wide median nose stripe, maintain right turn lane
43	Paradise Cove Rd.	52.162	Modify signal phasing to eliminate pedestrian-vehicle conflict for northbound vehicles turning left onto PCH
44	470' west of Escondido Beach Road / Malibu Cove Colony Drive	51.890	Construct a permanent raised median in the double-yellow area before and after Geoffreys's for approximately 1800 feet.
45	Escondido Beach Road / Malibu Cove Colony Drive	51.801	Install pedestrian crossing sign and flashers
46	John Tyler Dr.	48.491	Modify signal to provide protected left-turn phase to turn onto John Tyler from PCH
47	John Tyler Dr.	48.491	Restripe the acceleration lane on the inland side as a full shoulder
48	Malibu Canyon Rd.	48.171	Reconstruct crosswalk ramps to ADA standards at northbound inland corner

Priority ID	Location	Milepost	Project Description
49	Malibu Canyon Rd.	48.171	Shorten right-turn lane approaching intersection based upon queueing needs
50	Malibu Canyon Rd.	48.171	Widen right turn lane to provide channel for through bikes
51	1700' west of Webb Way	47.763	Convert free right turn and merge lane from Civic Center Way approximately 1700' west of Webb Way into a yield to turn condition. Restripe shoulder to discourage motorists from merging into northbound traffic
52	Webb Way	47.441	Reconstruct crosswalk ramps to ADA standards
53	Webb Way	47.441	Install countdown pedestrian signals
54	Cross Creek Rd.	47.091	Increase the storage length of SBL turns from PCH into Cross Creek Road by 150' from 300' to 450'
55	Serra Rd. to Malibu Pier	46.811	Construct continuous raised median and reduce median width to provide wider shoulders
56	Malibu Pier	46.535	Install pedestrian signal countdown heads
57	Carbon Canyon Rd.	44.961	Restripe right-turn lane on inland side with a shoulder stripe dashed approaching intersection.
58	Rambla Pacifico Rd.	44.171	Provide protected northbound left-turn phase from PCH into gas station
59	Las Flores Canyon Rd. to Rambla Pacifico Rd.	44.151 - 44.171	Study to realign across intersections to eliminate broken back striping due to change in median and shoulder widths
60	Las Flores Canyon Rd. to Rambla Pacifico Rd.	44.151 - 44.171	Widen bridge over Las Flores Creek to provide sidewalk on ocean side from Rambla Pacifico intersection to Dukes entrance. Maintain sufficient shoulder for bicycling, but utilize surplus area to move signal poles behind curb.
61	Las Flores Canyon Rd.	44.151	Provide ADA compliant improvements where feasible, including wheelchair ramps and raised curb returns
62	Las Flores Canyon Rd.	44.151	Reconstruct signal to eliminate condition where signal poles are not exposed to traffic on roadway shoulder.
63	Las Flores Canyon Rd.	44.151	Relocate signal detection so that vehicles are less likely to run red lights
64	Las Flores Canyon Rd.	44.151	Relocate crosswalk to eliminate pedestrian-vehicle conflict for Las Flores vehicles turning left onto PCH
65	Big Rock Dr.	42.491	Install a vehicle head on the 1-A pole in the northeast corner of the intersection for NBT movements
66	Big Rock Dr.	42.491	Monitor new protected/permissive left turn from PCH for effectiveness
67	Big Rock Dr.	42.491	Construct raised median east of the intersection for 150 feet
68	Corridorwide	n/a	Replace blue side-street name signs that intersect PCH with larger letter, more visible signs. Also consider advance street name signs at prominent intersections.
69	Encinal Canyon Rd.	59.401	Restripe northbound right-turn lane as a full shoulder with a dashed bike stripe

Priority ID	Location	Milepost	Project Description
70	Trancas Canyon Rd.	56.851	Construct ADA compliant sidewalk and ramps on the inland side for the length of the shopping center and reconstruct inland side driveway to provide appropriate deceleration area
71	Trancas Canyon Rd.	56.851	Reconstruct driveway to provide appropriate deceleration area
72	Guernsey Avenue	56.511	Provide street light at intersection
73	610' east ofWestward Beach Rd./Bonsall Dr.	54.791	Shift roadway alignment and construct shoulder on inland side from 610' east of Westward Beach to Zuma Beach access overpass by eliminating the center turning lanes
74	300' east of Kanan Dume Rd.	54.000	Move existing bus stop to Kanan Dume Rd. intersection and provide sidewalk and ADA ramps to accommodate pedestrians
75	820' east of Zumirez Dr. (Pointe Malibu)	53.511	Restripe deceleration and acceleration lanes to full shoulders
76	Latigo Canyon Drive	51.061	Provide street light at intersection
77	Latigo Canyon Drive	51.061	Widen shoulder to provide striping for dashed bike lane and right turn lane from PCH onto Latigo Canyon Dr.
78	Malibu Seafood	49.961	Construct a new pedestrian underpass crossing in the close vicinity of Malibu Seafood
79	Puerco Canyon Road	49.311	Restripe right-turn lane on inland side with a shoulder
80	John Tyler Dr.	48.491	Eliminate conflict with turning vehicles through crosswalk
81	John Tyler Dr.	48.491	Construct ADA sidewalk to connect west side crosswalk to bus pad on both sides of PCH
82	John Tyler Dr.	48.491	Widen right turn lane to allow dashed bike stripe
83	Webb Way to 23634 PCH	47.441	Stripe a shoulder merge taper line for lane drop, allow parking in this area
84	Webb Way	47.441	Relocate bus stop nearer to traffic signal
85	Webb Way at Civic Center Way	47.441	Consider roundabout at this intersection. A single-lane roundabout would suffice
86	Cross Creek Rd.	47.091	Reconstruct crosswalk ramps to ADA standards
87	Malibu Pier	46.535	Reconstruct crosswalk ramps to ADA standards, consider relocating bus stop on ocean side to Pier signal
88	22730 PCH (McDonald's ped crossing)	46.091	Increase width of ADA ramps on both sides as they are quite narrow, this may mean moving the crosswalk to the east by 1' or 2'
89	2000' west of Carbon Canyon Road	44.582	Consider an installation of a crosswalk and appropriate warning or crossing treatment at this location
90	Rambla Vista West	44.841	Replace short right-turn lane on inland side with a dashed striped shoulder

Priority ID	Location	Milepost	Project Description
91	Rambla Vista East to Rambla Pacifico Road	44.261 - 44.171	Study feasibility of narrowing shoulder in front of Rambla Pacifico shopping center to increase area for parking along frontage road. This project should be included in the imminent parking study.
92	Las Flores Canyon Rd. to Rambla Pacifico Rd.	44.151 - 44.171	Study feasibility to construct bridge connecting Rambla Pacifico to Las Flores Canyon Rd. north of PCH to eliminate the need for the Rambla Pacifico traffic signal
93	Las Flores Canyon Rd.	44.151	Consider widening the shoulder if any surplus width is available in travel lanes or median.
94	830' west of Big Rock Dr.	42.651	Construct a raised median in area where double-double yellow line exists at the end of the left-turn lane, provide landscaping pockets to obtain limited traffic calming effect from plantings
95	Big Rock Dr.	42.491	Increase the length of the southbound left-turn lane on PCH to 200 feet with a 90 feet transition by striping change
96	Big Rock Dr.	42.491	Construct a curb return with ADA ramp so that the traffic poles can be located behind it, narrow the opening and tighten up the radius so the curb return is on top of the existing pavement
97	Big Rock Drive to Pena Road	42.491 - 41.805	Restripe to narrow median where k rail occupies shoulder in this area
98	Decker Canyon Rd.	59.901	Widen shoulder to provide striping for dashed bike lane and right turn lane from PCH onto Decker Canyon Rd.
99	El Pescador Beach Rd.	58.856	Provide street light at beach access
100	Encinal Canyon Rd.	59.401	Install street light at intersection
101	El Matador Beach Rd.	58.848	Provide street light at beach access
102	Lunita Rd.	57.391	Install street light at intersection
103	Lunita Rd.	57.391	Widen shoulder to provide striping for dashed bike lane and right turn lane from PCH onto Lunita Rd.
104	Busch Dr.	55.041	Construct fourth leg of intersection to provide direct access to Zuma Beach and connection across creek to Westward Beach Rd. Permits elimination of existing northbound left-turn lane from PCH to Westward Beach and allows restoration of
105	Escondido Beach Road / Malibu Cove Colony Drive	51.801	Install street light at intersection on inland side
106	Latigo Shores Drive / Seagull Way	50.801	Provide street light at intersection
107	Latigo Shores Drive / Seagull Way	50.801	Widen shoulder to provide striping for dashed bike lane and right turn lane from PCH onto Latigo Shores Dr.
108	Corral Canyon Rd. to Puerco Canyon Rd.	50.391 - 49.311	Widen shoulder on inland side where parking occupies the entire shoulder. Reconstruct the median to provide full height curb. Opportunity to narrow median and increase shoulder width is possible.

Priority ID	Location	Milepost	Project Description
109	John Tyler Dr.	48.491	Remove obstruction (median curb) in crosswalk for both the east and west legs
110	John Tyler Dr.	48.491	Restripe to eliminate right turn from center lane. Double right turn through crosswalk is not justified by right turn volume
111	Malibu Canyon Rd.	48.171	Install bus stop on PCH
112	Malibu Canyon Rd.	48.171	Widen shoulder to provide striping for dashed bike lane and right turn lane from PCH onto Winter Mesa Dr.
113	Webb Way	47.441	Remove median curb obstruction to straighten crosswalk
114	Malibu Rd. to Cross Creek Rd.	47.241 - 47.091	Build sidewalk behind trees on ocean side from Cross Creek Rd. to Malibu Rd.
115	22333 PCH (Busch Realty ped crossing)	45.571	Move obstructing signal controller to improved location (it's in the middle of the sidewalk, with a less than 5' ADA approved clearance on either side)
116	Las Flores Canyon Rd. to Rambla Pacifico Rd.	44.151 - 44.171	Consider narrowing openings for Las Flores and Rambla Pacifico approaches.
117	Topanga Canyon Rd.	40.769	Upgrade signal system and conduct study to develop weekend timing plan that optimizes southbound flow along PCH based upon summer and weekend traffic counts
118	El Matador Beach	58.848	Consider possibility to enlarge parking lot
119	Trancas Canyon Rd.	56.851	Provide a sidewalk from shopping center and construct new pedestrian underpass crossing to beach
120	Paradise Cove Rd.	52.162	Widen shoulder to provide striping for dashed bike lane and right turn lane from PCH onto Paradise Cove Rd.
121	Corral Canyon Rd. to Beach Access	49.961	Construct complete pedestrian walkway on ocean side from Corral Canyon Rd. signal to beach property
122	Malibu Canyon Rd.	48.171	Restore shoulder stripe west of the intersection
123	Malibu Canyon Rd.	48.171	Provide ADA access from intersection to City Park
124	Malibu Rd.	47.241	Realign Malibu Rd intersection to eliminate acute angle and merging. Provide right angle intersection.
125	Carbon Canyon Rd. to Rambla Pacifico	44.961 - 44.171	Study feasibility to build a complete sidewalk from Carbon Canyon Rd. to Rambla Pacifico on the inland side
126	Rambla Pacifico Rd.	44.171	Realign Rambla Pacifico to narrow and improve channelization at PCH and increase separation from antique bridge rail. Increase left-turn lane storage for short turn pockets
127	Topanga Canyon Rd.	40.769	Lengthen southbound left turn storage bay to reduce potential overflow into through lane. (should be increased from 300' to 350', as the 95th queue distance is 350' for the weekend). Also lengthen time available to service lane during weekend.

Priority ID	Location	Milepost	Project Description
128	Decker Canyon Rd.	59.901	Evaluate intersection modification to a one- or two-lane roundabout. A one-lane roundabout could possibly provide space for additional parking.
129	330' west of Paradise Cove Rd.	52.222	Relocate bus stop to intersection of Paradise Cove Rd.
130	Encinal Canyon Rd.	59.401	Consider realignment of Encinal Canyon Road to intersect with La Piedra Beach Rd. Also consider roundabout control for new aligned intersection

	Safety Priority Projects						
Priority	PCH Safety Study Priority	Project Name	Project Description				
1		PCH Utility Undergrounding	Underground the existing utilities on PCH within the City limits. Funding through the Federal Instrastructure Bill - Resiliancy				
2	31, 59, 60, 61, 62, 64, 92, 93, 116	PCH at Las Flores and Rambla Intersection Improvements	Reconfigure the intersection of PCH and Las Flores and Rambla Pacifica. Provide protested left turn arrows, widen the existing bridge to provide additional room for bicycle lanes, relocate crosswalk to avoid conflicts, Coordinate with Caltrans for funding. Potential funding using Measure R and M and Federal Infrastructure Bill - Transportation.				
3		PCH Improvements from City Limits to Cross Creek Road	Reconfigure the travel lanes and center median, reduce the travel lane and center median widths, and install new bike lanes with buffer lanes. Funding through the Federal Infrastructure Bill - Transportation.				
4		Malibu Canyon Road Traffic Study	Conduct a traffic study on Malibu Canyon Road from Harbor Vista Drive to Potter Lane. STPL funding opportunity.				
5		Pedestrian Signal at 22523 PCH	Changing the existing flashing beacon to a pedestrian traffic signal. New signal shall connect to the newly synchronization system.				
6	2	PCH Signal Synchronization Project - Paradise Cove to	Provide interconnected traffic signal system and synchronize the timing of the				
7	78	Trancas Canyon Road Pedestrian Undercrossing at Malibu Seafood	signals. Include upgraded battery backup power.  Construct new pedestrian undercrossing near the Malibu Seafood Restaurant				
8	37	Right Turn Extension at PCH and Morning View Drive	Extend right turn lane from PCH onto Morning View Drive to allow for additional vehicles during school hours.				
9	24, 43	PCH and Paradise Cove Improvements	Install a new eastbound right turn lane onto Paradise Cove Road, widen the shoulder on the inland side to 12 feet, construct 5 wide sidewalk behind seven foot shoulder, and modify signal phasing to eliminate pedestrian-vehicle conflicts for westbound vehicles turning left onto PCH.				
10		Malibu Canyon Road Rock Netting	Install rock netting on the existing slopes that routinely drops rocks onto Malibu Canyon Road.				
11	23	PCH Improvments at Heathercliff Road	Increase the storage length of the westbound left turn lane, install new center median from Portshead to Heathercliff				
12	20	PCH Median Improvements - Trancas Canyon Road to Broad Beach Road	Install new concrete median between Trancas Canyon Road to Broad Beach Road.				
13	18, 19	El Matador and El Pescador Beach PCH Improvements	Restriping to widen shoulders by narrowing lanes to permit parking and provide buffer area				
14	25, 44	PCH Improvements at Escondido Beach Road	Increase the storage length of westbound turns from PCH onto Malibu Cove Colony Drive (total length= 210'), install new raised median in the double-yellow area before and after Geoffreys's (total of 1800'				
15	33	PCH Median Improvements at Pena Road	Construct new raised median for PCH with turn pocket into the north end of the turnout area. Median will prevent left turns into or from south end of the turnout area, so that traffic must turn right and make u-turns around the median area.				
16	36	PCH Improvements at La Piedra Beach Road	Restriping to widen shoulders by narrowing lanes to permit parking and provide buffer area				
17	11	PCH Median Improvements - Kanan Dume Road to Latigo Canyon Road	Install raised median in the double-yellow areas				
18		PCH and Malibu Road West Emergency Access	Construct a new access point for emergency vehicles to enter the west side of Malibu Road.				
19		Right Turn Lane Extension at PCH and Webb Way	Extend the westbound PCH/Webb Way right turn lane. Several vehicles merge over into shoulder area prior to right turn pocket.				
20	54	PCH Improvements at Cross Creek Road	Increase the storage length of eastbound turns from PCH into Cross Creek Road.				
21	55	PCH Median Improvements - Serra Road to Malibu Pier	Construct continuous raised median and reduce median width to provide wider shoulders.				
22	77	PCH Improvements at Latigo Canyon Road	Widen shoulder to provide striping for dashed bike lane and right turn lane from PCH onto Latigo Canyon Drive				
23	38	PCH Improvements at Bonsall Drive	Shift the alignment to convert intersection approach to a right-in, right-out and trim back vegetation to improve motorists sight distance towards the south. Restripe PCH to restore inland shoulder.				