

Final Recommendations Report

PCH Pedestrian Safety Project

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California Walks

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Disclaimer

California Walks is a community-based non-profit organization focused on improving pedestrian safety and walkability across the state. California Walks did not utilize professional engineers and/or planners to complete this report but provided its expertise in pedestrian safety, education, community engagement, research and evaluation. All recommendations and the recommendations developed by California Walks in this capacity must be thoroughly evaluated by a licensed a professional engineer for appropriateness and feasibility.

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GLOSSARY

Pacific Coast Highway (PCH) PCH Traffic Safety Taskforce (Taskforce) California Office of Traffic Safety (OTS) Leading Pedestrian Interval (LPI) Pedestrian Hybrid Beacon (PHB) California Department of Transportation (Caltrans) Los Angeles County Metropolitan Transportation Authority (LA Metro) Americans with Disabilities Act (ADA) Transportation Concept Report (TCR) Statewide Integrated Traffic Records System (SWITRS) Transportation Injury Mapping System (TIMS) UC Berkeley Safe Transportation Research and Education Center (SafeTREC) Los Angeles County Sheriff's Department (LASD) Los Angeles Police Department (LAPD) Santa Monica Police Department (SMPD) California Highway Patrol (CHP) Malibu Surfing Association (MSA)

Executive Summary

The City of Malibu, applying on behalf of the Pacific Coast Highway (PCH) Taskforce, received a safety corridor grant from the California Office of Traffic Safety (OTS) to promote motorist, pedestrian, and bicycle safety and to increase safety awareness along the section of the PCH from the McClure Tunnel in Santa Monica west to the Ventura County line (PCH). The PCH Taskforce retained California Walks to evaluate pedestrian safety conditions along the PCH corridor, to educate and engage community residents and affected stakeholders, and to develop community-driven, best practice recommendations to improve pedestrian safety along the corridor. The purpose of this Final Recommendations Report is to provide specific recommendations for treatments, projects and programs to improve and promote pedestrian safety on PCH for consideration by the Taskforce. California Walks also completed an Existing Conditions Report (Appendix A) that informs this Final Recommendations Report.

The Existing Conditions Report and the Final Recommendations Report focused on the following three assessment zones and areas of concern:

- Assessment Zone #1: Temescal Canyon Road to Palisades Bowl Mobile Home Park
- Assessment Zone #2: Malibu Pier to Malibu Lagoon/Surfrider Beach
- Assessment Zone #3: Zuma Beach Area
- Area of Concern (a) Moonshadows Restaurant Area
- Area of Concern (b) Malibu Seafood Restaurant Area
- Area of Concern (c) Entrada Drive/West Channel Road/Chautauqua Blvd.

California Walks staff worked to evaluate both quantitative and qualitative pedestrian safety issues and concerns to understand the existing conditions along PCH through the use of: collision data, police reports, twenty-seven (27) key informant and stakeholder interviews, three (3) in-person site visits, and two (2) school arrival and dismissal observations. The Final Recommendations were developed through the analysis of collision data and application of best practices with the guidance of the community and resident priorities.

Community and Resident Priorities

Community input and priorities shaped the direction and types of recommendations offered in this report. California Walks hosted location-specific community outreach, education, and engagement activities to gather a snapshot of public input and priorities related to increasing pedestrian access along and across PCH. It should be noted that as a snapshot, these activities only provide the views of individuals polled and may not fully represent the views of other PCH residents and visitors. Cumulatively, community educational engagement events engaged and collected input from 217 individuals of all ages, including children and youth. This included 330 expressions of priorities for the type of pedestrian safety strategies those individuals recommend that the PCH Taskforce and its member agencies now pursue. California Walks educated an additional 1,200 residents and visitors via educational pedestrian safety posters and banners displayed during the educational outreach and engagement events.

PCH residents and visitors strongly supported crossing improvements via pedestrian over/undercrossings; upgrading existing marked crossings with safety enhancements including: high-visibility crosswalk markings, advanced yield lines, additional high-visibility/fluorescent warning signage, and pedestrian countdown timers; and providing physically-separated pedestrian pathways. All of these speak to the desire to increase safe pedestrian access across and along PCH as well as to current perceptions of the lack of pedestrian safety. The second tier of community crossing improvement priorities includes installation of pedestrian-actuated beacons and signals and the installation of new marked crossings in high-demand locations. Education and enforcement strategies were also important.

Tier I Community Generated Suggestions for Priority Engineering Strategies
Construct a Pedestrian Overcrossing/Undercrossing
Safety Enhancements at Existing Marked Crossings
Provide Physically-Separated Pedestrian Pathways
(Sidewalks, Side Paths, and/or Paved Shoulders)
Tier II Community Generated Suggestions for Priority Engineering Strategies
Install Pedestrian-Actuated Beacons & Signals
Install New Marked Crossings

Collision Data

Between 2010 and 2014, there were forty-three (43) motor vehicle collisions involving pedestrians along the PCH section under the jurisdiction of the Taskforce (the Corridor). The majority of the pedestrian collisions (28) occurred in the Malibu section, including a high number of severe injury collisions. This total tracks with the physical length of the highway located within Malibu city limits, which is equivalent to two-thirds or 20 miles of the entire nearly 30 mile corridor. Half of the fatal pedestrian fatalities occurred in the Malibu section (6), with the other half (6) occurring in the much shorter 4 mile City of Los Angeles length of the PCH corridor.

Pedestrian collisions are concentrated in areas with recreation and/or retail destinations on either side of PCH; for example, the Will Rogers State Beach and Malibu Pier to Surfrider Beach areas experienced high numbers of pedestrian collisions. In the Malibu section, collisions are concentrated in the eastern half of the City, from the eastern City limits to Cross Creek Rd.

Recommendations

Extensive education and engagement of community residents and visitors greatly informed the direction of California Walks' pedestrian safety recommendations. California Walks recommends the following to improve pedestrian safety in the PCH Corridor:

Corridor-wide Recommendation #1 (C-1): Enhance Pedestrian & Motorist Wayfinding Signage to Existing Pedestrian Undercrossings: California Walks recommends adopting a uniform and more conspicuous wayfinding system to inform both drivers and pedestrians of the location of existing undercrossings.

Corridor-wide Recommendation #2 (C-2): Dedicate Funding for Maintenance of Existing & Proposed Pedestrian Undercrossings: California Walks recommends that agencies responsible for existing and proposed pedestrian undercrossings set-aside funds dedicated for ongoing maintenance to address nuisance and personal security concerns.

Corridor-wide Recommendation #3 (C-3): Enhance Existing Pedestrian Crossings at Signalized Intersections: California Walks recommends implementing the following improvements corridor-wide at existing signalized intersections with marked pedestrian crossings:

- Corridor-wide Recommendation #3a (C-3a): Enhance Existing Signalized Crossings with Pedestrian Countdown Signals
 Pedestrian countdown signals provide pedestrians with the amount of time left to cross the street before the traffic signal changes.
- Corridor-wide Recommendation #3b (C-3b): Enhance Existing Signalized Crossings with Leading Pedestrian Intervals
 Leading pedestrian intervals (LPIs) minimize conflicts between pedestrians crossing a roadway and left or right turning vehicles by providing pedestrian with a dedicated "walk" signal 3-7 seconds before motorists are allowed to proceed through the intersection.
- Corridor-wide Recommendation #3c (C-3c): Enhance Existing Signalized Crossings by Restoring/Upgrading Pedestrian Crossings with High Visibility Markings
 California Walks also recommends enhancing crossings along the PCH corridor at existing signalized three-legged crossings.

Corridor-wide Recommendation #4 (C-4): Install Pedestrian-Scale Lighting at All Existing & Newly Marked Crossings: California Walks recommends installing pedestrian-scale lighting at all existing marked crossings, whether signalized or unsignalized.

Corridor-wide Recommendation #5 (C-5): Upgrade Warning Beacons at Existing Uncontrolled Crossings to Pedestrian Hybrid Beacons: California Walks recommends upgrading all existing warning beacons at existing uncontrolled crossings to pedestrian hybrid beacons (PHB).

Corridor-wide Recommendation #6 (C-6): Evaluate the Feasibility of & Establish a Policy for Additional High-Visibility Marked Crossings for High Pedestrian Activity Centers, including Transit Stops: California Walks recommends Caltrans work with local agencies and community residents to consider, identify and prioritize locations for new at-grade marked crossings, as well as applicable minimum safety enhancements needed. New crosswalk markingswith any applicable minimum safety enhancement should also be considered, based on engineering analysis, where there is clear pedestrian activity but crosswalk markings are currently lacking. Clear pedestrian activity includes transit stop locations.

Corridor-wide Recommendation #7 (C-7): Improve & Increase Access to Transit Stops through Crosswalk Alignment & ADA Enhancements: California Walks recommends working with LA Metro to relocate transit stops along PCH that are not currently aligned with an existing marked

crossing. Where aligning stops at existing marked crosswalks is infeasible, California Walks recommends evaluating the possibility of relocating the marked crosswalk to align with existing transit stops instead.

Corridor-wide Recommendation #8 (C-8): Update the Caltrans Transportation Concept Report (TCR) for PCH to Conform to Current Caltrans Policies & Design Standards: California Walks recommends working with Caltrans to update the TCR to incorporate many of the Departmental policy and design flexibility directives that have been adopted since 2004, including: Deputy Directive 64-R2 ("Complete Streets – Integrating the Transportation System"); the 2013 Main Street, California Guide; the 2010 Caltrans ADA lawsuit settlement; and the 2015 Caltrans Strategic Management Plan. Most importantly, the TCR should recognize the Main Street nature of much of the PCH corridor and establish a clear vision and process for Caltrans' partnership with local agencies to ensure PCH is a multimodal corridor that meets the demands of all types of users. California Walks also recommends that the updated TCR account for the huge influx of motorists, pedestrians and bicyclists during the long tourist season.

Corridor-wide Recommendation #9 (C-9): Manage Speeds with Speed Feedback Devices & Gateway Treatments: California Walks supports the current use of permanent and portable speed feedback devices as a driver safety education strategy to manage vehicle speeds. California Walks also recommends exploring the installation of several gateway features at each end of the PCH corridor, as well as when entering high pedestrian activity areas (e.g., Malibu Pier area; Zuma Beach area, Malibu city limits, etc.). Gateway treatments visually demonstrate to and educate drivers that they are entering a zone with many pedestrians present and other activity requiring slower speeds.

A complete list of all recommendations, including assessment zone recommendations can be reviewed in Chapters 5-8 and Appendix E.

The improvements recommended in this Report represent what California Walks believes to be the most effective, best practice measures to address safety issues in alignment with the public's expressed concerns and priorities for next steps to improve pedestrian safety on PCH. Other measures not specifically recommended by this Report but identified by previous or future studies may also be feasible and effective. Implementing the Recommendations in this Report requires the involvement of multiple stakeholders and agencies and will also require further multimodal safety analysis by a licensed traffic engineering to ensure location-specific appropriateness and feasibility. Appendix E summarizes the recommendations and provides relative costs (low, medium, high, very high) and ideal timelines (short, medium or long term) for each recommendation to help guide implementation.

Chapter 1. Introduction

Project Background

The City of Malibu, applying on behalf of the Pacific Coast Highway Taskforce, received a safety corridor grant from the California Office of Traffic Safety (OTS) to promote motorist, pedestrian, and bicycle safety and to increase safety awareness along the Pacific Coast Highway (PCH). The PCH Taskforce (the Taskforce) is an active coalition comprised of community representatives, pedestrian and bicycle advocates, residents, law enforcement, city and traffic engineers, Caltrans, and local and state elected officials. The Taskforce jurisdiction stretches for nearly 30 miles of the Pacific Coast Highway from the McClure Tunnel in Santa Monica to the Ventura County line, including the cities of Santa Monica, Los Angeles, Malibu and unincorporated Los Angeles County. The PCH, California 1, itself is owned, operated and maintained by the California Department of Transportation (Caltrans).

As part of the PCH Safety Corridor Grant, the Taskforce retained California Walks to evaluate pedestrian safety conditions along the PCH corridor, to educate and engage community residents and affected stakeholders and to develop community-driven, best practice recommendations to improve pedestrian safety along the PCH corridor. California Walks is a statewide educational non-profit organization that partners with state agencies, organizations and communities to establish and strengthen policies and practices that support pedestrian safety and healthy, walkable communities. Previously, California Walks completed an Existing Conditions Report (see Appendix A) that has informed this Final Recommendations Report.

Purpose & Scope of Final Recommendations Report

The purpose of this Final Recommendations Report is to provide specific recommendations for treatments, projects and programs to improve and promote pedestrian safety on PCH for consideration by the Taskforce.

California Walks staff and the PCH Corridor Grant Subcommittee—which includes residents, law enforcement agency representatives, Taskforce Co-Chair representatives and the City of Malibu—identified three assessment zones and three additional areas of concern that are the focus of these Recommendations and the Existing Conditions Report.

The following were identified as critical areas in need of pedestrian safety improvements based on site visits, analysis of collision data, and local knowledge:

- Assessment Zone #1: Temescal Canyon Road to Palisades Bowl Mobile Home Park
- Assessment Zone #2: Malibu Pier to Malibu Lagoon/Surfrider Beach
- Assessment Zone #3: Zuma Beach Area
- Area of Concern (a) Moonshadows Restaurant Area
- Area of Concern (b) Malibu Seafood Restaurant Area
- Area of Concern (c) Entrada Drive/West Channel Road/Chautauqua Boulevard

Process

California Walks staff worked to evaluate both quantitative and qualitative pedestrian safety issues and concerns to understand the existing conditions along PCH through the use of: collision data, police reports, twenty-seven (27) key informant and stakeholder interviews, three (3) in-person site visits, and two (2) school arrival and dismissal observations. The Existing Conditions Report is attached herein as Appendix A and summarizes the quantitative and qualitative data collected that was used to inform this final recommendations report. The final recommendations were developed through the analysis of collision data and application of best practices, with the guidance of community resident input.

Community Resident Feedback & Priorities for Pedestrian Safety Strategies

Community input and priorities shaped the direction and type of recommendations offered in this report. California Walks conducted location-specific community outreach, education, and engagement activities to gather a snapshot of public input and priorities related to increasing pedestrian access along and across PCH. It should be noted that as a snapshot, these activities only provide the views of individuals polled and may not fully represent the views of other PCH residents and visitors. California Walks then developed specific recommendations for treatments, projects, and programs based on analysis of existing conditions, best practice and input from the community. California Walks facilitated the following community educational outreach and engagement activities:

- Assessment Zone #1: Temescal Canyon Road to Palisades Bowl Mobile Home Park
 - o Palisades Bowl Mobile Home Park Pedestrian Safety Education Workshop
 - Palisades Charter High School Interactive Lunchtime Pedestrian Safety Discussion & Educational Display
 - Temescal Canyon Road/PCH Pedestrian Interactive Pedestrian Safety Sidewalk Discussion & Educational Display
 - Pacific Palisades Community Council Pedestrian Safety Education Presentation
 & Discussion
- Assessment Zone #2: Malibu Pier to Malibu Lagoon/Surfrider Beach
 - Malibu Pier Interactive Pedestrian Safety Sidewalk Discussion & Educational Display
 - Chabad of Malibu Pedestrian Safety Education Workshop
 - Surfrider Beach Interactive Pedestrian Safety Sidewalk Discussion & Educational Display
- Assessment Zone #3: Zuma Beach Area
 - Zuma Beach Interactive Pedestrian Safety Sidewalk Discussion & Educational Display
 - Boys and Girls Clubs Pedestrian Safety Education Trainings & Discussions (Elementary School-Aged and Middle-School Youth & Teenaged Youth)
 - Juan Cabrillo Elementary School Back-to-School BBQ Interactive Pedestrian Safety Education Discussion & Educational Display

Cumulatively, community educational engagement events engaged and collected input from 217 individuals of all ages, including children and youth. The events collected 330 expressions

of priorities for the pedestrian safety strategies that the PCH Taskforce and its member agencies consider pursuing. This informal process provides a snapshot of individuals' impressions but is not offered as statistically valid. California Walks educated an additional 1,200 residents and visitors via educational pedestrian safety posters and banners displayed during the educational outreach and engagement events.

Pedestrian Collision Data

California Walks staff reviewed and analyzed the most recent 5 years of collision data (2008-2012) from the Statewide Integrated Traffic Records System (SWITRS), accessed through the Transportation Injury Mapping System (TIMS), operated by the UC Berkeley Safe Transportation Research and Education Center (SafeTREC). Analysis of the 2008-2012 data can be found in the Existing Conditions Report (Appendix A). To supplement the publicly available collision data to conduct a comprehensive analysis, on behalf of the PCH Taskforce, California Walks' staff requested additional recent collision summaries and reports for 2013-2014 from the following law enforcement agencies: Los Angeles County Sheriff's Malibu-Lost Hills Station; Los Angeles Police Department; Santa Monica Police Department; and the California Highway Patrol (CHP). The collision data from 2013 and 2014 is provisional and not yet final. This Final Recommendations Report includes an analysis of the 2010-2014 collision data (see Chapter 2).

The community engagement exercises, results, and California Walks' recommendations for improved pedestrian safety are discussed in detail in Chapters 3–8.

Chapter 2. Collision Data Analysis

Between 2010 and 2014, there were forty-three (43) motor vehicle collisions involving pedestrians along the PCH section under jurisdiction of the Taskforce, of which forty-two (42) are reviewed in this Report. The majority of the pedestrian collisions (28) occurred in Malibu, including a high number of severe injury collisions. This total tracks with the nearly 20-mile length of the highway located within Malibu city limits—equivalent to two-thirds of the entire Corridor. Half of the total number of fatal pedestrian collisions along the PCH corridor occurred in the Malibu section (6). The other half of these pedestrian fatalities (6) occurred within the Los Angeles city limits, a far shorter length estimated at 4 miles—equivalent to roughly 20% of the PCH corridor under Taskforce jurisdiction.

Jurisdiction	Fatal Collisions	Severe Injury Collisions	Other Injury Collisions	Total
Los Angeles	6	0	4	10
Malibu	6	9	12	27
Santa Monica	0	0	2	2
Unincorporated Los Angeles County	0	3	0	3
Total	12	12	18	42

Table 1: Pacific Coast Highway Pedestrian Collisions, 2010-2014 (by Jurisdiction & Severity)

Over half of the pedestrian collisions resulted in fatal or severe pedestrian injuries, with nearly one-third of all pedestrian collisions resulting in a fatality (30.2%) and over a quarter resulting in severe injuries (27.9%).

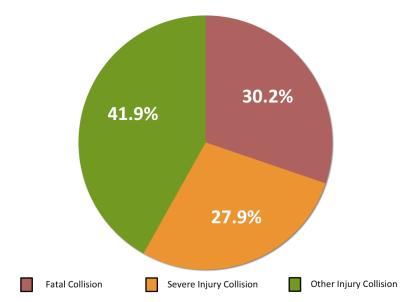


Figure 1: 2010-2014 Pacific Coast Highway Pedestrian Collisions (by Severity)

¹ There was one (1) bicycle-pedestrian collision that occurred during this time period that has been excluded from the analysis for the purposes of this report.

Roughly 51% of pedestrian collisions can be attributed to a Pedestrian Violation, while 44% can be attributed to driver violations.

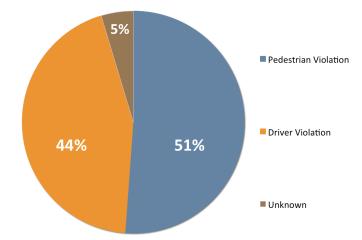


Figure 2: 2010-2014 Pacific Coast Highway Pedestrian Collision Factor (by Primary Collision Factor)

Of the collisions attributable to Driver Violation, the top Primary Collision Factors (PCF) are Unsafe Lane Changes (26.3%), Pedestrian Right-of-Way Violations³ (26.3%), and Improper Turning (21.1%).

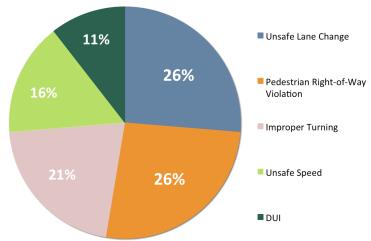


Figure 3: 2010-2014 Pacific Coast Highway Pedestrian Collisions Attributable to Driver Violation (by Primary Collision Factor)

Nearly half of the pedestrian collisions occurred after 6:00 pm (44.2%), and a majority of pedestrian collisions are concentrated in the spring and summer months that coincide with the

² Pedestrian Violations constitute a wide array of pedestrian behaviors, including, but not limited to, failure to yield to motorists when crossing outside of a crosswalk (marked or unmarked) and crossing against a pedestrian signal displaying the upraised hand or "don't walk."

³ Pedestrian Right-of-Way Violations occur when a driver fails to yield to a pedestrian who has the legal right-of-way in a marked or unmarked crosswalk and is crossing the road.

tourist season. Lastly, a majority of pedestrian collisions occur during the weekend, with nearly one-third occurring on Sundays (30.9%).

Collisions Involving Pedestrians

(By Time of Day)

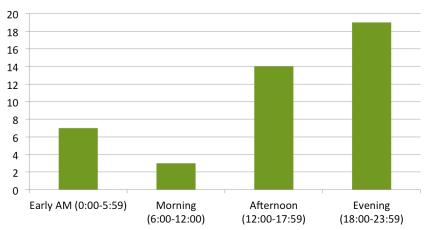


Figure 4: 2010-2014 Pacific Coast Highway Pedestrian Collisions (by Time of Day)

Collisions Involving Pedestrians

(By Time of Year)

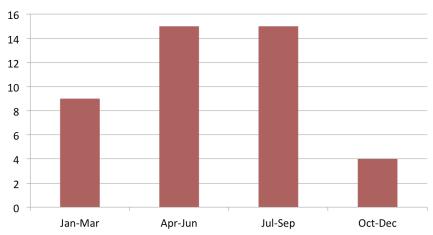


Figure 5: 2010-2014 Pacific Coast Highway Pedestrian Collisions (by Time of Year)

Collisions Involving Pedestrians

(By Day of Week)

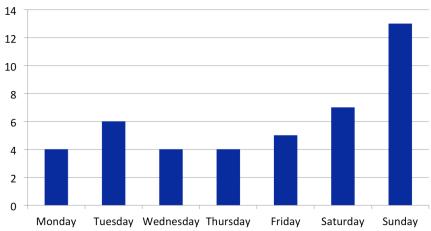


Figure 6: 2010-2014 Pacific Coast Highway Pedestrian Collisions (by Day of Week)

Pedestrian collisions are concentrated in areas with recreational and/or retail destinations on either side of PCH; for example, the Will Rogers State Beach and Malibu Pier to Surfrider Beach areas each experienced high numbers of pedestrian collisions.

In the Malibu section, collisions are concentrated in the eastern half: from the eastern City limits to Cross Creek Road. Roughly 57% of pedestrian collisions within the City of Malibu can be attributed to a Pedestrian Violation, while 39% can be attributed to driver violations.

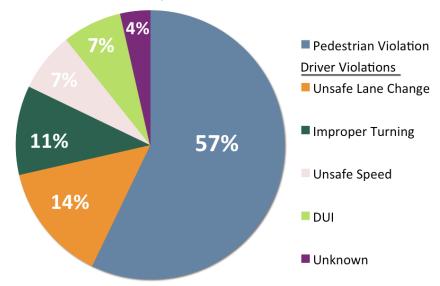


Figure 7: 2010-2014 Malibu Pedestrian Collisions (by Primary Collision Factor)

Due to the lack of traffic signals for long stretches of the corridor, pedestrians are permitted to cross PCH in most locations outside of marked or unmarked crosswalks. Generally, pedestrians may cross outside of a crosswalk (marked or unmarked) when the two nearest intersections are not controlled by traffic signals. However, in these instances, pedestrians must yield the right-

of-way to all vehicles so near as to constitute an immediate hazard and also must cross in a safe and predictable manner.⁴ This does not, however, relieve drivers from "the duty to exercise due care for the safety of any pedestrian upon a roadway."

⁴ California Vehicle Code (CVC) Section 21954, Pedestrians Outside Crosswalks.

Chapter 3. Community Resident Priorities

Community input and priorities shaped the direction and types of recommendations offered in this report. California Walks hosted location-specific community pedestrian safety education outreach and engagement activities—including workshops, trainings, sidewalk pedestrian safety discussions, and interactive educational displays—in order to gather a snapshot of public input and priorities.

California Walks developed a Pedestrian Safety Toolbox (Appendix B) to educate residents on:

1) pedestrian safety best practices including a range of pedestrian safety treatments and strategies spanning the fields of engineering, education, and enforcement that could be pursued to improve pedestrian safety on PCH; 2) the effectiveness of different pedestrian safety treatments; and 3) tradeoffs between different pedestrian safety strategies (including relative benefits and costs). Additionally, community members participated in informal prioritization exercises to identify priority pedestrian safety improvement strategies for PCH. The exercises provide a snapshot of the individuals polled, speak to participants' perception of safety, and reflect how participants believe pedestrian access along and across PCH can be improved.

This educational community engagement approach helps develop community-identified priorities for pedestrian safety improvements and has been recognized as effective by the California Office of Traffic Safety Director, as well as nationally. It should be noted that the prioritization exercises provide only a snapshot of the views of individuals polled and may not fully represent the views of other PCH residents and visitors.

The original PCH Pedestrian Safety Toolbox contained 11 categories of treatments and strategies, including a write-in "Other" category. California Walks organized write-in responses into an additional 3 categories (Install Bicycle Facilities on PCH; Improve Parking & Local Traffic Circulation; and Miscellaneous). The final PCH Pedestrian Safety Toolbox contained 14 categories, as follows:

- Educational Strategies
 - Launch a Pedestrian Safety Educational Campaign
- Enforcement Strategies
 - Pursue a Progressive Ticketing Campaign
 - Explore Automated Speed Enforcement Pilot Program
- Engineering Improvements
 - Safety Enhancements at Existing Marked Crossings
 - Install New Marked Crossings
 - Install Pedestrian-Actuated Beacons & Signals
 - Provide Physically-Separated Pedestrian Pathways (Sidewalks, Side Paths, and/or Paved Shoulders)
 - o Install Pedestrian Crossing Improvements

⁵ See Governors Highway Safety Association and State Farm Report: <u>Everyone Walks. Understanding & Addressing Pedestrian Safety</u>, pp.61-64.

- Explore Road Dieting or Rightsizing on PCH
- Construct a Pedestrian Overcrossing/Undercrossing where installed, improved, safe at-grade crossings have proven ineffective
- Install a Gateway Treatment and/or Other Speed Management Techniques
- Install Bicycle Facilities on PCH
- Improve Parking & Local Traffic Circulation
- Miscellaneous

Additionally, some participants identified pedestrian safety treatments and strategies for specific locations based on their local knowledge and experience with the PCH corridor.

All educational outreach and engagement events incorporated the prioritization exercise, except at the Chabad of Malibu workshop where participants preferred a more in-depth exploration of corridor-wide priority issues. This chapter captures the top community safety improvement priorities corridor-wide as well as by Assessment Zone and describes the community education, engagement, and outreach events in each Zone. Appendix C documents all participant input in a summary table format for easy reference.

Corridor-wide Community-Generated Suggestions for Priority Pedestrian Safety Improvement Strategies

At a corridor level, community residents and visitors consistently identified expanded opportunities to safely cross and walk along PCH as the priority, accomplished by engineering, education, and enforcement strategies.

Residents and visitors engaged through the prioritization exercises identified addressing the lack of adequate safe pedestrian access along and across PCH as a community priority. Education and enforcement strategies, as elsewhere, are not perceived as sufficient by the community to ensure safe access along and across PCH. Engineering strategies were ranked as the highest priority to improve pedestrian safety on PCH. No single strategy or treatment category was supported by participant input. Participants in all 3 Assessment Zones prioritized safer crossings, such as constructing pedestrian over/undercrossings or various at-grade crossing improvements and physically-separated pedestrian pathways (sidewalks, side paths, or paved shoulders). It should be noted that the prioritization exercises provide only a snapshot of the views of individuals polled and may not fully represent the views of other PCH residents and visitors.

PCH residents and visitors strongly supported crossing improvements via pedestrian over/undercrossings; upgrading existing marked crossings with safety enhancements including: high-visibility crosswalk markings; advanced yield lines; additional high-visibility/fluorescent warning signage; pedestrian countdown timers; and physically separated pedestrian pathways. The second tier of community-generated suggestions for pedestrian safety improvement priorities include installation of pedestrian-actuated beacons and signals and the installation of new marked crossings in high-demand locations. Education and enforcement strategies were also important. These community-generated suggestions for pedestrian safety improvements

inform California Walks' recommendations for the Assessment Zones, Areas of Concern, and corridor-wide on PCH.

Tier I Community-Generated Suggestions for Priority Engineering Strategies
Construct a Pedestrian Overcrossing/Undercrossing
Safety Enhancements at Existing Marked Crossings
Provide Physically-Separated Pedestrian Pathways
(Sidewalks, Side Paths, and/or Paved Shoulders)
Tier II Community-Generated Suggestions for Priority Engineering Strategies
Install Pedestrian-Actuated Beacons & Signals
Install New Marked Crossings

Table 2. Community-Generated Suggestions for Priority Pedestrian Safety Improvement Strategies (by Tier)

Assessment Zone #1: Temescal Canyon Road to Palisades Bowl Mobile Home Park

Participants in Assessment Zone #1 strongly favored engineering strategies to improve pedestrian safety in the study zone. The pedestrian safety improvement categories most supported by community resident and visitor participants were (in order of priority):

- Construct a Pedestrian Overcrossing/Undercrossing;
- Safety Enhancements at Existing Marked Crossings;
- Install Pedestrian-Actuated Beacons & Signals; and
- Provide Physically-Separated Pedestrian Pathways (Sidewalks, Side Paths, and/or Paved Shoulders).

	Assessmen		emescal Canyo Nobile Home P		isades
Pedestrian Safety Toolbox Category	Palisades Bowl — Pedestrian Safety Education Workshop	Palisades Charter HS – Lunchtime Discussion	Temescal Canyon/PCH — Sidewalk Discussion	Pacific Palisades Community Council — Safety Discussion	Total
Safety Enhancements at Existing Marked Crossings	11	3	0	6	20
Install New Marked Crossings	0	1	1	4	6
Install Pedestrian-Actuated Beacons & Signals	9	2	0	4	15
Provide Physically- Separated Pedestrian Pathways (Sidewalks, Side Paths, Paved Shoulders)	5	4	0	5	14
Install Pedestrian Crossing	4	2	0	5	11

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Improvements					
Explore Road Dieting or	0	1	1	4	6
Rightsizing on PCH	0	1	T	4	0
Construct a Pedestrian	0	4	2	17	23
Overcrossing/Undercrossing	O	4	2	17	23
Install a Gateway Treatment					
and/or Other Speed	3	0	1	2	6
Management Techniques					
Install Bicycle Facilities on	0	1	1	0	2
PCH	0	1	1	U	2
Improve Parking & Local	0	0	0	0	0
Traffic Circulation	U	U	U	U	U
Launch an Educational	2	2	1	3	0
Campaign	2	2	1	3	8
Pursue a Progressive	3	0	0	3	6
Ticketing Campaign	3	U	U	3	ס
Explore Automated Speed	1	0	0	0	1
Enforcement Pilot Program	1	U	U	U	1
Miscellaneous	0	0	0	0	0

Table 3. Community-Generated Suggestions for Assessment Zone #1 Priorities; Top Pedestrian Safety Improvement Categories Bolded

Palisades Bowl Mobile Home Park – Pedestrian Safety Education Workshop
On May 17, 2015, California Walks facilitated a two-hour pedestrian safety education workshop at Palisades Bowl Mobile Home Park from 4:00 pm-6:00 pm. Approximately fifteen (15) residents attended the workshop. As with participants in other Zones, participants expressed a strong preference for engineering strategies over education or enforcement strategies. Of the education and enforcement strategies discussed, participants supported establishment of a pedestrian safety awareness month and a progressive ticketing campaign.

In addition to discussing potential pedestrian safety strategies, the workshop also included a robust discussion regarding the planned installation of a pedestrian hybrid beacon (PHB) at the existing Palisades Bowl crosswalk. Unimproved bus stops on both sides of PCH are aligned with this crosswalk and are utilized by students, workers, and visitors. Prior to the workshop, Caltrans representatives reported a delay in the PHB installation from late Fall 2015 until summer of 2016. Due to this unexpected delay and the known risk from current driver failure to yield to pedestrians at the Palisades Bowl Crosswalk, workshop participants expressed a strong desire for Caltrans to provide temporary safety improvements enabling residents to safely reach the distant existing signalized crossing at Temescal Canyon until the PHB is installed. During the course of this project, Caltrans announced that installation has been expedited to March 2016.

Palisades Charter High School – Interactive Lunchtime Pedestrian Safety Discussion & Educational Display

On May 18, 2015, California Walks engaged Palisades Charter High School students and staff members during the lunch hour through an interactive educational prioritization discussion and display. California Walks team members spoke in-depth and at-length with five (5) staff members and five (5) students. As with participants in other Zones, the students and faculty expressed a strong preference for engineering over education or enforcement strategies, alone. Students also expressed a desire for bicycle lanes and other bicycle facilities on PCH—this comment was echoed in other community engagement events.

Temescal Canyon Road/PCH Pedestrian – Interactive Pedestrian Safety Sidewalk Discussion & Educational Display

On May 18, 2015, California Walks engaged commuting students, residents, and visitors at Will Rogers State Beach through a sidewalk pedestrian safety discussion and interactive educational display from 2:00 pm-4:00 pm. California Walks strategically selected an area close to the Metro bus stop at the corner of Temescal Canyon Road and Pacific Coast Highway to increase visibility of our efforts to both pedestrians and drivers. Hundreds of drivers and pedestrians viewed the "Make PCH a Safer Place to Walk" banner and other educational materials that afternoon. Martha Groves, a reporter from the Los Angeles Times, attended and interviewed several bus commuters. California Walks was able to speak to five to ten (5-10) people for varying lengths of time, and five (5) more people participated in the interactive display and prioritization exercise.

From approximately 2:15 pm-3:00 pm, a rush of transit riders and other pedestrians, including a large volume of Palisades Charter students, crossed PCH to wait for the Metro bus. During this time, there were two clear peak periods with student transit riders. Roughly every five minute signal cycle, at least five pedestrians were waiting and ready to cross PCH at Temescal Canyon Road, both landside and beachside. One of the transit riders interviewed shared (in Spanish) that the intersection was very busy, especially on weekends, and that high vehicle speeds were her highest concern. California Walks also received feedback from a bicyclist leaving the beach who strongly voiced the need for bike lanes on PCH.

Pacific Palisades Community Council – Pedestrian Safety Education Presentation & Discussion On June 25, 2015, California Walks presented and facilitated a discussion on the PCH Pedestrian Safety Project at the Pacific Palisades Community Council meeting from 7:00 pm-9:00 pm. In total, forty (40) residents participated in the prioritization exercise, and the following organizations were represented:

- Temescal Canyon Association
- Pacific Palisades Historical Society;
- Pacific Palisades Civic League;
- Pacific Palisades Garden Club;
- Pacific Palisades Residents Association;
- Palisades Chamber of Commerce;

- Palisades News; and
- Palisadian Post.

As with participants in other Zones, these participants expressed a strong preference for engineering strategies over education or enforcement strategies and were particularly vocal in their support for pedestrian overcrossings in general and specifically for an overcrossing from Potrero Canyon Park to Will Rogers State Beach.

Assessment Zone #2: Malibu Pier to Malibu Lagoon/Surfrider Beach

Participants in Assessment Zone #2 strongly favored engineering strategies to improve pedestrian safety in the study zone. The pedestrian safety improvement categories most supported by community resident and visitor participants were (in order of priority):

- Install New Marked Crossings;
- Install Pedestrian Crossing Improvements
- Install Pedestrian-Actuated Beacons & Signals; and
- Launch an Educational Campaign

	Assessment Zone #2: Malibu Pier to Malibu Lagoon/Surfrider Beach		
	Malibu Pier –	Surfrider Beach –	
Pedestrian Safety Toolbox Category	Sidewalk Discussion	Sidewalk Discussion	Total
Safety Enhancements at Existing Marked Crossings	1	2	3
Install New Marked Crossings	7	3	10
Install Pedestrian-Actuated Beacons & Signals	6	0	6
Provide Physically-Separated Pedestrian Pathways (Sidewalks, Side Paths, and/or Paved Shoulders)	2	0	2
Install Pedestrian Crossing Improvements	5	1	6
Explore Road Dieting or Rightsizing on PCH	0	0	0
Construct a Pedestrian Overcrossing/Undercrossing	3	0	3
Install a Gateway Treatment and/or Other Speed Management Techniques	1	1	2
Install Bicycle Facilities on PCH	0	1	1
Improve Parking & Local Traffic Circulation	2	0	2
Launch an Educational Campaign	2	3	5
Pursue a Progressive Ticketing Campaign	2	1	3

Explore Automated Speed Enforcement Pilot Program	1	0	1
Miscellaneous	0	0	0

Table 4. Community-Generated Suggestions for Assessment Zone #2 Priorities; Top Pedestrian Safety Improvement Categories Bolded

Malibu Pier – Interactive Pedestrian Safety Sidewalk Discussion & Educational Display On July 25, 2015, California Walks hosted a sidewalk discussion at Malibu Pier from 1:30 pm-3:00 pm. California Walks spoke at length with forty-five (45) people at the Pier, including approximately five (5) who identified themselves as Pier restaurant manager/workers. The Malibu Pier participants—mostly tourists and visitors—indicated a preference for pursuing engineering strategies over education and enforcement strategies.

Chabad of Malibu – Pedestrian Safety Education Workshop

On July 26, 2015, California Walks hosted a two-hour workshop from 10:00 am-12:00 pm at the Chabad of Malibu located near the Malibu Pier. Eleven (11) key stakeholders attended the workshop. During the discussion, workshop participants underscored the conflicting uses of PCH and the need to accommodate the different types of users. Specifically, the group discussed concerns about walking along and across at Paradise Cove, Malibu Seafood, and numerous beach access points.

The group also discussed access issues at Surfrider Beach at length, including challenges with: double parking; surfers and other beachgoers who cross where there is no marked crosswalk to access the existing stairwell beach entrance; and distracted drivers who may cause rear end collisions. John Hinkle, President of the Malibu Surfing Association, expressed that his organization would like to see a marked crossing installed at the existing Surfrider Beach west end access stairwell—a marked crossing enhanced with either a pedestrian-actuated beacon or a full traffic signal could be located to utilize existing lighting and electrical poles.

Surfrider Beach – Interactive Pedestrian Safety Sidewalk Discussion & Educational Display On July 26, 2015, California Walks hosted a sidewalk discussion at Surfrider Beach from 1:30 pm-3:30 pm. California Walks spoke at length with nine (9) visitors—several of whom self-identified as decades-long local visitors and beachgoers—and a few residents who completed the prioritization exercise. Participants expressed a preference for engineering and education treatment strategies. Residents and visitors shared with California Walks the importance of reducing and addressing speed along PCH, the significance of an educational campaign, and the need for a bike lane.

Assessment Zone #3: Zuma Beach Area

Participants in Assessment Zone #3 strongly favored engineering strategies to improve pedestrian safety in the study zone. The pedestrian safety improvement categories most supported by community resident, including children and youth and visiting participants were (in order of priority):

Construct a Pedestrian Overcrossing/Undercrossing;

- Provide Physically-Separated Pedestrian Pathways (Sidewalks, Side Paths, and/or Paved Shoulders); and
- Explore Road Dieting or Rightsizing on PCH.

	Assessment Zone #3: Zuma Beach Area			
Pedestrian Safety Toolbox Category	Zuma Beach – Sidewalk Discussion	Boys & Girls Club of Malibu – Pedestrian Safety Education Workshop	Juan Cabrillo ES BBQ –Safety Discussion	Total
Safety Enhancements at Existing Marked Crossings	2	8	2	12
Install New Marked Crossings	3	8	1	12
Install Pedestrian-Actuated Beacons & Signals	2	5	4	11
Provide Physically- Separated Pedestrian Pathways (Sidewalks, Side Paths, Paved Shoulders)	2	14	5	21
Install Pedestrian Crossing Improvements	2	3	6	11
Explore PCH Road Dieting or Rightsizing	2	10	1	13
Construct a Pedestrian Overcrossing/Undercrossing	2	21	4	27
Install a Gateway Treatment and/or Other Speed Management Techniques	2	8	1	11
Install PCH Bicycle Facilities	0	1	5	6
Improve Parking & Local Traffic Circulation	5	1	2	8
Launch an Educational Campaign	1	8	2	11
Pursue a Progressive Ticketing Campaign	1	10	1	12
Explore Automated Speed Enforcement Pilot Program	2	0	1	3
Miscellaneous	2	7	2	11

Table 5. Community-Generated Suggestions for Assessment Zone #3 Priorities; Top Pedestrian Safety Improvement Categories Bolded

Zuma Beach – Interactive Pedestrian Safety Sidewalk Discussion & Educational Display
On July 25, 2015, California Walks hosted a sidewalk discussion near the concession stands at
Zuma Beach from 10:30 am-12:00 pm. California Walks spoke at length with seven (7) local
Malibu residents who were happy to learn more about the pedestrian safety project. Local
residents indicated a preference for pursuing engineering treatments and enforcement
strategies.

Participants identified addressing parking—in terms of supply, impact on local circulation, and location—as a top strategy to improve pedestrian safety in this area and proposed numerous ideas, including: providing a free shuttle to/from the free parking located around Cross Creek area; discouraging unsafe parking related to memorials on PCH by designating an official joint PCH victims' memorial space off PCH and prohibiting memorial markers (such as crosses) on PCH itself; constructing additional parking lots off PCH; and improving parking ingress/egress. Participants at this event were very concerned about vehicle speeds and supported lowering speed limits to 45 MPH throughout Malibu, as well as improving parking and local circulation.

Boys and Girls Clubs – Pedestrian Safety Education Trainings & Discussions (Elementary School-Aged and Middle-School Youth & Teenaged Youth)

On August 5, 2015, California Walks conducted pedestrian safety trainings for elementary school-aged youth at the Boys and Girls Clubs from 11:00 am-11:30 am and for teenaged youth at the Boys and Girls Clubs from 11:30 am-12:00 pm. Thirteen (13) youth and two (2) adults participated in the first training, and twenty-one (21) youth and four (4) adults participated in the second training.

California Walks began the trainings with a brief explanation of the project, followed by a discussion of the youths' personal experiences walking on PCH. California Walks then reviewed pedestrian safety tips (Appendix D) and led a discussion on how the youth can walk and cross PCH safely. Next, California Walks staff asked youth what would make them feel safer when walking along or across PCH. California Walks also screened the "Stay Safe on PCH" PSA created by the PCH Taskforce. Finally, California Walks engaged the youth through the pedestrian safety strategy prioritization exercise.

During the trainings, California Walks staff asked youth what would make them feel safer when walking along or across PCH. In total, nineteen (19) youth provided responses that can be largely grouped as follows:

- Reduce the number of cars/level of traffic on PCH;
- Pedestrians should make eye contact with drivers, when possible.
- Install additional median reflectors on PCH;
- Ticket pedestrians who are not obeying the law;
- Construct a concrete median along PCH to separate both sides of the road to deter unsafe crossings;
- Install more traffic lights; and
- Lower the speed limit in high-density areas.

During the prioritization exercise, 34 youth participated and preferred pursuing engineering treatments and enforcement strategies.

Juan Cabrillo Elementary School Back-to-School BBQ — Interactive Pedestrian Safety Education Discussion & Educational Display

On August 19, 2015, California Walks hosted an interactive pedestrian safety and educational display at the Juan Cabrillo Elementary School Back-to-School BBQ, hosted by the PTA. The event was held from 4:00 pm-6:00 pm. Thirty (30) attendees, including both children and adults, participated in the prioritization exercise and discussed pedestrian safety on a one-on-one basis. California Walks staff distributed educational pedestrian safety materials targeted to children detailing tips on how to walk on and safely cross on PCH. Children shared that they would feel safer if motorists drove slower on PCH. Both children and their parents shared the critical need for bike lanes on the corridor (3), as well as medians and physically separating vehicles from cyclists and pedestrians (5). Parents also highlighted that Malibu Seafood and Paradise Cove are areas with high pedestrian activity and accompanying crossing issues.

Chapter 4. PCH Corridor-wide Recommendations

As noted in Chapter 3, community residents and visitors—engaged through numerous interactive events—provided the following suggestions to help guide the direction of California Walks' priority pedestrian safety recommendations. California Walks has organized these community-generated suggestions into two tiers of priority strategies, as follows:

Tier I Community-Generated Suggestions for Priority Strategies
Construct a Pedestrian Overcrossing/Undercrossing
Safety Enhancements at Existing Marked Crossings
Provide Physically-Separated Pedestrian Pathways
(Sidewalks, Side Paths, and/or Paved Shoulders)
Tier II Community-Generated Suggestions for Priority Strategies
Install Pedestrian-Actuated Beacons & Signals
Install New Marked Crossings

It should be noted that the prioritization exercises provide only a snapshot of the views of individuals polled and may not fully represent the views of other PCH residents and visitors. The following corridor-wide recommendations were developed based on these two tiers of community-generated suggestions for priority pedestrian safety improvement strategies, together with best practice and California Walks' own quantitative and qualitative analysis based on collision data and site visit observations, respectively.

Corridor-wide Recommendation #1 (C-1): Enhance Pedestrian & Motorist Wayfinding Signage to Existing Legal Pedestrian Undercrossings

Two legal coastal access points along PCH already provide safe undercrossings for some pedestrians; however, the existing undercrossings are not readily apparent from either the PCH or the adjacent parking lots. The two official undercrossings in the corridor are located at Topanga Boulevard/PCH and Entrada Drive/West Channel Road/Chautauqua Boulevard/PCH. California Walks recommends adopting a uniform and more conspicuous wayfinding system to inform both drivers and pedestrians of the locations of the existing official pedestrian undercrossings. Wayfinding signage on PCH and in coastal access parking lots should be coordinated with Caltrans and the California Coastal Commission to ensure uniformity throughout the PCH corridor.

Corridor-wide Recommendation #2 (C-2): Dedicate Funding for Maintenance of Existing & Proposed Pedestrian Undercrossings

Pedestrian undercrossings work best when they are direct, well lit, and designed to feel open and accessible. Lighting, graffiti removal, ADA-accessibility and personal security are common barriers to frequent use of pedestrian undercrossings.

⁶ Other locations described by the community as 'undercrossings' are not designed for pedestrian use but for storm water drainage or creek culverts. One of these, at Malibu Seafood, has been recommended by the City of Malibu's PCH Safety Study to be evaluated for redesign to create an officially designated pedestrian undercrossing. The other option is a safety enhanced at- grade marked crossing.

Accordingly, California Walks recommends that agencies responsible for existing and proposed pedestrian undercrossings set-aside funds dedicated for ongoing maintenance to address nuisance and personal security concerns, as well as to explore establishment of a formal "adopt an undercrossing" program to partner with residents to help care for each pedestrian undercrossing. One existing example is the adoption and resident maintenance of the Entrada undercrossing by the BOCA Neighborhood Association and the Santa Monica Canyon Civic Association.⁷

In general, undercrossings and overcrossings are exceedingly expensive and require extensive adjacent right-of-way to construct ADA-compliant ramps or elevators to meet current minimum ADA access requirements. The two official undercrossings along the PCH corridor need to be evaluated by an engineer for enhancements to bring them up to current ADA standards. Stair access alone does not meet current ADA access standards.

Moreover, pedestrians tend not to utilize over/undercrossings due to what is perceived as a circuitous detour, particularly when PCH destinations are located directly across from one another. Generally, appropriately enhanced at-grade marked crossings provide a much more direct route, which greater numbers of pedestrians will use to safely access their destinations. For these reasons, over/undercrossings should be considered a measure of last resort⁸ only after all other at-grade crossing improvements have been tested, evaluated, and proven ineffective.

Corridor-wide Recommendation #3 (C-3): Enhance Existing Pedestrian Crossings at Signalized Intersections

Community residents and visitors identified improving existing marked crossings with safety enhancements as a high-priority strategy. Accordingly, California Walks recommends implementing the following improvements corridor-wide at existing signalized intersections with marked pedestrian crossings:

• Corridor-wide Recommendation #3a (C-3a): Enhance Existing Signalized Crossings with Pedestrian Countdown Signals

Pedestrian countdown signals provide pedestrians with the amount of time left to cross the street before the traffic signal changes. Studies have shown repeatedly that people make safer crossing decisions when provided with this information.

⁷ It should be noted that even though the undercrossing is well maintained, a licensed engineer should still evaluate the undercrossing system for enhancements and improvements to either bring the undercrossing to current ADA standards or to install an added ADA-compliant at-grade crossing. Currently, it is nearly impossible for a landside visitor to locate or access the undercrossing. The complex West Channel Road/Chautauqua/Entrada intersection would benefit from an additional enhanced at-grade crossing, likely at the eastern end near the Patrick's Roadhouse corner across to the Beach—an alternative that can be included in the licensed engineer's comparative ADA access analysis.

⁸ Federal Highway Administration, "Pedestrian Overpasses/Underpasses," Pedestrian Safety Guide and Countermeasure Selection System, 2014. Available at

- Corridor-wide Recommendation #3b (C-3b): Enhance Existing Signalized Crossings with Leading Pedestrian Intervals
 - Leading pedestrian intervals (LPIs) minimize conflicts between pedestrians crossing a roadway and left or right turning vehicles by providing pedestrian with a dedicated "walk" signal 3-7 seconds before motorists are allowed to proceed through the intersection. Studies have shown that turning motorists are much more likely to yield when a pedestrian is already out in the crosswalk and clearly visible.
- Corridor-wide Recommendation #3c (C-3c): Enhance Existing Signalized Crossings by Restoring/Upgrading Pedestrian Crossings with High Visibility Markings
 California Walks also recommends enhancing crossings along the PCH corridor at existing signalized three-legged crossings. At most signalized intersections, only a single marked crossing across PCH exists, while the other is prohibited. This three-legged crossing design unnecessarily restricts pedestrian and bicyclist movement and crossings, particularly in high foot traffic areas located on either side of PCH at these intersections (e.g., shopping centers, parks, beaches) or where bicycle lane/path infrastructure exists. Restoring pedestrian crossings to all four legs of a signalized intersection would allow pedestrians to cross PCH safely at more intersections including at Morning View Drive and Temescal Canyon Road, two important intersections for beach access. Current design standards and technological advancements alleviate the need to restrict crossings at signalized intersections. For example, implementing leading pedestrian interval (LPI) at signalized PCH pedestrian crossings greatly reduces the left-turn vehicle-pedestrian conflict that likely motivated the original crossing restriction.

Corridor-wide Recommendation #4 (C-4): Install Pedestrian-Scale Lighting at All Existing & Newly Marked Crossings

California Walks' analysis of 2010-2014 pedestrian collision data revealed that nearly half of PCH pedestrian collisions (44.2%) occurred at night (after 6 PM). Accordingly, California Walks recommends installing pedestrian-scale lighting at all existing marked crossings, whether signalized or unsignalized. Pedestrian-scale lighting should be considered for the pathway—whether this is a sidewalk or on the shoulder—leading up to an existing marked crossing to increase the visibility of pedestrians traveling on PCH. Pedestrian-scale lighting can be implemented in such a manner as to be dark sky friendly.

Corridor-wide Recommendation #5 (C-5): Upgrade Warning Beacons at Existing Uncontrolled Crossings to Pedestrian Hybrid Beacons

The latest pedestrian safety research has demonstrated that pedestrian-actuated signals and beacons are much more effective than older style constantly-flashing warning beacons. Accordingly, California Walks recommends upgrading all existing warning beacons at existing uncontrolled crossings to pedestrian hybrid beacons (PHB). California Walks supports the current Taskforce, Caltrans, and City of Malibu efforts to upgrade crossings at La Costa and Palisades Bowl to PHBs, as well as supports the Malibu PCH Safety Study's recommendation to upgrade the crosswalk between the McDonald's and Busch Realty to a PHB.

Corridor-wide Recommendation #6 (C-6): Evaluate the Feasibility of & Establish a Policy for Additional High-Visibility Marked Crossings for High Pedestrian Activity Centers, including Transit Stops

Given the high influx of visitors to PCH with many parking on PCH or crossing PCH to access retail locations on the landside, there is a significant unmet need for additional at-grade marked crossings along the corridor, particularly in areas with high pedestrian volumes and pedestrian activity generators on both sides.

Presently, placement of marked crosswalks varies considerably in terms of distance from one another—some marked crosswalks are more than one mile apart, while others are as close as 0.1 mile apart. Despite several PCH sections containing several block lengths of contiguous retail/scenic tourist destinations on both sides of PCH and high pedestrian volumes, few, if any, of these sections contain marked crosswalks set at town-block length intervals (marked at 150 feet to 500 feet lengths). Yet at many PCH destinations, California Walks staff observed pedestrian volumes that exceed traditional town crossing volumes. Locations such as the Surfrider/Malibu Pier area may benefit from additional marked crossings. Observations during the July 25 and July 26, 2015 weekend clearly underscored the seasonal pattern of surging tourist and visitor volumes along the PCH corridor.

California Walks recommends Caltrans work with local agencies and community residents to identify and prioritize locations for new at-grade, marked crossings, along with any needed minimum safety enhancements. The relatively recent Caltrans Crosswalk Enhancements Policy recognizes that uncontrolled crossings require a host of safety enhancements depending on the characteristics of the roadway and that existing marked crossings on state highway facilities need to be updated with minimum safety enhancements.

Moreover, the 2014 update to the California Manual on Uniform Traffic Control Devices (CA MUTCD) has clarified that new marked crosswalks across uncontrolled intersections on roadways where speed limits exceed 40 mph should include additional safety enhancements designed to reduce traffic speeds, shorten crossing distances, enhance driver awareness, and/or provide active warning of pedestrian presence (Section 3B.18.09).

New marked crosswalks should be considered for installation in areas where there is clear pedestrian activity but crosswalk markings are currently lacking. Possible candidates for additional markings include intersections with transit stops. Thorough consideration and engineering analysis must be conducted prior to installation of any new crosswalk markings.

In developing a systematic policy for new marked crossings, California Walks recommends local agencies explore instituting developer impact fees as one source of funding for new marked crossings and accompanying safety enhancements.

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⁹ Crosswalk Enhancements Policy, Caltrans Traffic Operations Policy Directive 12-03, Available at http://www.dot.ca.gov/hq/traffops/policy/12-03.pdf

Corridor-wide Recommendation #7 (C-7): Improve & Increase Access to Transit Stops through Crosswalk Alignment & ADA Enhancements

Public transit along PCH attracts a ridership of 3,000 persons per weekday—which implies 6,000 pedestrian crossings a day as transit riders coming and going cross twice per day. However, many bus stops remain unimproved and far from marked crossings. California Walks recommends working with LA Metro to relocate transit stops along PCH that are not currently aligned with an existing marked crossing. Where aligning stops at existing marked crosswalks is infeasible, California Walks recommends evaluating the possibility of relocating the marked crosswalk to align with existing transit stops instead.

Alignment of transit stops with marked crossings encourages safer pedestrian crossing behaviors and can discourage "jaywalking" to catch the bus. Additionally, California Walks recommends aligning the landside bus stops with their designated beachside bus stops, wherever feasible, again encouraging safer pedestrian behavior.

Recently, the City of Malibu, along with Metro, upgraded 11 bus stops along PCH. California Walks commends this work and also recommends continued improvements beyond the stop itself that connect access to and from existing transit stops to marked crosswalks. For example, the Busch Drive bus stop landing improvement still requires pedestrians crossing PCH at Busch Drive to walk on the PCH roadway from the marked crosswalk to reach the bus stop.

In general, access improvements to enable safe access to and from a bus stop may include upgraded ADA-compliant curb ramps, sidewalks or separated pathway from crosswalk to bus stop; if travel on the PCH shoulder itself must continue, the addition of soft-hit post bollards on the shoulder striping creates some beachside separation between fast-moving vehicles and pedestrians.

Corridor-wide Recommendation #8 (C-8): Update the Caltrans Transportation Concept Report (TCR) for PCH to Conform to Current Caltrans Policies & Design Standards

A Transportation Concept Report (TCR) is a planning document prepared by the California Department of Transportation (Caltrans) that identifies the present geometric and operational characteristics of the transportation facility for which it was prepared, the anticipated demand in 20 years, and the suggested improvements to satisfy the future demand. The last TCR prepared for State Route 1 was published in December 2004. The 2004 TCR does not analyze land use patterns that generate pedestrian traffic along PCH.

California Walks recommends the Taskforce and local jurisdictions work with Caltrans to update the TCR to incorporate many of the Departmental policy and design flexibility directives that have been adopted since 2004, including: Deputy Directive 64-R2 ("Complete Streets – Integrating the Transportation System"); the 2013 *Main Street, California* Guide; the 2010 Caltrans ADA lawsuit settlement; and the 2015 Caltrans Strategic Management Plan. Most

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¹⁰ Mobility Matrix Report for Las Virgenes Malibu Council of Governments. Available at http://media.metro.net/projects_studies/lrtp/images/report_mobility_malibu.pdf

importantly, the TCR should recognize the Main Street residential nature of much of the PCH corridor and establish a clear vision and process for Caltrans' partnership with local agencies to ensure PCH is a multimodal corridor that meets the demands of all types of users.

Lastly, California Walks recommends that the updated TCR account for the huge influx of motorists, pedestrians and bicyclists during the long tourist season. An updated TCR needs to establish design and speed standards that are appropriate for this mix of users on a scenic highway with pedestrian attractors on both sides, including transit stops permitted parallel parking, and numerous retail and public uses, generating significant pedestrian and bicyclist crossing activity and shoulder travel in any locations without bicycle lanes, multi-use paths or sidewalks. Observations during the weekend of July 25 and July 26, 2015, for example, demonstrated that the Malibu Pier area is a popular summer destination for many, especially for tourists and local Southern Californian visitors. At each signal cycle, an estimated 50 pedestrians were observed crossing at the signalized Malibu Pier pedestrian crossing, many more than would fit within the existing marked crosswalk. Additionally, many were observed crossing outside the marked crosswalk both to the west near the staircase Surfrider Beach entrance and to the east near the retail tourist attractions to Sweetwater Canyon intersection.

Additionally, drivers unfamiliar with PCH want to make unsafe and illegal U-turns in areas with high pedestrian volumes, such as the Malibu Pier. As part of the TCR, Caltrans engineers could analyze stakeholder requests; for example, law enforcement has requested extending installation of median flexible bollards (such as currently in place near Geoffrey's) to prevent such unsafe driving maneuvers.¹¹

Corridor-wide Recommendation #9 (C-9): Manage Speeds with Speed Feedback Devices & Gateway Treatments

California Walks supports the current use of permanent and portable speed feedback devices as a strategy to educate drivers to manage vehicle speeds. PCH encompasses destination after destination along its length: state beaches with retail across the highway; beach front residences with transit stops and public beach access on PCH; and retail and other uses—creating significant pedestrian crossing demand in many locations.

Much of the PCH corridor under Taskforce jurisdiction is a non-stop scenic thruway, yet the current roadway design does not signal to drivers when they are entering high pedestrian activity areas. Given the large volume of unfamiliar visiting drivers and pedestrians, the lack of clear cues of changing land uses compounds pedestrian safety conditions on the corridor. These pedestrian activity nodes contain a high number of retail destinations and beaches that generate significant numbers of pedestrian crossings and would benefit from being designed to convey a "main street" setting to discourage high-speed travel through these areas.

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¹¹ See Transportation Alternatives, "Rethinking Bollards." Available at http://www.transalt.org/sites/default/files/news/reports/rethinking_bollards.pdf

California Walks recommends exploring the installation of several gateway features at each end of the PCH corridor, as well as when entering high pedestrian activity areas (e.g., Malibu Pier area; Zuma Beach area, Malibu city limits, etc.). Gateway treatments visually demonstrate to and educate drivers that they are entering a zone where the many pedestrians present and other residential, retail, and tourist activity require slower speeds. The effectiveness of gateway features depends on the type chosen, and the overall traffic-calming plan for the area. Gateway treatments can be combined with changes in speed limits, special enforcement zones and a variety of educational campaigns.

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¹² Federal Highway Administration, "Gateways," Pedestrian Safety Guide and Countermeasure Selection System, 2014. Available at http://www.pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=10

Chapter 5. Recommendations for Assessment Zone #1: Temescal Canyon Road to Palisades Bowl Mobile Home Park

As noted in Chapter 3, community residents and visitors—engaged through numerous interactive events—provided the following suggestions to help guide the direction of California Walks' priority pedestrian safety recommendations. California Walks has organized these community-generated suggestions into two tiers of priority strategies, as follows:

Tier I Community-Generated Suggestions for Priority Strategies
Construct a Pedestrian Overcrossing/Undercrossing
Safety Enhancements at Existing Marked Crossings
Provide Physically-Separated Pedestrian Pathways
(Sidewalks, Side Paths, and/or Paved Shoulders)
Tier II Community-Generated Suggestions for Priority Strategies
Install Pedestrian-Actuated Beacons & Signals
Install New Marked Crossings

It should be noted that the prioritization exercises provide only a snapshot of the views of individuals polled and may not fully represent the views of other residents of the Assessment Zone. The following recommendations for Assessment Zone #1 were developed based on these two tiers of community-generated suggestions for priority pedestrian safety improvement strategies, together with best practice and California Walks' own quantitative and qualitative analysis based on collision data and site visit observations, respectively.

Assessment Zone #1 Recommendation #1 (Z1-1): Install New Marked Crossing & Align Curb Ramps at Temescal Canyon Road/PCH Intersection

California Walks recommends installing a new marked crossing at this intersection. Currently, this intersection provides crossings on only three-legs of the intersection with beach parking entry/exit on the fourth side. There is only one marked crosswalk across PCH on the west side; on the east side, pedestrians are prohibited from crossing PCH. The prohibited crossing presents challenges to both bicyclists and pedestrians. Bicyclists, who arrive from the beach multi-use path and use the signalized crosswalk, end up illegally riding against traffic up Temescal Canyon Road when they should be directed across on the east side in a crossing aligned with on-road bicycle facilities.

On May 18, 2015, California Walks observed a rush of transit riders and other pedestrians on PCH, including Palisades Charter High School students from approximately 2:00 pm-4:00 pm. During this time, there were two clear peak periods with student transit riders, and five or more pedestrians were ready to cross PCH at Temescal Canyon Road, both landside and beachside, during every five minute signal cycle. Additionally, the high volume of pedestrians restricted from crossing at the east side of the intersection encounters a misaligned ramp on the west side marked crosswalk. The landside ramp is not aligned with the crosswalk—forcing those who need to use the ramp outside of the marked crosswalk. California Walks recommends this area be further evaluated by an engineer for ADA improvements.

Assessment Zone #1 Recommendation #2 (Z1-2): Improve Transit Stop at Temescal Canyon Road/PCH intersection

On May 18, 2015, California Walks strategically hosted an interactive pedestrian safety sidewalk discussion and educational display next to the southbound bus pad on PCH at Temescal Canyon Road, located at Will Rogers State Beach. California Walks noted that during the peak periods of pedestrian traffic, the majority of pedestrians crossed at Temescal Canyon Road and PCH in order to wait for the next bus. The bus pad was overcapacity with standing pedestrians, forcing commuting students and other pedestrians to stand at the vehicle beach parking entrance and in the beach parking lot. California Walks recommends that the City of Los Angeles and LA Metro explore the construction of a larger bus pad at this intersection to accommodate the daily volume of pedestrian transit riders during peak periods.

Assessment Zone #1 Recommendation #3 (Z1-3): Provide Dedicated Pedestrian Crossing Facility between Potrero Canyon Park & Will Rogers State Beach

Potrero Canyon Park (under development) is located east of Temescal Canyon Road and directly across from Will Rogers State Beach. The park is currently being created from a collapsed section of the Pacific Palisades bluffs. It is scheduled to open within the next year or two. While Will Rogers State Beach is a significant pedestrian activity generator in its own right, the park will likely substantially increase pedestrian crossing activity between the park and the beach.

The nearest signalized marked crossing located at Temescal Canyon Road is at least a 0.5 mile detour for pedestrians. The California Coastal Commission has requested the City of Los Angeles consider the installation of a pedestrian crossing feature. The Commission has also indicated that it does not support a pedestrian detour to Temescal Canyon Road through the installation of either a hill swale or other median barrier that would discourage at-grade crossings. The City of Los Angeles has been exploring options, including potentially restricting pedestrian at-grade crossings between the beach and park with a median fence. Caltrans has indicated that they are ready to work with the City of Los Angeles and the Commission to develop a safe pedestrian access solution that works for all parties. Free parking for Potrero Canyon Park will be sited at the Palisades Recreation Center.

California Walks recommends that a direct, dedicated, pedestrian crossing facility be provided between Potrero Canyon Park and Will Rogers State Beach. If the final approved crossing is atgrade, California Walks recommends incorporating multiple safety enhancements, including, but not limited to, high-visibility crosswalk markings, high-visibility/fluorescent warning signage, a pedestrian hybrid beacon (PHB), and a pedestrian safety island.

If a median fence is approved by the Coastal Commission and installed along this section of PCH, California Walks supports the installation of a fully ADA-accessible pedestrian overcrossing to preserve and provide access. However, California Walks emphasizes that this is a highly expensive pedestrian safety treatment and only effective when used by pedestrians. Most often, pedestrians continue to cross at-grade under dangerous conditions.

Assessment Zone #1 Recommendation #4 (Z1-4): Enhance Existing Marked Palisades Bowl Crosswalk

California Walks' key stakeholder interviews and site visits confirmed resident challenges in utilizing the existing, marked crosswalk with a warning beacon at the Palisades Bowl entrance. Drivers were observed failing to yield to pedestrians clearly attempting to cross, and pedestrians are particularly vulnerable to multiple-threat crashes in this location. Residents communicated that the existing crosswalk is routinely used to access the beach, as well as the transit stops. Many residents of the Palisades Bowl community expressed to California Walks that they do not feel safe enough to use the existing, marked crosswalk even with the warning beacon. They either walk from the Mobile Home Park along PCH—in traffic without a shoulder, sidewalk or pedestrian path—or up and down steep Tahitian Avenue—through the Park's back gate on the east—to cross at Temescal Canyon Road's signalized crossing. Others drive to shopping and recreational destinations to which they otherwise would walk.

Caltrans traffic operations analysis has concluded and approved that an upgrade to a pedestrian-actuated hybrid beacon is warranted; installation of the pedestrian hybrid beacon has been approved—originally estimated for 2015, then scheduled for Fall 2016. Caltrans has now expedited to the PHB installation to March 2016.

Given these ongoing challenges and the 2016 schedule in installing the pedestrian hybrid beacon (PHB), California Walks recommends the following near- and medium-term strategies:

- Assessment Zone #1 Recommendation #4a (Z1-4a): Pursue Implementation of Pedestrian Hybrid Beacon
 - California Walks strongly supports the installation of a pedestrian hybrid beacon (PHB) at the Palisades Bowl crossing and believes it is the most appropriate countermeasure given the roadway conditions and the pedestrian demand. Particular attention to pushbutton location and pedestrian waiting area has been raised by residents and should be evaluated for inclusion in the installation design. California Walks recommends that Caltrans work to accelerate implementation of this PHB—which has not experienced the same right-of-way acquisition delays as elsewhere—to align more closely with the original project schedule. Caltrans representatives have indicated that installation of the PHB has been expedited and on track for installation by March 2016.
- Assessment Zone #1 Recommendation #4b (Z1-4b): Provide Interim, Physically-Separated Pedestrian Pathway to Access Temescal Canyon Crossing

To facilitate safe passage along PCH to access the existing signalized crossing at Temescal Canyon, California Walks supports Palisades Bowl residents' request to Caltrans to extend the K-rail—now ending at the eastern side of Temescal Canyon—from the western side of that intersection along PCH to Tahitian Avenue—at least until the new pedestrian hybrid beacon is installed and fully operational. California Walks recommends a licensed traffic engineer further study the feasibility of this interim measure. If feasible and installed, this would create a protected side path to Temescal Canyon signalized intersection crossing for those who cannot now safely cross PCH to access the multi-use path on the beach.

 Assessment Zone #1 Recommendation #4c (Z1-4c): Evaluate Feasibility of Pedestrian Safety Island at Existing Marked Crossing

Due to the multiple-crash threat that exists with the current marked crossing, California Walks recommends evaluating the feasibility of installing a pedestrian safety island in advance of the PHB installation. A pedestrian safety island would allow pedestrians to cross direction of traffic at a time, as well as provide a refuge area for pedestrians if drivers in the opposite direction do not yield.

 Assessment Zone #1 Recommendation #5 (Z1-5): Improve Transit Stop at Palisades Bowl Crossing

Currently, the westbound Palisades Bowl bus stop is located next to the marked Palisades Bowl crossing but lacks a landing pad or dedicated waiting area, forcing riders to stand street level. California Walks recommends that the City of Los Angeles and LA Metro construct a large landing pad on the westbound Palisades Bowl bus stop.

Chapter 6. Recommendations for Assessment Zone #2: Malibu Pier to Malibu Lagoon/Surfrider Beach

As noted in Chapter 3, community residents and visitors—engaged through numerous interactive events—provided the following suggestions to help guide the direction of California Walks' priority pedestrian safety recommendations. California Walks has organized these community-generated suggestions into two tiers of priority strategies, as follows:

Tier I Community-Generated Suggestions for Priority Strategies
Construct a Pedestrian Overcrossing/Undercrossing
Safety Enhancements at Existing Marked Crossings
Provide Physically-Separated Pedestrian Pathways
(Sidewalks, Side Paths, and/or Paved Shoulders)
Tier II Community-Generated Suggestions for Priority Strategies
Install Pedestrian-Actuated Beacons & Signals
Install New Marked Crossings

It should be noted that the prioritization exercises provide only a snapshot of the views of individuals polled and may not fully represent the views of other residents of the Assessment Zone. The following recommendations for Assessment Zone #2 were developed based on the two tiers of community-generated suggestions for priority pedestrian safety improvement strategies, together with best practice and California Walks' own quantitative and qualitative analysis based on collision data and site visit observations, respectively.

Assessment Zone #2 Recommendation #1 (Z2-1): Install Safety Enhancements at Signalized Malibu Pier Crossing

Observations during the weekend of July 25 and July 26, 2015, confirmed the high pedestrian activity at the Malibu Pier. For example, up to 50 pedestrians were observed crossing at the Malibu Pier crosswalk during every signal cycle, and many more were observed crossing outside the marked crossings. As the primary signalized crossing in the area, California Walks recommends the following treatments to enhance this intersection:

- Assessment Zone #2 Recommendation #1a (Z2-1a): Install ADA-compliant Curb Ramps on Both Sides of Crossing
- Assessment Zone #2 Recommendation #1b (Z2-1b): Install Pedestrian Countdown Timers
- Assessment Zone #2 Recommendation #1c (Z2-1c): Evaluate Feasibility of Flex-Hit Post Installation to Create a Temporary Pedestrian Safety Island Area
- Assessment Zone #2 Recommendation #1d (Z2-1d): Evaluate Feasibility of Widening the Crosswalk Zone or Creating Parallel Crosswalks on one signal to Accommodate Peak Season Crowds

Assessment Zone #2 Recommendation #2 (Z2-2): Install New Marked Crossings with Safety Enhancements where High Pedestrian Crossing Activity Occurs

California Walks recommends installing new marked crossings in the Malibu Pier area to help channelize the high volumes of pedestrian crossings that are already occurring outside of the marked signalized Malibu Pier crossing. Two prime candidate locations are:

- Assessment Zone #2 Recommendation #2b (Z2-2a): Malibu Surf Shack Crossing
 California Walks noted that pedestrians cross outside the crosswalk directly from the
 Malibu Surf Shack to on street parking and the private parking lot at Malibu Pier in
 order to access rental surf equipment. Given the locations of the Surf Shack and their
 rental equipment, California Walks recommends that a new marked, uncontrolled
 crossing with a pedestrian safety island, advanced yield lines, and high-visibility
 markings/fluorescent signage be installed either at the Surf Shack or between the Surf
 Shack and the east end of the Pier's private parking lot.
- Assessment Zone #2 Recommendation #2b (Z2-2b): Surfrider Beach Stairwell Crossing The Malibu Surfing Association (MSA) has noted the high number of surfer and beachgoer crossings from and to parking on the landside to access the existing stairwell public entrance at the west end of Surfrider Beach. MSA strongly recommends the installation of an additional marked crossing near the state beach's stair street entrance. Many beachgoers laden with children, surfboards, heavy ice chests and the like are making these legal but unprotected crossings. California Walks supports MSA's recommendation for this additional marked crosswalk but recommends that a pedestrian-actuated beacon be explored to enhance safety. Existing electrical assembly for a flashing beacon could be converted to a pedestrian-actuated beacon at low cost.

Assessment Zone #2 Recommendation #3 (Z2-3): Install Gateway Treatment for Malibu Pier & Surfrider Beach Area

Given the high pedestrian volumes of the Malibu Pier and Surfrider Beach area, California Walks recommends installing a gateway treatment at either end of this zone—potentially a gateway monument or treatment at Cross Creek Road and the other at near Busch Realty. A gateway treatment will visually indicate to drivers that they are entering a high pedestrian activity zone and should proceed more cautiously. Additionally, an additional gateway monument or treatment at the Pier itself could help reinforce a sense of place and reduced speeds.

Assessment Zone #2 Recommendation #4 (Z2-4): Install Pedestrian Wayfinding Signage for Tourists

Given the high volume of visitors and tourists to the Malibu Pier area, California Walks recommends installing pedestrian wayfinding signage and kiosks throughout the zone. These wayfinding kiosks would help orient visitors to nearby attractions and local businesses, as well as suggest potential walking routes to various destinations that could help reduce the amount of driving for short distances that compounds local traffic circulation challenges.

Assessment Zone #2 Recommendation #5 (Z2-5): Improve Signage for Visitors to Parking/Destinations

California Walks recommends improving the conspicuity of signage to parking facilities and to tourist destinations specifically designed for visitors. The signage that currently exists is not readily apparent from PCH. Wayfinding signage on PCH and in coastal access parking lots should be coordinated with Caltrans and the California Coastal Commission to ensure uniformity throughout the corridor.

Chapter 7. Recommendations for Assessment Zone #3 Zuma Beach Area

As noted in Chapter 3, community residents and visitors—engaged through numerous interactive events—provided the following suggestions to help guide the direction of California Walks' priority pedestrian safety recommendations. California Walks has organized these community-generated suggestions into two tiers of priority strategies, as follows:

Tier I Community-Generated Suggestions for Priority Strategies
Construct a Pedestrian Overcrossing/Undercrossing
Safety Enhancements at Existing Marked Crossings
Provide Physically-Separated Pedestrian Pathways
(Sidewalks, Side Paths, and/or Paved Shoulders)
Tier II Community-Generated Suggestions for Priority Strategies
Install Pedestrian-Actuated Beacons & Signals
Install New Marked Crossings

It should be noted that the prioritization exercises provide only a snapshot of the views of individuals polled and may not fully represent the views of other residents of the Assessment Zone. The following recommendations for Assessment Zone #3 were developed based on the two tiers of community-generated suggestions for priority pedestrian safety improvement strategies, together with California Walks' own quantitative and qualitative analysis based on collision data and site visit observations, respectively.

Assessment Zone #3 Recommendation #1 (Z3-1): Clearly Define & Provide ADA-Compliant Beach Access from Morning View Drive Crossing

While the intersection of Morning View Drive/PCH is ADA-compliant, access from the crossing to the beach is not. California Walks recommends Los Angeles County Beaches and Harbors evaluate the feasibility of improving street access to Zuma Beach to current ADA standards. Currently, there is not a clearly defined pedestrian path to access the beach from the existing marked, signalized Morning View Drive crosswalk. Instead, the opening in the barriers leads pedestrians directly into a vehicle-exiting lane from the parking lot. Moreover, beachgoers must then navigate between parked cars to access the beach—a situation that is not ADA-accessible. ADA access can be achieved by the construction of curbs, ADA-compliant warnings and distinct paths for pedestrians. Signage can then educate pedestrians where to walk to safely negotiate access to Zuma Beach, outside the path of accelerating, oncoming traffic in the beach parking lot.

Assessment Zone #3 Recommendation #2 (Z3-2): Enforce Legal Parking Restrictions on PCH California Walks recommends increasing enforcement of legal parking restrictions on PCH. Along most of PCH, parallel parking is both legal and protected by the California Coastal Commission.¹³ While existing parking cannot be easily eliminated and may still be difficult even

¹³ The Coastal Commission's goal is to preserve the coast and public access to the coast. Public coastal access exists along nearly all of PCH. The Commission's legal authority extends to both beach public access and parking along PCH.

after traffic engineering analysis and study, enforcement of existing parking restrictions is a viable and short-term strategy for improving pedestrian safety. For example, shoulder parking to the north and south of Busch Drive may pose a challenge to pedestrians trying to walk safely in the shoulder to access the signalized crossing. Where allowable, crosswalks should be daylighted, with red curb/prohibited parking at least one legal parking space back from the outside edges of each crosswalk. This increases visibility of approaching vehicles to pedestrians and of crossing pedestrians to drivers, alike.

Chapter 8. Specific Recommendations for Other Areas of Concern

As noted in Chapter 3, community residents and visitors—engaged through numerous interactive events—provided the following suggestions to help guide the direction of California Walks' priority pedestrian safety recommendations. California Walks has organized these community-generated suggestions into two tiers of priority strategies, as follows:

Tier I Community-Generated Suggestions for Priority Strategies
Construct a Pedestrian Overcrossing/Undercrossing
Safety Enhancements at Existing Marked Crossings
Provide Physically-Separated Pedestrian Pathways
(Sidewalks, Side Paths, and/or Paved Shoulders)
Tier II Community-Generated Suggestions for Priority Strategies
Install Pedestrian-Actuated Beacons & Signals
Install New Marked Crossings

It should be noted that the prioritization exercises provide only a snapshot of the views of individuals polled and may not fully represent the views of other residents of these Areas of Concern. The following recommendations for the Taskforce-identified Areas of Concern were developed based on the two tiers of community-generated suggestions for priority pedestrian safety improvement strategies, together with California Walks' own quantitative and qualitative analysis based on collision data and site visit observations, respectively.

Moonshadows Restaurant Area

Moonshadows Restaurant is a high foot traffic generator. Currently, no marked crossing is provided from the landside to the beachside despite bus stops and on street parking on both sides of PCH. California Walks recommends the following to improve pedestrian safety in this area:

Area of Concern, Moonshadows Recommendation #1 (MSH-1): Install High-Visibility/Fluorescent Overhead Pedestrian Warning Signs

California Walks supports the Malibu PCH Safety Study recommendation to install overhead warning signs, per Caltrans Standard ES7J, 200 feet on each side prior to parking area and restaurant building with pedestrian crossing signs and to consider experimental action-style pedestrian signs via Federal request to experiment. California Walks also recommends installing pedestrian-specific advance warning signage in advance of the restaurant.

Area of Concern, Moonshadows Recommendation #2 (MSH-2): Install Marked Crossing with Safety Enhancements at Moonshadows' Front Door

California Walks supports the Malibu PCH Safety Study recommendation to construct a median in front of Moonshadows and to provide a raised median refuge cut out in front of the restaurant's front door so that pedestrians can wait in the median. Since a median safety island will be provided, California Walks recommends enhancing this with high-visibility crosswalk markings. This new marked crosswalk installation would provide a direct crossing opportunity

to and from the existing east and westbound transit stops. California Walks also recommends exploring the appropriateness of a pedestrian-actuated beacon for this crossing, whether a pedestrian hybrid beacon or a rectangular rapid flashing beacon.

Malibu Seafood Restaurant Area

The area around the restaurant lacks any at-grade crossing, and the restaurant attracts a fair number of beachgoers who must cross PCH. Currently, there is drainage culvert that is reportedly used as an undercrossing. This drainage culvert is neither a safe nor legal pedestrian undercrossing. The restaurant's parking lot is small, and during peak season, beachside parkers cross frequently to access the restaurant. Neither of the two Metro bus stops going east or west has a marked crossing provided at either stop. California Walks recommends the following to improve pedestrian safety:

Area of Concern, Malibu Seafood Recommendation #1 (MSF-1): Construct New Pedestrian Undercrossing with Dedicated Funding & Clear Plan for ADA-compliant Maintenance California Walks supports the Malibu PCH Safety Study recommendation to examine the feasibility of constructing a new pedestrian undercrossing in close vicinity to Malibu Seafood. California Walks recommends that the existing transit stops in the area be aligned to the new pedestrian fully accessible ADA-compliant undercrossing. Additionally, California Walks recommends that Caltrans set-aside funds dedicated for ongoing maintenance to address nuisance and personal security concerns as part of the planning for any such undercrossing. The Caltrans could also explore establishing a formal "adopt an undercrossing" program to partner with residents to help care for the pedestrian undercrossing.

Entrada Drive/West Channel Road/Chautauqua Boulevard Intersection

The complex intersection of Entrada Drive/W. Channel Road/Chautauqua Boulevard presents many challenges to pedestrians attempting to cross PCH between beach, restaurants, retail, and residences. California Walks recommends the following at this complex intersection:

Area of Concern, Entrada Drive/West Channel Road/Chautauqua Boulevard Recommendation #1 (EWCC-1): Enhance Pedestrian & Motorist Wayfinding Signage to Existing Pedestrian Undercrossing

Though a pedestrian undercrossing exists at this location, it is not readily apparent from PCH, the landside, or the adjacent beach parking lots. For visitors on the landside wanting to cross PCH for the first time to Will Rogers State Beach, it is virtually impossible to know of the existence of the undercrossing. California Walks recommends adopting a uniform and more conspicuous wayfinding system to inform both drivers and pedestrians of the location of the existing undercrossing. Wayfinding signage on PCH and in coastal access parking lots should be coordinated with Caltrans and the California Coastal Commission to ensure uniformity throughout the corridor. Caltrans representatives have confirmed that they have recently ordered wayfinding signs for this undercrossing.

Area of Concern, Entrada Drive/West Channel Road/Chautauqua Boulevard Recommendation #2 (EWCC-2): Identify Dedicated Funding & Clear Plan for ADA-Compliant Maintenance California Walks recommends that the City of Los Angeles set-aside funds dedicated to ongoing maintenance to address nuisance and personal security concerns for the existing pedestrian undercrossing. Currently, a maintenance agreement is in place between the City of Los Angeles and Caltrans, which places maintenance responsibilities for the undercrossing with the City of Los Angeles while Caltrans maintains the traffic signals at the intersection.

In addition to ongoing maintenance, dedicated funding should also be identified to update both sidewalks leading from the 4 streets and the beach to the undercrossing, as well as the undercrossing itself to meet current ADA requirements. Most of the sidewalks leading to the undercrossing apparently lack a current ADA-compliant path of level travel that is of sufficient width, has curb ramps, and is clear of obstructions. The Roosevelt Tunnel undercrossing is accessible only through stairs on both ends. Consequently, a wheelchair user and others with disabilities would not be able to utilize it. California Walks recommends a licensed engineer further evaluate this undercrossing to determine improvements to bring the undercrossing up to current ADA standards.

California Walks also recommends that the City of Los Angeles explore establishing a formal "adopt an undercrossing" program to enable local residents to help care for the pedestrian undercrossing. Maintenance of the two tunnels is currently jointly funded by the BOCA Neighborhood Association and the Santa Monica Canyon Civic Association who provide volunteer maintenance of the undercrossing and recently repainted the tunnel a bright light yellow. Additional activities could include frequent community patrols and installation of additional nighttime lighting.

Area of Concern, Entrada Drive/West Channel Road/Chautauqua Boulevard Recommendation #3 (EWCC-3): Install Enhanced High-Visibility Crossing at Easternmost Leg of Intersection In the absence of—and at least until—the undercrossing is upgraded to current ADA access standards, California Walks recommends installing—after multi-modal traffic analysis by a licensed traffic engineer—an enhanced high-visibility crossing across PCH at the easternmost leg of the intersection confluence. The crossing should provide a pedestrian-actuated signal, as well as a pedestrian safety island in the median.

There exists an opportunity, with the support of the PCH Taskforce, to leverage agency-wide funding for proactive PCH improvement, under the collaborative leadership of Caltrans and the City of Los Angeles. Each entity has dedicated lawsuit settlement funds, which could be proactively used to fund improved ADA access at pedestrian generators such as this throughout the corridor.

Chapter 9. Conclusion and Next Steps

Extensive education and engagement of community residents and visitors greatly informed the direction of California Walks' pedestrian safety recommendations. The improvements recommended in this report represent what California Walks believes to be the most effective measures to address safety issues in alignment with the public's expressed concerns and priorities for PCH. Many of the recommendations will require further evaluation and review by a licensed traffic engineer for feasibility and cost. Other measures not specifically recommended by this report but identified by previous or future studies may also be feasible and effective.

Implementing the recommendations in this report requires the involvement of multiple stakeholders and agencies. Appendix E summarizes the recommendations and provides relative costs (low, medium, high, very high) and ideal timelines (short, medium or long term) for each recommendation to help guide implementation. California Walks presented the draft version of this Final Recommendations Report at the September 2, 2015 PCH Taskforce meeting and has incorporated feedback from Taskforce members since the meeting. Additionally, Caltrans representatives reported at the September 2 Taskforce meeting that they anticipate 80% of the maintenance issues recommended in the recently approved City of Malibu PCH Safety Study will be addressed by the end of 2015.

Lastly, California Walks recommends the Taskforce incorporate several key tactics that will be helpful in shepherding the implementation of the report's recommendations, as follows:

Maintain Momentum for Change

California Walks has greatly appreciated the opportunity to work with the PCH Taskforce on this project. We have observed that the Taskforce is a unique group with many interested and invested stakeholders. This level of high involvement is a strength that should continue to be leveraged in implementing pedestrian safety improvements along and across the PCH. California Walks recommends either increasing the frequency of Taskforce meetings or establishing a Pedestrian Safety Subcommittee (see below) to maintain momentum for and to monitor projects that will improve traffic safety on PCH.

Follow Up with Caltrans ADA Coordinator

This Recommendations Report has identified many areas that will require additional engineering study by ADA specialists to ensure that pedestrian facilities are updated to current ADA standards. Caltrans representatives have indicated that all ADA-related issues within Caltrans' right-of-way identified within this report will be referred to a Caltrans ADA Coordinator. California Walks commends this proactive leadership by Caltrans and recommends the Taskforce follow up with the Coordinator for a status update at the end of the year, as well as consider inviting the ADA Coordinator to join the Taskforce to ensure ongoing communications regarding accessibility issues.

Create a Pedestrian Safety Subcommittee

To ensure pedestrian safety is prioritized continuously and monitored on a regular basis, California Walks recommends the Taskforce establish a Pedestrian Safety Subcommittee that is

focused solely on pedestrian safety issues on PCH. As agency engineers implement safety improvements, a Subcommittee would be able to evaluate, coordinate and encourage the integration of ongoing targeted education and enforcement campaigns to maximize safe behavior by all road users. Often, other modes take priority over walking and a focused effort on pedestrian safety can yield meaningful gains for all users of PCH.

ACKNOWLEDGMENTS

We would like to thank the Pacific Coast Highway Taskforce (PCH Taskforce) for inviting California Walks to the Pacific Coast Highway and for entrusting us to perform the work reflected in this Report.

Thank you to elected leaders Senator Fran Pavley (D-27), Assemblymember John A. Bloom (D-50), Senator Ben Allen (D-28) and their District Directors. Special thanks to Josh Kurpies, Kara Seward, Lauren Gallant and James Reina, who co-chaired the PCH Taskforce, and its PCH Taskforce Grant Subcommittee, on behalf of the elected Legislators and who—together with Elizabeth Shavelson and Matt Myerhoff of the City of Malibu—oversaw the PCH Pedestrian Safety Project.

The City of Malibu made this Pedestrian Safety project possible by assuming the contractual responsibility for administering all aspects of the OTS PCH Taskforce Safety Corridor Grant, which included this project, to the benefit of the City of Malibu and all of the PCH. Very special thanks to Malibu's Mayor and Council, City Manager Jim Thorsen and Public Works Director Bob Brager for undertaking this responsibility.

The State of California, California Department of Transportation and California Highway Patrol, the County of Los Angeles, County Supervisor Sheila Kuehl (D3), Los Angeles County Sheriff's Department- Malibu Division and LA Beaches and Harbors, the Cities of Los Angeles and Santa Monica Police Departments, Traffic Divisions, all made major contributions to this work.

Thank you to all of the individual members of the PCH Taskforce. Each meaningfully participated in this project. Not only did Taskforce members contribute in quarterly Taskforce meetings but many also individually provided expertise with local PCH existing conditions, collision data, agency standards and ongoing safety efforts, improvement strategies and opportunities for integration of their ongoing efforts including safety education, enforcement, engineering, evaluation, engagement and/or encouragement.

Hundreds of PCH residents and visitors contributed to this report, each by taking the time to learn more about pedestrian safety and to share their experiences walking across and along the Pacific Coast Highway. They communicated that due to PCH's unique combination of users, geography and destinations, all roadway users need ongoing safety education from the roadway environment itself.

We thank all of you for the opportunity to contribute this pedestrian safety step forward in the ongoing journey of improving traffic safety and reducing fatalities and serious injuries.

Funding for this program was provided by a grant from the California Office of Traffic Safety, through the National Highway Traffic Safety Administration.

Appendix A. Existing Conditions Report



Existing Conditions Report

PCH Pedestrian Safety Project

August 2015

Wendy Alfsen, Tony Dang, & Caro Jauregui
California Walks

Acronyms

California Office of Traffic Safety (OTS)

Pacific Coast Highway (PCH)

The PCH Taskforce (the Taskforce)

California Department of Transportation (Caltrans)

California Highway Patrol (CHP)

Los Angeles Police Department (LAPD)

Santa Monica Police Department (SMPD)

Los Angeles County Sheriff's Department (LACSD)

Palisades Bowl Mobile Home Park (Palisades Bowl)

Pacific Palisades Community Council (Palisades Community Council)

Statewide Integrated Traffic Records System (SWITRS)

Transportation Injury Mapping System (TIMS)

Safe Transportation Research and Education Center (SafeTREC)

American's with Disabilities Act (ADA)

Los Angeles County Metropolitan Transportation Authority (Metro)

Southern California Association of Governments (SCAG)

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Funding Acknowledgement

Funding for this program was provided by a grant from the California Office of Traffic Safety, through the National Highway Traffic Safety Administration.

Disclaimer

California Walks is a community-based non-profit organization focused on improving pedestrian safety and walkability across the state. California Walks did not utilize professional engineers and/or planners to complete this report but provided its expertise in pedestrian safety, education, community engagement, research and evaluation. All recommendations and the recommendations developed by California Walks in this capacity must be thoroughly evaluated by a licensed a professional engineer for appropriateness and feasibility.

Chapter 1. Introduction

Project Background

The City of Malibu, applying on behalf of the Pacific Coast Highway Taskforce, received a safety corridor grant from the California Office of Traffic Safety (OTS) to promote motorist, pedestrian, and bicycle safety and to increase safety awareness along the Pacific Coast Highway (PCH). The PCH Taskforce (The Taskforce) is an active coalition comprised of community representatives, pedestrian and bicycle advocates, residents, law enforcement, city and traffic engineers, Caltrans, and local and state elected officials. The Taskforce jurisdiction stretches for nearly 30 miles from the McClure Tunnel in Santa Monica to the Ventura County line including the cities of Santa Monica, Los Angeles, Malibu and unincorporated Los Angeles County.

As part of the PCH Safety Corridor Grant, the Taskforce retained California Walks to evaluate pedestrian safety conditions along the PCH corridor, as well as to educate and engage community residents and affected stakeholders to develop community-driven recommendations to improve pedestrian safety along the corridor. California Walks is a statewide non-profit organization that partners with state agencies, organizations and communities to establish and strengthen policies and practices that support pedestrian safety and healthy, walkable communities. California Walks will conduct location-specific workshops and interactive engagement opportunities to gather public input informing a pedestrian safety recommendations report for the Taskforce that will build upon this Existing Conditions Report.

Background on the Pacific Coast Highway (PCH)

The Pacific Coast Highway (PCH) opened in the late 1920s as a part of the Roosevelt Highway, a 1,400 mile road linking the United States from Mexico to Canada along its western border at the Pacific Ocean. Its ribbon cutting ceremony was held on June 29th, 1929, when the Malibu section of the highway opened and became the first direct link between Ventura and Santa Monica. The highway itself is owned, operated, and maintained by the California Department of Transportation (Caltrans) and the Taskforce corridor is served by the California Highway Patrol (CHP), Los Angeles County Sheriff's Department (LACSD), Los Angeles Police Department (LAPD), and Santa Monica Police Department (SMPD). In 1972, the state abandoned a plan to create a limited-access Pacific Coast Freeway due to strong public dissent, and PCH remains a state highway to this day. Residents have consistently fought to maintain the scenic setting of PCH, preserving it as an 'iconic beach roadway' rather than developing it into a mainstream freeway.

For the PCH Taskforce Safety Corridor Grant, we will be evaluating the pedestrian safety conditions along an approximately 30-mile section of the PCH corridor, from the McClure Tunnel to the Ventura County Line. This section of PCH encompasses portions of the cities of Santa Monica and Los Angeles (Pacific Palisades), portions of unincorporated Los Angeles County, and the entire length of the City of Malibu.

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¹ Nathan Masters, "From Roosevelt Highway to the 1: A Brief History of Pacific Coast Highway," May 12, 2012. http://www.kcet.org/updaily/socal_focus/history/la-as-subject/from-the-roosevelt-highway-to-the-one-a-brief-history-of-pacific-coast-highway.html#.

The Pacific Ocean and the Santa Monica Mountains flank PCH on either side. Since its opening, PCH has been and continues to be a very popular tourist destination—providing access to the Santa Monica Mountains National Recreation Area, which includes state beaches, county beaches, and hiking trails, as well as residences and small businesses. Most of the PCH economy is based on enabling shoreline access and recreational opportunities. Public parking parallel to the highway is legally permitted along most of the PCH to accommodate public access to recreational opportunities as required by the California Coastal Commission. PCH serves as one of the two main entry points for Pacific Palisades, Topanga Canyon and other Canyons along the Santa Monica Mountains and is the primary thoroughfare or "main street" to access businesses and residences in Malibu. The constrained physical geography and limited right-of-way along PCH present challenges to providing frequent marked crossings, crosswalks, sidewalks or bicycle paths; however, the need to provide business-serving access points along the corridor, safe ingress and egress from residences, and conflicting uses of the highway have prompted the need to evaluate how to better reimagine PCH as a multi-modal corridor that balances the needs of various travel modes (walking, bicycling, transit and motorists) in order to maintain PCH's historic identity as an iconic destination and in particular, providing access on foot by all to its world famous beaches and sites.

Purpose & Scope of Existing Conditions Report

The purpose of this existing conditions report is to better understand the current pedestrian safety issues along the PCH corridor in order to inform multi-disciplinary strategies to improve and promote pedestrian safety on PCH. Working with the PCH Corridor Grant Subcommittee—which includes residents, law enforcement agency personnel, Taskforce Co-Chairs' representatives, and the City of Malibu Public Works—California Walks staff identified three assessment zones based on initial in-person site visits, analysis of collision data, and local knowledge:

- Assessment Zone #1: Temescal Canyon Road to Palisades Bowl Mobile Home Park
- Assessment Zone #2: Malibu Pier to Malibu Lagoon/Surfrider Beach
- Assessment Zone #3: Zuma Beach Area

Additionally, the Taskforce identified the following two areas of concern that will be discussed in this report and the final recommendations report:

- Area of Concern (a) Moonshadows Restaurant Area
- Area of Concern (b) Malibu Seafood Restaurant Area



Figure 1: Pacific Coast Highway (Google Maps)

Based on further discussions with community stakeholders and a follow-up in-person site visit, California Walks recommends evaluating the Entrada Drive/West Channel Road/Chautauqua Boulevard intersection for potential improvements. The existing conditions in this area will be discussed in this report, and with guidance from the Taskforce, recommendations for this intersection may be included in the final recommendations report.

Methodology

California Walks staff worked to evaluate both quantitative and qualitative pedestrian safety issues and concerns through the use of: collision data, police reports, key informant and stakeholder interviews, and in-person site visits.

Collision Data

California Walks staff reviewed the most recent 5 years of collision data (2008-2012) from the Statewide Integrated Traffic Records System (SWITRS), accessed through the Transportation Injury Mapping System (TIMS), operated by the UC Berkeley Safe Transportation Research and Education Center (SafeTREC). To supplement the publicly available collision data to conduct a comprehensive analysis, California Walks staff requested additional recent collision summaries and reports (2013-2014) from the following law enforcement agencies: LA County Sheriff's Malibu-Lost Hills Station; LAPD; SMPD; and CHP.

Additional requested collision data is forthcoming from the law enforcement agencies. In order to ensure a uniform analysis of the collision data along the corridor, this Existing Conditions Report will be based solely on the publicly available data for 2008-2012. California Walks will continue working with the law enforcement agencies to secure the necessary collision data in order to incorporate analysis of the latest data from 2013-2014 into the Final Recommendations Report.

Key Informant & Stakeholder Interviews/Meetings

To collect qualitative data on pedestrian safety conditions and issues, California Walks conducted interviews with 27 key informants and stakeholders throughout the corridor. Appendix 1 contains the key informant interview questions and Appendix 2 lists the interviewed stakeholders.

In-Person Site Visits

California Walks conducted three in-person site visits along PCH on March 17, April 13 and April 30, 2015, which supported the quantitative collision data and qualitative interview findings. During site visits, California Walks staff observed pedestrian and driver behaviors, as well as evaluated potential infrastructure barriers and/or potential deficiencies that may impact pedestrian safety.

School Arrival/Dismissal Observations

For two of the three assessment zones, California Walks observed school arrival and/or dismissal at nearby schools to understand traffic patterns and potential parent concerns.

Chapter 2. Collision Data Analysis

Between 2008 and 2012, there were 36 pedestrian collisions along the PCH section under review in this report. The majority of the pedestrian collisions (20) occurred in the Malibu section of the corridor, including a high number of severe injury collisions. The majority of fatal pedestrian collisions along the corridor (6 of 9) occurred in the Palisades section.

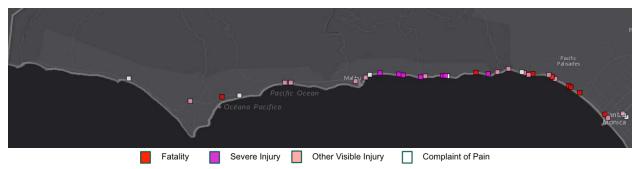
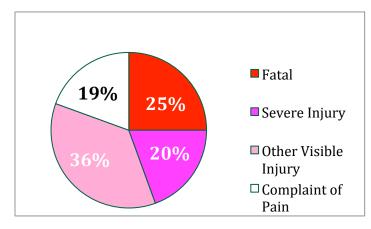


Figure 2: Pacific Coast Highway Pedestrian Collisions, 2008-2012 (TIMS)



The vast majority of pedestrian collisions were vehicle-pedestrian collisions, while a handful resulted from stationary vehicles being struck and hitting pedestrians (3) and one involved a bicyclist. One quarter of these pedestrian collisions were fatal, while nearly another 20% resulted in severe injuries.

Figure 3: Pedestrian Collisions by Severity (TIMS)

The top three Primary Collision Factors (PCF) for these pedestrian collisions are Pedestrian Violations, Pedestrian Right-of-Way Violations, and Unsafe Speed. 42% of the pedestrian collisions occurred at nighttime (after 6 PM). Pedestrian collisions are concentrated in areas with retail and/or recreational destinations on either side of PCH; for example, the Will Rogers State Beach and Malibu Pier to Surfrider Beach areas experienced high numbers of pedestrian collisions.

Due to the long stretches of the corridor lacking any traffic signals, pedestrians are permitted to cross PCH in many locations outside of marked or unmarked crosswalks, though they must yield the right-of-way to all vehicles and cross in a safe and predictable manner. This does not, however, relieve the drivers from "the duty to exercise due care for the safety of any pedestrian upon a roadway."

Α9

² California Vehicle Code (CVC) Section 21954, Pedestrians Outside Crosswalks.

Chapter 3. Stakeholder Interview Summary

California Walks conducted phone and in-person stakeholder interviews to compile qualitative pedestrian safety concerns. Additionally, some stakeholders completed the interview via an online survey. Responses from the stakeholder survey regarding corridor-wide issues underscored that most interviewees—including several Taskforce members—are engaged and heavily invested in efforts to improve pedestrian safety on PCH. Many have been active in engaging others in their community and in collaborating with agencies such as Caltrans to develop and implement solutions. This high level of community interest and buy-in is a particularly important asset for creating long-lasting pedestrian safety improvement efforts going forwaRoad

Respondents and interviewees were asked to identify from which Assessment Zone they were offering their perspective on PCH pedestrian safety. Twenty-seven (27) surveys and interviews were completed total. Nineteen (19) responded to providing their expertise from their experiences in either living or working in Malibu. The remaining eight (8) offered their expertise from their perspectives in either living or working in Pacific Palisades. Overall, Malibu respondents expressed the need for action and implementation rather than further studies. Many Malibu residents communicated discontent about the fact that pedestrians are allowed to walk on and across PCH given the current roadway conditions.

One key issue addressed through the interview process was how to best tailor pedestrian safety strategies to impact pedestrian populations most at risk of injury or death. Respondents identified the homeless, children/youth, slow walkers (such as seniors and people with disabilities), surfers, and tourists as the highest risk populations. The interview question did not offer "homeless", "tourists" or "surfers" as options; however, the respondents' identification of these three groups underscores the high need to develop strategies to reach these populations.

In their responses, interviewees cited the homeless, tourists and children/youth as being at risk because they may be unaware or incapable of completely understanding the risks of crossing in both marked and unmarked legal crossings and elsewhere along PCH.

Tourists and other visitors will be unfamiliar with PCH geography and road conditions. Tourists, often from foreign countries, have knowledge of differing driver and pedestrian laws and likely are unfamiliar with local laws. Some may not speak English. They may be unprepared for the combination of spectacular views, distracting to drivers and pedestrian tourists alike, multiple destinations on both sides of the highway, pedestrian-dangerous vehicle speeds, and residential/main street exiting/entering conditions.

People with disabilities, seniors, and slow walkers generally were cited as being at risk because of inpatient drivers unwilling to either stop or wait for these pedestrian groups to cross. Surfers were identified as a high-risk group because among locals—they are known to cross four lanes of traffic when they park landside in order to reach the beach while moving slowly and carrying heavy surfing equipment. Respondents and interviewees noted this behavior by both surfers

and beachgoer groups toting heavy ice chests and other equipment. This is especially true in the Malibu Pier and Surfrider Beach area.

California Walks also asked stakeholders to rank potential pedestrian safety concerns along PCH on a scale of 1-5, with 1 being not concerned and 5 being very concerned. There was a wide range of responses for issues regarding crosswalks, pedestrian signs, pedestrian signals, and motorist speed along PCH. However, several issues received near unanimous responses for a high level of concern, including: high traffic volumes, concern for aggressive motorists and recent pedestrian collisions. Personal safety and stray dogs/wildlife ranked very low in terms of concerns.

Chapter 4. Specific Observations for Assessment Zone #1: Temescal Canyon Road to Palisades Bowl Mobile Home Park



Figure 4: Assessment Zone #1 (Google Maps)

Key informant interviews, in-person site visits, and stakeholder meetings with the Palisades Bowl Home Owners Association, Palisades Community Council and the Captain Ocean Lifeguard at Will Rogers State Beach on April 13, 2015, identified two subsections within this zone of particular concern: Palisades Charter High School and Palisades Bowl Mobile Park. Additionally, Will Rogers State Beach is a significant pedestrian activity generator in this section, which will likely be magnified by the creation of Potrero Canyon Park directly across from it. The California Coastal Commission has requested the City of Los Angeles consider the installation of a pedestrian feature to address the crossing needs; the City of Los Angeles is currently exploring options, which will be reviewed by the Taskforce for input.

Palisades Charter High School

At school dismissal time, there is significant pedestrian, school bus and car activity at Palisades Charter. The school uses a staggered dismissal time with two-thirds of the student population released at 2:06 pm and the remaining third at 3:08 pm. During our site visit, California Walks



Figure 5: Palisades Charter dismissal at Temescal Canyon Rd above PCH at 2:06pm, April 30, 2015 (Caro Jauregui)

noted a total of 13 school buses lined up at the intersection of PCH and Temescal Canyon Road

At the same time, nearly 30 students walked down Temescal Canyon Road in a staggered group and crossed PCH to access public transit at the eastbound, beachside PCH stop. Although this bus stop has been improved, students waiting for the bus overflowed the bus pad, bench and waiting area, with many standing in the parking lot and beachside of Will Rogers State Beach. There is a crosswalk for one leg of the intersection and it is not aligned with ramp on the sidewalk landside. The infrequent 20 to 25-minute headways of buses encourage students to cram into the bus and overcrowd the stop.

Following the initial school dismissal, California Walks observed at least 10 more pedestrians crossing PCH. Crossing volume observed between 8:30-9:00 am was double that of the afternoon and included parents with small children, joggers, and people walking dogs. On the dates and time of these observations, there were very few beachgoer vehicles in the Will Rogers State Beach parking lot. During the May 18 lunchtime display and discussion, Palisades Charter staff confirmed that a total of 16 school buses transport students to and from the school.

Palisades Bowl Mobile Home Park

California Walks met with five residents of Palisades Bowl. Appendix 3 contains the list of those residents. One resident of more than 43 years reported that he had witnessed two pedestrian fatalities and estimates that 20 pedestrian collisions have occurred at the marked PCH crosswalk just west of the entrance to the mobile home community. Many residents cross PCH at this location every day, including wheelchair and scooter chair users, as seen in Figure 6 below.



Figure 6: Palisades Bowl resident using unsignalized marked crossing (Rachael MdDonald)

Though the crosswalk has been enhanced with a steady blinking yellow beacon, residents have found the beacon to be ineffective with few PCH drivers yielding to pedestrians. Additionally, residents have noted that ficus trees along PCH near the crosswalk impair the visibility of both

drivers and pedestrians. There are currently plans to upgrade the existing beacon to a pedestrian hybrid beacon, though installation is more than a year off.



Figure 7: Palisades Bowl Crosswalk (Caro Jauregui)

Given the timeline for the hybrid beacon's installation, resident Colleen Baker suggests that Caltrans extend the K-rail from the back road abutting the park eastward to the Temescal Canyon Road signalized crossing in order to provide a buffer between pedestrians and vehicles and to provide residents of two mobile home

parks a safe path of travel to access the signalized crossing. Without such a temporary protected path along this section of PCH, residents are left with the choice to either use the existing unsignalized crossing—where drivers fail to yield—or to travel without a barrier along the shoulder to access the signalized Temescal Canyon Road crossing.

Will Rogers State Beach & Palisades Bowl Bus Stops

In this assessment zone there are two marked crosswalks to enter the Will Rogers State Beach. One is located at the intersection of Temescal Canyon Road and PCH, and the other is located in front of Palisades Bowl. On the beachside, there are ADA-compliant sidewalks that enable access to the marked crosswalks, as well as to the parking lot and beach. Additionally, both of these beach entrances have bus stops. In addition to the PCH/Temescal Canyon Road bus stop discussed above, there are also east and westbound bus stops located at the Palisades Bowl crosswalk. The westbound Palisades Bowl bus stop side lacks a pedestrian landing pad or dedicated waiting area, forcing riders to stand at street level on the shoulder.



Figure 8: Pedestrian path from Palisades Bowl crosswalk to Will Rogers State Beach (Caro Jauregui)



Figure 9: Ramp leading directly to beach at Will Rogers State Beach (Caro Jauregui)



Figure 10: Palisades Bowl bus stop where bus riders must stand on street to wait for bus (Caro Jauregui)

At the PCH/Temescal Canyon intersection, there is only one marked crosswalk on the west side, while the east side crossing is prohibited. The missing crossing presents challenges to bicyclists who arrive from the beach path and use the signalized crosswalk and end up riding against traffic up **Temescal Canyon** Road

Palisades Community Council

California Walks also met with Palisades Community Council representatives, George Wolfberg and Patti Post. In addition to echoing similar concerns regarding the marked crossings

at Palisades Bowl and Temescal Canyon Road, Mr. Wolfberg identified two additional pedestrian safety concerns: the impending opening of Potrero Canyon Park and Entrada Drive/West Channel Road/Chautauqua Boulevard intersection.

Potrero Canyon Park is located east of Temescal Canyon Road and directly across from Will Rogers State Beach. The park is currently being rehabilitated from a collapsed section of the bluffs and is scheduled to open within the next year or two. While Will Rogers State Beach is a significant pedestrian activity generator in its own right, the opening of the park will likely increase pedestrian activity in the area and between the park and the beach. The nearest signalized marked crossing at Temescal Canyon Road is a 0.5 mile detour. The California Coastal Commission has requested the City of Los Angeles consider the installation of a pedestrian feature to address the crossing needs; the City of Los Angeles is currently exploring options, which include potentially restricting pedestrian crossings at this location with a median fence. Options will be reviewed by the Taskforce for input at a future date. Mr. Wolfberg proposed that a pedestrian overcrossing be included in the park renovation project.

The second PCH pedestrian crossing area of concern raised at this meeting—the Entrada Drive/West Channel Road/Chautauqua Boulevard intersection—will be discussed in Chapter 7.

Chapter 5. Specific Observations for Assessment Zone #2: Malibu Pier to Malibu Lagoon/Surfrider Beach



Figure 11: Assessment Zone #2 (Google Maps)

Key informant interviews—which included the Malibu Chamber of Commerce, Malibu Surfers
Association, the Lifeguard Captain of the Malibu Pier Section, a Malibu Public Safety Commissioner, Sierra Canyon Property Owners
Association, Trancas Highlands
Homeowners Association, a Malibu Planning Commissioner, Malibu Township Council, Malibu Surfing Museum, and the Point Dume Community Association—and in-



Figure 12: Malibu Pier (Caro Jauregui)

person site visits informed analysis of the pedestrian safety conditions in this assessment zone. From our site visits—which took place at different times of the day and different days of the



Figure 13: Lack of curb ramps at Malibu Pier crossing (Tony Dang)

week—we noted that this area had the highest pedestrian volumes of all assessment zones, underscoring the importance to improve pedestrian safety and walkability in this area to facilitate access to local businesses, restaurants, the pier, and the beach. During the April 30, 2015, site visit, there were 25 surfers out in the water between 10:00-11:00 am. Most visitors—once parked—travel on foot and cross PCH to

access Surfrider Beach, Malibu Pier, and Adamson House State Park/Malibu Lagoon State Beach.

Though a signalized marked crossing is provided at the Malibu Pier intersection, California Walks observed a large number of people crossing outside the crosswalk from the beachside to access the fast food and other restaurants on the landside. Additionally, the provided signalized crossing lacks curb ramps on either side and needs to be further evaluated by an engineer to assess needed improvements to bring the intersection up to current ADA standards. The next closest marked crosswalks are roughly 0.5 mile to the east at a traffic signal and roughly 0.5 to the west at the Cross Creek Road traffic signal.

Further east from the Pier, the Malibu Surf Shack generated a significant amount of pedestrian crossing activity. While the Surf Shack rental office is on the landside, the rental equipment is beachside. The Surf Shack stages its rental equipment directly across the highway from its office, which may encourage crossing to access the rental equipment outside of the Malibu Pier signalized intersection. We observed Surf Shack patrons willing to wait a long time for a break in traffic to cross, rather than travel the short distance to the Malibu Pier intersection.



Figure 14: Malibu Surf Shack rental equipment and Metro bus stop (Caro Jauregui)



Figure 15: Malibu Surf Shack patron & staff crossing PCH outside signalized crosswalk to rental kayaks (Tony Dang)

A modest number of parking spots serve retail destinations in the Malibu Pier/Surfrider Beach area and include the following options: legal, free parallel parking on both sides of PCH; a modest-sized Malibu Lagoon State Park parking lot on the western end of Surfrider Beach side; and a modest-sized Malibu Pier commercial parking lot provides parking for a \$10 fee. Since the on-PCH parallel parking is free, these spaces



Figure 16: Surfrider Beach west 'entrance' lacks ramp (Caro Jauregui)

are occupied first. This parking is nearly equidistant between two marked crosswalks, but both are remote from the beach itself. A high proportion of the occupants of landside vehicles cross directly from cars to Surfrider Beach without detouring to either marked crosswalk. Most Surfrider Beach ocean-side parallel-parked vehicles stay all day, with many operating businesses from the parked vehicles. Most customers and employees cross west towards the beach and outside of the Pier's signalized crosswalk. Due to the free unrestricted parking on PCH and lack of in and out privileges from paid parking, almost all drivers will leave their vehicles in the same parking space for the duration of their Malibu Pier/Surfrider Beach stay.

Access to Surfrider Beach—particularly when parking on PCH—is not clearly defined or signed. Moreover, the area needs to be evaluated by an engineer for any potential ADA deficiencies and improvements. Beachgoers must navigate through the parking lot, and there is a lack of paved curb ramps to access the beach that would need to be coordinated with Los Angeles County Beaches & Harbors.

Malibu resident and Taskforce member, Jennifer DeNicola, reported that sidewalks vary in width and are obstructed both land side and ocean side from Carbon Canyon Road to the bridge at Cross Creek Road. Some of these obstructions include mailboxes, Verizon boxes, Caltrans boxes, trash bins, bolts on the cement and man holes that do not fit or are damaged. Additionally, there are missing sidewalks on both sides of PCH from Carbon Canyon Road to Cross Creek Road.



Figure 17 Obstructed sidewalk along Malibu in PCH (Jennifer DeNicola)



Figure 18 Missing sidewalk in Malibu along PCH (Jennifer DeNicola)

Chapter 6. Specific Observations for Assessment Zone #3 Zuma Beach Area



Figure 19: Assessment Zone #3 (Google Maps)

Key informant interviews—which included a Malibu High School Teacher; the Walk it! Bike it! Coordinator for Malibu High School, Malibu Middle School and Juan Cabrillo Elementary; a Malibu lifeguard; a PCH Task Force Member; Malibu Villas Homeowners Association; Heathcliff Homeowners Association; Malibu Riviera Homeowners Association; Point Dume Community Association; A Safer PCH; and Malibu County Estates Homeowners Association—in-person site visits, and observations of school arrival informed analysis of the pedestrian safety conditions in this assessment zone, including the identification of three populations of concern: Zuma Beach beachgoers; children, youth and families on Morning View Drive; and the patrons of the Busch Drive shopping center. The site visits also included a walk accompanying the Malibu High School Marine Biology class.

Zuma Beach

While we did not observe any unsafe crossing behaviors during our site visit, California Walks recognizes the high potential for foot traffic along the Zuma Beach Corridor during peak tourist season. Parking along the length of the beach appeared to already be restricted on the landside, minimizing unsafe crossing behaviors.. In this section of PCH, there are few marked crossings. One of them is at PCH/Morning View Drive and pedestrians can only cross at one leg of the



Figure 20: Pedestrian access point to Zuma Beach from Morning View Drive bus stop and crosswalk. The entrance is not wide and provides a step, rather than a ramp. (Caro Jauregui)

intersection. Additionally, there are east and westbound bus stops at the intersection that are aligned with the signalized crosswalk. From the Morning View Drive crosswalk to the beach,

there is not a clearly defined pedestrian path to access the beach; rather, the opening in the barriers leads pedestrians to the parking lot directly into an exiting lane. Moreover, beachgoers then must navigate between parked cars to access the beach—a situation that needs to be evaluated by an engineer to address any potential ADA deficiencies and the appropriate improvements. Malibu Public Safety Commissioner Meril May suggested restricting parking in the south bound U-turn area on 30245 Pacific Coast Highway to improve sightlines. Commissioner May also recommended improving the brush clearing north of Guernsey to enable cars to park further to the right off PCH, which would create a space between parked vehicles and the fog line. Currently, people must walk directly in the traffic lane if parked in this area.



Figure 21: Lack of pedestrian path at Zuma Beach. Pedestrians trying to access the beach are met with a parking lot exit lane and must navigate through parked cars. (Caro Jauregui)

Morning View Drive



Figure 22: Morning View Drive intersection (Caro Jauregui)

Along Morning View Drive, California Walks noted several facilities that serve vulnerable pedestrian populations (such as children) and that generate high foot traffic, including the Malibu United Methodist Church & Nursery School, Boys & Girls Club of Malibu—Teen Center, Juan Cabrillo Elementary School, and Malibu High School and Malibu Middle School. Additionally, the existing marked crossing at the Morning View Drive intersection appears to be sufficient and the westbound bus stop is already aligned to the intersection.

During our April 30, 2015, site visit, California Walks staff observed school arrival at Malibu High School and Malibu Middle School, as well as general traffic along Morning View Drive from 7:40-8:00 am. Most traffic accessed Morning View Drive from PCH. The Malibu High School and Middle School joint campus has three drop-off locations: one directly in front of the school;

one to the left of the main drop-off area in the staff parking lot; and one by the gym. Fifty-one vehicles were observed between 7:40-8:00 am in the main drop-off location. The main drop-off location also utilizes crossing guards to lead students to the parking lot in front of Malibu High School from Morning View Drive, and the Principal directs drop-off traffic here every morning.

California Walks staff also discussed pedestrian safety with Nicole Portillo, who teaches Marine Biology to seniors and juniors at Malibu High School. Once every week during the school year, Ms. Portillo leads her class on a walk from the High School to Zuma Beach via Morning View Drive in the morning as a part of their applied learning course work. California Walks accompanied the class on April 30, 2015, and observed student pedestrian behavior during the walk. Ms. Portillo said that her class has not had an issue crossing PCH when they use the Morning View Drive crosswalk, and observations confirmed students walking and crossing safely.

Trancas Canyon Road

Trancas Canyon Road is home to the Trancas Country Market Shopping Center on the landside of the intersection and has many residences on the beachside of PCH. Trancas Canyon at PCH is just west of Zuma Beach and beachgoers are observed walking along the shoulders on both sides of PCH from the beach are to this shopping center. Fewer pedestrians were observed crossing at the signalized marked crosswalk. This intersection is a three-legged signalized intersection, with PCH crossing prohibited on the west side. The bus stop is located on Trancas Canyon Road just north of the west side prohibited crossing. A licensed traffic engineer can further evaluate the area for feasibility for pedestrian mobility and transit access improvements both along and across PCH and along Trancas Canyon Road.

Busch Drive

The shopping center at PCH/Busch Drive is a pedestrian activity generator and provides the closest food options for visitors to Zuma Beach. There is a marked crossing provided at the signalized intersection, and the westbound bus stop is already aligned with the signalized crossing. However, the crosswalk does not lead directly to the beach but to what appears to be a ditch. A traffic engineer should further evaluate this area for potential ADA deficiencies. During our site visit, we observed that despite the lack of sidewalks, patrons of the shopping center were able to access and use the signalized crossing via the PCH shoulder; however, during peak tourist season, visitors parking illegally along the north and south PCH shoulders may pose a challenge to pedestrians trying to walk safely to access the signalized crossing and the beach.



Figure 23: Busch Drive and PCH Crosswalk (Caro Jauregui)

Chapter 7. Specific Observations for Other Areas of Concern

Moonshadows Restaurant Area



Figure 24: Moonshadows Restaurant Area (Google Maps)



Figure 25: Bus stop at Moonshadows Restaurant (Caro Jauregui) California Walks conducted several site visits to the Moonshadows restaurant area and has concluded that it is a high foot traffic generator. Currently, no marked crossing is provided from the landside to the beachside despite bus stops being located on both sides of PCH. Street parking is also allowed on both sides; street parking is free and the restaurant operates a valet parking service. The bus stops are not aligned with one another, and while the bus stop on the restaurant side has a bench, it is located at the edge of the sidewalk, which may contribute to pedestrian safety concerns.



Figure 26: Moonshadows customers crossing from parked vehicle on landside to access restaurant (Caro Jauregui)

Malibu Seafood Restaurant Area



Figure 27: Malibu Seafood Restaurant Area (Google Maps)

California Walks conducted several site visits to the Malibu Seafood Restaurant area and interviewed the restaurant coowner, John Christenson and an area lifeguard. The area around the restaurant lacks any surface crossing, and the

restaurant attracts a fair number of beachgoers who must cross PCH.

The restaurant's parking lot is rather small, and during peak season, beachside parkers cross frequently to access the restaurant. There is are two Metro bus stops—one traveling east and the other west—and neither bus stop is aligned to one another nor is there a marked crossing provided at either stop.

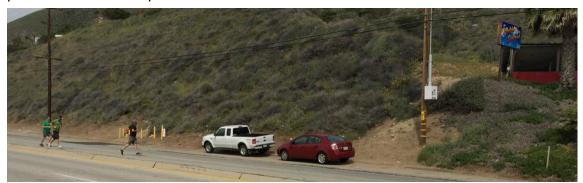


Figure 28: Beachgoers cross PCH to access Malibu Seafood (Tony Dang)

California Walks
conducted an
impromptu interview
of a lifeguard at
Tower 2. The
lifeguard confirmed
that in his
experience,
beachgoers cross the
PCH frequently to get



Figure 29: Pedestrian with a child crossing PCH from Malibu Seafood to parked car (Caro Jaurequi)

to/from the restaurant. The lifeguard pointed out what he believed to be an undercrossing to access the beach; however, this is a creek outlet that is not officially sanctioned as a pedestrian undercrossing. California Walks also interviewed one of the co-owners of the restaurant. The owner also believed the creek outlet to be an underpass and advised patrons to use it to cross PCH. California Walks staff investigated the creek outlet, which was too low, dark, and dirty to be of use to most pedestrians attempting to cross, and Caltrans confirmed this is not a sanctioned pedestrian undercrossing. There was a minor central divider that pedestrians could stand on when attempting to make a surface crossing.

Entrada Drive/West Channel Road/Chautauqua Boulevard Intersection



Figure 30: Entrada Drive/W. Channel Road/Chautauqua Blvd (Google Maps)

The complex intersection of Entrada Drive, W. Channel Road, Chautauqua Blvd presents many challenges to pedestrians attempting to cross PCH, including:

- Lack of Signage to Undercrossing: Though a pedestrian undercrossing exists, there is no clear signage and wayfinding markers to encourage the use of the undercrossing. Without local knowledge, it is very difficult for a visitor to know that an undercrossing tunnel exists, much less that it is the designated Entrada Drive crossing.
- Maintenance & Nuisance Issues with Undercrossing: The current undercrossing does not employ current best practice design, lacking clear visibility

from the entrance to the exit. A 90-degree turn obfuscates the view of other users and is a magnet for blight and nuisance activities. The undercrossing has also attracted homeless nighttime users. The Pacific Palisades Community Council provides volunteer maintenance of the undercrossing, recently repainting the tunnel bright yellow.

- Undercrossing Needs to be Evaluated Further by an Engineer for ADA Improvements:
 Due to the unleveled and obstructed sidewalk conditions leading to the undercrossing, lack of ramps to access the undercrossing (stair-only access on both sides), and narrow width of the undercrossing, wheelchair users and other persons with disabilities will not be able to utilize the undercrossing.
- Reports of Visitors Fined for Making Surface Crossings: Though crossing at the most eastern side of the 5-way intersection is not prohibited by signed barriers, residents report that visitors making this crossing are often fined. As described earlier, it is very difficult for visitors to find the existing undercrossing. Nearby residents and business patrons report and were observed spending a lot of their time explaining to pedestrians waiting to cross PCH at the 5-way intersection that it is prohibited to cross at street level, redirecting pedestrians to the undercrossing tunnel, and warning about ticketing for street level crossing.

Chapter 8. Current, Ongoing, & Proposed Efforts to Improve Pedestrian Safety

Many agencies are working to improve pedestrian safety along the corridor. This chapter documents the current, ongoing, and proposed efforts and projects by various agencies along the corridor.

Caltrans

California Walks staff have contacted the Caltrans District 7 Bicycle and Pedestrian Coordinator, as well as the Traffic Operations Chief and Traffic Engineer to document current and planned pedestrian safety improvements for the PCH corridor. To date, installation of pedestrian hybrid beacons at the La Costa Beach crosswalk and at the Palisades Bowl crosswalk is in the planning phase. California Walks also requested information on specific traffic operations policies regarding upgrading existing marked crossings, installing new marked crossings, and evaluating pedestrian crossing time at signalized intersections. As of September 22, 2015, Caltrans is still working to compile the requested project and policy information.

Los Angeles County Metropolitan Transportation Authority (Metro)

California Walks staff contacted Metro staff regarding bus stop facilities along the PCH corridor. Specifically, California Walks requested policies regarding realignment of bus stops to existing marked crossings and provision of bus stop amenities (such as benches, schedule information, and shelters). A weeklong email exchange and phone conversation with Silva Mardrussian, head of pedestrian issues from Metro's Planning Department revealed that Metro is only in charge of the bus stop posts and signs. The municipalities are in charge of providing bus shelters, trash receptacles, and benches. Local jurisdictions may secure funding for these types of transit stop improvements through Metro's Call for Projects, as well as through the state Active Transportation Program. California Walks also discussed bus stop alignment issues with Woodie Yee, Director of Stops and Zones with Metro. Due to the specific geographies of the Malibu Seafood and the Moonshadows areas, alignment of the bus stops was not feasible and the current stop siting is the most appropriate in order to allow safe bus ingress and egress from PCH per Metro.

City of Malibu PCH Bus Stop Improvements Project

The City of Malibu has secured Metro funding—supplemented by local funds—to improve 11 bus stops within the City. The improvements consist mostly of constructing sidewalks, curbs and gutters, curb ramps, asphalt concrete work, signage, traffic striping, and relocating bus benches. These improvements will promote safety and accessibility for transit riders and improve traffic flow for all modes of travel. There are no existing marked crossings for many of the stops. Where there are marked crossings, the stops are already aligned.

The 11 bus stops improved through the project include:

- PCH / Tuna Canyon Rd (Westbound)
- PCH / John Tyler Dr (Eastbound)
- PCH / Corral Canyon Rd (Westbound and Eastbound)
- PCH / Paradise Cove (Westbound and Eastbound)

- PCH / Heathercliff Rd (Westbound and Eastbound)
- PCH / Busch Dr (Eastbound)
- PCH / Morning View Dr (Eastbound)
- PCH / Trancas Canyon Rd (Eastbound)

California Highway Patrol

California Walks interviewed Leland Tang, CHP Public Information Officer from the West Valley Area. Officer Tang emphasized that improving pedestrian safety is among the top three priorities for the CHP office, and CHP hosts pedestrian safety workshops and responsible pedestrian workshops for elementary school aged children. One of their most successful formats has been using a character named "Chipper." The CHP has developed coloring books for children that teach safe pedestrian behaviors. More information can be accessed here: https://www.chp.ca.gov/CommunityOutreachAndMediaRelationsSite/Documents/ChipPals.pdf

Walk it! Bike it!

California Walks interviewed Audra Hotchkiss, Walk it! Bike it! Coordinator at the schools on Morning View Drive: Malibu High School, Malibu Middle School and Juan Cabrillo Elementary. Walk it! Bike it! is a part of the Santa Monica-Malibu School District (SMMSD) Safe Routes to School program. Schools in the District participate in walk/bike to school day events twice a year in early October and in early May. These events are intended to encourage families, children and youth to walk to school and bike to school together. In addition to encouragement activities, the program provides basic pedestrian and bicycle safety education to students. More information on Bike it! Walk it! to SMMSD can be accessed here: http://bikeitwalkit.org/

City of Malibu

The City of Malibu along with the Southern California Association of Governments (SCAG) conducted a Pacific Coast Highway Safety Study to improve safety for motorists, cyclists, transit riders and pedestrians along the corridor. The study was approved by the Malibu City Council on June 22, 2015. Most recently, the Council directed city staff to create an implementation schedule based on the report. Staff is working on the implementation of the high priority projects, many of which will improve pedestrian safety. More information on the Pacific Coast Highway Safety Study can be found here: http://www.malibucity.org/PCH-safetystudy

The City of Malibu is also working on the following projects that will improve pedestrian safety:

- Shoulder Enhancement Project
- Median Enhancement Project
- Signal Synchronization Upgrade Project

City of Santa Monica

On April 20, 2015 the City of Santa Monica began reconstruction of the California Incline. This project will replace an existing bridge with a bridge that has bike-lanes and sidewalks. Additionally, the City of Santa Monica along with Caltrans will begin working on a four-year

project next year that will improve pedestrian access on the Santa Monica Pier. For more information on these projects, please visit: http://www.pchpartners.org/projects.htm

Stay Safe on PCH PSA



Figure 31: PCH PSA (PCH Taskforce)

Another component of the PCH Safety Corridor Grant involved the development of a traffic safety PSA targeted to all PCH users. The PSA, titled "Pacific Coast Highway Group Therapy," was released on May 8, 2015 as part of May is Bike Month celebrations. The PSA has been posted to Youtube and can be found at

www.youtube.com/watch?v=e0IXIq EUXtM

Chapter 9. Conclusion & Next Steps

Since PCH is a state highway—owned, operated, and maintained by Caltrans—working with Caltrans is essential to improving pedestrian safety through traffic operations and roadway design. The Taskforce has created collaborative opportunities for analysis, project planning, funding and implementation of safety and mobility improvements by Caltrans. The Taskforce can grow these opportunities and currently has a great opportunity to help Caltrans, on a prominent state highway corridor, demonstrate safe, multimodal travel that can successfully reach the recently announced Caltrans Management Strategic Plan 2020 goals: double walking, triple bicycling, and reducing pedestrian and bicyclist fatalities by 10% per year.³

In summary, California Walks has identified the following challenges present throughout the corridor, including the assessment zones and areas of concern; recommendations to these challenges will be provided in the final report and will be informed by community resident input.

Three-Legged Crossings at Signalized Intersections

Few signalized intersections exist on PCH. Intersection signalization is mostly restricted to major canyon T-intersections and at Malibu Civic Center. At most of these intersections, only a single marked crossing is provided across PCH, while the other is prohibited. This design unnecessarily restricts pedestrian movements and crossings, particularly in high foot traffic areas located on either side of PCH at these intersections (e.g., shopping centers, parks, beaches).

Infrequency of Marked Crosswalks

Placement of marked crosswalks varies considerably in terms of distance from one another—some marked crosswalks are more than one mile apart, while others are as close as 0.1 mile apart. Despite several PCH sections containing several block lengths of contiguous retail/scenic tourist destinations on both sides of PCH and high pedestrian volumes, few, if any, of these sections contain marked crosswalks set at town-block length intervals (marked at 150 feet to 500 feet lengths). Yet at many PCH destinations, California Walks staff observed pedestrian volumes that exceed traditional town crossing volumes.

Lack Community Markers to Discourage Highway Mentality

PCH is nearly contiguous with destination after destination: state beaches with retail across the highway; beach front residences, transit stops and public beach access on PCH; and retail and other uses. Very little of the PCH corridor under review is a non-stop scenic thruway, yet no roadway treatments are implemented to signal to drivers when they are entering high pedestrian activity areas. These pedestrian activity nodes contain a high number of retail destinations and beaches and generate significant numbers of pedestrian crossings and would benefit from being designed to convey a "main street" setting to discourage speeding traffic through these areas.

³ Caltrans Strategic Management Plan, 2015-2020, Available at www.dot.ca.gov/perf/library/pdf/Caltrans_Strategic_Mgmt_Plan_033015.pdf

Lack of Improved Public Transit Facilities

Public transit along PCH attracts a ridership of 3,000 persons a day—which would imply 6,000 pedestrian crossings a day if transit riders cross the street twice per day.⁴ Yet many bus stops remain unimproved and are not aligned with a marked crosswalk in several locations. While crossing—where there is no traffic signalization—is legal, it introduces increased safety risks.

Tourist/Visitor Volumes

Observations after the initial March 16, 2015, clearly underscored the seasonal pattern to tourist and visitor volumes. Site visits in April and May 2015 noted that free roadside parking was nearly full and paid parking lots was beginning to be utilized. When parking on both sides of PCH is allowed, pedestrian crossings will occur. California Walks observed very high volumes of both pedestrian and vehicle traffic during the weekend of July 25 and 26, 2015, along the Malibu Pier. Vehicles were completely stopped along PCH most of the time due to the vehicle traffic and 50 or so pedestrians crossed at the Pier's crosswalk during every traffic signal cycle.

Next Steps

California Walks will continue engaging community residents to educate residents on pedestrian safety best practices and receive input and suggestions on pedestrian safety priorities along PCH. These community priorities and recommendations will be incorporated into the final recommendations report for the Taskforce and will be further informed by community workshops and interactive community input opportunities.

Community Workshops & Interactive Input Opportunities

California Walks will be hosting a series of community workshops and other public input opportunities throughout the spring and summer on behalf of the Taskforce. Community members will learn about pedestrian safety best practices and identify multi-disciplinary strategies and priorities that will work for PCH:

Assessment Zone #1: Temescal Canyon Road to Palisades Bowl Mobile Home Park

- On Sunday, May 17, 2015 from, 4:00 pm–6:00 pm, California Walks hosted a workshop at Pacific Palisades Bowl Mobile Home Park, 16321 Pacific Coast Highway.
 Approximately fifteen (15) residents learned pedestrian safety best practices, how to conduct a walkability assessment, and worked together to develop shared consensus pedestrian safety priorities.
- On Monday, May 18, 2015, California Walks hosted an interactive display for students at Palisades Charter High School during lunchtime. Students and staff learned about pedestrian safety best practices and voted on their priority pedestrian safety strategies.
 California Walks spoke in-depth and at-length with five staff members and five students.
- On Monday, May 18, 2015, California Walks also hosted an interactive display and sidewalk discussion at Temescal Park and Will Rogers State Beach from 2:00 pm-4:00

⁴ Mobility Matrix Report for Las Virgenes Malibu Council of Governments, Available at http://media.metro.net/projects_studies/lrtp/images/report_mobility_malibu.pdf

- pm, aimed at educating and engaging commuting students, transit riders and beachgoers. California Walks spoke with roughly 5-10 people briefly, and five people participated in the interactive display and prioritization exercise.
- On Thursday, June 25, 2015, California Walks facilitated a discussion on pedestrian safety priorities at the Pacific Palisades Community Council meeting. This meeting was open to the community and took place from 7:00 pm-9:00 pm. In total, 40 key stakeholders participated in the prioritization exercise, and learned about the pedestrian safety message.

Assessment Zone #2: Malibu Pier/Surfrider Beach

- On Saturday, July 25, 2015, California Walks hosted a sidewalk pedestrian safety discussion from 1:30 pm-3: 00 pm at the Malibu Pier. At least 200 people directly viewed the educational messages displayed, including families with children and many tourists. California Walks spoke at length with 45 people at the Pier.
- On Sunday, July 26, 2015, California Walks hosted a pedestrian safety workshop at the Chabad of Malibu from 10:00 am-12:00 pm. This workshop educated 11 key stakeholders on pedestrian safety best practices, successful examples from communities across the state were shared, and an action planning discussion was developed to share consensus on pedestrian safety priorities.
- On Sunday, July 26, 2015, California Walks conducted a sidewalk pedestrian safety discussion from 1:30 pm-3:30 pm at Surfrider Beach. Approximately 30 beach-goers directly viewed the educational messages displayed. California Walks spoke at length with nine (9) visitors—several of whom self-identified as decades-long local visitors and beachgoers—and a few residents.

Assessment Zone #3: Zuma Beach

- On Saturday, July 25, 2015, California Walks conducted a sidewalk pedestrian safety discussion from 10:30 am-12:00 pm at Zuma Beach. California Walks spoke at length with seven (7) local Malibu residents who were happy to hear more about the pedestrian safety project and offered various recommendations for this zone. California Walks also displayed educational materials that were viewed by approximately 50 local residents and visitors. California Walks staff only tallied passersby who directly viewed the materials and paused but did not engage in the prioritization exercise.
- On Wednesday, August 5, 2015, California Walks educated youth from the Boys and Girls Clubs of Malibu on how to walk safely on PCH and led a discussion on how to improve pedestrian safety with the elementary- and high school-aged youth from 11:00 am-12:00 pm. California Walks educated thirty-four (34) youth and six (6) adults.
- On Wednesday, August 19, 2015, California Walks hosted an interactive pedestrian safety education display at the Juan Cabrillo Elementary School's Back-to-School BBQ from 4:00 pm-6:00 pm.

Appendix 1. Script for Key Informant Interviews

Primary Objective: Document community concerns and pedestrian safety needs along the PCH corridor

[Interviewer Script]: Thank you for taking the time to speak with me today. The Pacific Coast Highway Safety Task Force, through the City of Malibu recently received a federal safety corridor grant from the California Office of Traffic Safety (OTS) to promote motorist, pedestrian and bicycle safety and increase safety awareness along the PCH. California Walks, the organization I work for, is leading the pedestrian safety component. The purpose of this interview is to get a better understanding of the community needs and concerns for pedestrian safety along the PCH. Your feedback will help us demonstrate the existing conditions and concerns for pedestrian safety along the PCH.

I would like to begin by asking a few questions about you and your organization.

- 1. What is your role in {organization we are interviewing}?
- 2. Before being contacted by California Walks, were you aware of the PCH Safety Taskforce or its work to improve pedestrian safety?
- 3. Could you tell us about any pedestrian safety activities you or your organization works on in the community?
- 4. What is your organizations or your own priority in improving pedestrian safety?

We would like to gain a better understanding about pedestrian safety concerns along the PCH corridor.

5. On a scale of 1 through 5, 1 being not concerned at all and 5 being very concerned, how would you rate the following present concerns about pedestrian safety in your community that you and/or your organization have?

Missing sidewalks:

Lack of pedestrian signals (e.g., flashing beacons):

Lack of pedestrian signs (e.g., crosswalk warning signs):

Lack of pedestrian-scale lighting:

Infrequently marked crosswalks:

Lack of high-visibility marked crosswalks:

High traffic speeds:

High traffic volumes:	
Aggressive motorists:	
Blight/trash:	
Personal safety (crime, gang activity):	
Stray dogs or aggressive wildlife:	
Recent pedestrian fatality or injury:	

6. Which pedestrian groups do you feel are most at risk of being injured in your community (i.e. children, older adult, persons with disabilities, certain racial/ethnic groups)?

Before ending the interview, I would like to let you know a bit more about the role California Walks will take regarding PCH pedestrian safety in the next few months.

- 7. California Walks will be facilitating community workshops for communities along the PCH this spring on (dates, time, and locations). At these workshops, community participants will learn best practices for improving pedestrian safety, how to conduct a walkability assessment to document safety concerns, and work with local agencies to create actionable next steps to improve the PCH corridor. Will you and or someone from your organization commit to attending one of these workshops?
- 8. Is there anyone else you think we should be speaking with about pedestrian safety issues?

Thank you for taking the time to speak with me today. We appreciate your feedback. Are there any questions or remaining comments that you have for me? Thank you! Have a nice day!

Funding provided by the California Office of Traffic Safety through the National Highway Traffic Safety Administration to the City of Malibu on behalf of the Pacific Coast Highway Safety Task Force.

For more information on this Survey, contact Caro Jauregui, Southern California Policy & Program Manager, California Walks at (323) 605-5220 or caro@californiawalks.org

Appendix 2. List of Key Informants & Stakeholders

Name	Title / Role	Organization / Agency
Michael Blum	Former President	Malibu Surfers Association
Bill Cacciatore	Board Member	Malibu Country Estates HOA
John Christenson	Co-Owner	Malibu Seafood Restaurant
Julie Eamer	Co-Founder	A Safer PCH
Dylan Gasperik	Malibu Coordinator	Surfrider Foundation, West
		Los Angeles-Malibu Chapter
Gigi Goyette	Member	Concerned Citizens of Malibu
Audra Hotchkiss	Walk it! Bike it! Coordinator	Malibu Middle School and
		High School, Juan Cabrillo
		Elementary School
Barry Kurtz	Transportation Engineer	County of Los Angeles,
		Department of Beaches and
		Harbors, Planning Division
Michael Lansbury	President	Malibu Riviera HOA
John Mazza	President	Point Dume Community
		Association
Rachael McDonald	President	Palisades Bowl Home Owners
		Association
Michael Novotny	Board of Directors	Point Dume Community
		Association
Mark Presson	CEO	Malibu Chamber of
		Commerce
Nicole Portillo	Marine Biology Teacher	Malibu High School
Patti Post	Transportation Advisor	Palisades Community Council
Carol J. Randall	Commissioner	Malibu Public Safety
		Commission
Andrea Bonnie Saito	President	Malibu Villas HOA
Jonathan Selig	President	Heathercliff HOA
Michael Smith	Principal	Our Lady of Malibu
Remy Smith	Captain Ocean Lifeguard	City of Malibu/Los Angeles
		County Fire Department
Scott Tallal	President	Trancas Highlands HOA
Leland Tang	Public Information Officer,	California Highway Patrol
	West Valley Area	
Susan Tellem	Member	PCH Taskforce
Robert Torres	Captain Ocean Lifeguard	Will Rogers State Beach / Los
		Angeles County Fire
		Department
Lawrence Weisdorn	Director	Serra Canyon POA
George Wolfberg	Member-At-Large	Palisades Community Council

Appendix 3. April 13, 2015 Stakeholder Meeting with Palisades Bowl residents

Name	Title/Role
Colleen Baker	Resident
Rachael McDonald	President of HOA
Margie Rodriguez	Site Manager
Pete Rodriguez	Site Manager
Bob Townsley	Resident for over 40 years

Appendix B. Pedestrian Safety Toolkit















Pedestrian Safety Strategies to Consider

Strategy	Considerations	Costs	Timeline
 Update Existing Marked Crossings High-Visibility Markings High-Visibility Signage Advanced Yield Lines Advanced Warning Signage Countdown Signals Crossing Time Adjustments Leading Pedestrian Interval 	 Can usually be implemented quickly Generally low-cost improvements Help to encourage people to use existing facilities May want to consider pursuing corridor-wide 	\$	Short Term
Crossing Improvements	 Provides the "next level up" of improvements Can be paired with lower cost improvements Lighting improvements should be prioritized at crossing locations 	\$\$- \$\$\$	Short to Medium Term
 Install New Marked Crossings Prioritized in locations w/ high pedestrian activity or generators Pair w/ safety enhancements 	 Can accommodate existing crossing behavior Must meet state warrants May not be appropriate in all locations 	\$- \$\$	Medium Term
 Beacons & Signals Rectangular Rapid Flashing Beacons Pedestrian Hybrid Beacon Standard Traffic Signal 	 Less stringent requirements for beacons May require education of drivers on new beacons Full traffic signals very costly 	\$\$- \$\$\$\$	Short to Medium Term
Sidewalks/paths; Paved Shoulders	 Provides separation from traffic Provides access to all community members, including those with disabilities May be costly to install everywhere, so prioritization needed May want to focus on areas with high pedestrian activity, schools, and/or transit stops Maintenance generally falls to adjacent property owner 	\$\$-\$\$\$	Medium Term















Pedestrian Safety Strategies to Consider

Strategy	Considerations	Costs	Timeline
Educational Campaign	 Helps to address behavioral factors that contribute to collisions Should be tailored to community's values May be difficult to reach tourists and visitors 	\$-\$\$	Short Term
Road Diet (or "right sizing")Narrows travel lanes and reallocates street space	Can be implemented cost-effectively if paired with existing repaving or other maintenance project	\$\$-\$\$\$	Medium to Long Term
Gateway Treatment & Other Speed Management Techniques Banners, art Transverse Rumble Strips	 Provides a fully separated crossing Usually very expensive to construct Needs to provide ADA-access Pedestrians may choose not to use them May require lots of land Needs to account for safety at night May attract vandalism Sends message to drivers that they are entering a community 	\$\$\$\$ \$-\$\$	Long Term Medium to Long Term
 Speed Feedback Signs Progressive Ticketing Campaign Educate through media Warning Phase 	 Should be paired with educational campaign and media outreach Requires grant funding or other operational resources 	\$\$	Short Term
Ticketing as last resort Automated Speed Enforcement	 Would require state legislation Could pursue as pilot for Malibu and other interested communities Has been proven very effective in other communities at reducing speeds (Washington, D.C.; New York City; Chicago) 	\$\$-\$\$\$	Long Term

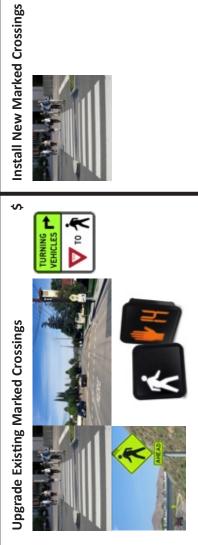


Help Make PCH a Safer

Place to Walk

\$\$\$ High \$\$\$\$ Very High \$ Low \$\$ Medium Legend

Pedestrian Safety Toolbox







Beacons & Signals





\$\$-\$\$

\$-\$

Older Adults

-Transit Riders -Parents -Other?



Sidewalks, Sidepaths, or Paved Shoulders





Help Make PCH a Safer

Place to Walk

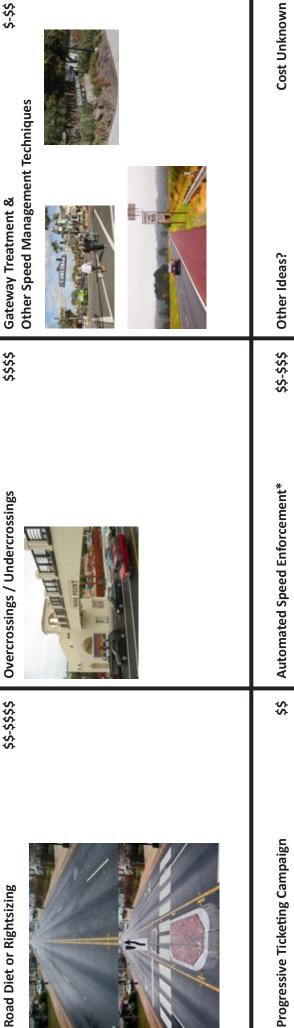
Legend

Pedestrian Safety Toolbox

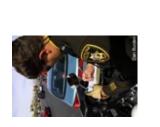
\$ Low \$\$ Medium \$\$\$ High \$\$\$\$ Very High

\$\$-\$









В4

*would require state legislation

Appendix C. Summary Table of Community Generated Suggestions for Pedestrian Safety Strategies by Assessment Zone

California Walks conducted location-specific community outreach, education, and engagement activities to gather a snapshot of public input and Appendix C. Summary Table of Community Generated Suggestions for Pedestrian Safety Strategies by Assessment Zone

priorities related to increasing pedestrian access along and across PCH. It should be noted that as a snapshot, these activities only provide the

views of individuals polled and may not fully represent the views of other PCH residents.

					Assessment Zone #2: Malibu Pier to Malibu	t Zone #2: to Malibu				
	Assessme	ent Zone #1: 1	~ ~ .	on Road to	Lagoon/Surfrider	urfrider	Assessmer	Assessment Zone #3: Zuma Beach	ıma Beach	
	Pal	Palisades Bowl Mobile	Mobile Home Park	Park	Beach	ıch		Area		
	Palisades Bowl – Pedestrian Safety	Palisades Charter HS –Lunchtime	Temescal Canyon/PCH – Sidewalk	Pacific Palisades Community Council –	Malibu Pier –Sidewalk Discussion	Surfrider Beach – Sidewalk	Zuma Beach – Sidewalk	Boys & Girls Club of Malibu – Pedestrian Safety	Juan Cabrillo ES BBQ – Safety	Total
Pedestrian Safety Toolbox Category	Education Workshop	Discussion	Discussion	Safety Discussion		Discussion	Discussion	Education Workshop	Discussion	(Corridor- wide)
Safety Enhancements at	11	٤	U	9	1	7	7	8	ζ	35
Existing Marked Crossings	11	'n	0	0	+	7	2	o o	7	5
Install New Marked	Û	l	l	7	7	3	3	8	l	28
Crossings	Þ	1	1	+	`	ו	n)	1	2
Install Pedestrian-Actuated Beacons & Signals	9	2	0	4	9	0	2	5	4	32
Provide Physically-										
Separated Pedestrian										
Pathways (Sidewalks, Side	5	4	0	5	2	0	2	14	5	37
Paths, and/or Paved										
Shoulders)										
Install Pedestrian Crossing	4	2	0	2	2	Т	2	n	9	28
Improvements										
Explore Road Dieting or	c	-	-	5	C	c	,	7	,	0
Rightsizing on PCH	0	T	т	t	o o	D	2	70	т	61
Construct a Pedestrian	c	ς.	r	17	C	c	r	7,	ς.	C
Overpass/Underpass	>	1	7	ì	n	>	7	17	†	n n
Install a Gateway Treatment	3	0	1	2	1	1	2	8	1	19
and/or Other Speed										

	6	10	77	17	5	11
	2	7	7	Τ	Τ	2
	1	1	8	10	0	7
	0	2	1	1	2	2
	1	0	3	1	0	0
	0	2	2	2	1	0
	0	0	3	3	0	0
	1	0	1	0	0	0
	1	0	2	0	0	0
	0	0	2	3	1	0
Management Techniques	Install Bicycle Facilities on PCH	Improve Parking & Local Traffic Circulation	Launch an Educational Campaign	Pursue a Progressive Ticketing Campaign	Explore Automated Speed Enforcement Pilot Program	Miscellaneous

Appendix D. Pedestrian Safety Tips for Youth



PCH Pedestrian Safety Tips



Tips to Walk Safely on PCH

- 1. Cross only in marked crosswalks;
- 2. Look left, right, left again and behind before crossing;
- 3. Watch for turning cars;
- 4. Make eye contact with drivers if you can--don't assume drivers see vou!
- 5. When crossing at a walk signal, start crossing only at the WALK or walking man. DO NOT start crossing if there is a flashing red hand.
- 6. Walk on a sidewalk; if there is no sidewalk; walk on the left side of the street, facing oncoming traffic
- 7. **Be visible!** If you walk when it is dark, wear light-colored clothing or clothing with reflective material so drivers can see you. A flashlight is also a good idea.

















Malibu

Brought to you by the PCH Taskforce through a grant from the California Office of Traffic Safety, through the National Highway Traffic Safety Administration.

Appendix E. Summary of Recommendations

	А	В	С	D	Е	F	G	Н	ı
1			California Walks Pedestrian Safety Improvement Recommendations	rovement	Recommenda	tions			
					Short-Term	Mid-Term	long-Term		
2	Zone	Number	Description	Cost	Timeline		Timeline	Agency Responsible	Coordinating Agencies
									City of Los Angeles; Los
		C-1	Enhance Pedestrian & Motorist Wayfinding Signage to Existing			×			Angeles County; California
3	Corridor-wide			\$				Caltrans	Coastal Commission
						:			Local Cities; Los Angeles
•		C-5	enance of Existing & Proposed	\		×			County; California Coastal
4	Corridor-wide		Pedestrian Undercrossings	\$\$				Caltrans	Commission
					;				City of Malibu; City of Los
-		(e Existing Signalized Crossings with Pedestrian Countdown		×			<u>.</u>	Angeles; Los Angeles
2	Corridor-wide	C-3a	Signals	\$				Caltrans	County
									City of Malibu; City of Los
(-	-	Existing Signalized Crossings with Leading Pedestrian	٠.	×			-	Angeles; Los Angeles
٥	Corridor-wide	C-3D	Intervals	۸.				Caitrans	County
			The control of the co			>			City of Malibu; City of Los
7	Corridor-wide	ر-ع		v		<		Caltrans	Aligeles, Los Aligeles Colinty
	9		00						City of Malibur City of Loc
			Install Bodastrian Scala Lighting at All Evisting & Nawly Marked				>		Angeles: Los Angeles
∞	Corridor-wide	C-4	מר און בעופרוון אין אינאו אבים	Ş			<	Caltrans	County
				+					City of Malibu: City of Los
			Upgrade Warning Beacons at Existing Uncontrolled Crossings to				×		Angeles: Los Angeles
6	Corridor-wide	C-5		\$\$\$				Caltrans	County
									City of Malibu; City of Los
			Evaluate the Feasibility of & Establish a Policy for Additional High-			>			Angeles; Los Angeles
			Visibility Marked Crossings for High Pedestrian Activity Centers,			<			County; California Coastal
10	Corridor-wide	C-6	including Transit Stops	\$				Caltrans	Commission
									City of Malibu; City of Los
		C-7	Improve & Increase Access to Transit Stops through Crosswalk			×			Angeles; Los Angeles
11	Corridor-wide		Alignment & ADA Enhancements	\$				Metro	County; Caltrans
									City of Malibu; City of Los
									Angeles; City of Santa
		8- - -				×			Monica; Los Angeles
) for PCH to						County; California Coastal
12	Corridor-wide		Conform to Current Caltrans Policies & Design Standards	\$\$				Caltrans	Commission
						:			City of Malibu; City of Los
13	Corridor-wide	6-5	Manage Speeds with Speed Feedback Devices & Gateway Treatments	\$\$\$		×		Caltrans	Angeles; Los Angeles
3	_		Market Crossing Q. Alian Camb Damas at Tomoral	2					(auto)
14	Assessment Zone #1	Z1-1	install New Marked of Ossaing & Align Curd Ramps at Lemescal Canyon Rd./PCH Intersection	\$\$			×	Caltrans	City of Los Angeles
15	Assessment Zone #1	Z1-2	Improve Transit Stop at Temescal Canyon Rd./PCH intersection	\$		×		Metro	City of Los Angeles
									Metro; City of Malibu; Los
		Z1-3	Provide Dedicated Pedestrian Crossing Facility between Potrero				×		Angeles County (Beaches &
16	Assessment Zone #1			\$\$\$\$				Caltrans	Harbors)
		,	swalk: Pursue	4	×			.	
ī	Assessment Zone #1	71-4a		\$\$\$				Caltrans	City of Los Angeles
			Enhance Existing Marked Palisades Bowl Crosswalk: Provide Interim, Interiorally Soportated Podortrian Dathway to Access Tomoscal		>				
18	Assessment Zone #1	Z1-4b		\$.	<			Caltrans	City of Los Angeles
			Marked Palisades Bowl Crosswalk: Evaluate		>				
19	Assessment Zone #1	Z1-4c	sing	\$	×			Caltrans	City of Los Angeles
									Ē

r	<	0		-	_	L	Ų	3	
20	Assessment Zone #1	71-5	owl Crossing	\$\$,	- ×		Metro	City of Los Angeles
1	Assessment Zone #2	Z2-1a	J Pier Crossing:	\$		×		Caltrans	City of Malibu
22	Assessment Zone #2	Z2-1b		- ♦	×			Caltrans	City of Malibu
23 /	Assessment Zone #2	Z2-1c	Install Safety Enhancements at Signalized Malibu Pier Crossing: Evaluate Feasibility of Flex-Hit Posts to Create a Temporary Pedestrian Safety Island Area	φ.		×		Caltrans	City of Malibu
24	Assessment Zone #2	Z2-1d	t Signalized Malibu Pier Crossing: ng the Crosswalk Zone or Creating nal to Accommodate Peak Season	\$\$		×		Caltrans	City of Malibu
25 /	Assessment Zone #2	Z2-2a	Install New Marked Crossings with Safety Enhancements where High Pedestrian Crossing Activity Occurs: Malibu Surf Shack Crossing \$-\$\$	\$-\$			×	Caltrans	City of Malibu
26	26 Assessment Zone #2	Z2-2b	Install New Marked Crossings with Safety Enhancements where High Pedestrian Crossing Activity Occurs: Surfrider Beach Stairwell Crossing	\$\$-\$			×	Caltrans	City of Malibu; Los Angeles County (Beaches & Harbors); California Coastal Commission
27 //	Assessment Zone #2	22-3	Install Gateway Treatment for Malibu Pier & Surfrider Beach Area	\$\$\$\$-\$\$		×		Caltrans	City of Malibu; Los Angeles County (Beaches & Harbors); California Coastal Commission
782	Assessment Zone #2	22-4	Install Pedestrian Wayfinding Signage for Tourists	\$\$-\$		×		Caltrans	City of Malibu; Los Angeles County (Beaches & Harbors); California Coastal Commission
29 /	Assessment Zone #2	22-5	Improve Signage for Visitors to Parking/Destinations	\$\$-\$		×		Caltrans	City of Malibu; Los Angeles County (Beaches & Harbors); California Coastal Commission
	Assessment Zone #3	23-1	each Access from	\$\$\$\$-\$\$		× >		Los Angeles County (Beaches & Harbors)	Caltrans
31	Assessment Zone #3 Area of Concern: Moonshadows	Z3-2 MSH-1	n PCH verhead Pedestrian Warning	\$\$		×	×	City of Malibu Caltrans	City of Malibu
33 /	Area of Concern: Moonshadows	MSH-2 MSF-1	Install Marked Crossing with Safety Enhancements at Moonshadows' Front Door Construct New Pedestrian Undercrossing with Dedicated Funding & Clear Plan for ADA-compliant Maintenance	\$\$-\$			××	Caltrans	City of Malibu
	Area of Concern: Entrada Drive/West Channel Road/Chautauqua Blvd.	EWCC-1	Enhance Pedestrian & Motorist Wayfinding Signage to Existing Pedestrian Undercrossing	\$ \$		×		Caltrans	City of Los Angeles
36 F	Area of Concern: Entrada Drive/West Channel Road/Chautauqua Blvd.	EWCC-2	Identify Dedicated Funding & Clear Plan for ADA-Compliant Maintenance	\$		×		City of Los Angeles	Caltrans; Neighborhood Groups
37 [Area of Concern: Entrada Drive/West Channel Road/Chautauqua Blvd.	EWCC-3	Install Enhanced High-Visibility Crossing at Easternmost Leg of Intersection	\$\$		×		Caltrans	City of Los Angeles
3									

Н				
9				
F	Short-Term = Less than 18 months	1-3 years	Long-Term = 3 or more years	
Е	Short-Term = 18 months	Mid-Term = 1-3 years	Long-Term = years	
D				
3	ж = Гом	\$\$ = Medium	\$\$\$ = High	\$\$\$\$ = Very High
В				
А				
	39	40	41	42