



Acknowledgements:

This Bicycle and Pedestrian Master Plan was prepared for the City of San Clemente under the direction of project manager Cliff Jones, Associate Planner, and the General Plan project manager, Jeff Hook, Principal Planner.

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Prime consultant was KTU+A Planning + Landscape Architecture of San Diego, California. Project manager was John Eric Holloway, ASLA, LEED Green Associate, LCI. Project planners and GIS analysts were Joe Punsalan, GISP, LCI, and Catrine Machi, AICP, LCI. Traffic engineering support was provided by Fehr & Peers Transportation Consultants.

This document is intended to fulfill project scope requirements for bicycle and pedestrian facility planning and to obtain City of San Clemente compliance with California Streets and Highways Code, Section 891.2 requirements for bicycle transportation plans.



Feb. 4, 2014: City Council RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN CLEMENTE, CALIFORNIA, APPROVING THE DRAFT BICYCLE AND PEDESTRIAN MASTER PLAN, APPLICATION NO. GPA 13-043

WHEREAS, On June 1, 2010, the City Council approved Contract C10-32, by and between the City of San Clemente and KTU+A, providing for the development of a Bicycle and Pedestrian Master Plan "Master Plan"; and

WHEREAS, the purposes of the Master Plan were to identify the bicyclist and pedestrian transportation needs in San Clemente, provide recommendations to improve the overall walking and biking environments, and to integrate San Clemente's bikeway network with the Southern Orange County area's regional bikeway system; and

WHEREAS, Council directed that the Bicycle and Pedestrian Master Plan be developed currently with a new general plan to allow the general plan process to better assess the Community's bicyclist and pedestrian needs and to develop relevant policies and implementation actions to address those needs; and

WHEREAS, To encourage public input and participation in the planning process, the project scope of work utilized several public outreach methods, including involvement of the bicycle advocacy group PEDal in the selection of the consultant and review of the draft Plan, an on-line survey, Focus Area Workshops, General Plan Advisory Committee (GPAC) review and advertised public meetings before the Planning Commission and City Council; and

WHEREAS, citizens, property and business owners, interested groups and agencies were notified of general plan meetings and topics through legal advertisements in a local newspaper of general circulation, through newspaper articles and workshop invitations, and through City website notices regarding public meetings of the General Plan Advisory Committee, the Planning Commission and the City Council; and

WHEREAS, at a public meeting on January 17, 2012, the City Council directed that the Master Plan be fully integrated with the General Plan to ensure consistency between the documents and to comply with the California Complete Streets Act, AB 1358, which took effect January 2011; and

WHEREAS, based on GPAC's review and recommendations, public input, Planning Commission review and direction, and planning consultant and staff recommendations received during numerous public meetings held between June 2010 and June 2013, the Planning Commission endorsed a revised Bicycle and Pedestrian Master Plan and fully incorporated Chapter Two of the Master Plan, "Policy Framework," into the draft General Plan Multi-Modal and Complete Streets Element; and

WHEREAS, at a duly noticed public hearing on August 7, 2013, the Planning Commission conducted a public hearing on the Draft Bicycle and Pedestrian Master Plan in City Council Chambers, 100 Avenida Presidio, San Clemente, California. At

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said hearing, the Planning Commission recommended that the City Council approve the 2013 Bicycle and Pedestrian Master Plan, City Council Hearing Draft Centennial General Plan, Environmental Impact Report, Climate Action Plan and related planning documents; and

NOW, THEREFORE, the City Council of the City of San Clemente hereby resolves as follows:

Section 1. Findings. Based upon its deliberations, the City Council makes the following findings:

1. The proposed 2013 Draft Bicycle and Pedestrian Master Plan ("BPMP"), **Exhibit A**, will promote the public health, safety and welfare by providing technical background, policies, candidate projects and design standards to help meet bicyclist and pedestrian transportation needs and to coordinate such projects with General Plan implementation and Capital Improvement Programs.

2. The 2013 Bicycle and Pedestrian Master Plan promotes public health, safety and welfare by addressing the community's non-motorized transportation needs and goals, and that <u>Chapter Two of the BPMP</u>, "Policy Framework", has been fully incorporated into the Final Draft General Plan Multi-Modal and Complete Streets Element.

3. The 2013 Bicycle and Pedestrian Master Plan incorporates GPAC and Planning Commission recommendations, public input, including bicycle advocacy group recommendations, consultant and staff recommendations and reflects the Council's review, direction and independent judgment regarding non-motorized transportation needs, existing and proposed circulation and transportation services and facilities, land use factors, economic development, design and other factors related to bicycle and pedestrian movement and infrastructure.

Section 2. Environmental Determination.

1. The City Council has reviewed and considered an Environmental Impact Report which evaluated potential impacts of the Draft BPMP and based on its deliberations, the City Council determined the DEIR adequately addresses the 2013 Bicycle and Pedestrian Master Plan's potential environmental impacts and certified the EIR as complying with requirements of the California Environmental Quality Act (CEQA) and CEQA Guidelines.

Section 3. Bicycle and Pedestrian Master Plan Approved.

1. The City Council hereby approves the 2013 Bicycle and Pedestrian Master Plan, as shown in **Exhibit A.**

<u>Section 4</u>. **Master Plan Amendments.** The City Council authorizes the City Manager or his designee to make minor amendments administratively, without a public hearing, to the Bicycle and Pedestrian Master Plan for the following reasons: 1) to reflect multi-modal improvements made in the community (i.e. updating tables, figures, and candidate projects); and 2) to remain consistent with state and/or local law.

Section 5. **Publication and Availability**. The Community Development Director shall cause the newly adopted Bicycle and Pedestrian Master Plan to be published electronically and made publicly available on the City's website as soon as practicable, with a target date of March 31, 2014.

<u>Section 6</u>. **Effective Date**. The newly adopted Bicycle and Pedestrian Master Plan shall be effective on the thirtieth day after passage of this resolution.

<u>Section 7</u>. **Zoning and Specific Plans Consistency**. The City Council intends, within a reasonable time after adopting the Centennial General Plan, to update the Zoning Ordinance and official Zone Map, and affected specific plans to ensure consistency with the Bicycle and Pedestrian Master Plan.

<u>Section 8</u>. **City Clerk Certification**. The City Clerk shall certify to the passage and adoption of this resolution and enter it into the book of original resolutions.

PASSED AND ADOPTED this _____ day of _____, ____,

ATTEST:

City Clerk of the City of San Clemente, California

Mayor of the City of San Clemente, California STATE OF CALIFORNIA) COUNTY OF ORANGE) § CITY OF SAN CLEMENTE)

I, JOANNE BAADE, City Clerk of the City of San Clemente, California, do hereby certify that Resolution No. ______ was adopted at a regular meeting of the City Council of the City of San Clemente held on the _____ day of _____, by the following vote:

AYES:

NOES:

ABSENT:

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of San Clemente, California, this _____ day of _____,

CITY CLERK of the City of San Clemente, California

Approved as to form:

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City Attorney



This chapter lists the goals, policies and implementation measures developed for this Plan, in conjunction with the Mobility Element of the General Plan.

Goal:

City-wide bicycle and pedestrian facilities that provide an integrated, direct, safe and convenient network for all users.

Policies:

P-1.1. We shall consider every street in San Clemente as a street that cyclists could use.

- P-1.2. We shall employ bicycle-friendly infrastructure design using new technologies and innovative treatments where necessary to improve bicyclists' safety and convenience.
- P-1.3. We shall evaluate roadway level of service performance from a multi-modal, Complete Street perspective.
- P-1.4. Traffic control devices and transportation infrastructure will be operated to serve the needs of all users of the roadway, including motorists, pedestrians and cyclists.
- P-1.5. In determining the appropriate standard to apply to a given situation, the City will seek to maximize cyclists' and pedestrians' safety, comfort and convenience in balance with the other roadway users.

P-1.6. In preparing City land use plans and CIPS, we address bicycle needs, including:

a. attractive destination facilities such as bicycle lockers, showers, and changing rooms conveniently located for cyclists (e.g., a Bike Station);

b. facilities for bicycle parking within newly built and renovated multi-family residential developments, condominium and apartment conversions, multi-use and non-residential sites;

- c. safe, secure and convenient bicycle parking; and
- d. wayfinding systems and traffic control signage or markings for all bicycle routes.
- P-1.7. We coordinate with other jurisdictions for regional on-road and off-road bicycle and pedestrian facility planning, as well as facility acquisition and development efforts.
- P-1.8. We link on-road and off-road bicycle and pedestrian facilities within San Clemente to existing and planned facilities in adjacent and regional jurisdictions.
- P-1-9. Where feasible, the City connects off-road trails with the on-road transportation.
- P-1.10. The City encourages and supports bicycle use as an efficient and legitimate mode of transportation, especially for connecting gaps between destinations and transit stops and rail stations.
- P-1-11. The City encourages and supports skateboard use as an efficient and legitimate mode of transportation to connect gaps between destinations and transit stops and rail stations.

- P-1.12. All bicycle facilities are maintained according to a management plan to be adopted by the City.
- P-1.13. We develop and maintain a network of sidewalks, crosswalks and other pedestrian facilities throughout the City as specified in the Bicycle and Pedestrian Master Plan.
- P-1.14. We utilize Federal and State guidelines and standards for traffic operations, signal timing, geometric design, Universal Access (ADA) and roadway maintenance that facilitate walking and bicycling at intersections and other key crossing locations.
- P-1.15. We shall utilize the Caltrans *Highway Design Manual* and other infrastructure guidelines as appropriate to design and maintain bicycle and pedestrian facilities to high safety standards.
- P-1.16. The City shall require unpaved bicycle and pedestrian trails on City-controlled property to be built and maintained using recognized best practices.
- P-1.17. The City shall require the intersections of local roads with the Interstate 5 freeway and toll roads to be designed using a "Complete Streets" approach.
- P-1.18. Bicycle and pedestrian network wayfinding and information shall be provided through signs, markings or other technologies.
- P-1.19. We shall consider using the right-of-way outside that of the roadway limits to install safe and convenient bicycle and pedestrian facilities.
- P-1.20. We shall explore the formalization of existing informal bicycle and pedestrian paths where appropriate.
- P-1.21. Integrate bicycle and pedestrian facility installation and maintenance into the roadway and maintenance planning process.
- P-1.22. When roadway repairs are done by the City or other agencies, such as utilities, the roadway shall be restored in accordance with City standards, with restriping suitable for cycling, as appropriate.
- P-1.23. Where feasible, we design bikeways beyond the minimum required widths, but within Federal, State or local standards (For example, Class 2 lanes should not exceed eight feet in width to avoid confusion as driving lanes.)
- P-1.24. We retain existing bikeways when a roadway is reconstructed, reconfigured or improved. When designated bikeways must be temporarily removed, they should be replaced on nearby, convenient and parallel routes.
- P-1.25. We review all new capital improvement projects and private development projects to ensure consistency with the Bicycle and Pedestrian Master Plan and with the Mobility and Complete Streets Element.
- P-1.26. We shall consider implementing bicycle and pedestrian improvement projects as part of other street improvement projects.



- P-1.27. We provide convenient, secure, attractive and easy to use bicycle parking at public buildings, commercial areas, multi-family residential development projects, and at schools and parks and encourage other agencies to provide bicycle parking for rail transit and Park-n-Ride facilities.
- P-1.28. Provide access paths to transit centers and commuter rail stations to encourage walking and cycling.
- P-1.29. Maintain riding surfaces suitable for cycling on all designated, on road bicycle facilities in accordance with a management plan to be adopted by the City.
- P-1.30. Maintain and sweep streets and bikeways in compliance with the City Street Sweeping Program.
- P-1.31. Maintain bicycle and pedestrian signage and pavement markings so they are in good working condition.
- P-1.32. We encourage public pedestrian improvement projects such as public art, fountains, street trees, lighting and directional signs.

Implementation Programs:

- I-1.1. Identify and designate Class 2 lanes where there is enough curb-tocurb pavement width.
- I-1.2. Install vehicle actuation to detect bicycles when intersections with signals are rehabilitated (CVC 21450.5).
- I-1.3. Install bicycle detector pavement markings at traffic signals using best practices and adopted State or Federal standards when intersections with signals are rehabilitated.
- I-1.4 Integrate development of the cycling network into larger land use planning and development projects.
- I-1.5. Maintain riding surfaces suitable for cycling on all designated, onroad bicycle facilities in accordance with a management plan to be adopted by the City.
- I-1.6. Periodically (for example, when the BPMP is updated and as part of the LTFP), review official databases of bicycle and pedestrian accidents, analyze their causes and locations, and strive to reduce collisions through infrastructure improvements, community outreach and education, and law enforcement efforts.
- I-1.7. Develop standards that require bicycle accommodations (such as parking, lockers and showers) in new or significantly rehabilitated non-residential developments.
- I-1.8. Ensure walking routes are integrated into new greenways and open space areas, where appropriate, and encourage them in existing greenways and open space areas.
- I-1-9. The City will recognize skateboarding as a legitimate form of transportation and accommodate it in its transportation policies and, where appropriate, in street and other public improvements. City will revise ordinances as necessary to accommodate safe skateboard use.

Goal:

Adults and children are educated and encouraged to be safe cyclists and pedestrians.

Policies:

- P-2.1. We encourage and support the creation of comprehensive safety awareness programs for pedestrians, skateboarders, cyclists and drivers.
- P-2.2. We encourage City staff, employees, residents and visitors to walk and bicycle as often as possible.
- P-2.3 Support and promote education and awareness of pedestrian and bicyclists rights and behaviors, as well as risk avoidance, among the motoring public.
- P-2.4 We improve appropriate legal access to public lands for cyclists and pedestrians.

Implementation Programs:

- I-2.1. Include bicycle and walking safety lessons in City recreation programs and collaborate with local schools and law enforcement to offer bicycle and pedestrian skills and safety education programs.
- I-2.2. Assist employers in implementing a comprehensive bicycle awareness program for their employees.
- 1-2.3. Expand the Safe Routes to School program, including International Walk/Bike to School events, and encourage all schools to get involved.
- I-2.4. Consider designating a law enforcement liaison officer for the bicycle and pedestrian community.
- I-2.5. Provide training opportunities for engineering and planning staff on ways to integrate bicyclists and pedestrians with the transportation network.
- 1-2.6. Provide training and public outreach opportunities about bicyclists' and pedestrians' legal rights and duties for City engineering and planning staff, as well as for law enforcement officials.
- I-2.7. Provide an outreach and education component to coincide with the first installation of any new type of bicycle facility as part of the implementation of the associated capital improvement project.
- I-2.8. Develop a City-wide bicycle map.
- I-2.9. Collaborate with local businesses, bicycle shops, non-profits, schools, and government agencies to produce and distribute bicycle and pedestrian safety materials.
- I-2.10. Encourage City officials and employees, as well as other employers, to participate in "Bike to Work Month" and "Bike to Work Week."
- 1.2.11. Collaborate with local off-road advocacy groups, conservation non-profits, State Parks, adjacent jurisdictions and the Donna O'Neil Land Conservancy to develop a plan for off-road trail facilities.



- I-2.12. Establish a bicycle-friendly business program to encourage and facilitate use of alternative modes of transportation by employees and customers: http://www.bikeleague.org/programs/
- I-2.13. Consider establishing an Active Transportation Coordinator position to work with City departments and advocacy groups to support and coordinate efforts to improve alternative transportation modes and to implement the Bicycle and Pedestrian Master Plan.

Goal:

Children in San Clemente have a safe environment in which to walk, skateboard and bicycle to school.

Policies:

P-3.1. We improve and maintain alternative transportation infrastructure and assign a high priority to improvements along primary pedestrian and bicycle routes to schools.

Implementation Program:

I-3.1. Provide assistance to school districts in facility planning and transportation operations to ensure safety for users of all modes during school pick-up, drop-off and other special events

Goal:

Cycling and walking are encouraged though improvements that support smart growth, public transit, lowered greenhouse gas emissions and healthy lifestyles.

Policies:

- P-4.1. We utilize non-motorized transportation solutions as a tool for achieving economic development and environmental sustainability goals.
- P-4.2. We pursue Federal, State, County, regional and local funding opportunities to increase bicycle and pedestrian mode share percentages to improve transportation system performance and air quality by creating a balanced multi-modal transportation system.
- P-4.3 We require the construction or rehabilitation of bicycle facilities and/or "bicycle friendly" Improvements as a condition of approving new development in accordance with Zoning Ordinance Standards.
- P-4.4 We encourage bicycle and pedestrian-oriented site design in commercial areas.
- P-4.5 We design bicycle and pedestrian network linkages that directly connect to retail and commercial centers.
- P-4.6 We require development projects and site plans to be designed to encourage pedestrian connectivity among buildings within a site, while linking buildings to the public bicycle and pedestrian network.

Implementation Programs:

- I-4.1. Track mode shift to quantify greenhouse gas reductions.
- I-4.2. Establish mode shift/share goals.

Goal:

Walking is encouraged with a complete pedestrian network that provides safe, continuous and convenient access to major destinations such as transit, employment centers, schools, beaches, parks, other recreation areas, retail and neighborhoods.

Policies:

- P-5.1. Should the City defer construction of street improvements as part of any development approval, the property owner may be required to sign an agreement to participate in the installation of the improvements when a more complete street improvement project is feasible.
- P-5.2. All new streets shall have provisions for the adequate and safe movement of pedestrians, in accordance with the American Disabilities Act.
- P-5.3. Sidewalks or pathways are desirable in all areas.
- P-5.4 As funding permits, we will install or require as a condition of development approval pedestrian facility improvements such as installation of signs, signals, street crosswalks, proper lighting, pedestrian-activated signals, street trees, placement of benches, transit shelters, shade and other ancillary pedestrian features.
- P-5.5 We ensure that substandard public sidewalks and paving in public areas are repaired or replaced in accordance with the Sidewalk Repair Program.
- P-5.6 We give high priority to providing pedestrian and bicycle access to all public facilities and transit stops and will coordinate with OCTA as necessary.
- P-5.7 We may approve certain commercial uses in public sidewalks in the Pedestrian Overlay District when those uses benefit the overall pedestrian environment.

Implementation Programs:

- I-5.1. Prepare and maintain an inventory of sidewalk facilities to determine where pedestrian improvements are most needed to insure continuous safe pedestrian routes throughout the City.
- I-5.2. Retrofit streets and require developments to install public improvements that provide disabled access and mobility on public streets, as required by State or Federal law.
- I-5.3. Work towards closing existing gaps in the City's pedestrian network.



3.1 Development Priorities

The proposed projects shown in this chapter are a combination of planned and candidate bicycle and pedestrian facilities. Planned projects are those in existing City plans and documents, but have yet to be implemented. Since these projects have yet to be implemented, analyzing them along with the candidate projects subjects all of them to the same level of scrutiny and prioritization criteria. These projects were then itemized into Prioritized Projects, which are those that will have a significant impact on the existing bikeway system, such as closing major gaps and extending or developing bicycle paths, lanes or routes along major transportation corridors.

As part of project analysis, a number of attributes were incorporated into a GIS model to produce Figure 3.1: Bicycle and Pedestrian Suitability Model, which depicts the areas most likely to support walking and biking. For the criteria used to develop this model, see the appendix. This relative suitability was used to help assign priorities. The prioritization criteria used to identify which routes are likely to provide the most benefit to the City's bikeway system can be found in the appendix.

The numbering used to identify projects within each bikeway facility class in the following sections does not necessarily imply priority beyond the facility category. Bikeway facility implementation has no specific time line, since the availability of funds for implementation is variable and tied to the priorities of the City's capital projects. This chapter's tables list candidate projects and the associated figures identify their locations. The candidate projects noted in the following tables as "additional" are follow-up recommendations to be evaluated for future prioritization and potential implementation.

This Plan also highlights a range of candidate public improvements to benefit pedestrians. Increasing sidewalk widths, landscaping, street furniture and parking in commercial areas all help separate pedestrian and vehicular traffic, while improving the appearance of the community and supporting retail storefronts and restaurant uses.

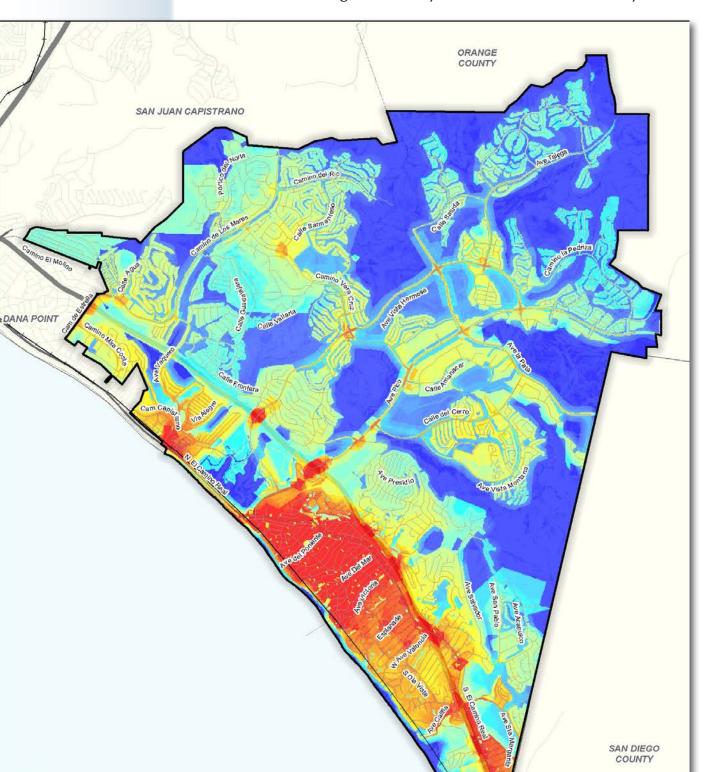


Figure 3.1: Bicycle and Pedestrian Suitability Model

City of San Clemente

Railroad

Bicycle/Pedestrian Suitability Model High Bike/Ped Propensity for Activity

Low Bike/Ped Propensity for Activity

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The planned system builds upon existing bicycle and pedestrian facilities throughout the City with enhancements to overall connectivity, including support facilities. This network, coupled with driver, cyclist and pedestrian and education, enforcement and promotional programs, will create a more bicycle and pedestrian-friendly community. The anticipated result is an increase in residents choosing to ride a bicycle or walk to nearby destinations.

The Plan policies attempt to balance the need for pedestrian use of the public right-of-way within the physical limitations of certain areas of the City. In many cases, streets in hilly coastal areas have little or no space for sidewalks. In other areas, a lack of enough existing improvements may make it difficult for pedestrian facilities to be installed without leaving a piecemeal system. This occurs especially with in-fill developments, which are likely to be typical of future residential areas in the future. For these reasons, policies that allow flexibility in determining where pedestrian improvements will be required are included.

The enactment of the *Americans with Disabilities Act* (ADA) has made it mandatory that public rights-of-way be improved to permit safe and efficient wheelchair access and use. For this reason, pedestrian ramps will be needed throughout the City where sidewalks are provided. Other requirements will also have to be met to provide clearance for wheelchairs around street signs, street lights, trees, mailboxes, etc. Neighborhoods devoid of all sidewalks are not as problematic as areas with only piecemeal walkway systems. An able-bodied walker can more easily navigate abrupt ends to walkways than a person with disabilities. In neighborhoods with no walkways, all users have to utilize the street, making this more equitable under ADA.

In addition to sidewalk improvements and crosswalk enhancements, properly timed pedestrian crossing signals should be provided at all signalized intersections with pedestrian access. This is particularly important at major streets with wide roadways that may be difficult for senior citizens and disabled persons to cross. Balancing the needs of pedestrians with the need to move vehicular traffic will require the City's ongoing attention.

3.2 Candidate Bicycle Projects

The following maps and tables describe the candidate bicycle projects developed through project analysis and City staff, community and advocacy group input. Pedestrian project and criteria are addressed in a subsequent section of this chapter.



Figure 3.2: Candidate Class 1 Bicycle Facilities



Table 3.1: Candidate Class 1 Bicycle Facilities

Rank	Roadway Segment	Miles	Limits	Avg Slope	Max Slope		
1	El Camino Real	0.9	Camino Capistrano and Avenida Estacion	0%	1%		
	 Connects with Dana P Provides mutli-use cor 12' bicycle path Precise layout to be de Planned City Project. F 	ridor alo etermineo	ng railroad tracks	t			
2	Avenida Pico	2.1	Camino Vera Cruz and El Camino Real	4%	13%		
	 Provides bicycle path along Avenida Pico from Camino Vera Cruz to Metrolink Station Primarily utilizes drainage channel parallel to Avenida Pico At-grade crossings and tunnels provide connections to local streets and under I-5 Reference Avenida Pico Cycling Corridor Study Precise layout to be determined 						
3	Avenida Vista Hermosa	1.51	Camino Faro and Via Turqueza	3%	7%		
	 across Ave Vista Herr Moving existing sound needed for adjacent s Significant costs to acc Potential impacts to re 	nnectivi nosa I wall ne lope juire righ siential p	ty to Marblehead Elementary School and Marblehead Park fi ar Camino Faro needed to fit bicycle path or sidewalk. Ret	0			
4	Avenida Vista Hermosa	0.4	Ave La Pata and Ave Pico	3%	5%		
	Connects residential w	ith regio	s to meet Caltrans Class 1 requirements nal commercial ommuter Bikeways Strategic Plan				
5	Camino De Los Mares	1.2	Calle Nuevo and Portico del Norte	1%	3%		
	l e	nce one erty. City r bicycle ng signag	each side to meet Caltrans Class 1 Multi-use Path design cr will need to coordinate with HOA to convert wide sidewalk s ge at intersections		-use path		

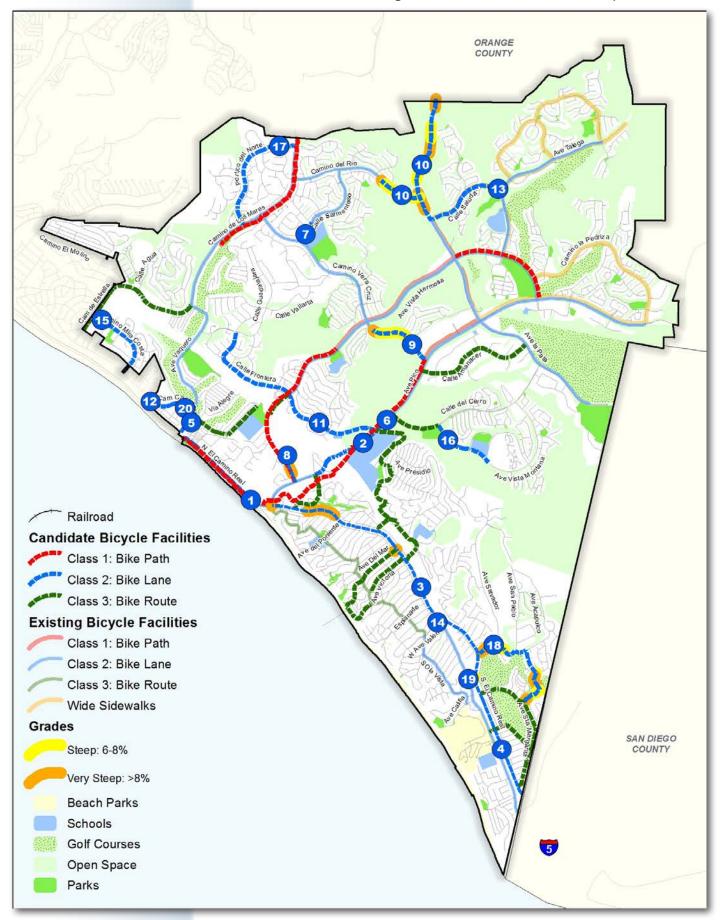




Table 3.2: Candid	ate Class 2	Bicycle Facilities	
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Devel	Deadure Comment	Length	11	Avg.	Max	
Rank 1	Roadway Segment North El Camino Real	(Miles) 1.0	Limits City Limit and Ave Pico	Slope 1%	Slope 4%	
•			onnects with City of Dana Point	170	4 /0	
	01		Capistrano, 65': 2x11' travel lanes, 1x14' right-turn-onl ' bicycle lane, 1x4' bicycle lane buffer, 1x5' center me	y lane, 1x12 edian	2′ bicycle	
	Suggested configuration	at Camino S	San Clemente, 64': 3x11' travel lanes, 1x12' bicycle pat cle path barrier, 1x3' bicycle lane buffer			
	bicycle path, 1x2' cente	er median, 1	st point, 56': 2x11' outer travel lanes, 1x11' inside noi x2' bicycle path barrier, 1x7' bicycle lane buffer			
	rows due to narrow wic	lth	venida Estacion and Ave Pico: Enhanced Class 3 Bicy	cle Route w	ith Shar-	
	· · ·		uter Bikeways Strategic Plan			
_		,	cle Path Proposed Design Layout		[
2	Avenida Pico	1.54	Calle De Los Molinos and Calle Del Cerro	1%	5%	
	 Planned pavement width Planned Project from OC tion of Avenida Pico Int 	CTA Commu	uter Bikeways Strategic Plan and I-5 HOV Lane Extens roject	sion and Red	construc-	
	 Precise layout to be dete Reference Avenida Pico 	rmined	, ,			
3	El Camino Real	2.8	Ave Pico and Calle Del Comercio	3%	5%	
5			ecise layout to be determined	370	3 /0	
			uter Bikeways Strategic Plan			
4	El Camino Real	0.9	Calle Del Comercio and City limit	1%	3%	
	See El Camino Real Alter	natives - Pr	ecise layout to be determined	•	•	
5	Avenida Vaquero	0.1	Via Cascadita and Camino Capistrano	2%	4%	
	 Existing pavement width: Completes missing bicyc Precise layout to be dete 	le lane on v	ested configuration: Four 11' travel lanes, 5.5' bicycle vestbound lanes	lanes		
6	Ave Pico	0.87	Calle Frontera/Ave Presidio and Calle Del Cerro	2%	6%	
	 Suggested configuration: awareness signage and Completes missing south be determined 	ement widtl Three 11' ti directional ibound bicy	h: 44' (Bicycle lanes exist on northbound side) ravel lanes, 6' bicycle lane and 5' bicycle lane buffer signage ycle lanes. Study needed to address deceleration lan			
	MPAH Designation. Any	road diet o	r physical reconfiguration will need OCTA approval		ř.	
7	Calle Sarmentoso	0.2	Camino Vera Cruz and Via Sage	3%	5%	
			ects Truman Benedict Elementary and Bernice Ayer N		lc	
	Bicycle lane exists on no	 Bicycle lane exists on northbound lane adjacent to school and on both sides north of school Suggested configuration: Stripe bicycle lane on southbound lane to provide "climbing lane" ing uphill to Camino Vera Cruz. Install Shared Lane Markings on northbound lane to conne existing bicycle lanes north of school entrance. Lanes should retain existing width for school bicycle awareness signage, school zone and directional signage 				
	 Suggested configuration: ing uphill to Camino Ve existing bicycle lanes no 	: Stripe bicy era Cruz. Ins orth of scho	cle lane on southbound lane to provide "climbing l stall Shared Lane Markings on northbound lane to co ol entrance. Lanes should retain existing width for sc	ane" for cy onnect to sc	hool and	
	 Suggested configurations ing uphill to Camino Ve existing bicycle lanes no bicycle awareness signal 	Stripe bicy era Cruz. Ins orth of scho ge, school :	cle lane on southbound lane to provide "climbing l stall Shared Lane Markings on northbound lane to co ol entrance. Lanes should retain existing width for sc	ane" for cy onnect to sc	hool and	



Table 3.2: Candidate Class 2 Bicycle Facilities (Continued)

Rank	Roadway Segment	Length (Miles)	Limits	Avg. Slope	Max Slope			
8	Ave Vista Hermosa	0.2	Marblehead Coastal	5%	6%			
	Connects to planned cor	nmercial de	ested configuration: Two 13' travel lanes, one 12' cent ' parkway strip between travel and bicycle lane evelopment within Marblehead Coastal from Ave Pico		and one			
9	Planned Project from Ma			70/	0.0/			
3	 Camino Vera Cruz 0.6 Calle Aquamarina and Ave Pico 7% 9% Existing pavement width: 64' - Proposed configuration: Four 11' travel lanes, one 10' raised median, two 5' bicycle lanes Closes bicycle lane gap between existing bicycle lanes on Camino Vera Cruz to Ave Pico Reducing raised landscaped center median from 15' to 10' required to install bicycle lanes Increase bicycle awareness signage and directional signage MPAH Designation. Any road diet or physical reconfiguration will need OCTA approval Planned Project from OCTA Commuter Bikeways Strategic Plan 							
10	Camino Del Rio/ Ave La Pata extension	1.5	Ave La Pata and City limit	N/A	N/A			
	See La Pata Avenue Gap	Closure an	La Pata throughout entire segment d Del Rio Extension Project uter Bikeways Strategic Plan					
11	Calle Frontera	1.8	Calle Guadalajara and Ave Pico	5%	12%			
	Consider adding east sid Avenida Faceta and inc	e sidewalk, rease bicycl	of a Provides parallel route to I-5 between Ave Vaquer complete streets concepts such as roundabouts as in e awareness signage and directional signage uter Bikeways Strategic Plan					
12	Camino Capistrano	0.5	City limit and Ave Vaquero	4%	10%			
	School • Increase bicycle awarene • MPAH Designation - Any	ess signage a / road diet d	5' - Provides connection to El Camino Real/PCH and and directional signage or physical reconfiguration will need OCTA approval uter Bikeways Strategic Plan	d Shorecliff:	s Middle			
13	Calle Saluda	0.7	Ave La Pata and Ave Talega	6%	10%			
	 Existing pavement width: 45' (Adjacent existing multi-use path) Provides on-street connection between multi-use path and bicycle lanes on Ave La Pata and Ave Talega Increase bicycle awareness signage and directional signage Candidate San Clemente Bicycle and Pedestrian Master Plan Project 							
14	Ave Valencia	0.1	El Camino Real and Ave Del Presidente	8%	9%			
	Presidente • Increase bicycle awarene	• Existing pavement width: 52' - Connects planned route on El Camino Real with bicycle lanes on Ave Del						



Rank	Roadway Segment	Length (Miles)	Limits	Avg. Slope	Max Slope			
15	Camino Mira Costa	0.7	Camino De Estrella and Camino Capistrano	2%	5%			
	 Existing pavement width: 63' - Connects Calle De Estrella and Camino Capistrano Add additional bicycle awareness signage and directional signage MPAH Designation. Any road diet or physical reconfiguration will require OCTA approval 							
16	Ave Vista Montana	0.6	Calle Del Cerro	5%	10%			
	 Existing pavement width: 44' - Connection Clarence Lobo Elementary and Rancho San Clemente Park Increase bicycle awareness signage, school route and directional signage Candidate for bicycle lanes if cycling activity increases Bicycle lane configuration: two 11' travel lanes, one 12' center turn lane, two 5' bicycle lanes Climbing lane configuration: 11' travel lane with adjacent 6' bicycle lane southbound between Cam Del Cerro and Futura, including both entrances to Ave Vista Montana from Calle Del Cerro. 13' center turn lane and 14' lanes with Shared Lane Markings northbound between Futura and Calle Del Cerro. Climbing lane configuration provides dedicated bicycle lane for cyclists climbing on Ave Vista Montana with- 							
	out impeding vehicular	traffic. Dov	/nhill shared lanes since some cyclists can travel at ve /clists will be sharing lane.	hicular spee	eds. Also			
17	Portico del Norte	1.0	Camino De Los Mares and Diamante	6%	12%			
	 Existing pavement width: Increase bicycle awarene Downhill direction can be 	ess signage a	0 0					
18	Ave San Gabriel, Ave San Pablo, Ave Acapulco, Ave Adobe and Calle Bahia	1.1	El Camino Real and Ave Santa Margarita	5%	14%			
	 • Existing pavement width: Varies • Provides connection to El Camino Real, Vista Bahia Park, Trestles, existing trails, and San Clemente Municipal Golf Course from residential neighborhoods • Increase bicycle awareness signage and directional signage • Downhill direction can be Class 3 with Sharrows • Planned Project from the OCTA Commuter Bikeways Strategic Plan 							
19	I-5 Crossing	0.1	Ave Del Presidente and El Camino Real	5%	14%			
	I-5 Crossing 0.1 Ave Del Presidente and El Camino Real 5% 14% • Existing pavement width: 28′ • Connects bicycle lanes on Ave Del Presidente and El Camino Real • Crosses over I-5 without an interchange • Add additional bicycle awareness signage and directional signage • Add additional bicycle awareness signage and directional signage							

Figure 3.4: Candidate Class 3 Bicycle Facilities

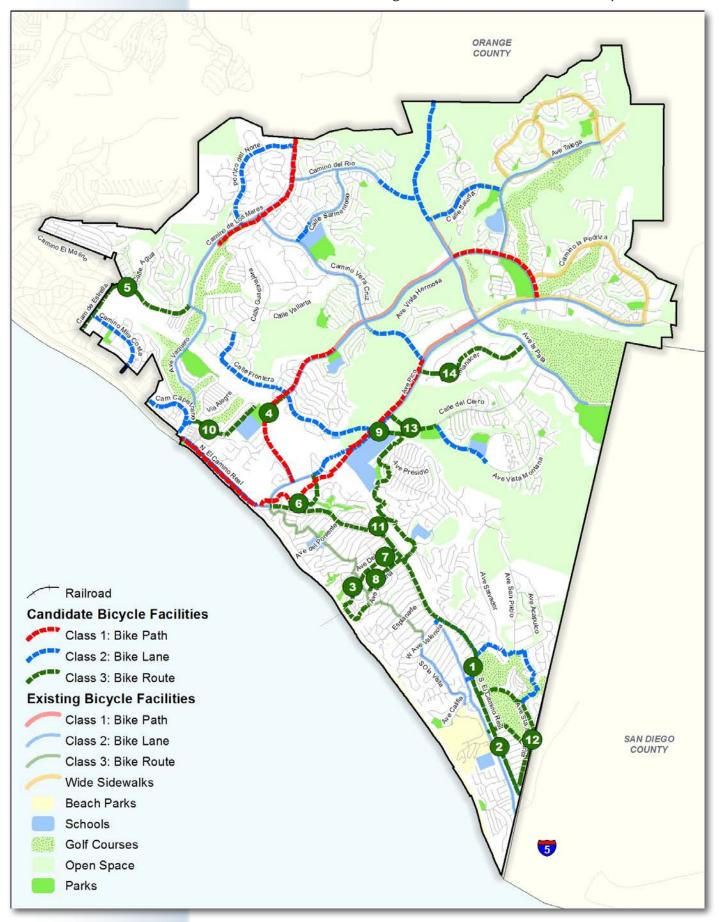




Table 3.3: Candidate Class 3 Bicycle Facilities

Rank	Roadway Segment	Length (Miles)	Limits	Avg Slope	Max Slope	Install Sharrows			
1	El Camino Real	2.8	Ave Pico and Calle Del Comercio	3%	5%	Yes			
	 See El Camino Real Alt Evaluate El Camino Rea Planned Project from th 	l corridor	for all multi-modal users Commuter Bikeways Strategic Plan						
2	El Camino Real	0.9	Calle Del Comercio and City limit	1%	3%	Yes			
	 See El Camino Real Alt Evaluate El Camino Rea Planned Project from C Ave Del Mar and	Il corridor CTA Com	muter Bikeways Strategic Plan	-0(110/				
3	Ave Victoria	0.6	Calle Seville and Ave Madrid	7%	11%	Yes			
	 Existing pavement width: 39' and 40' Provides connection between the Ola Vista bicycle route and Pier Shared Lane Markings or "Sharrows" recommended throughout Increase bicycle awareness signage and directional signage 								
4	Avenida Vista Hermosa	0.2	Marblehead Development and Calle Frontera	4%	13%				
	Increase bicycle awareMPAH Designation. An	etween exis ness signag y road die	sting bicycle lanes and future bicycle path in <i>t</i> ge and directional signage t or physical reconfiguration will need OCTA muter Bikeways Strategic Plan		ad Deve	opment			
5	Camino De Los Mares and Camino De Estrella	1.2	City limit and Ave Vaquero	3%	5%	Yes			
	 Existing pavement width: 82' Existing I-5 overpass pavement width: 62' Suggested configuration: Green Lane with Shared Lane Markings similar to Second Street in Long Beach, CA on outside lane. This treatment allows on-street parking to remain and still provides a facility for cyclists. Note Green Lane not approved by Caltrans and would not be allowed on overpass without experimental waiver. Increase bicycle awareness, such as "Share the Road" or "Bikes May Use Full Lane" signage on overpass Connects to Ocean View Plaza, medical facilities, movie theaters, shopping centers and crosses I-5 Heavy vehicular traffic Increase bicycle parking, awareness signage and directional signage along this route MPAH Designation. Any road diet or physical reconfiguration will need OCTA approval Planned Project from OCTA Commuter Bikeways Strategic Plan Study needed to determine feasibility of implementing Class 1 or 2 facility along this route 								
6	Calle De Los Moli- nos and Calle Valle	0.6	Ave Pico and El Camino Real	4%	11%	Yes			
	nos and Calle Valle 0.0 Average free and the Calinito Real 478 1176 118 • Existing pavement widths: Calle Valle = 29' and Calle De Los Molinos = 39' and 42' • Provides connection to between El Camino Real/PCH and Ave Pico • Provides connection to industrial businesses • Increase bicycle awareness signage and directional signage • Increase bicycle awareness • Increase bicycle awareness • Increase bicycle awareness • Increase bicycle awareness • Increase bicycle awareness								



Rank	Roadway Segment	Length (Miles)	Limits	Avg Slope	Max Slope	Install Sharrows			
7	Ave Del Mar	0.4	El Camino Real and Calle Seville	4%	7%	Yes			
	 Existing pavement width: 59' Provides facility along this main commercial corridor Provides connection to Community Center, Public Library and the Pier Not enough room for bicycle lanes with existing angled on-street parking Shared Lane Markings or "Sharrows" recommended throughout Increase bicycle parking along this corridor - Only existing bicycle parking is at library Increase bicycle awareness signage and directional signage Planned Project from OCTA Commuter Bikeways Strategic Plan 								
8	Ave Victoria	0.4	El Camino Real and Calle Seville	5%	10%	Yes			
	 Provides connection to Shared Lane Markings 	adjacent to the Pier ar or "Sharrov	Ave Del Mar commercial corridor nd utilizes part of the existing Ola Vista bicycl vs" recommended throughout re and directional signage	e route					
9	Ave Presidio, La Espe- ranza, Ave Caballeros, El Oriente, Ave De La Paz, Ave La Cuesta, Calle Empalme, Calle Miguel, Calle Escuela	1.9	El Camino Real and Ave Pico	6%	16%	Yes			
	Miguel, Calle Escuela Miguel, Calle Escuela • Existing pavement width: Varies • Provides connection from El Camino Real/PCH and Ave Pico • Provides connection to San Clemente High School from El Camino Real/PCH • Increase bicycle awareness signage, school and directional signage • Least amount of elevation gain between El Camino Real/PCH and Ave Pico • Directional signage important due to circuitous nature, especially at I-5 undercrossing • Shared Lane Markings or "Sharrows" recommended throughout								
10	Via Cascadita and Via Socorro	0.7	Ave Vaquero and Via Ballena	5%	11%	Yes			
		El Camino	e Real/PCH and Shorecliffs Middle School e, school route signage and directional signage	ge					



Rank	Roadway Segment	Length (Miles)	Limits	Avg Slope	Max Slope	Install Sharrows			
11	Ave Palizada	0.2	El Camino Real and Ave Caballeros	5%	7%	Yes			
	 Provides connection to Increase bicycle aware Directional and bicycle 	om El Cam San Cleme ness signag awareness or "Sharrov	ino Real/PCH and proposed bicycle route on ente High School from El Camino Real/PCH e, school and directional signage s signage important at 1-5 undercrossing vs″ recommended throughout their right-of-way	Ave de la	ı Paz				
12	Ave Magdalena, Ave Santa Margarita and Ave San Luis Rey	1.7	El Camino Real	3%	23%				
	Course, Concordia Bri • Increase bicycle aware	El Camino dge and I-S ness signag	Real, Vista Bahia Park, Trestles, existing trails, 5 crossings without interchanges e and directional signage Commuter Bikeways Strategic Plan	San Cler	mente Mi	unicipal Golf			
13	Calle Del Cerro	0.4	Ave Pico and Ave Vista Montana	6%	12%				
	Calle Del Cerro 0.4 Ave Pico and Ave Vista Montana 6% 12% • Existing pavement width: Varies between 46'-56' • Existing four lanes between Ave Pico and Ave Vista Montana. Two lanes between Ave Vista Montana and Ave La Pata • Provides connection to Clarence Lobo Elementary and Rancho San Clemente Park • Increase bicycle awareness signage, school route and directional signage • Because of grade, two lanes are needed to allow vehicles to pass slower cars, trucks and cyclists. Busy street during peak times								
14	Calle Amanacer	1.0	Ave Pico and Ave La Pata	4%	9%	Yes			
	Calle Amanacer1.0Ave Pico and Ave La Pata4%9%Yes• Existing pavement width: 44'• Connects to industrial businesses• Provides an alternative route to Ave La Pata• Planned Project from the OCTA Commuter Bikeways Strategic Plan								

Table 3.4: Candidate El Camino Real Alternatives

Class 2 Bicycle Lane Alternative

Roadway Segment	Length (Miles)	Limits	Avg Slope	Max Slope					
El Camino Real	2.8	Ave Pico and Calle Del Comercio	3%	5%					
 Existing pavement width: 56' Road diet needed to accommodate bicycle lanes. Existing four travel lanes and on-street parking on both sides Road diet alignment: two 11' travel lanes, one 10' center turn lane, two 7' parking lanes, two 5' bicycle lanes Connects to core commercial district and I-5 Increase bicycle parking, bicycle awareness signage and directional signage along this route MPAH designation - road diet or other reconfiguration will require OCTA approval for continued Measure M funding To increase efficiency of cyclist movements along this route, complete streets concepts (e.g. roundabouts) can be considered as intersection control 									
El Camino Real	0.9	Calle Del Comercio and City limit	1%	3%					
El Camino Real 0.9 Calle Del Comercio and City limit 1% 3% • Existing pavement width: 56' • Variety of road diet options can be utilized to accommodate Class 2 facility • Variety of road diet options can be utilized to accommodate Class 2 facility • Consider complete streets concepts along this route • Variety of commercial district, Concordia Pedestrian Bridge, Trestles and I-5 crossings without interchanges • Increase bicycle parking, bicycle awareness signage and directional signage along this route									

Class 3 Bicycle Route Alternative

Roadway Segment	Length (Miles)	Limits	Avg Slope	Max Slope	Install Sharrows			
El Camino Real	2.8	Ave Pico and Calle Del Comercio	3%	5%	Yes			
• Existing pavement width	: 56′							
Install Shared Lane Mark	ings or "Sha	arrows" throughout						
Connects to core comme	ercial distric	t and I-5						
• Increase bicycle parking,	• Increase bicycle parking, bicycle awareness signage and directional signage along this route							
Consider complete steets	s concepts a	along this route						

Enhanced Class 3 Bicycle Route Alternative

Roadway Segment	Length (Miles)	Limits	Avg Slope	Max Slope	Install Sharrows		
El Camino Real	2.8	Ave Pico and Calle Del Comercio	3%	5%	Yes		
 Existing pavement width: Proposed alignment: Gree lows on-street parking to 		h Shared Lane Markings similar to Second Street in ile providing facility for cyclists	Long Bea	ach, CA.	Treatment al-		
Connects to core comment	rcial district						
 Increase bicycle parking, bicycle awareness signage and directional signage along this route 							
Consider complete steets	concepts al	ong this route					



Table 3.5: Candidate Ola Vista Bicycle Improvementsto Existing Class 2 and 3 Route

Roadway Segment	Length (Miles)	Limits	Avg Slope	Max Slope	Install Sharrows
Ola Vista Bicycle Path Improvements	2.2	Ave Pico and W Ave Valencia			Yes
• Stop signs on slope cause c stopping at these stop sign	cyclists to sto	op on incline, making it difficult to start again. Th	nis tends to	o dissuade	e cyclists from
• Increase bicycle awareness	s signage an	d directional signage due to circuitous nature of	route		
 Consider complete steets of City Policy). 	concepts alo	ong this route (e.g. roundabouts and continenta	l style cro	sswalks, a	as allowed by

Table 3.6: Additional Candidate Bicycle Projects

Roadway Segment	Limits and/or Remarks	
Camino De Los Mares and Camino De Estrella	City limit and Ave Vaquero	
Ave Del Presidente	Ave Del Presidente and El Camino Real	
Ave La Pata	Entire corridor	
Wide walkways in Talega	Vista Hermosa, Saluda, Talega, Fuerte, Tierra Grande, La Pedriza, Pico - Wide sidewalks along these roadways do not meet Class 1 standards since they do not have 5' separation from roadways and have obstacles reducing usuable width. Designation as Class 1 will require study to determine challenges and costs versus benefits.	
Camino La Padreza	Narrow roadway. PEDal suggestion to install roundabouts.	
North Ola Vista	PEDal suggestion to install roundabouts.	

3.3 Candidate Pedestrian Projects

Substantial funding is needed to bring all of the City's pedestrian facilities up to a standard that makes them safe, walkable, accessible, connected and assets to their neighborhoods. However, the funding needs far exceeds what is likely to be obtained. To be cost-effective, a system of ranking projects for funding was developed to assist in prioritizing individual pedestrian projects. (See Figure 3.1.)

The following list of priority projects were collected from existing City plans, public input, collision data and the Bicycle and Pedestrian Priority Model. Formulating the list was based on City staff and public input, project knowledge, guidelines, designs of existing plans and extensive field work. The projects were then analyzed and scored based on the following criteria. Other projects can be compared to those in this chapter to gauge their relative priority using these criteria.



The pedestrian demand criterion acquires the projects' total model score and is then divided by the acreage of that project. This technique normalizes the scores throughout all the projects. This allows projects with larger footprints to have the same scoring parameters as smaller projects.

Safety Criteria

Safety was calculated by analyzing the pedestrian-related collisions within 100 feet of the project segment. For instance, if the project was at an intersection, then a 100 foot buffer was created and all the pedestrian-related collisions that fell within the buffer were collected and analyzed as part of the project. If a fatal collision occurred, it would get a higher score than those with major or minor injuries. The total number of specific injury types was multiplied by the appropriate point resulting in a sub-score for that injury criterion. All the sub-scores were then added as the final score for the Safety Criteria.

Feasibility Criteria

Project feasibility is defined by the probability of completion. Projects having high ratios of "value received" relative to likely project costs will receive higher ratings. Pedestrian's improvements values include increasing roadway users' safety and mobility. This increased safety and mobility will also likely improve quality of life, increase surrounding property values and improve the business environment in commercial areas. Other factors in determining the feasibility of a project include funding opportunities, right-of-way and easements, environmental permitting and utility relocations.

Accessibility Criteria

These address issues that can be improved for each project. A score is applied if issues will be addressed based on the criteria. Extensive accessibility measures, such as pop-outs and adding paths of travel, are given higher scores due to their overall accessibility improvement within the project. Smaller improvements, such as removing obstacles and trip hazards, are given lower scores due to their smaller accessibility role.

Connectivity Criteria

The Connectivity Criteria looks at missing connections relevant to the pedestrian use of the activity center and the connections between different land uses. The higher level of use such as schools, parks, beach access and transit centers are given the higher scores. There is more pedestrian activity to these activity centers than any other. Connections between different land uses such as between commercial, residential and recreational areas have lower scores because they have lower pedestrian activity levels.

Walkability Criteria

Improvement in walkability, such as shade and amenities like benches, are scored in this section. Major improvements such as creating a buffer from fast moving vehicles, public spaces, plazas and providing shade trees within the project receive higher scores for their overall sense of comfort



to walk within the area. Smaller improvements such as benches, increased lighting and improving dilapidated properties receive lower scores, but are still important in the overall walking environment.

Based on these criteria, nine projects were selected as candidate recommendations and are shown in Figure 3.5 and described in Table 3.7.

3.4 Other Candidate Recommendations

Formalize Pathways

Where legal public access rights exist, formalize well-used pathways that have served as important circulation routes for a significant amount of time. Most of these occur along the Interstate 5 frontage. Some of these could serve a Safe Routes to School function.

One-way Streets

Make some low volume streets one-way to allow space for sidewalks. Not all streets need this treatment, but entire neighborhoods may benefit from it, especially if busier streets are maintained as two-way to function more as collectors. City Staff will evaluate one-way streets on a case-by-case basis for opportunities to accommodate safe pedestrian and bicycle movement.

Extend Beach Route

Extend the beach route north and south to adjacent communities and the state park and make it more accessible to all non-motorized users.

Alleys

Alleys are generally considered utilitarian spaces intended to serve simply as access routes to parking facilities or loading zones. These "mini-streets" are not often thought of as noteworthy elements of the urban fabric, but that attitude is changing. In most cities reconsidering alleys, the primary objective has been to reduce urban runoff through permeable pavement, landscaping and bio-swales. Called "green alley" programs, this has been the approach of cities like Chicago, Detroit, Seattle and Vancouver.

San Clemente could consider broader functions, such as encouraging the use of certain alleys as bicycle and pedestrian circulation routes paralleling busy streets where room for bicycle facilities is limited or simply not available. In particular, a number of survey respondents questioned why the alley parallel with El Camino Real to the southeast could not be designated a low speed, two-way pathway available to cyclists and walkers to provide a safer and more pleasant route paralleling the very busy street. This section of El Camino Real has limited room for additional facilities like bicycle lanes without eliminating existing parking or travel lanes and many other survey respondents said they felt very uncomfortable riding on it. Some said they use the alley for shopping trips to stores along this segment of El Camino Real.

Figure 3.5: Candidate Pedestrian Projects

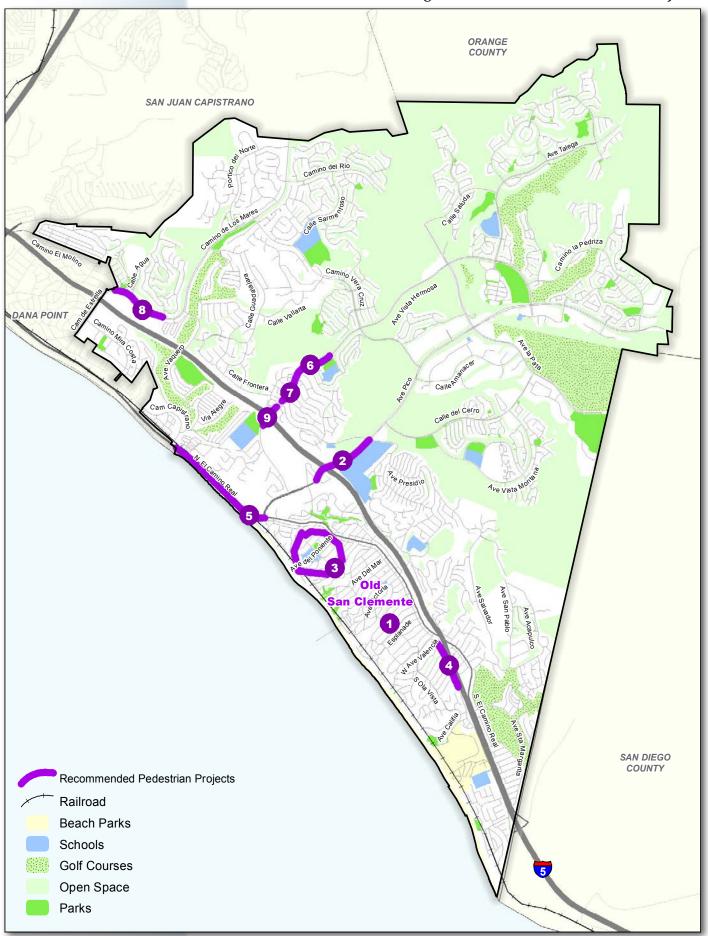




Table 3.7:	Candidate	Pedestrian	Projects
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Rank	Project Name	Issues	Potential Solutions	Total Score
1	"Old" San Clemente Sidewalk Study	Sidewalk gaps throughout "Old" San Clemente need fur- ther study to determine how to systematically correct	Update sidewalk network data, measure public right-of-way. Review possible solutions in- cluding one-way street network or right-of-way acquisition. Determine ranking system to decide which gaps to fill first.	42
2	Avenida Pico between Calle de Industrias and Avenida Presidio	Narrow sidewalks, lack of bi- cycle facilities, no pedestrian buffer, high volume traffic, un- safe on- and off-ramp crossings	Widen sidewalks, add bi- cycle lanes, improve pe- destrian signals and cross- walks. Implement Avenida Pico Corridor Plan.	32
3	Sidewalks near Las Pal- mas Elementary School	Sidewalk gaps near school	Add missing sidewalks.	31
4	Avenida del Presidente between Ave De Los Lobos Marinos and Avenida Junipero	Missing sidewalks	Add missing sidewalks.	29
5	El Camino Real from Camino Capistrano to Avenida Pico	High volume pedestrian and cyclist use. Lack of adequate sidewalk width and continuity	Implement 12' multi-use path.	26
6	Avenida Vista Hermosa between Via Turqueza and Camino Faro	Public comments reported side- walk ends abruptly and missing walkway across from school	Install sidewalk on west side of the street	24
7	Avenida Vista Her- mosa between Camino Faro and I-5	Continuation of missing walk- way adjacent to school	Continuation of installation of sidewalk on west side of street.	22
8	Camino De Los Mares between Marbella and I-5	Numerous sidewalk obstruc- tions, sufficient density for "park- once" district, but currently poor pedestrian environment	Complete Streets project to remove obstructions while preserving street trees, and study to limit vehicu- lar entry/exit points.	21
9	Avenida Vista Her- mosa over 1-5	High speed traffic, high speed turns and close pedestrian prox- imity along routes to school	Improve freeway cross- ing for pedestrians.	20

The Hollywood Business Improvement District set a precedent by approving a new tax assessment for a \$125,000 annual fund dedicated to the area's alleys, supported by about 50 business owners. While the initial goals were cleanup and maintenance, merchants are hopeful that their alleys can become more than dumping grounds. By taking advantage of their very pedestrian scale, cities like Portland and San Francisco have shown that alleys can be embraced in commercial areas, with successful dining and retail establishments taking advantage of them as distinctive outdoor areas.

Project Name	lssues	Potential Solutions	
Marblehead Coastal Bike/Ped Bridge to North Beach	Bicycle and pedestrian access between Marblehead development and North Beach	City should conduct study to deter- mine feasibility of and potential fund- ing for this suggested project	
Avenida Talega be- tween Avenida Talega and Portofino	Cars parking in bicycle lane and light pole in sidewalk at SW quadrant of bridge	Potential SRTS project. City should conduct study to evaluate improving student safety around school utilizing complete streets approach. MPAH des- ignation - Any road diet or reconfigura- tion will require OCTA approval to en- sure continued Measure M funding.	
Pedestrian path between south end of Buena Vista and West Mariposa	Route improvements needed	PEDal suggestion to invest in prop- er stairs along this route.	
Poche/County Beach access	Bridge needed over railroad and Pacific Coast Highway	PEDal suggestion that beach parking can be procured from DMV-areas lots.	
Mariposa ramp to Beach Trail	Route improvements needed	PEDal suggestion to make path ADA- accessible and add benches.	
Lost Winds stairs to Beach Trail	Route improvements needed	PEDal suggestion to use rail road ties to repair and extend stairs to Beach Trail.	
Trail access between Lost Winds and Calafia (at intersection of Lo- beiro and Montalvo)	Route improvements needed	PEDal suggestion to use rail road ties or decomposed granite to create better trail.	
El Portal access to Beach Trail	Route improvements needed	PEDal suggestion to replace stair structure.	

Table 3.8: Additional Candidate Pedestrian Projects

Alleys can even become landscaped connections between housing and schools, parks and shopping. The Los Angeles neighborhood of Canoga Park is considering improvements to alleys paralleling its main downtown commercial street to include higher quality paving, trees, signage, seating and lighting. The desire is to encourage alleys as alternative routes to access local businesses and adjacent blocks as part of transit-oriented development immediately around a new light rail station.

A similar street configuration is the European "woonerf," (Dutch, from wonen "reside" + erf "premises, ground"). A woonerf is a minor street where pedestrians and cyclists have legal priority over vehicle traffic. Woonerfs are intended to serve multiple functions, including vehicle, bicycle and pedestrian access and as outdoor play and social space. They are analogous to green alleys and many of their principles could be employed to produce the desired ambience. They both employ shared spaces, traffic-calming and low speed limits to improve safety for all users. In the Netherlands and Germany, drivers are legally restricted to very low speeds, generally a walking pace. Pedestrians, including children, may use the entire street and are even permitted to play in it.



Given the recent economic downturn, an obvious hurdle in implementing green alleys is funding. However, if project design incorporates stormwater management, public-private partnerships and various stormwater-related state and federal programs may be available to help fund alley greening projects. A green alleys program will also need to establish design and project selection criteria to be included in planning documents like specific plans that make alley consideration a planning requirement.

Such criteria could include security and lighting, for examples, but the critical issue is safety. Since alleys generally intersect intervening streets at mid-block, they have not been the focus of mobility planning on a city-wide scale and have therefore not typically been recommended as designated bicycle routes. This is primarily because traveling by bicycle via an alley across multiple blocks exposes cyclists to potential conflict points at each travel lane in each roadway the alley intersects.

In the case of El Camino Real's alley, this is a specific location with an obvious need for a more fundamental solution. The key will be to design the alley/cross street intersections properly to warn drivers and alley users alike to be aware of each other's presence. Making the alley crossing points visible will be crucial to safely implementing this concept, but there are other potential impacts. For example, prohibiting parking near crossing streets would be a safety improvement, but this would also reduce available parking. Finally, the cross streets tend to be low volume, but it may be advantageous to initiate a pedestrian-oriented program at first and add bicycle provisions if use warrants it.

City staff will evaluate alleys on a case-by-case basis and look at all opportunities to accommodate safe pedestrian and bicycle movement.



"Green Alley": Detroit, MI



Woonerfs: Utrecht and Haarlem, Netherlands

Power-Assist for Bicycles

A number of survey respondents from this and other municipalities have said that given the region's climate, the primary reason they do not ride more instead of drive is their local hilly terrain. They either do not have the physical strength to climb hills, or they do not want to arrive at their destination disheveled and sweaty from the effort of getting over steep hills. In the past, not much could be done about this issue except to try to route bicycle facilities to avoid the steepest and longest grades, but especially in cities like San Clemente, this is not always an option.



Power-assisted bicycles

Many bicycle manufacturers have been developing battery power assist technology to make riding easier. These manufacturers perceive significant latent demand and constantly evolving battery technology has supported this market as power units continue to shrink in size, weigh less and operate longer with more consistent output.

Power-assist systems are either built-in on bicycles designed for the purpose, or retrofitted after the fact. Many purpose-built examples not easily distinguishable from conventional bicycles. One is actually a motorized trailer that can be attached to virtually any bicycle and pushes the rider. These systems allow the rider to adjust the amount of assist the electric motor provides to tailor it to the terrain and the individual's physical capabilities. While these systems add weight, the assistive force effectively negates it.

Federal law requires that for power-assisted bicycles to be legally considered a bicycle, they must have functional pedals, be limited to 750 watts of power and cannot exceed 20 miles per hour. Units that meet these standards are allowed on all bicycle facilities, including off-street Class 1 bicycle paths (*HR 727 – amends Consumer Product Safety Act Section 38.(a): Low Speed Electric Bicycles*).

The City could promote awareness of this technology as a way to encourage more people to ride instead of drive, which would reduce congestion and improve air quality and health, while supporting sustainability goals. In particular, residents in the eastern areas indicated in surveys, were it not for the arduous climb home, that they would bicycle to the beach area more often instead of driving. Power-assist could be the key to changing their minds and habits. City of San Clemente Centennial General Plan, January 2014

Mobility and Complete Streets

The Mobility and Complete Streets Element focuses on moving people by multiple transportation modes, including both human-powered and motorized means, thereby providing safe, efficient, and convenient mobility choices.

Multimodal transportation has been recognized under California law for decades. It's widely acclaimed as an effective strategy to help communities to meet the transportation needs of all citizens, maintain and enhance environmental quality and comply with applicable laws. Moreover, the State of California's regulations promote multimodal transportation to accommodate new residents while helping to improve the efficiency of traffic, expand the State's economy and enhance everyone's quality of life. It is widely acknowledged that by utilizing all available transportation modes — motor vehicles, public transit, rail, walking and bicycling – and through strategies such as transportation demand management and telecommuting -- California's communities can use resources more efficiently and help achieve a sustainable future.

The "Complete Streets" perspective considers active transportation fundamental to the success of California's cities. California's 2008 Complete Streets Act states that to "make the most efficient use of urban land and transportation infrastructure and to improve public health by encouraging physical activity, transportation planners must find innovative ways to reduce vehicle miles traveled and to shift from short trips in the automobile to biking, walking, and use of public transit."

San Clemente residents already have embraced that strategy. In January, 2012, San Clemente's City Council unanimously resolved "to comply with the letter and spirit of California's Complete Streets Act, thereby creating a balanced multimodal transportation system for all." And in 2009, the City conducted a Vision San Clemente telephone survey that showed that 90 percent of residents surveyed supported a pedestrian-friendly town that encouraged walking and biking, 80 percent wanted traffic flow to improve and 78 percent desired improved access to alternative transportation.

The Mobility and Complete Streets Element complements the findings of California's State Legislature with the vision of San Clemente's leaders and residents. In so doing, we intend to achieve a sustainable future for generations to come.

PRIMARY GOAL:

Create a comprehensive, multimodal transportation system that provides all users with safe connections to homes, commercial centers, job centers, schools, community centers, open spaces, recreation areas and visitor destinations.

SECONDARY GOALS:

- Maintain accessibility and protect San Clemente's environment and natural beauty;
- 2. Reduce dependence on single-occupant use of motor vehicles;
- 3. Achieve and maintain State and Federal health standards for air and water quality.

City of San Clemente Centennial General Plan, January 2014

- 4. Promote alternative transportation modes such as walking, riding buses and bicycles, and using carpools for all users, including those with special needs.
- 5. Widen and extend streets only when there is a demonstrated need and strive to mitigate adverse impacts to levels of non-significance, pursuant to the California Environmental Quality Act.
- 6. Make commercial districts and recreational areas more functional and enjoyable for pedestrians.
- 7. Coordinate transportation planning with property owners, businesses and other affected agencies, such as the County of Orange, Orange County Transportation Authority, California Department of Transportation and the State of California Parks and Recreation Agency.
- 8. Reduce the need for automobile commuting through land use strategies, expanded and improved bicycle and pedestrian facilities, and by promoting telecommuting and flexible work schedules.
- 9. Protect wildlife habitat and corridors through environmentally-sensitive design of transportation- and drainage-related facilities.

GOAL AND POLICY SECTIONS:

- 1. Roadway System
- 2. Non-Automotive System
- 3. Transportation Safety
- 4. Parking
- 5. Freight Movement

LINKS TO REFERENCE MATERIALS AND BACKGROUND INFORMATION

- Existing Conditions Traffic Analysis [staff to provide link to F&P report]
- Regulatory and Policy Overview [staff to provide link to F&P report]
- Model Design Manual of Living Streets (MDML) (with exceptions) [http://www.modelstreetdesignmanual.com/]
- City of San Clemente Bicycle and Pedestrian Master Plan [staff to provide link]
- City of San Clemente Climate Action Plan [staff to provide link]
- City of San Clemente Traffic Calming Policy [staff to provide link]
- Master Plan of Arterial Highways [staff to provide link]
- Future Conditions Traffic Analysis [staff to provide link to F&P report]
- California Office of Planning & Research General Plan Guidelines, Complete Streets [http://opr.ca.gov/docs/Update_GP_Guidelines_Complete_Streets.pdf]
- Federal Safe and Complete Streets Act of 2011 [http://www.govtrack.us/congress/bills/112/hr1780/text]

Roadway System

San Clemente's roadway system [link to Figure M-1] shall meet multiple goals. It must be safe, convenient, efficient, balanced to address all roadway users' needs and compatible with its surroundings. The roadway system must provide the necessary capacity to meet existing needs and future transportation needs resulting from growth and development as allowed in the City's General Plan Land Use Plan [link to Figure LU-1]. At the same time, the roadway system must meet or exceed adopted performance standards. When feasible and where appropriate, the public rights-of-way must accommodate motor vehicles, pedestrians, bicyclists, landscaping, street furniture, utilities and traffic control devices in safe and aesthetically pleasing ways.

GOAL:

Create a balanced transportation network that provides mobility and access for all modes of travel, including motor vehicles, transit, bicyclists, pedestrians, and rail traffic.

POLICIES:

M-1.01. *Roadway system.* We require the City's roadways to:

- a. Accommodate public transit, motor vehicles, bicyclists, skateboarders and pedestrians within the public right-of-way wherever feasible.
- b. Consider Federal, State, Orange County and City standards and guidelines for roadway design, maintenance and operation.
- c. Comply with Orange County Transportation Authority (OCTA) requirements for arterial highways as determined through the Master Plan of Arterial Highways (MPAH) and Measure M. Maintain at least a Level of Service (LOS) D or better at all intersections, except where flexibility is warranted based on a multi-modal LOS evaluation, or where LOS E is deemed appropriate to accommodate complete streets facilities.
- d. Provide future capacity as called for by this Element and as shown in the Future Roadway System map.
- e. Ensure that new roadways, ramps, traffic control devices, bridges or similar facilities, and significant changes to such facilities, are designed to accommodate multi-modal facilities, and where feasible, retrofit existing facilities to improve the balance for the users of the roadway.
- f. Be maintained in accordance with best practices and the City's Street Improvement Program.
- M-1.02. **Transportation Infrastructure.** Traffic control devices and transportation infrastructure operate to serve the needs of all roadway users, including motorists, public transit, pedestrians and cyclists.
- M-1.03. *Off-Peak Circulation System Design.* For transportation system planning purposes, we design our circulation system for "off peak" season (non-Summer

months) demand and meet the needs of residents and local businesses to maintain San Clemente's village character.

- M-1.04. *Level of Service.* When the City determines there is a suitable tool available, we will measure and evaluate roadway performance from a multi-modal, Complete Streets perspective.
- M-1.05. **Development project impacts.** We require development projects to analyze potential off-site traffic impacts and related environmental impacts through the CEQA process and to mitigate adverse impacts to less-than-significant levels.
- M-1.06. *Intersection Improvements.* We evaluate impacts of intersection improvements on all modes of travel, including bicyclists, pedestrians, and transit.
- M-1.07. **Driveway Access Points.** We require the number of driveway access points onto arterial roadways to be minimized and located to ensure the smooth and safe flow of vehicles and bicycles.
- M-1.08. *Transportation Monitoring*. We regularly monitor the transportation system and the travel needs and behavior of residents and visitors to help guide transportation decisions.
- M-1.09. **Transportation Mode Choice.** We actively work to reduce automobile use and improve the efficiency of the roadways based on locally collected data and on goals set through a collaborative process involving City staff, residents and other stakeholders.
- M-1.10. **Regional Coordination.** We participate in the planning of regional transportation improvements, such as interchange improvements along I-5, the extension of the SR-241, and other major freeway and arterial improvements. The City supports the extension of an HOV lane on I-5 south to the San Diego County border.
- M-1.11. **Innovative Design.** We support the design principles in the City's Design Manual of Living Streets. We will consider use of innovative transportation design features, such as, but not limited to Intelligent Transportation System improvements, modern day roundabouts, midblock and corner bulbouts and road diets where such changes can improve the balance of the roadway and its compatibility with surrounding land uses.
- M-1.12. **Transportation Infrastructure Design.** In designing transportation facilities such as bridges, retaining and sound walls and related transportation facilities, the City applies the Design Guidelines to maintain high quality design, compatible with community aesthetics. Side slopes and earthen berms adjacent to roadways should attempt to be natural in appearance to minimize visual impacts along designated scenic corridors.
- M-1.13. **Design Integration.** City supports development that is designed and/or retrofitted to incorporate, and be efficiently served by, public transit, pedestrian and bicycle facilities.

- M-1.14. **Neighborhood-Serving Uses.** Consistent with the Land Use Element [link to LUE Homepage], we encourage roadway designs that are compatible with neighborhood-serving commercial uses, schools, churches, parks and recreational areas near residential neighborhoods, for convenience.
- M-1.15. *Residential Quality.* Protect the quality of residential areas by managing traffic volumes and speeds on residential neighborhood streets.
- M-1.16. **Transportation Technological Advancement.** We solicit ideas from private industry and public agencies for the development and implementation of innovative transportation technologies.
- M-1.17. *Alternative Paving Treatments.* We support the use of alternate paving materials for public streets, highways, rail beds and other transportation corridors where they can help achieve other General Plan goals, such as noise reduction, beautification, and improved fuel efficiency.
- M-1.18. *Streetscapes and Major Roadways.* During the design, construction or significant modification of major roadways, we will promote scenic parkways or corridors to improve City's visual quality and character, enhance adjacent uses, and integrate roadways with surrounding districts. To accomplish this, the City will:
 - a. Encourage the creation and maintenance of median planters and widened parkway plantings;
 - b. Retain healthy, mature trees in the public right-of-way, where feasible;
 - c. Emphasize the planting and maintaining California Native tree species of sufficient height, spread, form and horticultural characteristics to create the desired streetscape canopy, shade, buffering from adjacent uses, and other desired streetscape characteristics, while considering impacts to public view corridors.
 - d. Encourage the use of water-conserving landscaping, street furniture, decorative lighting and paving, arcaded walkways, public art, and other pedestrian-oriented features to enhance the streetscape appearance, comfort and safety.
 - e. Encourage and where possible, require undergrounding or stealthing of overhead utility lines and equipment, cellular facilities and related ground-mounted structures.
 - f. When possible, consolidate signs in the public right-of-way to reduce sign clutter, improve sight distance, maintain or improve safe access and reduce costs.
 - g. Design and locate street lighting with shielding or "cutoffs" to prevent glare, avoid excess lighting and preserve dark night time skies [link to Natural Resources Element, Dark Skies section].

- M-1.19. **Traffic Calming.** We design the circulation system serving new developments, and retrofit existing streets, where feasible, to control traffic speeds and maintain safety in all residential neighborhoods, in accordance with the City's Street Design Standards and Traffic Calming Manual.
- M-1.20. **Street Redesign.** We seek opportunities to redesign streets so that they are compatible with the surrounding neighborhood context and the Community's vision of the future, and only consider street widening or intersection expansions after considering multi-modal alternative improvements to non-automotive facilities
- M-1.21. **Regional Transportation Demand Management (TDM).** We support regional efforts by the South Coast Air Quality Management District (AQMD), OCTA, and other agencies to maintain and expand regional programs designed to reduce commuting by single driver automobiles.
- M-1.22. **TDM Financial Incentives.** We encourage businesses to offer financial incentives to their employees, including subsidized transit, carpool/vanpool programs, bike-to-work programs, parking cash-out programs, or a combination of incentives.
- M-1.23. *Telecommuting.* We support the use of private "tele-work" centers, satellite offices, or other forms of virtual work environments.
- M-1.24. **TDM in Development Review.** We encourage on-site features in all new non-residential developments that support Transportation Demand Management (TDM). Potential features may include preferred rideshare parking, car sharing vehicles, on-site food service and exercise facilities.
- M-1.25. **Regional Access to Arterial Streets.** New development contributing traffic to City Arterials, including development projects outside the City including, but not limited to, Rancho Mission Viejo shall be required to mitigate all traffic impacts to be consistent with adopted LOS standards contained in the City's Mobility and Complete Streets Element.
- M-1.26. *Major and Minor Scenic Corridors*. We require the following roadways be maintained and preserved as major or minor scenic corridors with key entry points as shown in Figure M-2:
 - a. Avenida Vista Hermosa
 - b. Avenida La Pata
 - c. Avenida Pico
 - d. El Camino Real/Pacific Coast Highway
 - e. Ola Vista
 - f. El Camino Real
 - g. Camino De Los Mares
 - h. Camino Vera Cruz
 - i. Camino Del Rio
 - j. Calle del Cerro

- k. Avenida Vista Montana
- I. Avenida Talega
- M-1.27. *Scenic Corridor Enhancement and Designation*. Enhance existing scenic corridors and identify opportunities for the designation of new corridors.
- M-1.28. Urban and Recreation Corridor designations. We seek to create and distinguish different roadway characteristics for Urban and Recreation corridors throughout the City. Distinctions between urban and recreation corridors will be included in the updated Master Plan for Scenic Corridors, and will establish a scenic hierarchy and an overall visual framework for the City.
- M-1.29. **New Scenic Corridors or Highways.** Expand or designate new scenic highways where protection of community resources warrants their preservation and/or protection.
- M-1.30. **Protection of Scenic Corridors.** We ensure that development is sited and designed to protect scenic corridors and open space/landscape areas by blending man-made and man-introduced features with the natural environment.
- M-1.31. **Building Heights and Setbacks.** We review the heights and setbacks of all structures to ensure the preservation of visual corridors and the maintenance of an open, scenic quality within each corridor.
- M-1.32. *Compatible Landscaping.* We require development to provide landscaping themes that are compatible with and reinforce the visual character of adjacent, designated scenic corridors.
- M-1.33. *Signs.* We require the review of the size, height, numbers, and type of onpremise signs to minimize their impact to scenic corridors.
- M-1.34. *Billboards Prohibited.* We prohibit the construction of billboards within the City of San Clemente.
- M-1.35. **Design and Maintenance.** We support the proper design, installation and maintenance of scenic highways and scenic corridor elements, including the responsibilities for the maintenance of landscaping and roadway surfaces to be fulfilled by homeowners' associations, community service districts, private owners and public agencies

GENERAL PLAN FIGURES

- Figure M-1, Roadway System Map
- Figure M-2, Scenic Corridors

ADDITIONAL LINKS

 Zoning Code, Chapter 17.76, Trip Reduction and Transportation Demand Management

[http://library.municode.com/HTML/16606/level2/TIT17ZO_CH17.76TRRETRDEMA.html]

- Design Manual of Living Streets (DML) (City will complete manual with deleted sections)
- Regulatory and Policy Overview [staff to provide link to F&P report]
- Master Plan of Arterial Highways [staff to provide link to F&P report]
- Orange County Transportation Authority Commuter Services [http://www.octa.net/STR2011.aspx]
- City of San Clemente Traffic Calming Policy [staff to provide link]
- State Deputy Directive 64 [http://www.dot.ca.gov/hq/tpp/offices/ocp/complete_streets_files/dd_64_r1_signed.pdf]
- City Street Design Standards [staff to provide link]
- California Office of Planning & Research General Plan Guidelines, Complete Streets [http://opr.ca.gov/docs/Update_GP_Guidelines_Complete_Streets.pdf]
- Federal Safe and Complete Streets Act of 2011 [http://www.govtrack.us/congress/bills/112/hr1780/text]

Non-Automotive Transportation System

A transportation system that meets all users' needs requires bicycle, pedestrian, rail and public transit facilities. In addition to providing more travel options, these alternative transportation modes have other significant benefits, including reduced fuel usage and emissions, health and recreation opportunities, reduced traffic congestion and an improved quality of life.

Increasing the community's use of alternative travel modes can mean changes to longstanding habits or behaviors. Thus, it requires more effort than merely building new facilities or expanding existing ones. It requires public outreach and education to promote these alternative modes and their safe use.

GOAL:

Create an interconnected network of bicycle, pedestrian, skateboard, rail and transit facilities that encourage non-automotive travel.

POLICIES:

- M-2.01. *Electric Vehicles.* We support the use of neighborhood- and long-range electric vehicles and identify routes and designate special parking for such Neighborhood Electric Vehicles (NEVs) at beaches and commercial locations.
- M-2.02. *Pedestrian Facilities.* Public streets shall provide pedestrian facilities [link to Glossary] in accordance with the adopted City standards.
- M-2.03. *Accessible Pedestrian Facilities.* All new streets shall have provisions for the adequate and safe movement of pedestrians, including improvements for the elderly and disabled.

- M-2.04. *Accessible Transit.* We provide bicycle, pedestrian and wheelchair access to all transit facilities and maintain bicycle, pedestrian and wheelchair facilities so that they are safe, attractive and well lit.
- M-2.05. **Rail Facilities and Programs.** We support the retention of passenger rail facilities at North Beach and in the Pier Bowl to help meet inter-city and regional transportation needs.
- M-2.06. **Regional Rail Service.** We support the expansion of Metrolink and Amtrak service by the Southern California Regional Rail Authority, OCTA, and other agencies to enhance San Clemente's regional transit accessibility for residents, employees and visitors.
- M-2.07. *Coordinated Land Use Planning for Transit.* We encourage higher density, mixed-use development in areas with existing and planned transit service.
- M-2.08. **Transit Service.** We support the maintenance of existing bus service and encourage transit service enhancements by OCTA to ensure all residents have access to adequate and safe transit.
- M-2.09. **Senior and Disabled Public Transit.** We support the provision of appropriate and cost-effective transit services for seniors, disabled persons and those who are unable to drive motor vehicles by coordinating with regional transit providers, non-profit service providers, private services, and community-based services.
- M-2.10. **Transit Priority in Development Review Process.** Development should encourage transit ridership by including bus turnouts, passenger shelters, transportation kiosks, pedestrian connections to transit, and other measures.
- M-2.11. **Bicycle and Pedestrian Wayfinding**. Bicycle and pedestrian network wayfinding and information shall be provided through signs, street markings or other technologies.
- M-2.12. *Integration of Bicycle Planning*. We integrate development of the bicycle facilities network into larger land use planning and development projects.

POLICIES (from Bicycle and Pedestrian Master Plan):

- M-2.13. *Bicycle and Pedestrian Network.* We plan, develop and maintain a comprehensive bicycle and pedestrian network as specified in the San Clemente Bicycle and Pedestrian Master Plan.
- M-2.14. *Bicycle Friendly Streets.* We consider every public street in San Clemente as a street that cyclists could use.
- M-2.15. **Bicycle-Friendly Infrastructure.** We shall employ bicycle-friendly infrastructure design using new technologies and innovative treatments, where necessary to improve bicyclists' safety and convenience.
- M-2.16. *Roadway Performance Evaluation.* We shall evaluate roadway level of performance from a multi-modal, Complete Streets perspective.

- M-2.17. *Traffic Control Devices*. Traffic control devices and transportation infrastructure will be operated to serve the needs of all users of the roadway and pedestrians.
- M-2.18. **Design Standards.** We support the design principles in the City's Design Manual of Living Streets in determining the appropriate standard to apply to a given situation, the City will seek to maximize cyclists' and pedestrians' comfort and convenience, in balance with other roadway users.
- M-2.19. *Bicycle Facilities.* In preparing City land use plans and applicable Capital Improvement Programs, we address bicycle needs, including:
 - a. Attractive destination facilities, such as secure bicycle lockers, showers, and changing rooms that are conveniently located for bicyclists, i.e. a bike station);
 - b. Facilities for bicycle parking within newly-built and renovated multi-family residential developments, residential condominiums and apartment conversions to condominiums, multi-use and non-residential sites;
 - c. Safe, secure, attractive and convenient bicycle parking; and
 - d. Wayfinding systems and traffic control signage or markings for all bicycle facilities.
- M-2.20. **Regional Bicycle and Pedestrian Coordination.** We coordinate regional trail and bicycle planning, acquisition and development efforts with adjacent jurisdictions.
- M-2.21. *External Linkages.* We link on-road and off-road bicycle and pedestrian facilities within San Clemente to existing and planned facilities in in adjacent and regional jurisdictions.
- M-2.22. *Off-Road Trail Linkages.* Where feasible, the City connects off-road trails with the on-road transportation network.
- M-2.23. **Skateboarding.** We encourage and support skateboard use as an efficient and legitimate transportation mode.
- M-2.24. *Maintenance and Hazard Monitoring.* We maintain bicycle and pedestrian facilities according to a management plan to be adopted by the City.
- M-2.25. *Intersections and Crossing Locations.* We utilize Federal, State, and local guidelines and standards for traffic operations, signal timing, geometric design, Universal Access (ADA) and roadway maintenance that facilitate walking and bicycling at intersections and other key crossing locations.
- M-2.26. **Bicycle and Pedestrian Facility Design Standards.** We shall utilize the Caltrans Highway Design Manual and other infrastructure guidelines as appropriate to design and maintain bicycle and pedestrian facilities to high safety standards.

- M-2.27. **Unpaved Trails**. We require unpaved bicycle and pedestrian trails on Citycontrolled property to be built and maintained using recognized best practices.
- M-2.28. *Intersection Configuration.* We shall require the intersections of local roads with the I-5 freeways and the proposed Toll Road to be designed using a "complete streets" approach.
- M-2.29. *Safety Awareness.* We encourage and support the creation of comprehensive safety awareness programs for pedestrians, skateboarders, cyclists and drivers.
- M-2.30. *Improvements along Bicycle and Pedestrian Routes.* We improve and maintain alternative transportation infrastructure and assign a high priority to improvements along primary pedestrian and bicycle routes to schools.
- M-2.31. **Non-Automotive Transportation Co-Benefits.** We utilize non-automotive transportation solutions as tools for achieving economic development and environmental sustainability goals.
- M-2.32. *Grant Funding.* We pursue Federal, State, County, regional and other funding opportunities to increase bicycle and pedestrian mode share percentages, improve transportation system performance, and to improve air quality through a balanced, multi-modal transportation system.
- M-2.33. **Deferred Street Improvements.** Should the City defer construction of street improvements as part of any development approval, the property owner may be required to sign an agreement to participate in the installation of the improvements when a more complete street improvement project is feasible.
- M-2.34. *American Disabilities Act.* All new streets shall have provisions for the adequate and safe movement of pedestrians, in accordance with the American Disabilities Act.
- M-2.35. *Sidewalks and Pathways.* Sidewalks or pathways are desirable in most areas, including coastal neighborhoods where, at a minimum, it may only be feasible to install sidewalk on one side of the street.
- M-2.36. *Active Transportation Linkages to Schools.* We assign high priority to the improvement and maintenance of active transportation infrastructure within one half mile of San Clemente schools.
- M-2.37. *Facilities Outside of Roadway.* We shall consider using the public right-ofway outside that of the roadway limits to install safe and convenient bicycle and pedestrian facilities.
- M-2.38. *Formalization of Bicycle and Pedestrian Paths.* We shall explore the formalization of existing informal bicycle and pedestrian paths, where appropriate.
- M-2.39. **Roadway Repairs.** When roadway repairs are done by the City or other agencies, such as utility companies, the roadway shall be restored in accordance with City standards, with restriping suitable for bicycle use, as appropriate.

- M-2.40. **Bikeway Width.** Where feasible, design bikeways beyond the minimum required widths, but within Federal, State or local standards (For example, Class 2 lanes should not exceed eight feet in width to avoid confusion with driving lanes).
- M-2.41. **Retention of Bikeways.** We retain existing bikeways when a roadway is reconstructed, reconfigured or improved. When designated bikeways must be temporarily removed, they should be replaced on nearby, convenient and parallel routes.
- M-2.42. **Consistency with Bicycle and Pedestrian Master Plan.** We review all new capital improvement projects and private development projects to ensure consistency with the Bicycle and Pedestrian Master Plan and with the Mobility and Complete Streets Element.
- M-2.43. *Implementation of Bicycle and Pedestrian Improvements.* We shall consider implementing bicycle and pedestrian improvement projects as part of other street improvement projects.
- M-2.44. **Bicycle Parking.** We provide convenient, secure, attractive and easy to use bicycle parking at public buildings, commercial areas, multi-family residential development projects, and at schools and parks and encourage other agencies to provide bicycle parking for rail transit and Park-n-Ride facilities.
- M-2.45. **Public Pedestrian Improvements.** We encourage public pedestrian improvement projects such as public art, fountains, street trees, lighting and directional signs.
- M-2.46. *Access to Public Lands.* We improve appropriate legal access to lands open for public use by bicyclists and pedestrians.
- M-2.47. **Bicycle Improvements Conditionally Required**. We require the construction or rehabilitation of bicycle facilities and/or "bicycle-friendly" improvements as a condition of approving new development, in accordance with Zoning Ordinance standards.
- M-2.48. *Bicycle- and Pedestrian-Oriented Site Design.* We encourage bicycle and pedestrian-oriented site design in commercial areas.
- M-2.49. *Network Linkages*. We design bicycle and pedestrian network linkages that directly connect to retail and commercial centers.
- M-2.50. *Pedestrian Connectivity.* We require development projects and site plans to be designed to encourage pedestrian connectivity among buildings within a site, while linking buildings to the public bicycle and pedestrian network.
- M-2.51. **Pedestrian Facility Improvements.** As funding permits, we will install, or require as a condition of development approval, pedestrian facility improvements such as installation of signs, signals, street crosswalks, proper lighting, pedestrian-activated signals, street trees, placement of benches, transit shelters, shade and other ancillary pedestrian features.

- M-2.52. *Sidewalk Repair or Replacement.* We repair or replace substandard public sidewalks and paving in public areas, in accordance with Sidewalk Repair Program.
- M-2.53. *Public Facility Access.* We give high priority to providing pedestrian and bicycle access to all public facilities and transit stops and will coordinate with OCTA as necessary.
- M-2.54. **Beneficial Commercial Uses on Public Sidewalks.** We may approve certain commercial uses on public sidewalks in the Pedestrian Overlay District when those uses benefit the overall pedestrian environment.

LINKS TO OTHER GENERAL PLAN CONTENT:

- Land Use Element, Focus Areas [link to Focus Areas page]
- Urban Design Element [link to LUE Homepage]

ADDITIONAL LINKS:

- San Clemente Bicycle and Pedestrian Master Plan [staff to provide link]
- Design Manual of Living Streets (DML) (City will complete manual with deleted sections)
- Caltrans Chapter 1000 Standards [http://www.dot.ca.gov/hq/oppd/hdm/pdf/chp1000.pdf]
- Orange County Transit Authority [http://www.octa.net]
- <u>Metrolink</u> [www.metrolinktrains.com]
- California Office of Planning & Research General Plan Guidelines, Complete Streets [http://opr.ca.gov/docs/Update_GP_Guidelines_Complete_Streets.pdf]

Safety

To encourage multi-modal transportation, San Clemente will use a combination of roadway improvements, urban design strategies, quality bicycle and pedestrian facilities, education/awareness programs and traffic code enforcement.

GOAL:

Create a balanced transportation system that facilitates safe travel by all modes of travel.

POLICIES:

- M-3.01. *Connected Roadway Network.* We require development projects to connect to and where necessary, improve local streets to allow travel by all modes and ensure connectivity with the larger City-wide roadway network.
- M-3.02. *Complete Streets Roadway Standards.* We require that pedestrian, vehicular, and bicycle circulation on public and private property is coordinated and

designed to maximize safety, comfort and aesthetics and is consistent with Federal, State, Orange County, and local laws, codes, and standards.

- M-3.03. **Safe Routes to School.** We collaborate with the Capistrano Unified School District and private schools to identify and implement safety measures to improve safe travel to and from schools for students, parents, residents and school employees.
- M-3.04. *Manage Traffic Speeds.* We use a combination of effective design and traffic code enforcement to manage traffic speeds.
- M-3.05. *Safety Awareness Program.* We encourage and assign high priority to the creation of a comprehensive safety awareness program for pedestrians, skateboarders, cyclists, and motorists which addresses proper riding behavior, wearing helmets, using lights, and other issues as appropriate.
- M-3.06. *Emergency Response.* We manage the transportation system to balance emergency response time and evacuation needs with other community concerns, such as Urban Design and balanced road designs.
- M-3.07. *Railway Safety.* We coordinate with appropriate agencies and organizations when reviewing development projects located adjacent to or near railroad rights-of-way to improve safety and minimize negative impacts on surrounding areas and on railway operations.

ADDITIONAL LINKS:

- Design Manual of Living Streets (City to complete manual with deleted sections. This is the most important link in the Element to address safety)
- San Clemente Bicycle and Pedestrian Master Plan [staff to provide link]
- California Office of Planning & Research General Plan Guidelines, Complete Streets [http://opr.ca.gov/docs/Update_GP_Guidelines_Complete_Streets.pdf]

Parking

Parking facilities are essential for most types of land uses. Their location, design and availability can influence travel choices. For example, reducing the level of available parking has been shown to reduce vehicle travel and increase biking, walking, and transit use. To strike a balance between the provision of adequate parking to meet residential and business needs and the goal of improving non-motorized travel options, San Clemente strives to provide an appropriate level of "right-sized" parking facilities.

For example, shared parking concepts allow parking spaces to be used by more than one type of user at different times of the day. This can provide more efficient utilization of parking spaces over predictable cycles of the day, week or year. Another strategy is to provide comprehensive and routine management of parking in key destination areas of San Clemente, like the Del Mar/T-Zone, North Beach, and the Pier Bowl.

GOAL:

Create a circulation-driven parking system which provides an appropriate level of multimodal parking and helps reduce traffic congestion.

POLICIES:

- M-4.01. **Shared Parking.** We encourage mixed-use and multiple use developments to implement shared parking techniques as a preferred approach for complementary land uses.
- M-4.02. *Parking Management.* We manage and evaluate public and private parking resources in key destination areas.
- M-4.03. **Automobile Parking Demand.** We reduce automobile parking demand by improving public transit, bicycle and pedestrian mobility, particularly to and from our key destination areas.
- M-4.04. *Alternative Parking Strategies.* We consider alternative parking strategies that address multi-modal parking needs, improve land use efficiency and enhance environmental quality, such as use of energy-saving/generating features, demandbased parking strategies, stacking, alternative paving, and accommodating multiple uses.
- M-4.05. **Parking Requirements.** We support the evaluation and possible consolidation of parking requirements to facilitate the gradual transition of land uses and to simplify standards.
- M-4.06. *Comprehensive Parking Strategies.* We base parking decisions and related improvements in key commercial areas (e.g., North Beach, Del Mar/T-Zone, Pier Bowl, and Plaza San Clemente) on comprehensive parking and circulation strategies, such as the adopted North Beach Parking Master Plan.
- M-4.07. *Alternative Parking Requirements and Incentives.* We will consider incentives to encourage alternative parking, such as crediting bicycle, neighborhood electric vehicles (NEV), motorcycle and scooter parking spaces toward meeting a portion of the required automobile parking.

LINKS TO OTHER GENERAL PLAN CONTENT:

- Urban Design Element [link to UDE Homepage]
- Land Use Element, Focus Areas [link to Focus Areas page]

ADDITIONAL LINKS:

- Link to local parking maps, applications, other programs [staff to provide separate links]
- <u>Zoning Code, Chapter 17.64, Parking and Access Standards</u> [http://library.municode.com/HTML/16606/level2/TIT17ZO_CH17.64PAACST.html#TOPTITLE]

Freight Movement

Freight vehicles are an integral aspect of the transportation network and crucial to the economic vitality of any city. A key consideration is to manage freight vehicle traffic to limit negative impacts to City residents and employees. Our transportation infrastructure allows trucks traffic to flow efficiently and minimize the possible exposure of people in sensitive areas, such as residential neighborhoods, hospitals and schools, to accidents involving trucks, high noise levels, and diesel emissions. In addition, directing truck traffic to use designated routes minimizes impacts and maintenance demands on roadways not designed or designated for truck traffic.

GOAL:

Create a transportation system which accommodates the safe and efficient movement of freight vehicles on appropriate routes.

POLICIES:

M-5.01. **Truck and Freight Movements.** We will continue to implement a program which allows efficient freight movement while minimizing negative impacts on local roads and noise-sensitive land uses by identifying and implementing vehicle weight restrictions on designated streets.

ADDITIONAL LINKS

 Designated Truck Routes (Municipal Code, Title 10, Section 36, Vehicles and Traffic) [http://library.municode.com/HTML/16606/level2/TIT10VETR_CH10.36WELITRRO.html#TIT10VET R_CH10.36WELITRRO_10.36.010TRRO]

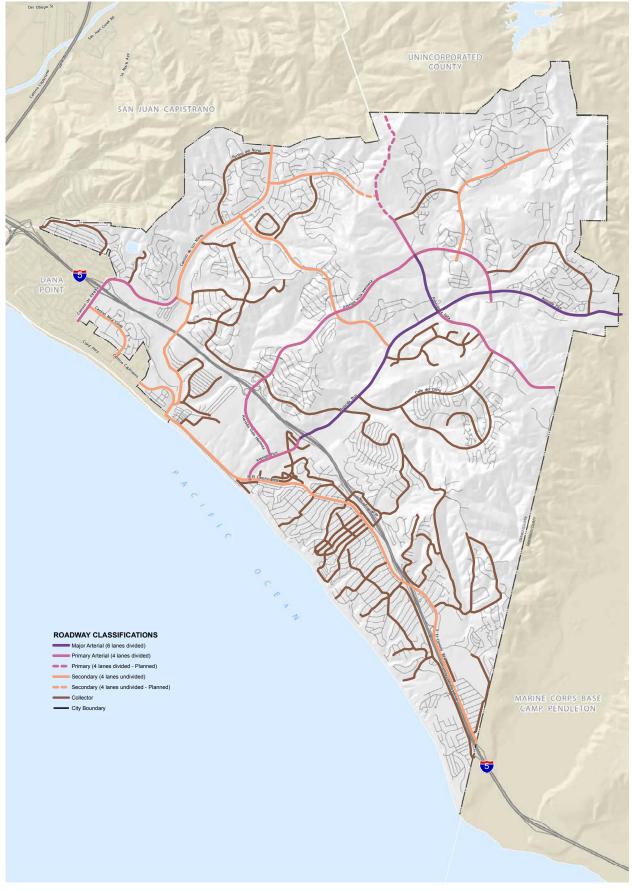
Mobility & Complete Streets Implementation Measures

- 1. Adopt a Street Design Manual based on the Model Design Manual of Living Streets.
- 2. Conduct regular surveys of City residents to identify preferences and behavior and report on the survey results to the City Council to benchmark travel behavior
- 3. Implement the Bicycle and Pedestrian Master Plan.
- 4. Implement the Candidate Projects in the Bicycle and Pedestrian Master Plan, subject to more detailed engineering studies.
- 5. Implement the following roadway extensions improvements based on the Mobility Element and Complete Streets Roadways Map and subject to design/environmental studies:
 - a. La Pata Extension
 - b. Camino Del Rio Extension
- 6. If necessary to mitigate potential impacts, the City will implement improvements identified as mitigation measures in the Final Environmental Impact Report for the Centennial General Plan.

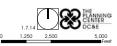
- 7. Update the Municipal Code to require end of trip bicycle facilities, as appropriate to the scale and use of the project, such as parking, lockers, and showers in new or major remodels of multi-family residential and non-residential sites.
- 8. Working with other agencies, the City will seek grants to help develop, operate and maintain a comprehensive trail system through San Clemente's open spaces.
- 9. Work with OCTA to identify shelter options to ensure adequate safety and comfort for transit users and encourage OCTA to provide bus shelters at all bus stops on El Camino Real, Camino De Los Mares, and Avenida Pico.
- 10. When and where appropriate, prepare a feasibility study for a community-serving trolley type transit system that connects San Clemente's key destination areas (e.g., North Beach, Del Mar/T-Zone, Marblehead Coastal, Pier Bowl) and residential areas with public transit and bicycle routes.
- 11. Validate and incorporate a Multi-Modal Level of Service (LOS) or other metric to evaluate multi-modal facilities performance into future traffic studies.
- 12. Update the Master Landscape Plan for Scenic Corridors.
- 13. Consider preparing detailed concept plans to evaluate alternate visions for major MPAH corridors, and address types of multi-modal improvements that can be included within the constrained rights-of-way (unless it is decided to acquire more right-of-way) for various alternatives.
- 14. Prepare comprehensive parking and circulation strategies for key commercial areas, including: North Beach, Pier Bowl, Del Mar/T-Zone and Plaza San Clemente
- 15. Identify and designate Class 2 bike lanes where considered appropriate and there is sufficient curb-to-curb street paveout width.
- 16. Install vehicle actuation to detect bicycles when intersections with signals are rehabilitated (CVC 21450.5)
- 17. Install bicycle detector pavement markings at traffic signals using best practices and adopted State or Federal standards when intersections with signals are rehabilitated.
- 18. Adopt a Pedestrian and Bicycle Facilities Management Plan.
- 19. Periodically review (for example, when the Bicycle and Pedestrian Master Plan is updated and as part of the Long Term Financial Plan process) official databases of bicycle and pedestrian accidents, analyze their causes and locations, and strive to reduce accidents through infrastructure improvements, community outreach and education and law enforcement efforts.
- 20. Develop standards that require bicycle accommodations (such as parking, lockers and showers) in new or significantly rehabilitated nonresidential developments, consistent with Policy M-2.19.
- 21. Integrate walking routes into new greenways and open space areas, where appropriate, and encourage them in existing greenways and open space areas.

- 22. Include Bicycle and Walking Safety lessons in City recreation programs and collaborate with local schools and law enforcement to offer bicycle and pedestrian skills and safety education programs.
- 23. Assist employers in implementing a comprehensive bicycle awareness program for their employees.
- 24. Expand the Safe Routes to School program, including International Walk/Bike to School events, and encourage all schools to get involved.
- 25. Consider designating a law enforcement liaison officer for the bicycle and pedestrian community.
- 26. Provide training opportunities for engineering and planning staff on ways to integrate bicyclists and pedestrians with the transportation network.
- 27. Provide training and public outreach opportunities about bicyclists' and pedestrians' legal rights and duties for City engineering and planning staff, as well as for law enforcement officials.
- 28. Provide an outreach and education component to coincide with the first installation of any new type of bicycle facility as part of the implementation of the associated capital improvement project.
- 29. Develop City-wide navigational tools such as maps, digital map, GPS, or other emerging technologies.
- 30. Consider establishing a Bicycling Advisory Committee to assist the City with grant writing and implementation of the Bicycle and Pedestrian Master Plan.
- 31. Collaborate with local businesses, bicycle shops, non-profits, schools, and government agencies to produce and distribute bicycle and pedestrian safety materials.
- 32. Encourage City officials and employees, as well as other employers, to participate in "Bike to Work Month" and "Bike to Work Week."
- 33. Collaborate with the local off-road advocacy groups, conservation non-profits, State Parks, adjacent jurisdictions and the Donna O'Neil Land Conservancy to develop a plan for off-road trail facilities.
- 34. Establish a bicycle-friendly business program to encourage and facilitate use of alternative modes of transportation by employees and customers.
- 35. Consider establishing an Active Transportation Coordinator position to work with City departments and advocacy groups to support and coordinate efforts to improve alternative transportation modes and to implement the Bicycle and Pedestrian Master Plan.
- 36. Provide assistance to school districts in facility planning and transportation operations to ensure safety for users of all modes during school pick-up, drop-off and other special events.
- 37. Establish mode shift/share goals.

- 38. Track mode shift to quantify greenhouse gas reductions.
- 39. Prepare and maintain an inventory of sidewalk facilities to determine where pedestrian improvements are most needed to provide a continuous safe route for pedestrians throughout San Clemente.
- 40. Retrofit streets and require developments to install public improvements that provide disabled access and mobility on public streets, as required by State or Federal law.
- 41. Work towards closing gaps in San Clemente's pedestrian network.











Data Source: City of San Clemente Master Landscape Plan for Scenic Corridors, 1992



