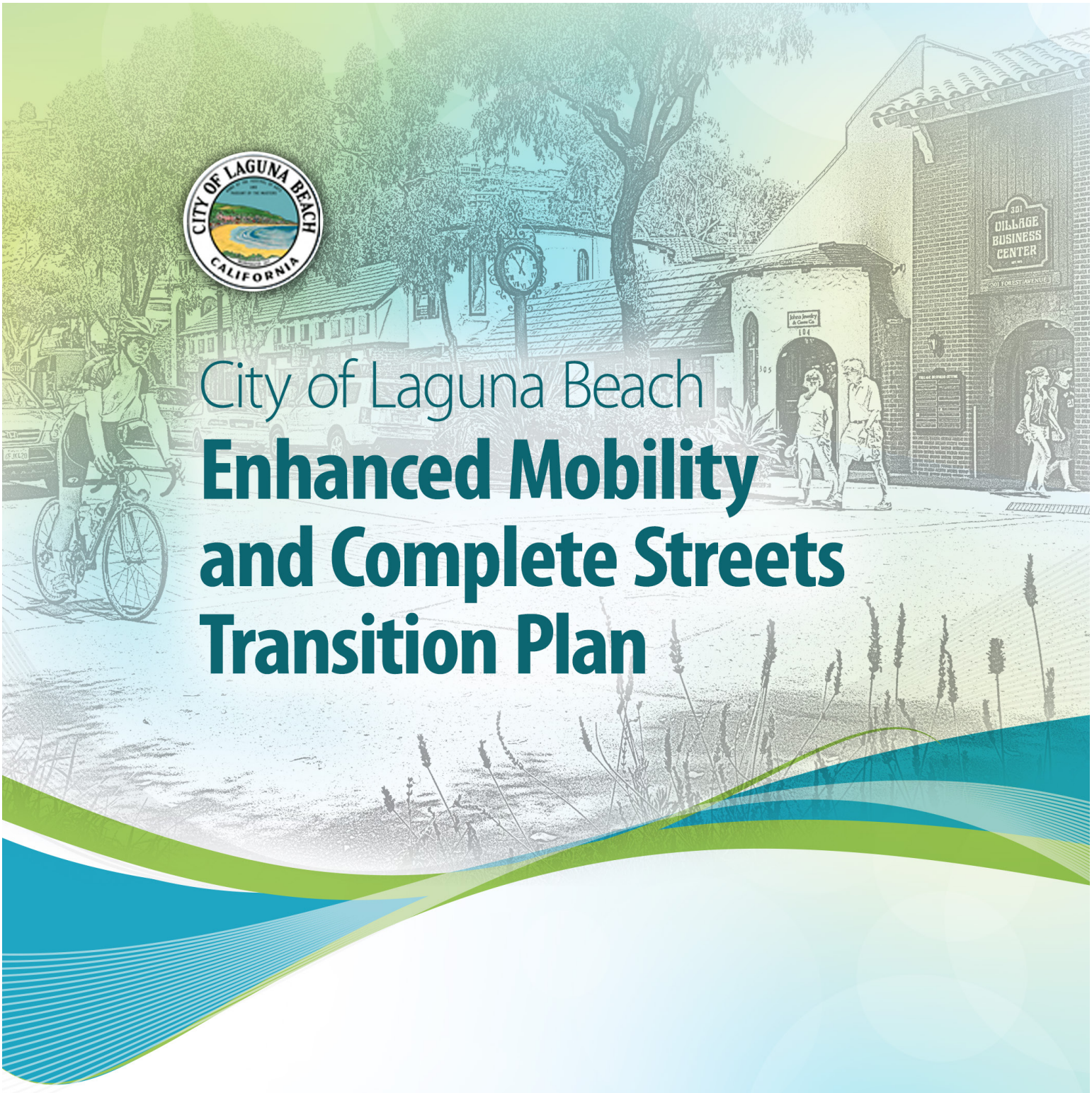

City of Laguna Beach

Enhanced Mobility and Complete Streets Transition Plan

February 6, 2015

City of Laguna Beach Enhanced Mobility and Complete Streets Transition Plan Acknowledgements

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1 | INTRODUCTION

INTENT

The intent of the City of Laguna Beach Enhanced Mobility and Complete Streets Transition Plan (Mobility Transition Plan) is to provide an assessment of the existing transportation environment and identify opportunities for enhanced mobility and Complete Streets. This is accomplished by reviewing existing local and regional conditions, including transit services and ridership, roadway facilities and traffic volumes, bicycle and pedestrian facilities, and related policies. Based on evaluation of the existing conditions, the Mobility Transition Plan provides recommendations to help guide the City toward the creation of a Complete Streets plan for Laguna Beach.

BACKGROUND

The Mobility Transition Plan is funded through a Transportation Planning Grant awarded from Caltrans. Assembly Bill 1358, adopted in 2011, requires that *…the legislative body of a city or county, upon any substantive revision of the circulation element of the general plan, modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.*

The City of Laguna Beach offers an interesting mix of hills and ocean side topography. The natural terrain presents a challenging environment that requires a unique approach to implementing the high-quality, non-motorized infrastructure essential for successful Complete Streets. To increase pedestrian and bicycle activity, it is important to shift focus from auto-centric policies and facilities and aim at reducing vehicle activity. The implementation of multimodal techniques and practices are an important component to the success of the Mobility Transition Plan.

What is a Complete Street?

Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from stations.

- National Complete Streets Coalition

Source: thecityfix.com/files/2009/05/livable-streets.jpg

ORGANIZATION OF THE PLAN

Following this introduction section, which identifies relevant on-going City initiatives and describes the related public engagement process, the Mobility Transition Plan is divided into two main parts.

Existing and Baseline Conditions

This section discusses and documents the existing and baseline conditions that were investigated as part of the planning process. This information establishes the foundation for the Mobility Transition Plan. The baseline information is presented in the following topics:

- Multi-modal Network
- Functional Classification of Roadway System
- Data Collected and Analyzed
- Greenhouse Gas (GHG) Assessment
- Policy Evaluation

To enhance the readability of the document, full size figures are located in Appendix B and smaller, cropped portions of those larger exhibits are integrated into the text.

Complete Streets Recommendations

Section 3 presents a Complete Streets recommendations "toolbox" based upon baseline conditions, community outreach, and best practices in the industry. Included in the recommendations are illustrations and photographs to enhance understanding, along with potential locations in the City where specific improvements might be most appropriate. A summary table highlighting the recommendations can be found at the end of the document. The recommendations are organized into the categories identified below.

- Complete Streets Planning and Policies
- Complete Streets Facilities
- Complete Streets Programs
- Transit Enhancements
- Parking Enhancements

Downtown Laguna Beach

A RELATED STUDIES

It is important to note that there are several City initiatives that contain elements of (or will factor into) Complete Streets planning. Figure 1 below depicts related City initiatives that have been reviewed in consideration of the Mobility Transition Plan. The various plans and efforts identified are all in different stages of development and/or implementation, but each present a unique opportunity to enhance Laguna Beach's goal of enhanced mobility.

Figure 1. Related City Initiatives

B COMMUNITY OUTREACH PROCESS

Residents and stakeholders were engaged throughout the various phases of the Mobility Transition Plan development. These community members provided input on their mobility priorities through interviews and surveys, a Walk/Bicycle Ride Audit, and multiple community workshops.

Walk Audit (March 2014)

Eight scoping and stakeholder meetings were held between May and September 2013 to publicize the development of the Mobility Transition Plan and solicit public input in determining specific transportation user needs. City staff and members of the Planning Commission hosted meetings with individual stakeholders, community partners and interested groups including pedestrians, bicyclists, parents, schools/PTA, seniors, users of public transportation, businesses, the Laguna Beach Chamber of Commerce, Visit Laguna, festival organizations, and hotels.

Bicycle Ride Audit (March 2014)

Two separate surveys were completed to engage the public on mobility issues. An online survey was provided to the public between January and April 2014 and an intercept survey was conducted in January 2014. Over 200 survey responses were received, and identified respondents' reasons for cycling and walking, how respondents feel about the local biking and walking facilities in the City, and suitable areas identified for bike and pedestrian improvements. The results of this survey, along with other data and community input, are incorporated into the Mobility Transition Plan Recommendations.

Community Workshop (June 2014)

Three community workshops were held from March to August 2014. A Walk/Bicycle Ride Audit was held in March to identify pedestrian and bicyclist movement opportunities and constraints. A community workshop in June 2014 presented preliminary recommendations for City bicycle, pedestrian, and transit improvements and obtain public multi-modal and mobility ideas. An additional community workshop was conducted in August 2014 to refine the recommendations previously presented.

Summaries of the surveys and community workshops are included in Appendix A.

2 EXISTING AND BASELINE CONDITIONS

To establish the baseline conditions from which recommendations were developed, the existing citywide multimodal transportation network was documented and relevant City land use and transportation policies were reviewed. Detailed maps of the existing multimodal transportation system were created utilizing geographical information system (GIS) layers. Existing transit ridership and build-out traffic forecasts have also been assessed. Appendix B contains hard copy exhibits of all the GIS maps prepared in support of the Mobility Transition Plan.

A MULTIMODAL NETWORK

A.1 TRANSIT SERVICES (LAGUNA BEACH TRANSIT AND TROLLEY, OCTA)

The City of Laguna Beach offers several transit options to its residents, visitors, and the business community. Transit services for the City are currently provided through Orange County Transportation Authority (OCTA), Laguna Beach Transit Mainline (Mainline), Laguna Beach Transit Summer Festival Trolley (a free shuttle service), Sally's Fund, and the Taxi Voucher Program.

Laguna Beach Transit Festival Trolley

Each of the different transit services tends to serve different riderships yet the services also complement each other. OCTA provides critical regional service for many employees residing outside the City and for residents traveling to neighboring cities. The Laguna Beach Transit Mainline connects to the OCTA Transit at the Laguna Beach Downtown Transit Center providing localized transit through various routes throughout the City. The Laguna Beach Transit Summer Festival Trolley provides transit services between key attractions and peripheral public parking during peak summer festival months. The Festival Trolley is used by tourists and is popular among local residents. Sally's Fund is a transit service focused on providing transportation for senior citizens. The Taxi Voucher Program supplements Laguna Beach Transit by discounting taxi services for residents in the late evening hours. The various transit services in Laguna Beach are further discussed in detail.

A.1.1 OCTA

OCTA Route 1 operates from Long Beach to San Clemente via Coast Highway, providing transit service to and from coastal cities north and south of Laguna Beach. OCTA Route 89 runs from Mission Viejo to Laguna Beach via El Toro Road and Laguna Canyon Road, providing transit service to and from Laguna Hills and Mission Viejo. Both routes stop at the Laguna Beach Downtown Transit Center and connect to all Laguna Beach Transit Mainline routes (and the Laguna Beach Transit Summer Festival Trolley, when in operation). Service frequency on Route 1 is approximately 30 minutes on weekdays and approximately one hour on weekends and holidays. Service frequency on Route 89 is approximately 30 minutes on weekdays and approximately one hour on weekends and holidays. Figure 2 shows a close-up of the OCTA transit routes map as shown on Exhibit 11 in Appendix B.

Figure 2. Close-up of OCTA transit routes map (Exhibit 11)

The Irvine MetroLink Station is within 10 miles of Laguna Beach, and could potentially link Laguna Canyon Road with transit options outside of the City.

A.1.2 Laguna Beach Transit Mainline

Laguna Beach Transit Mainline (Mainline) service consists of three routes (Gray Line, Blue Line, and Red Line) providing local service within the City. All three routes connect to the regional OCTA transit routes at the Laguna Beach Downtown Transit Depot. Mainline routes operate from 6:30 a.m. to 6:30 p.m. on Monday through Friday and from 9:30 a.m. to 6:30 p.m. on Saturday. There is no Sunday service. All routes operate hourly except for a two-hour break in the midday. Figure 3 shows a close-up of the Laguna Beach Transit Mainline routes map as shown on Exhibit 9 in Appendix B.

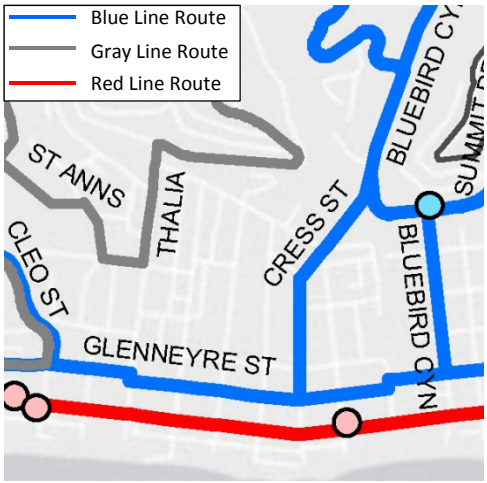


Figure 3. Close-up of Laguna Beach Transit Mainline map (Exhibit 9)

The Gray Line serves North Laguna, Laguna Canyon, and the Top of the World neighborhood. Important stops for the Gray Line include the Community/Senior Center, Legion Hall, Laguna Beach High School, Alta Laguna Boulevard at Chateau Way, Boat Canyon at North Coast Highway, the Boys and Girls Club on Laguna Canyon Road, and the Laguna Beach Downtown Transit Center.

The Blue Line serves the Arch Beach Heights and Bluebird Canyon neighborhood. Important stops for the Blue Line include the Community/Senior Center, Laguna Beach High School, Nyes Place at South Coast Highway, Legion Hall, and the Laguna Beach Downtown Transit Center.

The Red Line operates along South Coast Highway, beyond City limits to the Ritz Carlton Hotel in Dana Point. Important stops for the Red Line include Laguna Beach High School, Cleo Street at Coast Highway, Wesley Street at Coast Highway, Mission Hospital, The Ritz Carlton, and the Laguna Beach Downtown Transit Center.

The Mainline transit analysis currently under preparation will include public survey responses, which will provide useful information regarding rider frequency, trip purpose, access to personal vehicles, travel patterns, and payment methods. Based on recent public outreach and analysis, there may be opportunities for modifications to the mainline service that would optimize system performance, such as shorter or more flexible routes, smaller vehicles, and improved integration with OCTA transit and Laguna Beach Transit services.

A.1.3 Summer Festival Trolley

The Laguna Beach Transit Summer Festival Trolley (Festival Trolley) currently operates three routes - Canyon, North, and South – providing local service within the City of Laguna Beach during the summer festival months of July and August. The Laguna Beach Downtown Transit Center serves as the transfer point between each of the Festival Trolley routes, regional OCTA transit routes, and the local Laguna Beach Mainline Transit routes. The Festival Trolley generally operates from 9:30 a.m. to 11:30 p.m. seven days a week.

The Canyon route runs along Laguna Canyon Road between the Act V parking lot and the Laguna Beach Downtown Transit Depot. The Canyon route is critical in providing transit access to the festival activities with stops at the Pageant of the Masters, Art-A-Fair, and Sawdust. The North route runs northbound along North Coast Highway to Cliff Drive (south of Viejo Street) and southbound along Cliff Drive. The South route runs along South Coast Highway to 7th Street at Mission Hospital. Service frequency for Summer Festival routes is approximately 20 minutes. Figure 4 shows a close-up of the Laguna Beach Transit Festival Trolley routes map as shown on Exhibit 10 in Appendix B.

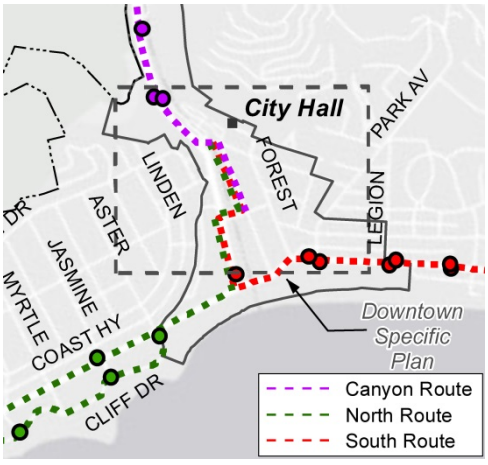


Figure 4. Close-up of Laguna Beach Transit Festival Trolley Routes map (Exhibit 10)

Figure 5 on the following page shows the proportion of Saturday ridership on the three Festival Trolley routes since 2002, the first year when no fare was charged. The source of this data is detailed ride checks of all boarding and alighting passengers conducted for Laguna Beach Transit in 2002, 2006, 2010, and 2013. The original purpose of the Festival Trolleys was to connect the Act V Parking Lot on Laguna Canyon Road with the Summer Festival sites and with the rest of Laguna Beach. In 2002, over 70 percent of Saturday riders used the Canyon Route. In subsequent years, however, the South Route has surpassed the Canyon Route in usage, accounting for over half of Saturday Summer Festival ridership in 2013. Many South Route riders are Laguna Beach residents traveling to and from the Downtown. Similar trends are seen on weekday and Sunday data.

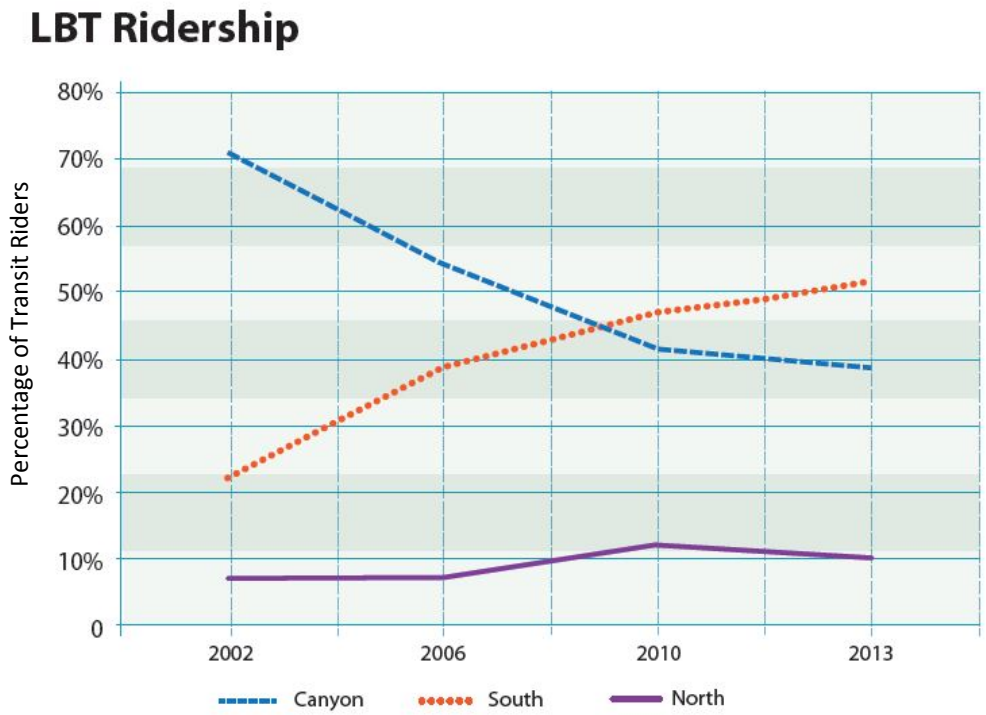


Figure 5. Proportion of Saturday Ridership on Festival Trolley Routes

Past success of the Festival Trolley service during the summer festival months has led to an extension of the service during the spring and winter months starting in March 2015. Approximately $3.6 million is available for the planned service extension through OCTA Project V funding. The City must average seven passengers per hour to keep the OCTA grant.

A.1.4 Sally's Fund

Sally's Fund supplements the local transit options by providing free door-to-door transportation services for senior citizens to local destinations, such as the Community/Senior Center to local businesses, grocery stores, social activities, and visits to senior homes. Transportation to medical appointments within 40 miles of the City is also provided with a $20 donation. Sally's Fund requires transportation services to be scheduled in advance.

A.1.5 Taxi Voucher Program

The City administers a taxi voucher program available to City residents. The taxi voucher program provides an option for residents to travel to/from the Downtown when the Laguna Beach Transit Mainline buses are generally not in service.

The vouchers are valid Monday through Saturday from 5:30 p.m. to 2:30 a.m. and on Sunday from 8:00 a.m. to 2:30 a.m. Trips must begin or end in the Downtown area or along Coast Highway between Viejo Street and 7th Avenue. Taxi vouchers may be purchased from the City and may be exchanged with participating taxi companies for a one-way ride with up to four passengers per voucher.

A.1.6 Trolley/Bus Tracker

Real-time tracking of the Laguna Beach Transit Mainline buses and Festival Trolleys is available through the Visit Laguna Beach Travel Info application (www.visitlagunabeach.com/app) for smart phones. The application is free for download and uses GPS information to display the location of the trolleys and buses in real-time. The application also provides information about attractions, destinations, services, and public parking in Laguna Beach that can be used in conjunction with the trolley/bus tracker features.

Visit Laguna Beach Travel Info App

A.1.7 Laguna Beach Transit Ridership

Figure 6 illustrates the change in average daily weekday, Saturday, Sunday, and daily boardings for the Festival Trolley. As shown on Figure 6, average daily ridership patterns have been increasing for weekday, Saturday, and Sunday Festival Trolley services.

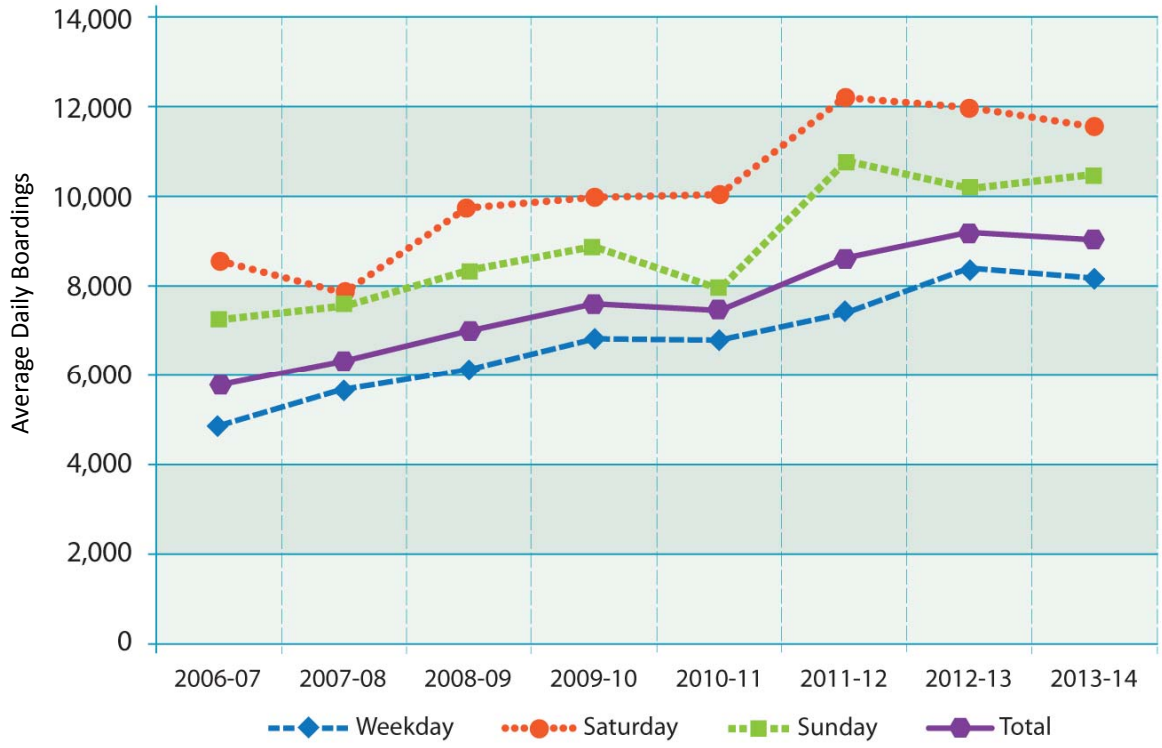


Figure 6. Laguna Beach Transit Festival Trolley Average Daily Boardings

Figure 7 illustrates the change in average weekday, Saturday boardings for Mainline service for the same 2006-2007 to 2013-2014 FY periods. Average daily boardings on Festival Trolley routes is over 9,000 in FY 2013-14, compared to 5,750 in FY 2006-07. Festival Trolley average daily boardings are highest on Saturdays, followed by Sunday and weekdays. Average daily boardings on Mainline routes have been in the range of 250 to 350 over the past eight years, with weekdays much higher than Saturdays.

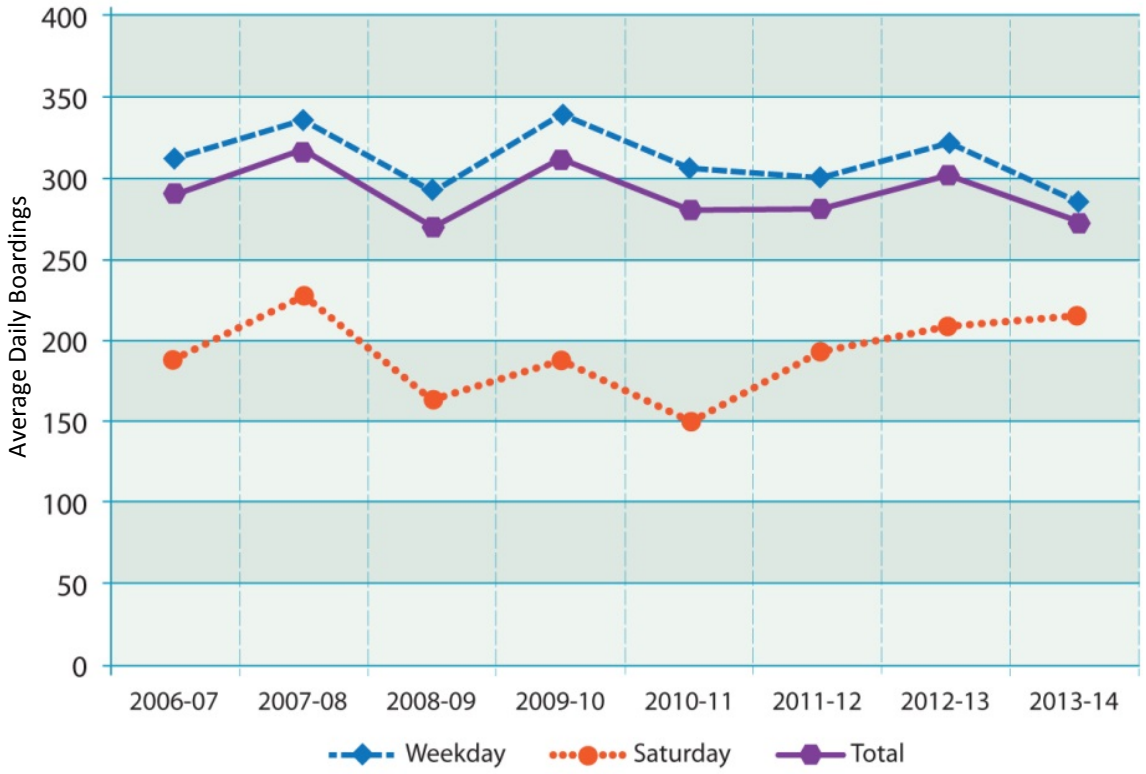


Figure 7. Laguna Beach Transit Mainline Average Daily Boardings

Figure 8 and Figure 9 on the following page illustrate the overall change in ridership between FY 2006-07 and FY 2013-14 on the Festival Trolley and Mainline routes, respectively. Festival Trolley ridership has increased from 380,000 to approximately 600,000 boardings annually. Mainline ridership has fluctuated over the years, with 83,000 boardings in 2013-14.

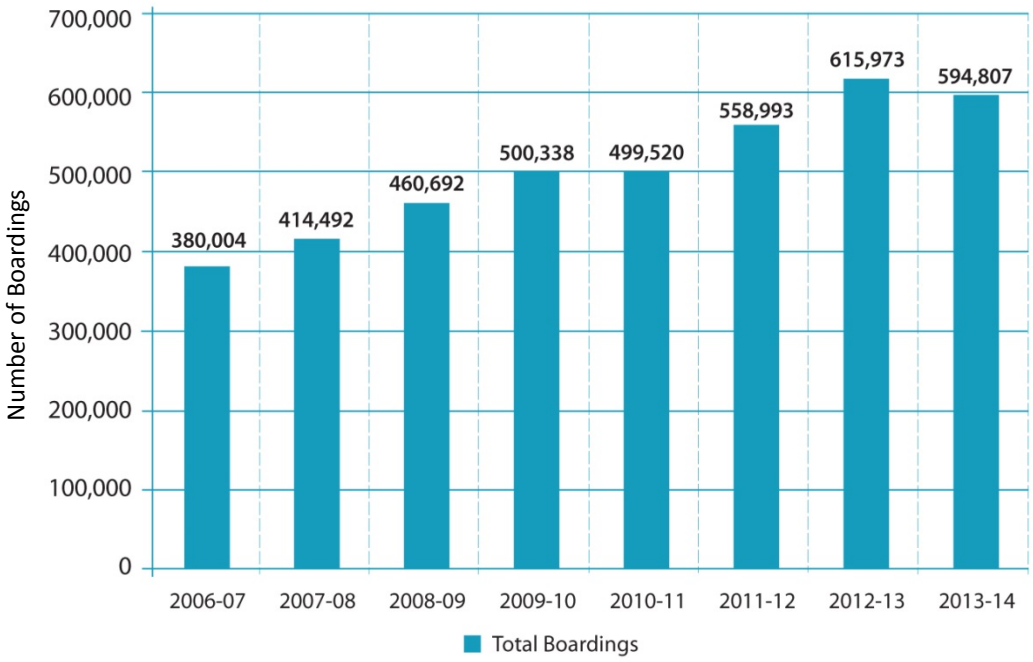


Figure 8. Laguna Beach Transit Festival Trolley Total Boardings Per Year

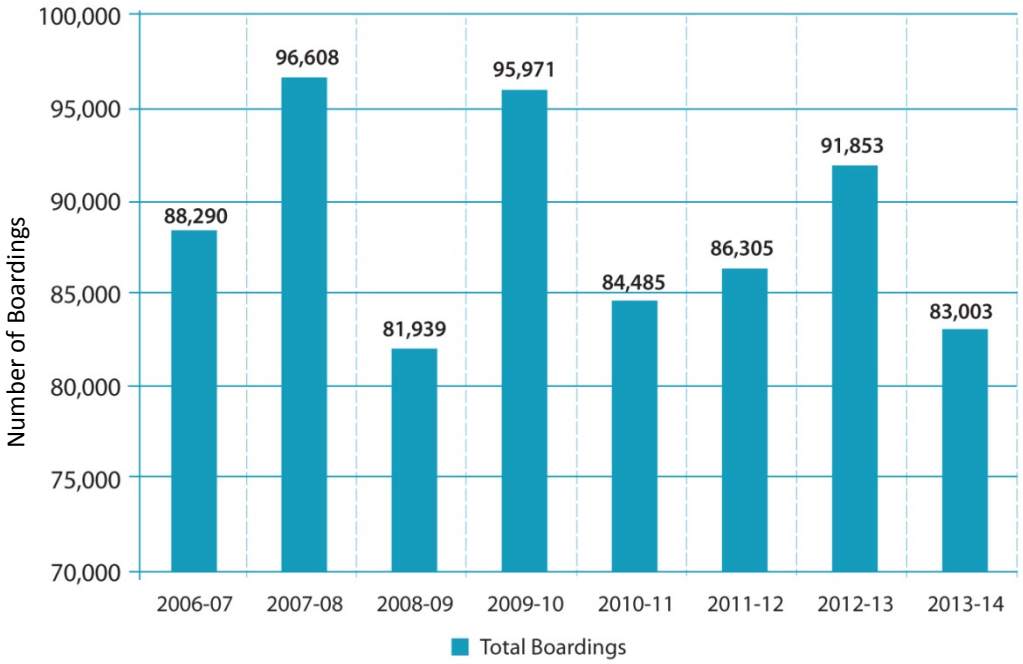


Figure 9. Laguna Beach Transit Mainline Total Boardings Per Year

A.2 ROADWAY TRAFFIC VOLUMES

Daily traffic volumes are measured in both directions of travel over a 24-hour period and are typically compared to daily roadway capacities to determine the adequacy of the roadway network for general planning applications. The capacity of a roadway is determined by the number of lanes provided and is based on general observations of how many vehicles per day a roadway can support when considering typical traffic flow variations throughout the day and interruptions to traffic flow such as those caused by intersection and driveway conflict points. Level of Service (LOS) is commonly used as a qualitative description of roadway operation and is based on the roadway traffic volume compared to the capacity of the roadway. The V/C methodology describes the operation of a roadway segment using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding volume to capacity (V/C) ratios shown below:

V/C Ratio	LOS
$\leq$ 0.60	A
0.61 to $\leq$ 0.70	B
0.71 to $\leq$ 0.80	C
0.81 to $\leq$ 0.90	D
0.91 to $\leq$ 1.00	E
> 1.00	F

Source: *1990 Transportation Research Board*

Roadway capacities are subject to the particular characteristics of a roadway and may in some cases exceed the generally accepted capacity assumptions, particularly in locations where roadway traffic flow experiences few interruptions or where traffic flow is fairly constant throughout the day. For example, Laguna Canyon Road can support more than the capacity of 12,000 vehicles per day typically assigned to a two-lane roadway since it has a two-way left-turn lane and relatively constant flow throughout the day.

While daily traffic volumes and V/C ratios are helpful for a quick evaluation of roadway operations, it is important to note that the City requires, by policy, that traffic impact studies be performed utilizing a Synchro-based Highway Capacity Manual (HCM) delay analysis methodology for peak hour traffic volumes. The Synchro-based HCM analysis can take into account variables such as pedestrian activity, on-street parking, spacing between signalized intersections, and timing and phasing of traffic signals; hence, the analysis results better reflect the conditions found in the City. Furthermore, the City-established thresholds of significance for evaluating traffic impacts are based on the change in delay at the study intersections resulting from a proposed project. Since conducting an accurate Synchro-based HCM intersection analysis is significantly more data intensive, the roadway segment V/C method has been utilized in the Mobility Transition Plan as a preliminary step in identifying roadways with excess capacity. The Synchro-based HCM analysis should be conducted once a specific project has been defined.

Existing daily traffic volumes were obtained from Caltrans *(Traffic Data Branch, 2012 All Traffic Volumes on CSHS)* for roadways under Caltrans jurisdiction. For roadway segments under the jurisdiction of the City, the daily traffic data was supplemented with daily traffic counts collected in April 2014.

Figure 10 shows the existing daily traffic volumes for key roadway segments within the City as well as the corresponding V/C and LOS.

Roadway	Limits	Classification	Capacity	Volume[1]	V/C	LOS
Coast Hwy	North City limits to Irvine Cove Way	4-lane Primary Arterial	40,000	35,000	0.88	D
Coast Hwy	Jasmine St to Aster St/Cliff Dr	4-lane Primary Arterial	40,000	37,000	0.93	E
Coast Hwy	Aster St/Cliff Dr to Broadway	4-lane Primary Arterial	40,000	38,000	0.95	E
Coast Hwy	Broadway to Ocean	4-lane Primary Arterial	40,000	38,000	0.95	E
Coast Hwy	Cress St to Mountain Rd	4-lane Primary Arterial	40,000	36,000	0.90	D
Glenneyre St	Forest Ave to Mermaid St	2-lane Hillside Collector	12,000	10,500	0.88	D
Glenneyre St	Laguna Ave to Legion St	4-lane Collector	24,000	11,700	0.49	A
Glenneyre St	Oaks St to Brooks St	4-lane Collector	24,000	9,800	0.41	A
Glenneyre St	Center St to Diamond St	2-lane Collector	12,000	3,700	0.31	A
Broadway	Coast Hwy to Beach St	3-lane Primary Arterial	30,000	21,500	0.72	C
Broadway	Beach St to Cliff Dr	4-lane Primary Arterial	40,000	21,500	0.54	A
Broadway	Cliff Dr to Forest Ave	4-lane Primary Arterial	40,000	28,000	0.70	B
Laguna Canyon Rd	south of Canyon Acres Dr	4-lane Primary Arterial	40,000	36,000	0.90	D
Laguna Canyon Rd	north of Canyon Acres Dr	2-lane Primary Arterial	20,000	37,500	1.88	F
Ocean Ave	Coast Hwy to Beach St	2-lane Local Street	12,000	3,000	0.25	A
Ocean Ave	Beach St to Forest Ave	1-lane Local Street (1-Way)	6,000	2,200	0.37	A
Forest Ave	Coast Hwy to Glenneyre Ave	1-lane Local Street (1-Way)	6,000	2,200	0.37	A
Forest Ave	Second St to Third St	2-lane Hillside Collector	12,000	7,200	0.60	A
Forest Ave	Third St to Ocean Ave	2-lane Hillside Collector	12,000	15,100	1.26	F
Hillcrest Dr	La Brea to Fairview St	2-lane Collector	12,000	1,900	0.16	A
Hill Dr	Holly St to Aster St	2-lane Local Street	12,000	1,000	0.08	A
Monterey Dr	Jasmine St to Holly St	1-lane Collector (1-Way)	6,000	700	0.12	A
Cypress Dr	Jasmine St to Holly St	2-lane Collector (1-Way)	12,000	3,000	0.25	A
Cliff Dr	Beach St to Rosa Bonheur Dr	2-lane Collector	12,000	8,000	0.67	B
Third St	Forest Ave to Mermaid St	2-lane Hillside Collector	12,000	9,100	0.76	C
Park Ave	east of Coast Hwy	1-lane Local Street (1-Way)	6,000	1,000	0.17	A
Park Ave	Goff St to Catalina St	2-lane Collector (Restricted)	10,000	3,700	0.37	A
Park Ave	Wendt Terrace to Hidden Valley Cyn Rd	2-lane Hillside Collector	12,000	5,400	0.45	A
Thalia St	Catalina St to Wilson St	2-lane Hillside Collector	12,000	6,300	0.53	A
Temple Hills Dr	Palm Dr and San Remo Dr	2-lane Hillside Collector	12,000	3,200	0.27	A
Cress St	Temple Terrace to Summit Dr	2-lane Hillside Collector	12,000	4,400	0.37	A
Bluebird Canyon Dr	Carmelita St to Santa Cruz St	2-lane Hillside Collector	12,000	1,000	0.08	A
Nyes Pl	north of Highland Rd	2-lane Hillside Collector	12,000	2,400	0.20	A

Notes: 1 = Caltrans Traffic Data Branch and traffic counts collected in April 2014.

Figure 10. Existing Roadway Segment Daily Traffic Volumes

Figure 11 through Figure 14 on the following pages illustrate existing roadway capacities and existing roadway segment volumes by segment classification.

Figure 11 shows that the one-lane roadway segments surveyed are operating well within their capacity of 6,000 vehicles per day. This would suggest that these locations may be suitable candidates for Complete Streets improvements such as enhanced pedestrian and bicycle facilities and traffic calming measures, since traffic flow would likely be nominally impacted.

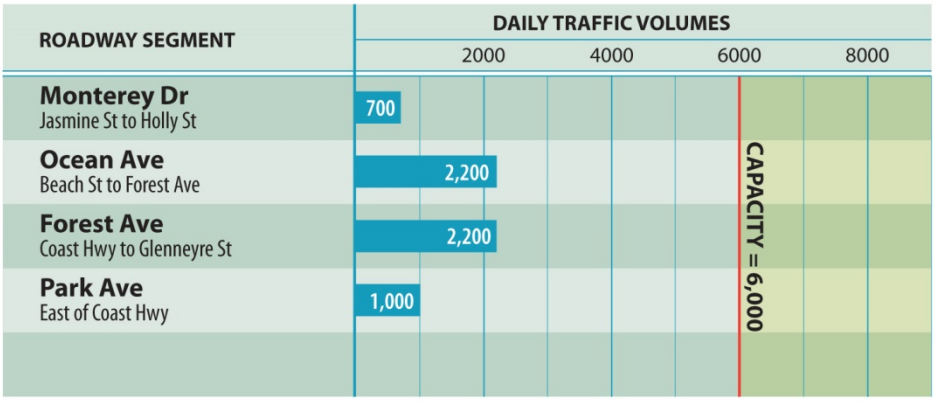


Figure 11. Existing Daily Traffic Volumes of Key One-Lane Roadway Segments

Figure 12 shows the existing daily traffic volumes of the two-lane roadway segments surveyed and the daily vehicle capacity of 12,000. As shown on Figure 12, Forest Avenue is over capacity by 25%. Laguna Canyon Road has been omitted from the chart below due to its unique characteristics; however, it is well known that Laguna Canyon Road can experience severe traffic delays and congestion, particularly during the peak summer festival season.

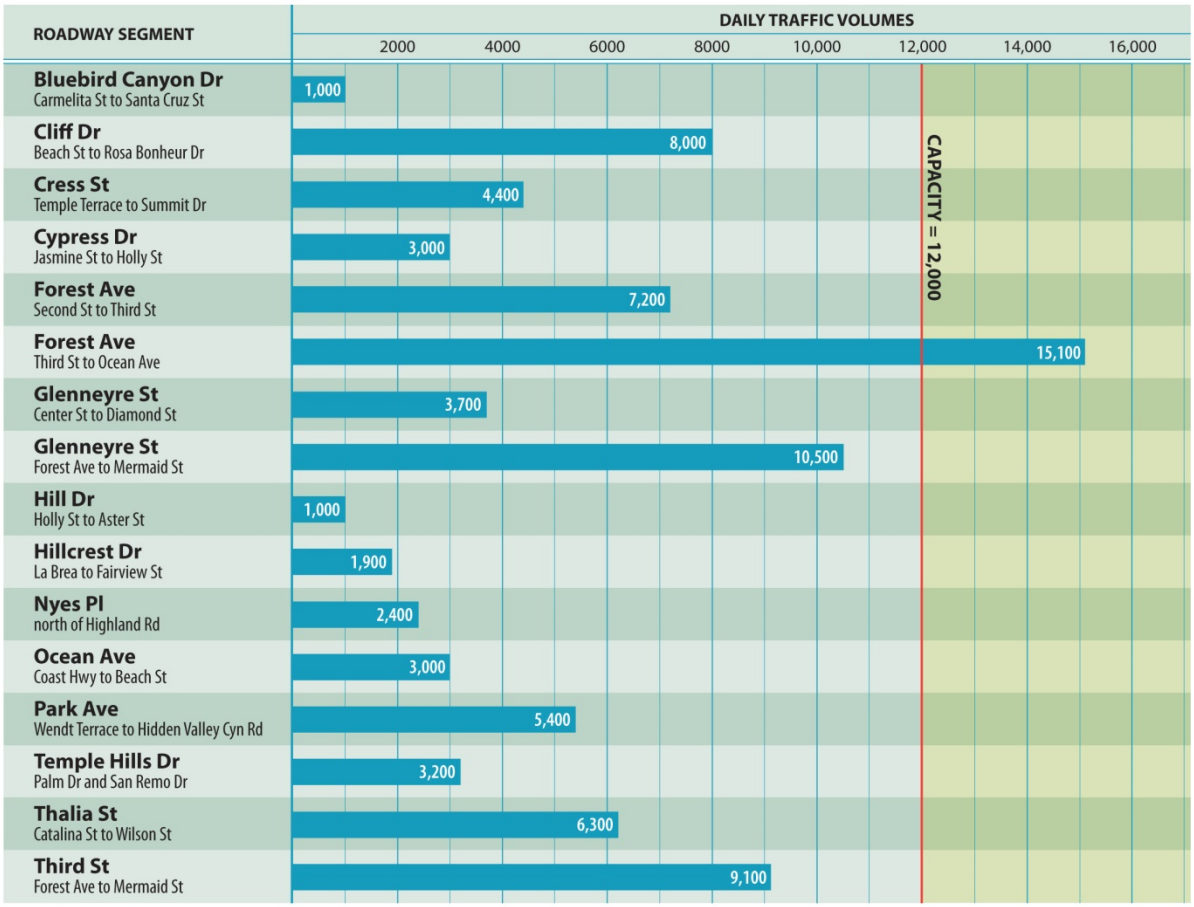


Figure 12. Existing Daily Traffic Volumes of Key Two-Lane Roadway Segments

Figure 13 shows that the four-lane (collector) roadway segments surveyed are well within their assigned vehicle daily capacity of 24,000. In other words, these roadways have surplus capacity for additional vehicular traffic volumes; therefore, these roadways may be suitable candidates for Complete Streets improvements such as road diets since the surplus travel lanes may be more useful for other modes of transportation.

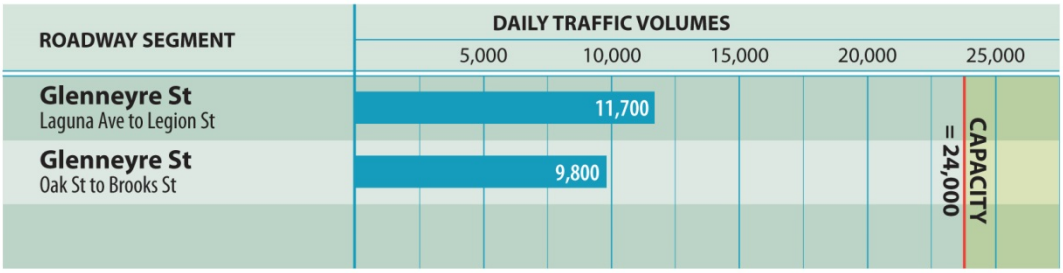


Figure 13. Existing Daily Traffic Volumes of Key Four-Lane Collector Roadway Segments

Figure 14 shows that all of the Four-Lane (Primary Arterial) Roadway Segments surveyed are below their suggested 40,000 vehicle daily capacity. It's important to note, six out of the eight proceeding segments are shown to be approaching the maximum daily vehicle capacity (Coast Highway and Laguna Canyon Road). The

daily traffic volumes along Broadway are well below capacity, suggesting a potential location for multimodal improvements.

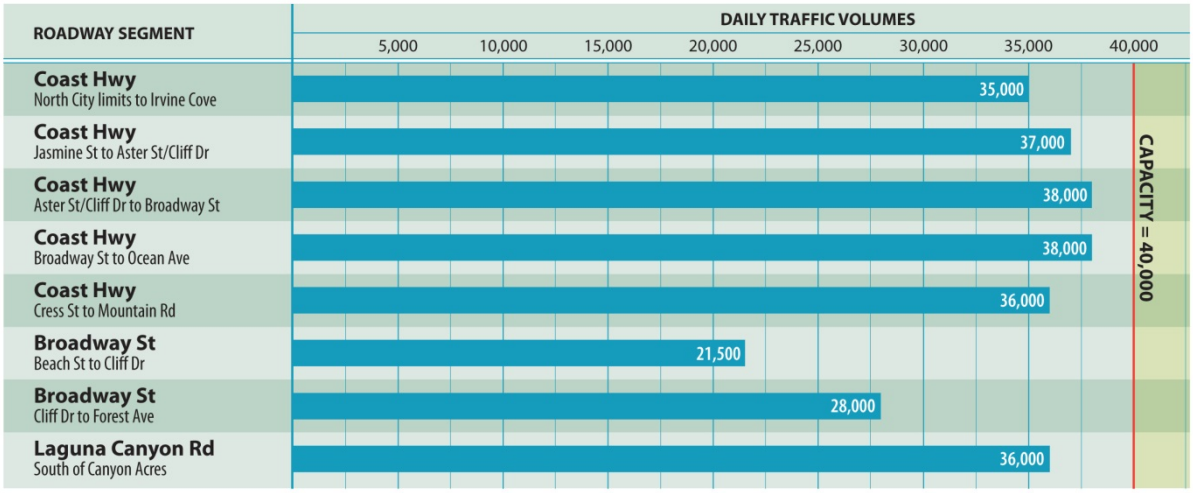


Figure 14. Existing Daily Traffic Volumes of Key Four-Lane Primary Arterial Roadway Segments

A.3 PARKING

Figure 15 shows a close-up of the off-street parking facilities map as shown on Exhibit 12 in Appendix B. There are four key peripheral parking lots: 1) ACT V lot located on Laguna Canyon Road near the Laguna College of Art and Design, 2) Mission Hospital in south Laguna (summer festival season only), 3) the Pavilions/Boat Canyon lot in north Laguna (summer festival season only), and 4) Laguna College of Art and Design along Laguna Canyon Road. The majority of off-street parking lots are located within the immediate Downtown areas, such as the Glenneyre Street parking structure, which are easily accessible by walking, cycling, or transit. It is important that the peripheral parking lots be well connected with transit or other multi-modal transportation connections to adequately link them to the Downtown and other area.

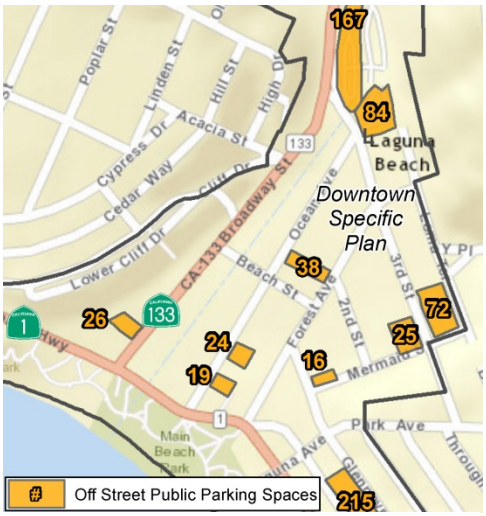


Figure 15. Close-up of off-street parking facilities map (Exhibit 12)

Parking demand in the City typically reaches its maximum during the peak summer festival months in July and August. Based on existing Downtown parking data, the off-street parking lots in the Downtown area generally peak after 5:00 p.m. during summer festival weekday conditions; the majority of lots in the Downtown are heavily used while the Act V lot and the high school lot stand out as underused at these times. Parking demand and use is even greater on Saturdays during the summer festival conditions, with significant demand beginning in the early afternoon and peaking above 95-percent use between 5:00 p.m. and 9:00 p.m.; the Act V and the high school lot are highly used during these time periods and it may be advantageous to consider additional periphery lots during peak summer festival weekend conditions. Providing adequate and easy to find parking facilities can reduce the number of vehicles circulating in search of parking, which can have a positive effect on pedestrians and bicyclists, vehicle delay, and reduce greenhouse gas emissions.

A.4 SIDEWALKS

The City of Laguna Beach has an extensive pedestrian infrastructure already in place within the Downtown area. Pedestrian circulation is convenient in the Downtown and is generally impacted only by vehicle congestion. Existing conditions provide sidewalk connectivity and continuity throughout Downtown. However, when the Downtown area becomes congested, pedestrian activity is hindered especially at intersection crossings. Uncontrolled crosswalks become challenging crossing points. Exhibit 20 through Exhibit 26 in Appendix B illustrate Laguna Beach's pedestrian infrastructure. As shown in the close-up on Figure 16, the Downtown vicinity generally provides sidewalks ranging between 6 feet to 10 feet.

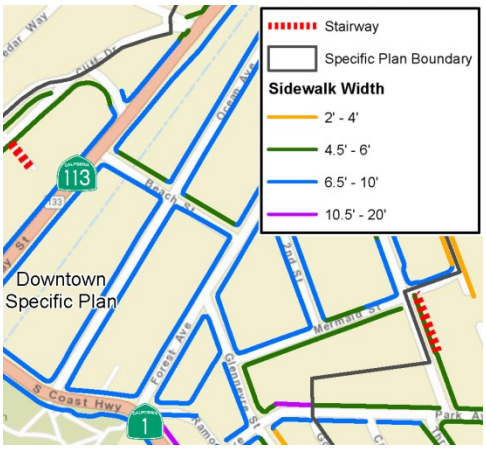


Figure 16. Close-up of sidewalk locations map (Exhibits 20 through 26)

Coast Highway is one of the major arterials that traverse Laguna Beach. This major corridor carries pedestrians, cyclists, transit, and vehicular traffic. Although Coast Highway is one of the most used corridors within the City, it has numerous gaps and variations in sidewalk widths ranging anywhere from no sidewalk provided to nearly 20 feet in width. Notable areas along Coast Highway with little to no sidewalk facilities include the segments between the northwest City limits to Ledroit and Aliso Beach to the southeast City limits. Laguna Canyon Road is also a major arterial lacking sidewalk facilities between Canyon Acres drive and the north City limits.

Laguna Beach lacks pedestrian infrastructure throughout most of the hilly areas within the City. Major collector roadways like Park Avenue, Temple Hills Drive, and Nyes Place provide access for Top of the World and Arch Beach Heights. Portions of the hilly road segments are too narrow for pedestrian facilities or are obstructed by overgrown vegetation, making accessibility by foot challenging. In most cases along the hilly areas, residents walk on the street due to the lack of sidewalks. It is important to consider that most of the street segments in the hilly areas are narrow and have limited width to add sidewalks due to existing right-of-way constraints and also the lack of physical space due to cliff-sides and steep slopes.

Lack of sidewalks in hilly areas

Collision History: According to collision history data maintained by the State of California Highway Patrol, 48 pedestrians were involved in collisions with vehicles between 2010 and 2012, including three fatalities. More than half of the pedestrian-involved collisions recorded during this time period took place along Coast Highway or Laguna Canyon Road (28 of the 48). Multiple collisions were also noted at Canyon Acres Drive and Bluebird Canyon Drive.

A.5 BICYCLE FACILITIES

Figure 17 shows a close-up of the bicycle facility accommodations map as shown on Exhibit 48 in Appendix B. As shown on Exhibit 48 (see Appendix B), the State of California has classified Laguna Canyon Road and Coast Highway as Class III bike routes. Exhibit 48 also shows locations where the City has installed sharrows, or shared lane bicycle markings intended to provide more visibility of bicyclists. Sharrows are classified as a Class III facility. With the exception of El Toro Road, there are no Class II bicycle facilities in the City. The Top of the World paved fire access road, which has come to serve as a multi-use trail, is outside the City boundary. The lack of Class I facilities in the City may be a significant deterrent to many recreational, non-competitive bicyclists who do not feel comfortable sharing the travel lane with motorized vehicles.

Figure 17. Close-up of bicycle accommodations map (Exhibit 48)

According to the Caltrans Highway Design Manual, bicycle facilities are categorized into four classifications: Class I – offer off-street separation from vehicular travel lanes, reducing the potential for conflicts between bicyclists and motorized vehicles; Class II – consist of a striped bicycle lane within a roadway and adjacent to vehicular travel lanes; Class III – consist of on-street bicycle routes with no dedicated bicycle lane striping; and Class IV – consist of on-street bicycle lanes with some form of physical barrier from motorized traffic. A non-avid bicyclist will often find Class III bicycle routes challenging because the travel lane must be shared with motorized vehicles. The two major arterials into the City, Coast Highway and Laguna Canyon Road, currently provide Class III bicycle routes.

Bicyclists in Laguna Beach riding on a sidewalk

Collision History: According to collision history data maintained by the State of California Highway Patrol, 35 cyclists were involved in collisions with vehicles between 2010 and 2012, including one fatality. The majority of bicycle-involved collisions recorded during this time period took place along Coast Highway or Laguna Canyon Road (23 of the 35).

B FUNCTIONAL CLASSIFICATION OF THE ROADWAY SYSTEM

B.1 ROADWAY HIERARCHY

The City of Laguna Beach Standards of Design are detailed in the Municipal Code, Chapter 21.12. The standards establish the minimum width for any street to be 20 feet to accommodate two travel lanes, excluding parking lanes. The Standards of Design also establish minimum right-of-way and travel lanes for the following street classifications:

- Collector Streets;
- Hillside Collector Streets;
- Hillside Collector Street with Limited Access;
- Local Streets;
- Hillside Local Streets; and
- Hillside Local Streets with Limited Access.

Standards for other design aspects are established, such as turnaround areas, driveway widths, on-street parking widths, dead-end streets, street grades, street corner curb radius, alley, and walkways. Municipal Code Section 21.12.430 requires street improvements and easements as a condition before approval of final maps or acceptance of dedication.

The previously listed street classifications are also described in the Transportation, Circulation, and Growth Management Element of the General Plan. Figure 18 summarizes the following roadway classifications and characteristics for the street system as established by the Municipal Code and the Transportation, Circulation, and Growth Management Element.

Roadway Classification	Ultimate Right-of-Way	Minimum Pavement Width*	Number of Travel Lanes*	Notes
Major Arterial Highways	120 feet	Undefined	6 lanes	• Includes a raised 14 -foot, landscaped median • Only the small portion of El Toro Road adjacent to the Club Laguna Apartments and SR-73 are classified as a major arterial
Primary Arterial Highways	Undefined	Undefined	Undefined	• Serve as primary, regional access-ways to the City • Seasonal traffic volume fluctuations (+30% during summer) • Only Laguna Canyon Rd, Coast Hwy, and a small portion of El Toro Rd between Laguna Canyon Rd and Club Laguna Apartments are classified as primary arterials
Collector Streets	60 feet	24 feet	2 lanes	• Varying characteristics such as sidewalk provisions, residential access, width, alignment, grade, and pedestrian usage • Require good judgment when evaluating capacity
Hillside Collector Streets	44 feet	24 feet	2 lanes	-
Hillside Collector Streets with Limited Access	36 feet	24 feet	2 lanes	• Driveway access on one side only
Local Streets	50 feet	24 feet	2 lanes	-
Hillside Local Streets	40 feet	24 feet	2 lanes	-
Hillside Local Streets with Limited Access	32 feet	24 feet	2 lanes	• Driveway access on one side only
*** Minimum pavement width and number of travel lanes are exclusive of parking lanes**				

Figure 18. Roadway Classification Summary

B.2 SPEED LIMITS

The two primary arterials in the City are Coast Highway and Laguna Canyon Road. Relative to the majority of other roadways in the City, Coast Highway and Laguna Canyon Road experience higher vehicle travel speeds during free flow conditions. The posted speed limit on Coast Highway from the north City limits to Broadway ranges from 35 miles per hour to 50 miles per hour. Coast Highway has a posted speed limit of 40 miles per hour from Broadway to the south City limits. The speed limit on Laguna Canyon Road is 45 miles per hour from the north City limit to Canyon Acres and transitions to 40 miles south of Canyon Acres Drive. Broadway is the extension of Laguna Canyon Road through Downtown Laguna Beach and has a posted speed limit of 25 miles per hour.

Collector streets and Hillside Collector streets in the City generally have a posted speed limit of 25 to 30 miles per hour with some exceptions, such as Park Avenue between the High School and Alta Laguna Boulevard where the speed limit is 35 miles per hour.

"Speed limits set by engineering and traffic studies are normally set near the 85th percentile speed. The 85th percentile speed is the speed at or below which 85 percent of the traffic is moving."

Speed limit determinations are subject to State and Federal procedures; failure to follow these procedures can result in legally un-enforceable speed limits.

Source: California Manual for Setting Speed Limits, Caltrans, 2014

On both collectors and hillside collectors, posted speed limits occasionally transition to 15 miles per hour near locations where speed bumps have been installed. Examples of this occur along Hillcrest Drive, southern portions of Glenneyre Street, and Del Mar Avenue.

B.3 STREET GRADES

Street grade maps for roadways within the City were developed utilizing GIS software and are shown on Exhibit 34 through Exhibit 40 in Appendix B. As shown in the close-up on Figure 19, street grades can exceed 26% in hilly areas such as in the Diamond/ Crestview Specific Plan; such steep grades can be major obstacles for pedestrians and bicyclists. The major portion of the City streets' grades fall within the 0-5% and 6-10% grade categories. More specifically, the two busiest corridors traversing Laguna Beach, Laguna Canyon Road and Coast Highway are well within 0-5% grade. Hilly areas like Top of the World and Arch Beach Hills range between 11-25% and over 25% grades. Pedestrian activity is more likely to occur in flat terrain. Most people walking will not deem it convenient to walk more than a half mile for purposes other than exercise. The greatest potential for a walking trip will occur after analyzing natural barriers such as steep terrain and other pedestrian barriers. This allows the City to focus its resources in these areas to better understand further pedestrian barriers and opportunities.

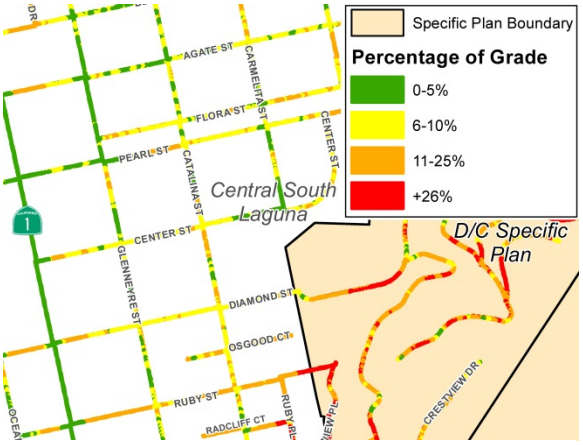


Figure 19. Close-up of street grades map (Exhibits 34 through 40)

C DATA COLLECTED AND ANALYZED

C.1 BUILD-OUT ASSESSMENT

To integrate land use with the Enhanced Mobility and Complete Streets Transition Plan a qualitative build-out analysis through the years 2020 and 2035 has been prepared. This analysis identifies deficiencies in the transportation network, qualitative recommendations for improvement to the transportation network, and changes to transportation and land use related policies. The build-out assessment is summarized in the following pages.

C.2 FUTURE CONDITIONS ROADWAY SEGMENT VOLUME ANALYSIS

Forecast year 2020 and year 2035 traffic volumes were derived by applying an annual growth rate to existing condition traffic volumes based on the Orange County Transportation Analysis Model (OCTAM). Since the City is generally built out with few vacant parcels remaining for major future development, future traffic volume growth is primarily attributed to traffic generated outside the City and will therefore primarily impact Laguna Canyon Road and Coast Highway. As a result of ongoing development in adjacent cities, the forecast growth for the study area between OCTAM base year and future year traffic models was determined to be approximately 1.2% per year along Laguna Canyon Road and approximately 1.9% per year along Coast Highway. Although OCTAM does not include data for other roadways in the City, a 1% annual growth rate has been applied to key Downtown roadways, such as Glenneyre Street, since these roadways may experience some spillover from Laguna Canyon Road and Coast Highway. Otherwise, the majority of collector and local roadways are not forecast to experience significant traffic growth.

It is important to note that traffic growth forecasts are generally based on existing travel behaviors. Emerging trends and evolving technology, such as internet-based transportations services (e.g., Uber, Lyft), vehicle sharing programs (e.g., Zipcar), and autonomous vehicles are likely to have a significant cumulative effect on future traffic growth. Due to the evolving status of such emerging trends and technology, longer range traffic forecasts are more likely to be influenced by these various factors.

Figure 20 and Figure 21 on the following pages summarize future year forecast traffic conditions.

Figure 20 below shows the forecast volumes and associated LOS for future year 2020 conditions.

Roadway	Limits	Classification	Capacity	Volume[1]	V/C	LOS
Coast Hwy	North City limits to Irvine Cove Way	4-lane Primary Arterial	40,000	39,200	0.98	E
Coast Hwy	Jasmine St to Aster St/Cliff Dr	4-lane Primary Arterial	40,000	41,400	1.04	F
Coast Hwy	Aster St/Cliff Dr to Broadway	4-lane Primary Arterial	40,000	42,600	1.07	F
Coast Hwy	Broadway to Ocean	4-lane Primary Arterial	40,000	42,600	1.07	F
Coast Hwy	Cress St to Mountain Rd	4-lane Primary Arterial	40,000	40,300	1.01	F
Glenneyre St	Forest Ave to Mermaid St	2-lane Hillside Collector	12,000	11,100	0.93	E
Glenneyre St	Laguna Ave to Legion St	4-lane Collector	24,000	12,400	0.52	A
Glenneyre St	Oaks St to Brooks St	4-lane Collector	24,000	10,400	0.43	A
Glenneyre St	Center St to Diamond St	2-lane Collector	12,000	3,900	0.33	A
Broadway	Coast Hwy to Beach St	3-lane Primary Arterial	30,000	22,800	0.76	C
Broadway	Beach St to Cliff Dr	4-lane Primary Arterial	40,000	22,800	0.57	A
Broadway	Cliff Dr to Forest Ave	4-lane Primary Arterial	40,000	29,700	0.74	C
Laguna Cyn Rd	south of Canyon Acres Dr	4-lane Primary Arterial	40,000	38,500	0.96	E
Laguna Cyn Rd	north of Canyon Acres Dr	2-lane Primary Arterial	20,000	40,100	2.01	F
Ocean Ave	Coast Hwy to Beach St	2-lane Local Street	12,000	3,200	0.27	A
Ocean Ave	Beach St to Forest Ave	1-lane Local Street (1-Way)	6,000	2,300	0.38	A
Forest Ave	Coast Hwy to Glenneyre Ave	1-lane Local Street (1-Way)	6,000	2,300	0.38	A
Forest Ave	Second St to Third St	2-lane Hillside Collector	12,000	7,600	0.63	B
Forest Ave	Third St to Ocean Ave	2-lane Hillside Collector	12,000	16,000	1.33	F
Hillcrest Dr	La Brea to Fairview St	2-lane Collector	12,000	1,900	0.16	A
Hill Dr	Holly St to Aster St	2-lane Local Street	12,000	1,000	0.08	A
Monterey Dr	Jasmine St to Holly St	1-lane Collector (1-Way)	6,000	700	0.12	A
Cypress Dr	Jasmine St to Holly St	2-lane Collector (1-Way)	12,000	3,000	0.25	A
Cliff Dr	Beach St to Rosa Bonheur Dr	2-lane Collector	12,000	8,000	0.67	B
Third St	Forest Ave to Mermaid St	2-lane Hillside Collector	12,000	9,100	0.76	C
Park Ave	east of Coast Hwy	1-lane Local Street (1-Way)	6,000	1,000	0.17	A
Park Ave	Goff St to Catalina St	2-lane Collector (Restricted)	10,000	3,700	0.37	A
Park Ave	Wendt Terrace to Hidden Valley Cyn Rd	2-lane Hillside Collector	12,000	5,400	0.45	A
Thalia St	Catalina St to Wilson St	2-lane Hillside Collector	12,000	6,300	0.53	A
Temple Hills Dr	Palm Dr and San Remo Dr	2-lane Hillside Collector	12,000	3,200	0.27	A
Cress St	Temple Terrace to Summit Dr	2-lane Hillside Collector	12,000	4,400	0.37	A
Bluebird Cyn Dr	Carmelita St to Santa Cruz St	2-lane Hillside Collector	12,000	1,000	0.08	A
Nyes Pl	North of Highland Rd	2-lane Hillside Collector	12,000	2,400	0.20	A

Notes: 1 = Caltrans Traffic Data Branch and traffic counts collected in April 2014 plus OCTA growth forecasts.

Figure 20. Forecast Year 2020 Roadway Segment Daily Traffic Volumes

The roadway segments along Coast Highway from the north City limits to Mountain Road were previously shown to currently be approaching the estimated daily vehicular capacity; as shown on Figure 20, these roadway segments are forecast to operate in an over-capacity condition by year 2020 conditions. Additionally, Forest Avenue from Third Street to Ocean Avenue and Laguna Canyon Road north of Canyon Acres Drive are forecast to experience increased vehicular demand and continue to operate in an over-capacity condition for forecast year 2020 conditions.

Figure 21 below shows the forecast volumes and associated LOS for future year 2035 conditions.

Roadway	Limits	Classification	Capacity	Volume[1]	V/C	LOS
Coast Hwy	North City limits to Irvine Cove Way	4-lane Primary Arterial	40,000	51,800	1.30	F
Coast Hwy	Jasmine St to Aster St/Cliff Dr	4-lane Primary Arterial	40,000	54,800	1.37	F
Coast Hwy	Aster St/Cliff Dr to Broadway	4-lane Primary Arterial	40,000	56,200	1.41	F
Coast Hwy	Broadway to Ocean	4-lane Primary Arterial	40,000	56,200	1.41	F
Coast Hwy	Cress St to Mountain Rd	4-lane Primary Arterial	40,000	53,300	1.33	F
Glenneyre St	Forest Ave to Mermaid St	2-lane Hillside Collector	12,000	12,900	1.08	F
Glenneyre St	Laguna Ave to Legion St	4-lane Collector	24,000	14,400	0.60	A
Glenneyre St	Oaks St to Brooks St	4-lane Collector	24,000	12,100	0.50	A
Glenneyre St	Center St to Diamond St	2-lane Collector	12,000	4,500	0.38	A
Broadway	Coast Hwy to Beach St	3-lane Primary Arterial	30,000	26,400	0.88	D
Broadway	Beach St to Cliff Dr	4-lane Primary Arterial	40,000	26,400	0.66	B
Broadway	Cliff Dr to Forest Ave	4-lane Primary Arterial	40,000	34,400	0.86	D
Laguna Cyn Rd	south of Canyon Acres Dr	4-lane Primary Arterial	40,000	46,100	1.15	F
Laguna Cyn Rd	north of Canyon Acres Dr	2-lane Primary Arterial	20,000	48,000	2.40	F
Ocean Ave	Coast Hwy to Beach St	2-lane Local Street	12,000	3,700	0.31	A
Ocean Ave	Beach St to Forest Ave	1-lane Local Street (1-Way)	6,000	2,700	0.45	A
Forest Ave	Coast Hwy to Glenneyre Ave	1-lane Local Street (1-Way)	6,000	2,600	0.43	A
Forest Ave	Second St to Third St	2-lane Hillside Collector	12,000	8,800	0.73	C
Forest Ave	Third St to Ocean Ave	2-lane Hillside Collector	12,000	18,600	1.55	F
Hillcrest Dr	La Brea to Fairview St	2-lane Collector	12,000	1,900	0.16	A
Hill Dr	Holly St to Aster St	2-lane Local Street	12,000	1,000	0.08	A
Monterey Dr	Jasmine St to Holly St	1-lane Collector (1-Way)	6,000	700	0.12	A
Cypress Dr	Jasmine St to Holly St	2-lane Collector (1-Way)	12,000	3,000	0.25	A
Cliff Dr	Beach St to Rosa Bonheur Dr	2-lane Collector	12,000	8,000	0.67	B
Third St	Forest Ave to Mermaid St	2-lane Hillside Collector	12,000	9,100	0.76	C
Park Ave	east of Coast Hwy	1-lane Local Street (1-Way)	6,000	1,000	0.17	A
Park Ave	Goff St to Catalina St	2-lane Collector (Restricted)	10,000	3,700	0.37	A
Park Ave	Wendt Terrace to Hidden Valley Cyn Rd	2-lane Hillside Collector	12,000	5,400	0.45	A
Thalia St	Catalina St to Wilson St	2-lane Hillside Collector	12,000	6,300	0.53	A
Temple Hills Dr	Palm Dr and San Remo Dr	2-lane Hillside Collector	12,000	3,200	0.27	A
Cress St	Temple Terrace to Summit Dr	2-lane Hillside Collector	12,000	4,400	0.37	A
Bluebird Cyn Dr	Carmelita St to Santa Cruz St	2-lane Hillside Collector	12,000	1,000	0.08	A
Nyes Pl	North of Highland Rd	2-lane Hillside Collector	12,000	2,400	0.20	A

Notes: 1 = Caltrans Traffic Data Branch and traffic counts collected in April 2014 plus OCTA growth forecasts.

Figure 21. Forecast Year 2035 Roadway Segment Daily Traffic Volumes

The traffic forecasts and resulting LOS shown on Figure 21 should be used with caution since it is difficult to account for the influence that emerging trends and evolving technology may have on existing travel behaviors. A significant change to existing travel behaviors, such as an increase in car-sharing, has the potential to lower future traffic growth projections.

Section 2.A.2 includes a detailed discussion of both the roadway segment V/C method and the Highway Capacity Manual (HCM) delay-based methodologies. As noted in the evaluation of existing traffic volumes, the roadway segment V/C method has been utilized as a preliminary step in identifying roadways with excess capacity. In accordance with current City policy, the Synchro-based HCM analysis should be conducted once a specific project has been defined to evaluate potential impacts.

C.3 QUALITATIVE RECOMMENDATIONS FOR IMPROVEMENTS TO THE TRANSPORTATION NETWORK

Since right-of-way for additional roadway capacity (i.e., additional vehicular travel lanes) is generally limited in Laguna Beach, improvements to the transportation system should focus on improving bicycle, pedestrian, and transit facilities in an effort to reduce the demand for vehicular capacity. Such improvements generally require less right-of-way and have the potential to improve the balance between different modes of transportation.

Coast Highway is particularly constrained and additional lane capacity, if feasible, is likely to be very challenging and costly to construct. As future demand for mobility along this route increases, modes of transportation alternate to the personal vehicle such as transit, pedestrian, and bicycle will improve mobility. Improvements to this facility should focus on enhanced transit service (frequency, service areas, enhanced amenities at stops), improved pedestrian facilities (closing sidewalk gaps, enhanced pedestrian crossings, and improved bicycle facilities (clearly signed bicycle route with dedicated bicycle facilities alternate to Coast Highway). Such improvements will be needed to support the forecast demand for mobility along the Coast Highway corridor, and will reduce the future vehicular demand along this route.

Downtown Laguna Beach

The forecast deficiencies in the short roadway segments in the Downtown area (Glenneyre Street from Forest Avenue to Mermaid Street and Forest Avenue from Third Street to Ocean Avenue) can be reduced with improved access to and from peripheral parking. This could limit the number of visitors needing to drive through these roadways. Additional way-finding signage and improved parking management techniques can also help reduce the number of motorized vehicles on the road which are searching for parking. This would have positive effect on the identified forecast roadway deficiencies in the Downtown area. As with other areas, successfully implemented improvements to transit, pedestrian, and bicycle facilities would reduce the number of motorists who drive into Downtown.

The City has assembled a task force comprised of multiple stakeholders to evaluate potential improvements to Laguna Canyon Road. Removing utility power pole lines within the existing Laguna Canyon Road corridor would provide space for additional transportation facilities with limited impacts to right-of-way. Potential improvements being considered include a new multi-use trail parallel to Laguna Canyon Road and on-street bicycle lanes. In addition to bicycle and pedestrian facility improvements, on-going evaluation of Laguna Canyon Road shows the potential for additional lane capacity (one additional northbound and/or one additional southbound lane) with limited right-of-way impacts.

D GREENHOUSE GAS ASSESSMENT

As Laguna Beach becomes more heavily impacted with vehicular traffic and roadways become slower due to increasing traffic volumes and congestion, greenhouse gases (GHG) are also rising.

As traffic congestion becomes more severe, local air pollution ("criteria" pollutants, such as carbon monoxide, volatile organic compounds and NOx) become more intense, which increases the health hazards that justified auto environmental standards in the first place. According to the California Air Resources Board, as vehicle speeds decline, GHG emissions increase, regardless of the distance driven.

The California Air Resources Board (CARB) is the agency responsible for coordination and oversight of State and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA), which was adopted in 1988. Various statewide and local initiatives to reduce the State's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long term.

Enhanced mobility and Complete Streets would supplement the GHG reduction objectives of the Laguna Beach Climate Protection Action Plan (April 2009). One of the goals of the plan is to achieve a balance among the four modes of transportation: bicycling, walking, public transport, and private vehicles. The City should encourage professional live/work environments, artist live-work studios, electronic mobility, telecommuting, and other innovative ways of to reduce the use of private vehicles.

Improvements to the transportation system could result in GHG emissions benefits due to reduced idling, reduced vehicle miles traveled, and increased mode share. The City can obtain a GHG assessment by coordinating with an air quality specialist/consultant. The GHG assessment should include, but is not limited, to the following:

- Baseline GHG emissions inventory
- GHG reduction target
- Quantification of the benefits of Complete Streets
- Other feasible GHG emissions reduction measures
- Performance monitoring of the GHG emissions reduction measures

The GHG assessment would use baseline and horizon analysis years that are consistent with other traffic and land use planning efforts in the City.

Although the City offers a wide array of transit options, new regulations such as the greenhouse gas (GHG) reduction mandated by Assembly Bill 32 and the regional targets Senate Bill 375 have introduced new considerations for transportation management. The average length of vehicle trips is an important measure in correlation to GHG production. In order for the City to reach desired reduction levels of GHG, motorized vehicles miles traveled must be reduced. A Complete Streets approach would provide the opportunity to fully integrate plans for cycling and walking with the road improvements. The Mobility Transition Plan identifies missing links in the multimodal transportation network.

E POLICY EVALUATION

To understand the existing Citywide transportation network, relevant prior planning work, current City Land Use and Transportation policies, the General Plan Elements, Specific Plans, and Municipal Code, have been collected, reviewed and assessed. The City's current planning capital improvement projects (CIP), long-term CIP program, the Synchro Traffic Model of the Laguna Beach Downtown Specific Plan area, as well as the Downtown and Laguna Canyon Road Parking Management Plan have also been reviewed. All of the above mentioned planning documents and sources should be considered within the City's goal of finding a balanced, multimodal transportation network that meets the needs of all users. The planning documents are summarized as follows.

E.1 GENERAL PLAN POLICIES

The City of Laguna Beach General Plan elements include Land Use, Transportation, Circulation and Growth Management, Housing, Open Space and Conservation, Noise, Safety, Historic Resources, Human Needs, and Scenic Highways. There is a correlation between the City's General Plan Elements and the City's vision for the development of a multimodal transportation system. Therefore, further Complete Streets and multi-modal enhancements are necessary to achieve the City's goal of a comprehensive transportation system.

The General Plan elements have been reviewed in terms of their compatibility with Complete Streets objectives. Relevant aspects of each General Plan element are described in the following sections, with the exception of an overview of the Transportation, Circulation, and Growth Management element, which is presented in a figure format beginning on the following page due to its broad range of content relevant to Complete Streets.

E.1.1 Transportation, Circulation, and Growth Management Element

The Transportation, Circulation, and Growth Management element encompasses a broad range of issues and topics such as the City's philosophical perspective, existing circulation conditions, residential neighborhoods, growth management, public/regional transportation, parking, biking, hiking circulation, and pedestrian movement. Beginning on the following page, Figure 22 summarizes an evaluation of the Transportation, Circulation, and Growth Management element.

Figure 22. Transportation, Circulation, and Growth Management Element Evaluation

Topic	Description	Evaluation/ Recommendations
[#1] Philosophical Perspective	The City's philosophy is a "historical commitment to balancing the transportation and circulation policies with the overall goals of the City". This philosophy seeks an effective and efficient use of existing roads over the construction and widening of new roads. Traffic management techniques are listed and should be used when appropriate.	***Compatible with Complete Streets objectives*** Traffic management techniques are listed and should be used when appropriate.
[#2] Local Thoroughfares, Transportation Routes and Traffic Flow	The policies regarding Local Thoroughfares, Transportation Routes and Traffic Flow, are designed to prevent and or minimize further impacts to the circulation system and appear to be consistent with the City's philosophical perspective and Land Use element policies. This topic provides a vision of uncongested roads. However, minimizing further impacts to the circulation system is currently ambiguous and can lead to the deterrence of future Complete Street projects that may require more right-of-way for other modes of transportation other than automobiles.	***Not compatible with Complete Streets objectives*** The City can minimize further vehicular impacts by optimizing existing, and developing new infrastructure that will give residents, employees, and visitors the option to opt out of driving their vehicle through Laguna Beach, and be able to bike, walk, or ride transit in a competent manner compared to the automobile.
[#3] Residential Neighborhoods	Residential neighborhoods generally lack sidewalks throughout most parts of the City. This presents a challenge when balancing the needs of vehicular and pedestrian circulation. Topic 1, Philosophical Perspective, references additional residential-specific policies that may address these challenges. To meet a Complete Streets approach, higher pedestrian network connectivity is necessary. However, hilly areas provide a challenge in achieving this matter. In many of these hilly areas, front yards and vegetation go all the way to the public right-of-way, leaving no room for pedestrian activity.	***Not compatible with Complete Streets objectives*** Setting a limit on how close a yard or bushes can go out on to the street may allow for a better pedestrian environment.
[#4] Growth Management	Growth Management policies, in compliance with Orange County Measure M, address issues related to level of service targets and planning for transportation improvement programs, timing, and funding which are necessary for orderly growth and development of transportation improvement programs.	***Compatible with Complete Streets objectives***

Topic	Description	Evaluation/ Recommendations
[#5] Public Transit and Regional Transportation Systems	Public Transit and Regional Transportation Systems describes available transit services. The policies are focused on enhancing, promoting, and increasing the use of the public transit systems. According to intercept and rider surveys conducted for the Laguna Beach transit services, residents, employees, and visitors are satisfied with the service. However, it was mentioned that it takes "too long" to travel through the City by bus.	***Moderately compatible with Complete Streets objectives*** The City can increase transit ridership through a timely, reliable, and consistent service that residents and visitors can depend on. Underutilized routes can provide resources for extra buses to travel routes that are more consistently used as a way to align with the Complete Streets approach. A Transit Only lane on Laguna Canyon Road may also encourage transit mobility in the summer, but would need higher frequency so the lane is not empty much of the time.
[#6] Parking	Parking policies focus on maximizing parking space use and efficiency through joint parking agreements, a directional sign program, periodically reviewing parking standards, and continually monitoring parking programs that deal with parking problems for residents, employees and visitors alike. Dynamic parking pricing can help to alleviate congested Downtown areas, and the process can be eased through effective signage that can direct drivers to the more affordable and open parking spaces.	***Compatible with Complete Streets objectives*** Connectivity to the Downtown area should ideally be available for all modes of transportation.
[#7] Truck Circulation and Loading Facilities	Truck circulation and loading facilities policies are designed to minimize delivery and trash collection impacts. Trash collection impacts can be minimized by coordinating trash collection to occur on off-peak hours only, specifically in the Downtown area.	***Neutral***
[#8] Transportation System/Demand Management	Transportation System/Demand Management policies focus on maximizing the efficiency of the current transportation system and reducing the number of commuter vehicle trips.	***Compatible with Complete Streets objectives***

Topic	Description	Evaluation/ Recommendations
[#9] Pedestrian, Hiking and Bicycle Circulation	Pedestrian, Hiking, and Bicycle Circulation policies encourage improvements to pedestrian facilities and promote bicycle connectivity with neighboring jurisdictional routes. It also highlights pedestrian circulation impediments such as the lack of sidewalks, uncontrolled crosswalks, and resulting consequences.	***Compatible with Complete Streets objectives***
[#10] Emergency Response and the Transport of Hazardous Materials	Emergency Response and the Transport of Hazardous Materials, addresses challenges with emergency circulation, including inadequacy of street geometry and excessive street grade. Hazardous material are transported along Laguna Canyon Road and Coast Highway. Since these roads are under Caltrans jurisdiction, the City has little or no control over the use of these roadways.	***Not applicable***
[#11] Scenic Highways and Aesthetics	Scenic Highways and Aesthetics seek the preservation of the aesthetic qualities provided along Laguna Canyon Road and Coast Highway. Maintaining scenic roads is vital to the growth of pedestrian and bicyclist activity.	***Compatible with Complete Streets objectives***
[#12] Utilities	Utilities policies include the acquisition of public easements for drainage improvements, ensuring adequate water pressure, and pursuing the undergrounding of utilities. The topic acknowledges that key concerns associated with above ground electrical transmission lines are visual degradation and the potential for accidental electrocution; these problems are significantly reduced when the utility lines are placed underground.	***Compatible with Complete Streets objectives***

The final component of the Transportation, Circulation, and Growth Management element contains an implementation program which provides specific measures to effectively pursue the policies outlined in the element.

E.1.2 LAND USE ELEMENT

The Land Use element sets limits and boundaries regarding the use of land and establishes goals and future City policies. Updated in 2012, the Land Use Element is generally consistent with the Complete Streets approach both in overall principles and specific goals, policies, and actions. Guiding Principles 2, 4, and 11 speak to enhancing the community's natural environment through sustainable development patterns, minimizing the impact of the automobile, and ensuring that sustainability drives City policy.

Section 7, which addresses the Goals, Policies, and Implementation of the Land Use Element, highlights the necessity of minimizing the impact of the automobile in Laguna Beach and incorporates strong language encouraging Complete Streets objectives. Goals and policies included in the Land Use Element identify the importance of providing a pedestrian-oriented environment and safe sidewalks/pathways. Specific goals and actions recognize the importance of having alternative means of transportation other than the automobile, as well as encouraging new and infill development that enhances the pedestrian quality of commercial areas.

Goal 1 encourages a sustainable, resilient, and regenerative City and includes actions such as revising and updating the Transportation, Circulation and Growth element, continuing business incentives for employers who encourage employees to bike and walk to work, and maintaining trolley service throughout the City.

Goal 2 addresses pedestrian use of streets and traffic calming measures to enhance the character of residential areas.

Goal 3 calls for maintaining the "Village Character" of Laguna Beach through promoting development that is compatible with a pedestrian oriented village, promoting safe and adequate pedestrian access, and evaluating adequacy and safety of sidewalks and pedestrian circulation in commercial areas. It also encourages the enhancement of public spaces and sidewalk areas and encourages pedestrian access and orientation in all commercial zones.

Goal 4 encourages shuttles and peripheral parking lots to reduce traffic and congestion which negatively impact Laguna Beach's natural resources. Reducing traffic allows room for other modes of transportation.

Goal 6 provides for pocket parks and community gardens that include amenities for bicycles and encourages biking and walking.

Goal 8 is focused in "minimize[ing] the impact of the automobile on the character of Laguna Beach and emphasiz[ing] a pedestrian-oriented environment, safe sidewalks, landscaped buffer zones, and alternative means of transportation" and is consistent with Complete Streets objectives. Statements noting that the City will "maintain a pedestrian-oriented community while facilitating the movement of traffic in a safe and uncongested manner" (Policy 8.2) acknowledge a pedestrian oriented community, but can be improved by further emphasizing a balance between all modes of transportation.

Together, Goals 4, 6, and 8 address the existing traffic conditions in Laguna Beach and acknowledge that although traffic has a negative impact on the City, it also highlights the vibrancy and vitality of Laguna Beach. However, strategic land use developments can bridge the existing connectivity gap that currently exists within some parts of the City.

E.1.3 Housing Element

The Housing Element identifies housing characteristics, needs, and resources in the City. Relevant to the transportation system, residential parking standards are discussed in relation to housing supply and affordability. The Housing Element can present a great opportunity for the City of Laguna Beach by helping to coordinate the transportation availability for the growing elderly population. According to the Laguna Beach Housing Element, the senior population is anticipated to increase to 40% by 2020. Driving through hilly areas and winding roads for elderly drivers can present a challenge. Considerations can be taken in order to provide adequate resources for the senior population given that the Complete Streets approach aims at providing equal transportation opportunities.

E.1.4 Open Space and Conservation Element

The Open Space and Conservation Element discusses coastal land features, water quality, parks, and hillside slopes. Topic 3 addresses Public Beaches and Shoreline Access, and Topic 6, Master Plan of Trails. Key pieces of information include Map 3-2 which correlates to Table 3-1 identifying public beach access points which are of particular significance to the transportation system.

Open Space and trail in Laguna Beach

The Master Plan of Trails section identifies and discusses the public/private trail networks, the need for trail classification, trail signage, future trail acquisition, and trail operation/maintenance. Policies aim to promote and enhance the trail system. An implementation program and map of the trail network (Map 1-3) are also provided.

Consistent with other transportation policies and the Complete Streets approach, the hillside slopes (Topic 14) section discourages new roads into currently inaccessible areas.

E.1.5 Noise Element

The Noise Element relies on the California Motor Vehicle Code and “is a comprehensive program for including noise management in the planning process.” It includes some transportation related information such as arterial roadway vehicle classification data by time of day. Some of the Noise Element’s policy goals are proper design of transportation facilities, circulation, and growth management. Implementing a Complete Streets approach which will minimize automobile traffic through the availability and suitability of other modes of transportation available within the City for the use of residents and visitors. Making a switch from motorized to non-motorized transportation will best address the Noise element.

E.1.6 Safety Element

The Safety Element outlines emergency planning and response to potential natural or man-made disasters, including transporting of hazardous materials, geologic, fire, and flood hazards and shoreline protection.

This Element acknowledges the accessibility challenges that several neighborhoods within the City experience. Access related policies and instructions on dwelling unit developments and cul-de-sac or single ingress/egress, and cul-de-sac roadways limitation to 750 feet are addressed. Relative to fire and geological hazards, the Safety element has room to become more specific in evacuation measures and procedures to be taken by citizens, such as providing signed evacuation routes. Road widths are essential for evacuation as well as clearance around structures. Sea level rise and rising heat waves may also have a negative impact on roadway infrastructure which should be assessed for robustness. Given Laguna Beach's limited accessibility points, a Complete Streets adoption can provide additional methods of evacuation in case of an emergency.

E.1.7 Other Elements

The City of Laguna Beach Historic Resources element promotes public awareness of the City's architectural history and provides an inventory of historical buildings. The Human Needs element references the transportation element for meeting the transportation needs of the community. The Scenic Highway element discusses the aesthetics/landscape of the City and serves as the initial step for designating and preserving scenic highways through the City.

Scenic view along Coast Highway in Laguna Beach

E.2 SPECIFIC PLANS

The following Specific Plans have been reviewed for their relationship to the transportation network and consistency with the various General Plan elements and policies: Diamond/Crestview, Laguna Canyon Annexation Area, Laguna Beach Downtown, and Sarah Thurston Park Specific Plans.

The Diamond/Crestview Specific Plan describes the approximately 161 parcel neighborhood and identifies issues and policies related to parking and circulation in Topic 4. Access, street section, and parking standards are presented in Section IV: Land Use and Development Standards. The Diamond/Crestview Specific Plan has a minimum parking requirement that can be revised to meet current-day parking demand. A Complete Streets project should provide better transportation options, thus allowing for a lower parking requirement.

The Laguna Canyon Annexation Area Specific Plan describes the characteristics and issues of the area. Although Laguna Canyon Road experiences high traffic volumes relative to its capacity, much of the area remains unimproved. It is also important to note that Laguna Canyon Road has been designated a rural scenic highway by the City and the County of Orange, requiring special aesthetic considerations for new developments.

The Laguna Beach Downtown Specific Plan discusses parking, circulation and transit issues in Section III, Topic 5 and establishes design standards for parking, loading facilities, pedestrian access, and street lighting in Section IV. As described in the General Plan, the Downtown area faces the challenge of balancing competing parking demands of residents, local/out-of-town shoppers, employees, recreationalists, and festival-goers without impacting the character of the Downtown area. The policies listed provide several strategies to improve parking management and traffic circulation in the Downtown area. The Specific Plan also provides

design guidelines and development standards for the Laguna Beach Specific Plan. The City has hired a consultant team to begin work on visioning for Downtown and Laguna Canyon Road.

The Sarah Thurston Park Specific Plan discusses parking and circulation issues in Section II. The Specific Plan identifies improvement policies for Woodland Drive and Milligan Drive and establishes policies for pedestrian circulation and parking within the Specific Plan boundary.

E.3 CAPITAL IMPROVEMENT PROGRAM

The City of Laguna Beach Capital Improvement Program (CIP) outlines the schedule and budget for major public facility improvements, such as streets, sewers, buildings, parks, street lights and storm drains. The CIP lists projects over a ten year schedule, with detailed descriptions of CIP improvements for the current year (Year One).

A few current CIP projects relevant to circulation include:

- LCR Trail from ACT V to Art College Supplemental Funding – funding for pathway lighting and other design features for incorporation in the pathway project from the ACT V parking lot to the Laguna College of Art and Design parking lot;
- Temple Hills Sidewalk Design – design of the Temple Hills sidewalk project concurrent with the Temple Hills Storm Drain project (construction in 2014/15);
- FY 2013/14 Street Slurry Seal and Rehabilitation – street slurry seal project for streets rehabilitated between 2002 and 2005 and ADA upgrades to existing pedestrian facilities;
- Coast Highway Sidewalk Design – funding for the design of sidewalk improvements on Coast Highway near Moss Street, Arch Street, Solana Way, and Alta Vista Way (construction in 2016/17);
- Citywide Sidewalk Repairs – removal and replacements of numerous small sidewalk repair projects throughout the City; and
- FY 2014/15 Street Slurry Seal and Rehabilitation – street slurry seal project for streets rehabilitated in 2007.

Relevant long-term CIP projects include:

- Coast Highway Right Turn Pocket at Broadway Construction;
- Several sidewalk construction projects along Coast Highway;
- Glenneyre Street, Del Mar, and Aster Street Sidewalk Construction projects;
- Hinkle Place/Coast Highway Intersection Improvements;
- Cliff Drive/Acacia Intersection Improvements;
- 585 Glenneyre Intersection Improvements;
- Ongoing citywide sidewalk repairs and street slurry seal and rehabilitation.

The CIP projects are consistent with a Complete Streets approach. Complete Streets encourage roundabouts, sidewalk connectivity, and adequate sidewalk design.

The CIP also lists capital improvements that are not included in the ten-year plan. These projects include a Citywide traffic signal pre-emption project, Coast Highway sidewalk construction, El Toro Road Traffic Signal Interconnect, Laguna Canyon Road sidewalk construction, Temple Hills Pedestrian Path Phase 3, and several other sidewalk and street improvement projects throughout the City which can all have a positive impact in a Complete Streets atmosphere.

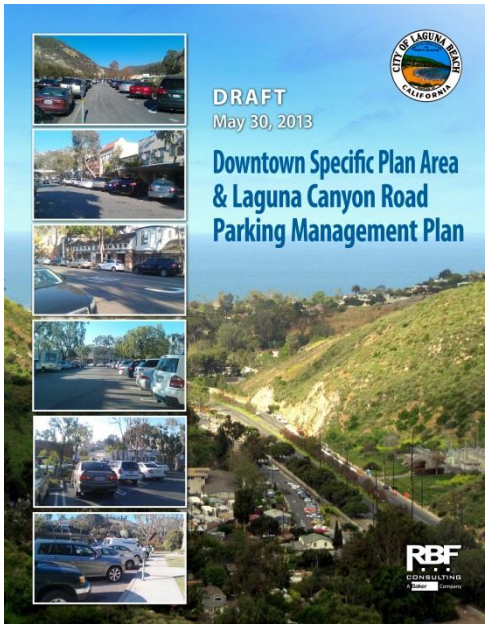
CIP's must be consistent with the General Plan and therefore it is important to include Complete Streets policies in the General Plan to be assessed with new projects.

E.4 TRAFFIC MODEL OF DOWNTOWN SPECIFIC PLAN

A Synchro model of key roadways within the Downtown Specific Plan has been developed by RBF Consulting and is currently being expanded to the south beyond the Downtown area. The model includes a simulation of existing (2013) summer festival weekday a.m. peak hour and p.m. peak hour conditions. The model can provide travel time and average speed estimates for existing conditions and can be used to evaluate the effect of alternative roadway configurations with some modification. The model should continue to be maintained with updated vehicle, pedestrian, bicycle, and public transit volumes to reflect current multi-modal conditions. Additional data collection could be input to simulate non-summer conditions and the model area could be further expanded to include Collector roadways in North Laguna and South Laguna as well as key Hillside Collectors as mobility enhancement projects are proposed.

E.5 DOWNTOWN SPECIFIC PLAN AREA AND LAGUNA CANYON ROAD PARKING MANAGEMENT PLAN

The Downtown Specific Plan and Laguna Canyon Road Parking Management Plan (Downtown PMP) was prepared by the City and RBF Consulting in 2013. The Downtown PMP provides an overview of all the existing facilities and programs that affect parking in the Downtown and Laguna Canyon Road areas of the City. More importantly, the Downtown PMP contains a wide range of parking management strategies, including general parking management, parking supply, parking pricing, and zoning/administration strategies, to efficiently manage the nearly 2,000 public parking spaces throughout the downtown and canyon areas.



Cover of Downtown Specific Plan Area and Laguna Canyon Road PMP

Consistent with General Plan and Complete Streets policies, the Downtown PMP seeks to balance the competing parking demands of residents, businesses, and visitors and satisfy the needs of all users of a multimodal transportation system. Effective parking management can also reduce greenhouse gas emissions by reducing the share of solo driver trips and reducing excessive driving associated with vehicles looking for parking. Additionally, the Downtown PMP discusses the role of multimodal transportation in relation to parking management. Parking management that involves

parking pricing can create a financial incentive for walking, bicycling, and transit; however, a shift in travel mode will also require that adequate facilities are provided for such alternative modes of transportation.

On January 21, 2014, the City Council approved a phased approach to implementation of the Downtown PMP recommendations; an agenda bill providing an overview of the trial program is contained in Appendix C. In summary, the following four strategies from the Downtown PMP recommendations were implemented in summer 2014:

1) Capacity Enhancements: The City added over 200 additional parking spaces between parked areas at the Laguna College of Art & Design, the Boys and Girls Club of Laguna Beach, and valet service at the Community/Susi Q Center.
2) Marketing/Signage: A uniform signage program was developed to help motorists identify City-operated parking lots, two electronic message boards were deployed near peripheral parking lots, and updated parking maps and marketing materials were distributed.
3) Efficiency and Service Improvements**:** Automated pay-stations were installed at two City parking lots, which allowed for credit card payment, reduced staff costs, and less vehicles queuing.
4) Financial Incentives: Demand-based pricing techniques in Downtown and along Coast Highway incentivized motorists to use the free or less costly peripheral lots and the hours of paid on-street parking were extended from 7:00 p.m. to 9:00 p.m.

Initial findings indicate that summer 2014 Downtown PMP strategies were generally effective in terms of increasing use of peripheral parking lots. Ongoing examination of the summer 2014 program will result in recommendations for the summer 2015 Downtown PMP, as well as options to improve non-summer parking management.

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3 MOBILITY AND COMPLETE STREETS RECOMMENDATIONS

A INTRODUCTION

The recommendations described in this section are intended to improve the effectiveness of Laguna Beach's street and sidewalk system for biking, walking and transit. These recommendations incorporate best practices in the industry, along with findings from the baseline conditions analysis and the community engagement process. For ease of presentation, the recommendations have been organized into the following categories:

- Complete Streets Plans & Policies
- Complete Streets Facilities
- Complete Streets Programs
- Transit Enhancements
- Parking Enhancements

WHEN TO INCORPORATE COMPLETE STREETS IMPROVEMENTS

- When resurfacing is done
- When any street or intersection is modified
- When new streets are built
- When the streets are reconstructed for utilities
- When the streets are cleaned or maintained

B COMPLETE STREETS PLANS & POLICIES

Having formal policies in place that emphasize Complete Streets practices, procedures, and priorities will help achieve a strong multi-modal network in the City. This section identifies some specific Complete Streets-related plans and policies that should be considered by the City.

B.1 GENERAL PLAN POLICIES

The analysis of the City's General Plan identified several areas for improvement, including creating Standards of Design that identify cross sections for pedestrian corridors balanced with the "rural character" of the City, as well as identifying a new commercial hub outside of Downtown. Updating the circulation element of the City's General Plan to a more comprehensive Mobility Element will be key in moving towards Complete Streets.

The City should adopt a Complete Streets Ordinance so that every project completed in the City considers Complete Streets principles. Large roadway improvement projects, along with even minor road resurfacing present opportunities to implement Complete Streets projects and should be considered whenever street improvements or modifications are planned. All projects completed by the City or private developers should be reviewed in conjunction with opportunities for Complete Streets enhancements. A copy of the City of Seattle's Complete Streets Checklist and Ordinance is contained in Appendix E to serve as an example.

B.2 CROSSWALK POLICY

A crosswalk policy that addresses the installation, removal, and enhancement of intersections and crossings should be developed. The policy should clearly articulate preferred treatments that enhance visibility and operation of pedestrian crossings throughout Laguna Beach and should provide a consistent decision-making process for City staff about where and how to mark crosswalks. The focus should be on crosswalks at intersections however consideration should be given for mid-block crossing locations if there is a need to serve pedestrians away from intersections. A crosswalk policy could help the City accomplish the following key goals:

- Identify where unmarked crosswalks are acceptable
- Ensure consistency in City approach to marking crosswalks
- Make the City's guidelines clear to residents and City staff

Crosswalks in Laguna Beach

Typical sidewalk zone in a business district

B.3 SIDEWALK ZONE SYSTEM

The City should consider developing a sidewalk zone system that can be implemented and applied throughout the City. A sidewalk zone system would establish appropriate cross-sections for different environments in the City according to topography or other limitations. This zone system would ensure that sidewalks have a clear path for pedestrians and could contribute to ADA accessibility. Typical sidewalk zones in a business district include a frontage zone, pedestrian zone, furniture zone, and curb zone.

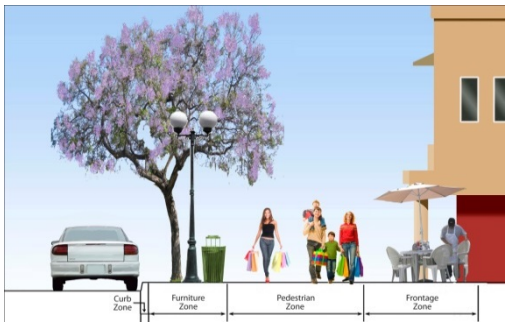


Illustration of a commercial sidewalk zone

B.4 ACTIVE TRANSPORTATION PLAN

The City should consider developing a comprehensive Active Transportation Plan that simultaneously addresses all non-motorized modes of transportation. Such a plan will allow for coordinated focus of detailed pedestrian and bicycle improvements and will provide additional public involvement opportunities. An Active Transportation Plan will also assist greatly in obtaining available mobility grant funding.

While funding sources are constantly changing, the following information is generally required or recommended in an Active Transportation Plan:

- The estimated number of existing bicycle trips and pedestrian trips in the plan area, both in absolute numbers and as a percentage of all trips, and the estimated increase in the number of bicycle trips and pedestrian trips resulting from implementation of the plan.
- The number and location of collisions, serious injuries, and fatalities suffered by bicyclists and pedestrians in the plan area, both in absolute numbers and as a percentage of all collisions and injuries. Goals for reducing collision, serious injury, and fatalities after implementation of the plan.
- A map and description of existing and proposed land use and settlement patterns which must include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, parks, major employment centers, and other destinations.
- A map and description of existing and proposed bicycle transportation facilities.
- A map and description of existing and proposed end-of-trip bicycle parking facilities.
- A description of existing and proposed policies related to bicycle parking in public locations, private parking garages and parking lots and in new commercial and residential developments.
- A map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These must include, but not be limited to, parking facilities at transit stops, transit terminals, and park and ride lots, and provisions for transporting bicyclists and bicycles on transit vehicles.
- A map and description of existing and proposed pedestrian facilities at major transit hubs.
- A description of proposed signage providing wayfinding along bicycle and pedestrian networks to designated destinations.
- A description of the policies and procedures for maintaining existing and proposed bicycle and pedestrian facilities, including, but not limited to, the maintenance of smooth pavement, freedom from encroaching vegetation, maintenance of traffic control devices including striping and other pavement markings, and lighting.

ACTIVE TRANSPORTATION PLAN

The Mobility Transition Plan recommends the development of a comprehensive Active Transportation Plan that addresses all non-motorized modes of transportation. If an Active Transportation Plan is infeasible to prepare at one time, the same can be accomplished through the development of a combination of distinct plans, each of which are briefly described separately in this section:

- Bicycle Master Plan
- Pedestrian Master Plan
- Safe Routes to School Plan
- ADA Transition Plan

- A description of bicycle and pedestrian safety, education, and encouragement programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the law impacting bicycle and pedestrian safety, and the resulting effect on accidents involving bicyclists and pedestrians.
- A description of the extent of community involvement in development of the plan, including disadvantaged and underserved communities.
- A description of how the active transportation plan has been coordinated with neighboring jurisdictions, including school districts within the plan area, and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, general plans and a Sustainable Community Strategy in a Regional Transportation Plan.
- A description of the projects and programs proposed in the plan and a listing of their priorities for implementation, including the methodology for project prioritization and a proposed timeline for implementation.
- A description of past expenditures for bicycle and pedestrian facilities and programs, and future financial needs for projects and programs that improve safety and convenience for bicyclists and pedestrians in the plan area. Include anticipated revenue sources and potential grant funding for bicycle and pedestrian uses.
- A description of steps necessary to implement the plan and the reporting process that will be used to keep the adopting agency and community informed of the progress being made in implementing the plan.
- A resolution showing adoption of the Plan by the City.

CONNECTIVITY TO OTHER PLANS

Any plan that addresses bicycles and pedestrians should be enhanced by coordinating with adjacent Cities and OCTA in providing bicycle connectivity along Coast Highway, and coordination with Irvine could support connections via Laguna Canyon Road. Connecting bicycle and pedestrian networks with OCTA routes could improve active transportation, especially if policies relating to bicycles on transit and bicycle amenities are incorporated. OCTA's bicycle connectivity report is scheduled to be released after this study and will take into account some of these recommendations.

Bicycle Master Plan

Whether it is incorporated into an Active Transportation Plan, a Complete Streets plan, or developed independently, a Bicycle Master Plan is important in providing long-range planning and design guidance for bicycle facilities and to create a network of bicycle paths. These paths could include off-street trails, protected bike lanes, buffered bike lanes, dedicated bike lanes, and sharrows. There are several grants and funding sources available for developing a bicycle master plan. Funding eligibility requirements usually include the following, of which several pieces have been incorporated into the Mobility Enhancement and Complete Streets Transition Plan:

- Bicycle commuter data
- Maps of land uses, bikeways, transportation connections, end-of-trip amenities (lockers, showers, etc.)

- Safety/education programs
- Community outreach
- Regional consistency
- Improvements prioritization
- Past and future spending needs

Pedestrian Master Plan

Pedestrians and cyclists encounter different issues of mobility, thus it is beneficial to develop a Pedestrian Master Plan in addition to a Bicycle Master Plan for the City that will be linked with the General Plan Circulation/Mobility Element either as a separate element or incorporated into a Complete Streets Policy. A Pedestrian Master Plan provides long range planning and design guidance for pedestrian facilities. Pedestrian Master Plans typically contains the following:

- Maps of pedestrian facilities, pedestrian crashes, slope constraints, transportation connections
- Needs analysis
- Community outreach
- Education, implementation, and evaluation programs
- Priority improvement areas
- Design guidance

ADA Transition Plan

The Americans with Disabilities Act (ADA) requires local governments to develop ADA Transition Plans to remove barriers to travel for people with disabilities. Laguna Beach developed a Plan and last updated it in 2012. It will be important for the City to continue removing barriers and to continue to update and implement the Plan to ensure that all streets, crossings and bus stops comply. An updated ADA Transition Plan can be incorporated into a new Active Transportation Plan.

Safe Routes to School Plan

A Safe Routes to School (SRTS) Plan will include improvements to the common routes that students use to get to school. These improvements often include bikeways, walkways and pedestrian crossings as described above, as well as bicycle, scooter and skateboard parking at the school. Ideally, the process will begin with workshops that gather information about the safety issues and other barriers from key stakeholders such as parents, students, principals, crossing guards, and the local law enforcement agency, along with parent surveys and a student travel tally (conducted by teachers) that records specific information about how children arrive to and depart from school on two days in a given week. The stakeholder engagement process and resulting SRTS Plan can serve as a catalyst to launch new programs or projects, or to improve on current efforts.

C COMPLETE STREETS FACILITIES

The geography of Laguna Beach presents physical challenges to active transportation. Many of the streets are too narrow to accommodate bicycle lanes or ideal sidewalk widths. The streets were generally built without significant focus on bicycles or pedestrians so they lack the infrastructure that best accommodates them. Laguna Beach's topography also limits having a well-established grid of small-connected blocks that are ideal for walking and bicycling. The slopes also make bicycling more challenging, although more interesting for some people. While steep slopes might be considered interesting for thrill seekers, they generally make walking and bicycling more challenging, especially for those who are less physically able. Thus the City must make optimal use out of innovative techniques.

The recommendation toolkit in this section presents a set of potential facility improvements that should be considered to enhance the overall mobility of the Laguna Beach streets and sidewalk system. The appropriate treatments will depend on the characteristics of each corridor, including traffic volumes, capacity, geometry, parking, and surrounding context. This list may expand upon further investigation and through the development of an Active Transportation Plan described earlier in the Plans & Policies section of the document.

C.1 ROAD DIETS

Road diets can be an efficient tool for incorporating different modes of transportation onto one street. Where volumes and capacity permit, a road diet can narrow or reduce travel lanes and allow for the installation of bicycle and pedestrian facilities. The reduction of lanes allows the roadway to be reallocated for other uses such as bike lanes, pedestrian crossing islands, and/or parking. As noted by the Federal Highway Administration, road diets have multiple safety and operational benefits for vehicles as well as pedestrians, such as:

- Decreasing vehicle travel lanes for pedestrians to cross, therefore reducing the multiple-threat crash (when one vehicle stops for a pedestrian in a travel lane on a multi-lane road, but the motorist in the next lane does not, resulting in a crash) for pedestrians,
- Providing room for a pedestrian crossing island,
- Improving safety for bicyclists when bike lanes are added (such lanes also create a buffer space between pedestrians and vehicles),
- Providing the opportunity for on-street parking (also a buffer between pedestrians and vehicles),
- Reducing rear-end and side-swipe crashes, and
- Improving speed limit compliance and decreasing crash severity when crashes do occur.

Key Considerations: Generally considered on streets that have traffic volumes equal to 50-percent or less of their daily capacity, such as a 4-lane street with volumes of 20,000 vehicles per day or less. Other factors to consider include signal spacing, number of driveways and transit usage. Many of the recommendations described in this section require the implementation of a road diet to accommodate the improvement.

Potential Applications

- Lane narrowing: Monterey Drive, Ocean Avenue, Forest Avenue, Park Avenue
- Lane reduction: Glenneyre Street, Cypress Drive, Alta Laguna Blvd

Before

After

Glenneyre Street road diet and cycle track

BIKEWAYS

The City should plan for a complete network of bikeways. In recent years, the types of bikeways in use has expanded from traditional bike paths, bike lanes and signed bike routes to a longer list. Options for bikeways that would be incorporated into a Bicycle Master Plan would include the following:

- Bike paths – exclusive paved paths separated from the roadway for bicyclists and other non-motorized users (Class I)
- Bike lanes – striped, stenciled and signed lanes in the street dedicated for bicycles (Class II)
- Colored bike lanes – bike lanes that are colored with a standard green background (Class II)
- Buffered bike lanes – bike lanes that have a painted buffer between either the travel lane and the bike lane, or between the bike lane and parking lane, or both (Class II)
- Bike routes – signed bicycle routes that is shared with other traffic (Class III)
- Sharrows – Shared lane markings that are bicycle stencils in the street that provide more visibility for bicyclists along bike routes (Class III)
- Greenback sharrows – stencils that are more prominent than regular sharrows by having a green painted background underneath (Class III)
- Separated bike lanes – bike lanes that are in the street and are physically separated from the other travel lanes by parked cars, a painted area, planters or other barriers. (Class IV)

The appropriate treatment for each will depend on the characteristics of each corridor or street. An Active Transportation Plan (or Bicycle Master Plan) should include an analysis of candidate corridors to see which of these makes sense depending on such factors as street widths, traffic volumes and the presence of on-street parking. The analysis may also result in improvements to existing designated bikeways.

C.2 STRIPED BIKE LANES

Bike lanes (Class II) are striped and provide dedicated space for bicyclists on a street corridor. They are either located along the curb if there is no on-street parking or between a vehicle travel lane and a parking lane. There is no physical separation provided between the bike lane and the vehicle travel lane or the parking lane.

Striped bike lane

Key Considerations: Generally most helpful on streets where the daily traffic volume is 3,000 vehicles per day or greater and speed limits are 25 miles per hour or greater (www.nacto.org).

Potential Applications

- Glenneyre Street
- Cypress Street
- Monterey Drive
- Alta Laguna Drive

C.3 PROTECTED BIKE LANES/CYCLE TRACKS

Protected bike lanes are lanes separated from traffic lanes or parked cars with physical barriers. These could be plastic delineators or a concrete curb. The protection allows cyclists to feel more comfortable using the lane adjacent to traffic and prevents vehicles from entering the bicycle lane. Protected lanes can be installed by removing parking lanes or by installing a road diet and removing a travel lane. If parking lanes remain – the protected bike lane would be located between the parking lane and the curb. Caltrans would classify protected bike lanes as a Class IV bike facility. Caltrans is working to include protected bike lanes in the Highway Design Manual update by early 2016.

Cycle track in Vancouver, B.C.

Key considerations: Generally helpful on streets with high bicycle volumes, parking lanes, and few driveway/intersection conflicts (www.nacto.org).

Potential Applications

- Glenneyre Street
- Cypress Street
- Monterey Drive
- Hillcrest Drive

C.4 BUFFERED BIKE LANES

There are currently no buffered bike lanes in Laguna Beach, but they would work best on collector roadways throughout the City where there is width available to provide buffering between the bike lane and the travel lane and between the bike lane and parked cars.

Buffered Bike Lane

Key Considerations: Generally helpful on streets with extra lanes or lane width and high travel speeds, high traffic volumes, and/or high truck traffic (www.nacto.org).

Potential Applications

- Glenneyre Street
- Cypress Street
- Monterey Drive
- Alta Laguna Drive
- Hillcrest Drive

C.5 SHARROWS AND SIGNED BIKE ROUTES

The purpose of sharrows is to communicate to motorists to share the street with bicyclists. Sharrows are designed with chevrons and bicycle stencils on the roadway to alert travelers to "be aware and share" the road with bicyclists, as well as to communicate to the bicyclist where they should position themselves on the road to be most visible. The sharrow and signed bike route options can be implemented easily and are relatively inexpensive to install and maintain.

Key Considerations: Guidance for sharrows is evolving, but can be used in the development of bicycle boulevards and to strengthen connections in a bikeway network; sharrows should not be considered a substitute for other bicycle facilities where space permits (www.nacto.org).

Painted sharrow

Potential Applications

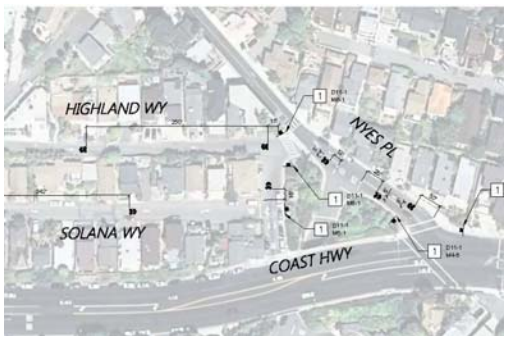
- Mermaid St
- Third St
- Glenneyre to Highland/Nyes
- North and South Coast Highway (where no alternate route or lane shoulder is available)
- Broadway

C.6 COAST HIGHWAY ALTERNATIVE

Much of Coast Highway does not have a sufficient right-of-way for dedicated bike lanes. Thus providing an alternative north-south bicycle route needs to be considered by the City where feasible as a valuable connection between Laguna Beach and adjacent cities. The Coast Highways Alternative would be a layered network, where certain streets are designated for bicycles and pedestrians, and some just for pedestrians. These alternative routes would be considered in a future Bicycle Master Plan or Active Transportation Plan.

Potential Applications

The City has developed a plan for two corridors to serve as alternate bike routes to Coast Highway. Cliff Drive west of North Coast Highway would be one of the corridors. The other corridor is Glenneyre Street from Mermaid Street to Bluebird Canyon Drive and Bluebird Canyon Drive from Glenneyre Street to South Coast Highway. These corridors would be signed Class III bike routes and would have sharrow pavement markings.



Coast Highway Alternative

C.7 BICYCLE PARKING AND END OF TRIP AMENITIES

An important deciding factor for bicycle commuting is the availability of bike racks, showers and clothing lockers. These are most appropriate at large work centers and at transit stations. Bicycle parking can generally consist of two broad categories:

- Racks for short-term parking, and/or
- Lockers, automated and attendant parking for long-term parking

Bicycle racks in Laguna Beach

Laguna Beach will need to plan for convenient and secure bicycle parking. It will be important to select parking devices that support bicycles well, and are easy to lock to, like the "inverted-U" parking device in the adjacent photo. Bike corrals are useful in pedestrian-oriented places, such as Forest Avenue.

The short-term and long-term bicycle parking at the Laguna Beach Transit Center will serve as an important link to transit. It will also be important to ensure that all OCTA buses (Routes 1 and 89), Laguna Beach Transit Mainline, and Festival buses have racks to carry bicycles. If Laguna Beach ever develops a park-and-ride center that allows commuters to meet to join carpools, vanpools or buses, it will be important to have long-term bicycle parking there as well.

Potential Applications

Appropriate locations for end of trip amenities and bike parking include:

- Along Forest Avenue (bike parking)
- At all schools and all parks
- At the Laguna Beach Bus Station (both short-term and long-term parking)
- At hotels and large employment locations
- ACT V lot and Village Entrance lot

C.8 MULTI-USE TRAIL

A multi-use trail provides a functional transportation route as well as a recreational amenity for cyclists, pedestrians and other forms of non-motorized transportation. These trails are specifically designated for all non-motorized forms of transit, although many undesignated trails are used in a similar way. Multi-use trails use limited right-of-way and do not interrupt traffic, making them ideal for recreation and transportation where they can be incorporated.

Top of the World trail near Laguna Beach

Potential Applications

There is an existing fire access road between Top of the World and Three Arch Beach Heights; this trail is just outside of the City's borders, but is a key bicycle and pedestrian connection for many residents and visitors. The City is currently evaluating how to improve the connection to Top of the World Drive.

C.9 SIDEWALKS AND BUFFERS

As illustrated in the existing conditions analysis, numerous streets within the City have no sidewalks or have gaps in the existing sidewalks. Additionally, some streets have sidewalks on only one side and others are very narrow. As part of the Active Transportation Plan (or Pedestrian Master Plan and Safe Routes to School Plan), priority locations to add sidewalks, widen sidewalks, and to add a buffer to existing sidewalks can be specifically identified. Sidewalk improvements are warranted in the City to not only improve walking conditions, but also to comply with Americans with Disability Act (ADA) requirements as some of the City's narrow sidewalks contain cross slopes at driveways that do not comply with ADA. Where space allows, protective barriers (e.g. planted parkways) can provide a physical buffer for pedestrians as well as enhance the walking experience.

Field visits and community input have indicated that existing sidewalk impediments such as parking meters, sign posts, and utility poles are a major deterrent to accessible sidewalks. The City should seek opportunities to relocate or remove sidewalk obstructions.

Potential Applications

Priority locations to develop Enhanced Pedestrian Corridors will include such places as, but not limited to, commercial areas along Coast Highway, along routes to school, along routes to bus stops, along routes to parks and where no sidewalks exist. Resident engagement will be essential to determining appropriate sidewalk project locations, as in some cases neighborhood character may be partially defined by the existing street environment.

C.10 HIGH VISIBILITY CROSSWALKS

High-visibility crosswalks generally have longitudinal lines that run in the same direction as the street. They are sometimes called "zebra-stripe" crosswalks, or "continental" crosswalks. If they have lateral (transverse) lines along with longitudinal lines they are called "ladder" crosswalks. Motorists can see these much better than typical transverse-line or "transverse" crosswalks.

High Visibility Crosswalk in Laguna Beach

Potential Applications

High visibility crosswalk can be installed anywhere there are existing marked crosswalks. The ultimate goal would be for the City to upgrade all marked crosswalks to this style. Priority should be given to school walking routes, the Downtown area and other areas with high pedestrian volumes.

C.11 ADVANCE YIELD LINES

Advance Yield Lines indicate where motorists and bicyclists are required to yield to pedestrians in an upcoming crosswalk. They may be used in advance of marked crosswalks at locations not controlled by a stop sign or traffic signal. They are designed as a row of white triangles resembling "shark's teeth." They should be placed between 20 and 50 feet in advance of the crosswalk and parking shall be prohibited between the markings and the crosswalk. They are marked along with posting of "Yield Here to Pedestrians" signs.

Advance Yield Lines in Laguna Beach

Potential Applications

Advanced yield lines should be added at all marked crosswalk locations not controlled by stops signs or traffic signals. Priority should be given to school walking routes, the Downtown area and other areas with high pedestrian volumes.

C.12 ADVANCE STOP LINES

Advance Stop Lines indicate where motorists and bicyclists are required to stop where there are marked crosswalks with stop signs or traffic signals. They should be placed at least four feet in advance of the marked crosswalk, although they are more effective at six or more feet.

Advance stop line in Laguna Beach

Potential Applications

Advanced stop lines can be installed anywhere there are existing marked crosswalks. The ultimate goal would be for the City to add advanced stop lines wherever there are marked crosswalks. Priority should be given to school walking routes, the Downtown area and other areas with high pedestrian volumes.

C.13 PEDESTRIAN SIGNAGE & FLASHING BEACONS

Appropriate signage accompanies uncontrolled (no signals or stop signs) pedestrian crossings to add additional notification to drivers of the crossing. Flashing beacons can supplement pedestrian signage to command extra attention from drivers. The California Manual on Uniform Traffic Control Devices specifies the design and installation standards of various pedestrian signs and flashing beacons. Some of the most important ones include:

Pedestrian signage and flashing beacons along Coast Highway

- Pedestrian Warning Sign (W11-2) that marks a pedestrian crossing and is accompanied with a downward pointed arrow plaque (W16-7P)
- Advance Pedestrian Warning Sign (W11-2) that is accompanied by an AHEAD sign can be used on an approach to a crosswalk to notify drivers of an upcoming crosswalk, and
- Yield to Pedestrians (R1-5) sign that tells drivers where to yield in advance of the crosswalk.

Potential Applications

Pedestrian signage should accompany every marked crosswalk not controlled by stops signs or traffic signals. Priority should be given to school walking routes, the Downtown area and other areas with high pedestrian volumes.

C.14 CURB EXTENSIONS

Curb extensions are used to shorten the crossing distance for pedestrians, to improve visibility, and to slow speeds of turning motorists. They provide space and geometry for perpendicular curb ramps. They are also called “curb extensions” at intersections but can also be used at mid-block crossing locations. Curb extensions may be irregular in shape to fit into the context. They may be solid and flush with the curb or broken up into islands to compensate for drainage issues.

Curb extension in Laguna Beach

Potential Applications

Ocean Avenue already has some curb extensions but finding other locations on this corridor or other streets Downtown would benefit pedestrians crossing the street. Curb extensions can be easily installed where there is on-street parking approaching an intersection.

C.15 CROSSING ISLANDS

Crossing islands break up the distance pedestrians have to cross streets into two phases. This allows them to wait for a gap in traffic to cross in only one direction at a time. They are especially important to cross multi-lane streets at locations not controlled by stop signs or traffic signals.

Example crossing island

Potential Applications

Crossing islands could be installed along South Coast Highway, North Coast Highway or along corridors where road diets are recommended. The crossing island would be located in the median or two-way left turn lane as a place of pedestrian refuge and could work at T-intersections where there is only a left turn required to one cross-street.

C.16 SIGNAL MODIFICATIONS

Signal modifications are used to improve pedestrian crossings by providing information and some advantages. There are a variety of such modifications. Some of the most important are:

- Providing more crossing time in the “Walk” phase
- Countdown signals that notify people how much time they have to cross
- Protected left turns that provide a separate phase for people to walk across the street when motor vehicles have to stop
- Leading pedestrian intervals that let pedestrians into the intersection before motor vehicles
- Pedestrian Hybrid Beacon at unsignalized mid-block crossing locations

Potential Applications

Priority should be given to traffic signals in the Downtown area and other areas with high pedestrian volumes.

C.17 ALL-WAY PEDESTRIAN CROSSING

All-way pedestrian crossings function by creating a designated pedestrian phase which stops all vehicular traffic flow through an intersection, thus allowing pedestrians to cross the intersection in every direction, including diagonally. Improvements to right- and left-turn vehicular movements may also result from implementation of an all-way crossing because it will reduce conflicts with pedestrians on the cross-street during the non-pedestrian phase. Pasadena and Santa Monica have both implemented all-way pedestrian crossings. All-way walk phases generally

All-way pedestrian crossing

work better at intersections with a fewer number of signal phases such as at T-intersections or at the intersection of one-way streets. Detailed traffic analysis should be conducted at intersections where this treatment is proposed to determine potential impacts on traffic operations.

Potential Applications

Caltrans suggests that these crossings are effective at intersections with high pedestrian volumes, such as at the intersection of Broadway and Coast Highway both on and off season.

C.18 SHARED SPACE STREETS

A Shared Space is an urban design approach which seeks to minimize demarcations between vehicle traffic and pedestrians, often by removing features such as curbs, road surface markings, traffic signs, and regulations. Since many of Laguna Beach's streets are narrow and have limited space for sidewalk improvements, the City could consider making some of them "shared space" where it is assumed that people on foot and bicycle share the street with motor vehicles. Motor vehicles would have to slow to minimal speeds for this sharing. In some locations, traffic calming measures may be installed.

Shared space at Maple Street in Escondido, CA

The City may also want to use shared space treatments to create an ideal retail/entertainment environment. This type of treatment could also be coupled with parklets where excess space or parking spaces are converted to dedicated space for pedestrians.


Example parklet

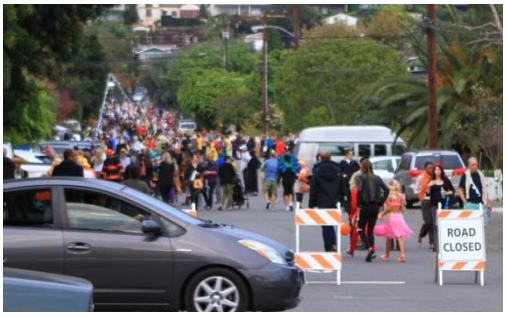
Potential Applications

There are many locations in Laguna Beach where Shared Space or Livable Streets would be appropriate, such as the block of Park Avenue east of Coast Highway.

- Holly Drive
- Oak Street
- Ocean Avenue
- Alta Laguna Boulevard
- Forest Avenue
- Park Avenue

C.19 FESTIVAL STREETS

Festival or open streets events temporarily close streets to motor vehicle traffic so that people may walk, bicycle, play, socialize, exercise or use the street for any other purpose. They range from large communitywide events, like cyclovias where long stretches of streets are closed, to small one or two block events, like a "Fun day Sunday" for the neighbors. Farmer's markets, arts and craft shows exemplify other types of open street events. The City can encourage open street events by sponsoring them, coordinating policy support and permitting them. The City can also set up a formal process for residents, merchants and others to gain permits to organize open streets events.



Oak Street on Halloween in Laguna Beach
(Source: http://www.lagunabeachlifestylez.com/)

Potential Applications

This type of treatment could work for several blocks Downtown but would need further analysis with input from downtown merchants to determine a preferred location.

C.20 ROUNDABOUTS

Roundabouts are a form of intersection traffic control on arterial streets much like stop signs or traffic signals. They are used to assign right-of-way at an intersection and work best when all approaches to an intersection have a similar volume of traffic. The capacity of a one-lane roundabout is approximately 20,000 vehicles per day. They provide an increased level of safety since drivers slow before entering and there are no left turns. Roundabouts should not be confused with traffic circles which are used as a form of traffic calming on lower volume local streets. The key element of a roundabout is the use of splitter islands on each leg of an intersection approach. This physically requires vehicles to reduce speed before entering the roundabout. This speed reduction also benefits pedestrian crossing the intersection. The splitter island also benefits pedestrian circulation at the roundabout by requiring pedestrians to only cross one lane of traffic at a time and by providing refuge for pedestrians between each lane of traffic. The crosswalk is typically set back one car length from the intersection so vehicles reduce speed at the crosswalk before approaching the roundabout. Roundabouts are used successfully in many Cities in Southern California including: Carlsbad, San Clemente, Dana Point, Costa Mesa, Huntington Beach and Seal Beach.

Potential Applications

On August 20, 2013, the City Council considered various Complete Streets features on Glenneyre Street, including a trial roundabout, however the Council voted unanimously to proceed with the installation and design of a trial roundabout at the intersection of Catalina Street and Los Robles subject to the design being approved by the City Council.

A trial roundabout would be mostly paint and raised pavement markers and would not have the aesthetic treatment that a permanent design would have, and it would also not have the curb ramps installed as would be done with a permanent installation. A permanent roundabout at this location is in the current 10-year Capital Improvement Program for FY 2019/20, with an estimated cost of $300,000. Since there is not a history of accidents at this intersection, this capital improvement project was included in the program as a traffic calming and aesthetic feature rather than as a traffic movement and safety feature. If the trial roundabout proves to be successful, then the permanent installation might be moved up in the Capital Improvement Program. The proposed trial roundabout would be a good test of whether the neighborhood would be supportive of a permanent roundabout at this location.

One potential negative impact of a roundabout at this location would be the removal of roughly 20 on-street parking spaces. The on-street parking demand in this area is largely for high school students during the school year and beach parking during the summer months. The residents nearby the proposed roundabout location were given notice of this item by mail on April 15, 2014.

Catalina and Los Robles Before

Catalina and Los Robles After

TRAFFIC CALMING

Traffic calming is the process of reducing vehicle speeds through the use of both passive devices, such as signs and striping, and physical devices such as change in road elevation or path. Traffic calming focuses on reducing speeds and improving safety primarily on local and collector roads. Through implementation of traffic calming measures, many Complete Streets goals can be met such as: improved pedestrian walking environment due to slower traffic speeds and improved visibility and improved bicycle environment by integrating bicycle lanes with road diet projects.

The type, design and placement of traffic calming devices depend upon the road classification, desired traffic speed and types of traffic issues along a corridor. A single traffic calming device placed along a long stretch of road will be only marginally effective at slowing down speed at that isolated location. Implementation of a series of traffic calming devices that work together will effectively slow down traffic speeds along the length of a corridor.

Why does traffic calming work? In most cases speeding occurs because the driver is comfortable in his or her environment and doesn't realize the speed at which they are driving. If the road is wide, has few interruptions and traffic volumes are low, then the potential for speeding is high. Traffic calming breaks up those long, interrupted stretches of road and requires the driver to be alert to the roadway environment and in turn makes the driver more aware of his or her surroundings. Traffic calming, in effect, creates friction, which results in slower speeds.




Many of the recommendations in the Mobility Transition Plan serve as traffic calming devices, including road diets, crossing islands, roundabouts, curb extensions, and signage. Additional traffic calming devices include, but are not limited to:

Chokers and neckdowns. Curb extensions placed midblock along a roadway to narrow the travel way are called chokers. Neck-downs reduce the total roadway width mid-block to slightly larger than a single lane, requiring vehicles to yield in order to pass.

Chicane. A chicane is a set of alternating curb extensions that create an "S" curve midblock along a road to create a non-linear travel way for motorists.

Speed humps, bumps and tables. Speed humps and lumps define a gradual raise in road to slow down traffic that is designed for 25 mph roads. A speed table is a speed hump with a flat top that typically serves as both a traffic calming mechanism and a crosswalk.

Half street closures. Half street closures utilize barricades or curb extensions to block street access to either the inbound or outbound traffic, leaving half the street open for the one direction of traffic or emergency access.

C.21 GLENNEYRE STREET

Based on recently collected traffic volume counts, most of the four-lane streets in Laguna Beach (such as Coast Highway, Broadway Street, and Laguna Canyon Road) have daily traffic volumes well over 20,000 vehicles per day and are not ideal candidates for road diets (reducing the number of travel lanes). However, Glenneyre Street only carries approximately 11,700 vehicles per day, well below the capacity provided by four travel lanes. Glenneyre Street is an ideal candidate for a "road diet." Reducing travel lanes would create space for bikeway and pedestrian enhancements and make the street a lively place for people. Some of the intersections of Glenneyre Street (such as Thalia Street, Calliope Street, and Oak Street) are large enough to capture space for outdoor seating, neighborhood gardening, and many other types of public space. Thus, Glenneyre Street offers unique opportunities to become an optimal complete street example with active transportation and neighborhood enhancements. See the Road Diet recommendation for an illustration of a potential cycle track and road diet on Glennyere.

D COMPLETE STREETS PROGRAMS

The programs listed below are intended to work in concert with the facilities described in the previous section. They are just as important to the success of Complete Streets. The programs provide the background for implementing projects, they allow an analysis to take place on where best to prioritize improvements and how to obtain funding to implement the Complete Streets infrastructure.

D.1 BIKE SHARE

Laguna Beach could get more people on bicycles with a "bike sharing" system. Bike sharing makes bicycles available to the public at convenient locations. They can pick them up with a membership card or a credit card, and then drop them off at another bike sharing location. Bike Share programs are currently being implemented on a trial basis in Fullerton, Anaheim, and Santa Monica, and are mostly privately operated. A Bike Share program in Laguna Beach would be considered after bikeway improvements have been made.

Potential Application

The Transit Center, Main Beach, Act V, Village Entrance, Forest Avenue and larger parking locations in both the north and south ends of town could be potential bike sharing locations.

Example bike share

THE 5 E'S

Cities that are most successful with active transportation incorporate the "5E" approach:

- Engineering
- Education
- Encouragement
- Enforcement
- Evaluation

Engineering refers to the physical improvements previously discussed such as bikeways and pedestrian improvements. The others are programmatic and are critical to the success of the effort.

Education refers to safety education such as "how to ride a bicycle in traffic," "how to cross the street safely," and "safe driving near schools." It also refers to education of people as to the health, environmental and livability reasons for active transportation. Laguna Beach will gain much from having such education programs at schools and available to adults.

Encouragement promotes active transportation and attempts to get more people to walk and bicycle instead of drive. Some examples of how the City could offer incentives and use social media and other forms of marketing to encourage people to walk and cycle are:

- Sponsoring school contests and open street events
- Promoting school bus and public transit use
- Coordinating with local businesses to install prominent bike racks
- Creating bicycle-friendly business districts
- Marketing the "walk/bicycle, don't drive" concept using radio, TV and social media

Enforcement ensures that traffic laws are followed around schools and on all streets. It includes a variety of techniques such as patrols, ticketing, crossing guards, sting operations, school driveway monitoring, speed feedback signs and red curbs.

Evaluation monitors active transportation with techniques like crash data, counts, speed surveys, survey questionnaires and fitness exams. It shows progress, or lack thereof, and can help to customize programs based on what seems to be most productive.

D.2 BICYCLE AND PEDESTRIAN COLLISIONS REVIEW

As part of any plan or program to enhance bicycle or pedestrian facilities, a review of bicycle and pedestrian collisions on a regular basis is necessary for determining areas of high collision frequency and where facility improvements could be most effective.

D.3 EDUCATION

In order to ensure that City staff understands details of designing for active transportation, training is available and several programs are already packaged with presentation modules and certified instructors. City Staff have taken these courses and should continue training. City Council members and commissioners may also want to take training classes. The classes typically last from a half day to two days on any of the following topics:

- Pedestrian Safety Design
- Planning and Designing for Bicycles
- Complete Streets or Living Streets
- Designing for People with Disabilities
- Street Manual Customization

Additionally, general public education/awareness is important for pedestrians and bicyclists to understand where new facilities are or are not appropriate and how to use them.

D.4 FUNDING, DESIGN AND CONSTRUCTION

The City can take full advantage of opportunities to implement active transportation by being up to date with ever-changing funding sources such as, but not limited to:

- Active Transportation Program
- Highway Safety Improvement Program
- Cap and trade
- Measure M
- Other local and regional sources

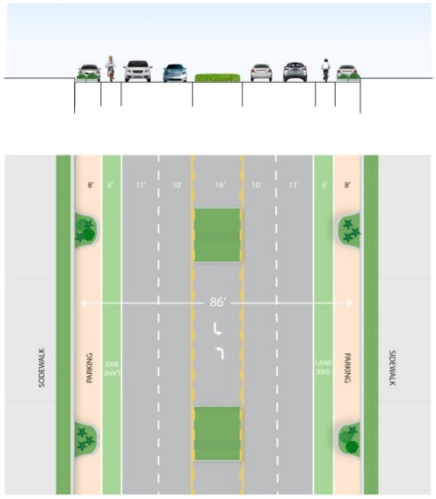
When these funds become available it will be important for the City to be proactive and apply for these funds, then progress into design and construction.

D.5 STREET, SIDEWALK, AND LANDSCAPE MAINTENANCE

Maintaining streets, bikeways, sidewalks and pedestrian crossings is essential for people to use active transportation in Laguna Beach. People on bicycles and people on foot are especially sensitive to pavement maintenance including both surface quality and sweeping. Maintaining signs and signals also ensure that people will use active transportation. The City should continue, and enhance if needed, its maintenance practices.

D.6 STREET DESIGN STANDARDS AND GUIDELINES

Local jurisdictions typically use a variety of street design standards and guidelines whenever they modify the street. Historically, many of these were based on principles meant to move as many cars as fast as possible and often neglected designing streets for people on bicycle or foot. Recently, several new resources and guidelines have published that present a multi-modal "people-oriented" approach to street design. The City can advance active transportation by adopting similar guidelines. The City will not need to "reinvent the wheel" since some guidelines have already been produced with the goal of customization and adoption by public agencies. The National Association of City Transportation Officials (NACTO) Urban Street Design Guide provides many ideas. The Model Design Manual for Living Streets is another option that is available for customization from its Word, InDesign or PDF versions that are posted on www.modelsteetdesignmanual.com. It will be especially important for the City to adopt new sidewalk design guidelines that incorporate the "four-zone system" with a curb zone, furniture zone, pedestrian through zone and frontage zone. The "four-zone system," for instance, can help ensure that new sidewalks or sidewalk improvement projects constructed with adequate consideration for pedestrian mobility.



Street design standard

D.7 CALTRANS COMPLETE STREETS EFFORTS

In recent years Caltrans has endorsed and supported efforts of Caltrans and cities to have Complete Streets. To ensure that this happen, Caltrans has formalized these policies in several memorandums from headquarters in Sacramento.

Deputy Directive 64, titled "Complete Streets – Integrating the Transportation System" from 2008 spells out a number of initiatives, one of the most important which states that Deputy District Directors should ensure that bicycle, pedestrian and transit user needs are addressed during planning, design, construction, maintenance and operation on Caltrans Highways.

In November of 2013 Caltrans released a new "Main Street, California: A Guide for Improving Community and Transportation Vitality." This guide recognizes that State Highways sometimes run through the center of cities and carry a "main street" function. The Guide encourages cities to use context sensitive design along these stretches and provides guidance as to doing that.

In April of 2014, Caltrans released a memorandum entitled "Design Flexibility in Multimodal Design" stating that, along the State Highway system, users of the transportation system should be in balance with other values and "a one-size-fits-all design philosophy is not Department policy." This policy also recognizes that local governments need leeway to design with flexibility especially when planning for Complete Streets.

In September of 2014, Caltrans released another memo entitled "Design Flexibility and NACTO Endorsement Frequently Asked Questions." This followed Caltrans' endorsement of the National Association of City Transportation Officials (NACTO) "Urban Street Design Guide" and their "Urban Bikeway Design Guide" that

modify traditional street and bikeway design manuals to allow for design flexibility and encourage narrow travel lanes and a variety of design techniques that were formally frowned on in street design manuals. The memorandum clarifies the Caltrans position that cities may opt to deviate from Caltrans [Highway Design Manual] standards and still have protection from liability, provided they document their engineering judgment according to NACTO or other reputable design guides.

E TRANSIT ENHANCEMENTS

Complete Streets programs benefit public transportation by improving pedestrian access to bus stops. Policies that encourage walking along city streets enhance the ability to access and use public transportation. Streetscape improvements can integrate bus stop design with street design, focusing as appropriate on provision of passenger amenities at stops while meeting space requirements on-street for the boarding and alighting of passengers with disabilities in accordance with ADA regulations.

The City has succeeded in making the Summer Festival Trolley an iconic element of summer in Laguna Beach. Complete Streets recommendations are intended to build upon this success by improving the pedestrian environment and providing bicycle paths and lanes in locations where bicycle-trolley conflicts are minimized.

E.1 ADJUSTED SCHEDULING AND ROUTES

The City could integrate the Mainline, Festival Trolley, and OCTA into a single local transit system. This would optimize the use of service capacity for OCTA's Routes 1 (along Coast Highway) and 89 (along Laguna Canyon Road). Mid-day fixed-route service in the Canyon and Hillside neighborhoods could be replaced with flexible-route feeder services with time transfers along South Coast Highway.

E.2 ENHANCED TAXI VOUCHER PROGRAMS

The City's current Taxi Voucher Program supplements the transit system by providing late night service throughout Laguna Beach. The City should expand the number of operators and incorporate performance-based criterion contracts. To better enhance the program, there should be an increase in compensation for operators from $13.00 per hour (2008 rate) to $15.00 per hour. The program budget can be capped to limit the number of taxi vouchers sold in order to maintain the current $5 cost for each voucher. The City of Dana Point is planning on implementing summer transit service on weekends. The service would run from the Ritz Carlton Laguna Niguel to Palisades Road with stops at Doheny Village, the Harbor, Doheny State Beach and the Town Center. It would be funded by OCTA's Measure M Project V grant.

E.3 SUPPLEMENTAL SENIOR TRANSPORTATION

Laguna Beach seniors can take advantage of free transit to local destinations through Sally's Fund. In order to ensure that the program maintains its integrity, there should be a competitive bid process with performance-based criteria for the service. The service should amend its eligibility criteria to 65 years old and refine its service delivery framework to include options like "shopping shuttles." Additional ride-sharing options would also benefit the service.

F PARKING ENHANCEMENTS

As discussed previously, the Downtown Specific Plan Area and Laguna Canyon Road Parking Management Plan (Downtown PMP) seeks to balance the competing parking demands of residents, businesses, and visitors and satisfy the needs of all users of a multimodal transportation system by providing a toolbox of strategies to effectively manage parking. The matrix shown in Appendix F summarizes the various parking management strategies presented in the Downtown PMP. In conjunction with ongoing implementation of the Downtown PMP, the recommendations discussed below would further support a Complete Streets transition in the City.

F.1 REDUCE DRIVERS CRUISING FOR PARKING

Parking sign in Laguna Beach

Frequently, drivers circle the block many times looking for the most convenient space. This increases vehicle miles of travel (VMT) and congestion levels. In addition, drivers "cruising" for parking are distracted and may represent a hazard for pedestrians and cyclists. As discussed in the Downtown PMP, when implemented in combination with each other, the following techniques can improve parking conditions by 20 to 30 percent:

- **Parking Management** strategies such as parking information systems, peripheral parking, shared parking, public valet program, and/or alternative transportation can help reduce vehicles looking for on-street parking
- **Parking Pricing** strategies can be used to incentivize off-street parking and seasonal or district based pricing can be used to incentivize other modes of transportation which reduce the impact of drivers cruising for parking
- **Parking Supply** can be increased by mandating new developments to share parking, maximizing off-street parking lot efficiency by restriping or allowing stacked or tandem parking, expanding or seeking additional peripheral parking lots, and installing bike racks or lockers at key locations.
- **Parking Zoning/Administration** strategies such as in-lieu fee programs and modification of parking code requirements can encourage better use of available resources for Complete Streets facilities and also minimize parking demands.

These parking management strategies and their implementation schedule, among others, are discussed in great detail in the Downtown PMP. Based on initial examination, the strategies implemented during the trial program in summer 2014 were effective in increasing use of the peripheral lots. It is recommended that the City make any necessary adjustments and further expand implementation of the parking management strategies contained in the Downtown PMP by continuing to examine the results of the summer 2014 trial program as well as engaging with community stakeholders.

F.2 REMOVE ON-STREET PARKING

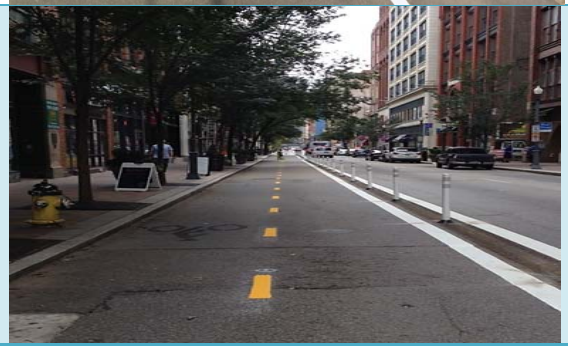
On-street parking should be evaluated on a street-by-street basis to determine its priority. While on-street parking is prized by both local businesses and shoppers, it may be appropriate to remove it in some locations in order to make room for bike lanes, wider sidewalks, priority bus lanes, parklets or other Complete Streets uses. The removal can be permanent, allowing a physical improvement such as permanent bike lane, or based on defined peak times. An example of the latter is making an exclusive bus lane to improve the speed and efficiency of shuttles serving remote parking lots during peak summer and festival seasons.

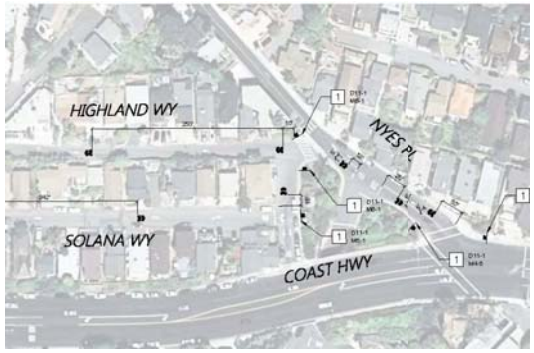
More modest proposals include removing a small number of on-street spaces for parklets, curb bulb outs, or bicycle corrals. These facilities should only be designed in areas where there is current demand. These projects can be implemented on a pilot or experimental basis or with permanent improvements. Taking back one or two on-street parking spaces per block face can have a big impact on the functioning of the street and its image.

Proposals to eliminate on-street parking on a permanent or temporary basis are bound to meet with concern. Specifically, it is important to note the California Coastal Commission requires that any removal of parking spaces does not translate to diminished beach accessibility to the public. The tools provided in the Downtown PMP and listed in the previous section offer ideas for managing parking demand in a way that maintains customer satisfaction and achieves Complete Streets outcomes. Successful implementation of Complete Streets improvements should result in improved access for other modes of transportation and can offset the impact of removing on-street parking.

COMPLETE STREETS RECOMMENDATIONS

	DESCRIPTION	PURPOSE	POTENTIAL APPLICATION
Complete Streets Plans and Policies			
General Plan Policies	Specific policies that reference complete streets and/or uphold complete streets goals.	Ensure that all projects consider the impact on bikes, pedestrians, and transit.	General Plan and/or Element Update
Crosswalk Policy	Addresses the installation, removal, and enhancement of intersections and crossings.	Provide consistent decision-making process for City staff about where and how to mark crosswalks.	Citywide
Sidewalk Zone System	Appropriate cross-sections for different environments in the City according to topography or other limitations. 	Ensures that sidewalks have a clear path for pedestrians.	Citywide
Active Transportation Plan	Comprehensive plan that simultaneously addresses all non-motorized modes of transportation.	Coordinates non-motorized mobility improvements and positions well for funding.	Citywide

Complete Streets Facilities				
Road Diets	Narrowing of roadway by reducing travel lanes or removing on street parking.		Allows for the installation of bicycle and pedestrian facilities or amenities.	• Glenneyre Street • Monterey Drive • Broadway Road • Cypress Street • Alta Laguna Boulevard • Thalia Street • Calliope Street • Oak Street
Striped Bike Lanes	Striped bike lane located adjacent to motor vehicle travel lanes or parking lanes, and flows in the same direction as motor vehicle traffic.		Alerts all road users that a portion of the roadway is for exclusive use by bicyclists.	• Glenneyre Street • Cypress Street • Monterey Drive
Protected Bike Lanes/Cycle Track	Lanes separated from traffic lanes or parked vehicles with physical barriers.		Increases perceived safety, allowing cyclists to feel more comfortable using the lane adjacent to traffic and prevents vehicles from entering the bicycle lane.	• Glenneyre Street • Cypress Street • Monterey Drive

Sharrows	Painted chevrons and bicycle stencils on the roadway.		Alert drivers to "be aware and share" the road with bicyclists.	• Mermaid Street • Third Street • Glenneyre St to Highland/Nyes • Portions of North and South Coast Highway • Broadway
Buffered Bike Lanes	Conventional bike lanes supplemented with a striped buffer space		Provide buffering between bike lane and travel lane, and bike lane and parked vehicles.	• Glenneyre Street • Cypress Street • Monterey Drive
Coast Highway Bikeway Alternate	Layered north-south bike route, where certain streets are to be designated for bicycles and pedestrians, and some just for pedestrians.		Provide valuable bicycle connection between Laguna Beach and adjacent cities.	• Cliff Drive west of North Coast Highway • Glenneyre St from Mermaid Street to Bluebird Canyon Drive and Bluebird Canyon Drive from Glenneyre Street to South Coast Highway.

Bicycle Parking & End Of Trip Amenities	Bike racks for short-term bike parking, and or lockers. Automated and attendant parking for long-term bike parking.		Accommodate cyclists and serve as an important link to transit, generally drawing more users.	• Along Forest Avenue (bike parking) • In front of commercial areas along Pacific Coast Highway • At all schools • At all parks • At the Laguna Beach Bus Station (both short-term and long-term parking) • At hotels and large employment locations • ACT V lot • Village Entrance lot
Multi-use Trail	Shared trails designed for bicycles, pedestrians and often also equestrians.		Provides a functional transportation route as well as a recreational amenity.	• Complete connectivity between existing multi-use trail at Top of the World to Top of the World Drive

Sidewalks And Buffers	Providing new, widening existing sidewalks, as well as closing gaps between sidewalks. Also, adding landscaped buffers or other buffers at sidewalk edge.		Improve walking conditions.	• Commercial areas along Coast Highway • Along routes to school • Along routes to bus stops • Along routes to parks • And where no sidewalks exist
High Visibility Crosswalks	Longitudinal striped lines that run in the same direction as the street. They are sometimes called "zebra-stripe" crosswalks, or "continental" crosswalks.		Improve visibility by motorists because they can typically see these much better than typical transverse-lined crosswalks.	Citywide – but priority can be given to • School walking routes • Downtown area • High volume walking areas
Advance Yield Lines	Painted white markings ("shark's teeth") placed in advance of a marked crosswalk to indicate where motorists and bicyclists are required to yield to pedestrians.		Increase separation between vehicles and pedestrians at marked crosswalks.	• All marked crosswalk locations not controlled by stop signs or traffic signals • Priority can be given to: school walking routes, and the Downtown area

Advance Stop Lines	A painted line placed in advance of a marked crosswalk to indicate where motorists and bicyclists are required to stop when there are stop signs or traffic signals.		Increase separation between vehicles and pedestrians at crosswalks in stop controlled intersections.	• Citywide where marked crosswalks already exist. • Priority can be given to: school walking routes, and the Downtown area
Pedestrian Signage	Specific signs to be used where no signals or stop signs are part of a pedestrian crossing.		Additional notification to drivers of the upcoming pedestrian crossing.	• Citywide where marked crosswalks are not controlled by stop signs or traffic signals. • Priority can be given to: school walking routes, and the Downtown area

Curb Extensions	Increased amount of sidewalk area at an intersection by extending the curb out further than the standard sidewalk		Reduce vehicle speed by narrowing the travel way at the intersection and reduce the crossing distance for pedestrians.	• Additional Curb Extensions along Ocean Avenue • Other segments where on-streets parking is present
Crossing Islands	Refuge island that is generally located in the middle of multi-lane streets.		Allows pedestrians to wait for a gap in traffic and to cross in one direction only at a time.	• South Coast Highway • North Coast Highway • Along corridors where road diets are recommended
Signal Modifications	Signal timing, length of crossing time, and visual and audio aid devices.		Provide crossing information to pedestrians and facilitate longer crossing times.	• Priority can be given to traffic signals in the Downtown area • Areas with high pedestrian volumes

All-Way Pedestrian Crossing	Designated pedestrian phase which stops all vehicular traffic flow through an intersection, thus allowing pedestrians to cross the intersection in every direction, including diagonally.		Allow for high pedestrian volumes to cross the street in any direction.	• Broadway and Coast Highway (both on and off season)
Shared Space Streets	Minimizes demarcations between vehicle traffic and pedestrians often by removing features such as curbs, road surface markings, traffic signs, and regulations.		To create an ideal retail/entertainment environment.	• The block of Park Avenue east of Coast Highway • Other limited right-of-way streets where streets are narrow and there is limited space for sidewalk

Festival Streets	Festival streets or open streets events temporarily close streets to motor vehicle traffic to allow for large communitywide events.		People may walk, bicycle, play, socialize, exercise or use the street for any other purpose, creating a stronger community character, and safe community space.	• Several blocks within Downtown (further analysis needed for preferred location)
Roundabout	Circular intersection control device that includes median splitter islands, separated pedestrian crossing, and signage.		Reduce traffic speeds at intersections and provide pedestrian refuge.	(further analysis necessary for preferred location/s) • Catalina and Los Robles • Glenneyre Street

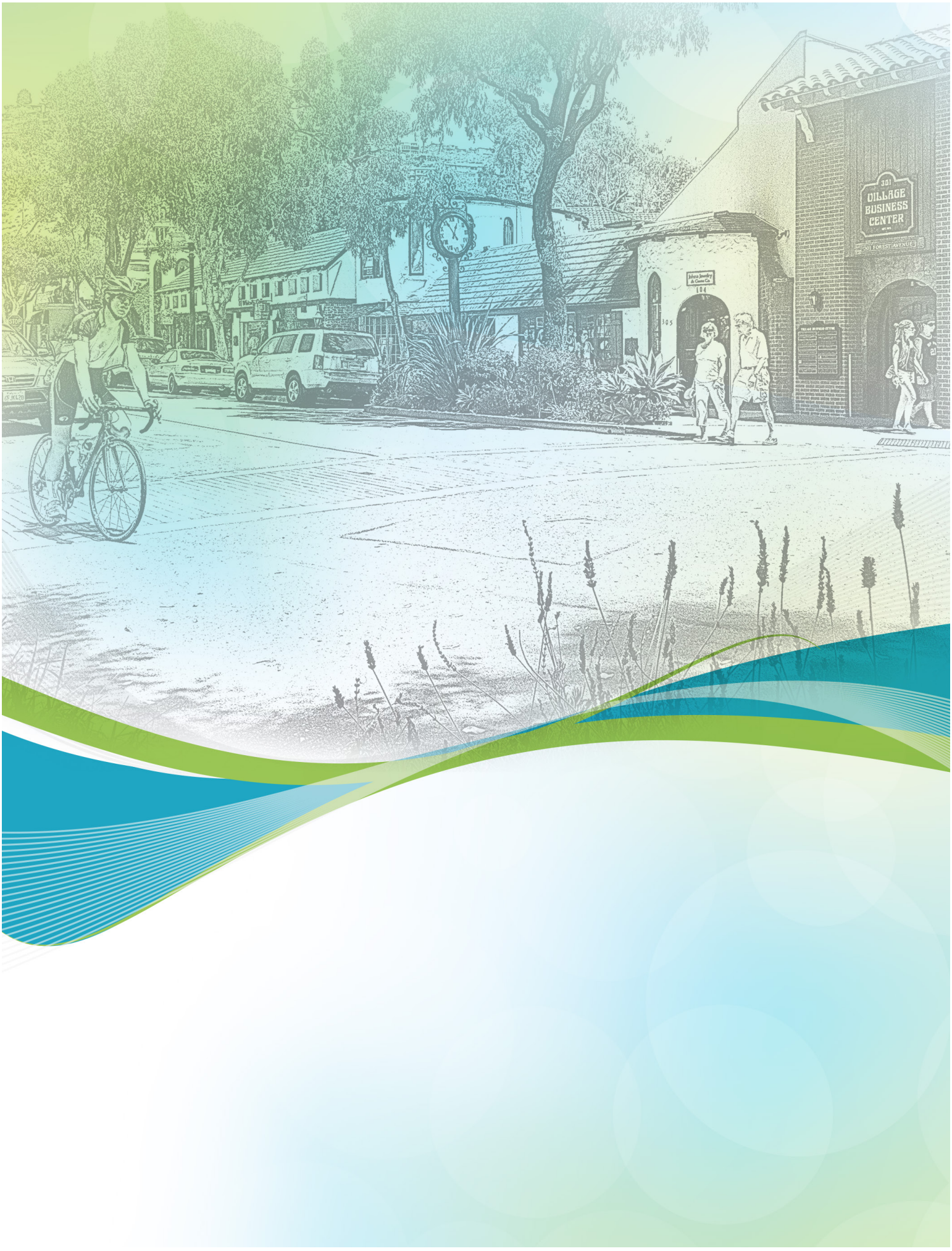
Complete Streets Programs				
Bike Share	Public bicycles available for rent using credit cards located in convenient places throughout the City.		Get more people on bicycle with a "bike sharing" system and increase use of peripheral parking lots.	• Transit Station • Main Beach • Act V • Village Entrance • Forest Avenue • Large Parking Locations (north and south ends of Laguna Beach)
Bicycle & Pedestrian Collisions Review	As part of any plan or program to enhance bicycle or pedestrian facilities, a review of bicycle and pedestrian collisions on a regular basis is necessary for determining areas of high collision frequency and where facilities improvements could be most effective.		Utilize the data as a factor in prioritizing bicycle and pedestrian facility improvement projects.	Citywide
Staff Training	Programs packaged with presentation modules and certified instructors with topics including pedestrian safety design, planning and designing for bicycles, complete streets or living streets, designing for people with disabilities, and street manual customization.		Ensure that City staff understands details of designing for active transportation.	City Staff
Funding, Design & Construction	Take full advantage of opportunities to implement active transportation by being up to date with ever-changing funding sources such as, but not limited to: Active Transportation Program, Highway Safety Improvement Program, Cap and Trade, Measure M, and other local and regional resources.		Allow the City to be proactive and apply for these funds, then progress into design and construction.	City Staff
Street, Sidewalk, & Landscape Maintenance	Maintaining streets, bikeways, sidewalks and pedestrian crossings.		Encourage, increase, and continue the use of pedestrian and bicycle facilities by keeping them in good repair.	Citywide

Street Design Standards & Guidelines	Adopt street design guidelines designed by (NACTO) which The City can advance active transportation by incorporating the "four-zone system" with a curb zone, furniture zone, pedestrian through zone and frontage zone.	Ensure that new sidewalks or sidewalk improvement projects are constructed with adequate consideration for pedestrian mobility.	Citywide
Caltrans Complete Streets Efforts	In recent years Caltrans has endorsed and supported efforts of Caltrans and cities to have Complete Streets. Caltrans has formalized these policies in several memorandums from headquarters in Sacramento.	Ensure pedestrian, cyclist, and transit user needs are addressed during planning, design, construction, maintenance and operation on Caltrans Highways.	• Laguna Canyon Road • Pacific Coast Highway

Transit Enhancements			
Adjusted Scheduling & Routes	The IBI Group suggests that the City could integrate the Mainline, Festival Trolley, and OCTA into a single local transit system.	Optimizing the use of service capacity for OCTA's Routes 1 (along Coast Highway) and 89 (along Laguna Canyon Road.	Citywide
Enhanced Taxi Voucher Program	The City's current Taxi Voucher Program supplements the transit system by providing late night service throughout Laguna Beach. Improvements to the programs can be to add additional operators on a performance-based criterion contracts, and a wage increase for operator from $13.00 (2008) to $15.00 per hour.	To better enhance the program, increase the utilization of the service, and minimize driving of private vehicles.	Citywide

Supplemental Senior Transportation	A competitive bid process with performance-based criteria for the service can be established. Amending the eligibility to 65 years old can allow for higher numbers of riders. While refining the service delivery framework to include options like "shopping shuttles", and additional ride-sharing options would also bring benefits.	In order to ensure that the program maintains its integrity, maintain/increase service quality, satisfaction, and increase of ridership.	Citywide

Parking Enhancements			
Remove on-street Parking	The removal of on-street parking, on designated segments, can be permanent, allowing for a physical improvement such as permanent bike lane, or based on defined peak times. More modest proposals include removing a small number of on-street spaces for parklets, curb bulb outs, or bicycle corrals. These facilities should be only designed in areas where there is current demand.	To make room for bike lanes, wider sidewalks, priority bus lanes, parklets or other Complete Streets uses.	Citywide
Reduce Drivers Cruising for Parking	Laguna Beach can benefit from the implementation of a combination from the following parking management techniques: Parking Management Strategies, Parking Pricing, Parking Supply, and Parking Zoning/Administration Strategies.	As discussed in the Downtown PMP, when implemented in combination with each other, the parking management techniques can improve parking conditions by 20 to 30 percent. As well as reduce vehicles miles traveled (VMT).	Citywide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