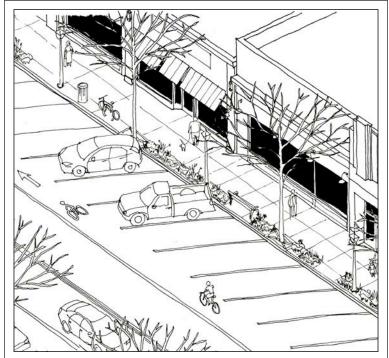
LAKESHORE DRIVE Downtown Corridor Plan Clearlake, California







City of Clearlake and Lake APC

February 2014









Opticos Design, Inc Berkeley, California

Lakeshore Drive Downtown Corridor Plan

Clearlake, California

A Report to the City of Clearlake February 2014

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Views and opinions presented in this report do not necessarily represent the views or opinions of Caltrans or the California Business Transportation and Housing Agency.

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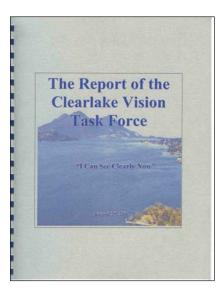
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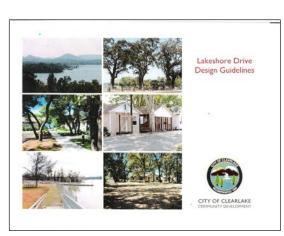
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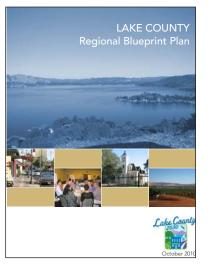
Introduction

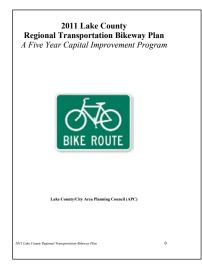
This report is the outcome of a community-based planning process for Lakeshore Drive in Clearlake, a city of approximately 15,000 residents located on the Lower Arm of Clear Lake in central Lake County, California. The project area includes an approximately 1.5 mile stretch of Lakeshore between Old Highway 53 to the south and Olympic Drive to the north.

A 2011 Caltrans Community-Based Transportation Planning Grant awarded to the Lake County Area Planning Council (APC) and the Local Government Commission (LGC) made this plan possible. It was prepared through close coordination with an advisory committee of City and APC representatives, and a multi-disciplinary consultant team. The Local Government Commission and the Lake County APC procured a team of planning and urban design specialists to assist with the plan, and assisted with community outreach and facilitation. Opticos Design, Inc., a Berkeley-based urban design and architecture firm, provided community planning and urban design expertise. The San Francisco office of Nelson\Nygaard Consulting Associates, Inc. focused on circulation and transportation.









Project Intent and Relationship to Other Documents

This plan provides a set of specific design recommendations and potential projects for Lakeshore Drive that may be implemented through future planning efforts. It seeks to build upon numerous and frequent planning activity that has a foundation in the 2007 Report of the Vision Task Force and the subsequent 2008 Lakeshore Design Guidelines, and serves as an essential component of a larger planning strategy to steer the community toward successful implementation of its identified goals and aspirations. A summary of the relevant planning documents and processes is below.

Report of the Clearlake Vision Task Force (2007):

This report provides a strategic planning foundation for Lakeshore Drive, prepared under the leadership of former interim planning director Irwin Kaplan and the Clearlake Vision Task Force. It identifies Lakeshore Drive as a key destination in the City and an important opportunity to address general issues in the community (such as housing, economic development, and infrastructure). The report includes recommendations for Lakeshore Drive and its development as a "destination resort" that protects view corridors and frequent vistas of the Lake, provides high quality environments for pedestrians including sidewalks, lighting, and landscaping, and encourages more coherent form and land use organization. The Report called for both a "Specific Plan" as well as "Design Standards" for Lakeshore Drive to be implemented.

Lakeshore Design Guidelines (2008):

The Design Guidelines provide a design foundation for this report, outlining several design standards and guidelines to guide development patterns along the corridor, with an emphasis on parking, circulation, vistas, open space, building form, streetscape, lighting, and signage. This plan utilizes the Design Guidelines as a foundation and has deviated from its findings only where detailed community discussion or a greater understanding of project area issues and constraints warranted such deviations.

Lake County Regional Transportation Bikeway Plan (2011):

The Bikeway Plan identifies existing and proposed bicycle facilities in Lake County and their priority for implementation. The portion of Lakeshore Drive described in this plan is slated for Class III Bicycle Lanes with medium (M) priority; this plan identifies different alternatives for providing bicycle facilities along Lakeshore, including the provision of Class II bicycle lanes.

Lake County Transit Development Plan Update (in process):

The plan is being updated to improve current and future transit operations, along with development of a Marketing Plan for Lake Transit.

City of Clearlake General Plan Update (in process):

At the time of writing an update to the City's General Plan had been initiated by a group of students at Cal Poly San Luis Obispo. The Update included Housing, Community Design, Circulation, Noise, Open Space, Conservation, Public Facilities, and Safety elements. The draft document was completed in June 2013.

Lake County Regional Blueprint Plan (2010):

The Lake County Blueprint provides a vision and plan for growth in Lake County through 2030. The preferred "Balanced Growth" scenario emphasizes infill within existing community boundaries, including the redevelopment and revitalization of Lakeshore Drive as described in the Vision Task Force Report and subsequent Design Guidelines. This plan provides further detail with regards to potential infill and redevelopment opportunities while acknowledging that that the City's ability to consolidate parcels and guide this process is at least temporarily hindered by the 2011 statewide dissolution of Redevelopment Agencies.

Lake County Safe Routes to School Plan (2009):

The Safe Routes to School (SRTS) Plan identifies circulation improvements for pedestrians and bicyclists to improve safety around and encourage non-motorized transportation to and from school. While both of Clearlake's schools (Pomo Elementary School and Burns Valley School) are outside of the project study area of this plan, pedestrian and bicycle improvements to and around Lakeshore Drive can help to improve access.

Other Relevant Planning Documents:

In 1995 improvement plans were prepared for Lakeshore Drive between Olympic to the north and SR53 to the south by Coastland Engineering. These improvements were not implemented and subsequent planning initiatives provide better alternatives for the project area's improvements. However, they provide a useful starting point for assessing the "as-built" conditions of the roadway as well as quantities and infrastructure to inform future improvements.

City of Clearlake Zoning Ordinance:

The project area is currently zoned "C-2: Community Commercial" on the landside of Lakeshore and "C-3: Visitor Commercial" along the shore. The Vision Task Force Plan recommended revision of the uses permitted in each of these zones. Incorporation of these revisions into the zoning code will take place following adoption of the updated General Plan after completion of the Environmental Review. This current plan provides further guidance for future zoning amendments to encourage the continued revitalization of the project area.

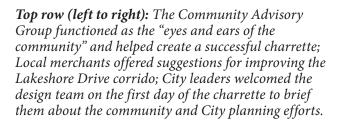
Introduction: Community Egagement











Right: Over 40 people attended the walking assessment to observe and discuss conditions with the design team.







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Bottom row (left to right): A leader of a previous visioning effort for Clearlake and Lakeshore Drive helps open the evening presentation following the walking assessment; Participants wrote down their vision for Lakeshore Drive in 20 years and top five values for the community.

Local Government Commission, Opticos Design, Inc., Nelson\Nygaard Consulting Associates, Inc.

Community Egagement

The design recommendations and potential projects in this plan stem largely from community input collected during a five-day design charrette held October 8 – 12, 2012 in Clearlake. A charrette is an intensive multi-day design process involving the public and a variety of stakeholders. The project was funded through a California Department of Transportation Community-Based Transportation Planning Grant received by the Lake County/City Area Planning Council (Lake APC) in partnership with the City of Clearlake and the non-profit Local Government Commission (LGC). Lake APC provided matching funds. Opticos Design, Inc. – a multi-disciplinary design firm – and Nelson\Nygaard Consulting Associates, Inc. – a transportation planning firm – joined with LGC to form the design team for this project.

With the guidance of a Technical Advisory Group and Community Advisory Group, the LGC organized a public process to provide input to this plan. The week-long planning process included focus group meetings, a walking assessment of the project area, an open studio, Technical Advisory Group meetings, presentations, guest speakers, hands-on planning exercises, and a community celebration. The charrette engaged business owners, property owners, youth from the community college, seniors, residents, city staff and elected officials, Lake APC staff, transit officials, and Caltrans staff.

Focus Groups

LGC and Lake APC staff met with nearly 40 local business owners at a Chamber of Commerce dinner on October 2 to discuss desired improvements to the Lakeshore Drive corridor. Business owners overwhelmingly desired a safe, walkable, well-lit downtown environment that capitalizes on views of and proximity to the lake. Multiple participants spoke about utilizing different treatments or "theme zones" along the corridor to provide a cohesive pedestrian environment that responds to the directional changes and variable right of way along the corridor.

Two additional focus groups were held for Technical Advisory Group members and the agencies and organizations involved in the Highland's Park Visitors' Center. Design concepts for the corridor and the parks along the corridor were discussed. Notes from the focus groups are included in the appendix.

Walking Assessment and Participatory Workshop

The public events kicked off on October 9 with a walking assessment that departed from Highlands Park and assessed the areas north and south along the corridor. Over 40 people participated in the walking assessment and identified safety issues and opportunities for the corridor. Common issues identified were:

- Lack of sidewalks, safe places to walk and bicycle
- Lack of safe crossings for pedestrians

February 2014 Introduction: Community Egagement

















- Space constraints for improvements due to narrow roadway sections and location of buildings
- Lack of separation between roadway and off-street parking
- Problems with visibility for motorists and pedestrians

Immediately following the walking assessment, a presentation and workshop were held at City Hall. Over 100 people attended and opening comments were provided by Mayor Joey Luiz. Irwin Kaplan, former Interim Planning Director and facilitator of the Vision Task Force Report, spoke about the vision process for Clearlake that began in 2006. LGC staff presented planning and design issues pertaining to the study area and asked community members to identify their top community values. Next, participants worked in groups at "design tables". They drew and wrote on maps of the study area and made recommendations for improving the Lakeshore corridor.

Open Studio

In the make-shift design studio across from Highlands Park and donated by David Hughes, the design team fleshed out concepts generated during the "design tables," conducted field checks, and vetted concepts with agency representatives. An open studio held October 10 brought approximately 50 to hear about the designs underway and to vet the recommendations. Representatives from Caltrans, Lake APC, Clearlake Police Department, California Highway Patrol, and other City of Clearlake staff attended a meeting at the design studio to further vet concepts.

During the City Council meeting on October 11, LGC staff briefed the public and City Council on the charrette process, with special acknowledgements for the robust citizen attendance at the workshops and open house.

Preliminary recommendations were presented to more than 130 community members during the closing night event on Friday, October 12. The recommendations are detailed in the following chapters of this report. The meeting adjourned to Austin Park for a community reception sponsored by the Clear Lake Chamber of Commerce and the City of Clearlake. Wine donated by Six Sigma and Vigilance Wineries, hors d'oeuvres, and music by David Neft added to the festive completion of the week's events.

Additional documentation from the community engagement process is included in the Appendix.



Middle row: Design table groups presented their concepts to the community; Open studio attendees packed the design studio to give input on designs in progress; The open studio also gave time for one-on-one discussions with the designers.

Bottom row: The closing meeting drew a record turnout of community members; The reception at Austin Park celebrated local wines, flavors, and community involvement.





















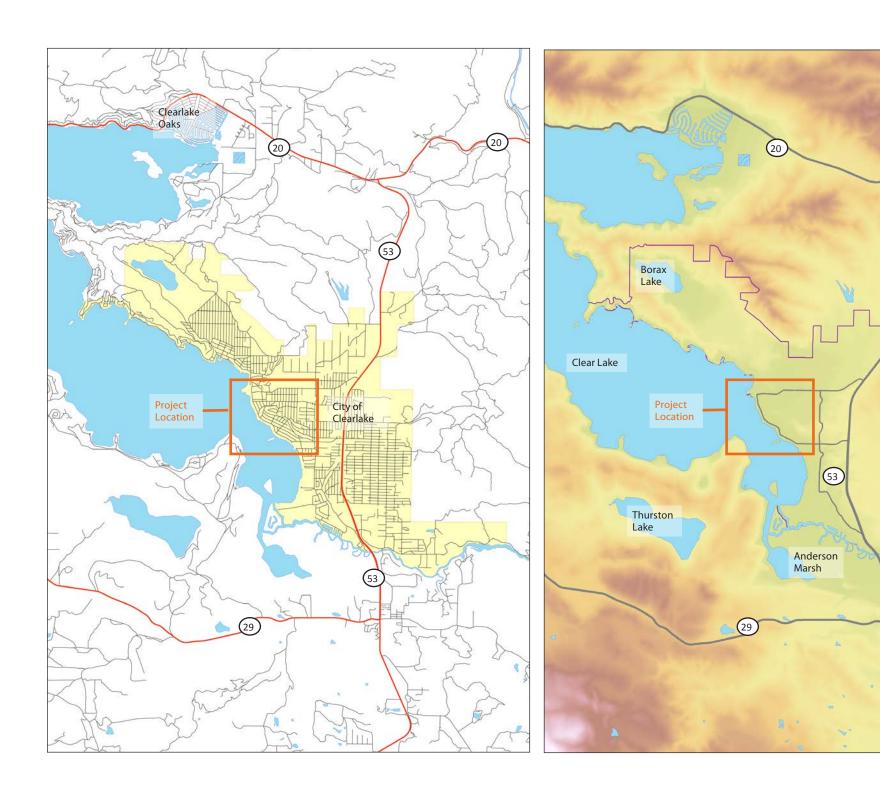
Top row (Left to right): The design team brainstorms improvements for Highlands Park; the community participates in a walking-audit, enlightening the design team as to the opportunities and challenges along Lakeshore Drive; during the walking assessment, participants mocked-up a curb extension to illustrate a potential intersection improvement.

Middle Row: A community member at the opening workshop shares his vision for a future Clearlake; another participant records what she values about Clearlake; a group of community members combine efforts to draw ideas concerning future Lakeshore Drive.

Bottom Row: Members of the design team prepare for boat rides to experience the City's shoreline from the perspective of lake users; a member of the design team sketches ideas from the community; an architect and a planner provide the design team with background from previous planning efforts.

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Project Area and the Community

Clearlake is located on the eastern shore of the lower arm of Clear Lake in central Lake County between the unincorporated communities of Lower Lake to the south and Clearlake Oaks to the north. Originally inhabited by Pomo Native Americans, it was settled in the early 20th century and became known as a resort destination along with other lakeside communities. Most properties along the corridor date from the 1970s. The community was incorporated in 1980.

The population of Clearlake is approximately 15,250 people according to the 2010 Census. A significant percentage of homes in the area (about 25% countywide) are "second" and/or vacation homes, contributing to seasonal (summer) increases in residents and visitors. Based on most recent Census data, the city skews toward older residents, with an above-average median age of 39.9 years, with nearly 44% over the age of 45. The median household income was reported as \$28,604 (less than half of the California average), with nearly a third of households below the poverty line. Up to 15% of households do not have a car or have no car present, underscoring the need for good pedestrian and bicycle facilities.

State Route 53 provides primary access to the community from SR29 and the Napa Valley to the south. Lakeshore Drive extends westerly from 40th Avenue (just west of SR 53 and east of the project area) for approximately 2.5 miles through central Clearlake, turning northwest, and merging with County Road 205 (Lakeshore Drive) along the lakeshore, northwest of the city.

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Lakeshore Drive

Lakeshore Drive provides one lane of travel in each direction through the project area on a relatively narrow right-of-way of 45 to 50 feet in width. There are areas with on-street parallel parking and areas of head-in off-street parking without separation between the shoulder and private parking spaces. Sidewalks are inconsistent on the east/land side of the roadway and are typically not present on the west/water side. It is common to see pedestrians and bicyclists traveling along the shoulder. Pedestrian facilities in general are substandard, with intermittent or absent sidewalks and wide driveways accessing individual properties.

The posted speed limit on Lakeshore Drive is 25 mph. There is one signalized intersection at the intersection with Old Highway 53. There are no other stop controls for vehicles traveling on Lakeshore Drive, but side streets have stop signs for motorists crossing or turning onto the the roadway. 2012 traffic counts indicate a volume of about 7,000 – 8,000 average daily vehicle trips (ADT) per day.

The project area includes predominantly commercial and service-oriented uses with some clusters of residential properties. It presents an eclectic mix of commercial and service establishments, including restaurants, vacation bungalows, markets, medical and personal offices, and specialty retail stores. Important community spaces engage the project area, which help contribute to the corridor's identity and stimulate activity, including Austin Park and Clearlake City Hall at the northern end, Highlands Park in the central portion, and Red Bud Park and Thompson Harbor Marina at the corridor's southern end.

The project area is outlined in red in the aerial image shown on the left. Lakeshore Drive, the City of Clearlake's historic downtown, is bookended by Austin Park and City Hall to the north, and Redbud Park to the south.

Key Issues and Opportunities

There are tremendous assets and opportunities associated with Lakeshore Drive and its surroundings, including the waterfront, three parks, and a variety of local businesses and services. At the same time, as residents and stakeholders noted during meetings, walks, workshops and interaction with the design team at the studio, there are a number of significant challenges and constraints to address in order to achieve the community's goals.

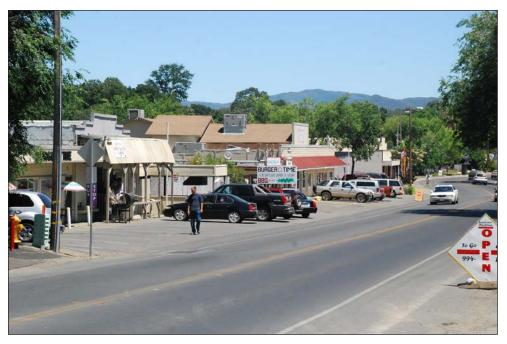
Need for Cohesive Identity

Although Lakeshore Drive offers many amenities, and frames beautiful and memorable views of the Lake, the street's current organization does not actively encourage residents and visitors to patronize its businesses. On many levels, Lakeshore lacks a cohesive identity which could help to make it more attractive and appealing. Addressing this problem will require coordinated efforts to improve the public and private realms along the street. Specific issues include:

- The checkmarked pattern of commercial buildings and vacant spaces creates a fragmented pedestrian environment where residents and visitors might otherwise be encouraged to stroll between destinations.
- The use and application of pedestrian-scaled elements, such as storefront windows, building canopies, and pedestrian-scaled signage is inconsistent.
- Public and private signs on Lakeshore Drive vary considerably. Better coordinated signage could improve corridor cohesiveness, and additional signage could help visitors locate important local destinations. Wayfinding signage to existing destinations does exist, but is small and very difficult to see from a passing automobile. New gateway treatments at both ends of the roadway (at Olympic and Old Highway 53) would also encourage a more cohesive identity for residents and visitors and reinforce awareness of entry into a special part of the City.
- There appears to be ample parking supply when on-street (or immediately off-street) and available parking in lots is combined. However available parking is not clearly delineated or managed and lacks clear signage. Poor lighting may discourage nighttime use. The narrowness of Lakeshore Drive may also discourage residents and visitors from parking on-street, because of perceived o real difficulty entering and exiting vehicles when parked along the corridor.

Lack of Pedestrian, Bicycle and Transit Infrastructure

Lakeshore Drive's narrow right of way contributes to an intimate scale and character that sets it apart from other places, and facilitates connectivity and access between the landside and Clear Lake. But it poses constraints on the amount of space available for pedestrian and bicycle infrastructure. As mentioned previously, sidewalks on the eastern/land side of the roadway are intermittent







and narrow, while sidewalks on the western/water side are largely absent. When present, sidewalks are often disrupted by street signs, posts, and curb cuts. There are no marked crosswalks across sidestreets that intersect with Lakeshore Drive. Most existing crosswalks on Lakehshore Drive are difficult for drivers to see. Groups of buildings are set back behind parking areas with large curb cuts and little separation from the shoulder, producing conflicts for pedestrians and gaps that discourage walkability. There are no marked bicycle lanes on Lakeshore. It is common to see bicyclists and pedestrians sharing the shoulder and/or the parking lane

Lakeshore Drive is served by three transit routes with high ridership. Currently, bus stop amenities, such as benches, shelters, landing pads and signag are limited. Buses often must block the shoulder used by pedestrians and bicyclists in order to drop off and pick up riders.

The corridor also lacks other streetscape elements that would contribute to







Above: Typical pedestrian, bicycle and transit condtions on Lakeshore Drive.

Left: Wayfinding signage on Olympic Drive at Lakeshore Drive.

cautious motor speeds and comfort, safety and sense of security for pedestrians and bicyclists, such as pedestrian-scale lighting, benches and sheltered places to sit. Landscaping is inconsistent and sparse, with very few street trees or other plantings to accentuate the corridor, provide shade, and contribute to improved air and water quality.

Other Infrastructure Issues

Other infrastructure issues remain which hinder redevelopment and reinvestment opportunities within the private realm. These include:

- Flood Plains. Multiple properties along Lakeshore between Howard Avenue and Olympic Drive lie within a 100-year flood plain.
- Wastewater capacity. At the time of writing the Southeast Regional Wastewater System that collects and treats wastewater in Clearlake needed upgrades to keep up with capacity challenges (both collection and pumping) at several key locations within the system. Planned upgrades in December of 2012 should reduce impacts and lessen the chance for wastewater spills. While the existing system (according to the 2005 Master Plan) has capacity for 14,641 connections, future development or intensification along Lakeshore may require additional improvements or upgrades to the system.
- Geology. Clearlake is also in a sensitive geological area that may impede development in certain locations along the corridor. The Clear Lake region sits over the Clear Lake Volcanic Field.

Deteriorated Properties

Community members and stakeholders cite that the eclectic mix of local businesses and restaurants along Lakeshore is a great amenity that contributes to the unique identity of the community. At the same time however, the current built environment makes continued economic development and revitalization difficult. Many structures appear to be at or near the end of their useable lifespan and require considerable rehabilitation to raise rents or stimulate additional investment. Other properties are dilapidated or vacant. Individual parcels are small and have constrained access, and existing development standards and requirements do not necessarily encourage redevelopment.

Large portions of some properties adjacent to the corridor are devoted to parking and therefore underutilized. From observation it would appear that most off-street parking in Clearlake is barely occupied, most of the time. The areas currently dedicated to parking could be used to provide more business area (e.g. restaurant seating, display area) or public amenities such as planters or seating. One of the challenges raised during stakeholder interviews and public workshops is that existing parking requirements hinder the turnover of businesses along Lakeshore Drive.



The public and private sidewalks fail to connect in the photo above. The public sidewalk ends and gives way to unlimited driveway access with no defined space for pedestrians.



Deteriorated pavement where the roadway shoulder meets underutilized private land.

The dissolution of Redevelopment Agencies in 2011 creates another challenge for the City, as traditional tools of land consolidation and tax-increment financing were at the time of writing simply not possible. For this reason this plan seeks to emphasize ways in which public realm improvements (such as improved pedestrian and bicycle amenities) can stimulate private investment in properties, and ways in which regulatory barriers to development (such as existing parking standards) can be reconsidered to incentivize positive private development activity.



There are numerous vacant or undertilized properties on Lakeshore Drive.



A high visibility crosswalk with lateral striping and signage is shown above on Lakeshore Drive at Austin Park. These crosswalks are more visible to motorists than two parallel lines. Added pedestrians signs also clarify to motorists precisely where to expect pedestrians and courage them to yield. Enhanced crosswalks at other locations on Lakeshore Drive would help pedestrians safely cross the street.



Above: Mulitple properties on the corridor lie within the hundred year flood plain as shown in the map. **Right, top and bottom:** Photos of Clear Lake, the shorline, wildlife and vegetation in the vicinity of the City of Clearlake.









Clear Lake is a unique amenity and is a principal reason the City of Clearlake exists. In recent years it has been subject to exceptionally high quantities of bluegreen algae, which have impacted its attractiveness as a destination. Clear Lake is a eutrophic lake that has likely always had ideal conditions encouraging the growth of these organisms. Research does demonstrate, however, that human activities around the lake – including erosion and sediment runoff – have contributed to high quantities of phosphorous and iron that can encourage algae growth. While the improvement of Clear Lake is beyond the scope of any single community, the City can do its part to minimize sediment intrusion and runoff from development in Clearlake through improved stormwater management facilities, which can be coordinated with public infrastructure improvements.









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Lakeshore Drive Downtown Corridor Plan City of Clearlake and Lake APC

Existing Framework

Lakeshore Drive is characterized by its serpentine quality, and can be described as centering on alternating nodes of commercial and civic function. The City's parks and open spaces ares prominent features with visual and/or direct access to the lake, and occcur at both ends and the center of the corridor. They are in turn accented by their proximity to groups or small clusters of of local businesses. Viewed together, both the businesses and the parks provide a foundation to build upon to make Lakeshore Drive a highly walkable corridor.

Parks and Open Space

The City of Clearlake has three lakeside parks that provide a diverse series of amenities to residents and visitors.

Austin Park

Austin Park performs mulitple civic and community functions. City Hall and the police station lie across the street on the north side of the park. Burns Valley Elementary School borders it on the east. To the south is one of the commercial centers along Lakeshore Drive, and to the west is a lakeside park with a children's playground and beach. Austin Park also includes a gazebo and skate park and is home to many city gatherings, including but not limited to the Fourth of July festivities and Farmer's Market.

Highlands Park

Located in the middle of the study area, Highlands Park today contains benches and picnic tables along the lake side. A small parking lot and on-street parking provide easy access for those arriving by car. The City has taken action to renovate the park. In 2012 it was expanded to include an adjacent house that will be the future home of the Chamber of Commerce.

Red Bud Park and Thompson Harbor Marina

The park and marina serve as an important regional access point to the lake and is home to several fishing tournaments year round. The park provides space for organized sports activities. In January 2013, the City of Clearlake and the South Shore Little League (SSLL) entered into a ten year lease agreement for the ball fields. The SSLL has subsequently made significant improvements to the ball field facilities with the help of community volunteers.

Parks and civic space anchor both ends and the center of the Lakeshore Drive.





Buildings and Uses Along the Corridor

The built form of Lakeshore Drive varies along the corridor, with portions developed and focused on retail and commercial uses, and others oriented toward residential and lodging uses. This existing built form and land use pattern leads to the impression of the corridor not as one continuous place or corridor, but as a series of places along a corridor, with unique characteristics for each each area of concentrated uses and activity.

Civic, commercial and visitor lodging uses are shown on the diagram.



The red circles in the diagram above show the area within a 1/4 mile radius or distance from centers of commercial activity along the corridor. 1/4 mile or 5 minute walk is generally considered the distance most people are willing to routinely walk to destinations.

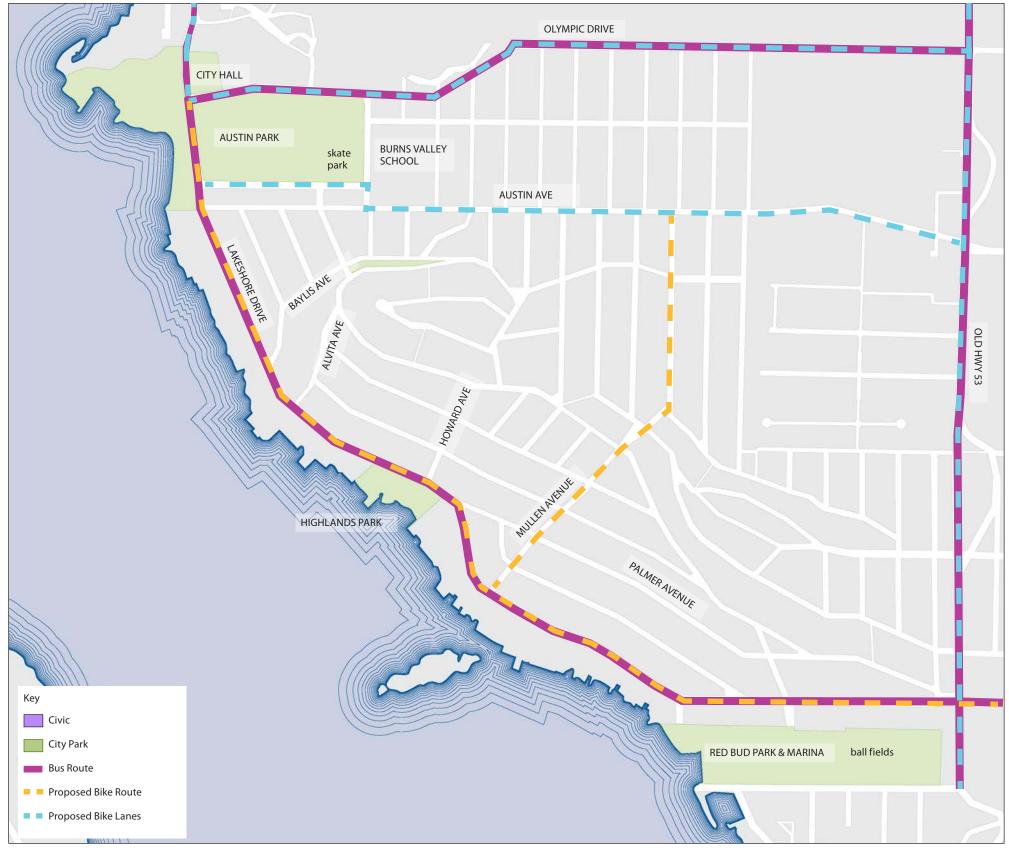
Walkshed from Commercial Areas and Parks

Along the corridor there are a series of commercial nodes. These nodes are located within a short 5 minute walk of the existing parks along the corridor. The close proximity of the retail and park uses provides opportunities for the community to capitalize on lake-based tourism by focusing on facilitating concentrated nodes of diverse activity.



The green circles in the diagram above show the area within a 1/4 mile radius or distance from the parks along the corridor. 1/4 mile or 5 minute walk is generally considered the distance most people are willing to routinely walk to destinations.

February 2014 Existing Framework: Bicycle and Transit Routes



Bicycle and Transit Routes

The 2011 Lake County Regional Transportation Bikeway Plan identifies the Lakeshore Drive corridor from Olympic Drive to Old Highway 53 as a proposed Class III bikeway, a shared roadway designated with a bike route sign. The plan notes the community expressed interest in improving the transportation infrastructure and improving safety along this corridor, including bicycle facilities. Strategies for including a Class II facility on Lakeshore Drive, striped bike lanes in both directions for enhanced bicycle safety and comfort, are presented in the next chapter.

Lake Transit provides service to Clearlake. The City is currently served by bus routes 5 and 6 from approximately 6:00 a.m. until 7:00 p.m.. Additional routes operate along Lakeshore Drive, with one route connecting Clearlake with North Shore communities and Lakeport. Expansion of services went into effect in October, 2013, with Austin Park becoming a transfer location. Maps and timetables for the expansion are included in the appendix of this document.



Local Government Commission, Opticos Design, Inc., Nelson\Nygaard Consulting Associates, Inc.

Lakeshore Drive Downtown Corridor Plan City of Clearlake and Lake APC

Design Proposals

Through the community engagement and design development process, the design team explored a variety of options to address deficiencies and enhance the existing assets of the Lakeshore Drive corridor. The proposals that follow provide direction for the City and the community to use and build upon in efforts to revitalize Lakeshore Drive as a high quality place for residents and first rate attraction for visitors.

Overall Corridor

The proposed designs aim to build upon and enhance the existing foci of parks and commercial nodes, helping the community establish distinctive places or experiences along the corridor. Proposals are set upon a framework of thoroughfare designs to establish a complete street environment, that is, a street that balances all modes of transportation and safely accommodates users of all ages and abilities. These changes in turn are expected to facilitate a positive experience for visitors to Clearlake, and attract more visitation and associated benefits in the future.

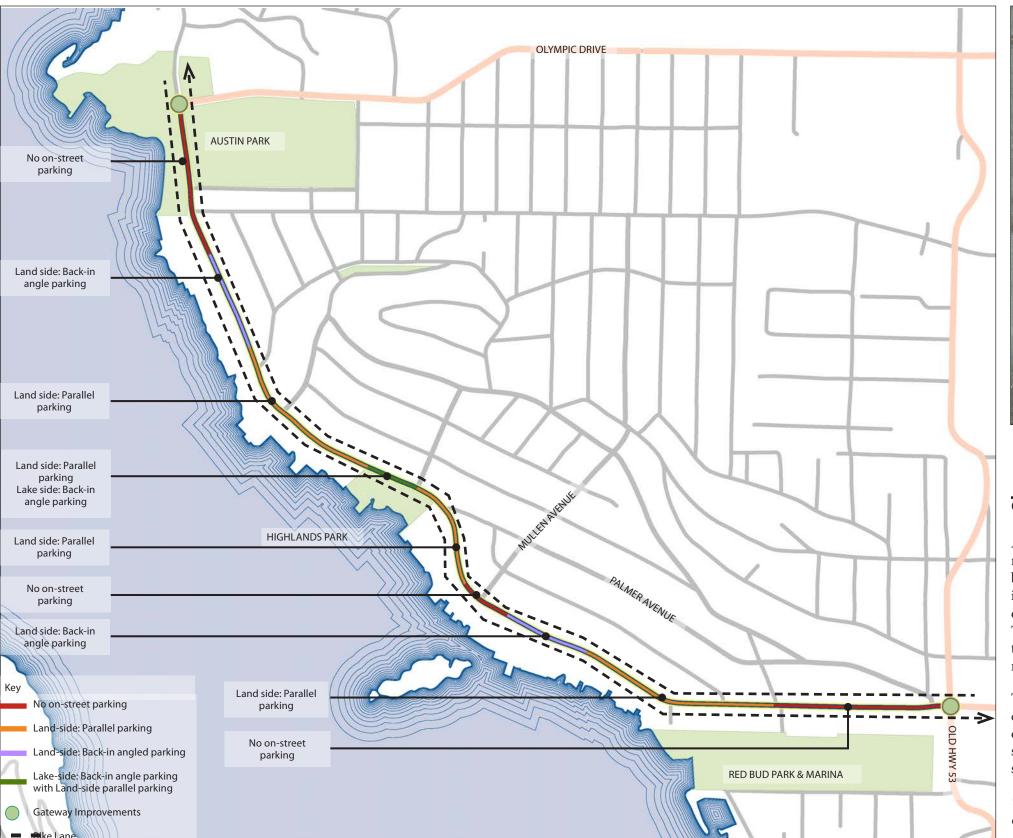
Guiding Principles

During the charette, the design team identified certain general principles to guide their efforts in creating a cohesive design approach. The guiding principles that emerged are centered on four goals:

- 1. To first, enhance and build upon the existing identity of Clearlake, namely Lakeshore Drive's foci of lakeside parks and commercial nodes.
- Secondly, to suggest various ways to complete the corridor of Lakeshore
 Drive: through enhanced bicycle facilities, a continuous and appealing
 pedestrian environment, convenient and efficient parking strategies, transit
 improvements, and improved safety for all modes of transportation and users.
- 3. Thirdly, to design improvements according to the perspective of a visitor, in hopes of making Clearlake tourist-friendly: through the use of inviting corridor gateways, successful and clear signage, and way-finding features.
- 4. Lastly, to suggest ways to improve the symbiotic relationship of Lakeshore Drive to Clear Lake. This should be thought about in terms of capitalizing or creating interactions between street and water, by protecting or enhancing viewsheds of Clear Lake and Mt. Konocti, and by facilitating waterfront improvements in general.

 $Illustrative\ plan\ for\ Lakehshore\ Drive.$

February 2014 Design Proposals: Complete Street Framework





Complete Street Framework

As noted previously, Lakeshore Drive is set within a relatively narrow public right of way. Moreover, building placement varies along the corridor, with some buildings set at or near the right-of-way edge, others set further back with parking in front with little or no separation between the parking and road shoulder, and others set further back behind more formally structured off-street parking lots. The constrained right-of-way, combined with varying building placement, means that a uniform solution for accommodating bicyclists, pedestrians and parking for motorists cannot be used for the entire length of the corridor.

This plan provides several cross section designs that respond to changing constraints along the corridor. Each cross section includes bicycle lanes in both directions, sidewalks on both sides of the street, and alternating patterns of onstreet parking. This requires removal of some of the existing on-street parking supply, but the parking demand along most of the corridor is relatively low.

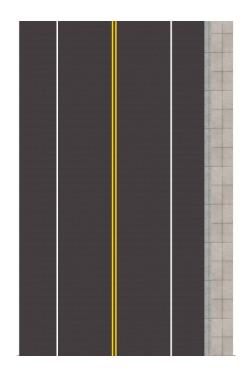
The diagram shows the proposed strategy for placement and types of parking along the length of Lakeshore

4.2

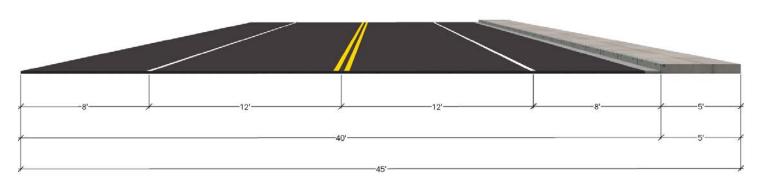
Street Design Options for Lakeshore Drive

Community input at the charrette focused on the need to maintain and enhance Lakeshore Drive as a slow-speed, scenic corridor with sidewalks and bicycle lanes, easy access to businesses, the shoreline and public spaces, and pedestrian-friendly building frontage. The public right-of-way on the Lakeshore Drive corridor is 50 feet wide and the location of building frontage and parking varies along the length of the corridor. The design team developed street design options at the charrette for continuous bicycle lanes, establishing continuous sidewalks on both sides of the corridor over time, and organizing and coordinating on-street and off-street parking.

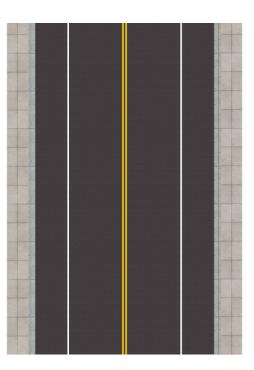
The diagrams on the right illustrate typical existing conditions.



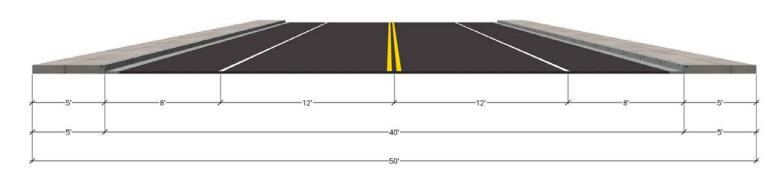
Existing Conditions: Sidewalk on Landside



Above: while the precise dimensions of the roadway varies, the cross section above illustrates the typical widths of travel lanes and shoulders with a sidwalk on one side of the street.



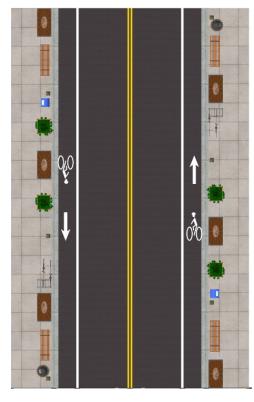
Existing Conditions: Sidewalk on Lakeside and Landside

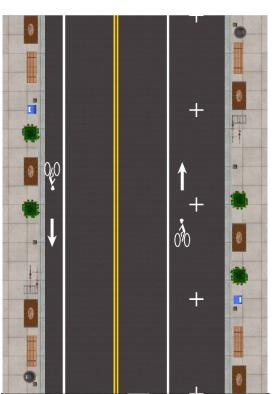


Above: the cross section above illustrates typical conditions with a sidwalk on both sides of the street.

The diagrams on the right show options for Lakeshore Drive with bicycle lanes and sidewalks on both sides of the street. In areas with no on-street parking, there would be enough space within the right-of-way to include wider sidewalks than currently exist. While a 5-foot sidewalk would meet the minimum width required to meet minimum ADA standards, wider sidewalks are desirable for creating pedestrian-friendly environments in higher use commercial and civic activity areas.

In areas where on-street parking is needed, wider sidewalks would likely require coordination and negotiation with property owners to provide the needed space. Narrower, 5-foot sidewalks on both sides of the street could be accommodated within the current 50-foot right of way, but ultimately, wider sidewalks would be the preferred long term option.





Option 1:
Wider sidewalks and Bicycle Lanes, No On-street Parking

Option 2: Wider sidewalks, Bicycle Lanes and On-Street Parking on one side



Options for Areas with Direct Access Head-in Parking

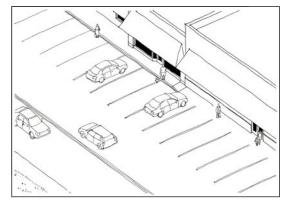
Along the portions of Lakeshore Drive that have existing head in parking, two options are proposed for maintaining off-street parking with direct access off of Lakeshore Drive that would improvie safety and character. A third option is shown that substitutes head-in parking with on-street parallel parking on both sides of the street and enhanced sidewalks to support adjacent uses.

All of these options would require coordination between the City and property owners.

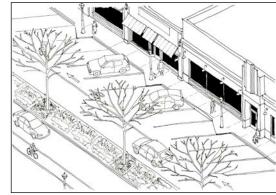


Photo of head-in parking on Lakeshore Drive.

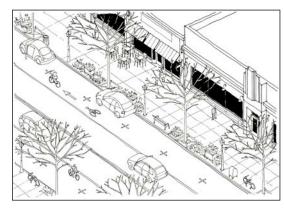
Existing condition



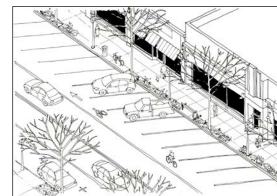
Option 1: Back-in Angled Parking with Median

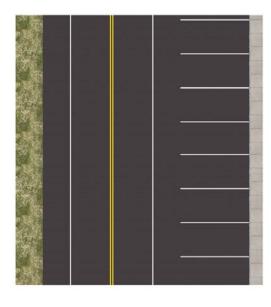


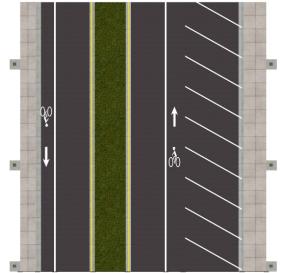
Option 2: Parallel Parking and wide sidewalks on Both Sides

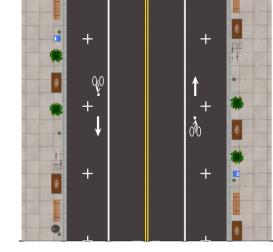


Option 3: Back-in Angled Parking (Landside) with Parallel Parking (Lakeside)

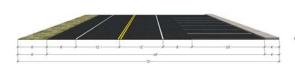


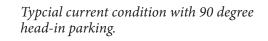


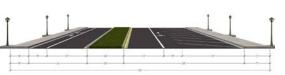












The cross-section above illustrates the conversion of head-in parking to back-in angle parking combined with the addition of a median. The median would offer opportunities for landscaping, signage and would provide a refuge area for pedestrians crossing the street.

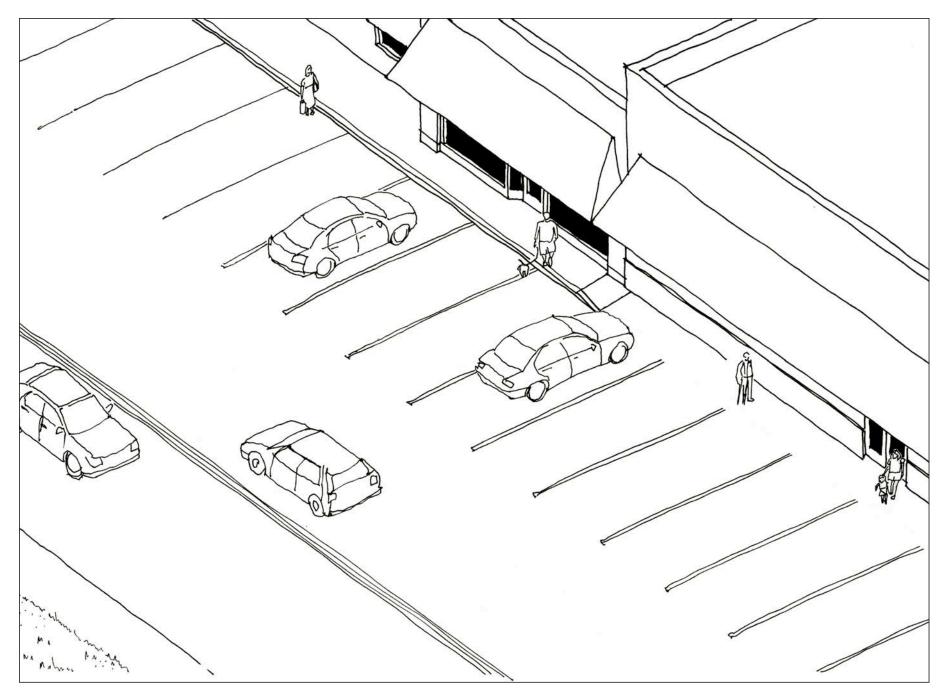


The diagram above shows the conversion of areas with head-in parking to enhanced sidewalks with on-street parallel parking on both sides of the street.

The option above shows the conversion of areas with head-in parking to back-in angled

parking with on-street parallel parking on the

oppossite side of the street.





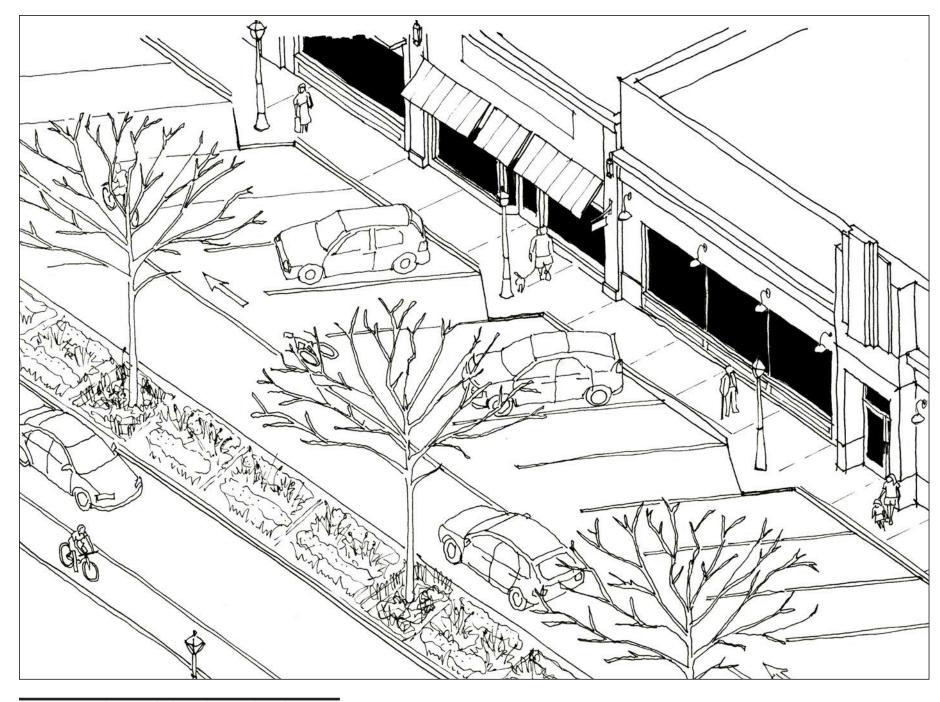
Under the current condition of head-in parking along Lakeshore Drive, there are no curbs, gutters, sidewalks or access lanes between the road and parking spaces, so motorists must back out directly into the travel lane toward oncoming traffic. In addition, motorists backing out have difficulty detecting bicyclists in the roadway or pedestrians using the shoulder in the absence of sidewalks.



Existing Right of Way

Cross section and plan view of current typical condition.

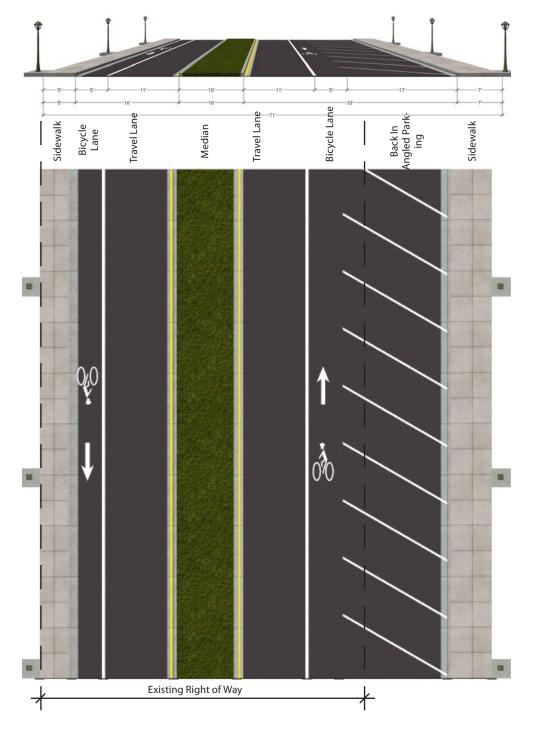
Photo of head-in parking on Lakeshore Drive.



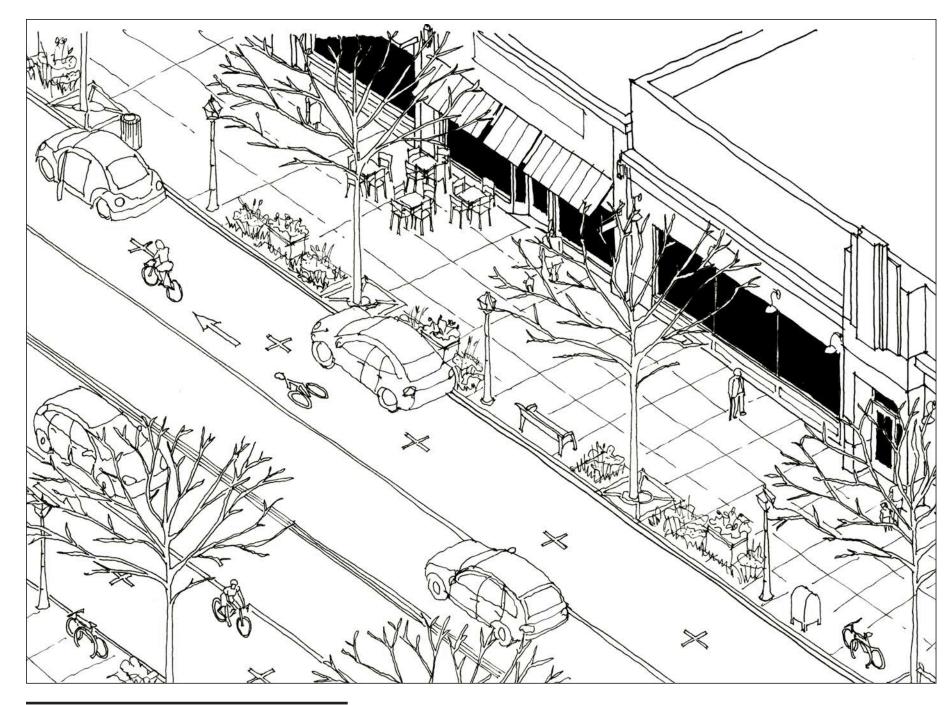
Option 1: Back-in Angled Parking with Median

Option 1 offers increased safety, with the combination of back-in angled parking and center median.

Motorists would face traffic when departing spaces, and the median would encourage drivers to slow down. The median would also provide space for landscaping, enhancing the experience of the corridor.

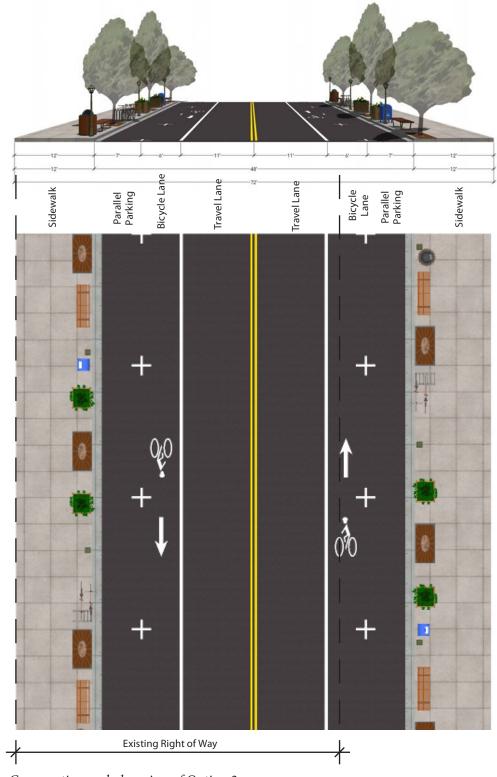


Cross section and plan view of Option 1.

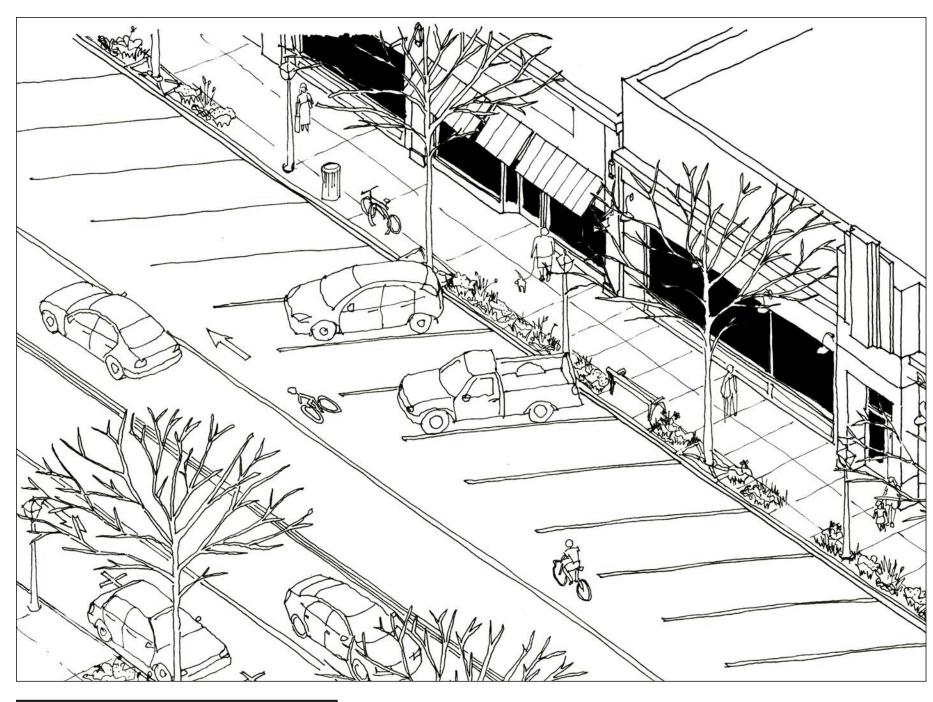


Option 2: Parallel Parking on Both Sides

Option 2 offers on-street parking on both the landside and lakeside, with the possiblity for ample sidewalks on both sides of the corridor, further enhancing the pedestian experience. Within the sidewalk, the City and/or property owners could invest in street foliage and street furniture; retail would have space to create outdoor terraces, sidewalk sales, and outdoor seating.

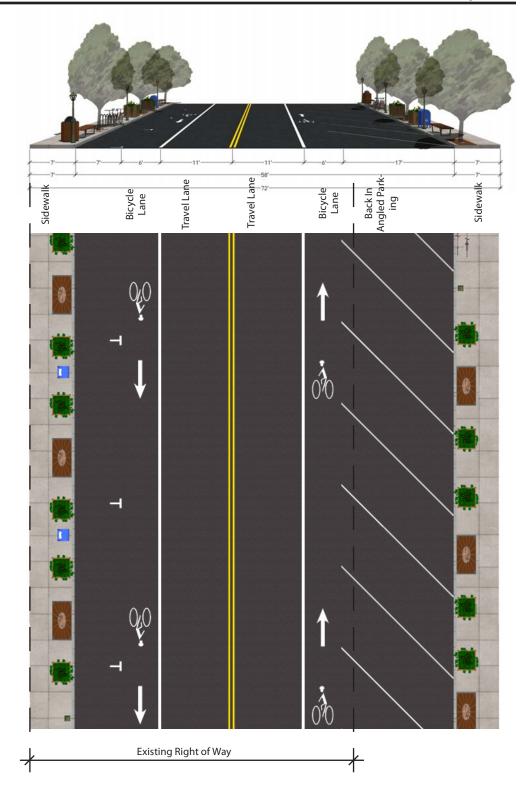


Cross section and plan view of Option 2.



Option 3: Back-in Angled Parking with Parallel Parking

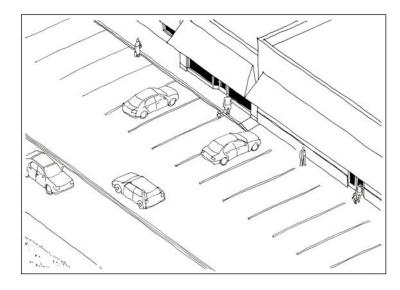
Option 3 combines the benefits of on-street parking on both sides of Lakeshore Drive, with the provision of back-in angled parking near storefronts. The 7' sidewalks still allow room to enhance the aesthetics of the corridor with small-scale landscape and street furniture amenities.



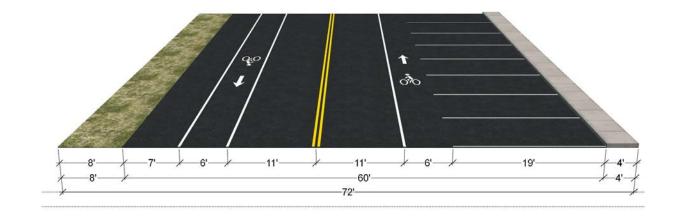
Cross section and plan view of Option 3.

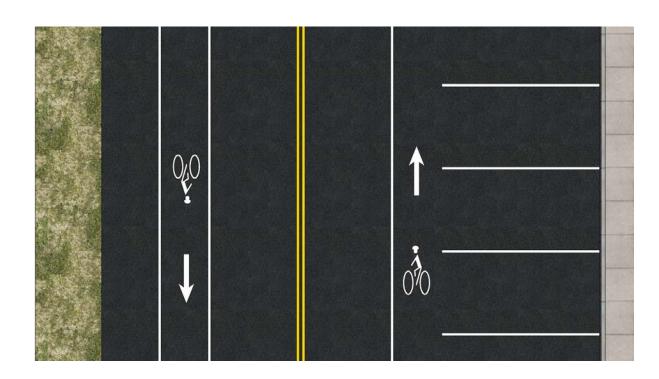
Short-term Option: Bicycle lanes with No Reconstruction

Recognizing that it will take time and coordination between the City and private property owners to implement back-in angled parking in areas throughout the corridor, a shorter-term option is shown in which the existing 60 feet that includes the paved roadway and the parking area could be restriped with no reconstruction.



Typcial current condition with 90 degree head-in parking.





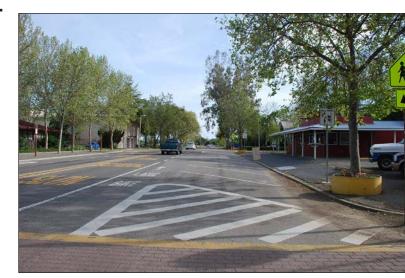
Benefits of Back-in Angled Parking

Back-in angled parking has emerged as an alternative to head-in angled parking. The benefits of back-in angled parking include:

- Motorists face instead of back out toward moving traffic as they depart from spaces.
- Since motorist are facing traffic when pulling out, visibility and sight distance between motorists and between motorists and bicyclists are improved compared to parallel parking or front-in angled parking.
- With back-in angled parking, children and other occupants unload toward the sidewalk instead of the street. Trunks, rear doors, hatches and truck beds are accessible away from moving traffic.
- The back-in maneuver is simpler than a parallel parking maneuver, requiring two instead of three movements. Signs are installed to show motorists the steps required.

A number of places have installed this type of parking, including, but not limited to, Washington D.C., Seattle (over 200 blocks for more than 30 years), Salt Lake City, New York City, Wilmington, Delaware, Pottstown, Pennsylvania, Kansas City (Mo.) and Sacramento, San Francisco, Ventura, Chico, Solana Beach, and Esparto (State Route 16, Yolo County) in California.

Installation and conversion to back-in angled parking requires careful site planning to ensure that the car stops before encroaching into the pedestrian space. As a general rule, back-in angled parking should be installed on side streets first. It may also be considered on non-arterial streets where speeding is a problem and increased parking is a need.



Back-in angled parking adjacent to a bicycle lane on SR 16/Yolo Avenue in Esparto, California. Yolo Avenue serves as the town main Street.



Back-in angled parking in Sacramento.



Sign directs motorists how to use back-in angled parking.



The photo shows how back-in angled parking can improve the visibility of passing bicyclists to motorists.



The photo shows how back-in angled parking directs passengers that are unloading toward the safety of the sidewalk.

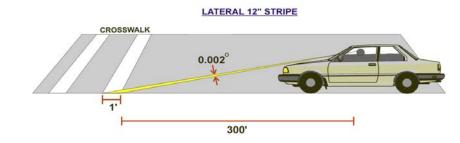
Intersection and Crosswalk Improvements

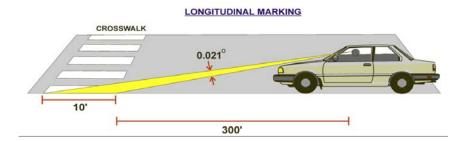
Most marked crosswalks in Clearlake are marked with two transverse lines, and many occur at unsignalized or uncontrolled locations. The problem at uncontrolled locations is that although these basic markings are quite visible to pedestrians they can be hard for motorists to see, especially if they are traveling around the speed limit. Depending on the location and local road culture, this marking configuration can produce low rates of motorists yielding to pedestrians.

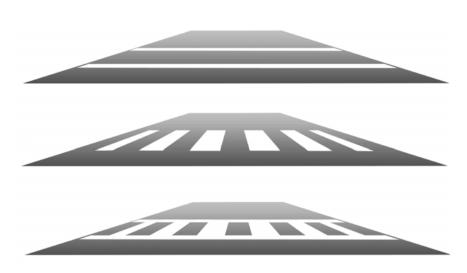
Two treatments that improve pedestrian safety and lower vehicle speeds are high-visibility crosswalks and curb extensions. Curb extensions physically narrow the street, which encourages motorists to slow down. With lower speeds and pedestrians starting their crossing where they are not hidden by parked cars, it is much easier for motorists to see pedestrians. Curb extensions also reduce pedestrian crossing distance, which is safer for pedestrians and reduces delay for motorists. Longitudinal lines as shown in the illustrations on the right are recommended as high-visibility markings, requiring less maintenance than conventional transverse lines if the longitudinal markings are carefully aligned to avoid the wheel paths of vehicles.

High-visibility crosswalks and curb extensions would work well at most places along Lakeshore Drive where the City wishes to improve pedestrian accessibility. Curb extensions might also be used to signal the more pedestrian-oriented nature of portions of the corridor.

High Visibility Crosswalks







Crosswalk striping patterns with lines longitudinal to the roadway are more visible to approaching motorists than the two transverse lines used on many marked crosswalks. High visibility patterns are especially beneficial at uncontrolled crossing locations (i.e., where there are no stops signs or traffic signals requiring vehicles to stop).

Curb Extensions





Curb extensions encourage slow vehicle turning movements, shorten pedestrian crossing distances, improve visibility between pedestrians and mototists, provide protection for cars parked on the street, and can provide added space for lighting, landscaping, signage and furnishings.

Design Proposals: Transit Improvements

Transit Improvements

The following recommendations are based on a review of documents provided by Lake Transit. The consultant team evaluated the 2013 schedule changes, and a 2013 overview of downtown Clearlake bus stops.

Stop Spacing

Most of the stops are roughly ¼-mile apart, which is the recommended distance that best balances pedestrian access against transit efficiency and tends to minimize travel times for the greatest number of users. The exception is the spacing between the stops at Howard and Golf. Eastbound there is only one stop at Java Express, which is too close to Golf and too far from Howard. Westbound there are two stops, one at Java Express and one at Burger Time. Here the spacing is slightly too dense for optimal transit efficiency. Lake Transit might consider relocating the eastbound stop to Williams Jewelry on the south side of Lakeshore Drive, as this would put the stop roughly equidistant from the stops on either side. Lake Transit might also consider consolidating the two westbound stops into a single stop outside One Stop Automotive.

Stop Amenities

Lake Transit has identified several places to make access improvements for passengers. Their focus on providing concrete landing pads to accommodate wheelchair loading/unloading is particularly welcome. These landing pads should ideally be connected by a sidewalk to the nearest crosswalk – for example the eastbound stop at Nott's Liquor (shown at the top) has neither a sidewalk nor a landing pad.

There are no crosswalks between Ball Park Road and Mullen Avenue. Lake Transit and the City might consider installing a mid-block crosswalk adjacent to the Java Express/Burger Time stops (or the eventual location of a consolidated stop, recommended above), because convenient pedestrian access to transit stops is critical – without nearby marked crossings passengers will often cross directly at the stop anyway.

Lake Transit buses are equipped with bicycle racks, so having bicycle parking along the corridor for people arriving with their bikes via Lake Transit would further encourage bicycle use and accommodate bicyclists. Installation of bicycle racks or metal bicycle lockers near bus stops should be considered.

Given the financial challenges that public agencies are contending with, improvements to stop amenities should be prioritized at the most popular boarding locations. The ridership information provided by Lake Transit suggests that the greatest number of riders board at Austin, Emory and Howard. However, the ridership survey was carried out in 2003 and a new survey should be carried out if possible, before investing in infrastructure improvements.



Installation of landing pads and sidewalks near crosswalks, such as this location on Lakeshore Drive would greatly improve access to transit and promote increased ridership.



Bus shelter with a wheelchair accessible access ramp on Lakeshore Drive, east of Old Highway 53.



Bus stop with concrete pad and bench near a crosswalk at Austin Park.



A high quality iconic bus shelter, such as the one shown above, could be considered for one or more key locations on Lakeshore Drive, such as Austin Park, which serves as a transfer point for bus routes in Clearlake.

February 2014



Lakeshore Drive as it exists today. Building placement and relationship to the street varies widely along the corridor.

Sidewalks and Street Frontage

As noted previously, building placement and frontage conditions vary widely along Lakeshore Drive. The wide variation in building setbacks, absence of demarcated pedestrian space, and automobile-oriented frontage produce areas of ambiguous space along the corridor. The proposed street designs are intended to bring patterns of consistency to the ad hoc relationship between buildings and storefronts with the sidewalk and roadway.

To help Clearlake regain a true and unique sense of place, the city should encourage business owners to invest in small projects that improve their building's relationship to the corridor, or street frontage. In the example on the right, the completion of the sidewalk, and an addition of a low landscape wall helps to give Lakeshore Drive an edge, while providing a place for landscaping and comfortable interaction with others. A 'no-man's land' has become a place to build community.

Other ideas for simple improvements to street frontage can include pedestrianoriented signage and upgrades to building facades (including as simple as the addition of coordinated canvas awnings and light fixtures). This will not only improve the pedestrian experience, but will enhance the retail tenant's environment and attract business.



Above: There are many ways to improve a building's relationship to the street. The example shows how the area in the photo above left could be improved with sidewalks and low landscaping walls, providing both a space for greenery and an impromtu meeting bench.

Design Proposals: Sidewalks and Street Frontage

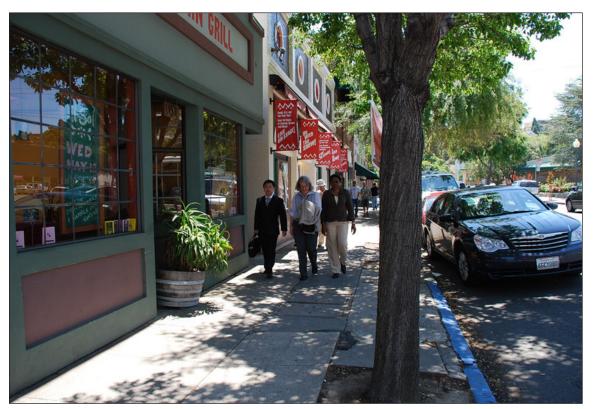
The proposed street cross sections include the provision of sidewalks on Lakeshore Drive. Sidewalks are generally needed on both sides of all urban streets. The American Association of State Highway and Transportation Officials (AASHTO) policy on highway and street design states "sidewalks are integral parts of city streets." Research by the Federal Highway Administration shows that the presence of sidewalks on both sides of the street is related to significant reductions in "walking along roadway" pedestrian crashes compared to locations without sidewalks or walkways. Reductions of 50 to 90 percent of these types of pedestrian crashes have been found in the research.

The sidewalk widths in the options shown on the preceding pages range from 7 to 12 feet. 5 feet is necessary for two people to walk comfortably side-by-side and allow ease of passage by people using canes, wheelchairs, or other mobility assistance devices. Where sidewalks are directly adjacent to the curb, a 6-foot minimum width is preferred to allow more space between pedestrians and the roadway. In areas of higher pedestrian use on Lakeshore Drive, or where higher use is desired, sidewalks should be wider whereever possible.

Wider sidewalks on Lakeshore Drive create opportunities for providing buffer space between the street and sidewalk. Streetlights, landscaping, signs, bicycle racks and other furninshings can be placed in the buffer zone where they can serve pedestrians without obstructing the walkway and provide additional framing and enclosure to both the street and the walking environment. Wider sidewalks would also create opportunities for enhanced bus shelters, outdoor eating areas and other sidewalk activities to support local businesses, social interaction and tourism.

Above Right: The photo of Main Street in Kelseyville shows how the sidewalk can be understood and organized as zones. American Disability Act (ADA) standards require that a minimum of 48 inches, or 4 feet, be maintained as an unobstructed walkway. Below Right: This photo of a street in Point Richmond, California, shows how an interesting façade can make a narrow sidewalk feel wider.







Outdoor seating areas such as this one in Point Richmond, California help activate the sidewalk. The City could pass an ordinance to permit outdoor eating service on sidewalks adjacent to food establishments as long as encroachments do not obstruct the pedestrian travel way.







Businesses have taken advantage of Clearlake's favorable climate for outdoor eating areas as shown in the photos above and the left.

February 2014

Design Proposals: Unviersal Access Design

Unviersal Access Design

Lakeshore Drive improvements need to be designed with users of all abilities in mind. The "Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (July 26, 2011)," issued by the U. S. Access Board, presents the latest guidance for providing equal access to people with disabilities.

The following accessible design features are recommended as corridor renovations are implemented. Refer to the City of Clearlake ADA Self-evaluation and Transition Plan (October 2013) for a comprehensive report designed to assist the City to identify policy, program and physical barriers to accessibility and to develop barrier removal solutions that will facilitate the opportunity of access to all individuals.

Sidewalks and Walkways

Walkways and crossings should be as direct, continuous, and level as possible, with smooth surfaces that accommodate people with disabilities. All sidewalks are sloped for drainage, but a slope that is too steep is challenging for people who use wheelchairs, walking aids, have visual impairment, or who otherwise have difficulty walking but do not use aids.

The Accessibility Guidelines referenced above specify that sidewalk cross-slopes not exceed 2 percent (1:50) and that walkways do not exceed the grade of the adjacent street. Walkways that are not adjacent to a street should not exceed a running slope of 5%. The Guidelines also specify that walkways provide at least four feet of unobstructed through width.

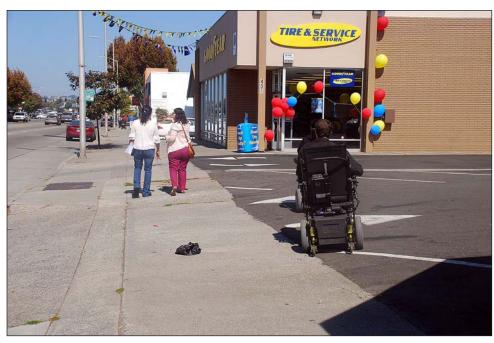
Curb ramps

State law and the Accessibility Guidelines require all streets with sidewalks and curbs to have curb ramps at intersections. Two curb ramps per corner are preferable where feasible to single, diagonal corner ramps because they direct wheelchair users and people with visual impairments into the crosswalk and maintain a straight path between sidewalks on both sides of the street. The 2011 Proposed Accessibility Guidelines strongly support two directional ramps on each corner. The Standard Drawings for the City of Sacramento include best practices for directional curb ramp design (see drawing T-77 at http://www.cityofsacramento.org/utilities/pubs/ stdspecs/Transportation.pdf).

The City should include curb ramp installation at all street intersections as part of street resurfacing, sidewalk improvement, utility, new construction, and alteration projects.

Driveways

Every driveway crossing is a potential conflict between motorists and pedestrians and bicyclists. Multiple and wide driveways expose drivers and pedestrians to increased risk. Sloped driveway aprons that extend into the pedestrian path can



Wide, sloped driveways are especially problemmatic for people with disabilities.



Curb ramps at the corner of Olympic and Lakeshore Drive benefit all users.

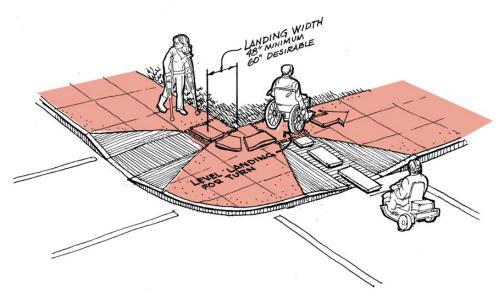
compromise balance and stability for people in wheelchairs, and disrupt the pedestrian path with slopes and undulations.

Ideally, driveway aprons on Lakeshore Drive should be designed to enable the walkway to continue across the driveway at the same level and slope. In areas without sidewalks where properties have direct perpendicular parking from the street, the use of back-in angled parking can help improve the visibility of pedestrians using the shoulder because motorists drive forward instead of back out of spaces into the street.

Detection

Accessible push buttons with audible signals for pedestrians at the signalized intersection of Lakeshore Drive and Old Highway 53 should be considered. Additional tactile devices and materials detectable to the visually impaired should be installed at all curb ramps, landings, and blended transitions. For example, truncated domes on curb ramps signal the edge of the crossing.

High visibility ladder-style crosswalks are more visible to both drivers and pedestrians with visual impairments. Curb extensions with channelized walkways would provide further visual and tactile guidance for people with disabilities while reducing crossing distances and exposure to motor vehicles.



The illustration depicts basic requirements for wheelchair access and mobility.

Aesthetic Improvements

Coordinated roadway improvements provide an opportunity to create a unified system of landscaping and signage along the corridor.

During the community workshop participants discussed their preference for indigenous plantings and drought tolerant landscaping that would provide added aesthetic beauty while communicating a strong community preference for ecological sensitivity.

Adding tree wells between the curb and sidewalk where space allows, and converting under-used paved areas to green spaces will provide an opportunity to plant street trees and complimentary landscaping along the corridor.

Trees planted in the furniture zone between the curb and sidewalk add a vertical buffer between moving vehicles and pedestrians. When located near the street edge, they provide visual interest and enclosure that heightens motorist recognition of speed and encourages caution. They also provide shade and cover for pedestrians, absorb air pollutants, capture rainfall and facilitate rainfall percolation into the ground, which reduces flooding and washing of contaminants into the lake. Studies have shown trees to have a positive impact on sales in business districts, crime reduction in low income neighborhoods, and increased residential property values.

Trees can be located in planters, crushed granite in tree wells or grates in the furniture zone on sidewalks that do not include continuous planting strips. In addition, Lakeshore Drive has under-used paved areas both within the public right of way and on adjacent private property that could be converted to landscaped space for roadside tree planting.

Signage and Wayfinding

Signage was also discussed as a design element in need of improvement. During the workshop participants discussed changes to the existing sign standards regulating private signs, including coordinated efforts to bring non-conforming signage up to standard, and the promotion of a more pedestrian scale and quality. Appropriate regulations can ensure that the standards of signage and landscaping are consistent along Lakeshore Drive and are done so within the community's traditional character.

Improvements to public signage were also discussed that would increase orientation and wayfinding in the area, and assist in connecting visitors traveling on Lakeshore Drive to the parks, beaches, lake access, trails and other attractions and amenities. If possible, signs should be placed and organized on the same monument to avoid visual clutter of multiple poles and signs along the street, and should be located in visible locations where pedestrian activity occurs.





Since sidewalk space is constrained in many locations along Lakeshore Drive, installing planters in the street, as shown in the examples above, would create additional opportunities for trees and landscaping.







Existing signs on Lakeshore Drive help mark community identity and locations, but lack prominence and visibility.

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Design Proposals: Aesthetic Improvements

Gateways

The study area provides many opportunities to provide visual gateways at transition points along the corridor, including the intersection of Lakeshore Drive and Olympic Drive, the location of Austin Park and City Hall at the north end of the corridor, and the intersection of Lakeshore Drive and Old Highway 53, the location of Redbud Park and Thompson Harbor boat launching facility.

Roundabouts are proposed at both of these intersections to highlight these entry points into Downtown Clearlake. Roundabouts would signal to motorists that the road is transitioning to a different character, help redefine the perceived boundary of Downtown Clearlake, and allow traffic to flow more smoothly and slowly as it travels through the intersections. The center of the roundabout would be designed to provide landscaping and signage in a highly visible location.

Details about proposed roundabouts are presented in the next section.

Streetlights

During the community workshops participants discussed the need for better lighting on Lakeshore Drive. Motor-vehicle scale street lights focus light on travel lanes and intersections. Pedestrian-scale street lights direct light onto walkways. Lampposts are spaced more frequently at lower heights, providing a vertical buffer between the street and sidewalk. They help activate streets, paths and other public spaces by adding illumination at the pedestrian level. Safety, comfort and security are improved through increased visibility.

Pedestrian-scale street lights should be considered for installation in high pedestrian activity areas, especially in commercial districts where nighttime retail, restaurant and entertainment services are encouraged, in areas with a history of high crime rates, or around schools. Criteria for pedestrian lighting include:

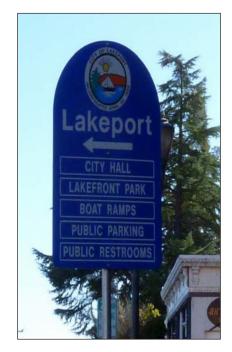
- Lampposts are a maximum 10 to 16 feet in height.
- Designs need to withstand vandalism.
- Consistent design and materials throughout the corridor.
- Light fixtures direct light where it is intended. Consider using partial or total cut-off fixtures (covers or hoods) to reduce glare, light trespass, and help preserve dark night sky.
- Choose appropriate lamp type for the location that balances illumination level, color rendering, energy efficiency, reliability and cost.

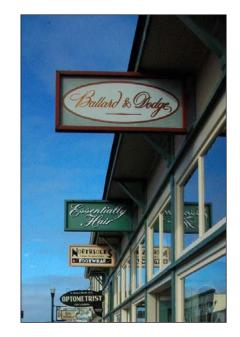




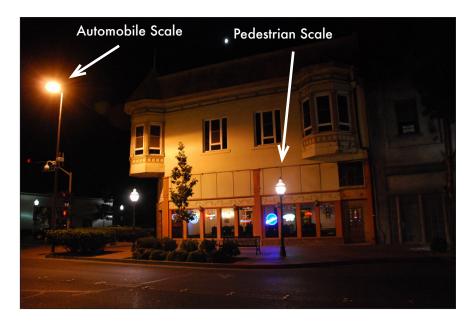


Above: Examples of high quality, visible, distinctive and consistent community identity and location signage in Esparto and Capay Valley, Yolo County, California.





Top: Public wayfinding sign in Lakeport. **Bottom:** Consistent pedestrian-scale signage along storefronts.







Top: Pedestrian scale lights oriented to the sidewalk versus automobile-scale light. **Bottom Left and Right:** examples of traditional street-light poles with modern energy-efficient fixtures that aim illumination toward the ground and reduce glare that obscures night sky visibility. The lampposts are also equipped for wayfinding and thematic signage.

Design Proposals: Activity Centers

February 2014



Local Government Commission, Opticos Design, Inc., Nelson\Nygaard Consulting Associates, Inc.

Lakeshore Drive Downtown Corridor Plan City of Clearlake and Lake APC

Activity Centers

As noted previously, the three parks serve as positive focal points with visual and physical access to the lake and shoreline from Lakeshore Drive. Maintaining and enhancing these areas as high quality public open space amenities, combined with incremental infill and improvements to existing commercial nodes, will help reinvigorate Lakeshore Drive around coordinated centers of activity. The design concepts presented on the pages that follow show the interaction of improvements to the parks, street, civic and commercial spaces to facilitate unique places and experiences throughout the corridor.

Plaza and safe connection to



Lakeshore Drive at Austin Park

The City controls the majority of the property at the intersection of Lakeshore Drive and Olympic Drive, including Austin Park, City Hall and the Police Station, and property on the pennisula to the west. There is tremendous potential to build upon the asset of Austin Park. It marks a distinct change in character on Lakeshore Drive when approaching from the north. It also marks the northern entry point for travelers arriving from Olympic Drive. This presents an opportunity to establish a cohesive design and prominent node at the north end of the corridor.

As illustrated in the drawing on the right, the vision for this area includes a roundabout at the intersection of Olympic Drive with Lakeshore Drive, which would require motorists on Lakehsore Drive to slow down, provide a pedestrian-friendly intersection, and establish a prominent gateway feature from the north and the east to Downtown Clearlake. Over time, City Hall could be expanded to frame the northeast corner of the intersection, appropriate-scale private mixed-use development could frame the other corners, and the pennisula open space area could include landscape restoration and improved public campground.



Above: Illustrative plan for the Austin Park gateway. Below, Left to Right: Austin Park playground and picnic area on the lake side of Lakehsore Drive as it exists today with Mount Konocti in the background; view of the pennisula from the lake; a small plaza and water play feature that could be installed in Austin Park on the landside of Lakeshore Drive.





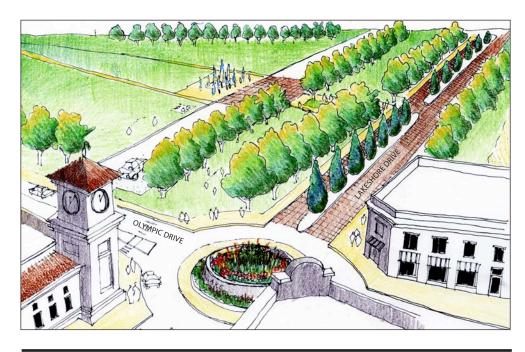


Lakeshore Drive Downtown Corridor Plan
City of Clearlake and Lake APC

Local Government Commission, Opticos Design, Inc., Nelson\Nygaard Consulting Associates, Inc.

Design Proposals: Lakeshore Drive at Austin Park

Intersection of Lakeshore Drive and Olympic Drive



Intersection of Lakeshore Drive and Olympic Drive

The roundabout proposed at the intersection of Lakeshore Drive and Olympic Drive would denote arrival into the heart of Clearlake. Roundabouts are becoming an increasingly utilitzed alternative to conventional signalized intersections in both rural and urban settings. They provide subtantial safety benefits by reducing vehicle speeds and the number and severity of crashes. They can be more efficient at moving vehicles since motorists are not required to wait for a green light or come to a full stop. They also facilitate quieter intersections and provide space for aesthetic enhancements.

Other benefits of the roundabout proposed at this location include:

- Reduced vehicular speeds through deflection (15-20 miles per hour through the intersection), enabling drivers to more readily see and yield to crossing pedestrians.
- Reduced crossing distance for pedestrians from what is now 50 feet to two 12–14 foot legs. Splitter islands enables pedestrians to cross one lane of traffic and pause in the channelized refuge area before crossing the other lane.
- The slow speed design of the intersection would allow bicyclists to merge into the travel lane through the intersection.
- The roundabout would include a mountable truck apron to enable vehicles of all sizes to complete turning movements.

In the perspective above, the intersection is also greatly enhanced by the buildings coming out to hold the street edge. An addition to City Hall, especially with a vertical element on Austin Park, could be an opportunity to express its proper civic importance, while also helping to create a sense of place for Clearlake.



Far Left: An aerial view looking south on Lakeshore Drive. The intersection at Olympic Drive offers a great opportunity to create a gateway into historic Clearlake. Here a sense of arrival is created by a roundabout, a more prominent face for City Hall, stamped and colored concrete, and improved landscaping.

Left: Conceptual roundabout layout, showing the configuration of vehicular lanes and bicycle lanes along Lakeshore Drive and Olympic Drive.

Below (Left to Right):
The first three images
show roundabouts with
a variety of decorative
treatments; The photo
on the far right shows
how a roundabout can be
equipped with curb ramps
enabling bicyclists to pass
through the intersection
on a separated path.









Campground Restoration









The photos above show examples of low impact cabin types that could be considered for camping sites at the restored campground.

Restoration of the pennisula landscape and campgrounds would provide a valuable public recreation and open space opportunity for the community and visitors to Clearlake. Conversion of the existing commercial properties lining Lakehsore Drive into small-scale mixed-use buildings would provide separation between the camprounds and the street, provide year-round "eyes" on the campround, and serve both daytime and overnight campground users, take advantage of Lakeshore Drive frontage and visibility to passing motorists, and adjacency to civic center employees and Austin Park visitors.



Lakeshore Drive Downtown Corridor Plan
City of Clearlake and Lake APC

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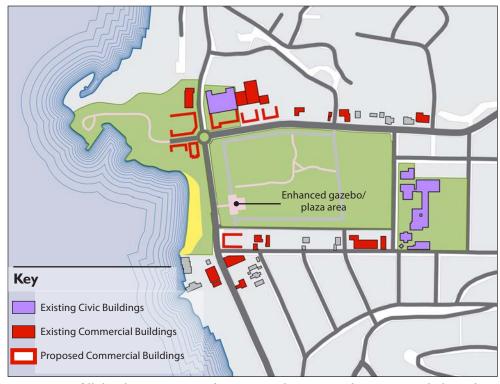
Design Proposals: Lakeshore Drive at Austin Park
February 2014

Scenarios Around Austin Park

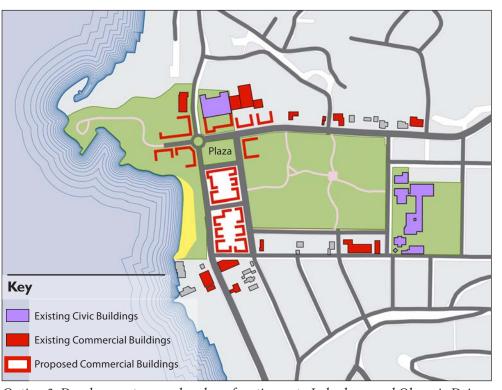
The design team learned of several ideas through the charrette regarding the development of the peninsula west of Austin Park. These fall under two general categories:

- 1. The land could retain its current natural state, where local families have enjoyed traditions of camping. The land would be formalized and designed to take advantage of a relationship with Austin Park and the beach front.
- 2. The view of Clear Lake would be capitalized on with a mixed-use hotel or resort development. The design team saw this option as potentially detrimental to Clearlake, possibly hindering efforts to revitalize the historic commercial center of town. As a result, the design team developed four different pennisula development strategies designed to integrate Austin Park and Lakeshore Drive:
 - Option 1: Formalize the presence of Austin Park along Lakeshore Drive, by landscaping where there is currently paved parking. This will help Lakeshore Drive be experienced as an enclosed corridor. Also, this option aims to create a more formal relationship between the beach and the grassy expanse of Austin Park. It proposes connecting them with a plaza and water feature (interest was expressed for a splash pad). Also notice the extention of City Hall to create a presence on the park.
 - Option 2: Develop a connection between the existing commercial core of Lakeshore Drive and City Hall, while creating a plaza that creates communication between the beach front and park. This proposal could create many desirable locations for storefronts both along Lakeshore, the plaza, and fronting Austin Park. The plaza and commercial buildings could be developed in such a way as to sensitively frame and enhance the view corridor from Austin Park to Clear Lake and Mt. Konocti.
 - Option 3: Create a plaza across from City Hall, giving City Hall an opportunity to express its civic importance, while also allowing the plaza to become the true gateway to Lakeshore Drive from Olympic Drive. This design calls upon the regional influences of other local small-town fabrics, such as the main plazas of Sonoma or Healdsburg. It too, offers a continuity of development from the commercial core to a new plaza.
 - Option 4: Offers a plaza situated opposite Austin Park, along Olympic Drive. In contrast to Option 3 however, the nature of this design is more informal in character. Instead of concentrating development along Lakeshore Drive, it preserves a full view of Clear Lake, and suggests (more residential) development occur along the southside of Austin Park, helping to create a sense of enclosure to the park.

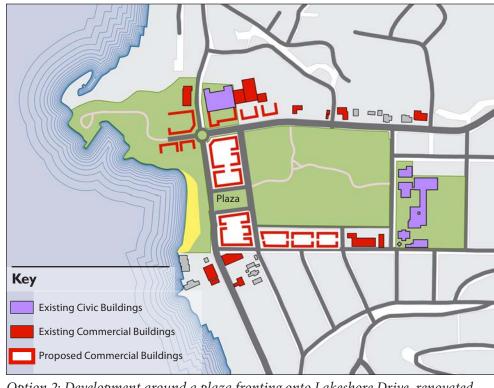
All four options presented will require further study of potential impacts on viewsheds and development potential and feasibility.



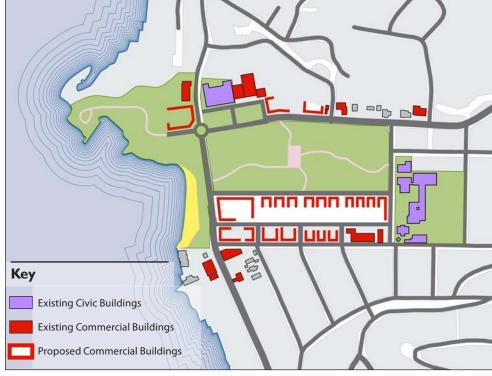
Option 1: Infill development around Austin Park, renovated campground along the lakeside.



Option 3: Development around a plaza fronting onto Lakeshore and Olympic Drive, renovated campground along the lakeside.



Option 2: Development around a plaza fronting onto Lakeshore Drive, renovated campground along the lakeside.



Option 4: Creation of a more informal plaza, with primary development happening along the southern edge of Austin Park; renovated campground along the lakeside.



Lakeshore Drive from South of Austin Park to Baylis Street

A number of local commercial establishments line Lakeshore Drive between Austin Park and Baylis Avenue. Head-in parking on the landside of the roadway should be improved utilizing the previously shown street design options. Space for parking is constrained on the lakeside of the street, but there are substantial areas of vacant or undertilized land behind buildings on the east side of the corridor directly accessible from Baylis Avenue and Pearl Avenue. The City could explore opportunities with property owners to dedicate portions of this land for use as shared, municipal parking lots. This would free up space in front Lakeshore Drive shopfronts for additional improvements.

In addition, the City and the community should encourage and support opportunites to convert underutilized land for patio and veranda uses, and/or local greening opportunities for beautification and environmental benefits. Strategies such as these, combined with the recommended street design improvements would create a continuous experience for pedestrians in Downtown Clearlake.

Finally, changing the skewed angle at which Baylis Avenue meets Lakshore Drive closer to 90 degrees would improve pedestrian conditions and traffic safety by improving visibilty between motorists, and between motorists, bicyclists and pedestrians. Squaring the intersection angle would also shorten the pedestrian and bicycle crossing distance across Baylis Avenue.



Lakeshore Drive Downtown Corridor Plan City of Clearlake and Lake APC

Local Government Commission, Opticos Design, Inc., Nelson\Nygaard Consulting Associates, Inc.

Intersection



Lakeshore Drive at Highlands Park

Highlands Park is located midway between the parks at the north and south ends of the corridor. Its intimate scale, vantage of Clear Lake, mature oak trees, and small beach make it a valuable commmunity asset. The recent aquisition of adjacent property with a 1940s house will enable expansion of the park to include a visitor's center and home for the Clearlake Chamber of Commerce. Community members expressed numerous ideas for the park at the charrette, such as starting a kayak rental service and a rotating art exhibit. With its central location along Lakeshore Drive, Highlands Park could evolve as a destination for boaters to dock, explore Clearlake, and patronize local shops.

Building on this momentum, the design team prepared a conceptual plan to help organize the newly expanded Highlands Park into areas of passive and active recreation. Around the park, development suffers from the prevalence of abandoned buildings. However, improvements to the park will stimulate park visitation and use, increasing activity and the likelihood of new investment in surrounding properties. Increased occupancy, renovations, and street frontage improvements will in turn reinforce Higlands Park as high value community and visitor destination, creating a distinctive link and experience in the middle of Lakeshore Drive.



Proposed Highland Park Improvements



Perspective View A: A view of Highlands Park from the lake. The forthcoming Visitor's Center and donated docks will offer visitor's more reason to stop and explore Clearlake.



Perspective View B: The vista point jutting out from Highlands Park could offer the city a great venue for local events, here a scenic wedding.



Lakeshore Drive Downtown Corridor Plan
City of Clearlake and Lake APC

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Intersections and Crosswalk Improvements





Top to Bottom: Lakeshore Drive, looking south at the intersections with Howard Avenue and Palmer Avenue; A group of children cross Lakeshore Drive from Highlands Park.



The intersections of Howard Avenue and Palmer Avenue with Lakehshore Drive present site distance challenges for motorists and non-motorists alike. Palmer Avenue intersects a curved segment of Lakeshore Drive at a highly skewed angle. The skewed intersection at Palmer allows motorists to make high speed turns to and from Lakeshore, which is unsafe due to the limited visibility around the curve on Lakeshore. The Howard Avenue intersection is approximately 200 feet northwest of the Palmer intersection.

Pedestrians cross Lakeshore Drive at Howard Avenue to and from

the Park. There is a marked crosswalk with transverse parallel stripes, but the crosswalk is difficult for motorists to see.

Suggested improvements for the two intersections to improve safety and connections to Highlands Park include curb extensions with marked high-visibilty crosswalks as illustrated above. The intersection at Palmer can be realigned to closer to a right angle by modifying the curb on the north side of the intersection. This will reduce the speed at which motorists can make the turn to and from Palmer, while also shortening the crossing distance for pedestrians.

Intersection at Palmer Avenue

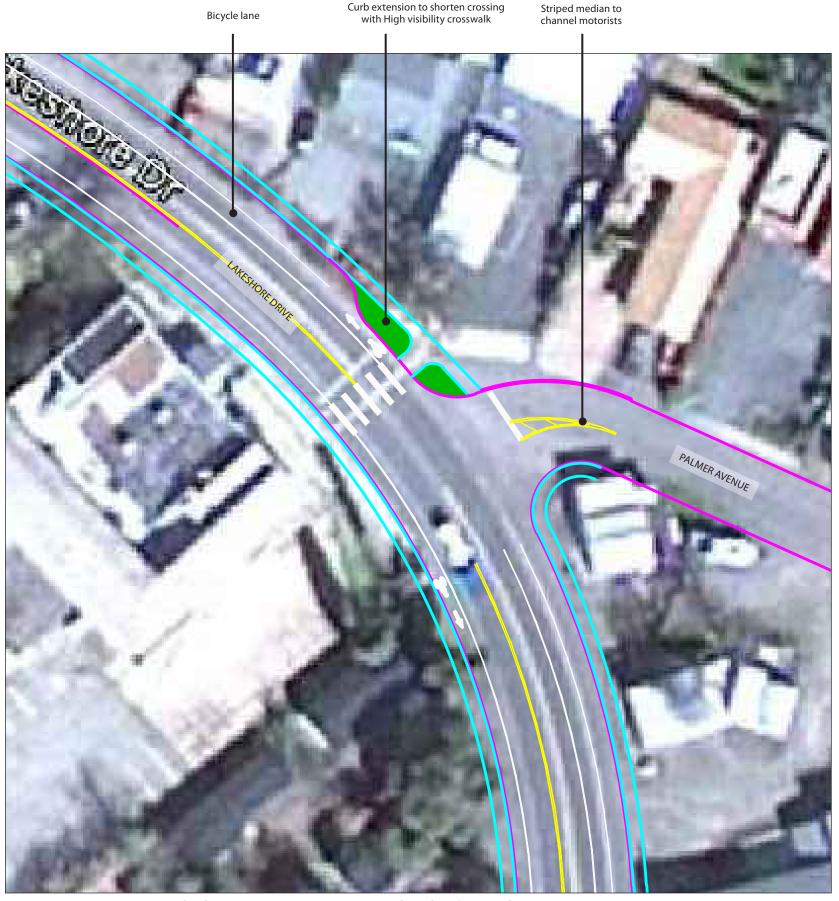


Participants at the charrette form a human corner extension, outlining the area where the corner could be rebuilt to remove excess roadway and improve pedestrian and driving conditions.

The drawing on the right illustrates the extension of the northeast and southeast corners at the intersection of Palmer Avenue and Lakeshore Drive. This would produce an approximately 90 degree angle intersection which would improve sight distances for motorists turning on and off Lakeshore drive. The corners could be rebuilt with sidewalks and landscaping.

The crossing is currently around 60 feet wide. Extension of the northeast corner would reduce the crossing distance for pedestrians and make them more visible to northbound motorists. It would also narrow the roadway, encouraging slow speed and caution as northbound motorists approach Highlands Park.

Access to the plumbing services company on the north corner of Palmer would be preserved by extending their driveway though the modified curb. The roadway would still be wide enough to accommodate the vehicles that routinely use Palmer to access the residential area.



Lakeshore Drive Downtown Corridor Plan
City of Clearlake and Lake APC

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Design Proposals: Lakeshore Drive at Mullen Avenue

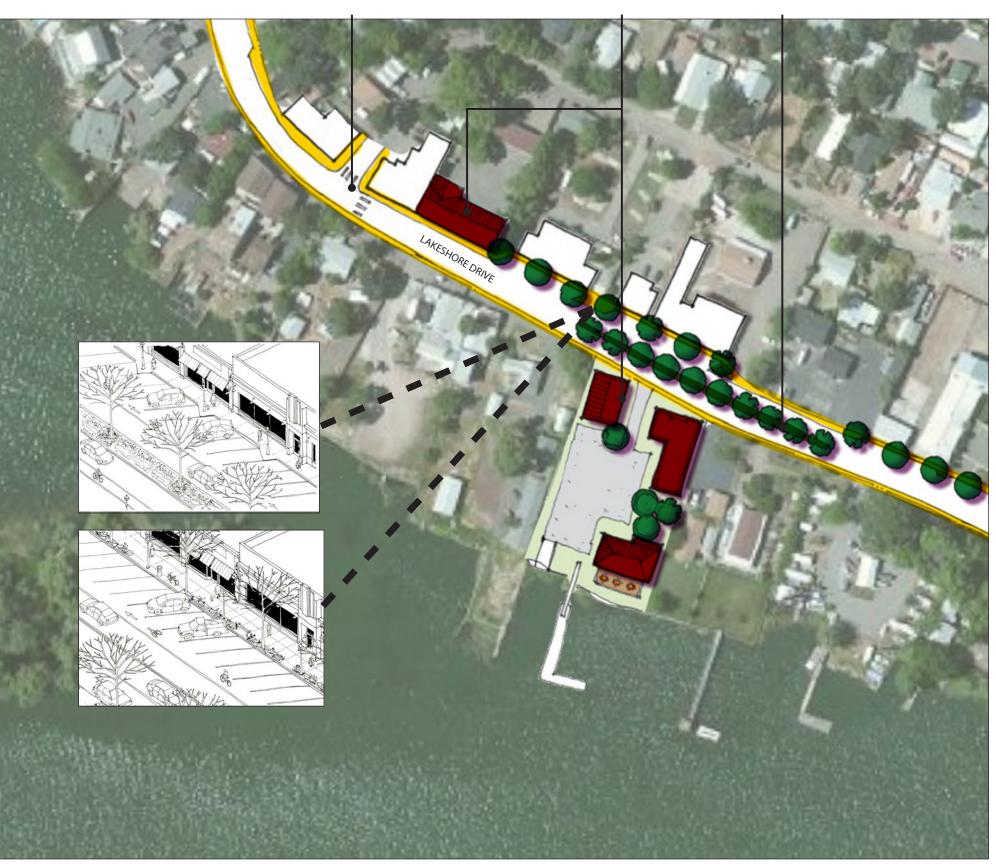
Lakeshore Drive



Lakeshore Drive at Mullen Avenue

South of Highlands Park, the character of Lakeshore Drive transitions again around the intersection with Mullen Avenue. It is markedly different than other points along the corridor, with a sense of place to build upon. This includes a sense of enclosure produced by a pinched right-of-way with two-story construction, and the experiential combination of Lakeshore Drive curving while simultanesouly arriving at the crest of a hill. This special character can further evolve through efforts to reinforce the street 'wall' with renovation of vacant and undertutilized properties, new consistently-scaled new construction, and the recommended parking, bicycle, pedestrian and transit improvements for Lakeshore Drive.

The intersection at Mullen Ave is challenging for motorists and pedestrians alike. The buildings at the corners of Mullen Ave combined with the curve on Lakeshore Dr make it hard to see oncoming traffic for motorists trying to exit Mullen Ave. The curve on Lakeshore Drive also makes it hard for motorists on Lakeshore to see pedestrians crossing at Mullen Ave, especially because the current crossing is marked with two transverse lines, which can be challenging for motorists to see. The crossing of Mullen and Lakeshore should both be marked with high-visibility markings.



Mullen intersection

Future additions

and redevelopment

Mullen Intersection Improvements

The intersection where Mullen Avenue meets Lakeshore Drive is challenging, because drivers exiting Mullen have a limited view of the street in either direction due to buildings very close to the street at this intersection. Extending the curb lines on Mullen and on the northeast side of Lakeshore Drive would provide narrower pedestrian crossings, and may also allow motorists to pull forward a bit further when looking for oncoming traffic. This could be accomplished in the short term with transverse striping along both buildings on the northeast side of the corridor to guide traffic closer to the center line.

Another solution to help reduce the risk of crashes at this intersection would be to prohibit left turns from Mullen onto Lakeshore Drive. This way, drivers would not have to focus on two directions of traffic at once in order to exit Mullen. Drivers making right turns from Mullen will still struggle to see oncoming vehicles from the left. Since drivers will therefore focus significant attention to the left when making right turns, a crosswalk is only recommended on the southeast side of the intersection.

A stop line is recommend behind the crosswalk on Mullen (whether the crosswalk is marked or not), as drivers should stop before they cross the crosswalk to ensure they see pedestrians crossing and do not infringe on the crosswalk. Drivers will then likely need to pull forward into the crosswalk in order to see oncoming traffic. This is common in urban areas with buildings placed at the right-of-way line. However, a stop limit line behind the crosswalk is not required as the crosswalk line serves as the stop limit line under the California Manual for Uniform Traffic Control Devices and State vehicle code.

It was suggested during the public engagement process that an all-way stop be considered at Lakeshore Drive at Mullen Avenue. Reviews of the junction in 2010 and 2012 found that it did not meet stop control warrants for stop signs on Lakeshore Drive. This does not mean that improvements are not needed at this location. Curb extensions and a left turn prohibition from Mullen on to Lakeshore would contribute to better site distance and would reduce the risk of collision between eastbound traffic on Lakeshore Drive and left turning vehicles from Mullen. In addition, Visually and eventually physically tightening the travel way at this location combined with narrower travel lanes the oughout the corridor as recommended would encourage slower speeds.



Lakeshore Drive Downtown Corridor Plan City of Clearlake and Lake APC

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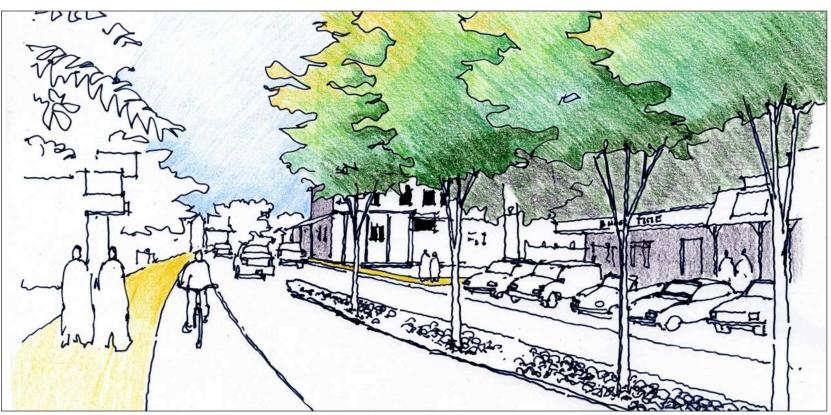
Options with existing head-in parking



There are two stretches along Lakeshore Drive that include head-in off-street parking without curb and sidewalk or other type of separation between the street and parking spaces. The longest stretch is between Division Street and Alvita Avenue, covering about 650 feet of frontage on the land side of Lakeshore Drive. The other stretch is southeast of Mullen Avenue, about 275 feet long, also on the land side of Lakeshore Drive.

As noted previously, these areas of head-in parking pose challenges for motorists trying to back out of the parking spaces as they can be blind to on-coming traffic and bicyclists. They are also problematic for pedestrians as they must pass behind parked vehicles, walk where there is no sidewalk, or follow a jog in the sidewalk.

On the other hand, the space afforded by head-in parking can be re-utilized creatively to add a unique character zone along the corridor. At right, two illustrations show how space might be reallocated in the stretch of Lakeshore Drive near the intersection with Mullen Avenue.

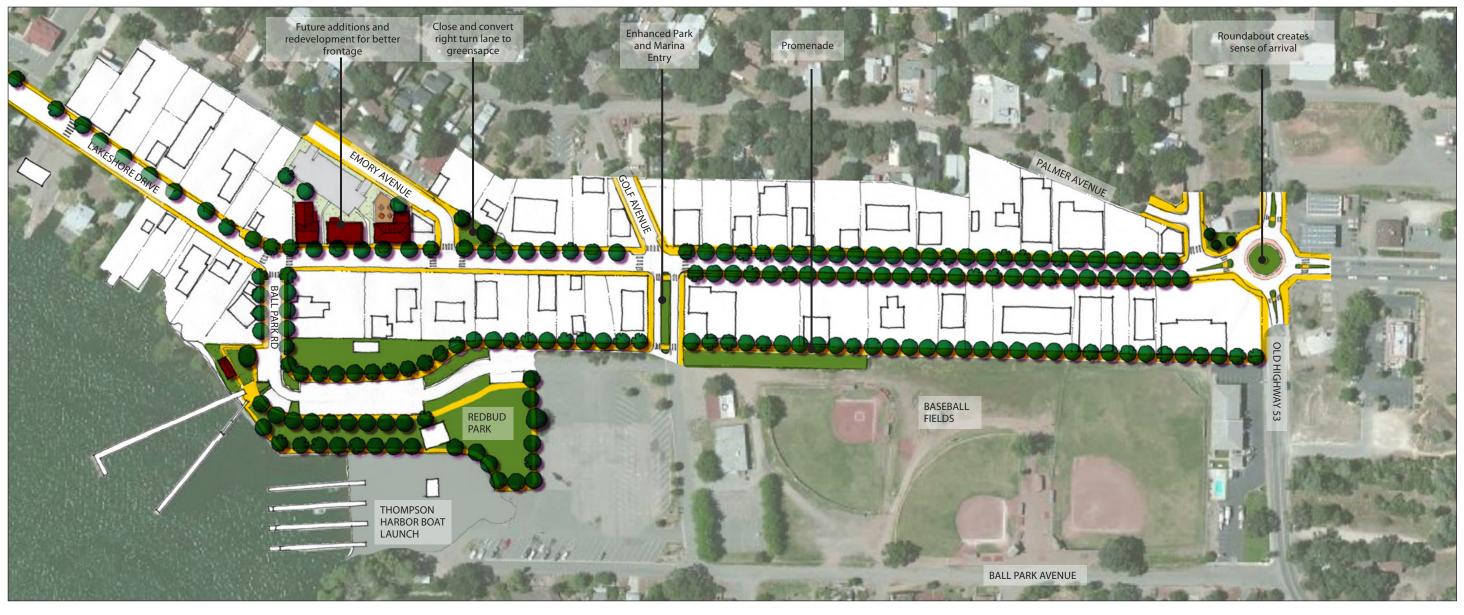


Two examples of what Lakeshore Drive could become, where there currently is head-in parking:

Left: A solution provides back-in angle parking, while leaving ample room for a median,increasing safety and landscaping/ shade.

Below Left: A variation uses land-side parallel parking, leaving wide sidewalks for retail and restaurant use.







Lakeshore Drive At Redbud Park

Located at the east end of the corridor, Redbud Park and Thompson Marina is a major asset and regional attraction for boating, fishing, sporting events, national bass tournaments and other special events. It includes a boat launch, playfields with an active little league, a central park and a fishing pier. The City was recently awarded a grant to improve the floating docks and the parking lot.

Despite the significance of the park and marina, Lakeshore Drive lacks pedestrian infrastructure and other features to support increased use and heightened awareness of this asset from the corridor.

Completion of sidewalks and improvements to intersections and crosswalks as shown above would strengthen the pedestrian environment around this prominent destination. A continuous eastwest parallel path between the buildings and the park would provide a safe alternative route for park users. A gateway at the Lakeshore Drive/Old Highway 53 intersection would create a distinctive entry into downtown Clearlake.

The majority of visitors bringing boats to Clearlake are anticipated to arrive from the east on Lakeshore Drive or from the south on Old Highway 53. Currently, boaters access the boat launch by making a left turn off of Lakeshore Drive at Golf Avenue, or by using Ball Park Avenue. Due to the location of the boat launch on the south side of

Proposed Redbud Park Improvements



the park and in order to reduce the impact on boat traffic on other park uses and the commercial activity on Lakeshore Drive, the best access for vehicles with boat trailers is via Ball Park Avenue. Signs are recommended to direct boaters to Ball Park Avenue at the intersection of Lakeshore Drive and Old Highway 53 and at the intersection of Old Highway 53 and Ball Park Avenue. By removing boat access at the park entrance at Golf Avenue, this entrance can be enhanced with a landscaped raised median that provides a gateway to the park. These changes will build the main street character of Lakeshore Drive, reflect the increased importance of Redbud Park, and emphasize pedestrian access for the local community.

The proposed changes to Redbud Park create clearer demarcation between park space and the operations associated with the boat launch facility. This would be accomplished by converting and organizing undifferentiated and underutilized paved area into expanded greenspace, and clearly defined vehicle parking and access lanes.

The separation created by extending Redbud Park provides more lakeview park frontage as well as added buffer between park visitors and boat launch traffic. The extension also connects the lakeview picnic area with the larger, principal green, which are currently separated by a paved access lane. Bridging the two greens should help increase natural surveillance of the main park, reducing the likelihood of illegal activity.

The proposed design includes a landscaped promenade behind the current businesses. This would create an enhanced park and lakeside front and a reason for properties to engage with the City's asset. Development of the rear of properties to address the improved frontage would encourage more patronage, while simultaneously creating "eyes on the park" activity to create a sense of security.

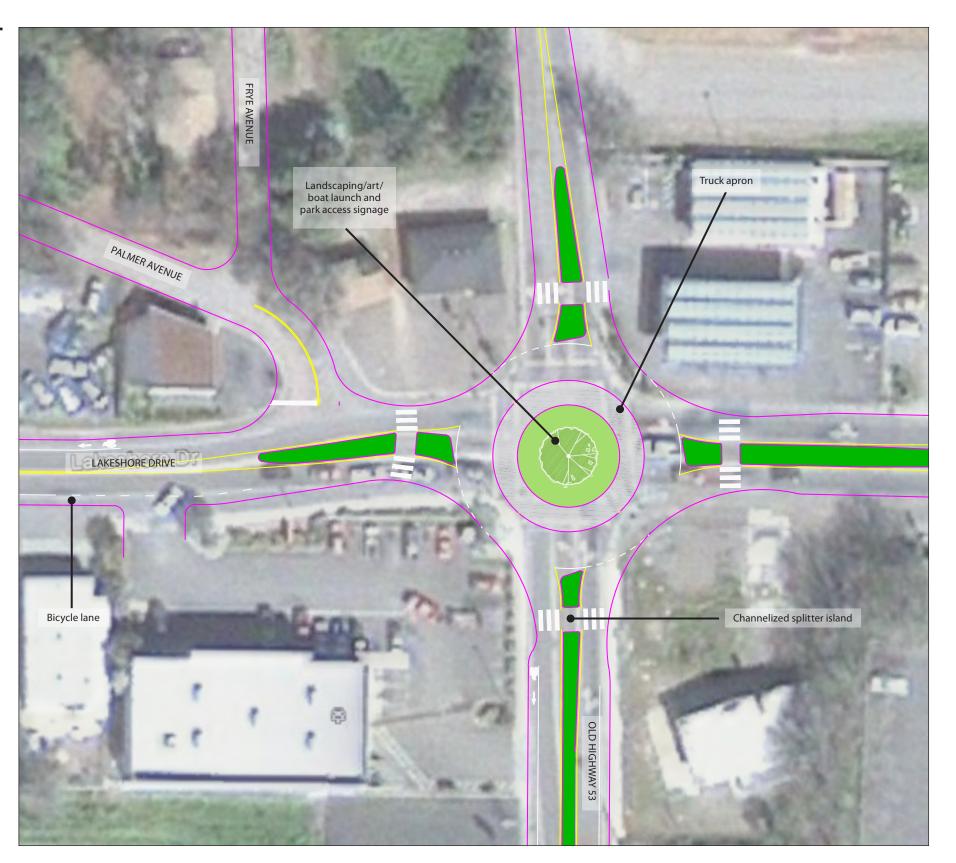


Intersection of Lakeshore Drive and Old Highway 53

The intersection of Lakeshore Drive and Old Highway 53 is the eastern entrance to the core of Clearlake. Placing a roundabout at this intersection offers an excellent physical gateway to the city, emphasizing the change from "car space" at the highway to "people space" in the city. A roundabout at this location also has the following benefits:

- Improves safety for motorists and pedestrians.
- Easily manages the volume of traffic at this intersection and all of the various turning movements necessary for users to access Red Bud Park, Thompson Marina, downtown Clearlake, and Health Services.
- Provides an aesthetically pleasing gateway into the city and a sense of arrival onto Lakeshore Drive as the heart of the city, terminating the vista as drivers approach from the highway.
- Physically slows motor vehicles to speeds that are appropriate for a mixed commercial and residential area.
- Accommodates large vehicles, including trucks, buses, and vehicles pulling boat trailers.
- Improves conditions for pedestrians where the existing crossings are 30-40 feet long, the splitter islands create two crossings about 12 feet long.
- Signage at the roundabout should direct boaters to turn south onto Old Highway 53 to access the boat launch at Red Bud Park.

During the construction of the roundabout, Palmer Avenue can be further realigned to provide more of a 90 degree connection with Lakeshore Drive. This is important to reduce the speed at which drivers can turn from Lakeshore Drive onto Palmer. The splitter island of the roundabout extends past the entrance to Palmer Avenue in order to eliminate left turn movements, which are challenging due to the close proximity of these two intersections.



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Implementation

The many improvements discussed in this plan will not be implemented all at once. A combination of time and persistence, grant writing, collaborating, and bundling of funding sources will be necessary to bring the community's vision for Lakeshore Drive from concept to construction. A recommended phasing schedule is presented in this chapter to assist the City and various agencies involved in implementation of the proposed improvements.

Collaboration between property owners and City Hall will be necessary to ensure a cohesive identify along the corridor, provide critical on-street parking and create a continuous enhanced pedestrian environment that includes lighting, landscaping and street furniture. This chapter will also explore temporary construction easements, maintenance agreements, improvement districts and the creation of a non-profit organization, as potential mechanisms for facilitating the necessary public-private partnership between City Hall and landowners along the corridor.

Finally, this chapter presents a summary of Federal, State, and local funding sources that can be pursued and bundled for implementation.

Phasing

In consideration of funding sources and availability, and the City's ability to concentrate improvements around the three activity nodes along the corridor, the following phasing schedule is presented.

Phase I: the first three years

The first implementation phase combines low-cost modifications to Lakeshore Drive, improvements at Highlands Park, and a clean up effort along the corridor.

Recommendations

Construction Projects:

- Reduce travel lane widths throughout the corridor and stripe bicycle lanes.¹
- Improve intersections. These include realignment of four skewed intersections along the corridor as well as improvements to the entrance to Redbud Park and Marina. The addition of high visibility crosswalks, curb extensions, and sidewalks are proposed at:
- Lakeshore and Palmer (both ends of Palmer).

Lakeshore Drive pavement was rehabilitated in 2007, including 15 feet on each side of the existing center line. The outside portions of the existing paving where bike lanes are proposed are not very smooth. 30 feet of reasonably smooth pavement may be adequate to mark bike lanes without resurfacing the shoulders, as bicyclists tend not to use the outermost portion of the bike lane. If lanes are marked 11 feet and 5 feet, then only the outermost foot would be potentially rough. The advantage of restriping with bike lanes without repaying the shoulders is that it can be done without much actual cost, perhaps without the need of obtaining substantial outside funds. Repaving the shoulders would be ideal, though substantially more costly, but could perhaps place the City in a better position to obtain outside funding sources to implement the combined improvement of new bike lanes and repave shoulders.

- Lakeshore and Mullen.
- Lakeshore and Baylis Ave.
- Develop the Visitors Center at Highlands Park in partnership with the Chamber of Commerce.
- Prioritize frontage improvements at Highlands Park and Visitors Center, including sidewalks, bike lanes, on-street parking, bus stop improvements and other enhancements.
- Make circulation improvements and Redbud Park in conjunction with boat launch and dock improvements.
- Install public wayfinding signage and community identity signage at gateways.

Policies and Programs:

- Direct City resources toward code enforcement and blight remediation efforts along the corridor.
- Include a Complete Streets Policy in the General Plan Update.
- Revise parking standards as discussed in the Appendix.
- Explore acquisition and/or utilization of landside vacant property for public
- Encourage/support shared use parking agreements between private property
- Update transit ridership survey to prioritize bus stop improvements.
- Explore the creation of an informal association of property owners. ("Highlands Association") to coordinate and guide a public-private partnership between the City and businesses within the District. This association could eventually become a more formal business district or be expanded to a non-profit organization.

Phase II: 4-10 years

The second phase of implementation focuses on comprehensive changes within the roadway and along the frontage. Roadway changes include intersection reconfiguration and definition of the roadway edge through the addition of curb, gutter and sidewalk. Frontage improvements are comprised of adjustments to onstreet parking, the addition of sidewalks, lighting, and street trees. Improvements to Austin Park are also included in phase two. Corridor-wide improvements recommended for phase two are premised on formal or informal public-private partnerships, and are discussed later in this chapter.

Recommendations

- Establish northend gateway through construction of roundabout at Lakeshore and Olympic Drive.
- In coordination with application of the selected parking options for each section of the corridor, make frontage improvements along the corridor, including:
- Sidewalk construction.
- Formalized on-street parallel parking and coordinated off-street back-in angled parking.

- Installation of bus stop improvements, including concrete landing pads, signage, benches, curb ramps, and shelters and bicycle lockers at prioritized high need/high use locations.
- Installation of consistent, pedestrian-scale street lights.
- Tree plantings and landscaping.
- Other enhancements such as benches, trash receptacles, and bicycle racks.

Policies and Programs:

- Adopt ordinance to provide direction for design and display of public and private directional and identity signage.
- Adopt ordinance to permit and provide direction for development of outdoor eating areas.

Phase III: 10 - 20 years

The third phase of implementation focuses on southend gateway construction and buildout of City-owned parcels.

Recommendations:

- Convert signalized intersection to roundabout at Lakeshore Drive and Old Highway 53.
- Restore Pennisula campground.
- Develop Redbud Park promenade.
- Expand civic center at Olympic and Lakeshore Drive.

Public-Private Partnerships

Right of way constraints along the corridor mandate that the public and private sectors work together to realize the full scale of improvements to pedestrian facilities along Lakeshore Drive. As discussed previously, the right of way along the corridor is variable, and is generally constrained to 45 – 50 feet. Widths ranging from 50 feet to 72 feet of space are required to accommodate on-street parking where needed, preserve existing perpendicular parking or accommodate diagonal parking in front of businesses, and provide sidewalks, bicycle lanes, and amenities such as streetlighting, landscaping, benches and trees.

Property owners can begin to organize informally as associations centered around each of the three City parks along the corridor. Organization could occur through the Chamber of Commerce, City-sponsored meetings, or could be initiated by the business owners themselves. These informal associations could discuss willingness to provide a combination of parking, landscaping, lighting, tree planting and signage on private property in order to 'complete the street'. Public funds can be used for construction of the amenities, and maintenance responsibility would be determined through a maintenance agreement or memorandum of understanding between the City and business owners.

Private property owners surrounding Highlands Park are well positioned to pilot such an association. The private sector can work with the City to ensure that

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frontage improvements extend throughout the Highlands district. A discussion of some organizational options is included below to aid this effort.

Parking Management Strategies

The City can work with businesses to encourage more efficient use of land for parking, and to reallocate some parking currently on Lakeshore Drive to other accessible locations to enable mroe space on the corridor for pedestrian, bicycle and aesthetic improvements. Strategies include:

- Explore acquisition of vacant land for use as a public parking lot.
- Reduce parking requirements for all land uses in order to stimulate reuse of existing properties, redevelopment and new development.
- Simplify turnover between different business types by making parking requirements the same across land uses.
- Consider an exemption to parking requirements for small lots.
- Implement a bicycle parking requirement.
- If/when on-street and store-front parking becomes congested, implement time-limited parking on-street and invest in signage to help longer term visitors find municipal lots.

More details regarding parking recommendations are included in the Appendix.

Temporary Construction Easements & Maintenance Agreements

A temporary construction easement (TCE) provides working room for construction on a property owned by someone other than the entity conducting construction activities. A TCE should include a termination date to make for a more accurate appraisal and clearer understanding between the parties during negotiations. One year may be a sufficient time frame for construction of pedestrian facilities on private property by a public agency. Following expiration of the TCE, improvements are effectively transferred to the landowner and a maintenance agreement specifies which party is responsible for maintaining facilities. For example, landscaping maintenance becomes the responsibility of the private party, and lighting maintenance becomes the responsibility of a lighting district or the city.

One of the benefits of utilizing TCE's and maintenance agreements is that it does not require the formation of a new district or additional taxation. However, the city would be required to negotiate each easement and agreement on an individual basis with each property owner.

Non-Profit Organizations

Non-profit organizations (NPO) can be utilized to facilitate communication between public and private entities and to leverage additional funding opportunities. NPO's can initiate community-based projects and form task forces to address issues within the community. The Clearlake Chamber of Commerce

could serve this function, or an additional NPO could be created to further the collaboration between the public and private sector in lieu of the creation of an improvement district.

Community Development Corporations (CDC) are non-profit, community-based organizations that are incorporated to provide programs, services and activities that support economic and real estate development. If certain conditions are met, CDC's may also have access to Small Business Administration loans.

Improvement Districts

A business improvement district (BID) is a defined area within which businesses pay an additional tax or fee in order to fund improvements within the district's boundaries. These fees provide money beyond what the city can provide in that area. Grant funds acquired by the city for special programs and/or incentives such as tax abatements can be made available to assist businesses or to recruit new business in the district.

A BID may be operated by a nonprofit organization or by a quasi-governmental entity. The governance of a BID is the responsibility of a board composed of some combination of property owners, businesses, and government officials.

The creation of an improvement district is more involved than an informal association or non-profit. However, it provides both an organizational structure and a means for financing improvements in collaboration with the city.

Potential Funding Sources

Bicycle Transportation Account (BTA)

This state fund, administered by the Caltrans Bicycle Facilities Unit, can be used to support bicyclists, including through bike lanes, median crossings, and bicycle/ pedestrian signals. Annual BTA funding is projected to be in the range of \$7 million a year, statewide.

To be eligible for BTA funds, a city or county must prepare and adopt a Bicycle Transportation Plan. Adoption of a plan establishes eligibility for five consecutive funding cycles.

The Lake County/City Area Planning Council routinely prepares the Bicycle Transportation Plan for the County and cities. The City is eligible to compete for BTA funds once it adopts the plan prepared by Lake APC (with input from City). The "2011 Lake County Regional Transportation Bikeway Plan" meets the BTA criteria, and the City of Clearlake adopted the plan. A copy of the plan is available at www.lakeapc.org

For more information, visit: http://www.dot.ca.gov/hq/LocalPrograms/bta/ btawebPage.htm

California Business, Transportation, and Housing Agency (BTH) Infrastructure State Revolving Fund (ISRF) Program

The Business Transportation and Housing Agency (which includes Caltrans) administers a revolving loan fund for local governments to finance infrastructure improvements, including county streets. Counties may apply for and receive loan funding from \$250,000 up to \$10 million, with terms of up to 30 years for a broad range of projects. Eligible applicants include cities, counties, special districts, assessment districts, joint powers authorities and redevelopment agencies. Eligible projects include city streets, county highways, state highways, drainage, water supply and flood control, educational facilities, environmental mitigation measures, parks and recreational features, port facilities, public transit, sewage collection and treatment, solid waste collection and disposal, water treatment distribution, defense conversion, public safety facilities, and power and communication facilities.

For more information visit: http://www.ibank.ca.gov/infrastructure_loans.htm

Community Development Block Grants (CDBG)

Under the State Small Cities Community Development Block Grant (CDGB) Program, the following projects are eligible:

- acquisition of property for public purposes;
- construction or reconstruction of streets, water and sewer facilities, neighborhood centers, recreation facilities, and other public works;
- demolition;
- rehabilitation of public and private buildings;
- public services;
- planning activities;
- assistance to nonprofit entities for community development activities; and
- assistance to private, for profit entities to carry out economic development activities (including assistance to micro-enterprises).

For more information visit: www.hud.gov/offices/cpd/communitydevelopment/ programs/

California Division of Boating and Waterways

The Division offers a number of different grants and loans for boating and marinarelated improvments that local government and public agencies can apply for. For more information, visit: http://www.dbw.ca.gov/Funding/

California Wildlife Conservation Board

The Wildlife Conservation Board (WCB) carries out a program which includes the development of facilities in cooperation with local agencies for public access to hunting, fishing, or other wildlife-oriented recreation. Financial assistance is available to cities, counties and public districts or corporations for development

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such as fishing piers or floats, access roads, boat launching ramps, trails, boardwalks, interpretive facilities, and lake or stream improvements. Support facilities such as restrooms and parking areas are also eligible for funding under this program.

Grant funding applications for public access are accepted on a year-round basis. The WCB meets four times each year, normally in February, May, August, and November to consider approval of funding for projects.

For more information, visit: http://www.wcb.ca.gov/Access/

Environmental Enhancement and Mitigation Program (EEMP)

The program offers a total of \$10 million each year for grants to local, state, and federal governmental agencies and to nonprofit organizations for projects to mitigate the environmental impacts caused by new or modified public transportation facilities. Eligible projects must be directly or indirectly related to the environmental impact of the modification of an existing transportation facility or construction of a new transportation facility. Grants are awarded in three categories: 1) Highway Landscaping and Urban Forestry Projects that offset vehicular emissions of carbon dioxide; 2) Resource Lands Projects to acquire or enhance resource lands to mitigate the loss or degradation of resource lands lying within or near the right-of-way acquired for transportation improvements; 3) Roadside Recreation Projects to acquire or develop roadside recreational opportunities.

The Guidelines and Application are published by the Natural Resources Agency each year. The Natural Resources Agency evaluates project proposals and provides a list of recommended projects to the California Transportation Commission (CTC) for consideration. The Department of Transportation administers the approved grants.

For more information visit: http://www.resources.ca.gov/eem/

Highway Safety Improvement Program (HSIP)

The new Moving Ahead for the 21st Century (MAP-21) federal surface transportation program authorizes funds for the HSIP program to be administered through State Departments of Transportation. This competitive grant program is based on a safety index, collision and accident data, and a benefit/cost ratio. Eligible projects include: bicycle and pedestrian facilities, correction or improvements to safety in the roadway; traffic calming, traffic signs, sight distance improvements, pavement markings, and roadway realignment. The High Risk Rural Roads (HR3) Program is part of the HSIP Program in MAP-21, not a set-aside as in the previous federal surface transportation act.

For more information visit: http://www.dot.ca.gov/hq/LocalPrograms/hsip.htm

Local Transportation Funds (LTF)

LTF funds are administered by Lake APC, for regional transportation planning, public transit, bicycle and pedestrian projects. Funds are derived from ¼ cent of the statewide sales tax. Most available LTF funding is dedicated to public transit service needs. Approximately \$30,000 per year is available for bicycle and pedestrian infrastructure needs countywide.

For more information contact: Lake County/City Area Planning Council 367 N. State Street, Ste. 206 Ukiah, CA 95482 (707) 263-7799

Office of Traffic Safety Grants

The Office of Traffic Safety (OTS) administers traffic safety grant funds to reduce traffic deaths, injuries and economic losses. OTS distributes funds statewide in the form of traffic safety grants that are awarded to political subdivisions of the state based upon certain criteria. OTS develops a yearly Highway Safety Plan (HSP) that identifies the primary highway safety problems in the State and provides potential solutions. Identified in conjunction with the National Highway Traffic Safety Administration, OTS has several priority areas for grant funding, including Police Traffic Services, Emergency Medical Services, Roadway Safety, and Pedestrian and Bicycle Safety. Political subdivisions of the state are eligible to apply for and receive OTS grant funding. In addition to state governmental agencies, state colleges, and state universities, subdivisions of the state include local city and county government agencies, school districts, fire departments, and public emergency services providers. Non-profit, community-based organizations (CBOs) are eligible to apply for funding through a political subdivision of the state. For example, a county department may submit a proposal that includes funding for CBO participation. The CBO funding would be included under contractual services in the proposal budget.

For more information visit: http://www.ots.ca.gov/

USDA-Rural Business Enterprise Grants (RBEG)

These grants are available to rural public entities (towns, communities, State agencies, and authorities), Indian tribes and rural private non-profit corporations. The primary criterion is the creation of jobs and economic development, with an emphasis on small business. They can be used for training, technical assistance, capital expenditures, parking, access streets and roads, façade improvements, and other uses. They typically range from \$10,000 to \$200,000. See website at www.rurdev.usda.gov/rbs/busp/rbeg.htm.

Regional Surface Transportation Program (RSTP)

Apportioned through Lake APC, the program provides funding for bicycle and pedestrian facilities, safety improvements and hazard elimination, traffic

management systems, intersections with high accident rates or congestion.

For more information visit: http://www.dot.ca.gov/hq/transprog/federal/rstp/Official_RSTP_Web_Page.htm

Safe Routes to School Programs

Caltrans administers state and federally funded Safe Routes to School (SRTS) programs to improve walking and bicycling conditions in and around schools. State grants are primarily focused on infrastructure (capital) projects. Projects for federal funding can include both infrastructure or non-infrastructure (education, encouragement, enforcement and evaluation) categories.

The program seeks to fund projects that incorporate engineering, education, enforcement, encouragement and evaluation components. Engineering is listed first, because that effort creates the durable features that support other local efforts. However, successful programs often require that all 5 "E"s are addressed. Encouragement and Education programs can often be started at low cost and have proven to be very successful in getting more children to walk or bicycle safely to school. Applicants are encouraged to develop their proposals as partnerships of the school, city and community.

The Lake County Safe Routes to School Plan (2009) includes the schools in the City of Clearlake, identifies potential projects, and included community outreach efforts. A copy of the plan is available at www.lakeapc.org

For more information visit: www.dot.ca.gov/hq/LocalPrograms/saferoutes/saferoutes.htm

State Transportation Improvement Program (STIP)/ Federal Transportation Improvement Program (FTIP)

This program represents the lion's share of California's state and federal transportation dollars. STIP/FTIP funds can be used for a wide variety of projects, including road rehabilitation, intersections, bicycle and pedestrian facilities, public transit, and other projects that enhance the region's transportation infrastructure. Funding for this program usually occurs every two years.

The Lake County/City Area Planning Council is the responsible agency for project selection and funding of projects in the Regional Transportation Improvement Program that provide input into the State Transportation Improvement Program.

For more information visit: http://www.dot.ca.gov/hq/LocalPrograms/STIP.htm

Or contact:

Lake County/City Area Planning Council 367 N. State Street, Ste. 206 Ukiah, CA 95482 (707) 263-7799 February 2014
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Total Roads Improvement Programs (TRIP)

This program offers a huge opportunity for substantial savings by funding street maintenance and improvement projects early. California Communities® offers a pooled securitization program to assist local agencies in bonding against future payments to obtain funding for more projects today. As a pooled public offering, program participants will benefit from reduced issuance costs and better interest rates as compared to standalone issues. The program does not require a pledge of the local agency's General Fund.

The Gas Tax Accelerated Street Improvement Program will allow local governments to leverage their State Motor Vehicle Fuel Tax (the "Gas Excise Tax") to finance road improvement projects. The use of proceeds from the Gas Excise Tax, an 18-cent State excise tax collected on fuel sales, is restricted to the maintenance and construction of public streets and highways. The obligations will be secured solely by a pledge of Gas Excise Tax revenues of the participating agencies.

For more information visit: http://www.cacommunities.org/public-agency-programs/total-road-improvement-programs-trip/

Appendix

This appendix includes the following:

- 1. Parking Management Recommendations for Lakeshore Drive.
- 2. Planned Lake Transit Service Expansion for Clearlake.
- 3. Review of Traffic Safety Data for Lakeshore Drive.
- 4. Community engagement process materials, including:
 - Flyer publicizing the charrette.
 - Samples of impromptu vision statements charrette participants were asked to jot down and read out loud at the opening workshop.
 - The top values identitified through an exercise by participants at the opening workshop.
 - Samples of input from the table map activities at the opening workshop.
 - Synthesis of input played back to the community at the closing meeting.
 - List of participants that signed in at focus meetings, the opening workshop, open studio, and closing meeting.

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Lakeshore Drive Downtown Parking Recommendations

The following are Nelson\Nygaard's recommendations for parking management in Clearlake, based on our understanding of existing conditions and community wishes following the weeklong charrette in Clearlake October 8 – 12, 2012.

SUMMARY OF RECOMMENDATIONS

- Reduce parking requirements for all land uses in order to stimulate reuse of existing properties, redevelopment and new development.
- Simplify turnover between different business types by making parking requirements the same across land uses.
- Consider an exemption to parking requirements for small lots.
- Implement a bicycle parking requirement.
- If/when on-street and store-front parking becomes congested, implement time-limited parking on-street and invest in signage to help longer term visitors find municipal lots.

REVIEW OF EXISTING ORDINANCE

Intention of Parking Requirements

When planners talk of "parking requirements" they typically refer to the amount of parking that cities require for different types of projects. A residential development may require one space per bedroom (for example), or a business may need to provide a certain number of spaces per thousand square feet.

Section 18-5.300 of the Clearlake Zoning Ordinance states that parking requirements are in place:

"In order to prevent traffic congestion, off-street parking facilities shall be provided incidental to any new building or structure..."

While this sounds like a good idea, requiring too much off-street parking has over the past decades had the unfortunate side-effect of causing the exact problem the ordinance seeks to avoid. In much of the US, the land area dedicated to off-street parking has created low-density cities in which driving is the only travel option – density is too low for transit to work well, and distances are too great for bicycling and walking to be convenient. Because most trips are made by car, there are enormous numbers of vehicles on the road – causing, rather than relieving congestion.

Another side-effect of parking requirements is that they can make redevelopment challenging, particularly in older downtowns with smaller lot sizes – often the parking requirement is so high that there is no room to provide the required parking and have enough space left for a meaningful building. Because many land uses have very different parking requirements, it can be challenging for a new business to move into an existing building – if there isn't enough parking for the new use, the business may simply not be permitted to move in.

Fortunately Clearlake has managed to retain much of its downtown character despite high parking requirements and has avoided sprawling development. The main challenge we heard from stakeholder interviews and public workshops is that existing parking requirements hinder the turnover of businesses along Lakeshore Drive.

Existing Parking Requirements

A common source of parking demand figures is the Institute of Transportation Engineer's (ITE) Parking Generation manual¹. The average peak parking demand ratios for different land uses in the ITE manual are frequently applied by planners and architects for parking standards. However, ITE itself cautions against using the manual in this way. While the Parking Generation manual is certainly one of the most comprehensive collections of parking data available, most of the sites surveyed are in suburban locations with discrete land uses, dedicated parking supplies, and few transportation alternatives. In such an environment, virtually all trips require a vehicle and spaces to park it in. Also, the data for some land uses only include a few sites (or even a single site), meaning that the data in many cases are not statistically significant. The ITE therefore recommends using local data wherever available, and to take into consideration such factors as mixed land uses, bicycling, walking, and proximity to transit.

Where the ITE Parking Generation manual represents the suburban end of the scale, the central business districts of cities predating the automobile represent the other – for example much of downtown New York or San Francisco consists of buildings with not a single parking space. And yet workers fill these buildings every day because these cities have developed many different transportation alternatives. Clearlake lies somewhere in the middle of this scale, with a compact downtown and older residential areas built prior to the advent of suburban-style development, and newer auto-oriented development further from the center. The compact layout allows fairly frequent transit service on multiple routes, and makes walking and bicycling attractive and practical alternatives – all of which means that residents have many transportation choices besides driving, which in turn means that parking requirements can be reduced below the suburban-oriented ITE values.

The table in Figure 2 (see page 5) shows the existing Clearlake parking requirements for various non-residential land uses, and compares these to the ITE's recommended parking ratios for similar land uses. Lastly, the table shows our recommended parking ratios.

RECOMMENDED PARKING RATIOS

From observation it would appear that most off-street parking in Clearlake is barely occupied, most of the time. The areas currently dedicated to parking could be used to provide more business area (e.g. restaurant seating, display area) or public amenities such as planters or seating. We therefore recommend reducing the amount of parking required across all non-residential land uses, see table in Figure 2 (page 5). Over several decades of work in the parking field, Nelson\Nygaard has studied many cities of varying sizes and only rarely found that actual parking demand exceeded 2 spaces per thousand square feet of gross floor area, see table in Figure 1. The areas studied were generally "mixed commercial" in character. Note that even in suburban settings such as Chico the amount of parking provided greatly exceeded actual demand. In a fairly traditional setting such as Clearlake we therefore feel that this ratio would be ideal, providing a sufficient amount of parking for residents and visitors.

¹ Parking Generation, 4th Edition: An ITE Informational Report, Institute of Transportation Engineers, 2010.

² Shared Parking, Mary Smith, Urban Land Institute, http://uli.bookstore.ipgbook.com/shared-parking-products-

Appendix

Figure 1 Built Parking Supply vs. Actual Demand, Selected Cities

City	Minimum Requirement / 1,000 SF or Actual Built Supply	Actual Demand / 1,000 SF	Gap between parking built and actual parking demand (for every 1,000 GSF)
Hood River, OR	1.54	1.23	0.31
Oxnard, CA	1.70	0.98	0.72
Corvallis, OR	2.00	1.50	0.50
Monterey, CA	2.14	1.20	0.94
Sacramento, CA	2.19	1.18	1.01
Seattle, WA (SLU)	2.50	1.75	0.75
Kirkland, WA	2.50	1.98	0.52
Palo Alto, CA	2.50	1.90	0.60
Santa Monica, CA	2.80	1.80	1.00
Ventura, CA (Westside)	2.87	1.26	1.61
Chico, CA	3.00	1.70	1.30
Hillsboro, OR	3.00	1.64	1.36
Bend, OR	3.00	1.80	1.20
Salem, OR	3.15	2.04	1.11
Lancaster, CA	3.67	1.37	2.30
Redmond, WA	4.10	2.71	1.39
Beaverton, OR	4.15	1.85	2.30
Soledad, CA	4.21	1.21	3.00

Note that the reduction of parking requirements does not prevent developers from providing parking. It simply relieves developers from having to provide more parking than the market deems necessary. Some businesses may legitimately need more parking, and the cost of providing additional parking is usually sufficient that the decision to do so is not taken lightly.

Historic Properties

Many of the properties on Lakeshore Drive, particularly between Division St. and Baylis Ave. sit on small lots with one or two parking spaces in front. New businesses wishing to renovate one of these properties might find it challenging to meet even the reduced parking requirement. The City might therefore consider an exemption from parking requirements for small lots (or historic lots), on the grounds that the benefit to the community of keeping the downtown thriving outweigh concerns over limited off-street parking. This is especially true given that average parking demand is low, there is plentiful on-street parking, walking distances are short, and the City has already identified several locations for potential shared municipal parking within a short walking distance.

Off-Street Requirements and "Spillover"

Since our recommendation is to reduce parking requirements for non-residential uses, it is natural for residents living near commercial areas to express concern that lower off-street parking requirements may cause spillover parking in their neighborhoods. Given that under current conditions the parking supply greatly exceeds demand, an increased demand to the point that visitors started seeking parking in downtown-adjacent neighborhoods would be a sign of a revitalized and successful downtown. Since part of the attraction of Clearlake is the traditional town character, the solution to greater parking demand should not be suburban style parking requirements as they would destroy one of the reasons people chose to visit. Instead, a combination of time limited parking downtown with improved signage to shared municipal lots would preserve town character while providing convenient access for visitors, potentially in combination with a residential parking permit program.

Shared Parking

The City can further maximize the existing amount of parking by allowing, and encouraging, adjacent businesses to share their parking.

For example, a restaurant tends to have maximum parking demand around dinner time. The bookstore next door sees peak demand at lunchtime and early afternoon. Customers from the restaurant can therefore use the bookstore's parking in the evenings, without impacting the bookstore's business in any way. Similarly, the bookstore's customers can use the restaurant's parking during the day. In this way, both businesses benefit – neither one needs to provide as many parking spaces as if they had to cover the entire requirement themselves, and they can use more of their property for their main revenue-generating activity. And the community benefits too: because there is less land dedicated to parking the city can be denser and more walkable, or provide more public amenities.

Further discussion of shared parking is beyond the scope of this report, but the Urban Land Institute² has produced an excellent guide to shared parking.

² Shared Parking, Mary Smith, Urban Land Institute, http://uli.bookstore.ipgbook.com/shared-parking-products-9780874209396.php?page_id=21

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Clearlake Parking Requirements, Non-Residential Figure 2

Code Section	Current Requirement	Spaces/1,000 sq.ft.	ITE requirement³	Proposed
18- 5.302 Minimum Parking Requirements for Commercial Uses.				
Retail Stores Not Otherwise Listed.	Four and one-half (4.5) spaces for every one thousand (1,000) square feet of gross floor area.	4.5 per 1,000 sq.ft.		2 per 1,000 sq.ft.
Shopping Centers and Mixed Use Development.	Four and one half (4.5) parking spaces for every one thousand (1000) square feet of gross floor area. If the total cumulative gross floor area of any single use within the development exceeds ten (10%) percent of the gross floor area of the development the appropriate parking requirement for that single use applies to that use in lieu of the shopping center parking requirement.	4.5 per 1,000 sq.ft.	3.76 per 1,000 sq.ft. (Land Use: 820 Shopping Center)	2 per 1,000 sq.ft.
Eating Establishments Including Cafes, Cafeterias, Coffee Shops, Fountains and Restaurants.	One (1) parking space for every three (3) seats based upon the capacity of the fixed and movable seating area as determined under the Uniform Building Code.	1 space for every 3 seats	10.6 per 1,000 sq.ft. or 1 space for every three seats (Land Use 932 High Turnover Restaurant). 10.4 per 1,000 sq.ft (Land Use: 937 Coffee Shop w. Drive-Through Window)	2 per 1,000 sq.ft.
Drinking Establishments Including Taverns, Lounges and Bars.	One (1) parking space for every two (2) seats based upon the capacity of the fixed and moveable searing area as determined under the Uniform Building Code.	1 space for every 2 seats	17.5 spaces per 1,000 sq.ft.(Land Use: Nightclub) ⁴	2 per 1,000 sq.ft.
Uncovered Sales Areas Including New or Used Automobile Sales, Boat or Trailer Sales, Lumber or Building Material Yards and Plant Nurseries.	Five (5) customer parking spaces for the first five thousand (5,000) square feet of uncovered sales area regardless of the actual area covered; one (1) customer parking space for each additional five thousand (5,000) square feet of additional uncovered sales area, to a required maximum of twenty (20) customer parking spaces.	1 per 1,000 sq.ft + 1 per additional 5,000 sq.ft over 5,000 sq.ft.	1.69 per 1,000 sq.ft. (Land Use: 812 Building Materials and Lumber Store)	2 per 1,000 sq.ft.
Building Materials.	Four and one-half (4.5) spaces for every one thousand (1,000) square feet of gross floor area in the main retail building, plus whatever additional parking is required by the application of subsection 18-5.302e to the balance of the sales area that is not within the main building.	4.5 per 1,000 sq.ft	1.69 per 1,000 sq.ft. (Land Use: 812 Building Materials and Lumber Store)	2 per 1,000 sq.ft.
Retail Furniture, Major Appliance, Floor Covering, Piano and Organ Retail Sales.	One and two-tenths (1.2) spaces for every one thousand (1,000) square feet of gross floor area.	1.2 per 1,000 sq.ft	1.04 per 1,000 sq.ft. (Land Use: 890	2 per 1,000 sq.ft.

³ Parking Generation, 4th Edition, ITE - the Institute of Transportation Engineers, 2010. Average Peak Period Parking Demand. (Where a choice was given between suburban or urban data, suburban was chosen).

⁴ Smith, Mary S. Shared Parking, Second Edition. Washington, D.C.: ULI – the Urban Land Institute and the International Council of Shopping Centers, 2005.

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			Furniture Store)	
Barber Shops.	Three (3) parking spaces for each employee or one (1) parking space for every one hundred fifty (150) square feet of gross floor area, whichever is greater, shall be provided.	3 per employee, or 6.66 per 1,000 sq.ft. – whichever is greater	2 per 1,000 sq. ft.5	2 per 1,000 sq.ft.
Beauty Shops, Wig Salons and Similar Uses.	Four (4) parking spaces for each employee or one (I) parking space for every one hundred fifty (150) square feet of gross floor area, whichever is greater, shall be provided.	4 per employee, or 6.66 per 1,000 sq.ft. – whichever is greater	2 per 1,000 sq. ft. ⁶	2 per 1,000 sq.ft.
Dance Halls, Ballrooms, Discos and Dancing Areas.	One (1) parking space for every two (2) seats based upon the capacity of the fixed and movable seating area as determined under the Uniform Building Code or one (I) parking space for every fifty (50) square feet of dance floor area, whichever is greater. Restaurants, bars, and other recreational uses with incidental dancing shall provide parking according to the standard specified above based upon the area of that portion of the premises oriented to the dance floor. The parking required for the portion of the premises not oriented to the dance floor shall be based upon the standards specified in this Chapter for the principal use of the premises. The Building Official shall determine which portions of the premises are oriented to the various uses.	The greater of: 1 space per 2 seats, or 20 spaces per 1,000 square feet of dance floor	17.5 spaces per 1,000 sq.ft.(Land Use: Nightclub) ⁷	2 per 1,000 sq.ft.
Household Appliance and Equipment Repair Shops.	One (1) parking space for every two hundred (200) square feet of gross floor area plus one (1) parking space for each employee shall be provided.	5 per 1,000 sq.ft. +1 per employee	2.23 per 1,000 sq.ft. (Land Use: 862 Home Improvement Superstore	2 per 1,000 sq.ft.
Automobile Repair and Service Shops.	Five (5) parking spaces for every one thousand (1,000) square feet of gross floor area.	5 per 1,000 sq.ft	4.17 per 1,000 sq.ft. (Land Use: 848 Tire Store	2 per 1,000 sq.ft.
Collection Facilities.	Small collection facilities: One (1) parking space for attendant. Large collection facilities: One (I) parking space for each employee and a minimum of six (6) customer parking spaces.	1 employee space for small facilities. 1 employee space + min. 6 customer spaces for large facilities.	0.51 per 1,000 sq. ft. (Land Use: 150 Warehousing)	No change
Sidewalk Vendors.	Three (3) parking spaces provided either onsite or on the adjacent street. Vendor shall use no more than ten (10%) percent of the host use's required parking spaces.	3 spaces onsite or onstreet.	N/A	No change
18-5.303 Minimum Parking Requirements for Office	ce and Professional Uses.			
Professional Offices and Office Complexes Not Otherwise Listed.	Four and one-half (4.5) spaces for every one thousand (1,000) square feet of gross floor area. Interior hallways used for access to office suites need not be counted in	4.5 per 1,000 sq.ft.	2.84 per 1,000 sq.ft. (Land Use 701 Office	2 per 1,000 sq.ft.

⁵ Nelson\Nygaard recommendation

⁶ Nelson\Nygaard recommendation

⁷ Smith, Mary S. Shared Parking, Second Edition. Washington, D.C.: ULI – the Urban Land Institute and the International Council of Shopping Centers, 2005.

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	determining gross floor area.		Building)	
Medical and Dental Offices.	Five (5) spaces for every one thousand (1,000) square feet of gross floor area.	5 per 1,000 sq.ft.	3.20 per 1,000 sq.ft. (Land Use 720 Medical-Dental Office Building)	2 per 1,000 sq.ft.
Financial Services including Banks, Savings and Loans and Credit Unions.	Five (5) spaces for every one thousand (1,000) square feet of gross floor area.	5 per 1,000 sq.ft.	4.0 per 1,000 sq.ft. (Land Use 912 Drive-in Bank)	2 per 1,000 sq.ft.

Appendix

BICYCLE PARKING REQUIREMENTS

During the charrette, the consultant team observed a lot of residents using bicycles for transportation. With short distances and few significant hills, the bicycle is a convenient way to get around town. However, there did not appear to be any bicycle parking provided, which could potentially be hindering more people from choosing the bicycle for local trips.

The City should require both short-term and long-term bicycle parking for all land uses. The amount of bicycle parking would be tied to land use, not to vehicle parking. The type and location of parking should meet best practices, as articulated by the Association of Pedestrian and Bicycle Professionals⁸. Where appropriate, developers or business owners may work with the city to install bicycle parking in the public right-of-way adjacent to the project.

However, since much of the City is already developed it would take a very long time before a new bicycle parking requirement resulted in a meaningful number of installed bicycle parking racks. To promote bicycling, public health, and support sustainable transportation the City may wish to install bicycle racks in central locations that serve existing cyclists and could conceivably attract more people to choose to bicycle to their destinations. For example, bicycle racks could be installed on sidewalks near popular businesses in the main retail areas on Lakeshore Drive. Many cities have programs where cyclists can request racks where they are currently needed. At an installed cost of a few hundred dollars per rack the cost to the City is not great, but the racks are visible symbols of the City's commitment to supporting non-motorized transportation.

Providing adequate amounts of bicycle parking at all destinations is critical in encouraging bicycle use and reducing auto travel for all types of trips (recreational, commuting, school, etc.). Lake Transit buses have bicycle racks, so having bicycle parking along the corridor for people arriving with their bikes via Lake Transit would further encourage bicycle use and accommodate bicyclists (employees, business patrons, and tourists). The intent of the proposed parking requirement is to increase bicycle mode share not only through the provision of adequate parking to meet existing demand but also by ensuring that the parking provided meets current best practices in terms of type, installation and location.

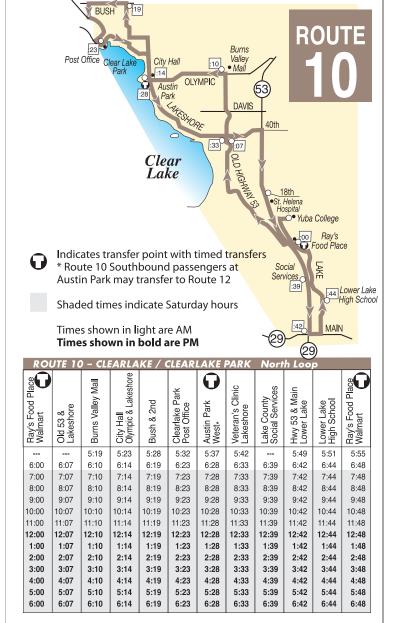
Bike parking types fit within two broad categories: short and long-term parking. Where short term parking emphasizes convenience with reasonable security, long term parking emphasizes security while being slightly less convenient. Short-term parking caters to customers and visitors who need a secure place to lock their bicycle for errands from a few minutes up to a few hours. For long term parking, individual storage solutions such as lockers can be used, or access-controlled "bike cages", or staffed bike stations. While it is still important that cyclists can easily access the parking facility, long term parking does not need to be immediately adjacent to a building's entrance as with short term parking.

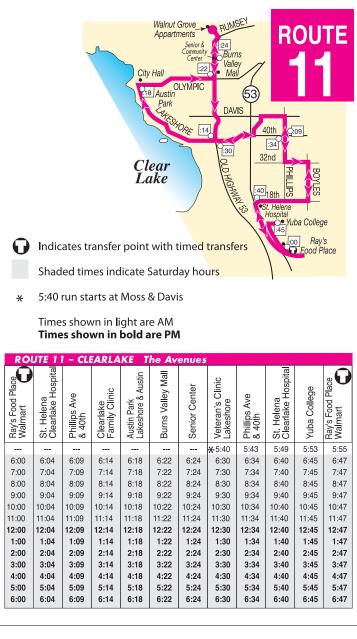
Bicycle parking facilities should be designed and installed according to best practices defined by the APBP. Particular attention should be paid to using an approved type of rack for short term parking (Class II), such as the "inverted U", and optimizing location as close as practicable to the entrance of the facility served.

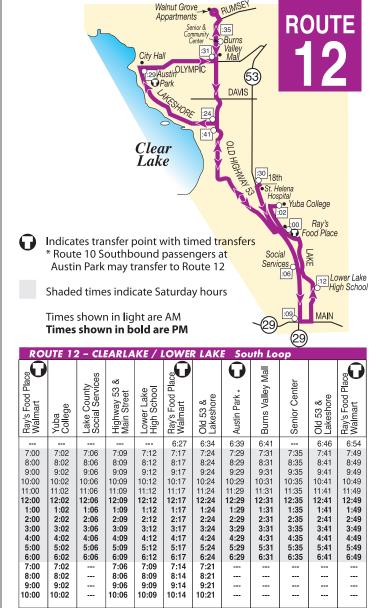
⁸ APBP Bicycle Parking Guidelines: http://www.apbp.org/default.asp?page=Publications

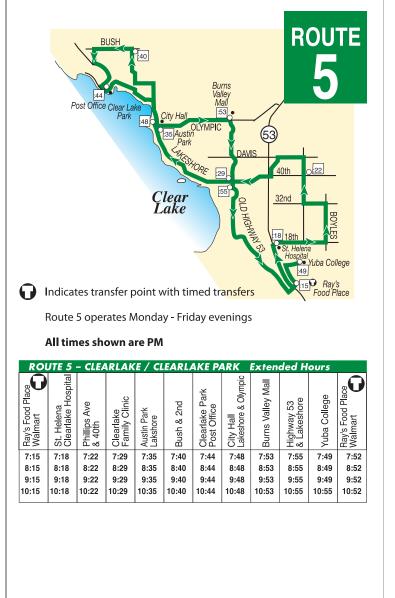
February 2014

Planned Lake Transit Service Expansion for Clearlake









Appendix February 2014

Review of Traffic Safety Data for Lakeshore Drive

TRAFFIC SAFETY

Clearlake had relatively few collisions in the five-year period 2007-2011, of which barely half resulted in injuries. The streets with the most collisions were Highway 53, Lakeshore Drive and Old Highway 53, in that order. Within the project area, Lakeshore Drive between Olympic Drive and Old Highway 53, there were no accident hotspots that might indicate a design problem. There were two collisions at Lakeshore and Olympic, while the remainder of the collisions occurred spread along the length of the corridor. The most frequently cited causes of collisions were speeding, incorrect turning movements and/or failure to signal, and driving under the influence of alcohol. Of these causes, the most serious danger to the public is speeding because the consequences of collisions at high speed are much more severe.

Figure 1 Mode Share, Clearlake

B08301: Means of Transportation to Work	Clearlake city, California		
	Estimate	Percent	
Total:	4,842		
Car, truck, or van:	3,767	77.8%	
Drove alone	3,307	68.3%	
Carpooled:	460	9.5%	
In 2-person carpool	372	7.7%	
In 3-person carpool	0	0.0%	
In 4-person carpool	0	0.0%	
In 5- or 6-person carpool	0	0.0%	
In 7-or-more-person carpool	88	1.8%	
Public transportation (excluding taxicab):	45	0.9%	
Bus or trolley bus	45	0.9%	
Streetcar or trolley car (carro publico in Puerto Rico)	0	0.0%	
Subway or elevated	0	0.0%	
Railroad	0	0.0%	
Ferryboat	0	0.0%	
Taxicab	0	0.0%	
Motorcycle	0	0.0%	
Bicycle	91	1.9%	
Walked	290	6.0%	
Other means	94	1.9%	
Worked at home	555	11.5%	

Source: 2007-2011 American Community Survey 5-Year Estimates

Figure 2 Collisions in Clearlake, 2007-2011

	Count	Percent
Total number of collisions	285	100%
Turning Movements and Required Signals	62	21.8%
Basic Speed Law	45	15.8%
DUI (alcohol or drugs)	42	14.7%
Bicycles involved	15	5.3%
Pedestrians involved	10	3.5%
Collisions on Highway 53 as primary street	59	20.7%
Collisions on Lakeshore Drive as primary street	52	18.2%
Collisions on Old Highway 53 as primary street	38	13.3%
Fatalities	7	2.5%
Collisions with Bicyclist Fatality	1	0.4%
Collisions with Pedestrian Fatality	1	0.4%
Injuries	132	46.3%
Collisions with Bicyclist Injury	12	4.2%
Collisions with Pedestrian Injury	9	3.2%

Source: Statewide Integrated Traffic Reporting System (SWITRS)

From figures 1 and 2 it can be seen that cyclists and pedestrians make up only 1.9% and 6.0% of road users (commuters), but that they are involved in 5.3% and 3.5% of collisions, respectively. They also make up 28% of fatalities and 16% of injuries. So bicycling and walking in Clearlake are disproportionately dangerous compared to other modes of transportation. While the collision reports don't contain enough information to make detailed conclusions on why cyclists and pedestrians are involved in more accidents and are being injured and killed at a higher rate than other road users, it is fairly typical for areas with roads designed primarily for motorist convenience rather than the safety of all users.

February 2014 Appendix

Figure 3 Collisions on Lakeshore Drive, 2007-2011

	Count	Percent
Collisions on Lakeshore	52	100%
Turning Movements and Required Signals	13	25.0%
Basic Speed Law	13	25.0%
DUI (alcohol or drugs)	10	19.2%
Bicycles involved	3	5.8%
Pedestrians involved	3	5.8%
Fatalities	0	0%
Collisions with Bicyclist Fatality	0	0%
Collisions with Pedestrian Fatality	0	0%
Injuries	24	46.2%
Collisions with Bicyclist Injury	2	3.8%
Collisions with Pedestrian Injury	3	5.8%

Collision Locations on Lakeshore Drive

Figure 4 shows a map generated by the UC Berkeley Transportation Injury Mapping system, drawing on data collected in the Statewide Integrated Traffic Reporting System (SWITRS) between 2007-2011. Yellow squares show vehicle/vehicle collisions, red shows vehicle/pedestrian collisions, and pink shows vehicle/bicycle collisions.

The map shows that there are few locations in the project area that experienced multiple collisions in the five-year period. There were two at Olympic Dr and Lakeshore Dr, and there were two on the short stretch of commercial strip that includes Burger Time and the Barber's shop. There were 4 collisions around the intersection at Golf Ave, all related to speeding or improper turning – these types of collisions may be related to the wider and more car-oriented design of Lakeshore Dr in this section of the corridor. The remaining collisions were spread throughout the study area.

The City was particularly interested in collisions at the intersection of Old Highway 53 and Lakeshore Dr, however there were no collisions reported to SWITRS in the previous five year period.

Figure 4 Location of Collisions in Study Area, 2007-2011



Source: UC Berkeley Transportation Injury Mapping System (TIMS)/SWITRS 2007-2011

Appendix February 2014

Charrette Flyer

Yesterday, Today... **Tomorrow**?





Envision the **Future**

of Clearlake's Downtown Lakeshore Corridor!



Tuesday, October 9

■ Walking Assessment of Project Area 5:00-6:00 p.m. | Meet at Highlands Park



Opening Community Workshop
6:00-8:30 p.m. | City Hall
Refreshments provided



Wednesday, October 10

Open Studio
 5:30-6:30 p.m. | 14330 Lakeshore Drive
 Drop by and share ideas about the designs in progress



from Olympic Drive to Old

walking, bicycling, transit,

parking, street beautifica-

tion, lake access and economic revitalization.

Hwy 53 and will address

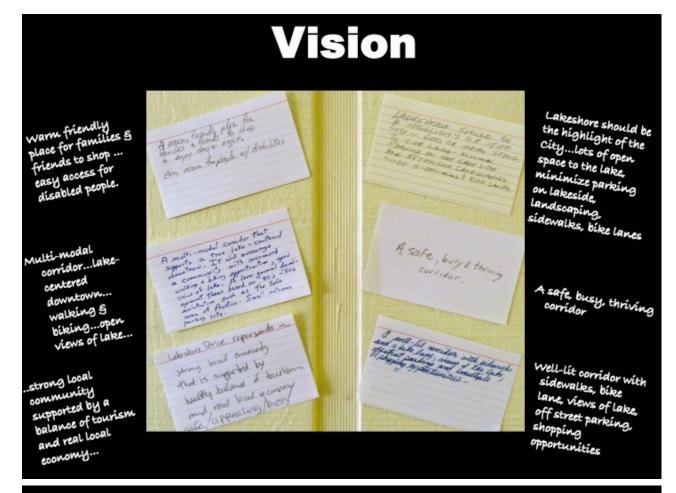
The Downtown Lakeshore
Corridor project area
includes Lakeshore Drive

Friday, October 12 Presentation of Preliminary Designs 5:00-6:30 p.m. | City Hall

■ Community Reception 6:30-7:30 p.m. | Austin Park Wine tasting from local wineries, free food & live music!

Organized by the City of Clearlake, Lake County/City Area Planning Council and the Local Government Commission, with support from a California Department of Transportation Community-Based Transportation Planning Grant and the Clear Lake Chamber of Commerce. For more information: lakeapc.org or call Terri Persons, Lake APC, (707) 263-7799

Vision and Values



Values

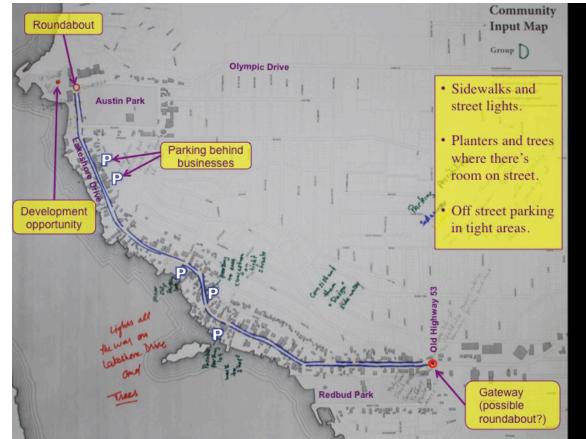
- Nature / Weather / Beauty (50)
- Community / People/Friends (38)
- Small town / Rural Atmosphere (38)
- The Lake / Recreation (35)
- Affordability (18)
- (Economic) Opportunity (8)



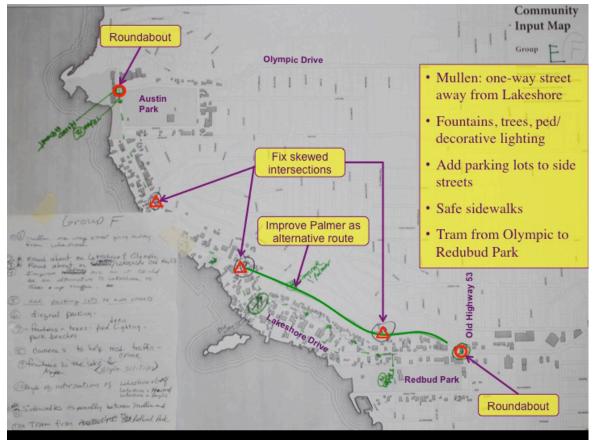
Local Government Commission, Opticos Design, Inc., Nelson\Nygaard Consulting Associates, Inc.

February 2014
Appendix

Table Maps







What You Told Us

- Manage speed on Lakeshore
- Provide safe places to walk, bike, catch the bus, and cross the street
- Fix problem intersections
- Organize parking
- Improve corridor look and appeal
- Develop focal points, activity areas
- Enhance waterfront views and access

5.16

Appendix

Charrette Participant List

Ronn Aitken, Resident Lori Aitken, Resident

Nathalie Antus, Lake County News

Tim Ashley

Greg Baarts, CHP Clearlake area

Judy Bailey-Brusnighan Bill Bennett, Resident John Boling, Resident

Henry Bornstein, Resident

Victoria Brandon

John Brusnighan

Jack Brusnighan

Dolly Burden, Resident

Betsy Caivn, Lake County Clean Water Program, Clearlake Advisory Committee

Bonnie Carter, Business Owner Robert Carter, Business Owner

Nancy Chisnall, Resident

Conrad Colbrandt, Resident

Ralph Cunningham, Resident

Carol Cunningham, The Essential Public Information Center Home

Lisa Davey-Bates, Lake APC Gloria Dela Cruz, Catfish Coffee

Gina Dickson, Planning Commissioner Martin Diesman, People Savings

Phil Dow, Lake APC

T. Foster, StoneHouse

Bob Galusha, City of Clearlake

Lisa Gilmore, Resident

Elio Giusti, Property Owner

Allen & Donna Golt, City of Clearlake

Richard Gulundre, Resident Randy Hare, City of Clearlake LaDonna Hart, Baby Baby

Reiko Hattori

Michael Heglin, Business Gae Henry, Resident

Doug Herren, City of Clearlake

Mark Holloway, Redbud Health Care District

Shirley Howland, Resident Suzanne Hoyt, Resident Julia Hurst, Homeowner Marion Kaiser, Resident Gundip Kam, Shell gas station Irwin Kaplan, City of Clearlake

Tony King

Molly Lang, Resident Larry Lang, Resident David Lark

Chuck Leonard

Terri Larsen, Lake County Magazine Property Owner

Chuck Leonard, Lake APC Vicki Leonard, Resident

Michael & Ricia Leventhol Mort Loeb, Resident

Pete Loustelot, Enterprise Towing + Automotive Denise Loustelot, Enterprise Towing + Automotive

Joey Luiz, City of Clearlake, Mayor

Bob & Joan Mingori, Property and Business Owner

Janet Molini, Resident Judy Morgan, Resident

Elliot Naess

Devin Negrete, Lakecounty Magazine

William Norwood Wendy Overin, Resident

Jayce Overton, City of Clearlake, Council Member

Lori Patotzka

Terri Persons, Lake APC

Lori Peters

Joan Phillipe, City of Clearlake, City Manager

Xavier Pina, Artist Slona Ponlson, Resident

Tatiana Quijano, Property Owner

Tam Richmond, Clearlake Chamber, Executive Director

Bruno Sabatiere, Resident Willie Sapetia, LCFPD

Jim Scholz, Open Studio/October 10th-5:30pm

Susanne Scholz, Resident Jim Scholz, City of Clearlake Emma Schoppe, Cal Poly Roon Searcy, Resident Pete Shandera, Resident Bud Shipley

Carolyn Shipley, Clearlake Chamber, Business Owner

Roy Simons, City of Clearlake Gurdarshan, Singh, Shell gas station

Schani Siong, Cal Poly Bonnie Smelling, Resident Sandy Som, Resident

Jeri Spittler, City of Clearlake ,Council Member

Maurice Taylor Rafid Tuma, Visitor Samir Tuma, Business Owner Bill Versaci, Studio Versaci

Jeannie Vierra, Lake County Resident

Alvaro Volenor, Planning Commission

Diane Watson, LCFPD

Carl Webb, City of Clearlake, Planning Commissioner

Carl & Carol Webb, Planning Commission

Tim Williams, Resident

Crystal Williams, Hair by MZC Lisa Wilson, Clearlake Chamber

Cathy Wilson, Resident

Ali, T&8 Permit

Andre

Craig, Clearlake PD Lauren, Catfish Coffee